

Discussion on Environmental Energy and Sustainable Development from Sociology Perspective

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Abstract: Environmental energy is inseparable from the sustainable development of modern human society. Currently, most research on environmental energy focuses on the regeneration and sustainable development of environmental energy combined with reality. Based on sociological perspectives, the sustainable development of environmental energy is discussed and analyzed, but there are still some deficiencies. During using energy, its impact is not only simply manifested in the impact on the environment, but also the crisis brought about by the whole society is very prominent. Therefore, it is of great significance to further strengthen the research on the sustainable development of environmental energy from the perspective of sociology and clarify the future development strategy to ensure the sustainable development of modern society and effectively deal with the social crisis brought about by environmental energy.

Keywords: Sociology, Environment and energy, Sustainable development, Development strategy.

1. Introduction

After the reform and opening up, Chinese social and economic development achievements have achieved world-renowned achievements. The overall economic growth rate has accelerated, and it has gradually entered the stage of high-quality development. The result has been that China has become one of the most rapidly growing economies in the world and has earned the reputation of "China's miracle". However, under the shining achievements and halo, it is hard to deny that the price paid for economic development is too high, mainly reflected in resources and the environment. The speed of Chinese economic growth is gradually slowing down. In gradually promoting high-quality economic development strategies, the pressure on the environment, energy and social and economic development is increasing. In the past, the extensive development model of high pollution and overexploitation of resources made Chinese future social development more and more difficult. Therefore, during comprehensively coordinating sustainable development strategic planning in the future, social perspectives are required to build a resource-saving, environmental-friendly society to ensure a balanced and organic integration of economic and social development. Further, ensuring that people can achieve sustainable development in a good social environment. So if it is impossible to break through the constraints of traditional environmental energy, then social research is just empty talk [1].

2. Relationship between Energy, Environment and Society

2.1. Energy and Society

In modern social development, it is necessary to invest certain production factors in energy, and social development also needs energy as a basic condition to achieve sustainable social progress. Based on a brief analysis from a sociological perspective, the relationship between energy and social and economic growth is mainly manifested in two levels: The first is that social and economic growth has a certain dependence on energy. That is, social and economic growth is inseparable

from energy. On the other hand, sustainable development of the energy environment requires social development as a prerequisite since social development promotes the large-scale development of energy and ensures rational energy utilization [2]. However, as a driving force for social and economic growth, energy will also become an obstacle. For example, if energy is depleted day by day, or if energy use brings environmental and ecological problems, it will blow society's sustainable development.

2.2. Energy and Environment

As a result of the development and utilization of energy, the natural environment will be subjected to various degrees of damage. Additionally, a large number of waste gases, wastewater, and solid waste generated as a result of energy utilization pollute the environment. Water, gases, and solids are the main pollutants, especially gas pollution, which is a major source of air pollution in China. However, liquid and solid waste are the root causes of pollution in the soil environment and water areas. The environmental pollution caused by energy, the impact is primarily manifested in two levels: The first is regional impacts, such as air pollution caused by carbon dioxide, sulfur dioxide, and nitric oxide, as well as soil pollution and water pollution in the current region, among which air pollution has the greatest impact [3]. Secondly, there is the global impact of air pollution caused by energy, including the greenhouse effect, the destruction of the ozone layer, and the acid rain effect on a global scale.

2.3. Environment and Society

The environment is the foundation for social development. The specific definition of the comprehensive environment, the ocean, water resources, atmosphere, and land resources in the environment are all its key components. At the same time, the environment is also important for people's daily production and life, leisure and entertainment. Whether the environmental quality is perfect or not has the most active impact on productivity—human physical and mental health.

Therefore, it can be considered that to protect the natural environment and realize the sustainable development of the human environment is to maintain social productivity and

optimize the natural environment, thereby improving the social productivity of China. As an important material condition in our modern society, the environment is also the basic condition for economic development. It can promote social and economic development and become a bottleneck to social and economic development. Environmental pollution and the destruction of ecological resources have gradually evolved into major bottlenecks threatening public health and negatively impacting social and economic development.

3. Sustainable Development Strategy of Environment and Energy from Sociology Perspective

3.1. Acceleration of Scientific and Technological Progress and Adjustment of Industrial Structure

Further accelerating the progress of science and technology, adjusting the industrial structure in an all-around manner, and developing a new mechanism for optimizing the social structure can drive social development in China and truly enter a virtuous circle system, which can be achieved at the following levels:

(1) Strengthen the centralized integration of forces, focus on the development of Chinese five pillar industries, take technological progress as the guide, highlight the key content of industrial development, make the pillar industries stronger, accelerate the cultivation of emerging pillar industries, and become the driving force for local social development. And actively participate in various international labor and cooperation divisions to optimize the enterprise's modern processing capacity. At the same time, focus on developing green food processing technology and new building materials to lay a favorable foundation for adjusting industrial structure [4].

(2) It is imperative that the development of three high-tech industries, including information engineering, biological engineering, and environmental engineering, be strengthened to transform them into leading industries for urban development. In addition, it is necessary to strengthen the development of high-tech industrial clusters, such as new materials, biomedicine, optoelectronics, and electronic information software, to occupy the city's commanding heights in developing high-tech industries while overcoming key technologies and critical technical challenges. As a result, a new development pattern should be established in which leading software companies would be the leaders, circuit manufacturing and information technology would be the guarantees, and new materials would be the source of economic growth.

(3) It is necessary to transform and upgrade traditional industrialized enterprises to change the level of development in traditional industries. With the help of advanced technology and high-tech, transform traditional industries and optimize the stock structure of enterprises. For the metallurgical industry, it is necessary to embark on the road of high-quality and professional development, focus on the transformation and upgrading of process equipment, actively develop product types that are really in short supply in various markets, and strengthen the focus on the research and development of high value-added products. In the case of aluminum processing enterprises, it is imperative to demonstrate their advantages in terms of technology and

equipment and invest in developing and researching high-precision aluminum strips in high demand. It is essential for machinery industry enterprises to develop large-scale power transmission and transformation equipment and comprehensively promote automatic control systems and intelligent instruments. The light industry should focus on improving product quality and optimizing product competitiveness. The textile industry needs to make appropriate adjustments to the cotton textile industry and focus on developing the garment industry. In the future, focus on the development of the service industry and make up for the shortcomings of the traditional service industry. For example, a core service network can be formed in the central business district of the city to improve the service industry standard, thereby further promoting the Chinese traditional service industry to a new level of development, especially the need to integrate information technology and network systems to form a database service industry. It provides a more diverse and richer content of services to promote the development level of social informatization. For example, it would be beneficial to accelerate the construction of a modern logistics distribution system, construct a huge warehouse-style store, and create an international convention and exhibition center in an urban area.

3.2. The Transition of Energy Consumption Pattern

In recent years, a virtuous development cycle has been found in the continuous Chinese promotion of energy conservation. However, in order to truly realize the synergistic progress between society, energy, and the environment, strengthening the change of energy consumption structure is the primary way. It can focus on developing new energy sources and reducing the proportion of traditional coal resource consumption. Cities need to strictly control the development of high energy-consuming and high-pollution industries, especially those requiring more than 1,000 tons of standard coal for project construction. It is necessary to strengthen the introduction of advanced technology and equipment and formulate targeted energy-saving and environmental protection measures.

The relevant government departments cannot approve the project construction for those not meeting the standards. For technical products that can bring more obvious energy-saving effects, it is necessary to implement preferential price policies in an all-around way or take the initiative to reduce taxes and fees for them. The local government departments will publish energy-saving information to guide enterprises. It is necessary to thoroughly implement Chinese energy-saving standards for constructing new engineering projects in cities. In addition, it is also necessary to strengthen the development of urban public transportation and green environmental protection, actively encourage and guide residents to travel green, and require government agencies and institutions to formulate green development strategies. At the same time, it is necessary to adopt the procurement mode of bidding for the procurement of various energy-saving equipment, build a social energy-saving company, and provide targeted services for the energy-saving work of social enterprises in the form of leasing and consulting. Furthermore, in terms of energy saving and emission reduction technologies in the future, it is necessary to focus on energy conservation and emission reduction in the petrochemical, cement, and thermoelectric fields, promote new technologies and new products in all

directions and use waste heat and pressure to replace traditional energy supply. And the continuous advancement of the construction of key energy-saving technology projects can adjust the city's energy structure through energy-saving measures such as seawater source heat pumps, LED lighting products, and reclaimed water recycling.

4. Energy-Environment-Society Research Trends

Currently, the impact of energy on domestic society, internal affairs, and diplomacy has become increasingly prominent under the social backdrop of increasing total energy consumption in China. However, there are some differences from the actual situation, and relatively few studies analyze the energy environment from a sociological point of view. Additionally, sociological research has not yet understood the impact of environmental energy problems and, at the same time, has not understood the benefits of sociology for energy optimization in the environment. Considering the current core issues facing the Chinese ecological environment and sustainable social development, it is imperative that China actively contributes to the development of environmental energy in sociological research [5].

For sociological research on environmental energy in the future, it is necessary to combine high-energy social theory with the perspective of energy-environment-society to clarify the existence of different eras and stages of development and the effects of environmental crises on society. Because of the past era's limitations, Cottrell could not provide a macro-level perspective on the relationship between high-energy society and environmental pollution. After the social crisis broke out day by day, the research results that emerged were unable to discuss the macro-social issues systematically and focused more on exploring specific issues.

Nevertheless, just like the current social development status, either in the area of energy problems caused by China or the basic solutions to environmental problems proposed by Western countries, they are all facing the environmental and social crises brought about by the uncontrolled supply and consumption of environmental energy. Therefore, it is necessary to integrate the high-energy social levels of different eras and conduct systematic research on the specific background of the crisis and the social foundation in which it is located. Cottrell's specific research ideas on this issue can be integrated to study the system components in developing a high-energy society and the relationship with energy, such as politics and energy, economy and energy culture and energy. Combined with the social changes in the times, research the current energy use patterns in society, understand how energy patterns affect the environment and society and restructure the theoretical system between energy, society, and the environment.

Next, further strengthening the exploration and research on energy supply is necessary. Chinese dependence on foreign energy imports continues to grow. Further strengthening exploration in this area has important practical significance and can reduce Chinese energy dependence on other countries. Pay attention to the problem of energy supply. On the one hand, it is necessary to analyze the current environmental and social crises brought about by energy, especially in the analysis of environmental crises, especially for the analysis of the environmental crisis, the research results of natural sciences, and news data reported by social media can be used

as a reference.

As for social crises, it is necessary to make active contributions through sociological research. For example, whether the environmental and social crises caused by energy will affect the body and mind of urban residents, whether the community's social capital will be damaged, whether it will lead to social disintegration, and whether it will cause obvious changes in social indicators. Objective evaluation and result confirmation can be done through on-site visits, research, and interviews. Paying attention to qualitative and quantitative horizontal comparative analysis in evaluating various social crises is necessary. The impact of the energy environment on urban residents can be clarified by comparing them with residents of other cities. Additionally, historical research can be used to understand the development of social crises and the relationships between various variables of social crises through long-term observation of certain cities.

On the other hand, it is necessary to pay attention to the energy supply problem and focus the research on the social production mechanism of the problem. In the perpetual motion machine production theory, the environmental problems caused by energy are presented more objectively and comprehensively. However, the explanation given in this theoretical study is based on the analysis from the overall macroeconomic perspective. The detailed energy supply issues in the process of social development still need to be continuously explored, researched, certified and analyzed in the future. Faced with different problems, such as the crisis and cumulative crisis brought about by the energy problem, the social production mechanism is different. Therefore, it is necessary to integrate the actual situation and use the collected materials to analyze specific issues. In analyzing the mechanism of social production, it is also important to consider how rights and capital endow energy supply through various rhetorical styles before the onset of the energy and social crises. How does capital dispel the public opinion of residents and the entire public group and the struggle for energy supply through the manipulation of discourse. Therefore, qualitative and quantitative research can provide a reference for this issue when analyzing energy supply issues, such as mastering the reported discourse of news media.

5. Conclusion

Consequently, energy conservation, emission reduction, and environmental protection have become mainstream values. Sustainable development levels of environmental energy impact the development prospects of society as a whole. Therefore, relevant personnel should be able to understand the internal relationships between energy and society, energy and the environment, and the environment and society, and formulate strategies for their targeted development. Focusing on three aspects of scientific and technological progress, industrial structure adjustment, and changes in energy consumption patterns in order to provide theoretical support for the sustainable development of modern human society, we must look forward to future research and development trends and make continuous efforts.

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