Implementation effect and suggestions of environmental protection tax in Shanxi Province

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Abstract: The “Environmental Protection Tax Law” was officially implemented on January 1, 2018, and is currently in force. The levy of environmental protection tax is of great significance to improving the quality of China's ecological environment and promoting the construction of China's ecological civilization. The purpose of this article is to find out the existing problems in the taxation structure of the environmental protection tax through an analysis of the status quo of environmental pollution in Shanxi Province. It is also given that the tax law should be improved and regulated according to the special conditions of different regions and the principles of tax law. The research can provide reference significance for improving the implementation effect of the environmental protection tax to a certain extent, and provide reasonable improvement measures according to the specific circumstances of Shanxi Province's environment, which can better help Shanxi's ecological environment to improve.

1. Status of Shanxi Province's Environmental Quality and Characteristics of Environmental Protection Tax

1.1 Status of Environmental Quality in Shanxi Province

Shanxi Province is a large coal province. In the past ten years, natural resources have been destroyed and ecological environment has been polluted during the process of coal mining. Shanxi is one of the provinces with the most severe environmental pollution in the country. Among the top 30 heavily polluted cities in the country, Shanxi accounts for 13 with a proportion as high as 43%. The provincial capital Taiyuan ranks first among the 30 most polluted cities in the world. The province's per capita emissions are 2.9 times the national average, of which TSP and sulfur dioxide emissions are 6.57 times the national average and smoke and dust emissions are 7 times the national average.

From the January 2020 environmental report, we learned about the recent air quality situation in Shanxi Province. As can be seen from Figure 1, the proportion of days with different degrees of pollution accounted for 73.9%, and the air quality was excellent and good only 26.1%. It can be seen that environmental pollution has become sustainable in Shanxi Province. An important constraint on development.

![Figure 1. Proportion distribution of days in various levels of ambient air quality in Shanxi Province in January 2020](image-url)
1.2 The characteristics of the current environmental protection tax

In order to protect and improve the environment, reduce pollutant emissions, and promote the construction of ecological civilization, the Environmental Protection Tax Law was formulated. Article 6 stipulates: "The determination and adjustment of the specific applicable tax amount of taxable air pollutants and water pollutants shall be coordinated by the people's governments of provinces, autonomous regions and municipalities to consider the region's environmental carrying capacity, pollutant discharge status and economic, social and ecological development. The objective requires that the tax amount specified in the "Environmental Protection Tax Tax Schedule" attached to this law be reported to the Standing Committee of the People's Congress at the same level for decision, and reported to the Standing Committee of the National People's Congress and the State Council for the record. " Table 1 shows a breakdown of the tax items and taxes stipulated in the current environmental protection tax law in China.

<table>
<thead>
<tr>
<th>Tax item</th>
<th>Tax unit</th>
<th>tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>atmospheric pollutant</td>
<td>Per pollution equivalent</td>
<td>1.2 to 12 yuan</td>
</tr>
<tr>
<td>Water pollutant</td>
<td>Per pollution equivalent</td>
<td>1.4 to 14 yuan</td>
</tr>
<tr>
<td>Solid Waste</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coal gangue</td>
<td>Per ton</td>
<td>3 yuan</td>
</tr>
<tr>
<td>Tailings</td>
<td>Per ton</td>
<td>15 yuan</td>
</tr>
<tr>
<td>Hazardous Waste</td>
<td>Per ton</td>
<td>1000 yuan</td>
</tr>
<tr>
<td>Smelting slag, fly ash, slag</td>
<td>Per ton</td>
<td>25 yuan</td>
</tr>
<tr>
<td>other solid waste (including semi-solid, liquid waste)</td>
<td>Per ton</td>
<td></td>
</tr>
<tr>
<td>noise</td>
<td>Industrial noise</td>
<td></td>
</tr>
<tr>
<td>1-3 dB above standard</td>
<td>350 yuan per month</td>
<td></td>
</tr>
<tr>
<td>4-6 dB above standard</td>
<td>700 yuan per month</td>
<td></td>
</tr>
<tr>
<td>7-9 dB above standard</td>
<td>1400 yuan per month</td>
<td></td>
</tr>
<tr>
<td>10-12 dB above standard</td>
<td>2600 yuan per month</td>
<td></td>
</tr>
</tbody>
</table>

Data source: Environmental protection tax law tax table.

According to the "Environmental Protection Tax Tax Schedule", air pollution is 1.2 to 12 yuan per pollution equivalent, and water pollution is 1.4 to 14 yuan per pollution equivalent. According to the regulations, the provinces issued the applicable tax amount according to the actual situation and showed the following characteristics:

1. More than half of the provinces (autonomous regions and municipalities) have shifted the environmental protection tax collection standard. Specific examples include Shanghai, Yunnan, Hubei, Zhejiang, Inner Mongolia, Liaoning, Jilin, Heilongjiang, Jiangxi, Fujian, Shaanxi, Xinjiang, Ningxia, Qinghai, Gansu, Anhui, and Tibet. The 17 provinces (autonomous regions and municipalities) listed account for 55% of the 31 provinces (autonomous regions and municipalities).

2. About 45% of provinces (autonomous regions and municipalities) have increased the environmental protection tax. The 14 provinces (autonomous regions and municipalities) are Beijing, Tianjin, Hebei, Jiangsu, Shandong, Henan, Chongqing, Sichuan, Hainan, Hunan, Guizhou, Shanxi, Guangxi, and Guangdong.

3. Some provinces (autonomous regions and municipalities) implement differentiated tax standards by region and pollutant. Among them, one is to implement pollutant differentiation, such as Shanghai, Shandong, Hubei, Zhejiang, and Fujian; the other is to implement regional differentiation policies, such as Hebei and Jiangsu.

4. Individual provinces (autonomous regions and municipalities) raise tax rates in stages. Such as Yunnan, Inner Mongolia, Shaanxi.

By dividing the tax standards, it can be seen that the environmental protection tax collection standard in Shanxi Province has been increased on the basis of the original sewage charges. Shanxi Province, in accordance with the provisions of the "Environmental Protection Tax Tax Schedule",...
has determined a tax of RMB 1.8 per pollution / equivalent of water pollutants and a tax of RMB 2.1 per pollution equivalent of water pollutants. This is a correct decision made by Shanxi Province based on the current situation of environmental pollution in Shanxi.

2. Problems Existing in the Implementation of Shanxi Environmental Protection Tax

2.1 Policy issues

2.2.1 The collection standard is low and does not meet the actual requirements.

Figure 2 shows the relationship between the amount of water pollution taxes and the main influencing factors of ammonia nitrogen emissions and chemical oxygen demand in 31 provinces in China. As can be seen from the figure, the more pollutants discharged, the higher the corresponding tax amount. However, there is a situation where the amount of pollutant discharge does not match the tax amount, and the tax department needs to make dynamic adjustments based on tax principles, local economic development and pollution levels. Shanxi’s air pollutant tax of 1.8 yuan / pollution equivalent, and water pollutant tax of 2.1 yuan / pollution equivalent, which raises the standard compared with sewage charges, but there is still a large gap compared with economically developed areas, and based on the current environment of Shanxi Province The amount of tax that should be set under the theory of pollution is also relatively low, which is difficult to play a role in restricting the amount of pollutants discharged by polluting enterprises and controlling the standards of pollutants in order to protect the environment and promote the construction of ecological civilization.

Figure 2. Comparison of major water resources pollutant discharges and taxes by region in 2017

Note: The data of the main pollutant discharge of water resources are from the China Statistical Yearbook 2019.

This article uses water pollutants as an example to analyze the relationship between taxes and pollutant emissions. Areas with poor environmental quality and high pollutant emissions need to specify high tax rates to ease economic pressure.
2.1.2 VOCs are not included in the scope of taxation.

In view of the severe haze weather problem in Shanxi Province, it is urgent to focus on controlling the discharge of pollutants. Among them, VOCs (volatile organic compounds under certain conditions) are the main components that cause haze weather. The current "Environmental Protection Tax Law" has not yet included volatile organic compounds in the scope of taxation, resulting in an imperfect taxation system, difficult to effectively control such pollutants, unable to resolve pollutant emissions from the source, and using only vehicles to limit traffic and encourage them Public transportation and other methods are difficult to improve air quality in the long term.

2.1.3 The proportion of central and local sharing taxes should be adjusted according to the actual situation.

Shanxi is a single-resource-based economic model that relies on coal mining to develop the economy. Inadequate exploitation, utilization, cleanliness, and environmental protection of coal resources have caused Shanxi's economic situation of high energy consumption and heavy pollution. The coal industry has a high tax on resources and a large proportion of funds paid to the central government. However, there is a lack of funds that can actually be used to control environmental pollution left by local governments. Compared with Henan Province, Shanxi has less central transfer payments, and the available financial resources are difficult to support the improvement. Funding for pollution problems requires incomplete environmental protection infrastructure and it is difficult to effectively improve in a short time.

2.2 Issues in collection and management

The issue of collection and management is the top priority for the smooth implementation of environmental protection tax, and it is also the core point that environmental protection tax cannot fully exert its regulating function.

2.2.1 Collection and management methods still need to be further improved.

The current tax collection and management method is to compare the taxpayer's self-declaration with the data returned by the relevant department, and if it is not equal, submit it to the environmental protection department for review. Among them, it is difficult to ensure that taxpayers report and register in accordance with actual conditions, that sewage plants do not fully have personnel for accounting for pollution equivalents, and that some taxpayers have not sorted the pollution equivalents in accordance with regulations to levy taxes on the first three or five items.

2.2.2 Poor information increases the difficulty of collection and management.

It is difficult for the collection and management personnel to grasp the amount of sewage in a timely manner. There is no special channel or channel for transmitting data between departments. Inefficient cooperation is difficult to support the environmental protection tax to confirm the tax liability at the time of sewage discharge.

3. Suggestions on improving policies and measures for environmental protection tax

3.1 Policy level

3.3.1 The environmental protection tax is “specially earmarked” and is dedicated to environmental protection and governance.

The "special fund" collection management method reflects the principle of tax neutrality, and also conforms to the general practice of tax reform, improving the efficiency of environmental protection funds. There are two main purposes for levying environmental protection taxes. One is to curb environmental pollution behaviors and use them for specific regulatory actions; the other is to raise funds. The tax revenue used to regulate behavior is included in the general fiscal revenue and collected into the national treasury, which is used in the general fiscal budget together with other tax
revenues; the tax revenue collected for the purpose of raising funds can be uniformly divided by the financial department and issued to the special environmental protection fund. For environmental protection. The special funds for environmental protection taxes can effectively resolve the lack of financial support for regional governance of the environment, and provide a powerful source of funds and backup funds for regional environmental protection departments to implement environmental protection policies and improve and strengthen environmental protection infrastructure construction in Shanxi.

3.1.2 Reasonably divide the central and local tax revenue distribution ratio.

Environmental protection is closely linked to the actual situation of local resources and environment. Local governments have a better understanding of the specific situation and deep problems of environmental pollution in their region. They should reasonably divide the proportion of tax revenue distribution between the central and local governments. A large proportion of local governments. Increasing local fiscal revenue can provide strong financial support for local governments in environmental protection on the one hand, and can better play the role and effectiveness of environmental protection taxes; on the other hand, it can increase the enthusiasm of local governments and resolutely win the battle against environmental protection. Determination and confidence. Give local government departments a certain degree of autonomy to a greater degree, and provide targeted policies and measures suitable for the special circumstances of the region, and use special funds to strengthen environmental protection infrastructure construction.

3.1.3 Expand the scope of tax payment and improve the tax system.

The inclusion of volatile organic compounds (VOCs) in the scope of taxation is the core issue at the institutional level for trans-regional issues such as governance of smog. The pollution fee system charged for the discharge of corporate pollutants was transformed into an environmental protection tax, and the government fee system was transformed into tax laws to protect the environment. In the process of transformation, the lack of taxation objects and loopholes inevitably appeared. Enterprises are the key link for a large number of pollution discharges. At the same time, individuals and non-profit-making organizations can not ignore the environmental pollution behavior. The key individuals of pollution discharge registered by unregistered companies should be included in the taxpayer system of the Environmental Protection Tax Law together with organizations that are not for profit, to ensure the integrity of the scope of taxation from the tax system.

3.1.4 Link environmental protection and innovation, and provide tax incentives for new energy and new patents for environmental protection.

Nowadays, science and technology are developing rapidly. In the reality that coal resources in our province are close to exhaustion and environmental pollution is a serious problem, it is even more important to seize innovation as the basis, organically integrate environmental protection tax and innovation, and integrate it into the tax system. Increasing tax incentives for innovative development of new energy sources, replacing coal mining, focusing on research and development of green and environmentally friendly production, additional deductions for taxable projects of high-tech enterprises and innovative enterprises committed to green environmental protection, and establishment of special green environmental protection innovation funds, Apply environmental protection taxes directly to the above projects, and encourage innovative enterprises to integrate with green environmental protection.

3.1.5 Combining various taxes and working together for environmental protection.

The taxation of contaminated goods in consumption tax can appropriately increase the tax rate, such as gasoline and other taxable consumer goods that have a greater impact on the ecological environment. Expand the scope of consumption tax collection, and include high-polluting, high-energy-consumption consumer goods into the consumption tax collection system. At the same time, the role of resource tax must be brought into play, and the scope of collection of non-renewable
and scarce resources should be expanded. Especially the joint taxation of water resources can effectively improve the problem of waste and pollution of water resources.

3.2 Level of collection and management

3.2.1 Strengthen innovation in collection and management technology and improve collection and management policies.

Strengthen the supervision and measurement of corresponding tax pollutants, implement the installation of monitoring instruments by various enterprises and regularly check whether the monitoring data is authentic and credible, promote the reform of regulatory technology innovation, use big data processing and analysis to closely link with the Internet, and introduce tax-related information sharing platforms Can effectively improve the problem of inefficient and timely information sharing between departments.

3.2.2 Improve the professional quality and collection ability of the collection and management personnel.

Relevant department staff involved in collection management should learn more about relevant tax laws, and be familiar with the pollution status of local enterprises in Shanxi, and have relevant capabilities and skills requirements for review, monitoring and tax audit. Strengthen environmental protection publicity and raise awareness of environmental protection in the whole society.

3.3 Enterprise level

3.3.1 Strictly control the emission concentration of pollutants and reduce the production of taxable pollutants from the source.

An enterprise shall strictly implement environmental protection standards in accordance with the requirements of the tax bureau and environmental protection department, install monitoring and discharge instruments at the sewage outlet and standardize their use, and report true and reliable pollution equivalent data for tax purposes. Use green and environmentally friendly raw materials, strengthen the recycling of materials, and reduce the total emissions and concentrations of pollutants.

3.3.2 Introduce energy-saving and emission-reduction equipment and innovate green and environmentally-friendly production technology.

Strengthen the technical transformation of production equipment, optimize the production structure of enterprises, increase investment in low-energy consumption and low-emission projects, adopt energy-saving emission reduction production processes as much as possible, promote the upgrading of production equipment, and introduce advanced production processes.

References


