

The seventh anniversary of the introduction of environmental protection tax has stimulated new impetus for green development



PECC
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Foreword

On 11 August 2024, the Central Committee of the Communist Party of China (CPC) and the State Council issued the Opinions on Strengthening the Comprehensive Green Transformation of Economic and Social Development, which is the first time that a systematic deployment has been made at the central level to accelerate the comprehensive green transformation of economic and social development. The opinions proposed to improve the green transformation fiscal policy. Actively build a fiscal policy system conducive to the promotion of green and low-carbon development and efficient use of resources, the implementation of environmental protection, energy and water conservation, the comprehensive use of resources, new energy and clean energy tax incentives for vehicles and ships. Improve the green tax system, fully implement the water resource fee to tax, improve the environmental protection tax collection system, and study the tax policies related to supporting carbon emission reduction.

At present, China's environmental protection tax (hereinafter referred to as "environmental protection tax") is at the core of the entire green tax system, and through its guiding mechanism of combining reverse constraints and positive incentives of "pay more if you discharge more, pay less if you discharge less, and pay less if you do not discharge", it effectively makes up for the In the past, the sewage fee system in the process of economic and social development revealed a series of problems, such as more human intervention, insufficient rigidity in law enforcement, insufficient standardisation, lack of mandatory, and inefficiency in ex-post supervision.

The introduction of environmental protection tax, on the one hand, directly and effectively promotes enterprises to consciously reduce pollution emissions, strengthen environmental governance, and practice the concept of green and sustainable development, and also plays an important and positive role in the optimisation of industrial structure, the enhancement of governmental efficiency,

and the shaping of international image, etc., which is highly effective. On the other hand, there is still a lot of room for progress and improvement in the areas of tax rate to be flexibly adjusted, policies to be supplemented and improved, levy and management mechanism and disclosure to be optimised and enhanced, and regional environmental protection and economic development to be coordinated and balanced, etc., which have been revealed in the course of many years of practice.

At the time of the seventh anniversary of the environmental protection tax, Lvse Jiangnan Public Environmental Concerned Centre (hereinafter referred to as "PECC"), based on the results of long-term work and research on green tax, summarises the effectiveness of environmental protection tax and levy and management problems and gives suggestions for improvement, with the aim of making a contribution to the environmental protection tax to better serve the development of economic and social transformation in a comprehensive and green way.

1. Overview of environmental protection tax collection

Since the introduction of environmental protection tax in 2018, the overall environmental protection tax revenue has stabilised at more than 20 billion yuan per year, and has declined steadily in recent years, while at the same time, the performance of China's energy consumption and environmental governance has continued to develop in a positive direction.²⁰²³ The government's work report shows that over the past five years, the energy consumption of the unit of GDP has declined by 8.1%, the carbon dioxide emissions have declined by 14.1%, and the average concentration of fine particulate matter in prefecture-level and above cities (PM2.5) average concentration in cities at the prefecture level and above dropped by 27.5 per cent.¹

¹ Report on the Work of the Government – At the First Session of the Fourteenth National People's Congress on 5 March 2023 State Council Gazette No. 8 of 2023_Chinese Government Website https://www.gov.cn/gongbao/content/2023/content_5747260.htm

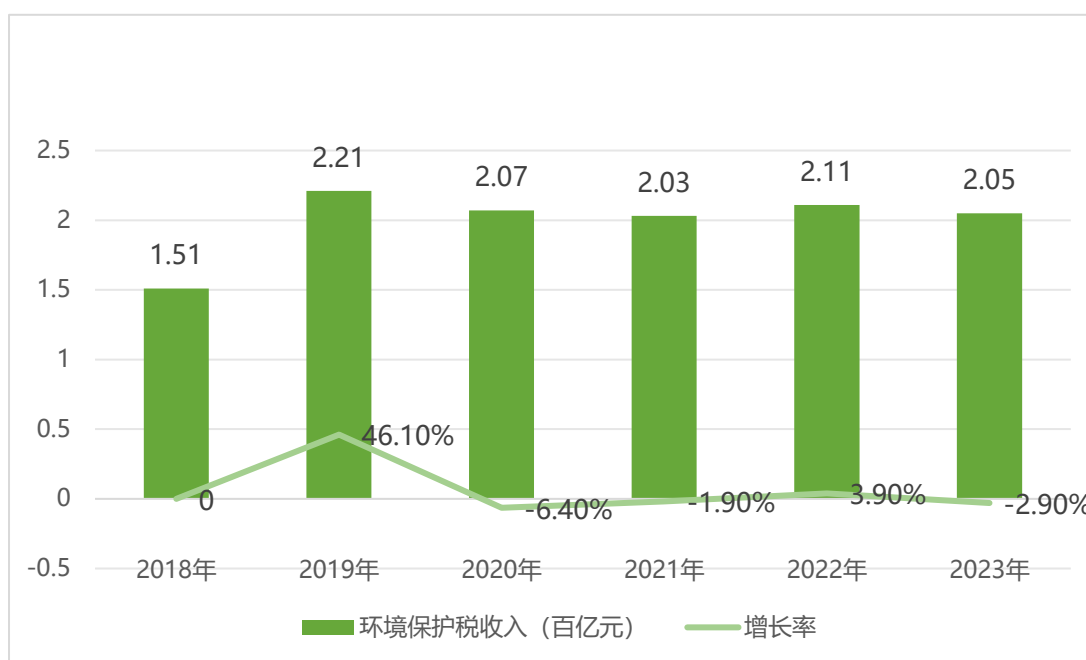


Figure 1 National environmental protection tax revenue, 2018-2023 (Source: Ministry of Finance)

One study shows that "in the provinces where the (environmental protection tax) levy was raised, the overall corporate environmental responsibility score was relatively improved by about 7.2 per cent on average compared to other provinces".² The role of the environmental protection tax in promoting the improvement of regional environmental governance is intuitively demonstrated by its effective guidance for the green transformation of enterprises, leading to a significant decline in taxable pollutant emissions. According to the data of the relevant report, "Increasing the applicable tax amount of environmental protection tax reduces the emission of pollutants. Taking sulphur dioxide as an example, raising the applicable tax on sulphur dioxide can reduce industrial sulphur dioxide emissions by 16.8 per cent, and raising the applicable tax on sulphur dioxide by 1 per cent can reduce industrial SO₂ emissions by 0.172 per cent".³

² Zhong Xiaomin, Lou Lei, Lu Jiankun. China's environmental protection tax law and corporate environmental responsibility performance: policy effects and conditions of action [J]. The Economist, 2023, Issue 08

³ Chen Zhuo. Pollution management effects of environmental protection tax in China: direct emission reduction and pollution transfer [D]. Northeast University of Finance and Economics. 2023

While the environmental protection tax has achieved outstanding results in environmental governance, it has also strongly motivated polluting enterprises to consciously fulfil their social responsibilities, promoted the green and low-carbon transformation and optimisation of industrial structure, and played an irreplaceable role in promoting the strengthening of cooperation and synergy among government departments and enhancing China's international image and influence, which is one of the important components of China's high-quality development.

2. Effectiveness of environmental taxes in promoting green transformation

(i) Guiding traditional high-polluting enterprises to take the initiative in green transformation

Industries such as iron and steel, non-ferrous metallurgy, petrochemicals, chemicals, construction materials, paper and dyeing and printing have long been the top priority for environmental protection due to the high level of pollution emitted during their production processes. The traditional "pollute first and pay later" sewage fee collection model has led to the government being in a passive position in environmental management, making it difficult to prompt enterprises to pay real attention to ecological protection. Since the implementation of the environmental protection tax, the enterprise's behaviour pattern is gradually changing from "forced emission reduction" to "active management", and the focus of pollution control from "after the fact" to "prevention-oriented". "Prevention is the mainstay". On the one hand, the mechanism of "pay more if you emit more" acts as a reverse constraint, so that polluting behaviours are directly transformed into the operating costs of enterprises, which directly affects their market competitiveness; on the other hand, the positive incentives of "pay less if you emit less, pay less if you don't emit, pay less if you don't emit" encourage enterprises to consider economic

benefits while also paying attention to the environment. On the other hand, the positive incentive policy of "less emission, less payment, no payment" encourages enterprises to pay attention to environmental benefits while considering economic benefits, consciously follow the concept of green development, actively carry out research and development and innovation of green technology, and adopt energy-saving, emission-reduction and environmentally friendly and efficient production processes. Such a shift not only enhances the environmental awareness and sense of responsibility of enterprises, but also promotes the transformation of society as a whole towards a more sustainable mode of development. Statistics from the State Administration of Taxation (SAT) show that in 2023, the greening investment of China's industrial enterprises grew fast, with the purchase of environmental protection management services increasing by 17.7%, and the proportion of high energy-consuming manufacturing industries in the manufacturing sector dropping to 30.7%.⁴ , "cleaner production and greener development" is becoming the general consensus of more and more enterprises.

According to the results of PECC's long-term research in the front line can be intuitively seen, the enterprise site environmental control progress is obvious, only in the management of air pollutants, we observed that more and more enterprises from the original unorganised emission of exhaust dust gradually transformed into the use of advanced environmental protection equipment and measures to collect and treat, and to seek green development. For example, in the research process of an iron and steel enterprises we learned that in recent years to build the province's iron and steel industry green safety benchmark enterprises, the enterprise has implemented the ultra-low emission technology transformation of iron and steel enterprises, power plant desulphurisation transformation for the whole flue gas desulphurisation and dust removal system,

⁴ Vivid Interpretation of Tax Practices for High-Quality Advancement of Chinese-Style Modernisation - Scanning the Highlights of Tax Work in 2023_State Administration of Taxation
<https://www.chinatax.gov.cn/chinatax/n810219/n810724/c5221224/content.html>

the original pellet, coke open yard transformation for the steel structure of the closed yard, installed a complete set of continuous flue gas detection system, and in the rolling mill furnace using desulphurization and denitrification flue gas integrated treatment process, a series of equipment upgrading investment of more than 360 million yuan. This change highlights that traditional high-polluting enterprises are gradually shifting from passive response to active participation in environmental management, showing that they have significantly increased the degree of attention and action on environmental protection. In this transformation process, the direct impact of environmental protection tax on enterprise decision-making cannot be ignored, and its intuitive economic incentive mechanism plays a key role.

(ii) Promoting the diversification and optimisation of the economic and industrial structure and the enhancement of industrial competitiveness

Since the introduction of the environmental protection tax, the environmental protection equipment manufacturing industry, the resource recycling industry, the environmental monitoring and consulting services industry, the new energy industry and other green and low-carbon oriented new industries, new industries and new business models have accelerated their development. On the one hand, this is due to the significant increase in environmental protection-related market demand in response to the impact of the environmental protection tax, and on the other hand, it is also due to the environmental protection tax guiding the flow of financial capital from high-polluting industries with declining return on investment to environmental protection, green and low-carbon industries with more potential for economic development.

Taking the development of the environmental protection equipment manufacturing industry as an example, the implementation of the environmental protection tax prompted enterprises to actively seek ways to reduce their tax burden, thus significantly increasing the demand for

environmental protection equipment.2024 In November, the China Ecological and Environmental Industry Development Conference and the Forum of Listed Environmental Companies opened in Shenzhen, at which the "Top 50 List of Environmental Enterprises in China in terms of Revenue in 2024" was announced, and the 50 enterprises on the list had an average operating revenue of RMB 7.842 billion, an increase of 2.84% over the same period of the previous year. Among them, three companies, Everbright Environmental, Beikong Water and Capital Environmental, performed particularly well, with their operating revenues exceeding RMB 20 billion. ⁵With the steady growth of the environmental protection equipment manufacturing industry, the development prospects of the relevant enterprises are increasingly bright. The far-reaching regulatory impact of environmental protection tax not only stimulates the growth of environmental protection equipment manufacturing industry, but also promotes the technological innovation of environmental protection equipment industry enterprises to further improve product performance and efficiency, and thus enhance the overall competitiveness of China's environmental protection equipment manufacturing industry. According to the data of the Ministry of Industry and Information Technology, in terms of industrial scale, China's environmental protection equipment manufacturing industry in 2023, the total output value of about 970 billion yuan, compared with the initial formation of China's environmental protection equipment industry in 1980, 750 million yuan has been increased by about 1293 times. In terms of technical level, China's environmental protection equipment technology level presents "overall running, local leading" situation, such as ultra-low emissions from coal-fired units, high-temperature flue gas filtration, and a number of technical equipment has been among the ranks of the international leading ranks.⁶

⁵ 2024 China Eco-Environmental Industry Development Conference and Environmental Listed Companies Forum <https://baijiahao.baidu.com/s?id=1815703648446998439&wfr=baike>

⁶ Environmental protection equipment manufacturing standard conditions enterprise interpretation of one: the implementation of standard conditions management to promote environmental protection equipment

(iii) Promoting a higher level of information disclosure and synergy among government departments

The introduction of environmental protection taxes has led to an optimal shift in the functional responsibilities of the multi-departmental functions, mainly between the ecological and environmental departments and the tax authorities. Green taxes are very important in terms of inter-departmental mechanism articulation and information sharing due to the long collection chain, the many departments involved and the wide range of collection areas. According to relevant reports, under the collaborative mechanism for environmental tax collection and management established by the tax department and the ecological environment department, the two departments have exchanged a total of about 40 million pieces of information with each other in 2023.⁷ Through in-depth and close co-operation, the ecological and environmental departments are able to promote the effective implementation of environmental protection at a broader level and help form a unified framework for environmental governance, while the tax department determines the tax payable by enterprises based on the results of the latest environmental monitoring, which further enhances the accuracy of the calculation of taxes and fees. The formation of a multi-sectoral governance structure is conducive to the formulation of more comprehensive environmental and economic policies, and promotes the coordination of economic development and environmental protection.

manufacturing high-quality development

https://www.miit.gov.cn/jgsj/jns/qjsc/art/2024/art_e367bc0e8ff9454798b457b39481cf1e.html

⁷ Playing the role of fiscal policy "baton" - Xinhua

<http://www.news.cn/20240822/7fcb6549e66845df9cbdb4c3fa57038d/c.html>



PECC has learnt from its daily work with local tax departments that many tax bureaus and local ecological environment bureaus have established good environmental information-sharing mechanisms. For example, Qingdao Taxation Department and Ecology and Environment Department have established an information sharing mechanism by breaking down the data barriers. The two departments share tax-related information such as automatic monitoring of pollutant sources and emission permits on a monthly basis, so as to realise "no-fill-in" service for environmental protection tax declaration, and the accuracy rate of the declaration has been greatly improved. ⁸We have always believed that the establishment of an information-sharing mechanism is the basis for good collaboration between government departments, and is of great significance in enhancing overall governance capacity.

(iv) Enhancing the international profile and impact of global environmental governance

General Secretary Xi Jinping stressed that "we should deeply participate

⁸ Qingdao Tax: Greening Qingdao, Moving Towards Newness <http://sd.people.com.cn/n2/2024/1105/c386785-41031627.html>

in global environmental governance and enhance our country's right to speak and influence in the global environmental governance system." It is of great practical significance to accelerate the construction of an ecological civilisation discourse system of Chinese characteristics in the new era, highlight China's deep participation in global environmental governance contributions, strengthen the construction of international communication capacity, and comprehensively enhance the international discourse power of ecological civilisation. Under the guidance of this policy, the smooth introduction of environmental protection tax is undoubtedly a solid step forward.

As early as the 1990s, developed countries in Europe and the United States, such as the Netherlands, Sweden, Germany and the United States, have successively begun to levy a variety of environmental protection taxes, and the green tax system is relatively complete, aiming to promote environmental protection and sustainable development through taxation. The introduction of environmental protection tax in China is an important manifestation of China's docking and transformation of international ecological rules and standards. By steadily expanding the systematic opening up in the field of ecological and environmental protection, China's status and discourse power in the global ecological and environmental protection standards and system has been further enhanced, shaping China's ecological civilisation into the image of a big country with a responsible role in the ecological civilisation.

In addition, the important role played by the environmental protection tax in the comprehensive green transformation of China's economy and society is highly compatible with the current hot topics of global carbon neutrality and the fight against climate change. It can be said that the successful collection of environmental protection tax not only provides strong institutional support for achieving the carbon peak and carbon neutrality targets, but also is a concrete embodiment of China's active participation in global climate governance and fulfilment of its international responsibilities. Therefore, environmental protection tax is not only a key tool to achieve the national carbon emission

reduction target, but also an important practice to build a community of human destiny and jointly address global challenges, which demonstrates China's commitment and role in global environmental governance.

PECC was recently invited to participate in the 29th United Nations Climate Change Conference (COP29) can intuitively feel that China's position and actions to address climate change are increasingly receiving a high degree of attention from international parties, "China is becoming the main driving force of the global green transformation."⁹ As a good practice of China's commitment to environmental protection and climate change, the introduction of environmental protection tax plays an important role in winning high recognition and respect from international parties. At present, a series of green tax systems with Chinese characteristics that promote green and low-carbon development, with environmental protection tax as the core, are further expanding to ecological compensation, energy and water conservation, and comprehensive utilisation of resources, which bring valuable practical reference and profound inspiration for the global response to climate change and comprehensive green transformation.

3. Challenges and recommendations for environmental protection tax

(i) The current rate of environmental protection tax is yet to be adjusted, and it is recommended that the rate be assessed and adjusted on a regular basis

The power to adjust the environmental protection tax rate rests with the people's governments of the provinces, autonomous regions and municipalities directly under the Central Government, which are required to propose a specific applicable tax rate within the range of tax rates stipulated in the Table of

⁹ Co-operation to tackle global climate challenges China's voice and actions praised_Chinese government website https://www.gov.cn/yaowen/liebiao/202411/content_6987693.htm

Environmental Protection Tax Items and Tax Rates and report it to the Standing Committee of the People's Congress at the same level for a decision in accordance with the region's environmental carrying capacity, the current situation of pollutant emissions and the requirements of the economic and social objectives of eco-development. This design makes the tax rate more reflective of the actual local situation and more favourable to local environmental protection. In fact, from the perspective of overall environmental losses, the current amount of environmental protection tax does not restore the actual cost of environmental pollution, if the cost of pollution control is much higher than the cost of paying environmental taxes, many enterprises may rather discharge. Therefore a reasonable adjustment of the tax rate is particularly important.

We recommend that tax rates be regularly assessed and adjusted according to the degree of harm and the cost of treatment of pollutants, to ensure that the tax rates can effectively incentivise emissions reduction and reflect the true cost of pollution. For pollutants that are more hazardous and more difficult to control, higher tax rates may be set; by increasing the cost of emissions, enterprises will be motivated to actively seek alternative materials, improve production processes or invest in more advanced pollution control technologies, so as to reduce the release of such harmful substances into the environment. For pollutants that are relatively easy to control or for which reductions have already been achieved, tax rates may be appropriately lowered; this not only reduces the burden on enterprises that have already successfully implemented emission reduction measures, but also encourages others that have not yet met the standards to accelerate the pace of adoption of best practices in order to reduce their own emission levels.

(ii) The scope of pollutant taxation needs to be upgraded, and it is recommended that volatile organic compounds (VOCs) be gradually included in the taxable scope as soon as possible.

At present, the taxation scope of environmental protection tax covers taxable pollutants such as air and water, and specific sub-tax items are divided under each type of taxable pollutant, but the taxation scope generally follows the schedule of pollutants and equivalent values used during the period of sewage charging, and some pollutants that are more hazardous to the environment and the human body have not been included in the taxation scope. Among them, volatile organic compounds (VOCs) have a prominent impact on the atmospheric environment, and have long been invested in response to strengthen the comprehensive management.²⁰²⁴ In January, the CPC Central Committee and the State Council made public the Opinions on Comprehensively Promoting the Construction of a Beautiful China, which proposes to strengthen the support of tax policies, strictly implement the environmental protection tax law, improve the collection system, and accelerate the inclusion of VOCs in the scope of the levy. ¹⁰ At present, ethylene, ethylbenzene, acrylic, acrylates, acrylamide, methylcyclohexane, methylamine, trimethylbenzene and other VOCs have not yet been included in the scope of environmental protection tax, and the incorporation of VOCs into the taxable scope of environmental protection tax has been on the agenda but still needs to be accelerated.

We suggest that in the process of incorporating volatile organic compounds into the taxable scope of environmental protection tax, pilot levies can first be imposed on key emitting industries, starting from those industries with the greatest potential for emission reduction and the lowest cost of emission reduction, and then gradually expanding the scope in accordance with the requirements of control and management. At the same time, the research and application of VOC emission reduction technologies should be strengthened to reduce the negative economic impact of the tax.

¹⁰ Opinions of the Central Committee of the Communist Party of China and the State Council on Comprehensively Promoting the Construction of a Beautiful China_State Council Communiqué No. 3 of 2024_China.gov.cn
https://www.gov.cn/gongbao/2024/issue_11126/202401/content_6928805.html

(iii) The disclosure of information by the relevant departments needs to be further enhanced, and it is recommended that mechanisms and technical safeguards be strengthened.

PECC has established a good relationship with tax departments in many places across the country since we started our green tax work in 2020. Through communication and exchanges with tax departments, we have found that a number of enterprises are required to pay environmental protection tax and late fees in addition to the VAT instant refund for comprehensive utilisation of resources by local tax departments due to environmental protection penalties.

Table 1: Recovery of environmental taxes

company identification	Environmental protection tax recovery Unit: Yuan	Report reference	reference link
Guangxi Guigang Red Flag Paper Co.	4383.45	Green taxes (IV)	https://www.pec c.cc/section/32
Mile City Huadu New Building Materials Co.	3361.24	Green taxes (v)	
Qinghai Ganhe Water Treatment Co.	pursue and force sb to give back the spoils	Green taxes (XI)	
Xilinhote City Water Supply and Drainage Company, Ltd.	4771.26	Green taxes (xiv)	
Anyang Taiyuan Water Co.	pursue and force sb to give back the spoils	Green taxes (xiv)	
Hongze Zeqing Water Co.	pursue and force sb to give back the spoils	Green taxes (xiv)	
Fusui Qiaofeng New Wall Building Materials Co.	pursue and force sb to give back the spoils	Green taxes (xv)	

Guizhou	Shengdong	pursue and force sb to give	Green taxes (xvi)	
Environmental	Protection	back the spoils		
Technology Co.				

The main reason for this phenomenon is that the collection and management of environmental protection tax involves a number of departments, such as taxation and ecological environment, but the level of data and information sharing and co-operation among the relevant departments has yet to be improved in actual operation. Firstly, the lack of effective information sharing mechanism among relevant departments in some areas has led to the fact that the latest pollutant emission data cannot be transferred from the ecological and environmental departments to the tax department in time, and the lagging communication of such information not only affects the accurate calculation of tax payable by tax authorities to taxpayers, but also brings an unnecessary burden on the work of enterprises' finance and taxation. Secondly, PECC found that all provinces (autonomous regions and municipalities) have basically established a unified information disclosure platform to disclose the annual environmental information of enterprises, but the information disclosure system in some areas (Guizhou, Guangxi, Hebei, Beijing, Zhejiang) often fails to open, and the stability is not good. The incompatibility of data formats and missing content caused by the non-uniformity of standards or differences in technical levels in the construction of information disclosure data platforms in various regions have further hindered the effective cooperation of all parties.

We suggest that the relevant departments should further strengthen co-ordination and linkage, enhance information disclosure, establish a more timely and transparent information disclosure mechanism, make it easier for the public to know the information on enterprises' emissions and tax payments, and open up social supervision channels. At the same time, to further improve the disclosure data platform construction standards and digital intelligence technology level, to eliminate the technical objective causes of data blockage.

Finally, strengthen the support of laws and regulations, and impose appropriate penalties for intentional concealment of important information, so as to ensure the smooth operation of the entire system.

(iv) Analysis of the taxable situation of enterprises needs to be improved, and it is recommended that the optimisation of collection and management initiatives balance environmental protection and development.

On the one hand, the collection of environmental protection tax has increased the operating costs and pressure on environmental protection investment of some small and medium-sized enterprises, which may have an impact on the development of enterprises, and it is necessary for the Government to increase its efforts to reduce taxes and fees in other areas while collecting environmental protection tax, so as to alleviate the burden on enterprises. On the other hand, for some medium-to-large-sized enterprises operating across regions, or those with multiple production bases located in different regions, the collection and management of environmental protection tax is more complicated. There may be differences in environmental protection standards and tax policies in different regions. How to unify the accounting of pollutant emissions and tax payable by these enterprises, and avoid enterprises taking advantage of regional differences to evade taxes, is a challenge for cross-regional levy management. For example, a chemical enterprise with factories in several provinces may be able to reduce its tax liability by adjusting the production and emission data of its factories in different regions.

We suggest that the relevant departments should fully analyse the situation of enterprises and adopt targeted measures to balance the relationship between environmental protection and enterprise development. For example, in order to encourage enterprises to carry out technological transformation of environmental protection and construction of pollution control facilities, the relevant departments can give a certain percentage of capital subsidies or low-

interest loan support to eligible enterprises to help them complete the transformation; secondly, for enterprises that have taken positive measures to substantially reduce the amount of pollutant emissions, they can be appropriately exempted from the amount of tax payable to avoid the excessive burden imposed on enterprises by the "one-size-fits-all" approach. Secondly, for those enterprises that have taken positive measures to significantly reduce pollutant emissions, the amount of tax payable can be appropriately reduced or exempted, so as to avoid the "one-size-fits-all" approach from imposing an excessive burden on enterprises. At the same time, through the mechanism to improve efficiency and technical protection and other ways and means to further promote regional linkage, enhance the effectiveness of cross-regional collaboration in the collection and management of work. This will not only maintain the quality of the ecological environment, but also promote the sustained and healthy development of the economy and society.

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