## Ecological economy: a new mode of development for both nature and economy

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**Abstract:** The core of ecological economization lies in transforming natural resources into natural capital, following ecological and economic laws, and realizing the promoting effect of natural resources on economic development. Change the traditional "consumption economy", make the economy harmoniously into the natural ecosystem circulation system, to establish a new economic form, ecological economy, to realize the sustainable development of harmonious coexistence between man and nature, and promote the building of ecological civilization, make people advocate green and happy life, building a beautiful China, and realize the "China dream" has important practical significance.

#### 1. Introduction

Over the past 40 years of reform and opening up, China has made remarkable achievements in its economic development. However, we cannot deny that the rapid development of China's economy is based on high investment, high energy consumption and high emissions. At the same time, a series of environmental pollution and ecological damage problems are also of great concern to the Chinese people [1]. The pattern of economic development featuring high investment and high pollution cannot be sustained for a long time, and a series of ecological and environmental problems have increasingly become the bottleneck that affects and restricts China's sustainable economic development. Ecological economy connects ecology and economy, which is the ecological development of economy and the benign development of ecology, the dynamic balance and coordinated development of economy and ecology, and the win-win economic development mode of ecological protection and economic development [2]. In the process of China's economic development, we must integrate ecological thinking, change the traditional way of operation, so as to bring more sustainable economic value and social value.

#### 2. Sustainable development is the inevitable choice of China's development path

The sustainable development concept aims at the comprehensive development of society and advocates the new development concept of coordinated development of economy, society, resources and environment. China has a large population, relative shortage of resources, deteriorating ecological conditions, worsening environmental pollution, low efficiency of resource utilization, and obvious gap in technological and economic level compared with developed countries. Therefore, it is the most reasonable and necessary for China to take the road of sustainable development. The thought of sustainable development is the rational design and practice of human development path, which requires the sustainable use of natural resources, sustainable ecological environment, sustainable economic development and overall social progress. As far as the development concept is concerned, the sustainable theory is the development concept guided by the global significance to adapt to the contemporary theme of peace and development, the development concept based on the premise of harmonious development between human and nature, and the development concept based on the goal of comprehensive social progress and development. China is a big developing country, iimplementing the strategy of sustainable development is the right choice for China to shake off poverty, get rid of the dilemma of population, resources and environment and rejuvenate China.

From the perspective of epistemology, the traditional human concept of social development is mainly represented by the expansion of industrial civilization which represents the socialized mass production of modern civilization. The process of economic development after the beginning of the industrial revolution is actually the process of continuous expansion of industrialization. The industrial expansion in the form of large-scale socialized production has brought unprecedented progress to human society. However, industrial development not only better meets various needs of human beings, but also greatly enhances human's ability to transform or obtain from nature, which soon exceeds the sustainable capacity of nature, resulting in a series of ecological crises caused by over-exploitation of nature. Therefore, in order to ensure the sustainable development of human society, we must change the pure economic development mode based on industrial expansion, recognize the necessity of maintaining a good ecological cycle while industrial development, and implement the development mode based on ecological economic construction.

## 3. The development of ecological economy is the basis for the harmony between man and nature

Kenneth balding, an American economist, put forward the concept of ecological economy for the first time and explored the economic root behind the ecological crisis, in order to solve the contradiction between the increasingly prominent economic growth and ecological environmental protection. Ecological economics emphasizes the coordinated development of ecological environment and social economy, and puts forward that social production and economic activities should follow the basic principles of ecology and introduce ecological technology into the circular development of economy. Aiming at the internal logical relationship between economics and ecology, the ecological economist Herman e. Daly once said that economics studies the external life processes determined by commodities and their relationships, so it is part of ecology [3]. Efficient ecological economy is a new model of economic development. Ecological values are handling of relationship between human and the nature of value theory, ecological and economic values is the value of dealing with the relationship between economic development and ecological balance theory, is the fundamental point of view for people to judge the value relationship between economic development and ecological balance from the perspective of ecology, is a pursuit of both economic and ecological benefits, seeking the value theory of economic development and ecological balance coordinated development. The development of ecological economy is the basis for the harmonious coexistence between man and nature and the inevitable choice for the coordinated development of economy and ecology.

# 4. Developing ecological economy is an effective way to implement sustainable development strategy in China

The theory of ecological economic value comes from ecological economic theory, and ecological production mode is the practical foundation of ecological economic value. Green economy, low-carbon economy, recyclable economy and other ecological production modes are the practice forms of ecological economic values. Efficient ecological economy is an economic development mode proposed by the plan on the basis of integrating the research results of ecological economy at home and abroad and the experience of regional economic development. It is also the innovation and development of ecological economy. American scholar Lester r. brown believes that ecological economy is able to meet our needs and not endanger the future generations to meet their own needs [4]. The characteristics of efficient ecological economy are mainly reflected in the following four aspects: ecological production mode, ecological industrial structure, efficient economic operation and advanced economic form. It is through the advantages of these four aspects that efficient ecological economy realizes the goal of balancing economic and ecological benefits and overcomes the contradiction of "economic development leads to ecological destruction". Therefore, efficient ecological economy is a mode of economic development independently selected by human beings to

realize the coordinated development of economy and ecology [5]. It plays an important role in promoting China's sustainable development.

### 5. Main problems of ecological and economic development

### 5.1 Contradiction exists between productivity development and ecological protection

The traditional economic development mode focuses on strengthening the transformation and demand of the ecological environment as much as possible while neglecting the protection of the ecological environment. What follows is that the larger the scale of economic development, the more environmental pollution it produces. The performance of the environmental pollution are diverse, mainly for waste water, waste gas, and solid waste and other modern industrial "three wastes" emissions, these pollutions not only destroy the air, water, soil and other necessary resources that human beings rely on for survival, but also directly caused global warming, catastrophic weather, even geological disasters and directly affect the quality of human life and survival environment. A series of environmental problems behind the development of productive forces have brought great challenges to ecological protection.

## 5.2 Contradiction exists between scientific and technological development and natural resources

The development of modern economy is based on the utilization of natural resources, and almost all modern technologies are related to how to use natural materials to meet various human needs. Therefore, the development process of modern science and technology is, to some extent, the process of how to obtain natural resources faster and better and process and transform them. As the most basic material for human industrialization, various chemical energy and mineral resources have become indispensable resources for the development of human society. However, due to the limited resources of the earth itself, the resources it can provide to human beings are also very limited. With the development of science and technology, human beings are more and more capable of acquiring corresponding resources, but the corresponding reserves of resources are less and less.

### 5.3 Contradiction exists between the current system and ecological protection

The economic reform that began in the 1980s was centered on economic construction. Under the guidance of this idea, environmental protection was consciously neglected in the formulation of the system. The concept of "Pollution first, treatment afterwards; Develop first, protect later" has resulted in a serious lack of ecological and environmental protection system, resulting in the contradiction between the current system and ecological protection.

### 5.4 Contradiction exists between moral culture and ecological protection

China's traditional culture emphasizes the "unity of man and nature", that is, the harmonious development of man and nature. However, in the large-scale industrialization process of China's modernization drive, human beings only take nature as a tool to meet their own needs, and seek natural resources to improve people's lives as much as possible, but ignore the problem of ecological environment destruction. In situations where punishment is less likely, most people will choose to destroy the environment to satisfy their desires. In the case of contradiction between moral culture and ecological protection, ecological economic construction will be difficult to be accepted by most people and will be difficult to be carried out in practice.

## 6. Effective measures to develop ecological economy

We will increase publicity for ecological progress, raise public awareness of environmental protection, and promote ecological and economic development. Government, school, community, etc should be appropriate to carry out some publicity and protect the ecological environment, energy saving of lectures and activities, and to adopt a variety of forms and means, comprehensive and

multi-level guidance and publicity, advocating green and healthy lifestyle and consumption mode, enhance citizens' consciousness of environmental protection responsibility, starts from the minor matter, starts from each person, work together for good ecological homes[6]. The government also needs to transform its own functions and improve its ability to promote ecological economy. In the process of developing ecological economy, it mainly plays the role of facilitator and model: on the one hand, it should guide enterprises and the public to participate in the development of ecological economy by introducing regulatory policies, developing diversified financing mechanism, improving supervision network and improving service capacity. On the other hand, they should lead by example, strengthen the building of a conservation-oriented government, make maximum use of the government's public resources, play an exemplary role, and strengthen our confidence in guiding the development of the ecological economy.

#### 7. Conclusion

The key to the thinking of ecological economy is to break away from the traditional cognition of industrialization. On the basis of respecting the basic status of natural ecosystem, the process of fully understanding the ability of protecting nature to provide ecological products is also the process of value creation. The key to the development of ecological economy is to take the ecological environment as a kind of resource and asset. While preserving and increasing the value of natural assets focusing on ecological balance, it can transform natural ecological resources into economic development resources, realize the value of ecological resources, and promote the synchronous growth of natural wealth and economic wealth.

In conclusion, ecological economy, is a process of healthy industrialization, a drop out of the traditional understanding of industrialization, with no loss or low loss of natural resources assets as the prerequisite. The sustainable development of wealth creation and accumulation by transforming ecological advantages into economic advantages can promote the virtuous cycle of ecology and continuously increase the value of natural assets, so that the natural wealth and economic wealth increase simultaneously, truly reflecting the development concept of "green water and green mountains" is "gold and silver mountains" [7], and gradually achieve natural and economic win-win.

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