

How Climate Change Is Affecting the Sustainable Development Management of Chinese Companies

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Abstract: As climate change has become increasingly complex in recent decades, it has been listed as a top global risk. Not only does it have an impact on the climate, such as the increase in severe weather, and global warming, but also has a corresponding impact on enterprises, becoming a hard constraint on their economic development. This paper mainly studies how climate change affects the sustainable development management of Chinese enterprises. Besides, the paper also aims to explore how Chinese companies can adjust their sustainable development management policies under climate change. In addition, it mainly analyses the impact of climate change on its enterprises through literature analysis and case studies. Through the research, it is found that under the influence of climate change, Chinese enterprises are still lacking in sustainable development management and their strategies are not flexible enough. And they must make up for their shortcomings from the practices of large international enterprises or organizations.

Keywords: climate change, sustainable development, management, Chinese enterprises

1. Introduction

Sustainable development management is the process of using all management methods and means to regulate the operation of its system, not only the management of economic relations and activities but also the management of its system. For this management, it is both a form of expression and a major development in economic management. For the sustainable development management of enterprises, related fields are mainly studied from the perspective of the social environment, such as how enterprises carry out social innovation in sustainable development management and the relationship with social responsibility. From the perspective of climate change, this paper expounds on the strategies for how Chinese enterprises conduct sustainable development management. Secondly, this paper specifically discusses the sustainable development management of Chinese enterprises by using the methods of literary analysis and case study, including the sustainable development management strategy, the importance of sustainable development and the management methods of enterprises. The impact of climate change on its management includes the degree of impact of climate change, the response strategies of Chinese companies and the evaluation of Chinese companies' implementation strategies. From the macro-social aspect, the significance of this thesis is to evoke the importance of society for sustainable development management in enterprises. In more detail, with the intensification of climate change, raise and increase the awareness of the public and related company

organizations about the necessity of sustainable development management. For the microscopic aspect, the content discussed in this paper provides data and references for future research on related topics and has corresponding research significance.

2. Sustainable Development Management of Chinese Enterprises

2.1. The Management Strategy of China for Sustainable Development

In the 21st century, sustainable development has become one of the hot development goals and one of the important research topics. As early as the 1970s, the definition of sustainable development was gradually put forward, and in the 1980s, the World Commission on Environment and Development proposed a sustainable development strategy. This concept has been recognized by the international community and has gradually formed a consensus.

As a developing country, China attaches great importance to the proposal and application of sustainable development. This is because for China at that time, due to its huge population and weak economic situation, the need to develop the economy resulted in ecological imbalance, so it was inevitable to embark on the path of sustainable development. After the United Nations Conference on Environment and Development in 1992, China officially raised the issue of sustainable development to a national-level strategic deployment and fully implemented it. Since then, China has become one of the first countries to propose this strategy and take practical actions. After entering the new century, China has continuously clarified its goals and requirements for sustainable development and has put forward new requirements for its strategy since the 15th National Congress of the Communist Party of China.

Sustainable development strategies need to be mutually adjusted based on population, society, economy, resources, etc. Therefore, China relies on these points to make deployments when formulating strategic guidelines and has completed the compilation of "China's 21st Century Agenda" policy. This policy is the charter of China's sustainable development strategy, which clarifies that its framework is comprehensive, long-term and progressive. For sustainable development, China's management strategy is divided into four parts, namely the overall strategy of sustainable development, society, economy, resource utilization and environmental protection [1]. It can be seen that the basic task of sustainable development management is to achieve the maximum benefit output through the least resource output by coordinating the ecological, economic and social aspects. As for the economy, China regards it as the central goal of its sustainable development management strategy, maintaining rapid economic growth while improving the quality of development. At the social level, since the population size and the baby boom period are accompanied by the widening of the economic development and distribution gap, China's strategy calls for the comprehensive promotion of social development and progress and the establishment of a foundation for sustainable development. Finally, on environmental issues, the Chinese government believes that the per capita resources were scarce at that time, and the ecological and environmental pollution problems were serious. Therefore, it is necessary to control pollution, improve the environment, protect sustainable resources, and make it one of the main goals of management strategies.

2.2. The Importance of Sustainable Development for Chinese Enterprises

For China, the proposal of sustainable development points out the right direction for China's socialist modernization. Therefore, under the influence of this big environment, especially the introduction of strategic policies, sustainable development is the only way for Chinese enterprises.

First of all, the sustainable development of enterprises means that in the process of survival and development, enterprises should not only consider the realization of business goals and improve their market position, but also maintain a leading competitive field and an expanding business environment

to maintain profitability and improve their capabilities to ensure that the enterprise prosperous. Although sustainable development has become a national development goal, for enterprises, this development model often means taking into account the relationship and application of environmental protection, resource utilization and corporate responsibility. It seems that sustainable development will lead to a decline in profits and a reduction in the competitiveness of enterprises, but not in this case. Relevant facts have proved that some international companies that highly respect sustainable development management have achieved amazing results, and their performance and development have steadily increased. Among them, Schneider Electric is a good example. After the sustainable development issue was raised, this French company launched the "Sustainable Development Impact Index Program" document in the early 21st century to measure its sustainable development in the long term and performance. As a pioneer, its focus is on green operations. This leading green and sustainable development strategy have allowed the company to rank high on the Gartner global supply chain list for many years and has been ranked among various industrial manufacturing companies. The success of Schneider Company has given corresponding enlightenment to the sustainable development of Chinese companies. Therefore, it seems that the sustainable development of Chinese companies is of great significance.

According to the "Report on the Practice of Sustainable Development Goals in Chinese Enterprises - Chinese Enterprises and Sustainable Development Baseline Survey" report, the awareness and actions of Chinese enterprises on sustainable development still need to be improved, although nearly 80% of the companies understand sustainable development [2]. development goals, but only 10% of companies have implemented relevant initiatives. Therefore, more companies need to be made aware of the importance of sustainable development. First of all, the implementation of sustainable development by Chinese enterprises will ensure sustainable economic growth. This is because if we want to achieve the growth of wealth, we must first realize the adjustment of society and nature and the rational use of resources. Therefore, it is for the sustainable development of the national economy that Chinese enterprises adopt sustainable development. Secondly, having sustainable Chinese enterprises can increase their life cycle. Because sustainable development enables companies to become more dynamic in innovation, to achieve future development. In addition, Chinese enterprises can obtain long-term benefits by operating in a sustainable mode. Using various resources, and manpower, and coordinating environmental development will result in long-term economic profits.

3. The Impact of Climate Change on the Sustainable Development Management of Chinese Enterprises

3.1. The Impact of Climate Change on Sustainable Development Management of Chinese Enterprises

As people enter the 21st century, climate change has become significantly more complex. Its obvious features are the increase in global warming and severe weather. The reasons for the increase in complexity mainly include natural and social reasons. The first is the natural aspect, such as natural disasters such as volcanic eruptions, earthquakes, etc. Humans, it is too weak to intervene in the face of these terrible natural disasters. But climate change is more of a social dimension, mainly due to productive activities. People want to improve the economy and consumption capacity through large-scale production, but ignore the ecological environment damage caused by uncontrolled production. The balance of the ecological environment, climate and society is broken, and because the other two are affected, the climate will also be impacted naturally.

For sustainable development, climate change is also related to it, which can be explained through the three elements of sustainable development [3]. The first is the economy, which is mainly about improving welfare by increasing the consumption of goods and services. However, due to climate

change, such as global warming, the economic development and welfare of some businesses are constrained. This is because of the rising sea level caused by global warming. For coastal enterprises, their main source of income is offshore manufacturing or related industries. Under the destruction of its environment, its economic sources are affected, and it cannot develop efficiently and sustainably. The second is the social factor, the fairness of society will be affected by climate change. This will be more pronounced in various countries, such as underdeveloped countries and some backward developing countries with weak adaptation to climate change. Due to the uneven impact of climate change, people are not equitably distributed among various resources. Sustainability proves that unfair distribution is ethically infeasible and undermines social cohesion in the long run and exacerbates the conflict over scarce resources. Finally, there are environmental factors, increasing emissions and greenhouse gases disturbing the atmospheric system, which in turn raises the stability of society and ecology. Climate change is inevitably related to regional environmental problems. Therefore, it is very important to avoid the irreversible damage of climate change to the ecosystem and its disturbance to the socio-economic system. Addressing climate change, its strategy is consistent with the national sustainable development strategy, to reduce the possibility of conflict between the growth of the market economy and the protection of the environment.

According to relevant research, future climate change will affect China's regional drought and flood disasters, ecosystems, agriculture, animal husbandry and fishery [4]. For agriculture in the southern region, its negative impact causes food security hazards and the destruction of farmland. This will be a huge challenge for Chinese agricultural enterprises. The first is that the destruction of farmland makes it impossible for enterprises to effectively and rationally use the farmland to cultivate crops, resulting in a decline in production. The enterprise needs to re-formulate a management plan, to re-use it rationally in the case of limited resources. The second is food security. Due to the increase in extreme weather, enterprises will be unstable in the production and management of crops, posing a security threat. These influences are all important factors restricting the management of sustainable development of enterprises. Climate change will also exacerbate drought in northern China, making it difficult to utilize freshwater resources. Since 2/3 of China's agricultural output comes from irrigated agriculture, due to the lack of water resources and the reduction of irrigated areas, irrigated agricultural enterprises will be greatly affected in terms of output. The instability of water resources and the contradiction between supply and demand will affect the sustainable development management of enterprises. In addition, rising sea levels caused by climate change are affecting China's coastal areas. This effect has also been briefly explained in the previous paragraph. Specifically, sea level rise will destroy the ecosystem stability of coastal cities and endanger the sustainable development of their social economy [5]. For coastal tourism enterprises, sea level rise submerges beach resources and erodes coastal landforms [6]. This restricts the economic development of enterprises and brings harm to the sustainable development of coastal tourism, and its management strategy needs to be adjusted accordingly.

3.2. Sustainable Development Management Strategies of Chinese Enterprises in Climate Change

In the increasingly complex situation of climate change, companies need to formulate strategies promptly within the broad national guidelines to resist the impact of this change. Although climate change has brought various impacts, it is also beneficial to promote the implementation of sustainable development management of enterprises and countries. Enterprises and the country have improved China's ecological and environmental conditions through various special measures to adapt to climate change, thus playing a positive role in promoting China's sustainable social and economic development. Different companies in China have different responses to climate change.

The first is technology companies, which are the backbone of the fight against climate change. Enterprises play a role in sustainable development when planning and implementing strategies. Technology companies mainly deal with climate change from two aspects. The first is to reduce their energy consumption and emissions. For example, one of the goals of China's Ant Group is carbon neutrality. The green model is used to design the park and operation mechanism, as well as the application of new technologies to ensure the effective management and promotion of sustainable development. Another point is to assist government departments in management optimization. Specifically, Moji Weather, China's leading meteorological service platform, has developed an air quality release app through cooperation and cooperation with the China Environmental Monitoring Station. This app uses the most advanced and sophisticated air quality detection and forecasting system, using advanced algorithms to model monitoring points. Enterprises rely on platform advantages to achieve sustainable development under climate change.

For agribusiness, the industry is most affected by climate change. Therefore, agribusinesses are more cautious and challenging in their management strategies to deal with their hazards. Enterprises manage and promote sustainable development through the following four points [7]. The first is to adjust the agricultural layout, which is mainly to reduce the risk of climate change by adjusting the planting structure of different crops and adopting multi-cropping. The second point is to choose varieties with strong stress resistance and to deal with disasters caused by climate change by cultivating high-quality crop varieties such as high-temperature resistance and drought resistance. In addition, sustainable development is achieved by strengthening the prevention and control technology of agro-climate. Enterprises carry out agricultural climate disaster prediction and early warning according to the impact of different climate disasters. Through the establishment of disaster prevention and control technology, agricultural disasters caused by climate change can be effectively avoided. Finally, the enterprise develops and strengthens water-saving agricultural planting technology. Due to drought, water shortage and other problems caused by climate change, vigorously develop water-saving agriculture and irrigation technology, so that enterprises can develop normally in arid areas and continue to manage sustainable development.

For China's coastal tourism enterprises, addressing climate change by improving building standards [8, 9]. Since extreme weather can cause damage to coastal buildings and facilities, new standards for facility construction should be raised to adapt to the impact of extreme weather and maintain the sustainable development of enterprises. Second, protect rare resources and the biological environment. Some coastal enterprises mainly attract tourists through unique landscapes or resources. Therefore, they respond to the impact of disasters caused by climate change by formulating protection measures, as well as long-term risk assessment, early warning and other management measures. Of course, there are other types of companies that are more or less affected by the hazards caused by climate change, such as construction and building materials companies, mining companies, and transportation companies. Although climate change is threatening, companies can reduce the impact of climate change by effectively improving management methods and technologies, to achieve sustainable development.

3.3. The Appraisal of the Sustainable Development Management Strategies of Chinese Enterprises

When Chinese enterprises formulate management strategies, they aim to achieve stable and sustainable development of enterprises. To achieve this goal, companies must be in line with the global economy, environment, etc., and consider China's domestic development model when formulating strategies. Since China has just turned to a market economy in its economic planning, Chinese enterprises will be affected when they formulate sustainable development management strategies, so enterprises will have a sustainable development model with Chinese characteristics [10].

This paper thinks that the strategies implemented in the sustainable development of enterprises in various fields in China are mainly carried out based on green environmental protection and sustainable development. Through these two aspects of the implementation strategy, the purpose is to realize the low-carbon technology development of enterprises in the environmental and social aspects, reduce environmental pollution through emission reduction and low-carbon mode, and realize the management of sustainable development of the company. On a global scale, green and low carbon has become the main mode of world development, and the management strategies of Chinese enterprises are in line with the environment of today's world. Under the influence of climate change, no matter which company it is, it mainly adjusts the existing sustainable development strategy. As well as the impact on society and the ecological environment is reduced, and the sustainable development of the enterprise is continued. This strategy effectively relies on its enterprise-specific management model and can be relatively stable and not affected by climate change.

Although the sustainable development management strategy of Chinese enterprises is in line with the world's development laws and China's transformation requirements, there are still many problems. The first is that the sustainable development management of some enterprises is based on the revision of enterprises in developed countries. Since foreign companies formulate strategies based on their specific environmental factors, such strategies may not necessarily be well developed and applied in the Chinese environment. The second point is that for enterprises, sustainable development will inevitably require more investment and cost. Whether it is the development of new technologies or the protection of the ecological environment, it requires a lot of capital, manpower and material resources to complete, which will be unfriendly to small and medium-sized enterprises. To sum up, these are the problems existing in the sustainable development management of Chinese enterprises, and managers need to improve the management strategy of enterprises through scientific thinking so that enterprises can develop sustainably and healthily [10]. Therefore, there are still many things that Chinese enterprises need to improve and upgrade on the road to sustainable development.

4. Conclusion

Overall, the impact of climate change on Chinese enterprises is not only in strategic management but also in the sustainable development of enterprises. However, it can be concluded that to the impact of climate change, Chinese enterprises have fully adapted to the management of sustainable development and made strategic improvements to achieve stable and sustainable development of their enterprises. Although Chinese enterprises have unique development and management strategies, there are still shortcomings and a lot of room for improvement. In addition, because the topic is relatively new, the appropriate cases of this paper are not sufficient, and the content is not complete and in-depth. Therefore, future researchers can collect cases and conduct a comparative analysis between Chinese companies and overseas companies. Based on this, it is expected that the research should also be perfected on the influencing factors of climate change.

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