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ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) PRACTICES OF THE CHINESE SMALL AND MEDIUM SIZE ENTERPRISES

Abstract

ESG is a collective term for the acronyms environmental, social, and governance. At present, ESG is mainly used in the investment field and has become an important reference for influencing investment decisions. It evaluates the indicators of enterprises from three non-financial dimensions: environment, society, and corporate governance, and evaluates the contributions of enterprises (investment objects) in promoting sustainable economic development and fulfilling social responsibilities. With the increasing awareness of corporate social responsibility and environmental protection in the international community, ESG has become a key indicator to measure the overall performance of enterprises. Many countries and regions have introduced ESG-related policies and regulations to encourage and regulate the performance of enterprises in ESG. This measure not only strengthens the attention of all sectors of society to ESG but also provides a good environment for ESG investment. In addition, the integration of ESG and quality management practices will open up new business opportunities for SMEs. For example, with the increasing demand for sustainable products and services, companies providing such products may discover new market spaces and growth points, strengthening their competitiveness. Similarly, excellent corporate governance and social responsibility practices can attract more investors and partners, providing financial and resource support for enterprises.

For Chinese SMEs, taking into practice the ESG principles and regular ESG reporting can have numerous positive impacts on business performance and potential hidden pitfalls from both domestic and international perspectives as well. This study focused on new perspectives to reveal the business operations and development of Chinese SMEs in the context of globalization, especially in the face of increasing ESG requirements. The authors research work gives insights into how these enterprises can adapt to and utilize these new trends.

Keywords

Chinese SMEs, ESG, competitiveness, sustainability, social responsibilities, business performance

INTRODUCTION

Besides the financial aspects of the economic actors, which focus primarily the financial strength and health of the company (to what extent can be profitable), Environmental, Social, and Governance (ESG) indicates the non-financial aspects of the companies running business operations. It means how and to what extent is the given business entities able to address relevant answers on the emerging sustainability (e.g. greenhouse gases emission, water contamination, natural resources allocation), corporate social responsibility and transparent governance issues (the latest one also linked to the ethical business operations). ESG has attracted attention of investors. Concepts such as corporate social responsibility (CSR) and dual carbon have been popular for many years, while ESG is more like a collection of multiple contents that can evaluate a company from more and broader perspectives and the collected available ESG data can contribute to effective risk management in

investment decisions. The reason beyond that is for those companies who have high ESG rating used to make tangible efforts taking into consideration the ethical norms and standards, less likely have tendency to make financial fraud. ESG information support companies to built up their well reputed brand, which attract financing, in order to reduce financing costs and improve valuation, creating investors confidence¹.

ESG emphasizes the unity of corporate business value and social value, which is more closely related to the business and requires enterprises to conduct systematic design in order to do a good job. ESG aspects coincide with the United Nations Sustainable Development Goals (SDG). It is an important basis for socially responsible investment and a widely accepted criterion for the international community to evaluate whether companies are in line with the level of green and sustainable development. ESG can also speed up the different innovation processes of enterprises, predominantly through green innovations. Currently, China's ESG system and the global ESG system both have unity and exhibit certain Chinese characteristics. This requires Chinese enterprises to formulate ESG strategies that are in line with the global framework while also taking into account China's national conditions and based on their own business and industry characteristics². Green development, together with the request for sustainability, are highlighted as current emerging trends in global economic development. Sustainable development, as defined by the World Commission on Environment and Development (WCED), is "development that meets the needs of the present without compromising future generations' ability to meet their own needs." Demanding green development and sustainable development is essential for the ecological environment and social economy because unsustainable exploitation and the consumption of the available scarce resources will lead to ecological disaster, which can easily undermine the future prosperity of humankind³.

The concept of ESG was officially proposed in 2007 by Goldman Sachs. This aimed to take into consideration environmental, social, and corporate governance factors as well in decision-making processes, reducing non-financial risks in investments. The European Union, the United States, Singapore, Japan, and China all have their own theoretical systems for ESG requirements. The core content is roughly the same, but there are still differences in specific implementation requirements. In 2004, the United Nations Environment Programme first proposed the concept of ESG investment, advocating for attention to environmental, social, and governance issues in investment. In 2006, the United Nations Principles for Responsible Investment (UN PRI) were released, playing a crucial role in the development of ESG concepts and domain setting. In the same year, Goldman Sachs Group released an ESG research report, integrating the concepts of „environment, society, and governance,“ marking the formal formation of the ESG concept⁴. Afterwards, international organizations, investment

1 Shen S. (2022); Key Developments and Realistic Challenges of ESG in Chinese Enterprises; available at <https://www.163.com/dy/article/HJ7JKM290519D5D8.html>; [access on January 08, 2024]; Zhan S. (2023): ESG and Corporate Performance. A Review, SHS Web of Conferences 169, 01064, DOI: 10.1051/shsconf/202316901064, Licence CC BY 4.0.

2 Ju B., Shi X., Mei Y. (2022): The current state and prospects of China's environmental, social, and governance policies; *Frontiers in Environmental Science* Vol. 10; DOI: 10.3389/fenvs.2022.999145; Licence: CC BY 4.0; Company Observer (2023). Dialogue on ESG: National strategic guidelines, reshaping corporate values; available at <https://baijiahao.baidu.com/s?id=1771088466139607795&wfr=spider&for>; [access on January 05, 2024].; Xie, Y., Xue, W., Li, L., Wang, A., Chen, Y., Zheng, Q. and Li, X. (2018), "Leadership style and innovation atmosphere in enterprises: an empirical study", *Technological Forecasting and Social Change*, Vol. 135, pp. 257-265.

3 Kong, N.; Bao, Y.; Sun, Y.; Wang, Y. (2023): Corporations' ESG for Sustainable Investment in China: The Moderating Role of Regional Marketization. *Sustainability* 15, 2905, DOI: <https://doi.org/10.3390/su15042905>.

4 Ju B., Shi X., Mei Y. (2022): The current state and prospects of China's environmental, social, and governance policies; *Frontiers in Environmental Science* Vol. 10; DOI: 10.3389/fenvs.2022.999145; Licence: CC BY 4.0; China Banking and Insurance News (2022): The goal of ESG: Sustainable development. Available at: http://www.cbimc.cn/content/2022-02/08/content_456573.html, [accessed on January 10, 2024].; Sun C. (2023): Research on ESG Report from the Perspective of Sustainable Development- Taking Fuyao Group as an example; *Frontiers in Business, Economics and Management*; ISSN: 2766-824X | Vol. 11, No. 3.

institutions, and other market entities continuously deepened the concept of ESG and gradually formed a complete set of ESG concepts. At the same time, international investment institutions have successively launched ESG investment products, continuously improving and enriching ESG concepts and products.

Since 2014, the scale of ESG asset management has grown at an annual rate of 25%. At present, more and more companies, investors, and even regulatory agencies are paying attention to ESG, and major stock exchanges around the world have also laid out ESG. For example, in 2014, the European Union issued guidelines requiring public interest entities with over 500 employees to disclose ESG information in their audited annual reports. The Hong Kong Stock Exchange issued the „Environmental, Social, and Governance Reporting Guidelines” in December 2011, encouraging listed companies to voluntarily issue ESG reports. In December 2015, the Hong Kong Stock Exchange revised the guidelines to change the principle of ESG information disclosure to „interpretation if not followed.” ESG focuses on sustainable development and advocates for enterprises to pay more attention to environmental friendliness (E), social responsibility (S), and corporate governance (G) in their operations. Based on ESG evaluation, investors can observe the ESG performance of enterprises, evaluate their investment behavior and the contribution of enterprises (investment objects) in promoting sustainable economic development and fulfilling social responsibilities, and find investment targets that create both economic benefits and social value and have sustainable growth capabilities. ESG originates from responsible investment, which is the practice of corporate social responsibility in the investment field. Unlike traditional financial indicators, ESG examines a company’s ability to respond to risks and long-term development from the perspectives of environmental, social performance, and corporate governance and is an emerging method of enterprise evaluation. For enterprises, the ESG concept is also a more advanced, reasonable, holistic, and comprehensive corporate governance approach. On a global scale, environmental factors are gradually forming a consensus, and „dual carbon emission reduction” and green environmental protection have become common international topics. In December 2015, the 21st United Nations Climate Change Conference (COP21) adopted the Paris Agreement, which clearly stated that by the end of this century, „the global average temperature rise should be maintained within 2 °C relative to pre-industrial levels, and efforts should be made to control the global average temperature rise within 1.5 °C.” On September 22, 2020, during the general debate of the 75th United Nations General Assembly, China officially announced that „carbon dioxide emissions aim to peak before 2030 and strive to achieve carbon neutrality by 2060”⁵ The transformation of the evaluation system for enterprises from a financial performance system to an ESG system is a significant change in business civilization. The core of enterprise operations has evolved from maximizing shareholder value to balancing shareholder value and social value. In this process, companies need to re-examine their business strategy from an ESG perspective, develop a clear ESG strategy, and make necessary adjustments to their business and operational models in order to maximize shareholder value and social value.

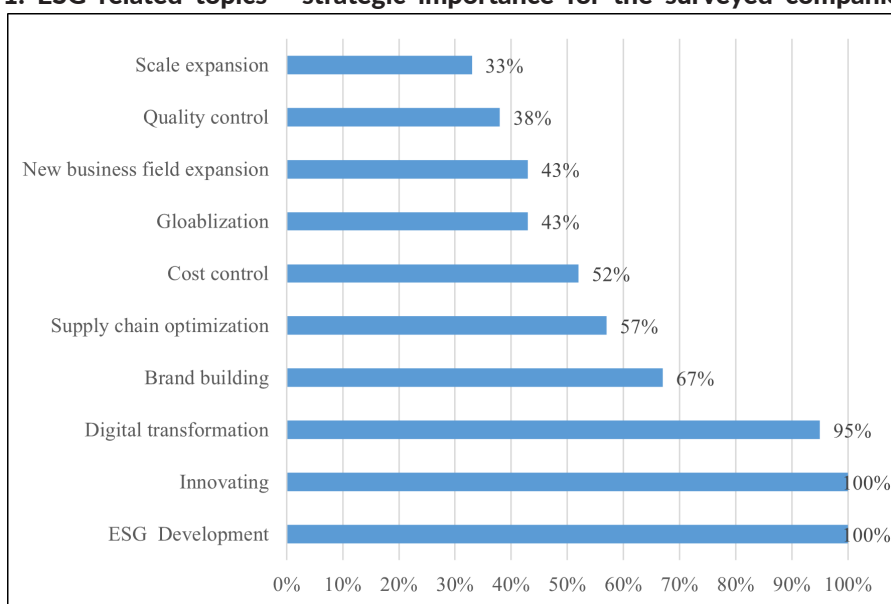
In terms of social development, China places greater emphasis on common prosperity and

5 Ju B., Shi X., Mei Y. (2022): The current state and prospects of China’s environmental, social, and governance policies; *Frontiers in Environmental Science* Vol. 10; DOI: 10.3389/fenvs.2022.999145; Licence: CC BY 4.0; Gao S., Meng F., Wang W., Chen W. (2023): Does ESG always improve corporate performance? Evidence from firm life cycle perspective, *Frontiers in Environmental Science*, Vol.11, DOI: 10.3389/fenvs.2023.1105077; Sun C. (2023): Research on ESG Report from the Perspective of Sustainable Development- Taking Fuyao Group as an example; *Frontiers in Business, Economics and Management*; ISSN: 2766-824X | Vol. 11, No. 3.; Weber O. (2014): Environmental, Social and Governance Reporting in China; *Business Strategy and the Environment*, 23(5):n/a-n/a, DOI: 10.1002/bse.1785.

rural revitalization. Common prosperity is comprehensive prosperity, which not only includes material prosperity, spiritual confidence, and self-improvement but also includes a liveable and suitable environment for work. Rural revitalization has shifted from „protecting the environment” to „a community of life,” deepening the understanding of natural ecology and transforming the relationship between nature and humans into an internal „community of life” awareness that the ecosystem is an organic living body. Research shows that 100% of surveyed companies consider ESG as one of their strategic issues for the next five years (see below Figure 1), and its importance is comparable to issues such as research and development innovation and digital transformation. Chinese enterprises are increasingly aware of the important role they play in the entire society and are willing to „take responsibility” and „contribute” to the sustainable development of the entire society⁶.

Recently, under the influence of numerous uncertainties such as weak overall economic growth and changes in the external macro environment, research has shown that the importance of surveyed companies in the ESG field has not decreased but increased, and the trend of long-term investment in ESG has not changed. In fact, the increasing uncertainty and conflicts in the macro-environment have increasingly highlighted the importance of enterprises in social and environmental aspects. At the same time, the values and propositions of ESG can also help enterprises effectively manage the occurrence of related risks.

Figure 1. ESG related topics - strategic importance for the surveyed companies in the next five years



Source: Own edition based on Shen S. (2022); Key Developments and Realistic Challenges of ESG in Chinese Enterprises; available at <https://www.163.com/dy/article/HJ7JKM290519D5D8.html>; [access on January 08,2024].

Specifically, about 80% of the enterprises interviewed were negatively affected by external uncertain events (such as the COVID-19 epidemic or international geopolitical conflicts). Although improving the company’s financial performance remains a key focus in the future, recent events have further increased the importance of ESG among the surveyed companies⁷.

⁶ Weber O. (2014): Environmental, Social and Governance Reporting in China; Business Strategy and the Environment, 23(5), DOI: 10.1002/bse.1785; Wang Z. (2022): Research on the implementation of ESG in enterprises under the concept of Sustainable Development; China Science and Technology Information, (24):146-148.

⁷ Duan, Y.; Yang, F.; Xiong, L. (2023): Environmental, Social, and Governance (ESG) Performance and Firm Value: Evidence from Chinese Manufacturing Firms. Sustainability, 15, 12858. <https://doi.org/10.3390/su15171285>; China Banking and Insurance News (2022): The goal of ESG: Sustainable development. http://www.cbimc.cn/content/2022-02/08/content_456573.html., [accessed on January 08,2024].

Understanding the company's operations and profitability, but these financial data lack „temperature.” What financial data can display is only a part of the enterprise and cannot fully reflect the spirit and appearance of the enterprise. It is also difficult for the outside world to deeply perceive and explore it. The content disclosed in ESG reports makes the image of the enterprise more three-dimensional and comprehensive, thereby helping the enterprise to prevent risks and enhance competitive advantages in all aspects. The focus areas are becoming increasingly diverse. Research shows that among the topics with over 60% attention, multiple topics in the fields of environment, society, and governance have been selected. The increasing diversification of corporate focus areas reflects a shift in corporate goals from simply pursuing performance growth to balancing financial, environmental, and social sustainability.

At the environmental level, with the attention of all stakeholders on climate change-related issues and the traction of national policies, it has been reflected at the company level that dual carbon emissions reduction has become the most highly regarded issue. Enterprises' awareness of dual carbon emissions reduction is gradually deepening, with a focus on expanding from direct emissions and energy-related indirect emissions to reducing carbon emissions throughout the entire supply chain. For example, Lenovo has set specific assessment indicators to promote supplier carbon reduction, and currently, 91% of suppliers have set carbon reduction targets. At the social level, internal diversification of enterprises is closely related to employee power and welfare and the development of the company, which is also widely valued. It is worth mentioning that research shows that Chinese companies have a more complete and diverse understanding of ESG. For example, over 60% of surveyed companies have included community welfare, supply chain and partner management, cybersecurity and digital privacy, corporate governance, and other issues in their core ESG issues (see below, Figure 2).

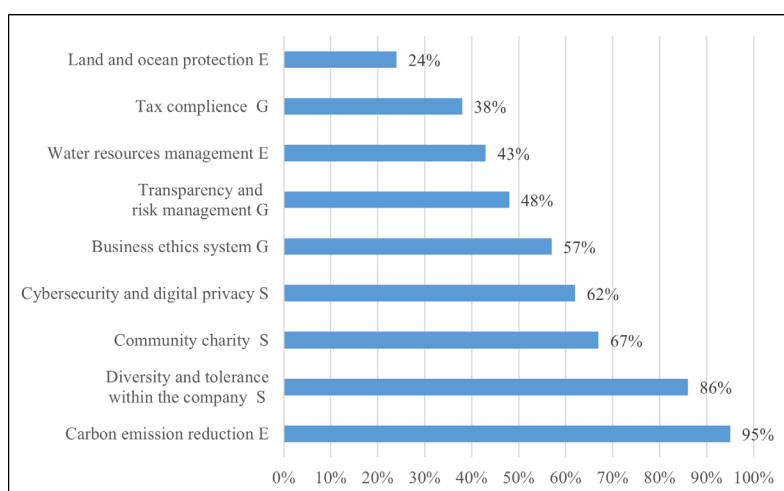


Figure 2. The most important areas for implement ESG concept

Source: Own edition based on Duan, Y.; Yang, F.; Xiong, L. (2023): Environmental, Social, and Governance (ESG) Performance and Firm Value: Evidence from Chinese Manufacturing Firms. *Sustainability*, 15, 12858. <https://doi.org/10.3390/su15171285>.

Multiple ESG-related information disclosure systems have been established internationally, including the International Sustainable Development Standards Board (ISSB), Global Reporting Initiative (GRI), Climate Change-Related Financial Information Disclosure Working Group Guidelines (TCFD), CDP Environmental Disclosure Framework. However, there is a lack of consistency among them. At the same time, there are over 80 ESG rating agencies worldwide, and there are significant

differences in the methodology, caliber, and coverage of their evaluations. International rating standards often cannot fully adapt to China's national conditions, leading to enterprises being unable to adapt. As the person in charge of a certain enterprise pointed out, „The ESG evaluation system and framework commonly used overseas may have some local differences in the Chinese market. At the same time, due to various factors such as language barriers and data quality, international evaluation agencies may lack in-depth research and coverage of the local market in China⁸.

Currently, in China does not exist unified ESG information disclosure standard for domestic listed companies yet resulting that the ESG information provided by listed companies in many cases can be incomplete, not accurate, not comparable each other or not credible. Currently, there are over 600 ESG rating agencies worldwide, while China has only about 20. While some domestic third-party ESG rating providers have emerged, including Wind, SynTao Green Finance, Sino-Securities, Harvest Fund, International Institute of Green Finance (IIGF), China Alliance of Social Value Investment (CASVI), RKS, and Asset Management Association of China (AMAC), the ESG ratings cannot precisely indicate the enterprise's true ESG performance. Due to the fact that ESG ratings aren't regulated, there are major discrepancies in the characteristics of ESG assessment systems among different rating agencies. In order to tackling of this situation, a disclosure guidelines published in 2022 by the China Enterprise Reform and Development Society (CERDS) in close cooperation with the state-owned Assets Supervision & Administration Commission, to set up uniform disclosure practices that are uniquely tailored to China-focused ESG priorities⁹.

METHODOLOGY

In this study, the authors focused on a top-down approach to deductive research strategy, which means studying the available relevant theoretical literature as a reference base, gathering and analyzing data, and drawing conclusions. The main research methodology was mainly a quality method based on secondary research analyzing scientific publications, studies, and online literature sources. The conclusions and recommendations based on these research findings reflect the authors' own professional views.

Structure of this paper: After the Introduction the essential elements of ESG and its application in the business areas and the Methodological Sections, the remaining part of the paper is structured as follows. Section 3 reveals the current situation of the Chinese SME sector, the challenges faced by Chinese SMEs from both domestic and international perspectives, paying special attention how to combine quality management with ESG principles. This section also focuses on the expected yields and impacts of ESG on the enterprise's financial performance. The next section provides deeper insight into the ESG practices of several Chinese SMEs via in-depth analysis of case studies. Finally, the outlook for the future development of Chinese SMEs was proposed, and the overall research will be summarized.

8 Baidu (2022): What is ESG investment, why it is so important, and how it affects the sustainable development of the world and China; available at <https://baijiahao.baidu.com/s?id=1770391062965050972&wfr=spider&for=pc>; [access on January 08, 2024]; Duan, Y.; Yang, F.; Xiong, L. (2023): Environmental, Social, and Governance (ESG) Performance and Firm Value: Evidence from Chinese Manufacturing Firms. *Sustainability*, 15, 12858. <https://doi.org/10.3390/su15171285>; Figurant (2023): CFA ESG01: Introduction to ESG Investment; available at <https://zhuanlan.zhihu.com/p/631521089>; [access on January 08, 2024].

9 Chan H. (2022): China moves to standardize fragmented ESG reporting landscape; Thomson Reuter; <https://www.thomsonreuters.com/en-us/posts/news-and-media/china-esg-reporting/>; [access on April 05, 2024]; Chen D. (2023): An Analysis of Domestic ESG Rating Agencies in China; <https://equalocean.com/analysis/2023092820259>; [access on April 07, 2024].; Zhang Z. (2022). What is ESG Reporting and Why is it Gaining Traction in China?: China Briefng; <https://www.china-briefng.com/news/what-is-esg-reporting-and-why-is-it-gaining-traction-in-china/>; [access on April 05, 2024].

CHINESE SMALL AND MEDIUM SIZED ENTERPRISES

SMEs are an important foundation for the strong resilience of China's economy, a main force in protecting market entities and employment, a key link in improving the stability and competitiveness of the industrial chain supply chain, and a strong support for building a new development pattern. They play a crucial and global role. At present, affected by the COVID-19 and the international economic situation, the production and operation of SMEs are under great pressure. The country attaches great importance to the work of SMEs and increases support for SMEs from various aspects such as improving support policies, optimizing development environment, and improving service systems¹⁰.

The number and scale of SMEs are rapidly expanding. As of the end of 2022, the number of SMEs in China has exceeded 52 million, an increase of 51% compared to the end of 2018. In 2022, an average of 23800 new enterprises were established every day, which is 1.3 times higher than in 2018. SMEs are rapidly developing and growing, becoming the largest and most dynamic group of enterprises and a driving force for China's economic and social development. SMEs not only provide a large number of material products and services directly to the general public but also become a 'reservoir' for absorbing and regulating employment. Both theory and practice have fully proven that good SMEs make the Chinese economy good and strong SMEs make the regional economy strong. Looking back on the past 10 years, Chinese SMEs have withstood various difficulties and challenges, such as the century-long upheaval and the century-long pandemic, demonstrating great resilience and vitality. From January to July this year, SMEs' production and operation showed a stable and positive trend, demonstrating strong resilience and laying a solid foundation for the stable operation of the national economy.

SMEs are crucial to the national economy and play an important pillar role in national GDP, taxation, and other aspects. From the perspective of SMEs' contribution to the national economy, Central Bank Governor Yi Gang pointed out in his 2018 speech report on „Several Perspectives on Improving SME Financial Services” that the final value of SMEs' products and services in China accounts for about 60% of GDP, taxes account for over 50% of the total national tax revenue, and over 70% of technological innovation and urban labour employment contributions. Under the backdrop of a macroeconomic downturn, the survival pressure of SMEs has increased¹¹.

With the continuous development of the global economy, SMEs are playing an increasingly important role in China's socio-economic development. SMEs are an important pillar of economic development, creating a large number of job opportunities and promoting social stability and prosperity. Currently, Chinese SMEs are in a critical period full of challenges and opportunities. They play an important role in the national economy, especially in providing employment, promoting innovation, and contributing to GDP. However, these enterprises face fierce market competition, financing difficulties, policy and regulatory changes, and other domestic challenges. At the same time, from a global perspective, they also need to address challenges such as digital transformation, cybersecurity, talent competition, and economic uncertainty. In this context, Chinese small and medium-sized enterprises need to maintain agility and innovation to address these internal and

¹⁰ Pai (2022): Report on Financing Development of Small and SMEs in China in 2021; available at https://mp.weixin.qq.com/s/g-ZM-MoG8I_eAR1Ecs0gag; [access on January 10, 2024].

¹¹ Zhihu (2023): What problems are small and medium-sized enterprises facing in China today?; available at <https://www.zhihu.com/tardis/bd/ans/3059773876>; [access on January 08, 2024].

external challenges while seizing the opportunities brought about by digitalization and global market changes.

The rise of digital technologies and transformation has reshaped the volatile business environment while providing SMEs with unique new development opportunities. Integrating ESG into digital transformation is essential for fostering sustainable and responsible business practices. SMEs can apply different digital technological solutions such as artificial intelligence (AI), virtual reality, cloud computing, big data to improve their marketing processes and procedures, enhancing market performance. Enhanced ESG capability via digitization can have potential impacts on third-party distribution, innovation, economic growth, and sustainable development¹².

CSR emerged in China about 2 decades ago, due to joining the World Trade Organization (WTO) becoming dominant actor of the global economy. Since then, more and more enterprises have elaborated own CSR programs including pollution reduction, production safety and occupational health. Today, CSR has become part of a company's liabilities. Even though it's still mainly voluntary, it's influential—and now it's also linked to ESG disclosure. China launched Enterprise Environmental Credit Evaluation in 2013 to record and assess compliance among industries generating heavy pollutants and leading to higher environmental risks and negative environmental externalities. The system categorises companies environmental credits based on certain criteria, including: 1) pollution control; 2) environmental protection; 3) environmental management; 4) social supervision. Based on those credit criteria, the provincial government periodically gathers compliance status and publishes annual credit scores across 4 levels: high to low as green, blue, yellow, and red. This range of credit results corresponds with different consequences – from financial support to more stringent inspection. The enterprise environment credit system builds up a centralized database to share among government agencies. The credits then substantially influence companies' rewards and punishment, which indirectly encourage enterprises to take active responsibility improving their credit level including promoting clean production audits, participating in community activities to advocate environmental protection awareness and developing corporate environmental reports and ESG disclosures. The Ministry of Ecology and Environment (MEE) in China has recently expanded the obligation to disclose environmental information from major pollutant generators to companies that are subject to mandatory clean production audit, publicly listed, and/or issuing corporate bonds¹³.

You can observe a positive, continuously growing trend in voluntary ESG reporting in China. The number of those A-share companies (companies listed in RMB on the Shanghai and Shenzhen Exchanges) which had published annual ESG reports increased from 371 to 1021 between 2009-2020 time-period¹⁴. According to other data, the 1425 firms listed on the China's benchmark CSI 300 index (another list) in 2022, lag behind their peers listed on equivalent indices in Australia, Hong Kong, South Korea, the US and the UK. Since the ESG Reporting is voluntary, Chinese companies have a lot

¹² Wang S.; Esperança J.P. (2023): Can digital transformation improve market and ESG performance? Evidence from Chinese SMEs; *Journal of Cleaner Production*, Volume 419, 137980, ISSN 0959-6526; <https://doi.org/10.1016/j.jclepro.2023.137980>; Yuli O. (2023): The Analysis of the Digital Transformation of Small and Medium-sized Enterprises in China; *Proceedings of the 2023 International Conference on Management Research and Economic Development*, DOI: 10.54254/2754-1169/22/2023028.

¹³ Chuang E. (2022): From CSR to sustainability disclosure: China's next steps in sustainability; *Enhensa*; https://www.enhesa.com/resources/article/from-csr-to-esg-disclosure-china-next-steps-in-sustainability/?utm_term=&utm_campaign=PMAX-2024-Feb-09-Reinforcing+EHS+regulations&utm_source=adwords&utm_medium=ppc&hsa_tgt=&hsa_grp=&hsa_src=x&hsa_net=adwords&hsa_mt=&hsa_ver=3&hsa_ad=&hsa_acc=2401415058&hsa_kw=&hsa_cam=21015196231&gad_source=1&gclid=EAlalQobChMI9b6T6_qvhQMVnpqDBx31ggqPEAAYiAAEgJcsPD_BwE; [access on April 07, 2024].

¹⁴ Zhang Z. (2022). What is ESG Reporting and Why is it Gaining Traction in China?; *China Briefing*; <https://www.china-briefing.com/news/what-is-esg-reporting-and-why-is-it-gaining-traction-in-china/>; [access on April 05, 2024].

of catching up to do on ESG reporting practices. Obtaining the ESG information from Chinese SME sector will remain difficult until these rules are mandatory. Nevertheless, companies in Europe – the region reached significant progress in making ESG disclosure mandatory – are also struggling to meet the sustainability reporting requirements¹⁵.

INTEGRATION QUALITY MANAGEMENT (QM) WITH THE ESG PRINCIPLES

With the continuous progress of society and the improvement of environmental protection awareness, the combination of enterprise quality management and environmental management has become more important. This combination can not only help enterprises improve product quality, but also promote environmental sustainability¹⁶.

There is a close relationship between enterprise quality management and environmental management. Through effective quality management, enterprises can better control product quality, improve customer satisfaction, and ultimately achieve economic benefits. Environmental management is aimed at protecting the natural environment, reducing pollution and damage to the environment by enterprises, and achieving sustainable development. Therefore, the combination of these two can bring dual benefits, both meeting customer needs and contributing to environmental protection. Companies need to adopt common strategies and methods in quality management and environmental management. For example, strictly implementing the ISO9001 quality management system and ISO14001 environmental management system, developing enterprise guidelines that comply with national and local environmental regulations, and establishing a sound internal audit and monitoring system. Through these measures, enterprises can establish standardized management processes, improve product quality, and reduce environmental impact. In addition, enterprises can also adopt some new technological means to achieve the combination of quality management and environmental management. For example, IoT technology can be used to monitor and manage the entire production process of products, improving the stability and consistency of product quality. Meanwhile, with the help of big data analysis and artificial intelligence technology, enterprises can better grasp environmental information, provide early warning of environmental risks, and adjust production plans in a timely manner to avoid irreversible damage to the environment. The combination of enterprise quality management and environmental management also requires attention to employee training and education. Only by fully realizing the importance of quality management and environmental management and possessing relevant knowledge and skills can employees truly achieve the goal of integration. Enterprises can integrate the concepts of quality management and environmental management into their employees' daily work through internal and external training, making it a part of their corporate culture.

Integration of enterprise quality management and environmental management is an inevitable trend in today's social development. Through reasonable strategies and means, enterprises can achieve a win-win situation in quality management and environmental management. In addition, government support and supervision are also important guarantees for achieving this goal. In the future, with the

¹⁵ CapitalMonitor (2022): China's new ESG disclosure standard "of limited use" to investors; <https://capitalmonitor.ai/regions/asia/china-esg-disclosure-standard-investors/>; [access on April 06, 2024].

¹⁶ Sohu (2017): Strategic Thinking on Building a National Environmental Quality Management System; available at https://www.sohu.com/a/162759372_743794; [access on January 08, 2024].

continuous progress of technology and the increasing requirements of society for environmental management, the combination of enterprise quality management and environmental management will be more widely applied and deeply developed. However, there are differences between QM systems and ESG management systems in terms of customer and other relevant parties' requirements and satisfaction, quality and environmental objectives, management processes and focus of activities, which need to be coordinated and resolved.

COORDINATE CUSTOMER SATISFACTION WITH STAKEHOLDER SATISFACTION

Focusing on customers primarily focuses on their needs. With the popularization of environmental knowledge, more and more customers are paying attention to the environmental factors of products while accepting products provided by organizations. The environmental factors of a product have become an important component of its quality performance. If the environmental indicators of the product are not qualified, it means that the product has become an unqualified or defective product. Only by fully understanding and meeting the constantly changing customer needs, including environmental requirements, can organizations ensure customer satisfaction. With the rise of public environmental awareness, the environmental image of enterprises is becoming an important factor in customer loyalty. When manufacturers or service providers indicate that they are striving to reduce their impact on the environment and continuously improve their environmental performance, customers will also agree. Faced with the diverse needs of stakeholders, enterprises should not forget to protect the environment while achieving economic benefits harmonizing with stakeholders satisfactions taking into practice sustainable development for their survival.

COORDINATE QUALITY OBJECTIVES WITH ENVIRONMENTAL OBJECTIVES

According to the ISO9001:2015 standard, the formulation of quality objectives should consider meeting customer requirements. According to the ISO14001:2015 standard, the formulation of environmental goals should consider the requirements of pollution prevention and continuous improvement. Environmental goals can play a positive role in improving product performance, reducing production costs, and improving product efficiency. Unqualified products not only consume energy, raw materials, manpower, material resources but also increase the pollution caused by the disposal of unqualified products to the environment. „Improving the one-time inspection qualification rate of products” can be both a quality goal and an environmental goal. Similarly, the goals of „controlling the use of toxic and harmful substances in raw materials”, „controlling the sulfur content of coal”, and „reducing the coal consumption, electricity consumption, water consumption, and material consumption per unit product” are also the same¹⁷.

¹⁷ Han F. (2007): Modern Quality Management, Beijing: Mechanical Industry Press; Gong Y. (2012). Modern Quality Management, Beijing: Tsinghua University Press.

COORDINATION OF MANAGEMENT PROCESSES AND ACTIVITIES

Due to the many differences in management objects between QM systems and environmental management systems, many enterprises operate QM and ESG management systems separately. In design, environmental factors such as raw materials, products, production processes are not considered, but environmental management plans and technical improvement plans are developed separately. In fact, a good technological transformation plan should include ESG management content, because a well-designed and well run ESG management system can effectively identify opportunities to control environmental factors, reduce energy consumption, and save costs. By changing operating procedures, changing product design and innovation processes, adopting new technologies, and implementing material substitution, the cost can be reduced or the quality of products can be improved. Environmental pollution is often a form of resource waste, indicating shortcomings and deficiencies in product design and production processes. It is also an important manifestation of the uncoordinated operation of the quality management system and environmental management system. When waste or toxic substances are discharged into the environment during manufacturing, energy consumption, service provision processes, or substandard products occur, it means that resources or energy have not been fully and effectively utilized, resulting in cost waste. Many enterprises have attempted to integrate reducing environmental pollution and improving product efficiency throughout the entire production or service process through the coordinated operation of QM and ESG management systems. Although the objects and methods of quality management system and environmental management system management are different, the results achieved are consistent. To achieve the best performance in QM and ESG management, it is necessary to coordinate and control the various processes involved in the product realization of QM and ESG management system. This approach can help to control the important environmental factors identified while controlling the factors that affect quality, such as human, machine, material, method, environment, and inspection, in order to achieve the unity of environmental and economic benefits.

COORDINATE THE SURVIVAL AND DEVELOPMENT OF ENTERPRISES

To survive and develop simultaneously, enterprises must coordinate the operation of quality management systems and environmental management systems in order to continuously enhance customer satisfaction, achieve continuous improvement, effectively prevent pollution, and protect the environment. Both the quality management system and environmental management system emphasize prevention first and continuous improvement. Clean production, circular economy, and sustainable development reflect the important ideas of environmental management, and are also important measures to improve product quality and efficiency. Clean production is the full utilization of resources from the source and throughout the production process, to minimize, resource, and harmless waste generated by each production enterprise during the production process. Circular economy requires the transformation of the traditional growth model of „mass production, mass consumption, and mass waste” through institutional innovation on the basis of traditional technological models, following the principles of „reduction”, „reuse”, and „recycling”, reducing dependence on resources and environmental damage, and completely eliminating untreated waste emissions in production and

daily life. Emphasizing internal circulation at the micro, meso, and macro levels is conducive to the formation of production and consumption patterns that save resources and protect the environment. The traditional production model is „raw materials - products - solid waste”, while the development model of circular economy presents the characteristics of „raw materials - products - raw materials for other products”, striving to achieve maximum economic benefits with the minimum resource and environmental costs. Enterprises with conditions can, on the basis of developing ecological industries and clean production, turn the waste from upstream enterprises into raw materials for downstream enterprises, continuously extend the production chain, achieve the most effective utilization of regional or enterprise group resources, and minimize or even zero emissions of waste.

The development of enterprises should follow a new path of industrialization with high technological content, good economic benefits, low resource consumption, low environmental pollution, and full utilization of human resource advantages. This requires adjusting the old industrial structure with new ideas, and pursuing a new model of sustainable development through the coordinated operation of quality management systems and environmental management systems. Enterprises should actively assume the responsibility of bridging social disparities and creating a harmonious society, abandoning and surpassing the traditional management concept of profit as the sole goal, emphasizing the attention to human value in the production process, and emphasizing contributions to consumers, the environment, and society. In the operation of the quality management system and environmental management system, a development strategy with new industrialization as the core and improving the quality of products and services as the breakthrough should be implemented. On the basis of careful protection of natural resources and ecological environment, development should be accelerated to achieve economic growth. Closely focusing on the strategic thinking of the enterprise, implementing the scientific development concept, implementing clean production, developing circular economy, and achieving sustainable development in the process of product realization. The effective operation of the quality management system is an important means to ensure that product quality meets the requirements, and a high-quality life must also be guaranteed by corresponding environmental quality. Only by coordinating the operation of quality management system and environmental management system can economic growth and sustainable development be ensured.

IMPACTS OF ESG ON THE CHINESE SMES BUSINESS PERFORMANCES

ESG fits with traditional Chinese ethics, which basic principle to create perfect harmony among humanity, nature and society. According to the Chinese ethical norms, allowing to earn profits in the right and proper ways, modern companies undertake social responsibility duties and attempt to promote social welfare¹⁸. ESG factors play a crucial role in the sustainable development of enterprises. For Chinese SMEs, ESG can not only help them enhance their corporate image and competitiveness, but also bring them more business opportunities. The specific role of ESG in the Development of SMEs in China can be: a) improve product quality and efficiency; b) attract investors and customers; c) enhance the long-term value of the enterprise¹⁹.

¹⁸ Shen H., Lin H., Han W., Wu H. (2023): ESG in China: A review of practice and research, and future research avenues, *China Journal of Accounting Research*, Volume 16, Issue 4; 100325; ISSN 1755-3091; <https://doi.org/10.1016/j.cjar.2023.100325>

¹⁹ Baidu (2023c): The Relationship between ESG Reporting and Corporate Performance: The Return of Social Responsibility; available at <https://baijiahao.baidu.com/s?id=1772461366225379602&wfr=spider&for=pc>, [access on January 08, 2024]; Kong, N.; Bao, Y.; Sun, Y.; Wang, Y. (2023): *Zeszyty Naukowe ZPSB FIRMA i RYNEK 2024/01 (65) 50*

Quality management and ESG not only focuses on the quality of the product itself but also includes optimizing every aspect of innovations, supply chain, from raw material procurement to final product delivery as you can see in the Table 1.

Table 1. IMPACTS OF QM AND ESG INTEGRATION ON BUSINESS PERFORMANCE

FOCUS	POSSIBLE IMPACTS ON BUSINESS PERFORMANCE
Innovation	The practice of ESG and QM encourages enterprises to adopt innovative technologies and methods, especially in product development and production processes. This innovation not only improves efficiency and quality, but also helps enterprises develop new market opportunities and customer groups. In the practice of ESG and quality management, Chinese SMEs can achieve significant business performance improvement by adopting innovative technologies and methods, especially in product development and production processes including innovations in product design and service models as well.
Supply Chain Management	The principles of QM can help small and medium-sized enterprises manage their supply chain more effectively, ensuring that every aspect of the supply chain meets quality and sustainability standards. This can reduce the risk of production interruption and improve the efficiency and reliability of the overall supply chain. In terms of supply chain management, Chinese SMEs can significantly improve their overall operational efficiency and market competitiveness by implementing quality management principles. QM not only focuses on the quality of the product itself, but also includes optimizing every aspect of the supply chain, from raw material procurement to final product delivery.
Brand reputation	A good ESG and QM record can enhance a company's brand and reputation, and enhance the trust of consumers and investors. In an increasingly competitive market environment, brand reputation has become one of the key factors for enterprises to gain competitive advantages. Consumers are increasingly valuing corporate social responsibility and are more willing to consume for companies with good ESG performance, thereby increasing market share. For Chinese SMEs, actively adopting environmental, social, and governance (ESG) principles has a significant positive impact on market opportunities.
Attracting investors	Investors are increasingly valuing the ESG performance of enterprises as an important reference factor for investment decisions. Enterprises with good ESG records attract more investors, thereby increasing financing channels and enhancing their competitiveness in the capital market.

Source: Own edition based on (Baidu 2023c; Kong et al. 2023; Zhou 2014).

When enterprises are committed to implementing and maintaining ESG standards, they usually have easier access to government subsidies and tax incentives, which is particularly important for SMEs with relatively limited resources. In addition, this commitment can also attract investors and clients who are increasingly concerned about corporate social responsibility and sustainable development.

The largest share of China's public ESG-related funds in 2021 were multi-asset funds and equity funds with an asset value of 180 billion yuan and 214 billion yuan respectively. In addition to that, around 80 percent of all public ESG funds were active funds. In the same year, the ESG fund market was valued at almost 400 billion yuan and included 160 funds. Furthermore, from the ESG investment aspects, the mining industry has the highest ESG risk, followed by electricity, heat, and gas. These high-risk sectors are the basis of the Chinese economy, highly energy intensive and have strong impact on the environment²⁰.

"The number of Chinese financial institutions that have announced adoption of ESG principles in their investments has grown rapidly. By the end of 2021, a total of 83 institutions in China signed the Principles of Responsible Investment, including 4 asset owners, 62 investment managers and 17 information service providers. In addition, there has been rapid and sustained growth in the number of institutions that are signing the Equator Principles, Principles for Sustainable Banking, and Principles for Sustainable Insurance. Chinese investors are playing an increasingly important role in responsible global investment"²¹. There are seven major ESG investment strategies: ESG integration, negative screening, norms-based screening, positive screening, shareholder engagement, sustainability investment and impact investment. Among these, screening ESG investment strategies are the most widely applied by institutional investors in China²².

With the increasing global emphasis on sustainable development, companies that meet ESG standards are more likely to enter new markets, especially those with strict requirements for environmental and social governance in international markets. For Chinese SMEs seeking long-term development and expanding their market influence, adopting ESG principles is not only a moral choice but also a strategic business decision²³. Nevertheless, when Chinese enterprises make actions ensuring compliance with GRI standards for tackling international stakeholders' concerns, they do not gain significant competitive advantage in global markets compared with those in the domestic market. The possible reason can be beyond that, when Chinese companies enter into any foreign markets, they address more intensive social and environmental regulatory requirements from various stakeholders, such as host country governments, foreign customers and non-governmental organizations. Harmonizing with GRI standards alone does not guarantee support from international stakeholders²⁴.

Employees are willing to contribute more to enterprises with good ESG practices, thereby improving production efficiency, employee stability. In addition, the improvement of corporate reputation can not only help companies have bidding and winning opportunities in more projects, but also promote relationships with financial institutions and investors to obtain more funding sources.

20 Statista (2023a): Value of ESG funds in China 2017-2021, by type; <https://www.statista.com/statistics/1371720/china-value-of-esg-funds-by-type/>; [access on April 05, 2024]; Statista (2023b): Industries with the highest ESG risk in China 2022; <https://www.statista.com/statistics/1374039/china-sectors-with-the-highest-esg-risk/>; [access on April 05, 2024].

21 ICMA (2023): White Papers on ESG Practices in China; <https://www.icmagroup.org/assets/Whitepaper-on-ESG-practices-in-China-ENG-January-2023.pdf>; page 36, [access on April 05, 2024].

22 Alessandrini F., Jondeau E. (2021): Optimal strategies for ESG portfolios; *Journal of Portfolio Management*; 47 (6), pp. 114-138; ISSN: 0095-4918

23 UNEP (2019): PRI Reporting Framework: Strategy and Governance; PRI Association; https://www.unpri.org/Uploads/x/a/b/strategyandgovernance2019_501247.pdf; Baidu (2023a): More and more listed companies disclose ESG reports. How does this concept affect investment? available at <https://baijiahao.baidu.com/s?id=1763143809996517290&wfr=spider&for=pc>; [access on January 08, 2024]; Baidu (2023b): ESG investment strategy and its impact on enterprise value; available at <https://baijiahao.baidu.com/s?id=1762848431171137145&wfr=spider&for=pc>; [access on January 08, 2024].

24 Yang Y., Orzes G., Jia F. and Chen L. (2021): Does GRI sustainability reporting pay off? An empirical investigation of publicly listed firms in China.; *Business and Society*, 60 (7), pp. 1738-1772; ISSN: 00076503; DOI: 10.1177/0007650319831632

ESG responsibility fulfillment may have a negative impact on financial performance in the short term. When enterprises increase their investment in strong external factors such as environmental and social responsibility their costs will increasing. The ESG responsibility cost of enterprises includes various explicit and implicit costs, including investments in clean energy, wastewater and waste gas treatment equipment, training and investment in employee safety production, and other direct costs related to ESG responsibility. The implicit cost includes indirect costs related to the planning, management, and evaluation of corporate ESG responsibilities. The increase in various costs may have a negative impact on the financial performance of the enterprise in the short term.

Integrating the impact of short-term and medium to long-term ESG practices on financial performance, the impact of corporate ESG responsibility fulfillment on financial performance manifests as learning curves and synergistic effects. ESG shows a negative correlation with financial performance at the beginning of investment, because ESG responsibility fulfillment exists at inherent costs. Under other conditions that remain unchanged, the more investment in corporate environmental, social, and corporate governance responsibilities, the higher the cost. Financial performance will also decrease accordingly. When ESG investment and practical accumulation reach a certain level, the efficiency improvement brought by the learning curve and the scale effect causes ESG investment costs to be shared. On the other hand, the synergistic compensation effect is greater than the substitution effect, and the incremental benefits obtained by enterprises through ESG practice. Ultimately, it leads to a decrease in unit costs and a positive correlation between ESG and financial performance. It can be transformed into key resources and positive factors such as learning curves that can be obtained by the enterprise, thereby significantly improving financial performance.

Figure 3. illustrates how can be improve the enterprises financial performance by introducing the ESG practices.

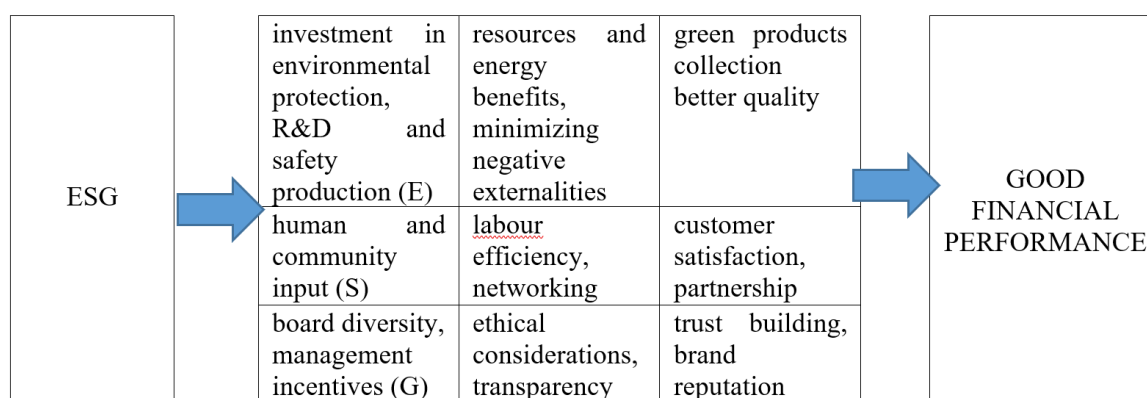


Figure 3. Financial performance of the company and the ESG practice

Source: Own edition based on Shen S. (2022); Key Developments and Realistic Challenges of ESG in Chinese Enterprises; <https://www.163.com/dy/article/HJ7JKM290519D5D8.html>.

ESG CASE STUDIES

At present, China's "double carbon" policy is having a profound impact on the industry. The relationship between digital transformation strategy and environmental, social, and governance (ESG) performance is analyzed based on the digitalization and sustainable development goals of enterprises, and on the basis of positioning enterprise digital transformation level through the strategic alignment model²⁵.

GREENLIGHT TECHNOLOGY

The company was established in 2012, locates in Jiangsu Province, China. It's industrial sector is Environmental Protection Technology and Products. Number of employees: approximately 150. Annual turnover (fictional data): approximately 770,028 EUR in 2022²⁶. In response to China's increasingly severe environmental problems, Greenlight Technology is committed to developing and selling energy-saving and environmental protection products, such as low-carbon emission equipment and renewable energy applications. Focusing on providing environmental solutions for small and medium-sized enterprises and urban residential areas.

In Table 2, you can find a brief summary of those things that can linked to the company ESG issues.

Table 2. GREENLIGHT TECHNOLOGY BUSINESS OPERATION

FACTOR	DESCRIPTION
ESG Practice	<p>Environment (E): Develop low-carbon technologies, reduce carbon emissions during production, and implement policies for waste recycling and recycling.</p> <p>Social (S): Provide employees with excellent working conditions, participate in community environmental protection projects, and enhance public environmental awareness.</p> <p>Governance (G): Establish transparent</p>
Challenges	<p>Technological innovation pressure: With the rapid development of technology in the environmental protection industry, continuous technological innovation has become an important driving force for enterprise development.</p> <p>Financing challenge: The research and development and market promotion of innovative technologies require significant financial support.</p> <p>Intensified market competition: In the face of an increasing number of competitors, including the entry of some large enterprises, Greenlight Technology needs to continuously improve its competitiveness.</p>

²⁵ Zhao W. (2023): ESG Research on Hong Kong Listed Companies; available at D4H320GK5IUgYRh1aCQLVwQ33HdVoEtc6XpyXNcG1g2Qa1UGCzQ-nX1GZIMhCjrdkLdEeg8RPnSWkQP5eXCy_So28j8m&wd=&eqid=a51ee5f00013a5550000006654b679b; [access on January 08, 2024].

²⁶ Green Light Group (2023); available at <https://www.gleenergy.cn/en/about.php>; [access on January 08, 2024].

Transformation and future development	<p>Expand R&D investment: Increase investment in new technology research and development, such as intelligent environmental protection equipment and sustainable energy technologies.</p> <p>Expand market scope: In addition to the local market, start expanding to other provinces and even international markets.</p> <p>Diversified product line: Develop diversified environmental protection products to meet the needs of different customer groups.</p> <p>R&D investment growth: from 256,830 in 2020 to 770,028 EUR in 2022</p> <p>Market share increase: from 5% in 2020 to 8% in 2022.</p> <p>Employee satisfaction improvement: According to internal surveys, employee satisfaction has increased from 75% in 2020 to 90% in 2022.</p>
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Source: Own edition based on Green Light Group (2023): available at <https://www.gleenergy.cn/en/about.php>; [access on January 08, 2024].

The case of Greenlight Technology demonstrates how a Chinese small and medium-sized enterprise can achieve transformation and development in the ESG field through technological innovation and market expansion. Despite the challenges of financing and market competition, the company has successfully enhanced its position in the market and contributed to sustainable development by adhering to its environmental mission and continuous technological innovation²⁷.

JIANGXI AIRIDA ELECTRONIC CO. LTD.

Jiangxi Airida Electric Co., Ltd. is promoting the construction of enterprise cloud projects, applying key technologies of cloud computing and big data services to make the company intelligent, industrialized, and scientific in operation and management, improving management level, improving work efficiency, and significantly reducing fund utilization.

In January 2016, the company established an Information Technology Promotion Implementation Group, led by the chairman of the company, to formulate information technology implementation plans, target responsibilities, and timeline requirements, laying a solid foundation for the promotion and implementation of the company's information technology and enterprise cloud. The preliminary work preparation for the project from January 2020 to July 2022, the project acceptance, and the completion of four sets of information construction and application management systems, all of which are on the cloud, mainly including: enterprise management system; network system; remote electronic monitoring system; financial, storage, materials, and management software systems. In the hardware construction and investment of enterprise cloud, establish a computer LAN covering the entire company, establish a company owned website, and establish a computer center. One is the cloud deployment of office automation OA. The company deploys a work environment on the cloud platform, implements cloud management of all computing and storage resources, assigns accounts and sets permissions for users, and achieves access to cloud desktops through thin terminals, mobile phones, PADs, ensuring that internal information of the enterprise is not leaked and improving office security. The Enterprise Resource Planning system (EPR) refers to a management platform established on the basis of information technology, which provides decision-making and operational means for the decision-making level of the enterprise with a systematic management philosophy. Jiangxi Airida deploys an ERP system through the cloud, and user terminal devices

²⁷ Shen S. (2022); Key Developments and Realistic Challenges of ESG in Chinese Enterprises; available at <https://www.163.com/dy/article/HJ7JKM290519D5D8.html>; [access on January 08, 2024].

access the cloud system to obtain ERP application services. In addition, another element is the cloud deployment of the intelligent Manufacturing Execution System (MES). Upload MES system collected data to the cloud through cloud access. The digital workshop application industrial software development platform mainly consists of six parts: basic layer industrial control software, control layer industrial control software, execution layer business management software, management layer business management software, data management software, product modification design and simulation software. Through enterprise cloud disks and other forms, enterprise file storage and backup services are uploaded to the cloud, achieving decentralized and domain management and data sharing within a certain range, And improve core data security and audit capabilities.

In order to comply with the development of information technology and promote the construction of industrial internet in enterprises, Jiangxi Airida relies on the national public data communication network to establish a unified technical standard and fully functional information network service system, achieving communication between enterprises, enterprises and customers, enterprises and markets, and employees and employees. It introduces advanced scientific research, business, management software systems, and other supporting facilities; adopting modern information technology to transform existing production lines and achieve automation of the production process in production, marketing, import and export, and material supply processes. By using computer management systems, achieve internal management digitization within the enterprise; by utilizing network technology and the Internet, we can achieve the transmission and sharing of business information, and explore and develop e-commerce in the electric porcelain processing industry. Provide services for enterprise technology development, promote the transformation of scientific and technological achievements, achieve technological and product upgrades, improve production efficiency and sales quotas, achieve modernization of enterprise management, and promote rapid development of enterprises.

The results are mainly reflected: firstly, resource sharing, reducing personnel and increasing efficiency, reducing the number of employees on the assembly line, and saving production costs for the enterprise. Secondly, the level of enterprise digitization has increased, the rate of defective products has decreased, and product quality has significantly improved. The third is to significantly reduce material and energy consumption, improve environmental quality, and promote green development. Fourthly, the equipment failure rate is reduced, the production line utilization rate is increased, and the economic benefits of the enterprise are improved. The fifth is to achieve scientific management, significantly improve management efficiency, and enhance the innovation and creativity of enterprises.

**ALIBABA GROUP HOLDING LTD.
PROMOTES CARBON NEUTRALITY**

Alibaba Group has released the 2023 ESG report, summarizing how the group has effectively implemented its ESG strategy over the past year, achieving the „dual reduction” goals of reducing its net operating carbon emissions and reducing the carbon intensity of the value chain. In the first year of driving ecological carbon reduction from 0 to 1, the group reduced 22.907 million tons of carbon²⁸. The company joined a group of over 200 of the world’s leading sustainable businesses as the newest

²⁸ Alibaba Group (2021): Alibaba Group Carbon Neutrality Report; https://sustainability.alibabane.com/download/Alibaba%20Group%20Carbon%20Neutrality%20Action%20Report_20211217_ENG_Final_single%20page.pdf; [access on January 08, 2024].

member of the World Business Council for Sustainable Development (WBCSD)²⁹.

The Five Links of Alibaba's Implementation of ESG Strategy are the followings. 1) Alibaba adheres to the principle of „digital circular economy” and proposes two goals: goal one is carbon neutrality, and goal two is to help build green mountains and rivers. 2) Integrating Sustainable Development into Business Design - Starting from Yourself. As a technology company, Alibaba covers a wide range of fields, which is why there are more scenarios to incorporate carbon reduction goals into its business design. But sustainable development is not achieved overnight. The first step is to start with carbon neutrality in one's own operations. The net emissions of direct greenhouse gases within the scope of Alibaba's physical control include fixed source combustion (natural gas), fugitive emissions (such as refrigerant emissions), and mobile source emissions (self-owned vehicles in retail business). The net greenhouse gas emissions generated by purchased electricity and heat are mainly used for the operational needs of cloud computing data centers, retail stores, warehouses, and office spaces. 3) Alibaba indirectly generates net greenhouse gas emissions upstream and downstream of the value chain. 4) Amplify the Impact of Platform Technology Companies Empowering Social Responsibility - Driving Consumers. This step is one of the promises of carbon neutrality: to expand the green ecosystem (range 3+), and beyond its own operations and value chain, Alibaba promises to use a platform to stimulate greater social participation by assisting consumers and businesses. Doing a good job in sustainable public welfare charity is to integrate public welfare into commercial design and practice social responsibility

CONCLUSIONS AND RECOMMENDATIONS

ESG practice is not only a response to social and environmental responsibility, but also an important way for SMEs to achieve sustainable development. With the increasing global attention to climate change and social responsibility, the ESG performance of enterprises is increasingly seen as a part of their core competitiveness. For Chinese SMEs, this means not only performing well in traditional business performance, but also demonstrating positive efforts and effectiveness in environmental protection, social contribution, and corporate governance.

Quality management is the key to maintaining and enhancing market competitiveness for SMEs. As consumers demand higher product quality and service levels, SMEs must meet these requirements through continuous quality improvement. Excellent quality management can not only improve customer satisfaction, but also effectively reduce production costs and increase operational efficiency.

The integration of ESG and quality management practices will open up new business opportunities for SMEs. For example, with the increasing demand for sustainable products and services, companies providing such products may discover new market space and growth points. Similarly, excellent corporate governance and social responsibility practices can attract more investors and partners, thereby providing financial and resource support for enterprises.

Faced with the challenges and opportunities brought about by globalization and technological change, Chinese SMEs need to actively embrace modern practices of ESG principles and quality

²⁹ WBSCDS (2023): Alibaba to the World Business Council for Sustainable Development; <https://www.wbcsd.org/Overview/News-Insights/General/News/Alibaba-Joins-the-World-Business-Council-for-Sustainable-Development>; [access on January 08, 2024].

management while maintaining their traditional business models. This not only helps to enhance its brand image in domestic and international markets, but also lays a solid foundation for its long-term business growth and sustainable development.

The practice of ESG has had a positive impact on the brand image and customer attractiveness of SMEs. Environmental protection measures, social responsibility projects, and transparent and fair governance structures enhance the social reputation of enterprises, while also helping to reduce operational risks and attract investment. An effective quality management system is crucial for improving product and service quality and enhancing customer satisfaction. This not only directly affects the market share and profitability of enterprises, but also serves as the foundation for long-term competitive advantage. Chinese SMEs face many challenges in implementing ESG and quality management, such as insufficient funding, technological innovation pressure, and market competition. Effective response strategies include diversified financing channels, continuous technological innovation, optimized supply chain management, and market segmentation strategies. The government's supportive policies, such as tax reduction and financing convenience, have played a positive role in the development of SMEs, especially in promoting technological upgrading and market expansion for enterprises.

Looking ahead, the development of Chinese SMEs will place greater emphasis on innovation, sustainability, and market responsiveness. With the deepening of digitization and globalization, enterprises will face more opportunities and challenges for internationalization.

Combined with ESG, ESG will also become a common discourse system in the global investment community. In addition, we also need to attach importance to instrumental thinking. You need to use financial technology products to identify, evaluate, measure, and detect the ESG or green substance of fund flows, and then present them on digital signage.

Sustainable investment actually has two meanings. The first is to contribute to human sustainability, which means that the financial and economic activities of any institution have positive external effects on the environment and society, reducing carbon rather than increasing it, and controlling pollution rather than creating it. The second is to promote self-sustainability, which means that as more and more funds are invested in the ESG sector, the capital premium will increase and the return on investment will also increase. For example, when production factor resources gather in the new energy vehicle and battery industries, these new economic industries begin to have the result of both righteousness and benefit that is using sustainable finance to promote sustainable economic activities. Drive industrial transformation with funds. So from this perspective, industrial transformation and ESG investment, energy transformation and green finance are actually coexisting. You have to find a starting point, that funds should be mobilized first, and then you can see the industry begin to turn green.

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