The Current Development and Future Trends of Sustainable Investment in China

Jiahao Ruan*

China School of Banking and Finance, University of International Business and Economics,100000 Beijing, China

Abstract. China's sustainable development goals have significantly accelerated the advancement of sustainable investment, creating a vast and dynamic market with increasing attention from policymakers and stakeholders. In this context, it is particularly necessary to explore the current development status and future trends of sustainable investment to better understand its role in supporting the green transition. The findings indicate that, under strong government support, sustainable investment has made remarkable progress and brought positive environmental and social impacts. Nevertheless, it still faces several challenges, such as the imperfection of policies and regulations, lack of standardization in information disclosure, and relatively low market awareness and investor participation. This research contributes to a deeper understanding of China's sustainable investment landscape and provides strategic insights for policymakers, financial institutions, and investors. The results are expected to offer valuable reference for promoting long-term, high-quality, and inclusive development in the realm of sustainable finance, while also supporting the design of more effective regulatory mechanisms, the improvement of investor engagement.

1 Introduction

In recent years, the concept of sustainable investment has been increasingly mentioned and emphasized worldwide, becoming one of the most popular international investment strategies. Many major financial institutions in various countries have integrated it into their investment decision-making frameworks. The Chinese government, keeping pace with the global trend, has introduced a series of policies to promote the development of green finance and sustainable investment. In 2020, China put forward the "Dual Carbon" target, which further offered a clear direction and expanded market space for sustainable investment. Moreover, with the growing social attention to sustainable development, more and more investors have come to realize that sustainable investment not only helps to achieve long-term economic returns but also has a positive impact on society and the environment. As a result, they have begun to incorporate ESG factors into their investment decisions, promoting the development of the sustainable investment market.

* Corresponding author: 202302048@uibe.edu.cn

To achieve the "Dual Carbon" target, China has introduced a series of policies to promote the development of green finance and sustainable investment, and has established a relatively complete policy system for the market. Studying the current development status and future trends of sustainable investment will help better implement the "Dual Carbon" target, enhance the effectiveness of policies, and foster the healthy development of the sustainable investment market. By analyzing the current development status of sustainable investment, its impacts on the economy and society, and exploring the current shortcomings and areas for improvement, this paper aims to contribute to the further development of sustainable investment.

2 The current development of sustainable investment in China

2.1 The main types of sustainable investment

2.1.1 ESG investment

"ESG investing" refers to the integration of Environmental, Social, and Governance factors with traditional financial analysis in the investment analysis and decision-making process. It aims to identify companies or projects with sustainable development capabilities by comprehensively evaluating both the financial performance and non-financial factors of enterprises. The essence of ESG investing lies in identifying ESG issues and analyzing their impact on the future financial performance of listed companies. It also helps investors better assess the long-term value of companies and identify potential risks based on ESG data, enabling them to make more rational investment choices. Not only can investors obtain financial returns through ESG investment, but also it can direct capital towards companies that are both profitable and socially responsible [1].

In 2020, according to statistics from China Securities Index Co.,Ltd, the global scale of ESG investment had reached nearly 40 trillion U.S. dollars, which is nearly one third of the total asset managing scale around the world. From 2020 to 2024, global ESG asset managing scale has grown by 15% annually. It is predicted that, by 2025, the ESG asset managing scale will reach 53 trillion U.S. dollars worldwide, accounting for one-third of the estimated total asset management scale [2].

2.1.2 Impact investing

Impact investing is an emerging investment approach that focuses on the two major themes of "enhancing resilience" and "promoting equitable development," actively seeking positive impacts on society and envronment, alongside financial returns. Unlike "ESG investing," which emphasizes the integration of environmental, social, and governance factors into traditional financial analysis, "impact investing" stresses the active creation of positive impacts rather than the passive avoidance of negative ones. Benefiting from its characteristics between traditional investment and charity, "impact investing" offers better continuity compared to charitable activities while overcoming the purely profit-driven nature of traditional investment. It represents a financial model that aligns with sustainable development [3].

2.1.3 Green investment

Green investment is a type of investment that takes environmental, social, and economic factors into account. It aims to achieve economic returns while also contributing to environmental protection and sustainable social development [4]. In addition to its basic environmentally friendly characteristics, green investment often has a longer duration to achieve sustainable development [5]. This is because many green projects require a longer period to generate positive impacts. Moreover, green investment is often associated with technological innovation and policy orientation. It strongly encourages technological innovation in relevant fields while also requiring alignment with national development policies and strategies.

2.1.4 Socially responsible investing

Socially Responsible Investing refers to an investment idea that, fully considers sustainable value and social responsibility, while measuring financial targets and economic returns [6]. Based on this goal, socially responsible investing emphasizes corporate information transparency and the quality of disclosure. Investors need to obtain detailed information about companies' environmental, social, and governance aspects to make more careful investment decisions [7]. Moreover, research indicates that the investor demand for socially responsible investment funds differs from that of traditional funds, with greater growth and sustainability [8].

2.2 Government policy on sustainable investment

As shown in Table 1, as early as 1995, sustainable development was proposed by Chinese govvernment as a national development strategy [9]. In terms of guiding opinions, in 2016, the People's Bank of China and six other ministries jointly issued the "Guiding Opinions on Establishing a Green Financial System," encouraging public to invest in environmentally-friendly industries and clarifying the importance of sustainable investment in the financial system. In 2021, the People's Bank of China and other departments released the "Green Bond Supported Projects Catalogue (2021 Edition)," further regulating the use of funds raised from green bonds. In 2020, China put forward the goal of striving to achieve carbon peak before 2030 and carbon neutrality before 2060, showing the direction of sustainable development. In 2025, the central leaders announced the guidance on doing a good job in the "five major articles" of finance, emphasizing the improvement of the green finance, supporting green development and low-carbon transformation.

In terms of information disclosure and supervision, with the increasing scale of sustainable investment, investors' demand for information disclosure is also increasing. In 2021, the central bank released the "Guidelines for Environmental Information Disclosure of Financial Institutions," promoting financial institutions to carry out sustainable information disclosure. In 2022, the China Banking and Insurance Regulatory Commission issued the "Green Finance Guidelines for the Banking and Insurance Industry", requiring financial institutions to incorporate green and low-carbon transformation factors into asset portfolio management.

Table 1. Development stage of sustainable investment in China.

Stage	Time	Guidance
Proposal	1995	The idea of sustainable development was proposed as a major strategy.

Announcement	2016	"Guiding Opinions on Establishing a Green Financial System"
Standardization	2021*c*	"Green Bond Supported Projects Catalogue (2021 Edition)" "Guidelines for Environmental Information Disclosure of Financial Institutions"
Addition	2022	"Green Finance Guidelines for the Banking and Insurance Industry"

2.3 The future development trend of sustainable investment

Overall, the scale of sustainable investment will continue to expand. Policy support is a crucial driving force behind the growth of sustainable investment. As shown in the figure above, the Chinese government has introduced a series of policies to support green finance and sustainable development, providing clear policy guidance and institutional guarantees for sustainable investment. For example, in February 2025, the Ministry of Finance released the framework for green sovereign bonds, providing standardized guidance for the issuance of green bonds and enhancing the confidence of domestic and foreign investors. In addition, the China Securities Regulatory Commission has also issued relevant guiding opinions to continuously optimize the standards for green bonds and improve the convenience of application, examination and registration.

Moreover, with the spread of global awareness of sustainable development, investors' attention to ESG investment is continuously increasing. An increasing number of investors, including both institutional and individual investors, are incorporating ESG factors into their investment decisions. According to data from Wind, as of March 24, 2025, the total scale of China's ESG bonds has reached approximately 13.2 trillion yuan, of which green bonds account for 43.65% [10]. Meanwhile, the total managing scale of ESG public mutual funds has also reached 818.229 billion yuan, demonstrating the strong market demand.

3 The main impact of sustainable investment

3.1 The impact of sustainable investment on economy

3.1.1 Promotion of the transition to green economy

Sustainable investment in China has been significantly boosted by a series of policies and guidelines issued by the government which encourage investors to engage in green investment and drive the green economic transformation. By the end of 2021, reaching a surprising 15.9 trillion yuan, the scale of China's green loans ranked first in the world [11]. Moreover, the balance of green loans in China was 19.55 trillion yuan, with an increase of over 40%, setting a new historical record for growth [11]. These green loans have not only supported the development of green industries such as clean energy and energy conservation but also reduced the dependence on traditional fossil fuels in the production by raising energy efficiency and promoting waste recycling.

These policies and financial instruments have provided abundant funding for green projects and promoted the development of green industries. The new energy vehicle (NEV) industry has driven the green economy transformation, technological innovation, and industrial upgrading. In 2022, according to statistics, the production and sales of NEVs in

China reached over 7 million and 6 million units respectively, with increases of more than 90%, driving the green transformation of the entire industry chain.

3.1.2 Technological innovation and industry upgrading

With the support of a series of policies and guidelines, China has built a relatively complete green financial system, providing diversified financing methods for green technological innovation. The People's Bank of China has announced a special rediscount project with a scale of 500 billion yuan and an interest rate of 1.75%, with the time of one year, to support scientific and technological innovation, technological transformation, and equipment renewal [12]. China has made great achievements in the field of green technology innovation. For example, China is the largest supplier of lithium battery components in the world. In 2024, Chinese power battery manufacturers accounted for 67.1% of the global market share, with an increase of 3.7 percentage points compared to the previous year [13]. This indicates that China's green technology innovation is not only at the forefront globally but also has strong competitiveness in the international market. Mengniu Dairy has invested in the development of digital technology, empowering the production, sales, and research and development sectors, optimizing energy consumption. Since 2015, the company's revenue growth rate has been maintained at a relatively high level of 10% to 20%, with a continuous upward trend [14].

3.1.3 Improvement of the long-term profitability of enterprises

Sustainable investment significantly improves the long-term profitability of enterprises by promoting corporate green technological innovation and optimizing resource allocation. Changan Automobile has significantly increased its green investment, innovated clean energy technologies, and improved equipment to reduce emissions [15]. These green investments have not only improved the company's environmental performance but also significantly enhanced its profit. In addition, China Shenhua Energy Company has provided financial support for optimizing resource utilization efficiency through investment. The utilization rate of wastewater has increased from 53% to 83%, which has greatly reduced both operation costs and raised market competitiveness while protecting the ecosystem [16]. Therefore, sustainable investment can enhance the long-term profitability of enterprises through technological innovation and resource optimization.

3.2 The impact of sustainable investment on society

3.2.1 Improvement of social responsibility and equity

The Chinese government has emphasized the fulfillment of corporate social responsibility. For example, in the "China-EU Comprehensive Agreement on Investment", sustainability terms have been included, requiring companies to fulfill their social responsibilities, including environmental protection and labor rights. In addition, China has also been driving companies to take on more social responsibilities in the green transition. Taking Unilever as an example, as one of the world's largest consumer goods companies, Unilever launched a global sustainable living plan in 2010. In China, Unilever has actively participated in social charity by funding Hope Primary Schools, providing teaching support in rural areas, and offering scholarships to students in need. Moreover, Unilever has also reduced carbon emissions and resource consumption through technological innovation [17].

3.2.2 Creation of job opportunities

Sustainable investment will create a large number of job opportunities. Taking the renewable energy sector as an example, according to a report by the International Labour Organization (ILO) and the International Renewable Energy Agency (IRENA), the number of jobs in the global renewable energy sector reached 13.7 million in 2022, with an increase of 1 million compared to 2021, and almost doubled from the 7.3 million in 2012. Among them, China accounted for 41% of the global total employment in the renewable energy sector. Contemporary Amperex Technology (CATL), a global leading green new energy innovation technology company, has driven the development of new energy vehicles through technological innovation. The Sanjiang New District Industrial Park, where CATL is located, has promoted the green transformation of the entire industry chain and created a large number of both high-skill and low-skill job opportunities.

3.2.3 Environmental governance and sustainable development

By investing in renewable energy, China has reduced its dependence on traditional fossil fuels and cut carbon emissions. According to central reports, by the end of September 2024, China's installed capacity of new energy had reached 1.25 billion kilowatts, fulfilling its goal of having more than 1.2 billion kilowatts by 2030, six years ahead of schedule.

3.3 The impact of sustainable investment on capital markets

Sustainable investment has also driven the diversification of financial products in China's capital market. In recent years, innovative financial products such as green bonds and ESG public mutual funds have continuously emerged. According to data, by March 24, 2025, the stock scale of China's ESG bonds has reached approximately 13.2 trillion yuan, of which green bonds account for 43.65% [10]. The total management scale of existing ESG public mutual funds has reached 818.229 billion yuan, covering a variety of themes, which includes environmental protection, social responsibility, and corporate governance. ESG-themed ETFs and active ownership special funds have become the mainstream of these products, providing investors with more choices by promoting corporate ESG performance through passive investment and shareholder engagement respectively. These bonds not only provide financial support for green projects but also offer a diversified range of fixed-income products for investors. Meanwhile, an increasing number of institutional investors are incorporating ESG factors into their investment decisions, and their influence in the capital market is gradually growing. Through long-term and value-oriented investments, these institutional investors help stabilize the market.

4 Challenges Faced by Sustainable Investment in China

4.1 Imperfection of policies and regulations

The current policies in China regarding sustainable investment still fall short. Firstly, the policies lack stability. The instability of policy signals is one of the key factors affecting the long-term stability of sustainable investment. For example, the regulatory standards for green finance in China are frequently adjusted. Taking the multiple revisions of China's "Green Bond Supported Projects Catalogue" as an example, the "clean coal" project was removed in 2021. However, due to energy security pressures in 2022, some coal projects were allowed

to be included in the "transition finance" category. This has caused confusion among investors.

Additionally, there may be a difference in goals between local and central governments during the implementation of policies. For instance, the central government emphasizes sustainable development, and promotes the progress of sustainable finance and low-carbon economy. However, local governments, when implementing central policies, often face both pressure of economic development and environmental protection. Therefore, some local governments may violate environmental supervision in the short term in order to promote economy growth. In 2021, the central government proposed required local governments to strictly control the expansion of high-energy-consuming industries. However, Inner Mongolia deeply relies on the electrolytic aluminum industry to boost its economy. Therefore, local governments approved new projects by turning a blind eye to existing enterprises. Eventually, the central environmental inspection team criticized Inner Mongolia for its unauthorized launch of electrolytic aluminum projects and suspended several projects that were built without approval.

To address the above two issues, the government should enhance the long-term stability of policies. It should formulate clear and long-term sustainable development strategies, such as "carbon peak" and "carbon neutrality", and incorporate them into the national long-term development plan. At the same time, a stable policy framework should be established to reduce frequent changes in policies.

Secondly, it is necessary to strengthen the coordination between the central and local governments. China government should establish a better coordination mechanism to enhance communication and coordination with local governments. Moreover, the policy implementation supervision mechanism should be improved. There should be stronger supervision and inspection of local governments' policy implementation to ensure the effectiveness and consistency of policies. For example, the European Union has updated the "Central Securities Depositories Regulation" to establish a set of common requirements for central securities depositories operating within the EU. This helps to improve the infrastructure of the green financial market, enhance market stability, and attract long-term capital.

4.2 The issues of information disclosure and standardization

The completeness and quality of sustainable investment information disclosure in China's current capital market are insufficient. Although the The Science and Technology Innovation Board (STAR) Market has mandatory disclosure requirements, the main boards of the Shanghai and Shenzhen stock exchanges still rely on voluntary ESG information disclosures [18]. As a result, institutional investors in the secondary market find it difficult to accurately track the ESG performance of their targets. Meanwhile, a mandatory corporate environmental information disclosure system has yet to be established. For example, the scope of industries covered by the accounting methods and reporting guidelines for greenhouse gas emissions is limited. Financial institutions, constrained by information asymmetry, face issues with the completeness, accuracy, and comparability of the carbon emission data they obtain. There is also a lack of standardized and quantifiable information disclosure.

Moreover, in terms of standardization, the content disclosed in the capital market is currently not standardized. Regulatory authorities and exchanges have not yet established unified standards for what should be disclosed in ESG reports and what quantitative indicators should be included. This results in inconsistent quality of ESG disclosures across companies, with most enterprises having low disclosure rates for environmental and social indicators. There is also a lack of unified sustainable finance evaluation criteria. While the "Green Finance Industry Guidance Catalogue" already exists, there is still a lack of guidelines

targeting green transformation activities. If the government could provide guidance for ESG indicators in key industries, it would offer references for institutions to establish ESG ratings. Therefore, China is currently committed to improving the information disclosure mechanism and establishing a mandatory disclosure system. Regulatory authorities are urged to promote the mandatory disclosure of ESG information, ensuring that listed companies and financial institutions disclose complete ESG data. At the same time, disclosure standards should be unified, including ESG information disclosure guidelines, quantitative indicators, and format requirements, to enhance the completeness and comparability of information disclosure. Companies should also be encouraged to hire third-party institutions to audit their ESG reports, thereby increasing the accuracy of information disclosure [18].

4.3 The issues of market awareness and investor participation

From the perspective of market awareness, Chinese investors' consciousness of sustainable investment is gradually increasing. For example, a survey by UBS shows that 81% of Chinese investors consider sustainable investment an important part of their portfolio strategy, a proportion higher than the global average [19]. Taking Ping An of China as an example, as a large financial enterprise, it actively joined the United Nations Principles for Responsible Investment (UNPRI) and integrated its ESG philosophy into investment decision-making [20]. This not only enhanced the company's long-term value but also boosted investor confidence and alleviated financing constraints. Moreover, over 70% of Chinese investors are inclined to invest in companies with sustainable supply chains. However, despite the increased awareness, there are still misunderstandings in the market's understanding of sustainable investment. For example, some investors may regard sustainable investment as a short-term action rather than a long-term strategy. Therefore, although ESG investing is gradually gaining attention in the Chinese market, there is still a gap between investors' awareness and understanding.

In terms of investor participation, although the demand for sustainable investment in the Chinese market is growing rapidly, the actual participation level is still relatively low. On the one hand, although the scale of products such as China's green funds is expanding, the overall market participation is limited. On the other hand, due to information asymmetry and fragmented channels, investors face difficulties in judging the green attributes of assets. In addition, the low participation of institutional investors in the capital market leads to limited capital aggregation for sustainable investment. Therefore, authoritative institutions should popularize the concept of ESG (environmental, social, and governance) and the importance of sustainable investment through the media, seminars, and training courses. Moreover, the use of data and technology to provide more accurate ESG ratings and data analysis tools can help investors better evaluate the performance of sustainable investment products. Case sharing and success stories can also be used to demonstrate the positive impact of sustainable investment on the economy, society, and environment, stimulating the interest of more investors.

5 Conclusion

This paper investigates the current state of sustainable investment in China through the analysis of data and materials. It is found that the main types of sustainable investment in China currently include ESG investment, impact investing, green investing, and socially responsible investing. Since the Chinese government regarded sustainable development as a strategy in 1995, it has continuously issued various policies to promote the development of sustainable investment. Data shows that the market for sustainable investment will continue to expand. The research reveals that sustainable investment can promote the green economic

transformation, technological innovation, and industrial upgrading, as well as enhance the long-term profitability of enterprises. On the social level, it is effective for the realization of corporate social responsibility and the improvement of social equity, creating job opportunities while aiding environmental governance and sustainable development. In the capital market, sustainable investment has driven the diversification and stability of investment products. However, sustainable investment still faces some challenges, such as instability of policy and difference of goals between local and central governments. Moreover, issues of information disclosure and standardization also trouble the capital market. The lack of market awareness and investor participation in the market also negatively influences the development of sustainable investment. Therefore, the government needs to introduce more long-term guidelines, implement stricter regulatory systems, improve the information disclosure mechanism, unify disclosure standards, and popularize the ESG concept. The research in this paper helps to further the development of sustainable investment and is beneficial to the realization of the significant strategy of sustainable development.

Finally, this research lacks the experience of field visits and expert interviews. In the future, more practical experience can be referred to for a more in-depth study.

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