

## Research on Construction of Fiscal and Tax Mechanism of China's Energy-saving Industry

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**Abstract:** Energy-saving industry is the technological industry encouraged by China, which is dominant on the burgeoning strategic industries. How to guide, standardize and promote the healthy development of the energy-saving industry and to build conservation - oriented industries, have been listed as one of China's long-term strategic tasks. It has been listed as one of China's long-term strategic tasks to guide, standardize and promote the healthy development of the energy-saving industry and to build conservation - oriented industries. In recent years, there are many problems about the development of this industry in China, especially the weakness of fiscal and tax mechanism of energy-saving industry. Thus, it is extremely important to have a research on the improvement of fiscal and tax mechanism of China's energy-saving industry. This essay will take an analytic method theoretically and practically to present several suggestions for the current situation of the development of China's energy-saving industries, namely, improving the input policy of public budget, strengthening the leading functions of government procurement, improving the inter-governmental transfer payment, adjusting the range and rate of resources tax, expanding the scope of consumption tax, adjusting the customs regulations of import and export and innovating vehicle and vessel tax etc.

**Key words:** Energy-saving industry; Fiscal mechanism; Tax mechanism; Perfection

### 1 Introduction

Energy-saving industry is the general designation of energy-saving industry and resource recycling industry in the industrial system of national economy. In order to save energy and make use of resources efficiently, and then get some economic benefits from those businesses, it usually works on technological development, manufacturing production, commercial distribution, recycled utilization of resources, information services and project contracting and so on. The core links contain manufacturing energy-saving and environmental protection equipment, developing the supporting energy-saving technology, supplying consulting services and building market. In order to build the purpose of energy-saving society, our fiscal section has integrated applied many policies such as tax, charge foundation, discount, distract pay etc. to promote energy-saving and the development of renewal resource, to reduce and control pollution emission.

Developed countries have more advanced fiscal and tax mechanism. The main way employed by majority countries is to use fiscal welfare to promote the development of energy-saving industry. The practical situations of those countries who used fiscal and tax mechanism, environment protection, energy saving illustrate that both the countries and entrepreneurs benefit greatly from that.

Based on the economic theory on fiscal and tax mechanism to support the development of energy-saving industry, foreign research on fiscal and tax mechanism of energy-saving industry has become gradually mature. Then foreign scholars focus on cultivating advantage and backward advantage of fiscal and tax mechanism and the upgrading of industrial structure.

In recent years, Chinese scholars also did some theoretical research on fiscal and tax mechanism of energy-saving industry. Zhao Rong (2007) thought that China should construct tax policy system of cyclic economy by perfecting policy of taxation, establishing green tariff system, collecting fuel tax and environmental tax timely, and making some targeted preferential policies, for the purpose of stimulating the development of relevant industries. Lao Jiying (2009) made a specific research on how to make the most of preferential tax policy to build a harmonious resource-saving society for achieving effective and reasonable use of resources. Quang Xiaoping, Luo Xiaohua (2008) did a research on duty assessment of energy production, consumption and reducing pollution emission in developed countries, and new trend of tax structure reform to improve energy-saving. Combined with the current situation of China, they put forward some proposals like adjusting the range of resources tax reasonably, expanding the scope of consumption tax appropriately and perfecting preferential tax policy for energy-saving industry. Wu

Guobing, Chen Peihua (2009) argue that the leading of our resource-protecting law of tax law spring is not very clear. Resource protection and utilization in tax mechanism have no integral policy system. There is no special tax category in the field of resource-protecting, but only several encouraging environment-protecting clauses in corporate income tax, consumption tax, value-added tax. For that, they suggest to construct ecological tax system which is proper to China's conditions.

Through literature review, we found that theoretical studies on how fiscal and tax mechanism supports the development of energy-saving industry hasn't formed a complete theoretical system, while the main target evaluated is country with a wider perspective, which cannot reflect the differences between the national regions. The region is rarely regarded as its research object. Therefore, in this paper we study the guiding role of tax mechanism to support the development of energy-saving industry from the neutral perspective, constructing fiscal and tax mechanism of energy-saving industry, and further perfecting the theoretical system of fiscal and tax mechanism of energy-saving industry in China.

## **2 Status Quo of China's Energy-saving Industries**

### **2.1 Situations of China's energy-saving industries**

Energy-saving industry belongs to the technological industry encouraged by China, which is dominant on the burgeoning strategic industries. Under the pressure of lacking of total resources and energy, energy saving and emission reduction have become an urgent task. Now 'Saving energy' has been a basic policy in China, and 'constructing energy-saving industry' will be listed as one of China's long - term strategic tasks.

At present, there is a good trend about the development of China's energy-saving industry. Firstly, it has already achieved conditions for speeding up development at a large scale. Specifically, energy-saving industries have had a batch of mature regular energy-saving techniques and facilities, among which some key and generic techniques have been industrialized. Secondly, there is substantial potential in domestic and international market. Thirdly, Chinese government has published a series of policies and measures. The central and local governments all invested a large amount of capital, which created a good external environment to speed up the development of energy-saving industries. Fourthly, some standards were revised by central and local governments which have a positive impact on regulating the development of these industries. Finally, corporations with other main countries regarded energy-saving as the important content, and economic and technical cooperation are active among the government, non-government organizations, enterprises and civil society.

Although China's energy-saving industries are in the period with high growing speed, there is a large disparity compared with some countries that had developed energy-saving industries, and it is difficult to satisfy the "twelfth five years" which plans to improve energy saving for a long time, to support and promote the high demand of the sustainable economic and social development effectively.

### **2.2 Problems of China's energy-saving industries**

At present, the development of China's energy-saving industries are facing many problems, such as lack of macroscopic guidance of national strategies, lack of industrial plan with coordination, pilot and into the system, restrictions from the lag of institutional construction; low degree of marketization, low degree of industrial concentration and serious low-level operation, short of the industrial flagship companies and enterprises are small scale, shortage of key techniques of. key techniques of proprietary intellectual property rights.

The weakness of fiscal and tax mechanism of energy-saving industry which included finance and taxation supporting and guiding policy stands out. Energy-saving enterprises are commercial entities in market economies, which mainly rely on investing energy-saving projects, sharing profits with energy users from the implementation of energy-saving projects and finally achieving profitable and rolling development. China will be in the primary stage of the socialist market economy for a long period, energy-saving enterprises would face several barriers with the investment of energy projects, such as financial risk, technical risks and credit risks. Therefore, a powerful fiscal and tax mechanism will be required to motivate some potential investors to enter energy-saving industries, which can pull enterprises to invest energy projects.

It has been proved that the fiscal and tax mechanism of energy-saving is a new energy-saving mechanism suited to China's current national conditions and consistent with the socialist market economy. Thus, it has been paid attention by the department concerned of Chinese government. How to make use of the fiscal and tax mechanism to promote the healthy development of energy-saving industry has been listed into a priority agenda of China's energy-saving works.

### **3 Drawback to Fiscal and Tax Mechanism of China's Energy-saving Industry**

China has been facing enormous energy pressure, however, the current fiscal and tax policy in China cannot promote the works of energy-saving and emission-reduction effectively. Imperfections of fiscal and tax policy, insufficient of rewards and punishments and unobvious guidance and inhibition have been the largest drawback in this field.

#### **3.1 Drawback to financial aspects**

Firstly, defective fiscal mechanism is one of main factors leads that China's energy consumption cannot to be worked out effectively. The fiscal system of tax distribution in China causes the shortage of local financial power, which mainly relies on tax revenue of local large industrial projects, and local governments pursues the goal of economic growth unilaterally. Under the guidance of the thought that large projects promote high-speed growth, China's economic development has diverged from the industrial adjustment and Chinese government approved some projects on high energy consumption, which caused some problems, such as repeated construction, excess production capacity and high energy consumptions and serious pollutions.

Secondly, the capital of energy-saving and emission-reduction arranged by fiscal policy is limited. Specifically, the capital of energy-saving and emission-reduction in the budget is little. Researches on energy-saving techniques are mainly undertaken by enterprises. However, due to the high uncertainty of R&D and application of new energy-saving techniques, a mass of energy-saving techniques cannot be implemented and most of energy-saving products cannot be spread and popularized with little financial capital's support and enterprises' low self-financing ability. Because of the limitation of financial capital, government can only give few discounts of loans to the energy-saving projects and products, which make financing level of enterprises limited.<sup>[1]</sup>

Thirdly, the guidance of government procurement is not obvious. Government procurement is one of direct fiscal policies to guide and control energy-saving behaviors. Government procurement should play an important leading role on weeding high energy-consumption and low-efficient products out and guiding enterprises to produce energy-saving products. According to a survey, energy consumption of Chinese government agencies accounts for 7.1% of total energy consumption in 2009, which is high growth rate. Government agencies not only used very few energy-saving products, but also wasted seriously. These attempts had a negative impact on the enterprise's production and consumption of residents, and were not conducive to the promotion of energy-saving products and projects.

Finally, the tools of fiscal policies are monotonous and dynamics of policy is insufficient. Most of all fiscal policies tools can promote energy saving and emission-reduction directly or indirectly, such as national subsidy and building financial investment fund, etc. However, because of capital and policies, other forms of policy tools have not been taken by Chinese government.

#### **3.2 Shortage of taxation policy**

Firstly, tax tool to promote energy-saving and emission-reduction is single, and the range of tax allowance is narrow, which both cause the encouragement not obvious. Presently, tax-relief is basically the unique tax policy adopted by Chinese government to improve energy-saving and emission-reduction. Investment relief, accelerated depreciation, deferred taxation and other policies are hardly used. In China, only gasoline and diesel oil are currently imposed on consumption tax, but the entire policy of consumption tax cannot supply energy-saving enterprises and consumers any preferential incentive. Business income tax is a category of taxes that plays an obvious tilting role on energy-saving and emission-reduction, but energy-saving businesses barely benefit from it. Especially, there are no special incentive in technical R&D on energy-saving and emission-reduction.

Secondly, categories of taxes and taxation system in China that can take hold of energy-saving and emission-reduction are not perfect. In China, categories of taxes involved in energy-saving and emission-reduction only include added value tax, consumption tax, business income tax, resource tax, and there are no special and pertinent ones. What's more, resource tax has a serious defect. It regards sales quantity or self-used quantity as its basis of taxation, and it doesn't impose tax on those resources that has been mined but not on sales or used by enterprises. This indirectly encourages enterprises to develop resources chaotically and waste of resources.

Thirdly, the dynamics of tax policy used to regulate energy prices is not strong, and no special taxation on pollution is taken. In China's current tax structure, the overall tax burden of oil is only about 23%, significantly below the international level (above 50% in most countries). Therefore, energy prices in China is far below the international price level in most countries. The phenomenon that energy prices

can't correctly reflect the value of energy is not conducive to improving efficiency of energy using.

## 4 Conclusions and Recommendations

### 4.1 Construction of fiscal mechanism of energy-saving and emission-reduction

#### 4.1.1 Improving the input policy of public budget

During the period of structural adjustment and reform in government budget, Chinese government should value the investment in energy-saving and emission-reduction by adding energy-saving subject to current budget, and arranging corresponding energy-saving expenditure budget. In addition, the investment in energy-saving and emission-reduction, which belongs to constructive fiscal budget should be strengthened. On one hand, Chinese government should increase the proportion of energy-saving investment to total budgetary investment. On the other hand, in order to support some key energy-saving and emission-reduction projects, promote efficient energy-saving products and new energy-saving mechanism, enhance the capacity of energy-saving management and construct the energy-saving and emission-reduction supervision system, it should extract some money from the budget in the way of subsidy and rewards, thereby making a major effort to tilt basic constructive fiscal investment toward energy-saving and emission-reduction projects.<sup>[2]</sup>

#### 4.1.2 Strengthening the leading functions of government procurement

Chinese government should perfect government procurement list system for energy-saving products, expand constantly the government procurement scope of energy-saving products, and fully play its consumer-oriented role. To air-condition, computer, monitor, duplicator and some other equipment, it should be changed from same level first purchase to purchase highly effective energy-saving and water-saving product compulsively. The establishment of energy-saving product in government procurement review system and supervision system guaranteed that energy efficiency and green procurement can be basically implemented.

#### 4.1.3 Improving the inter-governmental transfer payment

Chinese government should allocate special funds to support backward productivity. Meanwhile, it should arrange special funds by increasing transfer payments, in order to reduce the resistance to putting energy-saving and emission-reduction into effect.

### 4.2 Construction of tax mechanism of energy-saving and ejection-decreasing

#### 4.2.1 Adjusting the range and rate of resource tax

At present, the resource tax levied in China can't take effectively control of resource consumption and even waste of resources. Especially, the range of resource tax could not cover many fields of natural ecological resources which results in the problem that many enterprise neglected seriously the importance of resources in the process of production. Therefore, Chinese government should expand the range of resource tax, such as, increasing the tax items in land, mineral resources, atmosphere resources and water etc. renewable and nonrenewable resources. Meanwhile, it should formulate scientific tax standards. Not only differential resource tax levels, but also environmental cost caused by the resource exploitation should be taken into account.<sup>[3]</sup>

#### 4.2.2 Expanding the scope of consumption tax

Chinese government should list the low energy efficient and high polluted products into the scope of consumption tax. And luxury goods that use nonrenewable resources as raw materials would be taxed heavily. In contrast, taxes on energy-saving consumer goods should be reduced or free.

#### 4.2.3 Adjusting the customs regulations of import and export

Not only imported raw material and goods, which maybe cause heavy or expected environmental pollution to import countries so that it is difficult and high-cost to reduce pollution, but also exported raw material, primary products and semi-manufactured goods, which consume a mass of resources from export countries, could be levied higher tariffs.

#### 4.2.4 Innovating vehicle and vessel tax

Chinese government should substitute the existing classification of vehicle use tax for the classification based on fuel levels, implement proposed fuel tax project as soon as possible. And the control principle that 'more usage, more taxes' is utilized to make people to reduce the usage of car.

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