

Analysis of Tax Policy for Promoting the Development of China's New Energy Vehicles Industry

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Abstract. New energy vehicle is the future development direction of vehicles, as one of China's strategic emerging industries, the new energy vehicles industry will also become one of the important emerging industry to promote the growth of the world economy. It is very important to solve the pollution of the environment and the national energy security. In view of the development status of China's new energy vehicles industry, the paper deeply analyzes the shortcomings of the current new energy automobile industry tax policy: The overall tax burden is too heavy, and the repurchase of light insurance has defects. Drawing on the experience of developed countries, it is proposed to integrate the Green Tax System into the automobile industry, to guide and encourage tax policy recommendations for the development of new energy vehicle industry.

1. The Practical Significance of Studying Tax Policy for Promoting the Development of New Energy Automobile Industry

As one of the strategic emerging industries integrating energy conservation, environmental protection and sustainable development, the new energy automobile industry has become the commanding height for countries to seize the development of the automobile industry. The automobile industry is one of the important sources of national fiscal revenue, while the industrial chain is long. Taxes are involved in production process, purchase process, and use process, etc. The automobile industry needs scientific, relatively independent and comprehensive tax policies and regulations to guide. The proper use of tax policies not only guides the transformation of purchasing behavior, but also guides the transformation of producers' R&D and production behavior. In recent years, China's new energy vehicle industry has continued to attract attention, and tax incentives and various financial subsidies have emerged frequently. The Chinese government has introduced a number of financial support policies and active tax incentives to play an important guiding role in the development of new energy automobile industry.

Despite this, compared with the environmentally-friendly and energy-saving automobile industry in developed countries and regions such as the United States, Japan and the European Union, the further upgrading, brand building and R&D innovation of China's new energy vehicles are still at a relatively low level. The reason is that there are still some imperfections in the tax policy for new energy vehicles, and there is no specific tax policy for the new energy automobile industry. The current tax policy for promoting the development of the new energy vehicle industry is included in the tax policy of the traditional automobile industry. To this end, in order to better reform the current tax policy of the automobile industry and make it play a role in the macro-control of the development of the national strategic industry, it is of great practical significance to study the tax policy to promote the development of the new energy automobile industry.

2. Analysis of the Status Quo of Tax Policy for Promoting the Development of New Energy Automobile Industry in China

The main types of taxes involved in the automotive industry are: value-added tax in production, consumption tax and corporate income tax in the sales chain, vehicle purchase tax in the consumer purchase process, vehicle and vessel tax in the process of possession, and fuel consumption tax in the use process. The state has adjusted the tax categories closely related to the automobile industry. In the development of the new energy automobile industry, the tax preferential policies have played an effective role in regulating, but there are still areas for improvement. The main analysis is as follows.

2.1 Turnover tax policy

From January 1st, 2016, the self-use equipment (in total investment) of new energy vehicle investment projects included in the scope of encouragement can be exempted from customs duties, and the import and export of electric prototypes can be exempted from import duties and import value-added tax/ 1 /. In March 2019, the VAT reform was deepened, and the original 16% tax rate of the manufacturing industry was reduced to 13%/ 2 /. However, for auto companies, especially those with large R&D investment cost, there is no special tax incentives. New energy vehicles do not implement preferential tax policies in research and development, production and sales. The current consumption tax policy has promoted the improvement of China's automobile industry structure to a certain extent, and is conducive to the development and development of new energy vehicles. For passenger cars, the scope of excise tax does not include passenger cars without an engine, for example, pure electric and hybrid power passenger cars. In January 2015, the consumption tax was imposed on the battery, and the main battery type of the new energy vehicle power was exempted from consumption tax.

However, the consumption tax of cars is not comprehensive enough only by displacement. It should also consider the problem of vehicle energy. Because the displacement of the car is not completely proportional to the fuel consumption, it is also closely related to the fuel and power used. If a large-displacement car uses new energy, but it is levied at a high tax rate, it is unfavorable for energy-saving and environmental protection.

2.2 Vehicle purchase tax policy

Judging from the function of controlling automobile consumption, the adjustment effect of the vehicle purchase tax and the consumption tax is the same. Since January 1, 2018, pure electric and plug-in hybrid vehicles enjoy preferential vehicle purchase tax exemption, but plug-in hybrid vehicles, that is, traditional fuel-fueled hybrid vehicles, are not eligible for tax exemption. These policies have encouraged the development of new energy vehicles. In the long run, they are also conducive to stimulating domestic consumption of new energy vehicles.

2.3 Fuel consumption tax policy

How the fuel tax is levied not only affects the purchasing behavior of consumers, but also promotes the production enterprises to actively adjust the structure of automobile products and accelerate the improvement of energy-saving technologies. The government currently does not levy a fuel tax, but imposes a fuel consumption tax. China has implemented the same standards for automobile fuels and fuels, and the ratio is low. It is not enough to regulate the consumption of fuel by fuel tax. It does not reflect the encouragement of fuel-saving and environmentally-friendly vehicles, and does not reflect the guidance of consumers in choosing energy-saving and environmental protection industries.

2.4 Vehicle and boat tax policy

As a kind of property tax, the vehicle and vessel tax plays a role in regulating the income of residents and the structure of automobile products in the ownership of automobiles. The current vehicle and vessel tax law sets the tax rate according to the displacement of passenger cars, and clearly conveys the signal of encouraging energy conservation and emission reduction to the market, which has a

positive effect on promoting the development of new energy vehicles. On July 10, 2018, the vehicle and vessel tax will be halved for energy-saving vehicles; the vehicle and vessel tax will be exempted for new energy vehicles and ships/ 3 /.

2.5 Corporate Income Tax Policy

On the one hand, there is no additional tax benefit or reduction for income tax on new energy vehicle manufacturers. In the calculation of the corporate income tax base, the new energy vehicle technology and market are not mature enough, and the advertising expenses and research and development expenses are invested more. The pre-tax deduction part applies the same standard as the traditional automobile. These do not take into account that the new energy automobile industry bears higher risks than the traditional vehicles in the promotion stage. It can be seen that the income tax policy is insufficiently supported in the promotion stage of the new energy automobile industry. It is not conducive to the technological innovation and market promotion of new energy vehicles, nor does it reflect the preferential tax policies for strategic emerging industries.

On the other hand, new energy vehicles are inseparable from their supporting facilities, and the supporting equipment manufacturers do not have unique tax incentives. As a result, although some enterprises in China have been transforming into new energy enterprises, the infrastructure such as charging piles is not enough/ 4 /.

3. Problems Existing in Current Tax Policy for Promoting the Development of New Energy Automobile Industry

3.1 Overall tax burden is high

Throughout the world, the design of the automobile tax system is not the same, but the general direction is the same, that is, the purchase is encouraged but the use is restricted. Therefore, when producing and selling cars, the tax rate in the price of the car is low. However, in the production and sales stage, the enterprises in China have to bear a lot of taxes and fees. If the preferential policies are not considered, the corporate tax burden of the production and sales part should be higher. Due to factors such as technology and R&D expenses, the production cost of new energy vehicles has always been higher than that of traditional vehicles, new energy vehicles with high added value have also assumed higher tax burdens. In the car sales segment, companies need to bear a heavier tax burden. For example, in terms of value-added tax, the new energy industry can deduct a relatively small amount of input tax. Even if the low-rate or immediate-return method is adopted, the actual tax burden is relatively high compared to the traditional energy industry that can be deducted by a large number of inputs.

In addition, new energy vehicle industry in China is transforming from borrowing, introducing and absorbing foreign experience to independent innovation, creation and production. Due to the particularity of the industry, for the products with positive externalities in the basic research and development, practice development and trial use stage, the relevant funding costs are large, slow, and have greater uncertainty risks. It is difficult for a single company to independently solve common problems in the industry and promote the development of the new energy automobile industry. Only the support and encouragement of the state and the government can guide the development of the new energy automobile industry. Only through the government's tax support, many car companies can invest in the research and development stage. It can be seen that the pressure on relevant enterprises is relatively high and there is an urgent need for policy support.

3.2 The structure of the tax system is irrational, and the guiding role for consumers is not obvious.

Consumption tax, resource tax, vehicle and vessel use tax and other environmentally-friendly tax policies appear to be relatively independent from each other, making it difficult to form a complete tax system to achieve energy conservation and emission reduction targets. Compared with developed

countries, the tax structure of China's automobile industry is unreasonable in the proportion of taxes and fees at the stages of purchase, retention and use. The tax burden of vehicles is mainly concentrated in the purchase process, while the tax burden in the vehicle preservation phase is light. Even if the government has already levied a fuel consumption tax, its formation of the environmentally-friendly and energy-saving automobile consumer market is not obvious. Because the current fuel tax is only a tax item in the consumption tax of "product oil", and as an in-tax tax, consumption tax is difficult for consumers to clearly understand the tax burden they actually bear. The policy weakens the regulation of fuel taxes. On the other hand, the fuel consumption tax increases the tax base of value-added tax, which in turn affects the additional taxes, and increases the burden on producers and consumers of refined oil products. Consumers will consider whether to purchase new energy vehicles, even if they can recover some of the benefits through energy conservation during the use process, but far less than buying new energy vehicles over the price of traditional cars. It does not reflect the guiding role of the tax system on consumers.

At present, European countries regard fuel consumption or carbon emissions as the basis for taxation of all or part of the automobile. In China's tax structure, the differential tax policy of consumption tax and vehicle and vessel tax reflects the principle of paying more when using more. However, there is no penalty for higher tax burdens on high-energy vehicles. The effect of this policy on guiding the purchase and use of energy-saving and new energy vehicles is not obvious enough.

3.3 The scope of the preferential policy is too small, and the energy conservation and emission reduction factors are not considered enough.

When setting up specific tax types, there is a lack of consideration for energy saving and emission reduction factors. Some tax incentives that support energy conservation and emission reduction lack overall understanding. The old policies have not been adjusted in time, new policies have not been introduced, and the effectiveness of tax support for energy conservation and emission reduction needs to be strengthened. For example, many tax incentives for the automobile industry are reflected in the income tax, and there is no preferential policy exclusive to the automobile industry. In fact, the turnover tax also needs to reflect the tax incentives for new energy vehicles. The actual situation is as the first Large taxes, VAT does not specifically reflect tax incentives in promoting the development of new energy vehicle industry. Vehicle purchase tax has no guiding effect on new energy vehicle consumption, and consumption tax and fuel consumption tax need to be strengthened in terms of regulation and control. Otherwise, the existing tax incentives for new energy automobile industry will not be obvious for energy saving.

4. Tax Policy Suggestions for Promoting the Development of New Energy Automobile Industry in China

In order to realize the strategic goal of China's new energy vehicle development, we should learn from the successful experience of developed countries in promoting taxation policies for the development of new energy automobile industry, and reform and optimize the current automobile industry tax policy. The main ideas are as follows:

4.1 Optimize tax structure and reduce tax burden

On the one hand, we must continue to provide tax incentives for new energy vehicle-related enterprises. On the other hand, the tax policy must not only provide positive incentives for the new energy automobile industry, but also impose certain constraints on traditional vehicles. The specific recommendations are as follows:

4.1.1 VAT

While increasing the subsidies for consumers to purchase new energy vehicles, they may consider exempting some or all of the sales revenue of used cars from VAT. Advocating the consumption of new energy vehicles can start from enterprises and units. For example, new energy vehicles purchased

by business units are allowed to deduct their input tax. Some new energy vehicles, such as electric vehicles, are subject to immediate withdrawal.

4.1.2 Sale tax

New energy vehicle consumption tax can be exempted. By setting consumption tax at different tax rates to guide consumers' propensity to consume, according to the type of automobile power energy, the fuel tax rate of polluting the environment is high, the energy tax rate of new energy vehicles with energy saving and environmental protection is low. The consumption tax rate can be linked to the carbon dioxide emissions and emissions of automobiles. The larger the carbon dioxide emissions and displacement, the higher the consumption tax rate. At the same time, the fuel tax rate should be increased, the cost of using traditional vehicles should be increased, and consumers should be gradually turned to the consumption of new energy vehicles. / 5 /

4.1.3 Corporate income tax

In order to encourage auto companies to develop their own brands and independent R&D and innovation, new energy vehicle manufacturers can be reduced or exempted from income tax policies. The automobile industry has been severely restricted in recognizing it as a high-tech enterprise. It can be considered that new energy vehicle manufacturers enjoy the low tax rate of high-tech enterprises. The automobile industry has been severely restricted in recognizing it as a high-tech enterprise. It can be considered that new energy vehicle manufacturers enjoy the low tax rate of high-tech enterprises.

At present, China's new energy technology is still in the initial stage of research and development, and its technical level is low. It is still necessary to continue investing more research funds. For enterprises in the research and development stage of new energy vehicles, R&D expenses may be considered to be included in the current profit and loss for 100% plus pre-tax deduction; for the portion of the enterprise that actually incurred insufficient technology development fees in the current year, it is allowed to not exceed The five-year taxable income will continue to be deducted. It is also possible to study the United States and grant permanent tax reductions to the R&D investment of auto companies. R&D investment can offset the taxable income of its federal income tax. In order to encourage enterprises to increase investment in the construction of charging equipment, tax reduction and exemption policies such as property tax and urban land use tax can be given.

4.2 Establish a dynamic tax policy adjustment mechanism to promote the development of new energy automobile industry

The development of new energy automobile industry is a dynamic process of continuous updating and development of technology. The requirements of the country for economic development and the goal of environmental protection are also constantly changing. Therefore, the formulation of tax policies to promote the development of new energy automobile industry also needs to establish a dynamic adjustment mechanism.

4.2.1 New energy vehicle manufacturers implement different tax policies at different stages

In order to support the emerging new energy automobile enterprises, more preferential treatment should be given to enterprises in the stage of R&D and market introduction, and scientific adjustment should be made to enterprises that are in the stage of development and large-scale development. For example, a differential VAT tax policy is implemented at different stages of a new energy vehicle manufacturing enterprise. In the initial period, R & D invested a lot of money, the market risk is large and there is no profit margin, the company's solvency and debt-paying ability is relatively poor, it is possible to implement a tax incentive policy of 100% refund of the VAT; in the period of growth, the enterprise can already generate certain profits, it is possible to implement a 50% tax incentive for immediate levy to achieve large-scale production capacity.

When the technical standards for energy conservation and emission reduction in the new energy automobile industry change, the products that fail to meet the standards should be excluded from the scope of tax incentives. This will not only promote the development of the new energy automobile

industry, it can also prevent taxpayers from avoiding taxes by adopting the concept of new energy vehicles and avoiding the loss of tax sources.

4.2.2 *The supporting industries of new energy vehicles should also be given appropriate tax incentives*

The new energy vehicle industry is not developed in isolation. It requires the joint development and assistance of supporting industries. While improving tax incentives, it is also necessary to broaden the scope of preferential policies, increase the diversity of preferential policies, and extend the benefits to the supporting facilities of new energy vehicles. Among them, the development of the automotive battery industry and the charging and inflation service industries directly affects the development of new energy vehicles. Therefore, the government should formulate relevant tax incentives, promote the research and development of automobile batteries, support the construction of charging and inflatable facilities, and encourage enterprises to actively research and develop equipment such as charging piles and car chargers that are compatible with energy-saving and new energy vehicles, and give the supporting equipment manufacturers three to five years of tax-free concessions.

4.2.3 *Focus on tax incentives for consumers*

The demand of consumers is the biggest driving force to promote the development of an industry. Although China is a big country with automobile demand, consumers' demand for new energy vehicles is obviously insufficient. In order to promote the development of energy-saving and new-energy automobile enterprises, the consumption and use of automobiles are as important as the research and development of production. The government should help enterprises actively cultivate the consumer market and increase the market share of energy-saving and new-energy vehicles.

On the one hand, when consumers purchase new energy vehicles, they are exempt from the vehicle and vessel tax and vehicle purchase tax. On the other hand, consumers can be subsidized according to the price of the car, and the personal income tax on subsidized income can be exempted, thereby reducing the cost of buying a car, so as to significantly promote the desire of consumers to purchase new energy vehicles. In this way, the price of new energy vehicles in the automobile market is almost the same as the price of traditional cars of the same level. Together with the characteristics of saving resources and protecting the environment, it will stimulate consumers' enthusiasm for purchasing new energy vehicles.

References

- [1] China State Council Tariff Commission, Notice of the Customs Tariff Commission of the State Council on the 2016 Tariff Adjustment Plan, Tax Committee [2015] No. 23, 2015-12-04.
- [2] Ministry of Finance, State Administration of Taxation, General Administration of Customs, Announcement No. 39, 2019-03-20.
- [3] Ministry of Finance, State Administration of Taxation, Ministry of Industry and Information Technology and transportation Department, Notice on the preferential policies for energy-saving new energy vehicles and vessels to enjoy the vehicle and vessel tax, 2018-07-10.
- [4] Chen Shouwei, Analysis of Tax Preferential Policies for New Energy Automobile Industry in China, Capital University of Economics and Business, pp. 20-21, 2018-06-05.
- [5] Zhang Tianmin, Research on Fiscal and Tax Policies to Promote the Development of New Energy Automobile Industry, *Contemporary accounting*, pp. 77-79, 2017-07-15