

Research on Low-carbon Economy and Its Consumption Guidance

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Abstract: The low-carbon economy is to achieve low energy consumption, low emissions and low pollution for economic development. How to promote the development of low-carbon economy through consumption guidance, and realize the transformation of the economy from a high-carbon economy to a low-carbon economy and from a carbonized economy to a carbon-water economy shall to be researched. This paper briefly describes the necessity of consumption guidance in a low-carbon economy, analyzes the impact of low-carbon economy on consumption, and proposes corresponding guidance for guiding consumer behavior.

1. Introduction

A low-carbon economy is a green economy based on low energy consumption and low pollution. At its core is the transformation of the entire social economy into a model of energy efficiency, low energy consumption and low carbon emissions. The development model of low-carbon economy is to use the theory of low-carbon economy to organize economic activities in practice and transform the traditional economic development model into a low-carbon new economic model. Specifically, the low-carbon economic development model is based on low energy consumption, low pollution, low emissions and high efficiency, high efficiency, high efficiency (three lows and three highs), with low carbon development as the development direction, with energy saving and emission reduction as Development mode, economic development model with carbon neutral technology as the development method]. Changes in the economic base will inevitably bring about changes in the field of social life. In the context of market supply and demand in the buyer's market, how to guide consumers to adapt to the market environment under the low-carbon economy, improve consumption quality, and achieve healthy consumption is worth exploring. the study.

2. The need to guide low carbon consumption

Objectively speaking, household consumption is carried out in a certain regional environment, organizational environment and social environment. Therefore, there will be various connections and influences between residents' consumption, and household consumption is also for society, others, and the environment. It will have a positive or negative impact, which is called the externality of consumption in economics. The externality of consumption has the distinction between positive externality and negative externality. The positive externality of consumption refers to the characteristic of personal or collective consumption behavior and environment, and benefits to others. Consumer behaviors with positive externalities include: people buying green food, consuming low-carbon products, using vegetable baskets instead of plastic bags to buy food. The negative externality of consumption refers to the situation in which individual or collective consumption behavior harms the environment and endangers others. Consumer behaviors with negative externalities include: smoking in public places, driving vehicles with excessive exhaust emissions, discarding disposable plastic bags and used batteries, consuming disposable items, or over-wrapped gifts. For the former, the government should issue a document to advocate or give tax reduction subsidies for economic rewards. For the latter, it should be suppressed by administrative orders or tax increases.

Residents' consumption is subjectively rational and irrational. The rational expression of household consumption is the rationality of individual market behavior, which is the code of

conduct that follows the minimum expenditure in market transactions. The irrational performance of household consumption is the blindness and backwardness of consumption, which is manifested in excessive consumption habits such as excessive consumption and conspicuous consumption. Residents only pursue the goal of meeting the individual interests and paying the least for them. Whether this goal is harmful to the overall interests of society, some people rarely consider this. Therefore, while purchasing individual rationality, household consumption may lead to irrational collective consumption. For example, the disposal of domestic garbage and the low temperature of office air conditioners are rational choices for individuals, but they are irrational from the perspective of society as a whole. According to statistics, in 2008, the consumption of disposable paper cups in China was as high as 17 billion. According to the carbon content of 2021 grams of paper cups, the annual carbon emissions were more than 340,000 tons. This results in a national waste of up to 18 billion kWh per year, equivalent to the annual power generation of three Daya Bay nuclear power plants. If these consumer behaviors are allowed to develop, without guidance and regulation, they will definitely bring harm to our resources and environment.

3. The impact of low carbon economy on consumption patterns

The model of economic development must have an impact on all aspects of social operations. The development of a low-carbon economy will certainly have an impact on existing social production methods and consumption patterns. The technological progress and industrial development brought about by the industrial society have produced a large number of social material products, enriching the needs of social consumers, and at the same time forming and developing corresponding social consumption patterns. Consumption and production are closely related to the way the economy operates. From the point of view of the material guarantee of consumption, consumption depends on the economic operation with the proliferation value as the core, which is the result of economic operation, and production is dominant. Therefore, production determines consumption, and in turn, from the dynamic conditions of economic operation and market guarantee. Economic operation depends on consumption. Here, consumption is the premise of economic operation, and its demand form becomes the driving force and purpose of production and economic operation mode. The development of a low-carbon economy will also bring about corresponding consumption patterns and behaviors. The so-called consumption method refers to the consumption habits and consumption preferences formed by consumers under certain social and economic conditions. The pattern of economic development affects people's consumption habits and preferences in many ways, and finally forms a relatively fixed pattern.

Low carbon economy requires optimization of consumption structure. With the introduction of low-carbon economy, China's industrial development should take a new road to industrialization, promote the optimization and upgrading of industrial structure and the transformation of growth mode, vigorously develop high-tech industries, and upgrade the development of traditional industries; accelerate the pace of enterprise reform, restructuring, and transformation; Inferior enterprises with high investment, high energy consumption, high pollution and low efficiency; greatly reduce the proportion of high-energy-consuming industries, and reduce the dependence on energy consumption to form a low-carbon industrial cluster while maintaining sustained and rapid development of the industry. In short, the low-carbon economy will promote the economic structure from the current energy-consuming, extensive to technical intensive, resource-saving and environmentally friendly, resulting in changes in the social industrial structure, whether it is between the three industries. Adjustments will be made within the industry, which will also affect the consumption structure based on the industrial economy. On the one hand, the focus of consumption will shift from high-energy, high-pollution industries to environmentally-friendly industries; on the other hand, consumer preferences will also change with the layout of production, and more favor for low-energy products.

4. Government recommendations for low carbon consumption

The legal means is a legislative compulsory means for effectively regulating the consumption of residents. It uses legal means to regulate and guide low-carbon consumption. First, it is required to continue to establish and improve the legal system in the field of low-carbon consumption. At present, China's laws on energy conservation and emission reduction are mainly concentrated in the production fields, such as China's electric power law, energy conservation management regulations, civil building energy conservation management regulations, the People's Republic of China energy conservation law, energy medium and long-term planning outline (draft). There are relatively few direct regulation of residents' consumption behaviors, mainly including energy-saving products Huimin project, implementation rules for the promotion of energy-efficient room air conditioners, and notices on restricting production and sales of plastic shopping bags. It is necessary for us to further strengthen the legal system for regulating consumption and the legislation on macro-control methods for consumption. The function of law regulating low-carbon consumption is manifested in two aspects: First, the guiding function of low-carbon consumption demand, stipulates what people should consume and how to consume, which is conducive to promoting people's consumption lifestyle toward scientific civilization, healthy low-carbon direction. development of. The second is the punishment function for high-carbon consumption activities. For those who engage in high-carbon consumption activities and polluting the environment, the people or units can be punished according to law.

Administrative means is the necessary tool and important force to achieve the goal of consumer intervention. The use of administrative means to guide low-carbon consumption is to use the state's administrative authority to regulate, guide and manage low-carbon consumption through administrative orders. There are two different forms of using administrative means to guide low-carbon consumption: (1) Directly issue administrative bans and explicitly prohibit high-carbon waste consumption projects. For example, the General Office of the State Council issued a notice on the restriction of production and sales of plastic shopping bags on December 31, 2007: From June 1, 2008, it is prohibited to produce, sell, and use plastics with a thickness less than 0.025 mm nationwide. Bags; In all supermarkets, shopping malls, bazaars and other retail places of goods, the use of plastic shopping bags paid use system, no free plastic shopping bags. According to the National Energy Conservation and Emission Reduction Manual of the Ministry of Science and Technology of China, the reduction of 10% of plastic bags nationwide can save about 120,000 tons of standard coal and reduce carbon dioxide emissions by 310,000 tons. (2) Advocating a low-carbon consumption lifestyle. For the consumer activities of the vast number of consumers, instead of adopting an administrative order, they should indicate the precautions for low-carbon consumption, persuade and persuade, and emphasize that the key to low-carbon consumption is to save resources, rather than reduce food and clothing, and will not lower the quality of life. Baoding City printed a low-carbon city family behavior manual, telling ordinary citizens what to pay attention to in life, how to reduce carbon emissions. For example, encourage public transportation or step by step; promote housing to implement energy-saving renovation; guide the use of energy-efficient home lighting and scientific and rational use of household appliances. Government departments can popularize green low-carbon knowledge through various information channels and tools, and advocate low-carbon consumption concepts of health science, energy conservation and environmental protection.

The only relevant environmental resources in China's current tax categories are resource tax, consumption tax, urban construction tax and vehicle and vessel use tax. These tax systems have certain adjustment effects on consumption, but the intensity is far from enough. Compared with foreign related taxes, China's green taxation has problems such as narrow adjustment of taxes and fees, weak regulation, and single adjustment means. There is no targeted carbon tax, ecological tax and pollution tax. The so-called carbon tax is an environmental tax levied on the amount of carbon emitted by the processing of the product. Experts from the Ministry of Finance suggest that China's carbon tax should be levied at the production stage based on the consumption of coal, natural gas

and refined oil. In addition to imposing a carbon tax on production companies to affect product price adjustment consumption, other countries may also levy a carbon tax on high-energy, high-pollution and durable consumer goods such as automobiles, and impose a consumption tax on disposable goods and over-packaged goods. A standard banquet is charged with a banquet tax.

In addition to taxing high carbon consumption or raising tax rates to reduce carbon emissions from consumption, the government can also use financial subsidies to promote the development of low-carbon industries and increase the supply of low-carbon products. According to statistics, the most energy-consuming behavior of urban residents is living, accounting for 451% of urban residents' energy consumption. The construction cost of low-carbon buildings is relatively high. A low-carbon building in Zhengzhou has double-zero buildings, which can realize energy. Zero consumption, zero discharge of sewage, the construction cost of up to 10,000 yuan / m², double the price of the surrounding buildings. The government can consider appropriate subsidies for consumers who purchase low-carbon buildings to encourage the promotion of low-carbon buildings. At present, the relevant subsidy policies that have been implemented in China mainly include: On June 1, 2010, the Ministry of Finance, the Ministry of Science and Technology, the Ministry of Industry and Information Technology, and the National Development and Reform Commission jointly issued a notice on the pilot of private subsidies for the purchase of new energy vehicles, including The maximum subsidy for each electric vehicle is 60,000 yuan, and the maximum subsidy for plug-in hybrid vehicles is 50,000 yuan per vehicle. The subsidy for energy-saving vehicles of 16 liters and below is 3,000 yuan. The National Development and Reform Commission announced the implementation of the energy-saving products Huimin project high-efficiency energy-saving room air conditioners, from June 1, 2010 on the energy efficiency level 2 air conditioners to give 300-650 yuan / set (set) subsidies, energy efficiency level 1 Level air conditioners are subsidized by 500-850 yuan/set (set), and this policy will be promoted in refrigerators, washing machines, water heaters and other products in the future. The above subsidy funds are not directly distributed to consumers. The government subsidies enjoyed by consumers come from the price reduction of energy-saving products to guide the development of public consumption towards energy-saving and low-carbon. The guiding significance of the guidelines is far greater than the actual promotion. .

5. Conclusion

The socio-economic development and change based on the low-carbon economy will inevitably bring about changes in the superstructure, and will also affect people's consumption concepts and consumption patterns. Only through continuous consumption guidance will enable all consumer entities in society to have a sense of civilized consumption. And the concept, adhere to the low carbonization and recycling of consumption, can achieve the transition from a high-carbon economy to a low-carbon economy, a transition from a carbonized economy to a carbon-water economy, a transition from low-civilization consumption to high-civilization consumption, and ultimately the realization of human consumption and The harmony of natural ecology.

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