

Research on ESG Performance Evaluation of New Energy Automobile Enterprises-- Taking XPeng and BYD as Examples

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Abstract: This study aims to explore the ESG (environmental, social, governance) performance evaluation of new energy automobile enterprises, and make a comparative analysis of XPeng and BYD, two well-known new energy automobile enterprises in China. This paper used the data comparison method to conduct an in-depth comparative analysis of the ESG performance of XPeng and BYD, discuss the three aspects of environment, society, and governance, and evaluate the performance of the two enterprises in various aspects of ESG performance. Based on the comparison, this study analyzes the impact of the ESG performance of the two enterprises on society and discusses the meaning of comparison and implications for the new energy automobile industry. This study is expected to provide reference and inspiration for the improvement of ESG performance of new energy automobile enterprises and promote the sustainable development of the new energy automobile industry.

Keywords: ESG performance; Social Impact assessment; New energy automobile enterprises

1. Introduction

In order to measure the degree of public fulfillment of corporate social responsibility, new energy enterprises adopt the information disclosure of non-financial performance indicators of listed companies originally from European and American countries - ESG performance (Environmental Social and Governance).

Hong Kong, as an international financial center, in 2011, conducted an assessment of ESG performance and made a preliminary exploration of the information disclosure of ESG performance of listed companies. In 2012, the Guidelines on Environmental, Social, and Governance Reporting was issued to advocate the information disclosure of ESG performance by listed companies. In 2016, Hong Kong-listed companies were required to make mandatory disclosure of ESG performance. Hong Kong Stock Exchange (HKEX) required listed companies to disclose ESG information in separate chapters in the annual report to ensure the standardization of information.

XPeng and BYD are representative enterprises in the new energy automobile industry. This study is devoted to exploring the differences and evaluation of ESG performance practices between the two car companies and finally evaluating which car company does better in ESG performance practice evaluation.

2. The Increasing of the Market Consumption

According to the data released by the China Association of Automobile Manufacturers, since 2013, the new energy automobile industry has been in a trend of sales growth, and the market consumption level of the new energy automobile industry has increased (Liu, 2023).

3. Case Study of XPeng and BYD Automotive ESG Performance Evaluation

XPeng, as one of the most popular Internet electric automobile enterprises among young people, and BYD, as the most trustworthy old electric automobile enterprises among middle-class families. MSCI's third-party institution evaluated XPeng ESG performance and obtained AA level for two consecutive years, and AAA level in 2023, which is the highest level obtained by global

automobile companies. BYD also has an A rating of more than A in 2020-2022.

4. The ESG Performance Analysis between XPeng and BYD

Compared the ESG performance of XPeng and BYD in three dimensions environmental, society, and corporate governance, in addition to the non-comparable indicators, the following table shows which enterprise did better in each indicators. The comparison criteria are: Quantifiable indicators are compared by data, and non-quantifiable indicators are compared by whether relevant documents, reports, or certifications have been issued; Whether specific data or statements by senior management are available as criteria.

A	Environmental Performance	XPeng	BYD	Better
A1.1	Emission type	2	3	BYD
A1.2	Greenhouse gas emission T/¥oR ^[1]	0.04	0.19011	XPeng
A1.3	Hazardous waste generation T/¥oR	0.00057	0.02426	XPeng
A1.4	Non-hazardous waste T/¥oR	0.009	0.00169	BYD
A1.5	Emissions targets and steps taken T/¥oR	General information	Procedures ^[2] ; ISO50001 energy certification.	BYD
A2.1	Total consumption of direct and indirect energy T/¥oR	Electricity: 0.00273 Gas: 0.001689 Gasoline: 0.00000057 Diesel: 0.00000205	Electricity: 0.01867 Gas: 0.00058317 Gasoline: 0.000006692 Diesel: 0.0000005879	BYD
A2.2	Total water consumption T/¥oR	0.4	0.00120502	BYD
A2.3	Set energy efficiency targets	To build a photovoltaic project in Zhaoqing base	Reduced by 5%+ from 2021	BYD
A2.5	Packaging material density T/¥oR	0.0023	0.02137	XPeng
A4.1	Actions taken in response to significant climate-related matters	(CRFD). ^[3]	Formulated 3 Policy Measures ^[4]	BYD
B	Social Performance	XPeng	BYD	Better
B1.1	Total number and proportion of employee	15,829 81.7:18.3	570060 69.5:30.5	BYD
B2.2	Loss due to injury Number of working days lost due to injury & working day ratio LDR	1.48	0.505	BYD
B3.1	Percentage of trained employees (%)	74.5	100%	BYD
B3.2	Average number of hours per employee completing training (hours)	16.4	48.19	BYD
B4.1	Measures to avoid child labour and forced labour	Regular assessments	Card system for entry	BYD
B4.2	Steps taken in the event of a breach	Set up a complaint handling team.	No records of violating relevant laws.	BYD
B5.2	Practices for employing suppliers	General information	Meet ISO14001, trying SA8000.	BYD
B5.3	Identify supply chain related implementation and monitoring methods	General information	Annual Report on Human and Environmental Performance	BYD
B6.1	Percentage of total products sold to be recalled for safety and health reasons (%)	0	3.36	XPeng
B6.2	Number of complaints received about products and services UN/¥oR	0.016381236	0.001103096	BYD
B6.3	Practices for safeguarding and protecting intellectual property rights	Rules ^[5] .No violations of property rights in 2022.	General information	XPeng

B6.4	Quality verification process and product recovery procedure	Monitoring and Measurement Equipment Management	General information	XPeng
B6.5	Consumer Data Protection and Privacy Policy	General information	Confidentiality Agreement NDA signed with suppliers and providers; privacy policy with customers.	BYD
B7.1	Corruption proceedings concluded (per employee)	0.000189526	0.00000702	BYD
B7.3	Anti-Corruption training	General information	Conduct integrity training; integrity commitment Signing.	BYD
B8.1	Contribution areas ¥/YoR	4.108339538	2.213124999	XPeng
B8.2	Resources utilized H/TNE	0.338303	0.073326	XPeng
C	Governance Performance	XPeng	BYD	Better
C5	Number of committees under the Board	No disclosure	1	BYD

Notes:

1 T/¥oR (tons / ¥10,000 of Revenue)

2 “BYD Energy Saving Management Procedure”

3 Follow Climate-Related Financial Information Disclosure (CRFD)

4 “BYD Carbon Emission Management”, “BYD Company Carbon Emission Quantitative Management Regulations” and “BYD Company Product Carbon footprint Management Measures”.

5 Number of working days lost per 100 employees

6 “Measures for the Administration of Intellectual Property Work”

7 Non-disclosure Agreement

8 E.g., education, environment, labor demand, health, culture, sports

9 Total number of the employees

After the above three performance analyses and comparisons, it was concluded that XPeng had done better in 8 indicators and BYD had done better in 19 indicators.

5. The Impact of ESG Performance on Society between XPeng and BYD

Comparing the ESG performance of two enterprises, the first Social Impact Assessment Tool launched by the Hong Kong Social Enterprise Business Center (SEBC) was recommended. It is found that XPeng’s ESG indicators are more outstanding in terms of social impact, which is in line with the conclusion drawn by various third-party rating organizations that XPeng is better than BYD in ESG performance.

6. Conclusion

This study not only made a comparison and analysis of XPeng and BYD, but more importantly, it discussed how to promote the improvement of ESG performance indicators of the entire new energy automobile industry through the efforts of all parties, and also arouse the public’s attention to the concept of ESG concept. All sectors of society need to help monitor government and businesses and provide adequate support. Only by working together can we promote the new energy automobile industry to have a deeper and more positive impact on society.

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