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The enlightenment of foreign carbon tax collection practice to our country

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Abstract: As an effective market economic policy means to reduce greenhouse gas emissions, carbon tax has been promoted and implemented by many countries around the world and achieved good emission reduction results. This paper systematically expounds foreign carbon tax systems and collection practices, and puts forward policy suggestions such as innovating tax administration, raising coal mine resource tax, establishing incentive and restraint mechanism for promoting pollution reduction and carbon reduction, perfecting tax supervision system, and establishing incentive compatible policies for energy conservation and emission reduction based on national conditions.

1. Introduction

In October 2021, the UN Committee of Experts on International Tax Cooperation published the UN Handbook on Carbon Taxes for Developing Countries 2021, which aims to help countries make decisions on the introduction of carbon taxes.

In May 2018, the World Bank (WB) released the Current Status and Trends of Carbon Pricing 2018, stating that about 70 jurisdictions around the world had implemented or planned to implement "carbon pricing measures" in 2017, including measures such as carbon taxes.

In October 2019, the OECD released the 2019 Energy Use Tax, which believes that the energy tax will help citizens and investors to use clean energy rather than dirty energy. Fuel excise and carbon taxes are simple and effective tools to curb dangerous climate change; Energy and carbon taxes can also help reduce the damage of pollution to health, and provide feasible suggestions for how governments can improve energy tax policies. [1]In October 2021, the OECD released its latest report on carbon pricing in G20 economies, concluding that a carbon tax would not only increase the cost of high-carbon fuels, thereby guiding businesses and households to make more climate-friendly choices, but also raise some revenue that could be used to improve energy access and affordability, strengthen social safety nets, or invest in low-carbon infrastructure. At present, the average carbon tax rate of the G20 is still less than 1 euro/tonCO2.

In December 2019, the EC issued the "European Green Agreement", which will reduce carbon emissions to 50% of 1990 carbon emissions before 2030, and by 2050 Europe will take the lead in the world to achieve "carbon neutrality", that is, net CO2 emissions will be reduced to zero. [2]In June 2021, the European Parliament passed the European Climate Law, enshrishing in law the EU

target of carbon neutrality by 2050, and Spain became the first country in Europe to reduce its VAT rate on electricity in response to rising electricity prices. In July 2021, the EC adopted the "Climate Change Package Proposal", which includes the establishment of a carbon border adjustment mechanism to align tax policy with the objectives of the European Green Deal.

2. Carbon tax collection practice in various countries

2.1. Europe

(1) Luxembourg. In October 2020, the Luxembourg government proposed a CO2 tax of 220 euros per ton of CO2 emitted from 2021, rising to 25 euros per ton of CO2 in 2022 and 30 euros per ton of CO2 in 2023.

(2) Iceland. In December 2017, the Icelandic parliament proposed a 50% increase in the carbon tax rate on fossil fuels, such as gasoline, from 5.5 kroner per litre to 8.25 kroner. In October 2019, the carbon tax rate was increased by €6 to €26 per tonne of carbon.

(3) Finland. In January 2018, the Finnish Parliament passed the government's proposal to revise the consumption tax, and from January 1, 2018, the tax rate of fuel consumption tax (including carbon tax) was increased by an average of 7%. Finland's energy (fuel) excise tax consists of two parts: energy content tax and carbon tax. The carbon tax is actually levied on the taxable energy quantity quota, but its unit tax is determined according to the CO2 content of energy and the standard of CO2 tax per ton. This adjustment increases the tax rate per ton of CO2 from the current 58 euros to 62 euros.

(4) Denmark. In June 2022, the government passed a new corporate carbon tax of around US $159 per tonne for companies subject to the EU ETS and DK750 per tonne for companies not subject to the EU ETS.

(5) Sweden. In May 2018, the Swedish Tax Agency ruled that high-emission vehicles are subject to a high tax for the first three years after purchase, based on the vehicle's carbon emission level or emission weighted average level.

(6) Norway. In October 2021, the Norwegian government plans to gradually increase the CO2 tax rate, such as the CO2 tax rate levied on petroleum and domestic aviation mineral oil in 2022, which is planned to increase by 15% on the basis of price adjustment.

(7) Netherlands. In September 2020, the Dutch Ministry of Finance announced plans to introduce a new carbon tax of €30 per tonne of CO2 equivalent from 2021, which will increase by €10.56 per year to €125 per tonne of CO2 equivalent by 2030. In November 2020, the Dutch Lower House of Parliament passed the "tax reform plan", including the introduction of a new carbon tax.

(8) Germany. In October 2019, Germany plans to raise the price per tonne of CO2 emitted from €10 in 2021 to 35 Ograms in 2025. Starting in 2026, the minimum and maximum prices per tonne of CO2 emitted are set at €35 and €60, with the prices for 2027 and beyond to be redetermined in 2025.

(9) France. In order to control carbon emissions, the French government plans to raise the fuel tax in 2019 and gradually increase the carbon tax rate, which will increase the carbon tax rate from 30.50 euros per ton to 44.60 euros in 2018, and plans to gradually increase the carbon tax rate to 100 euros/ton in 2030.

(10) United Kingdom. In December 2016, HMRC introduced the main elements of the climate change tax, including the latest applicable tax rates. The UK Climate Change Tax is a carbon tax imposed on fossil fuels to reduce CO2 emissions, which has been in place since 1 April 2001. The UK Global Tariff Regime cuts tariffs on more than 100 products to support renewable energy, energy efficiency, carbon capture and the circular economy.

(11) Ireland. A carbon tax on fossil fuels was introduced in 2009 and the current rate is €20 per

tonne. The 2020 budget plans to increase the carbon tax rate from €20 to €26 per tonne of CO2 emitted in two tranches, depending on the fuel. In October 2020, the Irish government plans to increase the carbon tax rate by €7.50, from €26 to €33.50 per tonne of CO2. In October 2021, it is planned that the carbon tax rate for natural gas and solid fuels will increase by €7.5 / ton CO2 from €33.50 / ton CO2 to €41 / ton CO2 from May 2022.

(12) Lithuania. In October 2019, the Lithuanian Ministry of the Environment issued a proposal for a new Vehicle Pollution Tax Law, which plans to impose a pollution tax on diesel vehicles emitting more than 115g/km of CO2, as well as gasoline or LPG vehicles emitting more than 130g/km of CO2. The motor vehicle pollution tax is paid when the polluting car is registered or re-registered.

(13) Poland. In November 2019, the fundamental reason for the promulgation of a bill in the Polish Official Gazette to cancel the hydrocarbon tax on shale gas extraction was that initial assumptions that the tax would make a significant contribution to the national budget were difficult to realize, and instead, shale gas extraction in Poland itself has made little progress.

(14) Portugal. Since the introduction of the aviation carbon tax in July 2021, 28 million euros have been collected, of which more than half (15.7 million euros) came from Lisbon Airport. Starting July 1, 2021, Portugal will introduce an aviation carbon tax of €2 per person for air passengers over the age of 2 (except for domestic travel by residents of the Azores and Madeira).

(15) Andorra. In January 2021, the Official Gazette of Andorra will introduce a new carbon tax to raise funds for the Green Fund to support the energy transition and to combat climate change. But the exact details of a carbon tax have yet to be decided.

(16) Russia. In June 2021, Russia issued a strategy to achieve low-carbon development by 2050, which means that by 2050, Russia's net greenhouse gas emissions will be reduced by 60 percent from the 2019 emission level, 80 percent from the 1990 emission level, and carbon neutral by 2060. The strategy supports the deployment and expansion of low - and carbon-free technologies, stimulates the use of secondary energy, and alters tax, customs and budget policies.

2.2. America

(1) The United States. In May 2021, the U.S. Department of the Treasury announced incentives to prioritize the development of clean energy, such as eliminating fossil fuel tax incentives, expanding and strengthening incentives for renewable and alternative energy sources, implementing low-carbon production tax credits, increasing and expanding carbon sequestration credits and electric vehicle charging pile credits.

(2) Canada. British Columbia introduced a carbon tax in 2008 at a rate of C $30 per ton of CO2, compared with the current carbon tax rate of C $225 per ton. In January 2017, Alberta introduced a carbon tax on greenhouse gas emissions from fuels at a rate of $20 per ton of carbon, which increased to $30 per ton of carbon in 2018. In September 2017, the government of British Columbia announced plans to gradually increase the carbon tax rate over five years from April 1, 2018, to $5 per ton of CO2 per year for the next five years, increasing to $50 per ton of CO2 by 2021. In March 2021, New Brunswick increased the carbon product tax rate by $10 / ton CO2, which means that the New Brunswick carbon tax rate will increase from $30 / ton CO2 to $40 / ton CO2 from April 1, 2021. Therefore, the actual use tax rate of taxable fuel based on carbon content has also been increased accordingly, such as the carbon tax rate of gasoline from 6.63 cents/litre to 8.84 cents/litre; The carbon tax rate on gasoline was increased from 8.05 cents per litre to 10.73 cents per litre.

(3) Argentina. In August 2021, Argentina exempted biofuels from the CO2 tax for the period from August 5, 2021 to December 31, 2030. On the basis of fuel tax, CO2 tax will be levied on some fuels from March 1, 2018.

(4) Colombia. In October 2016, the Colombian government submitted a tax reform bill to Congress to introduce a fixed carbon tax from January 1, 2017, such as 135 pesos per gallon for gasoline and 29 pesos per cubic meter for natural gas.

2.3. Asia

(1) Singapore. In February 2017, the Singapore government planned to introduce a carbon tax on major sources of greenhouse gas emissions, such as power plants, from the 2019 Gregorian calendar year, with a tax rate of between SGD 10 and SGD 20 per tonne of greenhouse gas. In February 2022, the Ministry of Finance announced plans to gradually increase the carbon tax rate from the current levy of S $5 per tonne of GHG emissions to S $25 per tonne of GHG emissions in 2024. S $45 per tonne of greenhouse gas emissions by 2026; By 2030, greenhouse gas emissions could reach 50 to 80 Singapore dollars per tonne.

(2) Thailand. In September 2021, the Board of Investment of Thailand passed a number of measures to encourage companies to reduce carbon emissions, such as a new three-year tax exemption for investment in equipment upgrades aimed at reducing greenhouse gas emissions.

(3)Indonesia. In October 2021, Indonesia decided to introduce a carbon tax in phases, that is, from April 1, 2022, the carbon tax on excessive CO2 emissions from coal-fired power plants will be levied at a tax rate of 30 rupiah per kilogram of CO2 equivalent. The carbon tax is part of Indonesia's commitment to reduce its carbon emissions by 29 per cent on its own and 41 per cent with international support by 2030, according to Indonesia's nationally determined Contribution to carbon emissions reduction. Previously, the minimum tax rate was IDR 75 per kg of CO2 equivalent, but the implementation has been delayed due to increasing uncertainties in the world.

(4) Israel. In August 2021, the Ministry of Finance approved the first carbon tax mechanism to impose a carbon tax on companies emitting CO2 that causes environmental and economic harm, that is, a carbon tax on all emissions originating from fuel, which will later be expanded to tax greenhouse gas emissions from landfills and other emission sources, gradually imposing a carbon tax on fuels, and a carbon tax on transportation fuels.

2.4. South Africa

In May 2019, the South African Revenue Service announced the "Carbon Tax Act 2019", which provides that from June 1, 2019, the carbon tax will be levied at a tax rate of 120 rand per ton of CO2 equivalent, and thereafter, the tax rate will be increased annually according to the Consumer Price Index published by the Bureau of Statistics, plus 2% until 2022, and the tax rate will only be adjusted by the annual consumer price index from 2023.

In February 2020, South Africa plans to increase its carbon tax rate by 5.6% for the 2020 calendar year to R127 per tonne of CO2 equivalent. From 1 April 2020, the environmental tax on CO2 emissions from motor vehicles will be increased to 120 rand per gram of CO2 per kilometer for passenger vehicles; Other motor vehicles are raised to CO2 160 rand per gram per kilometre.

3. Several enlightenments

Tax policy is a regulatory tool with guidance: [3]

First, tax administration innovation, continue to thoroughly implement the environmental conservation, new energy, ecological green economy and other aspects of the tax preferential policies, in order to establish a sound tax preferential system, such as individual income tax, small and medium-sized enterprise income tax and other environmental pollution tax preferential policies and tax preferential, by reducing taxes, To attract small and medium-sized enterprises to actively

and consciously participate in pollution reduction, environmental protection technology innovation. [4]

Second, by increasing the resource tax payment rate, continue to expand the coal mine resource tax tax, can reasonably regulate the rational use of various resources and fuels in coal mines, so as to promote resource conservation and emission reduction; The proportion of direct taxes can be increased, and the consumption tax can be used to drive economic participants such as private enterprises and individuals at all levels of society to carry out low-carbon behaviors.

The third is to establish incentive and restraint mechanisms to promote pollution reduction and carbon reduction, and implement relevant tax policies, which will help better play the economic leverage role of taxation and guide enterprises and individuals to save energy and reduce emissions. For example, the tax rate of environmental protection tax and coal resource tax can be moderately raised, and the environmental protection cost of enterprises can be increased on the basis of valuation and levy, so as to limit their carbon emission behavior. We can learn from the experience of developed countries such as Europe and the United States, set up carbon tax as an independent tax, and formulate corresponding collection methods and policies. Pilot projects can be carried out in free trade zones and new areas first, and gradually promoted. Such initiatives will help guide enterprises to pay more attention to environmental protection and low-carbon development, and push the coal industry towards sustainable development.

Fourth, improve the tax supervision system and enhance the awareness of small and medium-sized enterprises on environmental tax collection, which can effectively prevent small and medium-sized enterprises from polluting behavior. It is important to establish and improve the tax advisory system related to carbon trading, which aims to fill the gaps in the existing tax regulations. At the same time, financial and technical support is provided to ensure the good operation of the system. This can effectively improve the perfection of the tax system and provide more comprehensive support for the tax of carbon emission rights. This will help to promote the development of carbon trading participants and promote the improvement of the tax system.

The fifth is to establish a compatible incentive policy for energy conservation and emission reduction, including a carbon emission reporting system for local governments and a system linking carbon emission intensity with assessment indicators.

It is true that it is still a long and difficult process to achieve this goal, but it is a long-term task of constant development and progress. [5]The establishment of a sound tax advisory service system will provide solid support for the development of carbon trading and ensure the effective operation of green tax administration.

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