The General Characteristics of Ecological Policy in China

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Abstract. Since China became the world's leading producer on the world map, China's environmental conditions have been unfavorable and have long been the main source of damage to health and society. At the same time, in the past two decades, environmental and emission policies have undergone tremendous changes, especially the transition from poor implementation to implementation.

Keywords: Ecological Policy; China; General Characteristics.

1. Introduction

Global environmental pollution offers the greatest challenge to sustainable industrial development and the need to meet the requirements of ever increased world population. It is very clear that socio-economic development depends on industrial capabilities or capacities; however, it is also a fact that industrial development is linked with many environmental sustainability challenges.

In this regard, different States have adopted numerous strategies to meet these basic challenges.

2. The Evaluation of the Current Ecological Situation in China

China’s recent environmental issues have become scale and political priorities. Many national measures have been initiated and implemented, including the 2015 Environmental Protection Law, the 2017 Environmental Taxation Law (effective from January 1, 2018), and the Air Pollution Prevention and Control Action Plan. Many environmental problems in China have severely affected the biophysical environment and public health. Rapid industrialization and free environmental monitoring have made the greatest contribution to solving these problems. The Chinese government is aware of these problems, provided many answers and made some progress. However, your response was criticized as insufficient. In recent years, civic activism has increased due to the government's decision to destroy the environment [1]. The cause of environmental damage can be traced back several centuries. China's economic prosperity has greatly accelerated the destruction of the country and its resources. The rulers of the dynasties that led to famines and natural disasters managed natural resources. The current environmental situation in China is not only the result of the current political solution, but also the result of the methods, views, and systems that have been put forward for hundreds of years. According to the "China Forestry Report", China has an area of approximately 1.05 million square miles. It affects more than 400 million people. Pollution and desertification have weakened China's ability to support industrial production, food production, and clean water to feed a large population. With the participation of China and its citizens, the rapid development of the Chinese economy has led to an increase in water and air pollution. The latest "Asian Logic" research on air pollution and well-being conducted by the Health Impact Institute (HEI) and the Asian Public Health and Air Pollution Project found that more than 120 pollution surveys have been conducted in Chinese urban communities. All aspects of hospitals and premature mortality are increasing. The World Health Organization (WHO) estimates that the current air pollution in China may cause more than 300,000 deaths each year [2]. These effects extend beyond the Chinese suburbs. Pollutants produced in China are transported to neighboring countries and have a major impact on the health of these countries. On the other hand, China’s economic progress can serve as a model for improving the environmental well-being of China and the rest of the world. Although this may leave another impression on people, China is still a developing country. The Chinese seem to work 7 days a week. China is the main mechanical platform on the earth. This did not show a "weekend effect", which
means that the NO2 concentration finally recognized by the satellite is very low. Compared with working days, the current air pollution situation in China may be in sharp contrast with that of Western Europe in the 1960s. Industrialization continues to grow rapidly, and GDP grows at a rate of nearly 10% every year. China's energy consumption per capita is only one-tenth that of the United States. Although per capita energy consumption is low, its large population means that China is currently the largest energy consumer on the planet, and because of the use of petroleum products, SO2 is the country with the largest outflow of SO2 on the planet. The increase in the number of cars also increases the emissions of nitrogen oxides and hydrocarbons and increases the concentration of ozone. The impact of Chinese technology and horticulture on the atmosphere is difficult to assess. On the other hand, the consumption of carbon dioxide from non-renewable energy sources and the consumption of methane from coal and organic agriculture have a significant impact on the atmosphere [4]. In any case, the high release of SO2 and the further development of sulfate molecules will help create a cooling atmosphere. The problem we face here is that due to the negative impact on health, the emission of pollutants (especially sulfur dioxide) must be reduced in the future. As the sunlight reflects more space, China will have a dual impact on the earth’s atmosphere, thereby improving carbon emissions and reducing air evaporation. This is vital to the earth’s atmosphere and air quality. Due to the rapid development of mechanical technology, China must pay attention to natural issues. With the exception of three national carbon inventory reports issued by the Chinese government in 1994, 2005, and 2012, China did not formally publish its carbon report. That is why environmentalists and research institutions are responsible. Calculate CO2 emissions based on logical assumptions and previously available data from various sources. Due to national interests and sensitive issues, China does not allow certain aspects of environmental research to be disclosed. The institutional structure and process of the natural administrative framework are important for understanding environmental measures. In expanding our institutions and environmental institutions, we must rely on information gathered from official documents of relevant institutions or government agencies. China's environmental monitoring system is considered a single and comprehensive rule. Over the last few decades, it has been said that in most cases it is worth discussing non-compliance with environmental standards [3]. Over the last few decades, China has become the world's largest producer, making it economically viable but at the same time causing enormous damage to the environment. The GOC therefore prioritized environmental issues and emissions trading has attracted widespread attention in this regard. At the end of November 2015, the National Information Office issued a "White Paper on Climate Change Policies and Measures in China", in which the government outlined detailed plans for the gradual creation of a carbon market in the near future. The IEA has identified some of the main sources of pollution in China. According to the International Energy Agency, China's main sectors of major greenhouse gas emissions are: energy production and transportation, chemical processing and production, mining, coal processing and processing, coking, non-metallic minerals, fuels and metals, and non-ferrous metals. Smelting or processing of metals. Many environmental laws have been passed over the last two decades, including the Air Pollution Prevention and Control Act, the Water Act, the Noise Pollution Prevention and Control Act, and the Water Prevention and Control Act. Pollution. "Economic Law and the Act on Environmental Impact Assessment". Based on these efforts, it can be said that China has put in place a legal system to achieve better environmental protection. While China is preparing to implement a national emissions trading system, meetings of the Climate Change Committee and the European Climate Committee, and the Committee on International Cooperation and Development took place in October 2016. "[10] This is a recognition of China's efforts in global emissions trading. At the same time, thanks to a conscious and deliberate agreement, it also takes on greater responsibility for solving environmental problems. The meeting praised seven pilot emissions trading schemes launched across the country, which played an important role in the growth of the national carbon market. Mutual assistance funds in the carbon market have almost doubled to €10 million (around €70 million) in the EU's three-year external cooperation project. The National Commission for Development and Reform approved "China's
Interim Measures for Certified Voluntary Emissions Trading" in June 2012. The term "interim measures" means that carbon credits in carbon credits can be used to offset carbon emissions. Discharged voluntarily. By adopting temporary measures, these temporary measures are expected to significantly help the seven mandatory ETS pilots in China and improve the vision of local grant units. This development has further improved China’s ability to respond to environmental challenges. The only exception is that if the National Development and Reform Commission does not approve these ex-ante measures in each ETS pilot plan, seven pilot projects may be invalid. All pilots can use CCER compensation in a fluoroscopy system, but the limitations of many pilots using compensation are not clear. Ideally, this should be controlled by the entity itself by direct means in the national system. After completing the necessary steps, a final report (MRV) will be generated for the monitoring, reporting, and verification system. China needs to consider the following variables: cost monitoring, practicality, appropriate parameters, and monitoring methods to increase the effectiveness of the discipline. Emissions and other emission reductions will be reported by the industrial and non-industrial sectors involved in carbon trading. The report must be verified by a third party to ensure that it includes the relevant necessary documents, in particular, the activity log containing the necessary information and data; then there must be a period of direct reporting. Verification is the most important part of the MRV system. The verification shall be carried out at the request of the third verified verifier, followed by the submission of a detailed verification report, which shall also invite the participants involved to make the necessary adjustments and diligence. The qualification requirements for verification and the standards of the verification department are a prerequisite for the market readiness plan (MRP) [7]. The Ministry of the Environment, authorized by the National Council, is responsible for approving environmental impact assessment certificates and qualified architectural design documents, including construction projects approved or approved by the National Council. On the other hand, across provincial, autonomous regions, municipalities, and other specific construction projects (such as certain secret projects and nuclear facilities). In addition to the above code, the scope of approval of environmental impact assessment certificates for construction projects affected by municipalities (cities) also applies. When smog-polluted air spread to China in December 2016, the government realized its responsibility for further environmental reforms. In this context, several steps have been taken to overcome this situation. To reduce smog, it was decided from November to March each year to close 30% of aluminum smelting capacity in large provinces that consume coal and produce aluminum (such as Beijing, Shandong, Shanxi, and Henan). Chinese environmental scientists claim that about 60% of Chinese groundwater is “relatively poor” or “very poor”. Another official report states that 16% of mainland China is contaminated, which encourages stakeholders to implement some reforms immediately. Finally, China has tightened the text of environmental legislation. This is the first time in 25 years that amendments to the Environmental Protection Act have been proposed and fines for pollutant discharges need to be abolished. Recent environmental legislation has brought significant progress in public interest litigation and strengthened the legislator in the field of disciplinary action against polluters through recommendations on fines [5]. Environmentalists also have the right to more effective control and discharge of pollutants. Until a new change is proposed, environmental officials have no right to confiscate property. However, they are now approved for use in water storage facilities that allow for the timely discharge of pollutants. Previously, environmental officials were at risk of preventing the illegal release of pollutants. Now they will be able to find company every day. Nevertheless, there are still consequences of non-compliance and consequences for officials responsible for large-scale pollution and environmental damage. In December 2016, China passed the first environmental tax law, which aims to strengthen social control over environmental standards. It collects more taxes for production units that pollute air and water, noise, and solid waste. The bill went into effect on January 1, 2018. Tax collection will help eliminate pollutants. As the world's largest producer of greenhouse gases, China is the first country to reduce total emissions at the end of this century. According to a senior government adviser, absolute carbon limits will be set. Therefore, due to urgency and absolute limitations, the government will use two methods to standardize emissions over the next five years.
Here are the key steps introduced in the recently revised Health Care Act to help create a systematic, controlled, and sustainable environment: Five key measures have been introduced in the new EPL 1. Impose fines on offenders on a daily basis; 2. The right to confiscate contaminated equipment; 3. The authorities shall order the limitation or cessation of excessive polluting production; 4. Administrative detention for serious offenses; 5. Pollution may also be penalized on suspicion of environmental violations [6].

In 2016 alone, 22,730 cases were registered under the five main measures provided for in the new Environmental Protection Act. As shown in Figure 1, the details of these cases may include: seizure of 44% of equipment or installations, deduction of 25% of production and shutdowns, deduction of 25% of daily fines, deduction of 18% of administrative detention, and 9% of criminal charges.

![Figure 1. Breakdown of Environmental Cases in 2016. Source: China Water risk base on IERL report](image)

3. The Tendencies of Ecological Development in Foreign Countries

3.1 Germany is Moving Towards an Ecological Economy

Germany is already a world leader in recycling. This requires the manufacturer to receive the packaging, and the system requires that all items with green dots must be exported by the recycling federation so that my business can be restored. However, according to the new "Waste Recycling and Management Law" that came into effect on October 7, 1996, the government took the first step to end the entire economy. Now, the manufacturer is responsible for the entire life cycle of the product. The energy required to transport the product from underground materials to processing must be considered. The new law requires a closed approach to the design and management of low-waste products and prioritizes waste avoidance by promoting consumer behavior aimed at purchasing low-waste products and environmentally friendly pollutants. The priority of recycled materials is higher than the need for burning to recover energy. Although the requirements are not strict, regulations requiring the use of renewable resources help to lay the foundation for the circular flow of resources in the economy. After formulating the new principles, the bill requires the federal government and local governments to comply with specific regulations regarding product liability, waste recycling, waste disposal, and "institutional transparency" (i.e., excluding confidentiality) responsibilities. No one knows when these regulations will appear or what they will look like, so the industry is forced to look forward to new regulations and take measures to achieve a circular economy in every industry. For example, in 1994, the German paper industry promised to reach 60% of the paper recycling level by 2000, and this year the automobile industry agreed to recycle and reuse its machinery. BMW has established a car recycling plant in Munich, which includes more than 20 types of plastic parts that are difficult to recycle. In order to meet the new standards and establish a closed material cycle, it is necessary to cooperate in industries (such as automobiles and electronic products), industries (such
as paper, glass, metallurgy, and plastics), and regions. These departments combine different processes, and there is only one company in the entire material process. -Guy Dawsey (EcoNews) [8].

Dutch environmental investment is no longer taxable, in order to accelerate the development of environmental protection projects and technologies, the Dutch government stipulates tax exemptions for "green" investments. Now, projects ranging from wind energy to "sustainable housing projects" are now easier to obtain financing at attractive prices. Wealthy investors seeking to avoid high-income taxes of up to 60% in the Netherlands are flocking to new areas of green investment. The "green funds" created by major banks have been restored and are currently estimated to exceed 1 billion VND (600 million US dollars). The wind farm products recently provided by ABN-AMRO were sold out within a few days. Wind energy, solar energy, energy-saving, organic agriculture, and forest protection programs are particularly advantageous. Recently, housing projects that use alternative energy technologies, renewable building materials, circulating water systems, and other environmentally friendly methods have been added to the tax-free green investment list. Banks such as ASN (General Savings Bank) now offer "green mortgages." For example, an environmentally friendly housing project in the north of Amsterdam can be financed at an interest rate of 4.9%, which is much lower than the usual 6.2% interest rate. The money saved helped fund the improvement of alternative energy sources. (International Green Planner) [9]

3.2 Other Countries

The Czechs and Austrians created a 250-mile-long Czech trail that connects sidewalks, bicycle and horse trails, and canoe waterways to Vienna and Prague. (Seaside World) "Unconventional" high-density plans are gaining popularity in Ontario, Canada, and at least 12 projects are in progress. One of the settlements, Montgomery Village near Toronto, is located in three- and four-story townhouses with a land width of 20 to 30 feet and wooden balconies. Porch and back garage. (New York Times) [10] Germany has 60 million bicycles and 40 million cars. As a result, Germany will spend more than $1 billion on bicycle lanes in the next five years. (What's next) The new 62-story commercial bank building in Frankfurt includes 13 covered gardens with an area of 15 x 36 meters, with natural light and ventilation. (Greenclips / ENR) The British Green House in 1996 was the 6000 square meter administrative and student building of Oxford University. The building uses only natural materials for recycling, recycles gray water and rainwater from the roof for toilets, and uses a condensing gas boiler. And low-energy lighting. (Greenclips/Building the future) The Rijksmuseum in Amsterdam uses an innovative alternative cooling technology that avoids the cost and energy consumption of air conditioning by pumping ice water into underground storage tanks in winter and recycling it in summer. ("Earth Island" magazine) [11] Shell scientists predict that by 2050, renewable energy will contribute to almost all energy sources, such as coal, oil, natural gas, and nuclear energy, to meet general energy needs. (Heart of the Sun) One of the biggest obstacles to sustainable development is the increase in global inequality. According to data from the United Nations Development Program, the income ratio of 20% of the world’s richest countries and 20% of the world’s poorest countries has risen from 30:1 to 61:1, and has more than doubled. Today, the net worth of the world’s 358 richest people is equal to the total income of the poorest 2.3 billion people, who make up 45% of the world’s population. (Selected by the United Nations Development Programme) [12].

4. Summary

The results of the thesis testify to the positive role and consequences of the international consequences of Chinese innovation. However, innovations in the Chinese style still have many shortcomings that should attract the attention of scientific and practical circles, such as the emergence of used oils, melamine, and other practices of "dangerous innovations".
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