

Research on the Current Situation and Strategy of the Development of BYD New Energy Vehicles in the European Market

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Abstract: The climate crisis hangs over the entire planet, and the present and future survival of mankind is at stake. Therefore, countries have to speed up the transformation of energy structure to delay and control the process of climate change, and encourage the comprehensive development of the new energy vehicle industry. Traditional automobile manufacturers have also joined this new track, hoping to gain a share of the global market of new energy vehicles. In the above context, this thesis takes BYD new energy vehicles as an example, carrying out PESTEL and 4Ps analysis to analyze the main content of BYD new energy vehicles in Europe's development strategy and market status. The methods used in this thesis are mainly case analysis, literature review and data analysis to analyze it. At the same time, some problems are found, such as imperfect supporting facilities, relatively single sales channels and other problems, and corresponding solutions are proposed for these problems. This thesis hopes that by studying the status quo and development strategy of BYD new energy vehicles in the European market, it can play a certain role for reference in its development in the European market.

Keywords: BYD; New Energy Vehicles; Strategy of Development; European Market.

1. Introduction

For the sake of clear illustration and brief introduction of this thesis, three aspects will be included in this part. They are, respectively, the background of the research, the significance of the research and research methodology.

1.1. Background of the Research

With the continuous development of economies around the world, climate crisis also hangs over the earth along with the prosperity of globalization, threatening the present and future living environment of human beings. The Paris Agreement, signed by 178 parties around the world in 2016, has set out "hard targets" for the world to pursue. According to the agreement, all parties will strengthen the global response to the threat of climate change, keep the global average temperature rise below 2 degrees Celsius above pre-industrial levels, and strive to limit the rise to 1.5 degrees Celsius. This makes new energy vehicles gradually replace fuel vehicles and become the new favorite of the automobile market. Major automobile enterprises have developed new energy vehicles to seize the market. Europe, as the birthplace of traditional automobiles, is naturally the blue ocean market highly valued by new energy automobile manufacturers.

In October 2022, the EU's three main bodies -- the European Commission, the European Parliament and Member States -- reached an agreement that would ban the production of new fuel cars from 2035. The move, aimed at speeding up the electrification transition and tackling climate change, will reshape the EU's transport landscape, marking an important step on the road to reduce carbon emissions in the region. The agreement commits EU carmakers to a zero emissions target by 2035. It also requires the bloc to cut carbon emissions by 55 percent over the next decade and set a goal of becoming climate neutral by 2050. Jan Huitema, speaker of the conference, said the agreement clarifies the future created by the auto industry and stimulates innovation

and investment by automakers, which greatly promotes the development of the new energy vehicle industry. It will become cheaper and more convenient for consumers to buy zero-emission new energy vehicles. And this agreement may accelerate the business layout of Chinese new energy vehicle enterprises in the EU market. France, one of the most developed countries in the European Union, will also push hard to achieve its goal of 100% electric vehicles by 2035. In an interview published by Les Echos on October 17, French President Emmanuel Macron said that France aims to produce 2 million electric vehicles a year by 2030. France is sticking to its goal of making 100 percent of its car's electric by 2035. Mr. Macron said France would reach the point of producing one million electric cars a year by 2027. Separately, Mr. Macron will increase financial assistance for half of households to buy an electric car from €6,000 to €7,000.

As the world's third largest auto company, BYD has naturally accelerated its pace in the European market layout of new energy vehicles. In July 2022, according to BYD auto official WeChat, BYD announced that it would launch several new energy models for the European market in the autumn of this year, including BYD Tang, Han, and Yuan PLUS (locally named BYD ATTO 3). It will be shown at the Paris Motor Show in October. According to reports, BYD has reached cooperation with a number of passenger car dealers in Europe, a number of offline stores will be opened in autumn, and the first vehicles are expected to be delivered in the fourth quarter of this year. In August last year, BYD Tang EV launched in Norway and delivered its first car in Oslo, Norway. In July this year, Tang EV achieved the highest sales record in Norway's 7-seat SUV market. However, with the increasingly fierce competition in the industry, how to win in the industry and maintain a long-term development is the problem that new energy vehicle companies have to face. Therefore, they must be based on the current development status and establish the right development strategy.

This thesis studies the development status and strategies of

BYD's new energy vehicles in the European market, analyzes the external macro-environment, and establishes strategies that can guarantee the development of BYD's new energy vehicles in the European market with strong market competitiveness, which has a certain guiding role for BYD's further development in the European market in the future.

1.2. Significance of the Research

As one of the rapidly developing industries in recent years, the development of new energy vehicles has attracted the high attention of many scholars and experts. In the context of climate change and the evolving development of globalization, new energy vehicles have gradually replaced fuel vehicles and become the focus of the future development and transformation of the global automobile industry. And China's domestic car enterprises also want to take this opportunity to achieve the curve overtaking, to stand firm in the evolving situation of globalization, and to improve the domestic new energy vehicle brand influence in the world. Therefore, this thesis takes BYD as an example to study the status quo and development strategy of BYD in the European market, in order to promote China's new energy vehicles to better play their own advantages, and more stable foothold in the European market.

1.3. Research Methodology

Case analysis. In this thesis, BYD, a typical enterprise of automobile new energy, is proposed, and its current situation and development strategy in the European market are analyzed. And PESTEL model is used to analyze the macro environment of BYD's development in the European market, the existing problems and suggestions in its development strategy in the European market, etc.

Literature research method. By referring to the university library collection database, the official website and publications of China Association of Automobile Manufacturers, and the journals of CNKI, the current situation of new energy vehicles and the status quo of BYD in the European market can be learned.

Data analysis. This thesis summarizes the development data of BYD company, combined with key statistical data such as BYD's market share and sales growth rate of new energy vehicles in the European market, to provide data support for the research and development of marketing strategies for BYD's new energy vehicles in the European market.

2. Literature Review

Few scholars abroad have studied BYD or other domestic car brands' expansion and development in overseas markets. On the contrary, many academic theses are basically about the development of China's domestic new energy vehicle market and the entry of overseas new energy vehicle enterprises into the Chinese market. In contrast, domestic research on the overseas development of new energy vehicles is more than abroad. In this respect, the information is also relatively complete, so it can be referred to. The following content will be discussed in detail. Some Chinese scholars have their own academic views on BYD's development, competitiveness and marketing in the European market.

2.1. Researches at Home

Compared with foreign countries, China is vigorously promoting and encouraging the development of the domestic

new energy vehicle market, and the products made by Chinese new energy vehicle enterprises are trusted by domestic and foreign consumers in terms of quality and quality control. In recent years, the state has continuously introduced policies to subsidize the purchase and sale of new energy vehicles, which also makes the export of domestic new energy vehicles to foreign countries become a general trend. In this context, domestic scholars carry out relevant research.

Fu Yurui (2010) concluded the direction that the European market of new energy vehicles should pay attention to by comparing the development experience of foreign countries and the advanced policy encouragement mode. Furthermore, by evaluating auto development conditions and European market environment, the thesis deeply analyzed the development prospects of Chinese new energy vehicles in the European market, and then put forward relevant marketing strategies to provide reference for realizing the "leapfrog" development of Chinese automobile industry.

Ma Hongyan (2020) analyzed the existing problems of the marketing strategies adopted by BYD's new energy vehicles in the European market by combining international marketing theories with enterprise international marketing cases, and provided suggestions for BYD to expand the sales of new energy vehicles in the European market, as well as reference and experience for Chinese new energy vehicle enterprises to occupy the international market. And then it promotes China's new energy automobile industry "curve overtaking".

Wu Jin (2020) analyzed the problems faced by BYD in the market competition of new energy vehicles by means of survey analysis and data analysis, put forward BYD's competitive strategy in theory, made contributions to the construction of the theoretical system of competitive strategy in the new energy vehicle industry, and formulated competitive strategy with certain advantages.

Wan Yijuan (2016) took BYD new energy vehicle as the research object, analyzed its brand strategy in the international market, and compared the study of Yadi new energy vehicle international brand strategy through the case analysis method and comparative analysis method, which played a certain role in the "going out" of Chinese new energy vehicles.

Wang Shanjin and Cheng Yuan (2021) introduced the status quo and development trend of new energy vehicles in Europe, including the European automobile market, carbon emission regulations of the European Union, new energy promotion policies of European governments, and new energy vehicle strategies and technological routes of European automobile enterprises to clarify the status quo and development trend of new energy vehicles in Europe.

Zhang Yan (2019) mainly studied the macro-operating environment of three markets in Europe, North America and South America through PEST analysis, and evaluated the effect of international operation through performance analysis. This study found the successful experience and shortcomings of BYD's international operation, and put forward targeted suggestions for improvement, which can improve the effect of its international operation. Other Chinese new energy vehicle enterprises can learn from BYD's successful experience and avoid similar deficiencies, and gradually move toward internationalization and enhance brand influence. Therefore, this study has important practical significance for the international operation of domestic new energy vehicle enterprises.

Zheng Baocheng (2016) analyzed and studied BYD's new

energy development strategy for China's automobile industry, which not only has reference significance for other domestic new energy automobile enterprises, but also can improve the overall level of China's new energy automobile industry and make China's automobile industry truly become a powerful country from an automobile country. Furthermore, through the rapid development of the new energy automobile industry, the huge pressure of the rapid expansion of the automobile industry on resources, environment and other aspects can be solved.

2.2. Researches Abroad

Foreign scholars study the development and trend of China's domestic new energy vehicle market in more articles and journals, but rarely touch on the status quo and development of China's domestic new energy vehicles in foreign countries. This is also due to the impact of China as a large and unsaturated new energy vehicle market. The following are some of the foreign research statuses.

Christian, T. (2010) et al. studied and compared carbon dioxide emissions from oil wells to wheels, the cost of General Motors in Europe and the cost of carbon dioxide emission reduction, including gasoline cars, diesel cars, gasoline hybrid, diesel hybrid, plug-in hybrid and pure electric cars. The comparison of projections is a snapshot of carbon reduction for 2010, 2020 and 2030 under Europe's new energy policy scenarios.

Fakhrol, H. (2022) et al. mainly focused on the theme of "new" and discussed the competitive advantages and challenges of energy vehicles. From the perspective of market and traditional vehicles, the thesis analyzes the competitiveness of new energy vehicles and the challenges they face.

Giacomo, F. (2021) et al. for the first time conducted a comprehensive bottom-up analysis of the European EV charging network. The thesis displayed a better understanding of some of the key challenges ahead to ensure mass adoption of electric vehicles across Europe, thereby it potentially reduced the environmental impact of the transport sector.

Remi, L. (2022) et al. described a method to study the technical and economic impact of large-scale EV charging on power systems for multiple EV owners by connecting behavioral profiles (systematic, when necessary, and when convenient) and the range of charging modes available (uncontrolled, TOU, intelligent one-way charging, and vehicle-to-grid). The flexibility of solutions can further develop EV needs.

3. BYD's New Energy Vehicles Current Situation in the European Market

Three steps that BYD has taken in order to enter Europe: the first step was to sell buses to the European market from 2013, and set up bus assembly factories in Hungary and France. The second step was to test the water in Norway with the old Tang EV from 2021, with a total sale of more than 2,300 vehicles within a year and a price of up to 600,000 kroner, which was well received. The third step was to start from the second half of 2022, launching an all-out attack on Europe. The Han, Tang and Yuan dynasties appeared together in the European Union.

As early as 1998, BYD established its European headquarters in the Netherlands and contacted dealers around

the country. In the field of commercial vehicles, BYD electric buses have been sold in France, Germany, Hungary, Spain, Finland and other European countries year by year since they entered the UK market in 2015. BYD also opened Europe's first electric bus factory in Hungary in 2017. BYD now accounts for more than half of the electric bus market in the UK and 90 per cent in the capital. In early October 2022, SIXT, Germany's largest car rental company, announced that it had signed a long-term agreement with Chinese car brand BYD. SIXT will purchase 100,000 BYD Atto 3 Series new energy vehicles by 2028, with thousands of BYD vehicles expected to be delivered in the fourth quarter of this year, according to the company's disclosure. Foreign media said these Chinese-branded new energy vehicles, made in China, will soon be put on the car rental market in Germany, France, the Netherlands and the United Kingdom. It's a big deal for SIXT. SIXT, the largest car rental company in Germany and Europe, currently has around 240,000 vehicles under its portfolio. In other words, the BYD deal will increase SIXT's vehicle quantity by nearly 30 percent.

3.1. Introduction of the Company of BYD

BYD Co., LTD. (hereinafter referred to as "BYD") was founded in February 1995, headquartered in Shenzhen, Guangdong Province. The company has more than 220,000 employees, and its business spans four major industries: automobile, rail transit, new energy and electronics. It is listed in Hong Kong and Shenzhen, with revenue and market value exceeding 100 billion yuan. BYD is committed to promoting the sustainable development of human society with technological innovation and helping to achieve the goal of "carbon peak and carbon neutrality". BYD has always adhered to the development concept of "technology is king, innovation is based". With its research and development strength and innovative development mode, BYD has achieved comprehensive development, and plays a pivotal role in many fields such as batteries, electronics, passenger cars, commercial vehicles and rail transit. BYD company's main business covers the following module:

In the automotive field, BYD has mastered the core technologies of battery, motor, electric control and other new energy vehicles by virtue of its technological research and development and innovation strength. At present, BYD's new energy vehicles have formed two product series of passenger cars and commercial vehicles, covering seven conventional areas and four special areas (namely, the "7+4" strategy, in which "7" is private car, taxi, urban public transport, road passenger transport, urban commodity logistics, urban construction logistics, sanitation vehicles; "4" is the special vehicle for storage, port, airport and mine), which covers the whole field.

In the field of urban rail transit, BYD spent five years developing a new design of straddle monorail "cloud orbit." Products have received orders from many cities at home and abroad. In September 2017, the first "cloud orbit" route was completed. Officially opened and operated in Yinchuan. The business will cooperate with new energy vehicles to achieve the three-dimensional overlay of urban public transport. It is the strategic direction of BYD's future development.

In the field of new energy vehicles, BYD took the lead in proposing to replace traditional fuel vehicles with electric vehicles "bus electric." And in the aspect of financial model, together with China Development Bank, BYD launched "zero-yuan car purchase, zero cost, zero risk, zero emission

"solution, providing services for the development strategy of electric transportation. For now, BYD's new energy vehicles such as K9, E6 and Qin have spread all over the world.

In the battery field, BYD has 100% independent research and development, design and production capacity. With more than 20 years of continuous innovation, its products have covered consumer 3C batteries, power batteries (lithium iron phosphate batteries and terpolymer batteries), solar cells, energy storage batteries and other fields, and formed a complete battery industry chain. BYD is now the world's largest manufacturer of lithium-iron phosphate batteries by capacity. In addition to new energy vehicles and rail transit, BYD's battery products are widely used in a variety of new energy solutions such as solar power stations and energy storage stations. BYD is the world's leading supplier of solar energy and energy storage solutions. Its products have been exported to the United States, Germany, Japan, Switzerland, Canada, Australia, South Africa and many other countries and regions. Its main customers include State Grid of China, China General Nuclear Power Corporation, Chevron of the United States, Fenecon of Germany, A-style of Japan, etc.

3.2. Share of BYD's New Energy Vehicles in the European Market

Market share refers to the proportion of sales of a product (or category) of an enterprise in the market of similar products (or category). It largely reflects the competitive position and profitability of the enterprise, usually the higher the market share, the stronger the competition. The market shares of major brands of new energy vehicles in the European market in 2018 are as follows (See Table 1):

Table 1. The market shares of major brands of new energy vehicles in the European market in 2018

Tesla	15%
BMW	10%
Reynolds	8%
Mitsubishi	7%
Nissan	6%
Hyundai	6%
VW	4%
Kia	4%
Volvo	4%
Mini	4%
BYD	2%
Others	31%

Data source: European Automobile Industry Association ([https:// www.acea.be/](https://www.acea.be/))

3.3. Overview of the Competitive Situation

As a mature and open automobile market, Europe gathers the major developed countries such as Europe, America, Japan and South Korea Automobile enterprises. At present, the European new energy vehicle market is not only competitive from the transformation of traditional automobile enterprises, but also there is competition from new forces of new-energy car making.

As shown in the following data, in the sales list of electric passenger models in Europe in 2020, the traditional European

car brand Renault Zoe and the United States car brand Tesla ranked the first and second place. The electric passenger car market in Europe is basically monopolized by European, American, Japanese and Korean manufacturers (See Table 2).

Table 2. The electric passenger car market in Europe is basically monopolized by European, American, Japanese and Korean manufacturers

1. Renault Zoe	99613
2. Tesla Model 3	87642
3. Volkswagen ID.3	56937
4. Hyundai Kona EV	48537
5. Audi e-tron	35463
6. Volkswagen e-Golf	33659
7. Nissan Leaf	31791
8. Peugeot	31554
9. Kia Niro EV	30690

Number of new energy vehicles sold in the European market in 2020.

Data source: European Automobile Industry Association ([https:// www.acea.be/](https://www.acea.be/))

4. Analysis of the External Environment of BYD's New Energy Vehicles and Current Marketing Strategy of BYD New Energy Vehicles in the European Market

4.1. PESTEL Analysis of the External Environment of BYD's New Energy Vehicles in the European Market

In this part, it will analyse the external environment of BYD's new energy vehicles in the European by PESTEL model.

The external environment of the new energy vehicle market is determined by many factors. The following will analyze the external environment of BYD's European market from the perspective of PESTEL (political factors, economic factors, social factors, technological factors, environmental factors, legal factors), in order to better formulate and adjust BYD's development strategy in the European market.

4.1.1. Political Factors

The European Union has greatly enhanced its political support for new energy vehicles, and the core point is to further strengthen the constraints, penalties and incentives. First, the carbon emission standard for vehicles will be significantly raised in 2020 from 130g/km in 2015-2019 to 95g/km in 2020-2025. Enterprises that fail to meet the standard will be required to pay a fine; In June 2022, the European Union advanced the date of zero emission from cars from 2050 to 2035 (i.e., the vehicle CO₂ emission will be 0g/km in 2035). At the same time, the plan to stop selling all fuel vehicles by 2030 is proposed to accelerate the transformation of traditional car enterprises to electrification.

Second, for the purchase and use of new energy vehicles to implement the EU and national level of double subsidies, the highest car subsidies can reach 7,000 to 10,000 euros; there are also tax deductions or deductions, including purchase tax, ownership tax, company car deduction, environmental

protection tax, etc. Take Germany as an example, subsidies for pure electric vehicles (BEVs): 6,000 euros if the price is less than 40,000 euros, 5,000 euros if the price is more than 40,000 euros; For plug-in hybrid electric vehicles (PHEVs): 4,500 euros under 40,000 euros and 3,000 euros above 40,000 euros. The subsidy will run from June 2020 to the end of 2022, after which more stringent requirements are planned for vehicles eligible for support.

Third, the European Union has stipulated that starting from 2026, road traffic carbon emissions will be included in the carbon emissions trading market, setting a price for its pollution and creating a level playing field for new energy vehicles.

4.1.2. Economic Factors

Like this map manifesting, market uptake of electric vehicles is directly related to a country's national income (GDP per capita), showing that affordability remains a major barrier for EU consumers (See Table 3).

Table 3. Gross domestic product (GDP) per capital.By country, 2020



Data source: European Automobile Industry Association (<https://www.acea.be/>)

Across the EU, 10.5 per cent of all new cars registered in 2020 were electric vehicles (ECVs). However, the ECV market share in 10 EU member states remains below 3%. Countries with less than 3 per cent of the ECV market have a per capita gross domestic product (GDP) of less than €17,000, including new members of the European Union in central and Eastern Europe, as well as Greece. In rich countries with an average GDP of more than €46,000, electric vehicles account for just over 15% of total car sales. Seventy-three per cent of global electric car sales are concentrated in the four Western European countries with the highest GDP. Cyprus, on the other hand, sold just 42 electric vehicles in 2020 (a market share of 0.5%). There is a clear division between central and Western Europe on the affordability of ECVs, and a north-south divide is evident across the continent (See Table 4 and Table 5).

Table 4. Top 5: countries with the LOWEST electric car share in the EU + GDP

1.Cyprus	0.5% – €23,580
2.Lithuania	1.1% – €17,460
3.Estonia	1.8 % – €20,440
4.Croatia	1.9% – €12,130
5.Poland	1.9% – €13,600

Data source: European Automobile Industry Association (<https://www.acea.be/>)

Table 5. Top 5: countries with the HIGHEST electric car share in the EU + GDP

1.Sweden	32.2% – €45,610
2.Netherlands	25.0% – €45,790
3.Finland	18.1% – €42,940
4.Denmark	16.4% – €53,470
5.Germany	13.5% – €40,070

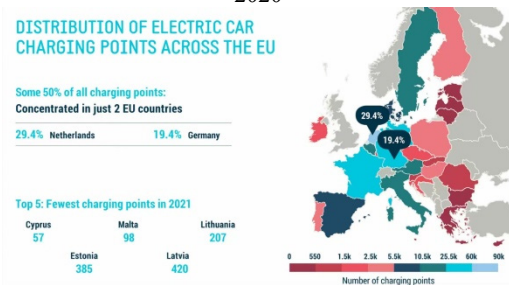
Data source: European Automobile Industry Association (<https://www.acea.be/>)

4.1.3. Social Factors

The slow installation of public charging piles in EU countries leads to a serious shortage of public charging piles in the EU.

Brussels, June 22, 2022 - New analysis of data from the European Automobile Manufacturers' Association (ACEA) shows that half of all electric vehicle charging points in the EU are concentrated in just two countries - the Netherlands (90,000 chargers) and Germany (60,000). These two countries cover less than 10% of the surface area of the entire European Union. The other half of the chargers are in the remaining 25 countries, covering 90 percent of the region's surface area. It urged EU member states to increase investment in electric vehicle infrastructure as soon as possible (See Table 6).

Table 6. Market share of electrically-chargeable cars.By country, 2020



Data source: European Automobile Industry Association (<https://www.acea.be/>)

4.1.4. Technological Factors

Different from traditional fuel vehicles, new energy vehicles have not been in contact with joint venture brands and independent brands for a long time, so the technology is not mature, and the vehicle endurance is very short, slow charging and other problems urgently need to be solved. The core technologies of new energy vehicles are: motor, electronic control system and battery. In terms of battery technology, most of the OEMs (Original Equipment Manufacturers) of self-owned brands do not have the ability to design their own cells and battery packs at present, and most of them assemble through procurement. For sure, multinational companies do not have their own cells, but they do have the ability to produce battery components and management systems, which enhances their core competitiveness in batteries. At present, the degree of autonomy in the field of motor and electric control is not high in Europe. Only few has the core components of electric control. And BYD is one of them.

4.1.5. Environmental Factors

The main reason for banning fuel cars is low-carbon development. Climate change caused by carbon emissions has become a big problem threatening the survival of all mankind.

In order to address climate change, the United Nations established the Intergovernmental Panel on Climate Change (IPCC) in 1988 and has held 26 conferences on climate change since 1997. The Paris Agreement signed at the Paris Climate Conference in 2015, as a legally binding climate agreement, is of great significance to the global response to climate change. In this regard, the EU has been presenting itself as the leader. The EU has long pursued green and low-carbon development, and low-carbon, zero-carbon and negative carbon have become the main ideas of economic and social development.

4.1.6. Legal Factors

On June 29, 2022, at the meeting of the Ministers of Environment of the EU member states, the ministers of the 27 member states voted through the resolution after 16 hours of hard negotiations, supporting the motion of the European Parliament, and decided to stop the sale of new fuel cars in the whole EU in 2035. Among EU countries, France will ban the sale of new fuel cars in 2040; Ireland, Denmark, Sweden and other countries will ban the sale of new fuel cars in 2030; the Netherlands, the most radical country, will ban the sale of new fuel cars in 2025; Norway, also a non-EU country, will also ban the sale of fuel cars in 2030.

4.2. Current Marketing Strategy of BYD New Energy Vehicles in the European Market on 4Ps Theory

In this part, it will analyse the current marketing strategy of BYD new energy vehicles in the European market by the model of 4Ps (See Table 7). And the result of analysis will support the opinion posted by the suggestion part.

Table 7. The model of 4Ps



4.2.1. Product Strategy

Product strategy refers to the enterprise's own product type, product line, new product development, brand design, package design and other aspects targeted to develop strategies and effective use, a series of measures in order to achieve marketing goals.

BYD's new energy vehicle products are mainly divided into two categories: passenger cars and commercial vehicles. The major car companies will target when aiming at the passenger car market. BYD chose the commercial vehicle sector as the breakthrough to enter the European market. Yadi is mainly engaged in electric buses and electric taxis in the European market, as well as electric forklifts involved. Product line covers 8.7 meters, 12 meters, 18 meters e-bus pure electric bus, e6 pure electric taxi. Electric balancing forklifts and electric pallet trucks, as well as BYD, which is jointly built by BYD and its partner ADL Enviro200EV and BYD ADL Enviro400EV.

BYD has equipped the all-electric buses with advanced intelligent monitoring and diagnosis systems, power battery

heat management systems, intelligent distribution management systems and public transport IT systems that comply with European IT×TP standards, continuous breakthrough in vehicle performance and safety, through several large orders and customer reputation in Europe brand effect has been basically established in the bus market. For BYD, however, the bigger challenge is to continue to explore a larger market.

4.2.2. Price Strategy

In a marketing mix, only price reflects revenue; the other factors reflect only cost. Therefore, the price is an important factor affecting the economic benefit of enterprises. If an enterprise wants to get good economic benefits, it must take all kinds of factors affecting the product into account, at the same time, combine the product characteristics and market competition situation to make the appropriate product price.

Due to the high per capital income level in Europe, low sensitivity of consumers to price, and the proportion of medium and high-end new-energy vehicles in the European market as high as 65%, BYD mainly adopts the skimming pricing strategy in the European market, relying on its pure electric bus to obtain the European Union vehicle certification and its unique advantages in the three electric core technologies of new energy vehicles. In the field of new energy vehicles to establish a higher product price, to create high quality and high price product image. Take K9 pure electric bus as an example. The price of this model in the European market is as high as RMB 4 million, far higher than the market price of similar products. In addition, BYD's new energy automobile industry chain covers the upper, middle and lower reaches, which can obtain high profits under the advantage of controllable cost.

4.2.3. Place Strategy

Marketing channels take producers as the starting point and consumers as the ending point. A series of independent organizations set up by producers such as sales agencies, intermediaries, agents, wholesalers and retailers cooperate with each other, so that products or services can be used or consumed smoothly. Products through channels can realize rapid circulation in the market, accelerate the information exchange between producers and consumers, so as to improve the transaction efficiency, and reduce the transaction costs and market risks of manufacturers.

BYD sells directly in Europe. This is because BYD mainly sells commercial vehicles in the European market. Its customers are not final consumers, but public transport operators such as bus companies, taxi companies and government institutions. Besides, BYD has its own wholly-owned factory in Europe, which specializes in the production of new energy vehicles by receiving orders from customers and directly delivering them to customers. As for other marketing channels, such as dealer channels and online channels, BYD has not yet formed in the European market.

4.2.4. Promotion Strategy

Promotion strategy refers to the enterprise's product promotion through TV, media, trade fairs, Internet and other media in order to stimulate the enthusiasm of consumers to purchase products. The promotion strategy has less investment, quick effect and good effect, and has the largest number of modes and the highest frequency of use in enterprise marketing activities. The rational use of promotion strategy will greatly promote the development of enterprise business.

In order to increase its brand awareness and sales in the European market, BYD promotes its products by participating in professional exhibitions. Since BYD entered the European market, it has participated in IAA Exhibition in Hannover, Germany, UITP International Public Transport Exhibition, World Bus Expo, etc., in order to introduce new products and technologies. Moreover, rather than selling directly to customers, BYD first lets customers try the cars for free for a period of several months, using the intuitive driving experience to promote word-of-mouth.

5. Deficiencies of BYD in European Marketing Strategy and Suggestions for Improvement

5.1. Deficiencies of BYD in European Marketing Strategy

Based on the above analysis, it can be found that there are some deficiencies in BYD's development strategy in the European market. First of all, although electric buses have a high market share in the UK, the market share of new energy vehicles in the whole Europe is very low. According to relevant data, the market share of 2% in 2018 is far behind other well-known brands. Second of all, BYD will not fully enter the European market until 2022, so its brand awareness in the European market is far from enough. Third of all, existing competitors and potential competitors are all competing for market share. In this case, BYD, as a latecomer, is far less competitive than new energy automobile manufacturers that have already made strategic deployment in the European market. Fourth of all, BYD also has many problems with its marketing strategy. In terms of product strategy, BYD's product strategy in the European market is relatively simple before 2022, with only three models: bus, forklift and MPV. Fifth of all, in terms of pricing strategy, BYD adopts a skimming pricing strategy in the European market. Although this pricing strategy can obtain high profits, it also has certain disadvantages. Since the pricing does not take the interests of customers and market competitors into account, this pricing method is not conducive to the occupation and stability of the market, and will hinder the improvement of market share. Sixth of all, in terms of sales channel strategy, the main problem of BYD's channels lies in the lack of quantity and quality of channels and the lack of overseas marketing network. In the highly competitive European market, most new energy vehicle manufacturers, by integrating existing marketing channels and sharing dealer networks with traditional vehicles, can not only make good publicity for new energy vehicles through traditional automobile channels, but also greatly reduce the cost of expanding new channels. For BYD, traditional cars are mostly exported to Asia, Africa and Latin America and other less developed regions, while new energy vehicles are targeted at developed countries in Europe and the United States. Especially in the face of the brand-new market in Europe, BYD's channel laying is basically starting from scratch. In addition, in terms of online channels, BYD failed to take advantage of social networking platforms such as Facebook and Twitter, which are common in various countries. Chery, on the other hand, can book a car it likes on its website and then go to an official dealer and buy it at a discount. A weak marketing channel could hamper BYD's push into passenger cars in Europe. Seventh of all, in terms of

promotion strategy, the promotion method is single. At present, the enterprise has various promotion forms, including personnel promotion, advertising promotion, exhibition promotion, public relations, Internet promotion and so on. However, BYD only adopts the way of exhibition promotion and word-of-mouth publicity. Compared with other enterprises, the promotion way is too simple, which is not conducive to enhancing the visibility of the enterprise. In addition, although the exhibition covers customers in most regions of Europe, the establishment of cooperative relationship with customers through the exhibition has a certain degree of contingency, what's more, some customers do not have the habit of participating in the exhibition, but look for suppliers by other means. This way of waiting for customer inquiry in the form of "sitting in the business" is too passive. For the huge potential of the European new energy vehicle market, just rely on these two marketing methods have great limitations, will undoubtedly lose a large part of customers.

5.2. Suggestions for Improvement

Combined with the above problems and the above analysis, here come suggestions for BYD's strategy in Europe. First of all, the problem of small market share and low brand awareness. Combined with the serious shortage of infrastructure for new energy vehicles in Europe, BYD can take advantage of this shortcoming to solve the problem of low brand awareness, so as to achieve drainage and gradually increase the market share. In particular, BYD can build charging posts for free in areas where they are scarce, and negotiate with local governments to mark the posts with some BYD information to raise brand awareness in those areas. In addition, BYD will be fully responsible for the maintenance of charging piles free of charge for a certain number of years, and the maintenance fee will be half funded by the local government. In this way, a charging pile network can be established locally, which also occupies a place in this field and enhances the brand competitiveness to some extent. Secondly, in terms of marketing strategy, BYD announced its official full entry into the European market in September 2022, and withdrew a variety of models in Europe, which broke the previous single problem of combination to a certain extent. In terms of price strategy, BYD focuses on medium and high-end car brands, so the price will not be low naturally. However, on this basis, BYD can provide cars with different prices but different performance configurations, so as to cover more customers to a greater extent. In terms of sales channels, BYD can play a combination of various ways and strengthen its efforts to explore the potential of the online channel. The online channel has developed into an important channel in the European market. Compared with other channels, the online channel can avoid layers of exploitation of the interests of dealers, provide customers with affordable prices, and adapt to the habits of the majority of consumers. In terms of promotion strategies, it should strengthen advertising and promotion, exhibitions, and connect with local network bloggers, so as to enhance brand awareness and promotion ability.

6. Conclusion

In recent years, the development momentum of new energy vehicles is rapid. With the strong support of countries around the world, new energy vehicles have entered the fast lane of development, and there is still a huge space for development

in the future. New energy vehicles will become the direction of the development of the automobile industry in the future. In this context, this thesis takes BYD, the pioneer of China's new energy vehicle industry, as the research object. By analyzing the status quo of BYD in the European market and its marketing strategy, this thesis puts forward the problems in the development strategy, and puts forward corresponding suggestions to solve the problems, so as to optimize the development strategy of BYD in the European market. As one of the world's leading manufacturers of new energy vehicles, BYD has sufficient conditions and ability to explore the developed European markets. Therefore, BYD should take the European market as an important target market for its external layout. At present, new energy vehicle technology is in a rapid development period, and the policies of new energy vehicles in European countries will be constantly adjusted. Therefore, the implementation of marketing strategies also needs to be constantly followed up and supplemented. Now China has become a big country of new energy vehicles, but there is still a certain gap from the goal of becoming a powerful country of new energy vehicles. In the future, Chinese automobile enterprises still need to develop vigorously. By establishing correct overseas market

development strategies and improving marketing ability, they will gradually occupy overseas market shares, and truly realize the goal of "overtaking on a curve" in China's new energy automobile industry. Limited in the author's knowledge level, limited time and other reasons, this thesis may not be very in-depth in the international BYD new energy vehicles strategy analysis. Above all, this study provides some references for future studies.

References

- [1] Christian, T. et al. Cost and CO₂ aspects of future vehicle options in Europe under new energy policy scenarios [J]. *Energy Policy*, 2010, (38): 7141-7151.
- [2] Fakhrol, H., & Mohammad, R. I. New Energy Vehicles from the Perspective of Market and Environment [J]. *Journal of Business Strategy Finance and Management*, 2022, (1): 38-51.
- [3] Giacomo, F., & Michel, N. Electric vehicle charging network in Europe: An accessibility and deployment trends analysis [J]. *Transportation Research Part D*, 2021, (94).
- [4] Rémi, L. et al. Integration of electric vehicles into transmission grids: A case study on generation adequacy in Europe in 2040 [J]. *Applied Energy*, 2022, (326).