

The Impact of Chinese New Energy Vehicle Companies' Corporate Social Responsibility Actions on Stakeholders - Taking SAIC as an Example

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Abstract. Corporate social responsibility is also an important strategy for the development of today's businesses. The automotive industry has always been a rapidly growing sector. With the increasing awareness of environmental protection, the automotive industry is innovating and developing new energy vehicles for production and sale. This article analyzes the impact of corporate social responsibility of Chinese new energy vehicle companies on stakeholders by reading a large number of scholarly literature and combining it with the case of SAIC Motor Corporation Limited. The analysis reveals that the company still lacks self-sufficiency in core technologies, so SAIC Motor Corporation should increase its investment in research and development. The contribution of the company's infrastructure construction is insufficient; hence it is recommended that SAIC Motor Corporation should improve the construction of infrastructure for new energy vehicles. The company lacks a more innovative product strategy; therefore it is suggested that SAIC Motor Corporation should increase its investment in innovative strategies.

Keywords: Corporate social responsibility; Stakeholders; New energy vehicle companies.

1. Introduction

In the context of today's globalization, many scholars have shifted their research focus towards corporate social responsibility (CSR). As a development strategy for businesses, CSR plays a guiding role in global enterprise development. The automotive industry is an important pillar of China's economic development [1]. Cars are also indispensable means of transportation in our daily lives. However, while cars bring convenience, they also have significant environmental impacts, particularly in terms of pollution. In recent years, China's new energy vehicle industry has rapidly developed and become an important sector for promoting economic transformation, upgrading, and environmental protection. As a key industry in China's economic development, automotive companies should set an example for other industries. With the continuous advancement of technology and the increasing environmental awareness of people, it is imperative for companies to prioritize environmental protection. Therefore, the automotive industry has been developing new energy vehicles to mitigate environmental pollution.

In recent years, major automobile manufacturers have been plagued by various "gate events" such as "defect-gate," "recall-gate," and "brake-gate" due to various reasons, attracting significant attention [1]. There has been increasing demand from the public for automobile companies to fulfill their corporate social responsibility (CSR). Consequently, CSR has become one of the focal points in the development process of new energy vehicle enterprises in China.

This article aims to analyze the impact of corporate social responsibility on stakeholders, primarily consumers, in Chinese new energy vehicle enterprises using a case study approach with SAIC Motor Corporation Limited as the representative. Furthermore, by combining the SWOT analysis of SAIC Motor Corporation Limited, future development recommendations will be provided.

2. Review of Research Status

2.1. Definition of Corporate Social Responsibility

Corporate social responsibility (CSR) has undergone a considerable period of development, but there is no universally accepted definition. Many scholars have provided explanations of the concept's content. In his seminal work, "The Philosophy of Management," O·Sheldon first introduced the idea of corporate social responsibility in 1924 [2]. Since then, several scholars have modified or even overturned this notion, proposing different models. Some influential models have emerged as a result. In 1979, Archie B. Carroll presented the CSR pyramid model. This model facilitated the development of corporate social responsibility by suggesting that, in addition to economic responsibility, businesses have legal, ethical, and philanthropic responsibilities, thus enriching the theory of CSR. In 2002, Porter and Kramer introduced the concept of strategic corporate philanthropy. They argued that to achieve a win-win situation for both charitable endeavors and shareholder interests, companies must engage in philanthropy in areas that generate both economic and social benefits [1].

2.2. Research Status of Corporate Social Responsibility in China

In-depth research on corporate social responsibility (CSR) by foreign scholars has also provided theoretical foundations for the development of CSR in China. Zhou Zucheng believes that the social responsibility of a company is a comprehensive responsibility that the company should assume, directed towards stakeholders and including economic, legal, and ethical responsibilities. Li Youhuan suggests that the social responsibility of a company, during a specific period of social development, involves economic, regulatory, ethical, voluntary charitable, and other related responsibilities towards its stakeholders [3]. The development of CSR in Chinese companies can be divided into three stages. The first stage occurred from the mid-1990s to the early 21st century when Chinese companies gradually started paying attention to social responsibility issues. The second stage, from the early 21st century to 2006, witnessed a wide-ranging focus on CSR. The third stage involves companies implementing social responsibility and achieving a dynamic balance between economic, social, and environmental responsibilities.

2.3. The Study of Stakeholders

Robert Edward Freeman elaborated the theory of stakeholders in detail in 1984. He claimed that the stakeholders are organizations or individuals which had been affected by the enterprise goal or the process of enterprise goal realization [4]. According to this theory, stakeholders generally include social stakeholders, such as communities, governments, NGOs; economic stakeholders, such as shareholders, consumers, competitors and suppliers; and organizational stakeholders, such as employees and employers. Some of these stakeholders shared risks in operating the enterprise, some paid for the operating activities. Therefore, managers should consider the interests of stakeholders when making business decisions and give relevant returns and maximize the total value created by enterprises.

2.4. Study Content

This paper studies corporate social responsibility (CSR) and analyzes influence of new energy automobile enterprises in China on stakeholders through reading literature, periodicals and reviews all over the world about "stakeholders", "CSR" and "NEV enterprises".

In Yang Kaijun, Cao Anqi, Hu Yiqun and He Tiantian's "Research on the Realization Mechanism of Corporate Social Responsibility of China's "Start-up" New Energy Vehicles - Based on the Case Study of Li Auto Inc. ", it was clarified as the central idea that the fulfillment of CSR of new energy vehicle inner demand of enterprises' development and an effective guarantee for the sustainable development of enterprises [5]. The above paper adopts the single-case research method, selects Li Auto Inc. as the research objects, and discusses the mechanism of 'start-up' new energy vehicle enterprises' CSR executing. It is found that the scope of the CSR fulfillment includes economic,

environmental, legal, ethical and voluntary responsibilities, and the five responsibilities are interrelated.

In Zhang Kaili's study 'The Dilemma and Development Strategy of CSR in China's Automotive Manufacturing Corporation-Based on the Perspective of Stakeholders', the author uses the pyramid model, based on the frequent problems of the car industry in daily life and the overall development of China car industry to raise some problems and dilemmas of the performance of CSR [6]. Such as uneven performance, insufficient information disclosure, and production consistency problems. In view of the above problems, the causes are analyzed one by one from the perspectives of internal factors and external factors, and corresponding solutions are proposed [4]. The other author Cao Yang, integration from the macro social responsibility of Chinese enterprises, clarifies the conceptual evolution, main content, composition and important role of CSR, and identify the theoretical basis to be used, such as stakeholder theory, organizational legitimacy theory, corporate citizenship theory in his article "Research on CSR standards and their implementation in China's automobiles (2014)" [7]. Then, the author Cao Yang clarified the CSR of automobile enterprises and detailed analysis of CSR standards and construction principles. In the end, he conducts the case study of Faw BMW, and compares the CSR from aspects like society, environment, consumers and employees [8]. Based on the comparison, the problem is raised, the cause of the problem is identified, and the solution is proposed, and then the whole is summarized (the four dimensions of CSR standards, automotive enterprise standards and their particularities) [2].

3. Representative of SAIC Motor Corporation Limited

3.1. The Market Share is Large

SAIC Motor Corporation Limited is one of the largest companies in production and sales in China, which is the leader of the vehicle industry. Meanwhile, it is businesses include six modules, such as parts and components, mobility and services, finance, international management and Innovative technology. SAIC Motor Corporation Limited subordinates SAIC VOLKSWAGEN, SAIC MAXUS, IM Motors, and RISING AUTO and so on.

In 2022, there are 5.303 million complete vehicles were sold by SAIC Motor Corporation Limited. SAIC Motor Corporation Limited maintains sales first from 2005 to 2022 in China and became the first automobile group because its Car sales reached one million respectively in the domestic and overseas and the total turnover reached 744.063 billion [9]. In the first quarter of 2023, SAIC Motor Corporation Limited sold 891,000 cars, in addition, there is 14, 5916 billion yuan obtained by SAIC Motor Corporation Limited [10]. SAIC Motor Corporation Limited ranks 84th in the world's top 500 in 2023.

3.2. New Energy Vehicle Technology Research and Development Investment is Large

SAIC Motor Corporation Limited was one of the earliest movers about motivating the developing of new energy automobile and researching fuel cell technology. Meanwhile, SAIC Motor Corporation Limited was an exclusive company which was successful to commercialize the variety of fuel batteries. In 2001, SAIC Motor Corporation Limited started to project called "Phoenix One" with regard to development of fuel batteries. In September 2001, this group cooperated with China National Petroleum Corporation, Sinopec Group and Contemporary Amperex Technology Co., Limited to invest and set up a company called Shanghai Jie Neng smart electric new energy Technology Co., LTD which has a great member of businesses such as battery rental business, power change technology development and promotion, battery operation management, big data service and so on [11].

It is expected in 2025.SAIC Motor Corporation Limited will preliminarily accomplish Convert the old track to the new track. Its self-owned brand company will accelerate development's pace, which will account for 60% in the group's overall sales. As for product structure, SAIC Motor Corporation Limited will turn Conventional car into Upgrading and development of electric intelligent network

connection, which will be beneficial to enhance capability of new vehicle integration and refer to chip, operating system, and software. The proportion of sales volume of new energy vehicles in overall sales volume of SAIC Motor Corporation Limited will be 50% and sales volume of intelligent connected vehicles that will have Level 2 and above integral technical equipment in overall sales volume of SAIC Motor Corporation Limited will be over 50% [12].

3.3. SAIC Actively Gives Play to Its Corporate Advantages and Fulfills Its Social Responsibilities

With regard to “2022 SAIC Social Responsibility Report”, SAIC Motor Corporation Limited complied with social responsibility about the user-oriented, partner in progress and innovation. SAIC Motor Corporation Limited took an active part in carrying out corporate social responsibility involving constructing community service project, making cooperation and communication platform, promoting development of zero carbon factory. In 2022, there was 55.704 billion yuan which was tax paid for government, and SAIC Motor Corporation Limited put 76 million yuan into charity [13]. SAIC group was aggressive in working resumption and guaranteeing the supply of products, in addition, it proofed the responsibility of domestic enterprises by practical action. During 2022, Saic Chase produced 90 special vehicles by extra work, and these cars were used for areas affected by COVID-19 in China [14]. Xiang Dao travel belonged to SAIC group set up a support team to support Xuhui District in Shanghai, which spend 20,000 hours on service. SAIC have allocated more than RMB70 millions of special funds, and about RMB200 million had invested on employees health and life assistance [15].

4. SWOT Analysis of CSR of SAIC

4.1. Advantage Analysis

SAIC Motor Group's new energy vehicles are reasonably priced and suitable for the majority of people. Taking the Hongguang MINI as an example, it is currently priced at a minimum of 32,800 yuan, while the prices of other new energy electric vehicles generally start from 150,000 yuan. Therefore, the Hongguang MINI is the preferred choice for many people. SAIC Motor Group's new energy vehicles not only have affordable prices but also maintain high quality, safety standards, and long driving range. This allows consumers to use them with confidence, making them the choice of the majority.

SAIC Motor Group is committed to environmental protection and improving energy management. In the process of automobile manufacturing, SAIC Motor Group uses environmentally friendly materials and employs a range of disinfection measures to treat water used in painting, which is then utilized for greening the plant area. This approach allows for simultaneous environmental protection and efficiency, achieving green production [16]. In addition, SAIC Motor Group recycles and utilizes retired batteries from the research and development phase of new energy products. They have constructed the first megawatt-scale photovoltaic and wind energy integrated storage and utilization power station in Guangxi province, which can provide charging for 250 Baojun E100/E200 vehicles. Furthermore, SAIC Motor Group optimizes its energy structure and monitors and controls the entire energy utilization process. Their strong emphasis on environmental protection has earned them the Green Factory Certification from the Ministry of Industry and Information Technology's fourth batch of green manufacturing system [6].

SAIC Group is committed to public welfare actions, making contributions to society and enhancing its reputation. Since 2006, SAIC Group has been dedicated to public welfare actions, contributing its efforts to society. In collaboration with the supply chain of SAIC and the Chinese Red Cross Society, SAIC Group has built health stations in impoverished and minority areas, providing medical training for rural doctors and improving local medical standards to offer medical assistance to those in need [17]. During the pandemic, SAIC Group allocated workshops specifically for mask production, alleviating the shortage of masks. Meanwhile, SAIC Group mobilized global

resources to purchase masks from overseas and donate them to the government, ensuring the safety of medical personnel. Moreover, they also contributed 35 Baojun new energy vehicles as work vehicles for epidemic prevention, assisting medical units in rescue operations and providing comprehensive assistance to relevant departments in the fight against the epidemic. These contributions to society have earned SAIC Group a higher level of recognition [7].

4.2. Weakness Analysis

4.2.1. Low self-sufficiency of core technologies

SAIC's chip self-sufficiency rate is only 6%. Its most important brand of new energy vehicles: SGMW has its main technology from General Motors of the United States. The reason for this problem may be that SAIC Motor has insufficient investment in research and development [18].

Table 1. Tesla's R&D investment [20].

Y2022	Total annual revenue (billion)	Total annual R&D invest (billion)
Tesla (\$)	81.5	3.075
SAIC(CNY)	720.988	20.866

The above data in table 1 shows that Tesla's R&D investment accounted for 3.77% of operating revenue, and SAIC's was 2.89%. Tesla's data is one percentage point higher than that of SAIC. And Tesla is a technology leader, and SAIC, as a catch-up, should have more R&D investment than Tesla. It can be seen that SAIC's investment in scientific and technological research and development needs to be improved.

The scarcity of core technologies and dependence on imports may directly affect the competitiveness and profitability of enterprises, and have a significant impact on the development of enterprises.

4.2.2. Insufficient contribution to infrastructure construction

SAIC lacks of contribution to the construction of supporting facilities for new energy vehicles. SAIC's business scope includes automobile manufacturing, automobile sales, R&D innovation, etc., but does not include the construction of charging facilities supporting new energy vehicles [19]. Compared with Tesla, Tesla is not only a car manufacturer, but also a service provider and charging network construction. Tesla has built and opened more than 1,500 Supercharger stations and tens of thousands of Superchargers in Chinese mainland [20].

In the new energy automobile industry, the construction of charging piles is an extremely important part, which is directly related to the charging convenience of new energy vehicles and the promotion and popularization of the new energy automobile industry. As a leading enterprise of new energy vehicles in China, SAIC Motor should contribute to the construction of charging infrastructure network [21].

4.2.3. Lack of innovative product strategies

SAIC's development trend is not optimistic. In 2022, SAIC's total operating income will be approximately RMB744.063 billion, a decrease of about 4.59% from the previous year [22]. BYD's total revenue in 2022 will be about 424.06 billion yuan, an increase of 96.20% over the previous year [23]. It can be seen that SAIC's market share is declining, which is not caused by force majeure such as the epidemic. The lack of innovative product strategies is an important reason. Product innovation is one of SAIC's social responsibilities to Chinese society, which can promote industrial upgrading, create employment opportunities, improve the quality of life of the masses, and promote economic development.

One of the product innovation initiatives that SAIC can take is to expand other areas of strength besides energy conservation and environmental protection. For example, SAIC Motor should develop autonomous driving technology. This technology can effectively reduce the occurrence of traffic

accidents, improve traffic safety, and help reduce the loss of life and property caused by traffic accidents. Such innovative initiatives have positive implications for Chinese society.

4.3. Opportunity Analysis

With the increasing policy support of the Chinese government for new energy vehicles, SAIC Motor Corporation Limited and its affiliated companies all benefit from incentive policy and preferential policy to increase development of SAIC group. Among these policies, National Development and Reform Commission published “Motor vehicle industry development policy” that focused on energy saving, environmental protection and sustainable development of new energy vehicle technology[8]. The executive meeting of The State Council studied and measures policies to promote the high-quality development of the new energy automobile industry On June 2, 2023. Government implemented a series of measures to decrease the purchase tax and optimize the layout of charging piles. Though a series of policies and measures to carry out, SAIC Motor Corporation Limited rose the public's acceptance and utilization rate of new energy vehicles, meanwhile.

4.4. Threat Analysis

Along with the application of new energy vehicles gradually, battery ranges and recycling issues have become the focus of public attention. Battery life and recycling industries still face high recycling costs. The technical specifications of the industry are not perfect. These issues determine the public's acceptance of new energy vehicles and influence speed of development about new energy vehicles. SAIC group's new energy vehicle brands research and look for the solutions to problems about battery life and after sale. However, these problems have not improved significantly. This phenomenon will affect sell condition of SAIC group's new energy vehicles and decrease public acceptance level. Meanwhile, the main purpose of creating new energy vehicles is to save and reduce energy consumption. But battery recycling and after-sales business of new energy vehicles are not thorough and contrary to sustainable development. Therefore, SAIC group should pay attention to battery-related issues and come up with new solutions. SAIC group wants to achieve the support and recognition from the public and serve them.

5. Analysis of Issues Related to CSR of SAIC

5.1. Consequences of the Shortage of Core Technologies

At the economic level, the shortage of core technologies will lead China to rely more on imports to meet the demand for new energy vehicles. This will lead to an increase in China's trade deficit for new energy vehicles, and importers may bid up prices, increasing the burden on China's economy. From the aspect of security, the shortage of core technologies will lead to some key areas such as defense and cybersecurity, which have potential safety hazards due to the inability to control the quality of imported products. And problems such as equipment failure and information leakage occur. In terms of talent, the lack of core technology research may make it difficult for China to cultivate high-end talents on its own, or cause talent drain.

5.2. Consequences of Inadequate Infrastructure Construction

Insufficient infrastructure construction may make it difficult to popularize new energy vehicles. The lack of charging facilities may affect the popularization of new energy vehicles in China. This will inhibit the development of the new energy automobile industry. Car owners will choose to continue to use traditional fuel vehicles, causing environmental pollution and increasing the difficulty of China's environmental remediation.

Inadequate infrastructure can also lead to an uneven distribution of resources: the number of charging piles may vary from region to region, resulting in convenient charging in some regions and insufficient charging in others. A small number of charging facilities will be concentrated in

economically developed urban areas, which will lead to the imbalance of charging resources between rural and urban areas, which is not conducive to China's social unity and stability.

5.3. Consequences of Lack of Innovation

SAIC's lack of innovation may lead to the weak competitiveness of its products, which in turn will affect the competitiveness of China's new energy vehicles in the global market, affecting exports and international trade. The lack of innovation will also lead to a fixed market positioning. SAIC's current models include only small and mini cars and transport vans. As a result, the masses who pay attention to SAIC's products do not have much product selection.

6. Based on the Relevant Suggestions of SAIC Group Social Responsibility Related Issues

6.1. Encouraging Enterprises to Increase Investment in Research and Development

Mastering core technology is crucial for enterprises as it impacts their profitability, competition, and development. Currently, SAIC Group still relies on imported chips as it has not yet mastered chip technology. Chips have extensive applications in the automotive industry, and without them, cars cannot function. Chips are like the nerves of automobiles, involved in various aspects such as engines, driving, and entertainment [10]. If the relationship between China and the United States deteriorates, the US may stop supplying chips, posing a significant challenge for SAIC Group. Therefore, as an important Chinese automotive enterprise, SAIC Group should increase investment in research and development of core technologies such as chip manufacturing, aiming to gain competitiveness and avoid being restricted by relying on imported chips in the future.

6.2. Expanding the Scope of Business, Improve the Construction of New Energy Vehicle Infrastructure

In recent years, in response to environmental policies, the development of new energy vehicles has been rapid, but they have not yet fully replaced traditional fuel vehicles. To achieve a complete transition, it is necessary to improve the infrastructure for supporting services of new energy vehicles, such as the construction of charging stations and the enhancement of automotive components' performance. If SAIC Group can take charge of building its own charging stations, it can enhance brand loyalty and establish brand culture and social circles in the shortest possible time. The establishment of charging stations by automotive companies is helpful in improving the future industry chain. New energy vehicles are closely related to energy storage markets, as the batteries of a retired electric vehicle, with a capacity loss of 20% to 30%, can still be used as energy storage batteries for several decades. Therefore, by establishing their own charging stations and gaining access to vehicle information, automotive companies can maintain relationships with users and encourage them to choose their brand for future vehicle recycling [11].

6.3. Increase Investment in Innovative Strategies

SAIC Group is a leader among Chinese automotive companies, and to maintain its leading position, it should invest in innovative strategies on top of its current foundation. For example, it can develop additional vehicle models that are suitable for a wide range of demographics based on existing models, better meeting consumer demands and suiting various occasions. In addition to updating vehicle models, SAIC Group can also pursue more technological innovations, such as incorporating more intelligent features into its new energy vehicles to better serve consumers. However, while pursuing convenience and intelligence, it is crucial to prioritize safety. Reforms and enhancements can be made to existing technologies to ensure both safety and intelligence.

7. Conclusion

The new energy vehicles industry is in an early stage of growth and a period of rapid development. In this period, new energy vehicles enterprises have important corporate social responsibility and serve the public. We explicit SAIC group's market shares the amount of investment in research and development of new energy vehicles, fulfilling corporate social responsibility actively and other representatives by means of learning about knowledge about corporate social responsibility and stakeholder theory. The paper uses SWOT to analyze the corporate social responsibility of SAIC. And then, the advantages, disadvantages, opportunities and threats of SAIC corporate social responsibility are analyzed. The company needs analyze the existing problems according to the shortcomings and threats. Compared with the traditional cars, new energy vehicles companies are short of business experience and new energy vehicles companies' technologies are immature, which lead to the market share of new energy vehicles products are lower than traditional cars and the public do not accept the new energy vehicles. As for SAIC group, enterprise should enhance investment in research and development of new energy vehicle technologies, upgrade chip technology, consummate infrastructure for new energy vehicles and plan and allocate surplus funds properly, which are benefit to public. SAIC group's research and develop various technology. It is conducive to promote the progress of the national new energy vehicle industry and won the trust of the public. SAIC group adds the sense of social responsibility to daily business operations. When SAIC group strengthens the quality of new energy vehicle products' supply chain, SAIC group could develop the image of new energy vehicles in the public mind and acceptance level and do it best to solute some problems about energy consumption in life. Because this thesis is based on data and literature to analyze and research before 2021, it has certain objective limitations. The new energy vehicle industry is developing rapidly recently, new era users have much higher standards about electrification, intelligentization and networking. It is obvious that SAIC group needs set up higher requirements than before. SAIC group is supposed to focus on fulfilling corporate social responsibility and promote the development and innovation of company's quality.

Authors Contribution

All the authors contributed equally and their names were listed in alphabetical order.

References

- [1] Deng Zhe. Research on corporate social responsibility of automotive in China from the perspective of stakeholders. Hunan University of Technology, 2013.
- [2] Cao Yang. Research on CSR standards and their implementation in China. Northeastern University, 2014.
- [3] Kou Zhanying. Literature review on corporate social responsibility. Commerce, 2014, (05), 268.
- [4] Freeman R. Edward. Strategic management: A stakeholder approach. Cambridge University Press, 2015.
- [5] Yang Kaijun, Cao Anqi, Hu Yiqun, et al. Research on the mechanism of achieving corporate social responsibility in "Startup" new energy vehicle companies in China: A case study of ideal automobile. In Proceedings of the 17th Annual Conference of the China Management Modernization Research Association, Fudan Management Award Foundation, 2022: 15.
- [6] Zhang Kaili. Challenges and development strategies for corporate social responsibility of Chinese automotive manufacturers: A stakeholder perspective. Marketing World, 2019, (52): 178+197.
- [7] Chaoyang Wuling Baojun 4S Store. Wuling: Green Development, Innovative Manufacturing! Economic Daily Commends SAIC-GM-Wuling's Ecological Construction. March 22, 2021. Retrieved on August 22, 2023. Retrieved from: <https://www.bilibili.com/read/cv10410599>
- [8] Longyan Baojun Wuling. Leading by Example, Sustained Public Welfare – SAIC-GM-Wuling in Action. February 10, 2020. Retrieved on August 22, 2023. Retrieved from: https://www.sohu.com/a/371924225_99955648

- [9] State Council of the People's Republic of China. Regulations of Investment in the Automobile Industry. Retrieved on May 21, 2004. Retrieved from: www.gov.cn
- [10] Gratitude Tide Review. Issues and Suggestions Regarding the Development of New Energy Vehicles. June 1, 2022. Retrieved on August 25, 2023. Retrieved from: https://m.sohu.com/a/553078820_120596939
- [11] Car Guys. Escalation of China-US Trade War, Will Chinese Automotive Brands Face a "Chip Crisis"? July 21, 2018. Retrieved on August 25, 2023. Retrieved from: <https://chejiahao.autohome.com.cn/info/2576376/>
- [12] Automobile Science Island. Two Meanings of OEMs Building Their Own Charging Stations: Car Piles and Light Storage Closed Loop, Intelligent Ecological Construction. July 4, 2023. Retrieved on August 25, 2023. Retrieved from: <https://baijiahao.baidu.com/s?Id=1770474316577541453&wfr=spider&for=pc>
- [13] Li Xinyue. The impact of the development of new energy vehicles on energy and the environment. Resource Conservation and Environmental Protection, 2023, (04): 129-132.
- [14] Bao Xiaona, Zhang Shu, Chang Linlin. Research on the path of strategic corporate social responsibility practice from the perspective of stakeholders. Learning and Exploration, 2022.
- [15] Li Cong. The impact of manufacturing industry's social responsibility on performance based on stakeholder theory. Yangzhou University, 2020.
- [16] Yu Xinyu. Literature review on the influence of female executives on corporate social responsibility. China Management Informatization, 2020, (13): 70-72.
- [17] Su Jie. Misconceptions and improvements in Chinese enterprises' understanding of corporate social responsibility. Journal of Taiyuan Urban Vocational College, 2018, (07): 177-178.
- [18] SAIC. Shanghai Automotive Group Co., Ltd. 2021 Annual Report. Shanghai: Shanghai Automotive Group Co., Ltd., 2021. Retrieved on September 28, 2023. Retrieved from: http://www.sse.com.cn/disclosure/listedinfo/announcement/c/new/2022-04-30/600104_20220430_7_33F1fGSz.pdf
- [19] SAIC. Shanghai Automotive Group Co., Ltd. 2022 Annual Report. Shanghai: Shanghai Automotive Group Co., Ltd., 2022. Retrieved on September 28, 2023. Retrieved from: http://www.sse.com.cn/disclosure/listedinfo/announcement/c/new/2023-04-29/600104_20230429_BB1P.pdf
- [20] SAIC. SAIC Group 2022 Corporate Social Responsibility Report. Shanghai: Shanghai Automotive Group Co., Ltd., 2022. Retrieved on September 28, 2023. Retrieved from: <https://www.saicmotor.com/chinese/qyshzrbg/index.shtml>
- [21] Tesla. Tesla Annual Report 2022. California: Tesla, 2022. Retrieved on September 28, 2023. Retrieved from: https://ir.tesla.com/_flysystem/s3/sec/000095017023001409/tsla-20221231-gen.pdf
- [22] Deloitte China. 2022 Observation Report on Investment Opportunities in the Chinese New Energy Vehicle Industry. Shanghai: Deloitte China, 2022. Retrieved on September 28, 2023. Retrieved from: <https://www2.deloitte.com/cn/zh/pages/consumer-business/articles/investment-opportunities-observation-on-new-energy-auto-in-china.html>
- [23] BYD Co., Ltd. 2022 Annual Report. Shenzhen: BYD Co., Ltd., 2022. Retrieved on September 28, 2023. Retrieved from: <https://www.bydglobal.com/sitesresources/common/tools/generic/web/viewer.html?file=%2Fsites%2FSatellite%2FBYD%20PDF%20Viewer%3Fblobcol%3Durldata%26blobheader%3Dapplication%252Fpdf%26blobkey%3Did%26blobtable%3DMungoBlobs%26blobwhere%3D1638928374244%26ssbinary%3Dtrue>