

# **China Automotive Report 2021**

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Financed by the Ministry of Economic Affairs, Labour and Tourism of the State of Baden-Württemberg

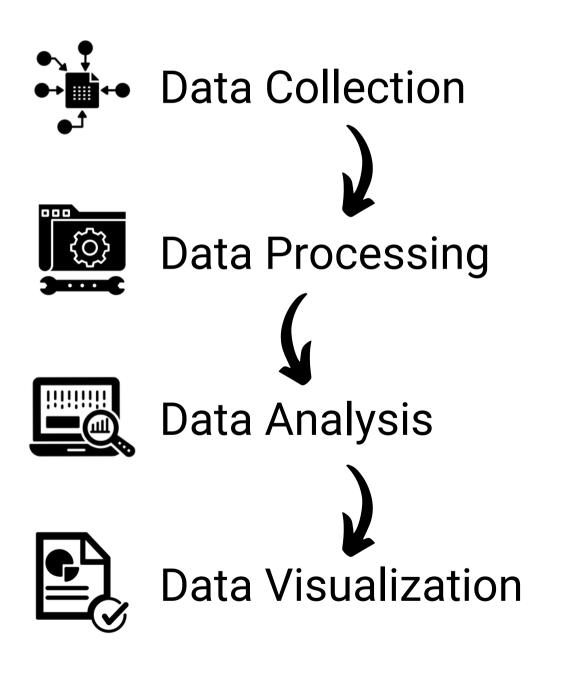


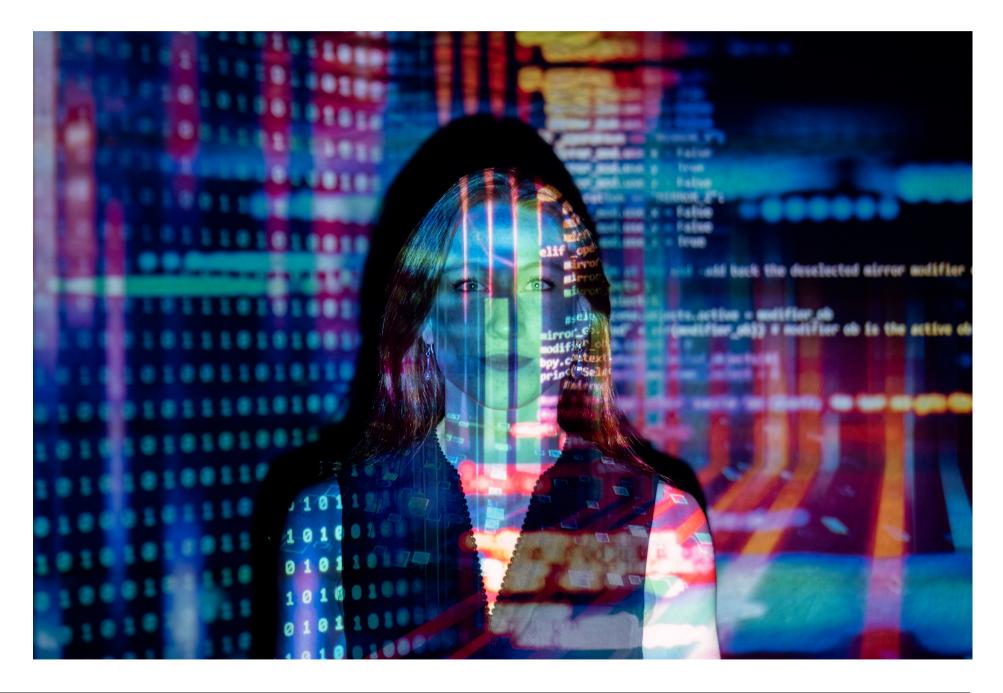
June 2022

Picture: https://www.nio.com/



### CIMK (China Investment Market Knowledge) will revolutionize China's market intelligence sector.









#### **Overview of CIMK's customer groups.**



- Corporate Innovation
- 360° Industry Monitoring

VC / PE Investors



**Projects** 

- Startups Identification
- China Due Diligence Service

#### 



Competition and Customer
Analysis



### The CIMK methodology used in this report.



#### **D** CIMK



### **Presentation Content.**







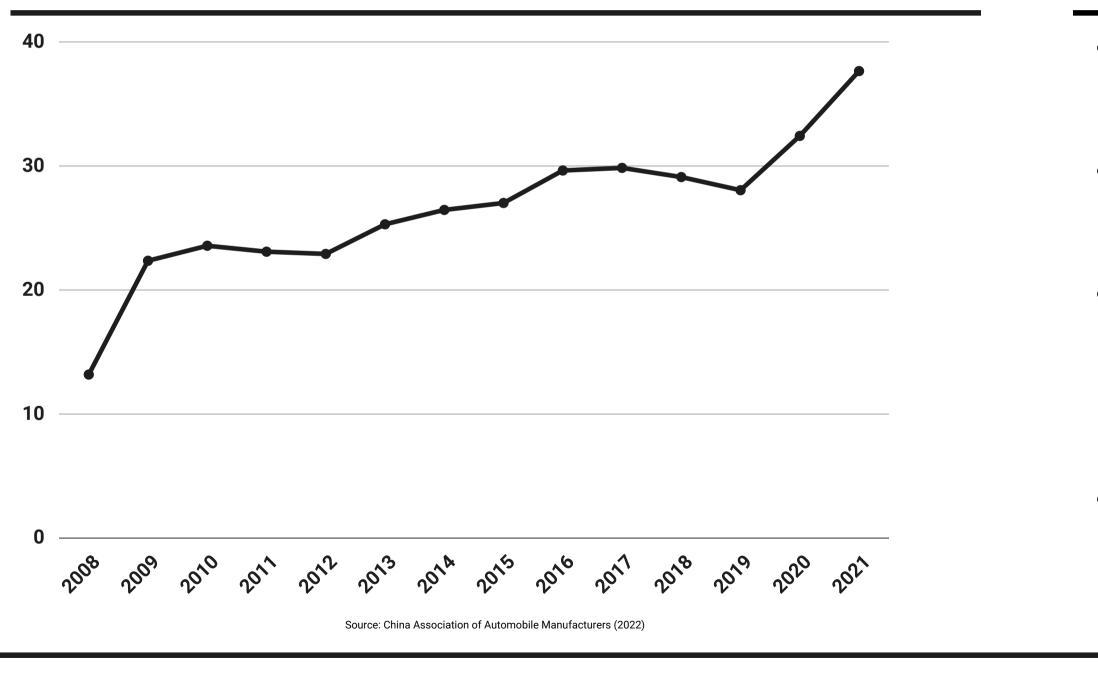






### China's global influence in the automotive industry continues to grow.

China's Share in Global Vehicle Production: 2008-2021



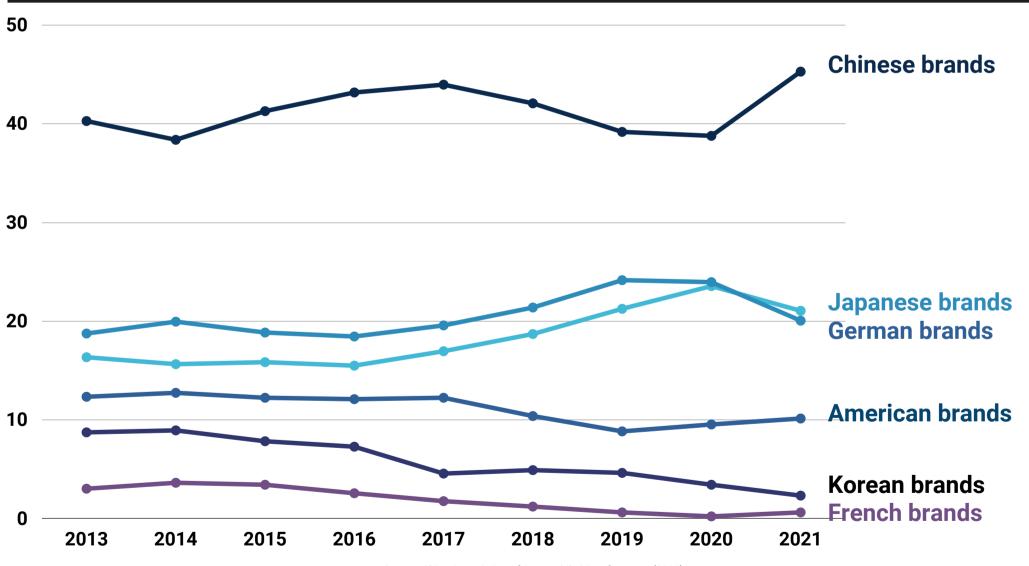


- Since 2009 China has been the largest automotive market in the world
- In 2021 around 36% of all globally sold vehicles were sold in China
- According to the China Association of Automobile Manufacturers (CAAM), more than 26.08 million automotive vehicles were produced in China in 2021
- In 2021 more than 2 million Chinese automobiles were exported



#### Chinese brands are winning higher market shares.

Various Brands' Sales in China from 2013 - 2021 per (in Percent)



Source: China Association of Automobile Manufacturers (2022)



- Chinese brands had increased their total market share to more than 47% at the end of 2021
- In 2020, Chinese brands only had a market share of 43.9%
- The German market share of German brands was reduced the most with -11.4% in comparison to 2020
- This is the second year in a row for the German brands, with a year-on-year decline of more than 10%



#### Production and sales figures for most German brands are declining in China.

#### Most sold Automotive Brands in 2021 (Excluding Imports)

| Rank | Brand         | 2021      | Change  |
|------|---------------|-----------|---------|
| 1    | Volkswagen    | 2,164,946 | -10.28% |
| 2    | Toyota        | 1,656,053 | 7.7%    |
| 3    | Honda         | 1,531,486 | -6.5%   |
| 4    | Geely         | 1,072,405 | -5.5%   |
| 5    | Changan       | 1,000,799 | 15.7%   |
| 6    | Nissan        | 1,000,292 | -10.8%  |
| 7    | Buick         | 828,636   | -10.5%  |
| 8    | Wuling        | 818,041   | 101.1%  |
| 9    | Haval         | 770,008   | 2.6%    |
| 10   | BYD           | 730,093   | 77.5%   |
| 11   | Chery         | 708,728   | 11.3%   |
| 12   | BMW           | 652,000   | 6.5%    |
| 13   | Audi          | 643,500   | -1.9%   |
| 14   | Mercedes-Benz | 598,204   | -6.6%   |
| 15   | Tesla         | 473,103   | 249.3%  |

Source: CPCA (2021)



- Most international automotive brands are struggling with declining sales in 2021
- Volkswagen has the most significant absolute and relative sales decline of the major brands
- Out of all the major German automotive brands, only BMW managed to increase its sales in 2021



#### German premium brands are still leading, but other brands are growing faster.

#### Most sold Premium Automotive Brands in 2021 (Including Imports)

| Rank | Brand             | 2021    | Change  |
|------|-------------------|---------|---------|
| 1    | BMW               | 815,691 | 4,9%    |
| 2    | Mercedes-Benz     | 758,863 | -2.0%   |
| 3    | Audi              | 701,289 | -3.44%  |
| 4    | Tesla             | 320,743 | 116.72% |
| 5    | Hongqi            | 300,600 | 43.69%  |
| 6    | Lexus             | 277,000 | 23.85%  |
| 7    | Cadillac          | 233,117 | 1.35%   |
| 8    | Volvo             | 171,400 | 3.06%   |
| 9    | Jaguar Land Rover | 103,888 | -6.58%  |
| 10   | Xpeng Motor       | 98,155  | 262.98% |
| 11   | Porsche           | 95,671  | 7.53%   |
| 12   | NIO               | 91,429  | 109.08% |
| 13   | Li Auto           | 90,491  | 177.37% |

Source: CPCA (2022)



- The German premium brands are currently stagnating and are declining, except for BMW
- Tesla could be the largest premium brand in China in one to two years
- Starting at rank ten, many new Chinese NEV companies can be identified, which are also growing by more than 100%



### Chinese brands dominate the NEV market.

#### **Top 10 NEV Producers in 2021**

| Ranking | Company Name | Sales Numbers 2021 |
|---------|--------------|--------------------|
| 1       | BYD          | 593,745            |
| 2       | Wuling       | 395,451            |
| 3       | Tesla        | 320,743            |
| 4       | ORA          | 135,028            |
| 5       | JAC          | 134,100            |
| 6       | GAC AION     | 123,660            |
| 7       | VW           | 119,000            |
| 8       | Chery        | 109,028            |
| 9       | Geely        | 100,126            |
| 10      | Roewe        | 100,000            |
| 11      | XPeng Motor  | 98,155             |
| 12      | NIO          | 91,429             |
| 13      | Li Auto      | 90,491             |
| 14      | Chang'an     | 70,000             |
| 15      | NETA         | 69,674             |

Source: CPCA (2022)



- 3.52 million NEV vehicles were sold in the Chinese market in 2021, representing 11% of the total car market in China
- Tesla and Volkswagen are the only international companies in China's top 15 NEV manufacturers
- Many newly established NEV companies such as Xpeng Motors, NIO, Li Auto sell almost as many NEVs as Volkswagen



### Analysis of the executive rotation in the Chinese automotive industry.

# $\Theta$ Ø Source: CIMK Research, Company Websites

#### **Automotive Executive Network Rotation**



#### Key Take-Aways

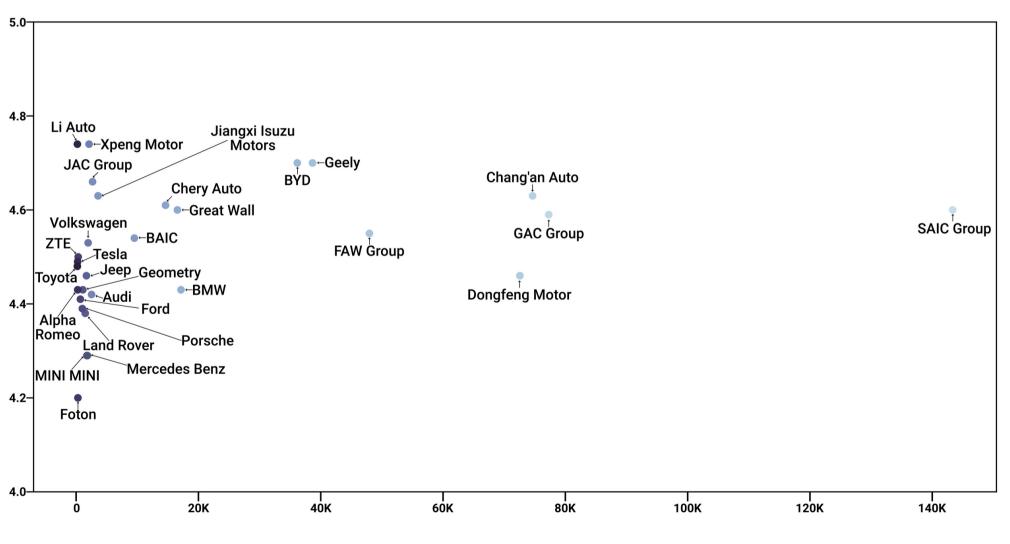
• BAIC Motor, Dongfeng Motors, and GAC Group have employed several executives who have work experience at other automotive manufacturers

 NIO and XPeng Motors hired external automotive executives with much experience from other state-owned automotive companies because technology entrepreneurs founded these companies

 Various automotive companies, such as BAIC Motors or JAC Motors, have recruited executives from battery companies to develop their NEV projects

### Chinese automotive community analysis.

#### Autohome: Number of Evaluations vs. Average Evaluation



Source: Autohome, Date of data collection: 2022-01-06



- Based on the 355 most discussed car models (500,000 user reviews), the vehicles from SAIC Group are the most discussed, with a total of 143,339 reviews
- NEV vehicle manufacturers Li Auto, Xpeng Motors, and BYD are rated highest by the automotive community despite fewer ratings
- Volkswagen is the highest-rated brand of all international companies. A large proportion of the other multinational brands tend to be in the bottom three of customer ratings



#### **Consumer perception: Chinese NEV vs. foreign-owned NEV: Example based on the automotive platform Autohome**

#### Volkswagen ID.4



- Uncomfortable suspension damping
- Poor software systems
- Interior odor
- Poor interior material
- Unreasonable weight of brake pedal



#### **Positive Keywords**

- Long Range

- Great Entertainment System

Source: Autohome, Date of data collection: 2022-01-07

• Sufficient power

• Good cost performance

• Satisfactory comfort



#### **XPeng Motors G3**

Average Ranking

🔶 4.76

- Enough Space
- Good comfort
- Good handling

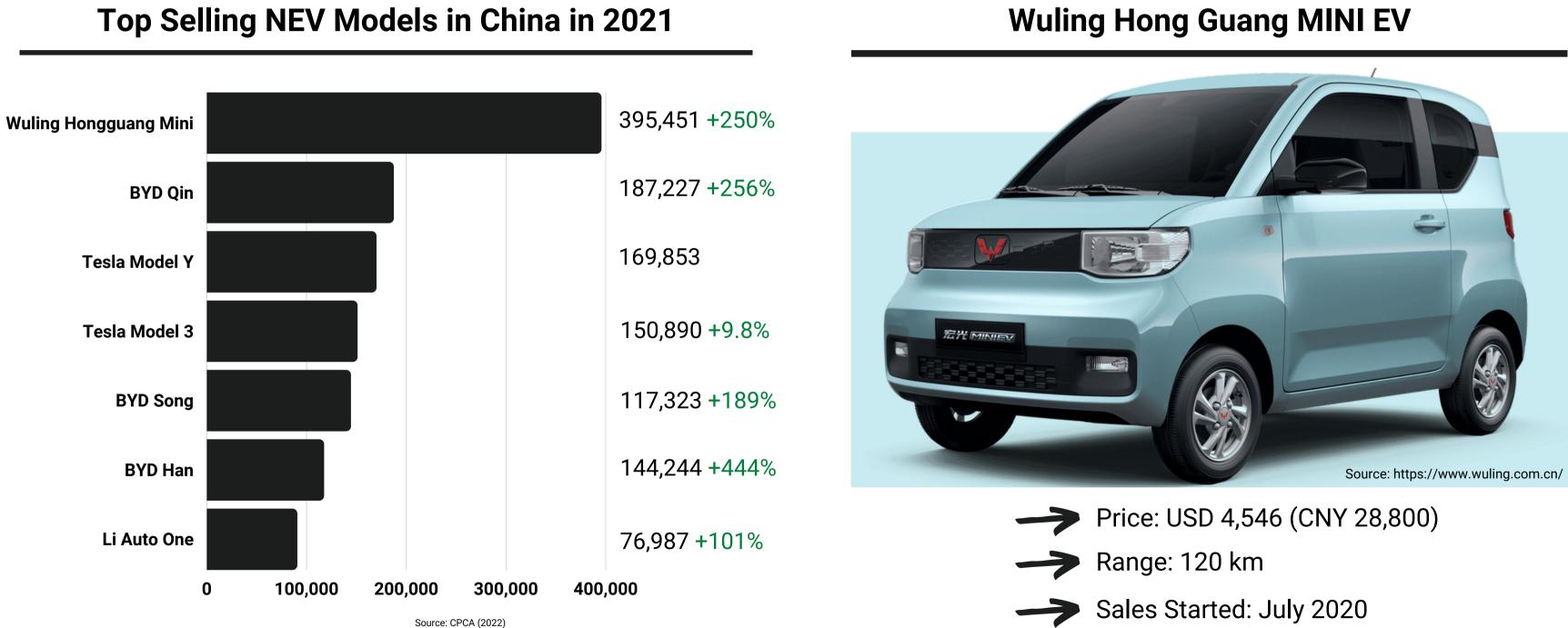
#### **Negative Keywords**

- Foul odor in the interior
- Noisy tires
- High power consumption in winter

Source: Autohome. Date of data collection: 2022-01-07



### GM's joint venture with Wuling has the best-selling NEV in China.

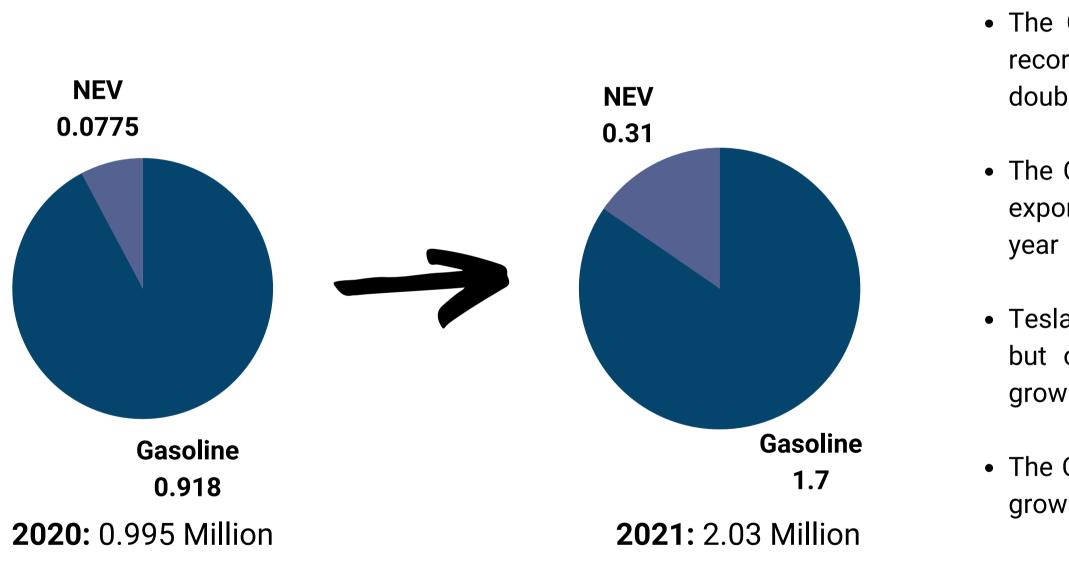






### Chinese automotive companies doubled their exports in 2021.

**Exports of Chinese Vehicles (In Million)** 



Source: China Association of Automobile Manufacturers (2022)



#### Key Take-Aways

• The Chinese automotive vehicle exports reached a new record with 2.01 million units in 2021. This is more than double the previous year

• The CAAM announced that a total of 310,000 NEVs were exported in 2021, a threefold increase from the previous

• Tesla is responsible for the majority of the NEV exports, but other OMEs like BYD (563) and SAIC (5,716) are growing as well

• The CAAM forecasts that Chinese automotive exports will grow by 20% in 2022



#### The requirements for suppliers in the Chinese automotive industry are changing.

|                          | Engi  | ine   |                       | Small/Gene                     | eral Parts                       |                  | g/Suspen<br>eel & Tire |                           | Drivet                            | rain                       |                                 | ake/Body<br>htrol                            | Electr                  | onic/Elec                         | tric                        | Body & Ex                            |
|--------------------------|---|---|-----------------------|--------------------------------|----------------------------------|------------------|------------------------|---------------------------|-----------------------------------|----------------------------|---------------------------------|--|-------------------------|-----------------------------------|-----------------------------|--------------------------------------|
| 11                       | 浙江方正電機  | Mecaplast                                     |                       | SHEN DONG                      | Sanoh<br>Industrial              | auto parts       | X 既暇股份                 | Superior<br>Industries    | 💠 課程將請                            | Aisin                      | ●隆基机械                           | ITT  |                         | 华城三电汽车空调                          | Garrett                     |                                      |
|                          | Yasunaga                                      | - INTEAN VALVE CO., LTD.                      | FIAMM                 |                                | Ð                                | <b>2</b> 2.040   | LEXMANNINECO           |                           | -税能科技-                            | Kongsberg                  | AAPICO Hitech                   | Knorr-Bremse                                 | Stanley<br>Electric     | RENESAS                           | 广州汽车集团                      | NBHX<br>SHOWA                        |
| Ś                        | Yanagawa Seiki                                | HOM SHARE RADE CO., LTD.                      | Federal-Mogul         | SONGYUAN                       | PIOLAX                           | DEPU             | BAOLONG                | 著肉体以他的                    | -AICHIKIKAI                       | Hyundai<br>Transys         |                                 | Kiriu  | 仪电汽车电子                  | PKC Group                         | 零部件<br>FURUKAWA<br>ELECTRIC | v 🧖 🔹                                |
| <b></b> 亿华通<br>SinoHytec | 无锡威孚高科技集团                                     | Nemak   | 一汽解放汽车<br>无锅柴油机厂      | Carthane                       | Parker-Hannifin                  |                  | ☞ 縣設料技                 | DY<br>DURA                | 许昌远东传动轴                           | American Axle              |                                 | Korea Flange                                 | Sensata                 | Panasonic                         | FALTER                      | Hanke XHHHE                          |
| (A) 联诚精密                 | Weichai                                       | Motonic                                       | Faurecia              | 上海肌众聚氨酯有限公司                    | Owari Precise<br>Products        |                  | EXRD                   | 春代代本<br>容师件               | 💏 SHINRY                          | 浙江万里杨                      |                                 | 东北工业集团                                       |                         | NP                                | EVE Energy                  | Guardian                             |
| <i>a</i> 8               | United<br>Automotive<br>Electronic<br>Systems | Mitsuboshi                                    | Exide                 | DAIMAY                         | OILES                            |                  | DOD REPLACED           | Datwon Kangup<br>中信最卡     |                                   | Hyundai Kefico             |                                 |  | ALAE                    | NVIDIA                            | ESTRA                       | ● 永茂泰 <sup>®</sup>                   |
|                          | Unink   |   | Despictes             |                                | NTN-SNR                          | DOUBLESTAR       | IN FORTH BRANSSO       | 中国汽车系统                    | CEMOTO<br>B M 20 7                | it BorgWarner              | JHAT                            |  |                         | NIPPON SELKI<br>宁波均胜电子            | 东风电子科技                      | 医长春英利                                |
|                          | Unick   | Miba  | Exerptions            |                                | NOK                              | FENGHUA          | -                      | 一汽當錄<br>BRIDGESTONE       | ○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○ | Ogura Clutch               | CHERVON-Auto                    | XXXX 长江汽车电子<br>Orangang betweekile like twee |                         | Nidec                             | <b>DENSO</b><br>天海汽车电子      | Maant as exceeding                   |
| · FREITRICARDS           | Tokyo Radiator                                | MANN+<br>HUMMEL                               | Donaldson             | Krauss Haffel                  | Nishikawa Rubber                 | SENTURY<br>BBBCC | С сканананана          | Autoliv                   | MAHLE                             | BOSCH<br>Invented for life |                                 | BINGE  | G-宁波高发                  | -Altordreams                      | CATL<br>审德時代                | <b>7</b>                             |
| <b>WLY</b> 75里场          | T.RAD   | MAHLE   | Deutz                 | ● # K                          | Nippon Gasket                    |                  | E Miles 25 28          | Asahi Tec                 | Fuji Machinery                    | <b>↓LI∈B⊙O</b><br>越博动力     | <b>VBTL</b>                     | €₽#ħ<br>S                                    |                         | Mobase                            | brose                       | CAIP                                 |
|                          | Sogefi  |   | Detroit Diesel        | KUANG-CHI                      | HUTCHINSON'                      | 2037 7. * # #    |                        | 富奥                        | SL 圣龙集团                           | (F.C.C)                    | 尤順智动<br>ENNOVA                  | SCIWE  | VITI ADDRESSION         |                                   | Horizon<br>亚新科              | <b>汤</b> 旷达科技                        |
|                          | Sebang  | 昆明云内动力<br>Johnson Matthey                     | Dayco                 | <b>全</b><br>星宇眼份               | HI-LEX                           |                  | Giti 🖊                 | TENNECO                   | <b>UNIVANCE</b>                   | WALH ISHIDIB               | ₹A.                             | SONAUOX                                      | Constant<br>Constant    | MAHLE                             | ALPS/ILPINE                 | R                                    |
| ZONESHEN                 | 舍弗勒<br>(中因)                                   | Amounneurey                                   | Cummins               | Woco                           | 贾对贾敬凡本字的评<br>GCooperStandard     |                  | Astra Otoparts         | <b>R</b> tech             | e<br>8181073                      | SHUANGLIN                  | FAWER                           | CWB 台兴集团                                     |                         | LS<br>Automotive                  | ADIENT                      | OTNOPUE IS                           |
|                          | Sawafuji Electric                             | 涤由沃德汽车拿邻件<br>Ichitan                          | Gntinental 5          | 万向钱湖                           | Chuo Spring                      |                  | Pirelli                | SAUTOFORMER               | Juico                             | <b>2</b> 540               | <u>2625070</u>                  |  | SØNGZ                   | 📶 Littelfuse                      | GS Yuasa                    | Samvardhana<br>Notherson<br>Poguform |
|                          | ROKI  | Hyundai<br>WIA                                | TVS Grou<br>Trellebor | Illinois                       | 襄阳汽车抽承<br>3777 <sup>11</sup> 000 | GS•P             | MOPE NOVTRAL CO LTD    | JTEKT<br>BEST             | SINOTEC                           | Sone Koyo                  | 0.20065                         | ADAYO \$REE                                  | 《天 河曲轴                  | Kostal                            | Sejong<br>Industrial        | SL                                   |
|                          | Roechling                                     | 湖南科力遠   | TAIH                  | Tool Works                     | NICO<br>Nichirin                 | TPAP             | OTTO FUCHS             | _                         | EXEDY                             | Steering Systems<br>中国船舶重工 | SORL Auto Parts, Inc.           | Engeneration                                 | う<br>SPESSWELLCHOMES    | Leoni                             | Hwashin                     | - ORALINDIA                          |
| # <b>(2000)</b> (8       |   | 新能源   |                       | ILJIN                          | LISI                             |                  | NTN                    |                           | CONTR.                            | 集团动力                       |                                 |  | Vitesco<br>Technologies | Lear                              | Ge                          | estamo<br>Martinrea                  |
| <b>(5)</b>               | Riken   | HITACHI<br>Inspire the Next<br>©Htachi Aslemo | SCHAEFFL              |                                | Kyung Chang                      | IKDco.us         | 宁波拓普                   | Bharat Gears              | Hoerbiger                         | C COLLEGE                  | Srembo                          | с<br>МСI                                     | Visteon                 | Kyungshin                         | OSRAM                       | 凌云工业                                 |
| HO 网 荣 画 工               | Automotive                                    | 东安动力  | SKF                   | Freudenberg                    | Eagle                            | RADICAL          | Nexteer                |                           | KUO                               | GYUTAKA                    | Haldex                          | (例) 根轮股份                                     | U-SHIN                  | Kojima Industries<br>德昌电机         | <b>数实集团</b>                 | Korro                                |
| 中山大洋電機                   | International                                 | 广西玉荣机器集团                                      | 2.100 W/TH            |                                | Industry                         |                  | Musashi                | Ĩ.                        | 浙江亚太机电                            |                            | Hinschwogel<br>Automotive Group |  | CB TOKAJ RIKA           | Jeco                              | Lumax Industries            | Kiekert<br>Inoac                     |
| Inergy                   | P.C.S. Holding                                | 国轩高科  | TZOMAX                | tovo tires<br>diferito perform | Kalyani So<br>Jay                | on               | MICHELIN               | -                         | 河江 SL 太 兆 モ<br>TMD Friction       | Rassini                    | Meritor                         | ۲  | TE Connectivity         | Inzi Controls                     | Kinugawa<br>Rubber          | <b>M</b>                             |
| 安庆环新集团                   | Amalgamations                                 | Bosal   | WENCAN                | TOPY                           | Bharat Lan.<br>Maruti            | ane wanfeng      | Maxion<br>Wheels       | <b>Nag</b> の2000で<br>料屋均力 | 浙江万安将县                            | Somboon<br>Advance         | Nabtesco                        | <b>BJIANSHE</b>                              | Strattec Security       | <b>CIMASEN</b>                    | 江南视型科技                      | ІСНІКОН                              |
| Anand                    | Aisan   | BOSCH<br>Invented for life                    | A STATEMENT           | YOKOHAMA                       | FUJI KIKO                        | Þ                | м                      | DARE                      | Sapura Industrial                 | Technology                 | Hyundai<br>Mobis                | THN  | Stoneridge<br>S&T Motiv | Hulzhou<br>Desay SV<br>Automotive | Roof Systems                | Ficosa                               |
| Alfmoior                 | Bharat Forge<br>渤海活憲                          | 骆驼集团  | A THIANGLE            | The Goodyear<br>Tire & Rubber  | The Association, There Adventuge | LINGLONG TIRE    |                        | 陕西法士特                     |                                   | TBK<br>OTI Automotive      | Hyundai<br>Dymos                | 9<br>SINCAL                                  | 上海东业交通电器                | Huawei                            | IAC (j===                   | Flex-N-Gate                          |
| Alfmeier                 | 科师伯基  | Plastic Omnium                                |                       | UNO MINDA                      | Kumho Tire                       |                  | Manuo                  |                           | $\sim$                            |                            | bymos                           | and the later                                |                         |                                   |                             |                                      |



#### xterior ZANINI VACHIYO ebasto UNIPRES TPR G Tower International Topre Technol Eigh Tata AutoComp Systems Sungwoo Hite 上海交达集团 常州星字车灯 Samuandhana Mutherson Group Pilkington NSC 宁波车厢电子 Brano Benteler 北京海纳川 Austem Aska ams OSRAM 爱信 (中国) AGC ASAHI GLASS ABC Group Edscha Doga Saint-Gobai

- Chinese automotive manufacturers only want to work with suppliers with a local supply chain in China
- Manufacturers of NEVs in the high-price segment are increasing their demands on their suppliers in terms of product quality
- The number of suppliers that have established themselves in China in recent years has grown. Existing Chinese suppliers are trying to expand their product range and work with international OEMs



### China's leading role in battery production.

#### **Top 10 Largest Battery Producers Worldwide**

| Ranking | Company Name       | Market Share | Location    |
|---------|--------------------|--------------|-------------|
| 1       | CATL               | 32.5%        | China       |
| 2       | LG Energy Solution | 21.5%        | South Korea |
| 3       | Panasonic          | 14.7%        | Japan       |
| 4       | BYD                | 6.9%         | China       |
| 5       | Samsung SDI        | 5.4%         | South Korea |
| 6       | SK Innovation      | 5.1%         | South Korea |
| 7       | CALB               | 2.7%         | China       |
| 8       | AESC               | 2.0%         | Japan       |
| 9       | Guoxuan            | 2.0%         | China       |
| 10      | PEVE               | 1.3%         | Japan       |

Source: http://www.sneresearch.com (2022)

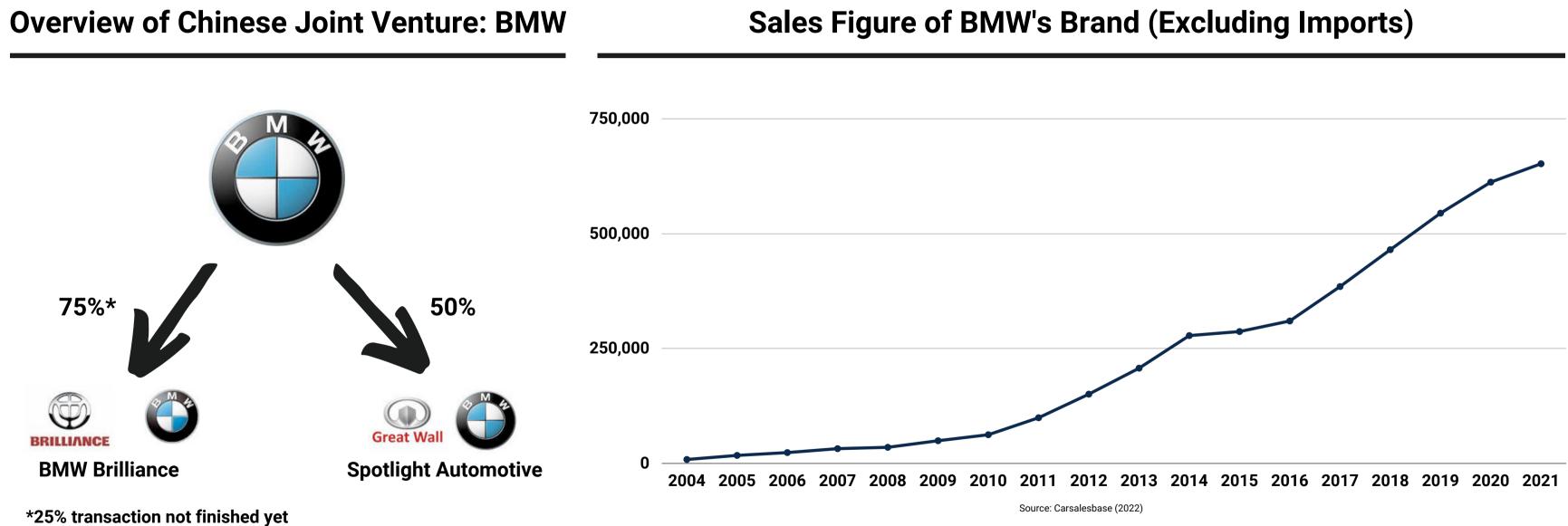


- All large NEV battery producers are located in Asia
- The clear market leader in battery production is now CATL which nearly produces 1/3rd of all automotive batteries
- China plays a crucial role in the production of batteries for the NEVs. The battery manufacturing industry has a market size of about USD 203 billion USD in 2021

**Development of German Automotive Companies in the Chinese Market** 



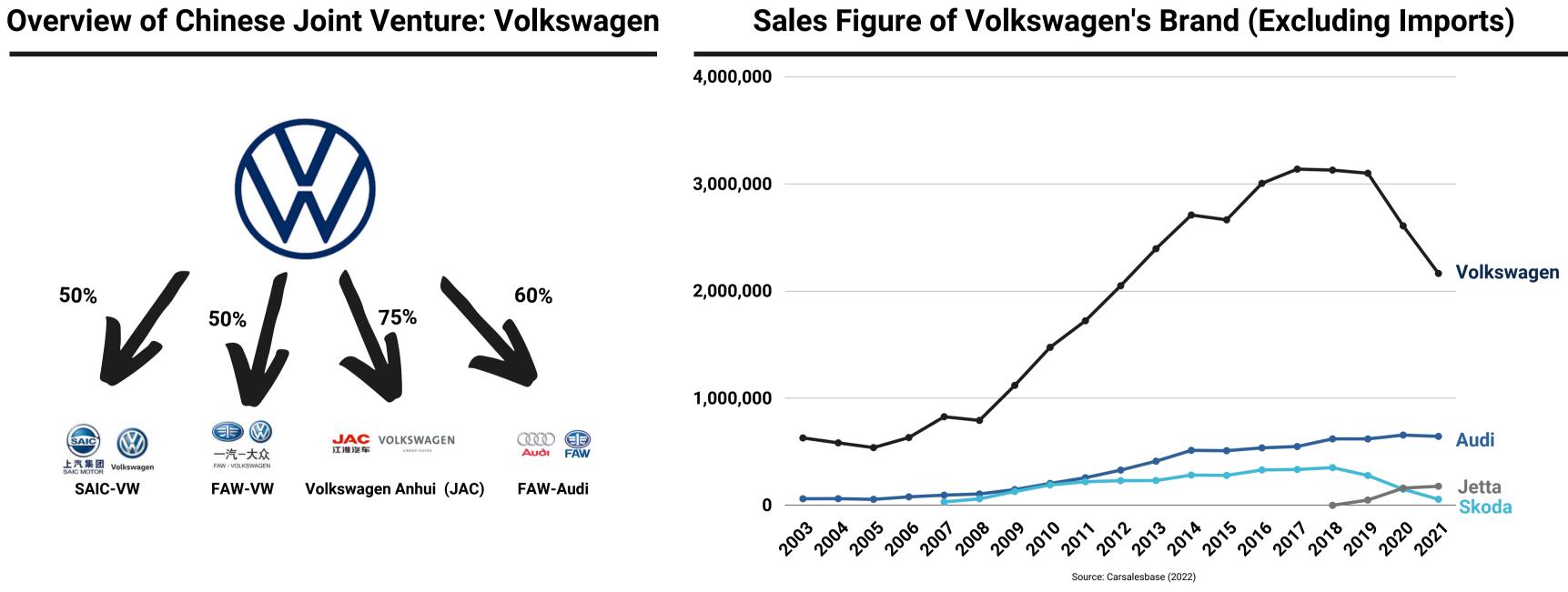
#### BMW developed positively in 2021 and bought joint venture shares.







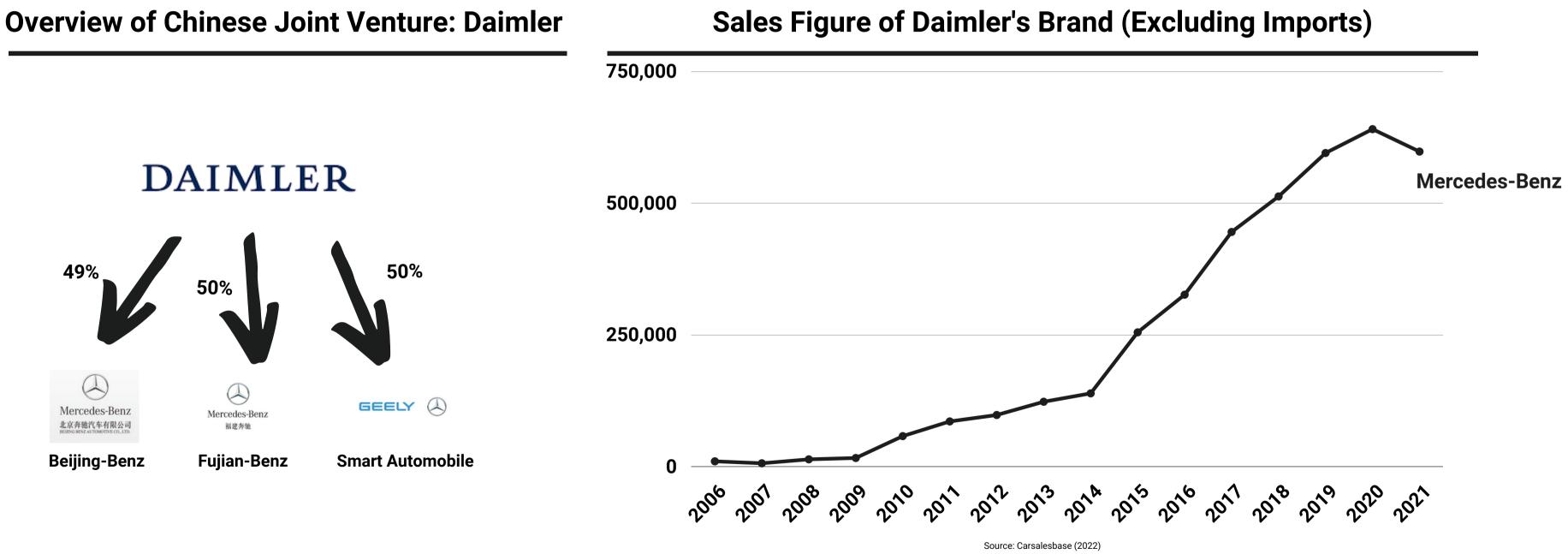
### Volkswagen's performance over the last two years is very worrying.







### Daimler has received the first setback in terms of sales figures in 2021.

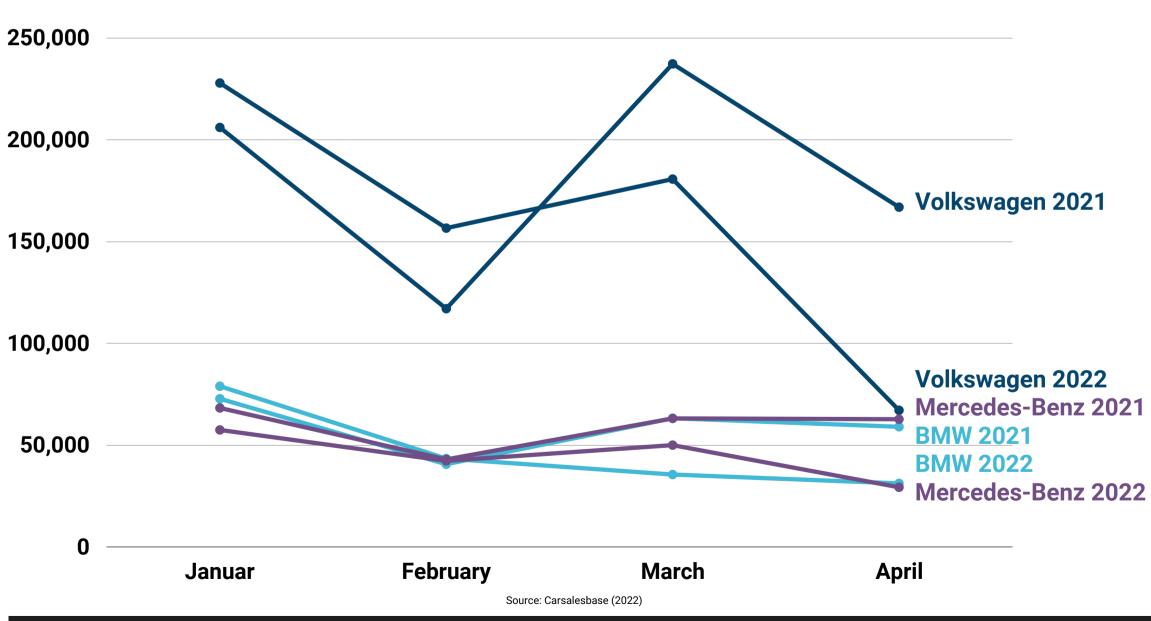






### In 2022, sales of German OEMs are significantly lower than last year.

Sales Numbers German Automotive Companies in China (Jan - April)



June 2022



- Some of the companies had a positive start in 2022. For example, Volkswagen was able to increase its sales in January and February year on year
- Due to the lockdown and the general downturn, however, the economic situation has taken a sharp turn for the worse
- Problems exist in terms of production and sales

# Development of the Chinese Automotive Market in 2022

REV

RDM



#### In 2022, German automakers are continuing to be among the poor performers.

#### Most Sold Automotive Brands at the Start of 2022 (Excluding Imports)

| Name          | January | February | March   | April   | Sales Jan - Apr | Change YoY<br>(Jan - Apr) |
|---------------|---------|----------|---------|---------|-----------------|---------------------------|
| Volkswagen    | 227,953 | 156,714  | 180,786 | 67,278  | 632,731         | -13.05%                   |
| Toyota        | 151,159 | 125,628  | 166,941 | 98,969  | 542,697         | -0.97%                    |
| Honda         | 154,762 | 116,113  | 148,022 | 40,398  | 459,295         | -13.84%                   |
| BYD           | 95,180  | 90,268   | 104,338 | 102,247 | 392,033         | 166.00%                   |
| Changan       | 130,609 | 55,030   | 112,408 | 49,183  | 347,230         | -12.32%                   |
| Geely         | 115,270 | 58,209   | 78,444  | 42,253  | 294,176         | 14.20%                    |
| Nissan        | 112,068 | 75,390   | 57,010  | 38,037  | 282,505         | -15.66%                   |
| Chery         | 71,108  | 47,592   | 63,652  | 36,943  | 219,295         | 7.58%                     |
| Haval         | 70,228  | 41,994   | 54,534  | 29,125  | 195,881         | -29.47%                   |
| BMW           | 79,087  | 43,558   | 35,723  | 31,372  | 189,740         | -19.68%                   |
| Tesla         | 59,845  | 56,515   | 65,814  | 1,512   | 183,686         | 115.72%                   |
| Mercedes-Benz | 57,615  | 42,421   | 50,160  | 29,460  | 179,656         | -24.43%                   |
| Buick         | 61,967  | 42,048   | 57,117  | 16,008  | 177,140         | -34.80%                   |
| Dongfeng      | 56,066  | 35,727   | 48,123  | 27,392  | 167,308         | 55.21%                    |
| Audi          | 63,054  | 43,319   | 31,706  | 14,129  | 152,208         | -41.19%                   |

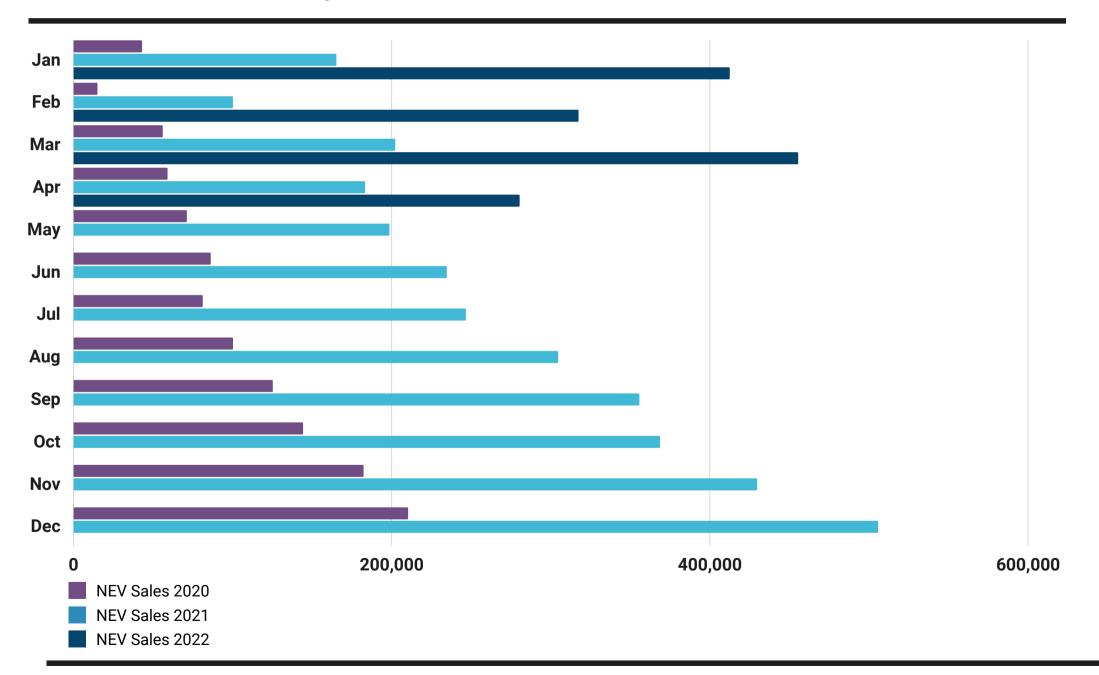


- Total vehicle sales in China in the first four months of the 2022 year fell 12% to 7,691,000 units, from 8,748,000 a year earlier
- Four German automotive brands continue to be among the 15 best-selling brands in China. However, sales of all brands are declining sharply. Still, Volkswagen continues to be the best-selling automotive brand
- The current profiteers are clearly BYD, Tesla, and Dongfeng, which can gain high market shares through their NEV automobiles



#### The triumph of NEV Automotive continues in 2022.

Monthly Sales of NEVs in 2020-2022



June 2022



- Despite the economic downturn, it can be seen that sales of NEVs each month in 2022 are significantly higher than in recent years
- One reason is that production capacity is still a bottleneck, and increased production capacities result in higher sales.
- The demand also remains very high.
- It can be seen that the lockdown in Shanghai also had a negative impact on NEV production and sales volumes in April, as they declined month on month by 38.5%



#### BYD is the clear market leader in the NEV segment.

#### **Top 10 NEV Sellers Januar to April 2022**

| Brand              | January | February | March   | April   | Jan - Apr |
|--------------------|---------|----------|---------|---------|-----------|
| BYD                | 76,719  | 87,473   | 104,878 | 105,475 | 374.545   |
| SAIC               | 72,236  | 45,267   | 74,509  | 37,800  | 229.812   |
| Tesla              | 19,609  | 23,200   | 65,814  | 1,512   | 110.135   |
| Geely              | 17,928  | 14,501   | 15,557  | 15,636  | 63.622    |
| GAC Aion           | 16,031  | 8,526    | 20,317  | 13,141  | 58.015    |
| Xpeng              | 13,025  | 6,225    | 15,414  | 9,002   | 43.666    |
| Li Auto            | 12,268  | 8,414    | 11,034  | 4,167   | 35.883    |
| Neta<br>Automobile | 9,726   | 7,117    | 12,026  | 8,813   | 37.682    |
| NIO                | 10,166  | 6,131    | 9,985   | 5,074   | 31.356    |
| Leap Motor         | 7,440   | 3,435    | 10,059  | 9,087   | 30.021    |
| WM Motor           | 2,701   | 2,701    | 5,516   | 3,314   | 14.232    |
| Geely Zeekr        | 3,309   | 2,916    | 1,795   | 2,137   | 10.157    |
|                    |         |          | 1,795   |         |           |



- In 2022, the clear market leaders will continue to be BYD, SAIC (Wuling), and Tesla
- German automakers are not represented among the best-selling NEV automotive manufacturers. For example, Volkswagen's ID.3 sold only 255 units in April
- Most of these Chinese brands are still growing by more than 100% year on year



# The current difficult economic situation has an overall very negative impact on the premium auto industry.

#### Change YoY Brand April January February Jan - Apr March (Jan - Apr) 108,294 39,022 44,507 241,820 BMW 49,997 2.36% Mercedes-93,967 60,180 37,348 231,104 -2.78% 39,609 Benz 72,517 39,497 48,095 26,706 186,815 -27.81% Audi 114,337 20.17% Tesla 19,346 28,184 65,074 1,733 42,000 14,304 83,810 -8.87% 16,031 11,475 Hongqi 56,541 17.815 11,606 16.911 10.209 -35.25% Lexus Cadillac 21,032 50,846 -32.83% 9,587 12,206 8,021 Volvo -15.85% 15,335 7,873 12.882 7.823 43,913 Jaguar 8.844 5,041 14,245 5,406 33,536 -16.10% Land Rover 23,849 Porsche 8.000 2,928 7.169 5.752 -13.99% 8,821 4,221 4,919 24,302 2.45% Lincoln 6,341 NIO 9,652 30,208 5,672 9,810 5,074 11.21% 12,268 35,888 Li Auto 8.340 11,067 4,213 98.08%

#### **Premium Automotive Sales in China in 2022**

Source: CAAM (2022)



#### **Key Take-Aways**

 Looking at the premium segment, it can be seen that the gainers are clearly NEV-only brands (Telsa, NIO, and Xpeng Motor)

 Compared to other Chinese and global premium manufacturers, the almost constant sales of BMW and Mercedes-Benz are not bad. In contrast, Audi sales are down by more than 20%

 However, it must also be mentioned here that some Chinese premium manufacturers are also facing problems with the transition to NEV vehicles

# Challenges and Outlook of the year 2022





### **Challenges in the Chinese Automotive Industry.**

- The economic downturn has a direct influence on customer demand for automobiles
- Regional lockdowns due to virus outbreaks by the Chinese government are a risk that can significantly affect production without warning
- Even in 2022, chip supply is still limited, and a battery shortage is also possible
- The transformation to NEVs enables new automotive companies to enter the market and increase the existing competitive situation
- Chinese OEMs are trying to localize their supply chain to reduce supply chainrelated risks







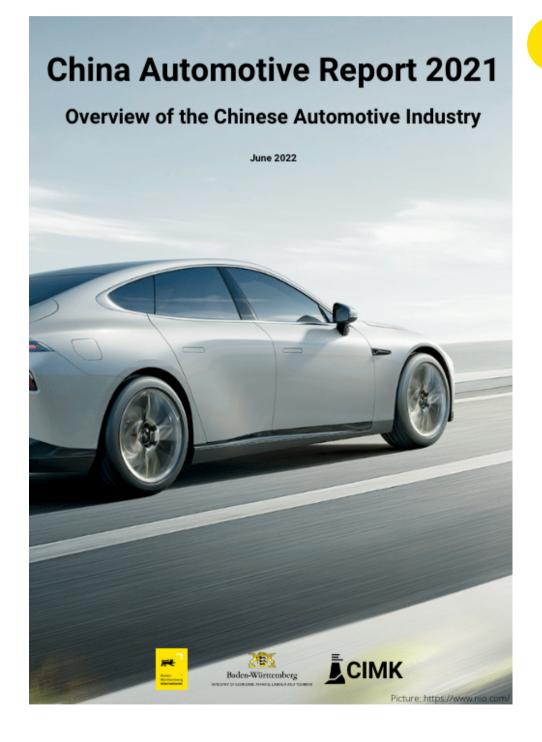
### **Outlook and Conclusion.**

- 2021 was the mass market breakthrough of NEVs, which already had a 20% market share in December
- Conservative estimations suggest that a total of more than 5 million NEV vehicles will be sold in China in 2022
- Many international brands still have a good reputation in China, but many new Chinese automotive brands in the premium segment have rapidly increased their overall market share
- Every international automotive manufacturer has to transform itself into a NEV company and must work hard to ensure that its brand continues to be received as high-quality, up-to-date, and digital

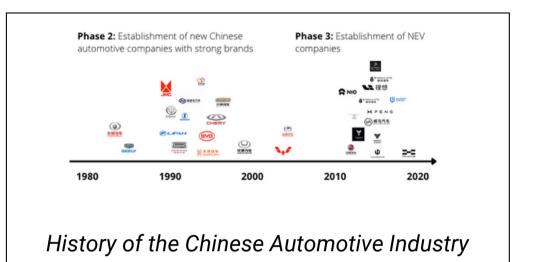


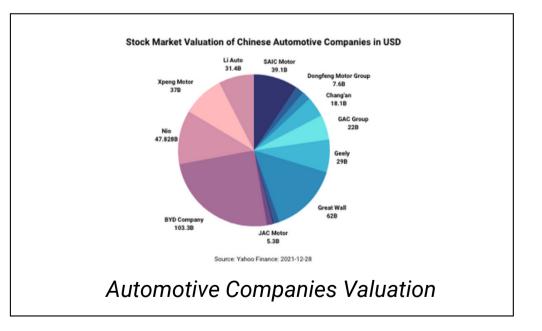






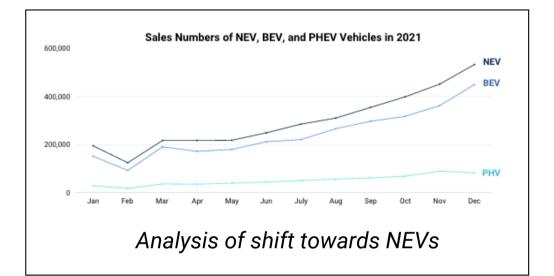
#### **Overview of the Chinese automotive industry in 2021**

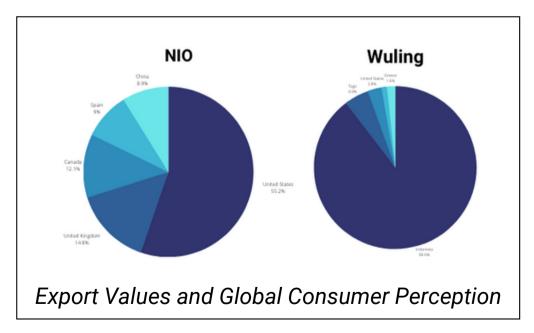




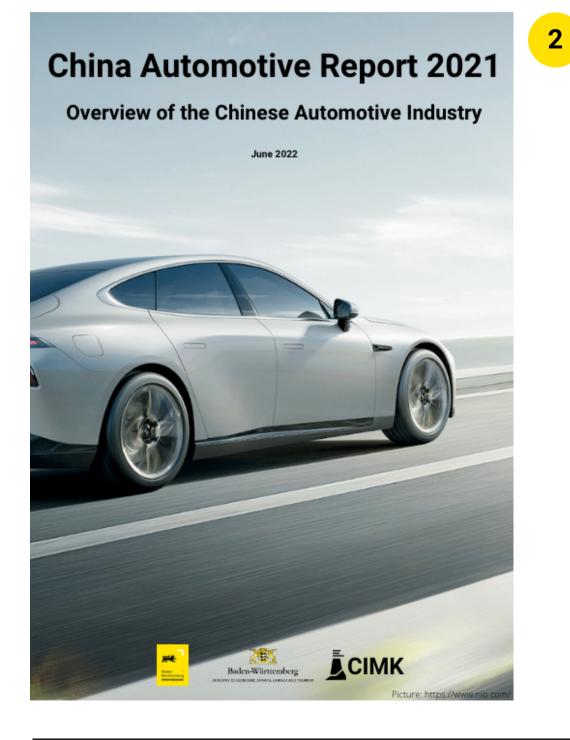
June 2022











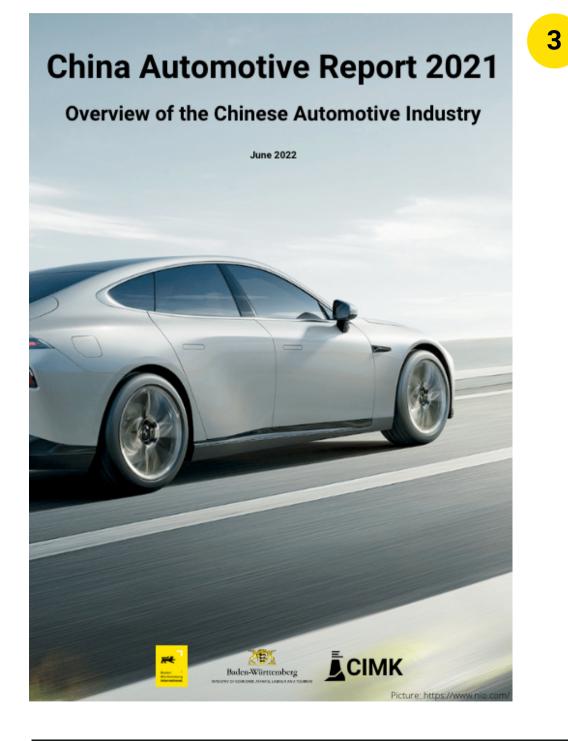
#### Detailed analysis of the following Chinese automotive companies



- Ownership Structure
- 💓 Subsidiaries and Brands
- **V** Production Location
- Sales Developments
- Export Developments
- Management Rotation







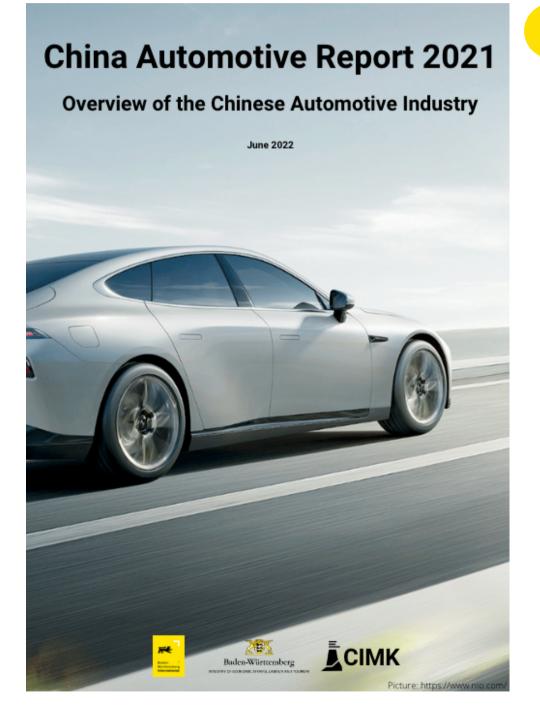
#### Detailed analysis of the joint ventures of the following international brands g<u>m</u> STELLANTIS ACUAR HYUNDAI LAND= =ROVER ΤΟΥΟΤΑ $\mathbf{H}$ HONDA SUZUKI RENAULT NISSAN MITSUBISH

- [<u>Ω</u>=\_] **Ownership Structure**
- **I** Subsidiaries and Brands
- Sales Developments 1
- **Customer/ Public Sentiment on Social Media**
- **Automotive Communities**



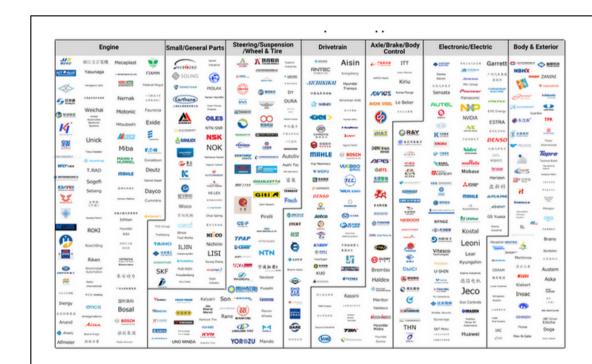






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#### **Overview of the International and Chinese Suppliers**



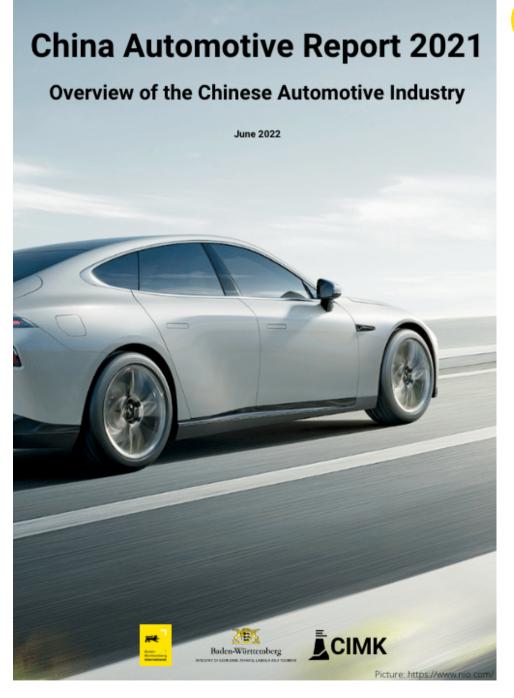
#### Overview and segmentation of supplier



| Rank | English Supplier Name    | Country<br>Headquarter | Chinese Supplier Name | Presents in the Chinese<br>Market |
|------|--------------------------|------------------------|-----------------------|-----------------------------------|
| 1    | Bosch                    | Germany                | 博世                    | High                              |
| 2    | Continental              | Germany                | 大陆集团                  | Medium                            |
| 3    | Denso                    | Japan                  | 电装                    | High                              |
| 4    | Magna                    | Canada                 | 麦格纳                   | low                               |
| 5    | ZF Friedrichshafen       | Germany                | 采埃孚                   | low                               |
| 6    | Aisin                    | Japan                  | 爱信精机                  | low                               |
| 7    | Hyundai Mobis            | South Korea            | 現代摩比斯                 | low                               |
| 8    | Bridgestone              | Japan                  | 普利司通轮胎                | Medium                            |
| 9    | Michelin                 | France                 | 米其林                   | Medium                            |
| 10   | Valeo                    | France                 | 法雷奥                   | low                               |
| 11   | Faurecia                 | France                 | 佛吉亚                   | low                               |
| 12   | Lear                     | USA                    | 李尔                    | Medium                            |
| 13   | Cummins                  | USA                    | 康明斯                   | High                              |
| 14   | Tenneco                  | USA                    | 天纳克                   | low                               |
| 15   | Marelli                  | Italy                  | 马瑞利                   | low                               |
| 16   | Adient                   | Ireland                | 阿迪思特                  | low                               |
| 17   | Sumitomo Electric        | Japan                  | 住友电气工业株式会社            | low                               |
| 18   | Yazaki                   | Japan                  | 矢崎                    | low                               |
| 19   | Weichai Power            | China                  | 潍柴动力股份                | low                               |
| 20   | Goodyear Tire and Rubber | USA                    | 固特异轮胎                 | Medium                            |
| 21   | Aptiv                    | Great Britian          | 安波福                   | low                               |
| 22   | Panasonic                | Japan                  | 松下电器                  | Medium                            |
| 23   | Mahle                    | Germany                | 马勒                    | High                              |
| 24   | Toyota Boshoku           | Japan                  | 丰田纺织                  | low                               |
| 25   | Schaeffler               | Germany                | 含弗勒                   | low                               |

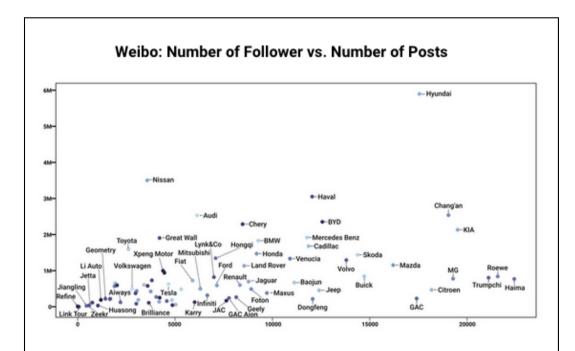
Analysis of how active international suppliers in China are





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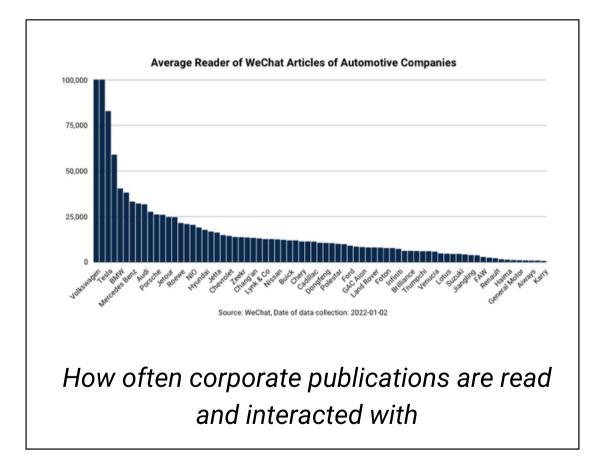
Detailed analysis of how different customer groups rate Chinese and international automotive brands



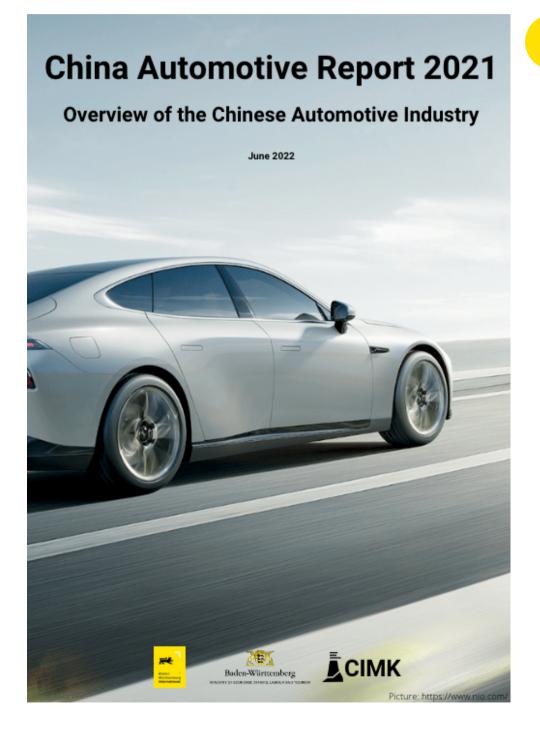
Overview of how often and in what sentiment brands are discussed

June 2022



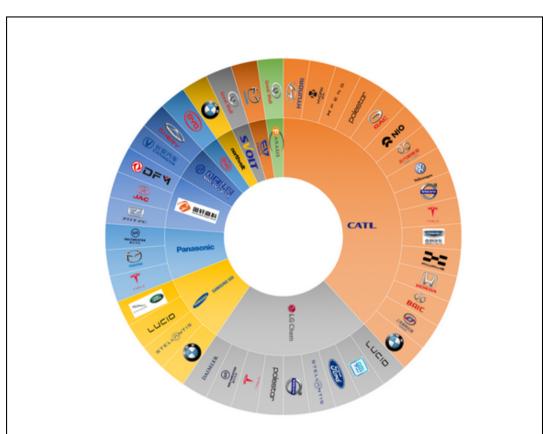






**Battery and NEV Charging Infrastructure Analysis** 

6



Assignment of battery manufacturer and automotive manufacturer

June 2022



| Provinces | Number of Charging Station Units |
|-----------|----------------------------------|
| Guangdong | 11,633                           |
| Jiangsu   | 6,701                            |
| Zhejiang  | 6,001                            |
| Shanghai  | 5,870                            |
| Beijing   | 5,850                            |
| Shandong  | 4,999                            |
| Hebei     | 3,353                            |
| Sichuan   | 2,955                            |
| Tianjing  | 2,845                            |
| Hubei     | 2,379                            |

**Overview of location infrastructures** per province and manufacturer





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# Thank You.

#### If you have any further questions, please contact us

#### **Bernhard Weber**



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