

# Research on the Countermeasures of Industrial Ecological Development in Huaihe Ecological Economic Belt

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## Abstract

The "Thirteenth Five-Year Plan" has raised the construction of the Huaihe Ecological Economic Belt into a national strategy, which has played a role in promoting the rise of the central region and the development of the eastern region. However, due to the long-term lack of overall planning for the basin in my country, the Huaihe River basin has problems such as low overall economic development level and fragile ecological environment. Based on the analysis of the status quo of the industrial ecological development of the Huaihe Ecological Economic Belt, the paper puts forward reasonable suggestions on its industrial structure, urbanization construction, investment in science and education, and regional economic development, in order to promote the healthy and sustainable development of the Huaihe Ecological Economic Belt.

## Keywords

Huaihe River; Ecological Economic Belt; Industrial Ecologicalization; Problems; Measures.

## 1. Introduction

The construction of the Huaihe River Ecological Economic Belt is not only an important measure to realize the economic integration and development of the eastern and central regions of my country, but also an effective way to respond to the national "One Belt, One Road" development strategy, fill the gaps in the regional development strategy of the Huaihe River Basin, and accelerate the economic development of the Huaihe River region[1]. However, the Huaihe Ecological Economic Belt, which has always been dominated by the primary industry, lacks independent industries that can enhance its economic strength. It mainly relies on the continuous input of production factors to promote economic growth, which is accompanied by increasingly serious environmental pollution[2]. Therefore, while promoting the construction of the Huaihe Ecological Economic Belt, we must pay attention to the conservation of energy resources and the protection of the ecological environment, so as to achieve green and sustainable development[3].

## 2. Basic Overview of the Huaihe Ecological Economic Belt

### 2.1. Basic Situation of Huaihe Ecological Economic Belt

The Huaihe River flows through the central and eastern regions of my country, with a total length of about 1000km[4]. It is an important dividing line between the north and the south. It has rich mineral resources, transportation resources, cultural tourism resources, etc. It is an indispensable part of my country's overall economic and social development[5]. The main area of the Huaihe Ecological Economic Belt includes the main stream of the Huaihe River, the first-level tributaries, and the area through which the lower reaches of the Yishu - Si water system flows[6]. km , with a resident population of 148 million at the end of 2018 and a regional GDP of 7.27 trillion yuan. However, due to the lack of long-term planning for the overall planning of the river basin in my country, the urbanization level of the Huaihe River Basin is relatively low,

the regional development competitiveness is weak, and there is a lack of complete infrastructure[7]. In addition, there are flood and drought disasters in local waters all year round, and there is a lack of complete water supply and water storage measures, resulting in a situation of "rain and drought, but no rain and drought", high resource and energy consumption, excessive pollution discharge, and ecological environment. Destruction and other phenomena are becoming more and more serious, resulting in the low level of economic development of the Huaihe River Ecological Economic Belt as a whole, insufficient development momentum at the industrial level, and relatively fragile ecological environment[8].

## **2.2. Definition of the Concept of Green Economy**

Professor Ji Zhu is one of the founders and practitioners of the green economic system theory[9]. He is also the director of the World Economic Research Center of Beijing Technology and Business University and the director of the Suining Green Economy Research Institute. He believes that the meaning of green economy can be expressed as: green economy is a It is a kind of economic structure, growth mode and social form. Its development goals are harmony, efficiency and sustainability. Its basic contents are recycling industry, ecological agriculture and continuous service industry. Undoubtedly, the green economy has replaced the long-standing single goal with a new development goal, replaced the traditional people-oriented concept with a new concept of people-oriented nature, and replaced it with a new economic structure dominated by the green service industry[10]. The traditional economic structure with agriculture and industry as the mainstay has replaced the old conflicting, inefficient and intermittent growth methods with new harmonious, efficient and sustainable growth methods, and the new green economy, green New Deal, and green society have also replaced traditional society.

## **2.3. Status Quo of Green Economy Development**

At present, the global economy is undergoing transformation driven by the strong logic of green economy. Developed countries have gradually turned to green economy, and have achieved structural optimization in the transition from traditional economy to green economy. In my country, Professor Ji Zhu took "structural growth + green economy" as the guiding theory, and made Suining, Sichuan, China complete the historical transition from the traditional economy to the green economy[11]. On November 20, 2010, Sichuan Suining was awarded the title of the world's first "Green Economy Demonstration City" by the International Environmental Resource Management and Supervision Agency of the United Nations Industrial Development Organization. Since then, the "Green Economy and Green GDP Index of China's 300 Provinces and Cities" has also been published by the Beijing Institute of Intelligent Economy for many years. Facts show that the new economic structure will gradually weaken the traditional agricultural economy, industrial economy, and service economy and then develop into a green economy. The highest social form of mankind after society, green economy, green new deal, and green society are the global consensus and development direction of human civilization in the 21st century[12].

## **3. Problems Exist in the Ecological Development of Industries in the Huaihe Ecological Economic Belt**

### **3.1. Insufficient Attention to Economic Strategy, There is Still the Phenomenon of Sacrificing Ecology for Economic Development**

Among the five provinces in the region, the economic center of Jiangsu is in the south; Anhui's development focuses on Hefei City and the economic belt through which the Yangtze River passes; Shandong's development center is in the eastern coastal cities; Henan's economic center is in Zhengzhou and its surrounding urban agglomerations Hubei mainly develops urban

agglomerations in the middle reaches of the Yangtze River and Wuhan urban agglomerations. Cities within the economic belt do not have a targeted development strategy, and neither the country nor the province pay enough attention to it, and policies, institutional design and industrial deployment planning cannot effectively promote the high-quality development of the region.

The 25 major cities in the region are relatively backward in economy. In 2018, there are 6 cities with a total GDP of more than 400 billion yuan, ranking between 33 and 43 among the 358 cities in the country, and the other 19 cities have a GDP of about 200 billion yuan, ranking after the 50th in the country. The phenomenon of economic development at the expense of ecology still exists. Of the 31 provinces across the country, in 2020, energy consumption per 10,000 yuan of GDP will increase in 7 provinces, including Henan Province in the region; 16 provinces will see an increase in electricity consumption per 10,000 yuan of GDP, including Anhui and Hubei. In addition, driven by the performance appraisal system centered on GDP, some localities have adopted a tacit attitude towards polluting enterprises.

### **3.2. The Ecology is Fragile and the Task of Enriching the People and Increasing the Income is Arduous, and the Ecological Development of the Industry is Required**

The task of enriching people's income and increasing their income is still arduous. In 2020, per capita GDP will be 1.212 billion yuan/10,000 in Jiangsu, 634 million yuan/10,000 in Anhui, 720 million yuan/10,000 in Shandong, 553 million yuan/10,000 in Henan, and 752 million yuan/10,000 in Hubei. While the national level is 724 million yuan per 10,000 people, Jiangsu, Shandong, and Hebei are higher than the national level, while Anhui and Henan are lower than the national level. From the perspective of Jiangsu Province, Yancheng, Suqian and other seven cities belonging to the Huaihe Ecological Economic Belt will have a total GDP of 3,937.091 billion yuan in 2020, accounting for 38.33% of the province's total. The per capita GDP is 90,200 yuan, the province's average is 125,000 yuan, only 72.16% of the province's; the per capita disposable income of all residents is 32,994 yuan, the provincial level is 43,390 yuan, 76.04% of the province's average level, lower than The province is 10396 yuan.

Therefore, it is necessary to use stricter measures, spend more effort to save resources, optimize ecology, protect the environment, and implement ecological development of industries to enrich people and increase income.

### **3.3. Insufficient Driving Force for the Development of Green Economy**

#### **3.3.1. The Growth of the Tertiary Industry is Slow, and the Industrial Structure is Still Biased Towards Heavy Industry**

By comparing the data of the proportion of the tertiary industry in the GDP of the five provinces in the Huaihe Ecological Economic Belt in 2018, 2019 and 2020, the proportion of the tertiary industry in the five provinces in the past three years has increased, but the growth has been slow, and Jiangsu has risen the fastest in 2020 (52.5 %) increased by 2.53% compared with 2018 (50%), Anhui has the slowest increase, and 2020 (51.3%) increased by only 0.3% compared with 2018 (51%). The proportion of the secondary industry is decreasing, but most provinces still account for 30-40%, and most of them are highly polluting chemical, paper, coal and other industries at the expense of ecology. The industrial structure is still biased towards heavy industry, indicating that the industrial structure needs to be further optimized, the task of industrial ecological development is arduous.

#### **3.3.2. The Development Level of Green Industry in the Park Needs to be Improved**

Take Jiangsu Province as an example: in the list of national-level green factories and green parks, there are 2,137 national-level green factories and 176 in Jiangsu Province, which do not match the status of a strong economic province; there are 173 national-level green parks in Jiangsu

Province. There are 15, and only 5 of the seven cities in Jiangsu belong to the Huaihe Ecological Economic Belt. Suqian, Lianyungang and Huai'an were not selected. This aspect needs to be improved.

### **3.4. The Development of Green Technology is Slow, and the Innovation Capability of Green Technology Needs to be Improved Urgently**

The main problems of green technology innovation: First, the ability of independent innovation is not strong, the independent innovation cycle is long, there is a lack of basic, pioneering and disruptive technological innovation, some key technologies are controlled by other countries, and the supply capacity of high-end technical equipment is not strong. Second, it is difficult to introduce green technology talents, and it is also difficult to retain people after introduction. Third, the research and development of energy-saving and environmental protection technologies has a low degree of correlation with the market, and the transformation of innovation achievements is not smooth enough. The commercialization of green production technologies in universities and scientific research institutions is still immature, and most technologies are still in the laboratory stage; many companies have limited capital scale and insufficient investment in environmental protection, and some backward and inefficient technical equipment has formed a market squeeze for mid-to-high-end products. pressure phenomenon. Fourth, the research on key core technologies of green manufacturing is insufficient, and the cultivation of green technology innovation carriers needs to be strengthened.

### **3.5. The System and Mechanism for Promoting the Development of Green Industry are not Perfect**

First, some administrative measures related to green development failed to play their due role. For example, the state has established a green development indicator system and an assessment target system for ecological civilization construction, but the guiding role for local governments is not strong. Second, the ecological and environmental protection laws and regulations need to be further improved, especially the rigidity of the implementation of the laws and regulations is not strong.

## **4. Suggestions on the Ecological Development of Industries in the Huaihe Ecological Economic Belt**

### **4.1. Strengthen the Concept of Ecological Environment Protection**

1. Strengthen the concept of ecological environment protection. Increase publicity and education, conduct multi-pronged efforts to popularize ecological environmental protection among city leaders, entrepreneurs and ordinary citizens, and enhance the awareness of ecological environmental protection and sustainable development in the whole society; advocate a green and low-carbon lifestyle, and guide the public to practice green simplicity Life and low-carbon leisure mode, and resolutely put an end to waste, extravagant consumption and unreasonable consumption.

2. Change the ways and means of resource utilization and improve the efficiency of resource utilization. In addition to adopting ecological methods and high-tech to save and intensively utilize resources, environmental protection departments should also pay attention to the use of reward and punishment methods to mobilize the enthusiasm of enterprises to improve resource utilization efficiency, and encourage enterprises to promote the application of energy saving, water saving, material saving, land saving and resource recycling. new method to use.

3. Implement more active environmental and economic policies. Pursue the principle of environmental protection in economic activities, raise the entry threshold for environmental

protection, and increase the proportion of environmental pollution control investment in GDP, and by 2025, it will not be less than 3%. According to international experience, only when the ratio reaches 2%-3% can the environmental quality be improved.

#### **4.2. Attach Importance to Overall and Coordinated Development and Take the Road of Win-Win Cooperation**

1. Overall and coordinated development to advance in depth Promoting cooperation in depth, rather than staying on the surface, determines the speed and quality of the construction of the Huaihe Ecological Economic Belt. The integrated and linked development should center on the three core cities of Huai'an, Xinyang and Bengbu, guide the flow of factors between regions, and promote the development of urban groups. For example, the convenient and smooth traffic conditions can be used to promote the development of the Suqian-Xuzhou-Suzhou group.

2. Build a competitive and sustainable industrial structure to promote the development of appropriate industrial categories in various regions on the basis of coordination and cooperation, establish a competitive industrial structure, and avoid homogeneous competition and repeated allocation of industries in the region. It is suggested to lay out the industrial structure from the perspective of the overall economic belt . The first is to insist on giving full play to comparative advantages, and to form an effective division of labor and rational distribution of industries among regions through industrial planning and demonstration; the second is to integrate regional forces and actively develop new strategic industries through the joint construction of industrial parks and collaborative industrial clusters. , to promote the advanced industrial base and the modernization of the industrial chain.

#### **4.3. Build an Innovative Green Industry System**

1. Green and intelligent transformation and upgrading of traditional advantageous industries. For traditional industries, the municipal government must issue a strict green transformation policy. The implementation of the policy must ensure rigidity and force the green development of traditional industries. Those that cannot be transformed and upgraded must be resolutely eliminated.

2. Cultivate emerging industries and future industries with growth potential. Increase green technology research, focus on energy conservation and environmental protection, clean production, clean energy, green buildings and other fields; cultivate and expand green emerging industries, and cultivate a Approval of leading new energy equipment manufacturing enterprises that lead the development of green industries; strengthen the support of green basic industries, and implement clean energy industrialization projects.

3. Vigorously develop ecological products, through the establishment of a benefit compensation mechanism with resources and ecology as the carrier, so that the clear waters and lush mountains reflect the due industrial value and capital benefits. Accelerate the development of primitive agriculture to modern agriculture.

#### **4.4. Promote Technological Progress and Improve the Efficiency of Green Innovation**

Exploring a development model with low energy consumption, low emission and low pollution is an inevitable path to realize the ecological development of regional industries. Therefore, it is necessary to promote technological progress and improve the efficiency of green innovation. Increase financial investment in science and technology, and establish an incentive mechanism for technological innovation. In 2020, the national R&D expenditure accounted for 2.4% of GDP, Jiangsu was 2.82%, and the other four provinces did not publish the data. Continuously improve and innovate fiscal and financial policies, and build a policy system for fiscal and financial support for green development. For example, Jiangsu Province promoted the "green innovation investment" project in 2018, which not only introduced the preferential funds of the state to

support energy conservation and emission reduction into Jiangsu, but also perfectly combined financial support policies with the market-oriented mechanism of financial institutions, in order to enhance the green development of Jiangsu's economy.

#### 4.5. Constructing the Rules and Regulations and Policy System for Industrial Ecological Development

1. Build a performance appraisal system oriented to development quality. In order to effectively improve the level of industrial ecology and avoid unfair competition at the expense of the environment and development quality, a set of performance appraisal system oriented to development quality should be established as soon as possible. The proportion of environmental pollution losses in GDP and the growth rate of green manufacturing are included in the government's assessment system as an important basis for their political performance and rewards and punishments, thereby inspiring governments at all levels to pay attention to and promote green development.

2. Improve the ecological compensation mechanism. It is recommended to formulate relevant laws and regulations on inter-provincial ecological compensation as soon as possible and strictly implement them. It is necessary to strengthen the supervision and management of cross-provincial ecological compensation by the central government to ensure the effect of ecological environmental protection. For the ecological compensation funds allocated by the financial departments at all levels, it is necessary to adhere to the supervision of the use effect of the whole process.

3. Formulate fiscal and taxation policies to promote environmental protection, energy conservation and emission reduction. Fiscal and taxation system arrangements should be tilted towards circular economy and energy-saving industries, and a set of carbon tax constraints and guarantee systems coordinated by value-added tax, consumption tax and urban construction tax should be established; the scientific and rational collection of resource tax should be used to improve the ecological compensation mechanism for resource development; Continue to use fiscal funds and budgetary investment to support environmental infrastructure to make up for weak points, green environmental protection industries, efficient use of energy, and resource recycling; through corporate income tax and value-added tax, grants are given to enterprises that save energy, water, environmental protection, and comprehensive utilization of resources. Different levels of discounts. Only by adhering to the concept of green development, expanding the channels for realizing the value of ecological products, taking the green development path of industrial ecologicalization and ecological industrialization coordination, and establishing a sound ecological economic system, can the Huaihe Ecological Economic Belt promote high-quality economic development and realize human Live in harmony with nature.

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