### Chapter 2 Promotion and Application of New Energy Vehicles



As an important strategic pillar industry to promote environmental protection and energy security, the new energy vehicle industry has become an important direction guiding the transformation and upgrading of the automobile industry in countries around the world. In recent years, China has attached great importance to the development of the new energy vehicle industry, and governments, ranging from the central government to the local provincial governments, have taken multiple measures collaboratively to promote the development of the new energy automobile industry, and have made significant achievements till now. This chapter, based on the vehicle access data on the National Monitoring and Management Platform, makes an in-depth analysis of the market concentration, production concentration and NEV marketization characteristics for the promotion of NEVs from different dimensions, laying a good foundation for us to summarize the development characteristics and laws of China's NEV industry and to predict its development trend in the future.

## 2.1 Development Status of China's New Energy Vehicle (NEV) Industry

### The sales of NEVs in China in 2020 was 1,367,000, with the BEV passenger cars dominating the market.

According to data from the China Association of Automobile Manufacturers (CAAM), the sales of NEVs in China in 2020 was 1,367,000 with a YoY increase of 10.9%. Among them, the sales of passenger cars were 1,246,000, which accounts for 91.1% of the total sales of NEVs, and in which the sales of BEV passenger cars increased significantly by 16.1% to 1,000.000, i.e., 73.2% of the total sales of NEVs; the sales of FCEV passenger cars were 247,000, with a YoY increase of 9.1%. The sales of new energy commercial vehicles, compared with last year, dropped slightly to 121,000, which accounts for 8.9% of the total sales of NEVs, and in which the

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	Sales in 2020 (10,000)	Proportion (%)	YoY change (%)
NEVs (Total)	136.7	-	10.9
New energy passenger cars (Subtotal)	124.6	91.1	14.6
BEV	100.0	73.2	16.1
FCEV	24.7	18.1	9.1
New energy commercial vehicle (Subtotal)	12.1	8.9	-17.2
BEV	11.6	8.5	-16.3
FCEV	0.4	0.3	-22.2

Table 2.1 Sales of NEVs in China in 2020

Source China Association of Automobile Manufacturers (CAAM)

sales of BEV commercial vehicles was 116,000 with a YoY decrease of 16.3%; the decline of FCEV commercial vehicles was the highest, and specifically, the sales of PEHV commercial vehicles was only 4,000, with a YoY decrease of 22.2% (Table 2.1).

#### The monthly sales of NEVs throughout 2020 went from low to high.

The change in monthly sales of NEVs in 2020 was significantly different from that in 2019 (Fig. 2.1). In the first half of 2020, the NEV market grew sluggishly due to the COVID-19 outbreak. Specifically, the sales of NEVs from January to June was 393,000, decreasing by 37.4% compared with last year. In the second half of the year, the NEV market, driven by countryside NEV promotion policy, continuous product iteration and promotion mechanism of auto makers and other factors, showed a continuous growth trend. By November, the cumulative sales growth rate increased by 3.9%, putting an end to the negative growth and realizing positive growth. In December, the sales reached 248,000, increasing by 49.5% compared with last year. NEVs worked as the main force for the overall recovery of the automobile market.

#### 2.2 Analysis on Vehicle Access Characteristics of National Monitoring and Management Platform

An important driver for the rapid development of China's NEV industry is the Internet. The NEV access big data characteristics of the National Monitoring and Management Platform is significant for understanding the current NEV promotion and application situation in China, promoting the reasonable layout of the NEV industry, and expanding and strengthening the NEV industry. In view of this, this section makes an analysis from two dimensions, namely the overall access characteristics of NEVs and the historical access characteristics of NEV.



Fig. 2.1 Monthly sales growth of NEVs in China. *Source* China Association of Automobile Manufacturers (CAAM)

#### 2.2.1 Overall Access Characteristics

#### (1) Overall access

### As of December 31, 2020, totally 392,300 NEVs have been accessed to the National Monitoring and Management Platform.

As of December 31, 2020, the number of NEVs accessed to the National Monitoring and Management Platform has been up to 3,923,000, including 5863 models from 306 manufacturers. If we talk from the type of vehicles (Fig. 2.2), the number of accessed passenger cars, buses, and special vehicles are 316,000, 381,000 and 382,000, accounting for 80.5%, 9.7% and 9.8% respectively, which shows that the passenger car takes the main share.

According to the cumulative access of vehicles in different application scenarios, the cumulative access of private cars is the highest with a proportion of more than 50%. As of December 31, 2020, the cumulative access of private cars has reached 1,970,000, accounting for 50.23% of the total number of vehicles accessed to the National Monitoring and Management Platform; the vehicles following the private cars are cars for sharing, official vehicles, logistics vehicles and urban buses with a cumulative access of 557,000, 408,000, 366,000, and 324,000, accounting for 14.2%, 10.4%, 9.3%, and 8.3% respectively.

#### (2) Regional concentration

# The number and proportion of provinces with a cumulative access of more than 300,000 vehicles in 2020 increased significantly compared with the previous two years.

According to the cumulative NEV access of different provinces (including autonomous regions and municipalities directly under the Central Government) on the National Monitoring and Management Platform (Table 2.2), there were 5 provinces with a cumulative access of more than 100,000 in 2018, among which,



Fig. 2.2 Cumulative access and proportion of NEVs for different purposes

Cumulative access level (10,000)	2018		2019		2020	
	Number of provinces	Proportion of cumulative access (%)	Number of provinces	Proportion of cumulative access (%)	Number of provinces	Proportion of cumulative access (%)
0–5	21	17.8	12	5.8	11	4.6
5-10	5	28.8	10	28.0	5	10.6
10–20	4	37.4	6	32.6	8	27.8
20-30	1	16.5	2	16.6	4	23.6
30–50	0	0.0	1	16.9	2	16.7
>50	0	0.0	0	0.0	1	16.7

Table 2.2 The number of provinces of difference access levels and their proportion

Shanghai ranked first with a cumulative access in Guangdong of more than 200,000 (but less than 300,000), accounting for 16.5% of the total NEV access in China; other provinces with a cumulative access of more than 100,000 (but less than 200,000) are Beijing, Zhejiang, Shandong, and Shanghai, accounting for 37.4% of the total NEV access in China.

In 2019, there were 9 provinces with a cumulative access of more than 100,000, among which, the cumulative access in Guangdong was more than 300,000, accounting for 16.9% of the total NEV access in China; and the cumulative access in Beijing and Zhejiang was more than 200,000 (but less than 300,000), accounting for 16.6% of the total NEV access in China.

Classification of proportion of NEV production (%)	2018		2019		2020	
	Number of provinces	Proportion of NEV production (%)	Number of provinces	Proportion of NEV production (%)	Number of provinces	Proportion of NEV production (%)
0-1	11	3.2	10	4.0	10	3.4
1–5	10	14.9	10	29.1	9	17.1
5-10	2	24.7	6	44.3	7	48.7
>10	5	57.2	2	22.6	2	30.8

 Table 2.3
 The number of provinces with different NEV productions and the proportion of NEV production

In 2020, there were 15 provinces with a cumulative access of more than 100,000, among which, the cumulative access in Guangdong was more than 500,000, accounting for 16.7% of the total NEV access in China; the cumulative access in Beijing and Zhejiang was more than 300,000 (but less than 500,000), accounting for 16.7% of the total NEV access in China; the cumulative access in Shanghai, Shandong, Henan and Anhui was more than 200,000 (but less than 300,000), accounting for 23.6% of the total NEV access in China (Table 2.2).

### The promotion scale of NEVs in various provinces has increased steadily, and the cumulative promotion and application effect in Guangdong is significant.

According to the cumulative access of different types of vehicles over the years (Table 2.4), the cumulative access of new energy passenger cars is significantly higher than that of new energy buses and logistics vehicles.

According to the changes in the cumulative access of new energy passenger cars over the years (Table 2.5), the cumulative access of new energy passenger cars in TOP5 provinces increased from 588,800 in 2018 to 1.5322 million in 2020, and the cumulative access of new energy passenger cars in TOP10 provinces increased from 889,700 in 2018 to 2.2826 million in 2020.

According to the changes in the cumulative access of new energy buses over the years, the cumulative access of new energy buses in Guangdong, Jiangsu, Henan, Hunan and Shandong ranks in the forefront, the cumulative access in TOP5 provinces increased from 78,500 in 2018 to 143,900 in 2020, and the cumulative access in TOP10 provinces increased from 125,500 in 2018 to 233,100 in 2020, among which the cumulative access of new energy buses in Guangdong in 2020 was more than 50,000.

According to the changes in the cumulative access of new energy special vehicles over the years, the cumulative access of new energy special vehicles in TOP5 provinces increased from 95,600 in 2018 to 200,800 in 2020, and the cumulative access in TOP10 provinces increased from 144,500 in 2018 to 291,800 in 2020.

According to the access concentration of vehicles of different types over the years, the access concentration of new energy passenger cars and new energy buses in TOP3, TOP5 and TOP10 provinces has shown an overall downward trend; as for new energy

Table 2.4	Cumulative access of vehicles of different types i	n each province	
Type of vehicle	Cumulative access of each province (including autonomous region/municipality directly under the Central Government) in 2018	Cumulative access of each province (including autonomous region/municipality directly under the Central Government) in 2019	Cumulative access of each province (including autonomous region/municipality directly under the Central Government) in 2020
Passenger car	Guangdong Beijing 137637 Beijing 138669 Zhejlang 94852 Shandbrai 94852 Antui 73310 Henan 64512 Jiangsu 6512 Jiangsu 61457 Jiangsu 64464	Guangdong Beiling 212154 875092 Beiling 212154 Zhaigang 163470 Shandong 163470 Shandong 163242 Anhui 146153 Henan 119487 Jiangsu 105136 Tianjin 97646 Hebei 75892	Guangdong 287530 503597 Beijing 286338 Shanghal 213784 Hinan 213784 Anhui 213784 Jiangsu 153450 Tianjin 151123 Guangxi 128123
Bus	Guangdong Guangdong Beijing 13942 Bhandong 13553 Hunan 13578 Jangsu 13578 Jangsu 13578 Jangsu 13578 Jangsu 13578 Jangsu 953 Fujian 9325 Anhui 8060 Shanghai 7355	Guangdong         41728           Hunan         2065           Jangsu         20709           Henan         19483           Shandong         19483           Henan         19483           Shandong         19431           Henan         19483           Schandong         1941           Hebei         13278           Anhui         13278           Hebei         11856	Guangdong Jiangsu 25166 Henan 23137 Hunan 22391 Shandong 22434 Zhejiang 21169 Beijing 21114 Anhui 16002 Hebei 14726 Shanghei 14726
Special vehicle	Guangdong Autor 15447 Shaanxi - 15447 Hubei - 12673 Beijing - 12613 Anhui - 12015 Sichuan - 10815 Jiangsu - 10815 Jiangsu - 9898 Zhejang - 9333 Tianjin - 8853	Guangdong Anhui 23277 Huhei 21917 Sichuan 21917 Sichuan 2155 Shaanxi 21558 Seying 18558 Shanki 18758 Shanki 1876 Jangsu 13876 Henan 13122 Zhejlang 13081	Guangdong         28878         101735           Sichuan         28878         101735           Sichuan         23301         101735           Hubei         23593         2369           Shaanxi         23569         23651           Hubei         23559         23651           Brangu         23655         22461           Jiangsu         13165         22461           Henan         17631         2355           Shanxi         16828         27461           Shanxi         16828         27461           Zhejiang         16828         27451

	Cumulative access of TOP10 provinces over the years (10,000)	Plassenger car           250         228.26           200         166.80           150         88.97           100         88.97           50         19.4024.05           100         2019           2018         2019           2019         2020	Proportion of cumulative access in TOP10 provinces over the years (10,000)	Passenger car         Bus           85         79.39         77.27         76.33           75         75.15         72.37         72.29           66         63.68         61.43         61.23           50         2019         2020
f vehicles of different types in each province	Cumulative access of TOP5 provinces over the years (10,000)	Passenger car 140 140 120 120 120 120 120 120 120 120 120 12	Proportion of cumulative access in TOP5 provinces over the years (10,000)	52.51     53.31     52.52       50     52.51     53.31     52.52       50     49.73     48.53       45     49.73     48.53       36.67     37.8       30     39.83     36.67       31     2019     2020
Table 2.5         Cumulative access and proportion of	Cumulative access of TOP3 provinces over the years (10,000)	Passenger car 140 120 120 10775	Proportion of cumulative access in TOP3 1 provinces over the years (%)	45     Passenger car     Bus       40     38.98     39.9     40.42       35     33.71     34.59     34.13       36     33.71     34.59     34.13       37     26.29     26.41     25.98       20     2018     2019     2020

special vehicles, the proportion of cumulative access in TOP5 provinces increased from 52.51% in 2018 to 52.52% in 2020, and the regional access concentration in TOP5 provinces has remained basically stable.

According to the cumulative access concentration of different types of vehicles in various provinces, the development of new energy passenger cars and buses, after years of promotion and application, has been relatively mature, with the regional promotion concentration decreasing generally; but the new energy special vehicle is still in the early stage of industrial development, and its regional access concentration in TOP3 provinces and TOP5 provinces is relatively high, but as more and more provinces accelerate the pace of electrification in the public sector, the regional promotion concentration of new energy special vehicles will gradually decline.

#### (3) Production concentration

### Compared with 2018, the number of provinces with a proportion of NEV production of more than 10% in 2020 was less.

According to the proportion of NEV production of each province over the years (Table 2.3), the number of provinces with a proportion of NEV production of more than 10% declined. In 2018, there were Anhui, Beijing, Shaanxi, Hunan and Shanghai, accounting for 57.2% of the total NEV production in China; in 2019, there were Beijing and Anhui, accounting for 22.6% of total NEV production in China; Then came to 2020, there were only Shanghai and Guangxi, accounting for 30.8% of total NEV production in China. The TOP2 provinces accounted for 30.8% of total NEV production in 2020, increasing by 8.2% compared with 2019.

The number of provinces with a proportion of NEV production of 5–10% increased. In 2018, there were only Zhejiang and Hubei, accounting for 24.7% of total NEV production in China; by 2020, there were Anhui, Guangdong, Chongqing, Beijing, Hunan, Shaanxi and Jilin, accounting for 48.7% of total NEV production in China (Table 2.3).

#### The proportion of production of new energy passenger cars and special vehicles in major provinces has fluctuated greatly, but that of new energy buses has been relatively stable.

According to the cumulative production of vehicles of different types over the years (Table 2.7), the gap of cumulative production of new energy passenger cars between the top provinces and other provinces is widening gradually.

As for new energy passenger cars, the proportion of cumulative production in TOP3 provinces increased from 34.3% in 2019 to 41.7% in 2020 (Table 2.8), and the cumulative production in Shanghai, Guangxi and Guangdong has increased significantly.

Year	2018	2019	2020
Access (10,000)	133.68	132.49	98.07

Table 2.6 Annual total access of NEVs to national monitoring and management platform in China



As for new energy buses, the production concentration in TOP3, TOP5 and TOP10 provinces is decreasing, with Henan, Hunan, Jiangsu, Shandong, and Fujian ranking in the forefront in terms of cumulative production.

As for new energy special vehicles, the production concentration in TOP3, TOP5 and TOP10 provinces in 2020 was increasing compared with 2019, among which, the proportion of cumulative production in Chongqing grew fastest from 8.1% in 2018 to 34.8% in 2020; the proportion of cumulative production in Guangxi also increased from 0.9% in 2018 to 9.1% in 2020.

#### 2.2.2 Historical Access Characteristics of NEVs

#### (1) Historical access of NEVs to National Monitoring and Management Platforms

### In 2020, there were 980,700 NEVs accessed to the National Monitoring and Management Platform.

As shown in Table 2.6, a total of 980,700 NEVs were accessed to the National Monitoring and Management Platform in 2020, which is lower than that in 2019 mainly due to the delay allowed for enterprises to access the National Monitoring and Management Platform. According to the comparison between the data of the National Monitoring and Management Platform and the actual sales of NEVs (Table 2.9), the access in January and February was significantly higher than the sales, indicating that some NEVs sold at the end of 2020 were accessed to the National Monitoring and Management Platform in January and February 2021.

According to the change in the monthly access of NEVs to the National Monitoring and Management Platform, the monthly access from October 2020 to January 2021 shows an obvious tail-raising trend (Fig. 2.3).

Table 2.9Comparison ofNEV access and sales inJanuary–February 2021	Type of vehicle	January	February	
	Sales (10,000)	17.90	11.00	
	BEV	15.10	9.25	
	FCEV	1.89	1.71	
	Access	21.53	19.79	
	BEV	20.33	18.21	
	FCEV	1.20	1.58	

Source Sales data from China Association of Automobile Manufacturers (CAAM)



Fig. 2.3 Access of NEVs in China-by year

Table 2.10         Access of NEVs           in China-by driving type	Driving type	BEV	FCEV	FCEV
in China-by unving type	Access (10,000)	84.97	12.87	0.23

#### (2) Access of vehicles of different driving types over the years

### The access of BEVs takes a lion's share and shows a tail-raising trend in the fourth quarter.

As shown in Table 2.10, the total access of BEVs in 2020 was 849,700 with a proportion of 86.64%, and the access of PHCVs and FCEVs were 128,700 and 2,300 respectively. According to the distribution of monthly access throughout the year (Fig. 2.4), the access of BEVs in the fourth quarter of 2020 showed an obvious tail-raising trend, and some vehicles were accessed to the National Monitoring and Management Platform in early 2021 (Table 2.9).



Fig. 2.4 Monthly access of NEVs in China in 2020-by driving type



Fig. 2.5 Access in different regions of China

#### (3) Access of vehicles in different regions over the years

East China ranks first in terms of NEV access. According to the access in different regions (Fig. 2.5), East China boasts the highest access with a volume of 325,200, followed by South China and North China with an access of 233,400 and 176,100 respectively.

#### (4) Access in cities of different tiers over the years

### The access of NEVs is closely related to the local economic development and the traffic & purchase restriction policy.

According to the access in cities of different tiers (Fig. 2.6), the access in first-tier cities was the highest in 2020 with a volume of 426,200, which is due to, on the one hand, the implementation of traffic and purchase restriction policies, and on the other hand, the advanced economic development and users' low sensitivity to the price of NEVs; in addition, the year-by-year increase of users' acceptance to NEVs is also an important factor that drives the increase of market demand. In 2020, the access of NEVs in second-tier and third-tier cities exceeded 200,000.

According to the proportion of NEV access in cities of different tiers (Fig. 2.7), in 2020, the proportion of NEV access in first-tier cities was 43.6%, with an increase of 3% compared with last year; the proportion of NEV access in third-tier, fourth-tier, and fifth-tier cities showed an expanding trend; and the proportion of NEV access in cities of third-tier or below was 35.9%, with an increase of 5.03% compared with last year.

#### (6) Access of vehicles in different application scenarios

In order to better study the characteristics of vehicle behaviors in key segments, six segments, including private cars, e-taxis, taxis, cars for sharing, logistics vehicles, and buses, are selected by using the big data intelligent analysis technology from the National Monitoring and Management Platform as the key application scenarios for



Fig. 2.6 NEV access in cities of each tier in China



Fig. 2.7 Proportion of NEV access in cities of different tiers

research. In addition to those six key application scenarios, this report incorporates additionally the study of the operating characteristics of some new energy heavy-duty trucks, and the analysis of the battery swapping characteristics of some heavy-duty trucks of battery swap type, as described in the subsequent chapters. The vehicles of those main application scenarios are defined as follows:

**Private cars:** vehicles not for online ride-hailing service selected from vehicles with an inherent label of "private car" in the National Monitoring and Management Platform as the research object for private car segment

**E-taxis:** vehicles for online ride-hailing service selected from vehicles with an inherent label of "private car", "official car" and "rental car" in the National Monitoring and Management Platform as the research object for the e-taxis segment

**Cars for sharing:** vehicles for time-based rental service and long/short-term rental service selected from vehicles with an inherent label of "rental car" in the National Monitoring and Management Platform as the research object for a segment of cars for sharing

**Taxis:** vehicles with an inherent label of "taxicar" in the National Monitoring and Management Platform selected as the research object of the taxi segment

**Logistics vehicles:** vehicles with an inherent label of "logistics vehicle" in the National Monitoring and Management Platform selected as the research object of the logistics vehicle segment

**Bus:** vehicles with an inherent label of "bus" in the National Monitoring and Management Platform selected as the research object of the logistics vehicle segment

As shown in Table 2.11, the accesses of private cars, e-taxis, taxis, cars for sharing, logistics vehicles and buses in 2020 were 618,400, 13,900, 71,100, 24,300, 47,500 and 62,000, and compared with the access in 2019, the access of private cars increased by 9.9%, the access of logistics vehicles decreased by 61.3%, and the access of buses decreased by 44.1%.

#### (7) Access of new energy private cars over the years

### The NEV has been more than more market-oriented, and the proportion of access of private cars has been growing rapidly.

With the rapid release of private consumer demand, the demand on vehicles for daily travel has become an important force driving the growth of the NEV market. According to data on the National Monitoring and Management Platform, the proportion of access of new energy private cars in 2020 was significantly greater than that in 2018 and 2019 (Fig. 2.8), i.e., increased by 20.6 to 63.1% compared with 2019, which is mainly due to the market-oriented development of more products more suitable

Key segment	Access in 2018 (10,000)	Access in 2019 (10,000)	Access in 2020 (10,000)	2020 YoY change (%)
Private car	63.10	56.27	61.84	9.9
E-taxis	8.95	19.78	1.39	-93
Taxi	4.38	6.41	7.11	10.9
Car for sharing (time-based renting + long/short-term renting)	6.07	4.73	2.43	-48.5
Logistics vehicle	15.13	12.26	4.75	-61.3
Bus	14.09	11.09	6.2	-44.1

Table 2.11 NEV access in key segments



Fig. 2.8 Proportion of access of NEVs in different segments over the years

for consumer demand, coupled with the strengthened promotion of manufacturers in the peak consumer season, and the rapid release of private consumer demand. In addition, in 2020, the proportion of access of taxis increased fast to 7.3% compared with 2019; the proportion of access of e-taxis, cars for sharing and logistics vehicles decreased compared with 2019; and the proportion of access of buses was generally stable.

### Stimulated by the countryside NEV promotion policy, the proportion of access of new energy private cars in cities of third-tier or below increased rapidly.

According to data on the National Monitoring and Management Platform (Fig. 2.9), in 2020, the proportion of access of new energy private cars in cities of the third-tier or below increased rapidly by 7.5 to 39.2% compared with 2019, which is mainly driven by the countryside NEV consumption stimulation policies in various regions. Some NEV manufacturers have responded positively and launched products suitable for the travel needs of residents in cities of the third-tier or below, which further promotes the rapid growth of the private car market in these cities.



Fig. 2.9 Proportion of access of new energy private cars in cities of different tiers

#### 2.3 Summary

With the improvement of the NEVs' cost performance, the upgrading of charging facilities and supporting environment, and the significant increase of consumers' recognition and acceptance to NEVs, the NEV industry has enjoyed explosive growth. According to the access data on the National Monitoring and Management Platform over the years, the NEV industry presents the following development characteristics: The driver for the development of the NEV industry has changed from policy to the combination of policy and market. On the one hand, the proportion of access of new energy private cars is growing rapidly, and the demand in private consumption market is released rapidly. According to the data on the National Monitoring and Management Platform, the access of new energy private cars accounted for 63.1% of total NEV access to the platform in 2020, which is significantly higher than that in 2018 and 2019 mainly due to the market-oriented development of products suitable for customer needs by NEV manufacturers and the rapid release of the private consumer market; on the other hand, the market demand for NEVs in the cities of the third-tier or below is growing rapidly due to the adoption of countryside NEV promotion policy. In 2020, the proportion of access of new energy private cars in cities of the third-tier or below increased rapidly. Some small BEV passenger cars such as Hongguang MINIEV, Chery eQ1 and BAIC EC series were developed and launched according to the market demand of the cities of the third-tier or below, exploring a new path for the market-oriented development of NEVs.

BEVs are the main force in the marketization of NEVs, and among them, FCEVs have entered the steady development stage, and FCEVs are still in the scale demonstration and promotion stage. According to the data on the National Monitoring and Management Platform, in 2020, the access of BEVs was 849,700, accounting for 86.64% of the total NEV access in China; the monthly access of FCEVs maintained stable; the access of FCEVs was 2300, and FCEVs were still in the scale demonstration stage.

**East China is the focus for the promotion of NEVs in China**. According to the NEV access in different regions, East China and South China are the regions where the NEV application is the most concentrated; then according to the NEV access in cities of different tiers, the NEV access in first-tier cities in 2020 was significantly higher than that in cities of other tiers. The access of NEVs is closely related to the local economic development and the traffic & purchase restriction policy of cities. The eastern coastal region is economically developed and densely populated, and users therein have a high recognition to NEVs, and thus the promotion and application of NEVs in this region far exceeds that in other regions.

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