A Preliminary Evaluation of the Linkage between Passenger Car Double Integral Policy and Carbon Trading Market

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Abstract: With the in-depth implementation of the dual credit policy for passenger cars, the link between the policy and the carbon trading market has also shown an upward trend. This requires an effective assessment of the connectivity between the passenger car dual-point policy and the carbon trading market, controls the energy consumption and exhaust emissions of the automobile industry, and creates a sustainable development path for the transportation industry in my country. At the same time, it should also study the internal and external environment. Begin to link the dual-point policy for passenger cars with the carbon trading market to ensure the connectivity and feasibility between the dual-point policy for passenger cars and related systems.

1. Introduction

In order to improve the implementation of the dual-point policy for passenger cars, it is necessary to formulate reasonable measures based on the current situation and future development trends of the carbon trading market, strengthen the effect of the dual-point policy for passenger cars and the carbon trading market, and improve the implementation effect of the dual-point policy for passenger cars and carbon Comprehensive management level of the trading market. In addition, there are many factors to be considered in the preliminary assessment of the connection between the double-point policy for passenger cars and the carbon trading market. This should ensure the relevance of various policies and regulations, and solve the connection between the double-point policy for passenger cars and the carbon trading market. The question is to ensure the implementation of the dual-point policy for passenger cars in the development of related industries.

2. Overview of the Double Points Policy for Passenger Cars

Under the conditions of the continuous development of the new energy automobile industry, the relevant industries have also formulated and perfected corporate average fuel consumption points and new energy vehicle points based on social energy consumption and related factors. The industry has carried out effective management to meet the actual development requirements of the new energy automobile industry, and fully demonstrate the energy-saving and environmentally-friendly attributes of passenger cars. In recent years, the number of passenger cars in my country has become more and more obvious. In a survey conducted by the Bureau of Transportation, it was found that the proportion of civilian cars and passenger cars is increasing day by day (see Table 1). This should be combined with my country's transportation industry Development requirements and related requirements, plan a dual-point policy, use the dual-point policy to reduce various energy consumption during the operation of passenger cars, ensure the operation effect of passenger cars and energy-saving and environmental protection attributes, and then demonstrate the practical effect of the dual-point policy for passenger cars. At the same time, the number of passenger cars in my country is also showing a continuous upward trend. This should start with the analysis of the double-point policy from the actual growth rate of the number of passenger cars and related information, and strictly prevent problems in the actual application of the double-point policy. Strengthen the practical effect of the double points policy for passenger cars.

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Table 1 Percentage of Changes in the Number of Passenger Cars

Year	Proportion of civilian car ownership	Proportion of passenger car ownership
2012	52%	41%
2014	59%	50%
2016	67%	62%
2018	82%	77%
2020	87%	81%

3. Changes in the Passenger Car Carbon Trading Market

When conducting research on the carbon trading market, it is necessary to ensure that relevant personnel have an understanding of the energy consumption of road transportation in modern society (see Table 2) obtained through a coordinated investigation by the transportation bureau and the environmental protection department, and clarify the basic energy of various types of vehicles during operation Consumption, and then analyze the relationship between passenger car energy consumption and carbon emissions growth space, continuously adjust the carbon trading market, reduce basic energy consumption and harmful gas production during the operation of various passenger cars, and then ensure the actual carbon trading market The working mode and practical function provide strong support to guarantee the current energy utilization efficiency and practical function. At the same time, determine reasonable improvement measures in accordance with the changes in the carbon trading market and related requirements, adjust the actual management defects of the carbon trading market, and ensure the management effect of the carbon trading market, so that the level of connection between the dual-point policy for passenger cars and the carbon trading market has been improved. At the same time, research should be conducted on domestic and foreign carbon markets and carbon emission trading systems, so as to reduce the amount of carbon dioxide and carbon monoxide generated during the operation of passenger cars, and to ensure the safety and stability of the existing ecological environment. Generally speaking, there are many requirements that need to be considered in the actual management process of the passenger car carbon trading market. This should be combined with various requirements to determine reasonable measures, so as to plan the passenger car carbon trading market management system, and verify the operation and verification of automobiles. The fuel consumption and other aspects are combined with the carbon trading market management model to formulate a reasonable management model to improve the comprehensive management level of the passenger car carbon trading market.

Table 2 Road Traffic Energy Consumption

energy	Consumption (100 million tons)	Proportion of consumption
Standard coal	4.2	9%
Oil	2.2	37.5%

4. Correlation Analysis of Passenger Car Double Points Policy and Carbon Trading Market

4.1 Forecast of Passenger Car Technical Structure

In order to meet the requirements of the dual-point policy for passenger vehicle overall planning and energy conservation and environmental protection control, it is necessary to carry out effective predictions on the technical structure of passenger cars in accordance with the actual performance of the dual-point policy and the carbon trading market management requirements, and take into account relevant prediction conditions. The technical structure and energy-saving and emission reduction attributes of passenger vehicles are optimized and adjusted to reduce the energy consumption and waste generation of various passenger vehicles during the operation process, and promote the development of passenger vehicles in the direction of new energy vehicles, thereby strengthening the development of new energy vehicles. The level of development of car use ensures that new energy passenger vehicles play a role in the road transportation industry and their share in

the car market has increased. Moreover, it is inferred from the development of the carbon trading market that after 2030, the market competitiveness of new energy passenger vehicles and the proportion of society will show a significant upward trend, and under the guidance of various policies, various policies will be strengthened in passenger vehicles and carbon trading. The role of market linkage regulation is to give full play to the practical role of the passenger car dual-point policy, and provide strong support for strengthening the linkage effect between the passenger car dual-point policy and the carbon trading market. Of course, following specific requirements to effectively predict the technical structure of passenger cars, it can also adjust the existing problems of the technical structure of passenger cars, highlighting the practical effect of the double-point policy for passenger cars.

4.2 The Impact of Passenger Car Electrification on Crude Oil Dependence

With the continuous improvement of the development level of my country's transportation industry, the electric passenger vehicle processing and manufacturing industry is highly valued by people. The replacement of energy-driven passenger cars with electric passenger cars can not only reduce the consumption of energy materials during the operation of passenger cars, but also ensure the stability of the existing social ecological environment and the sustainable development of the automobile industry. The carbon trading market can meet the specific implementation requirements of the double-point policy for passenger cars. A study on the electrification trend of passenger vehicles in the survey results of the transportation department found that there are certain differences in the impact of electrified passenger vehicles on the changes in vehicle crude oil and its external dependence (see Table 3) under different scenarios. The basic difference of the project starts with the analysis of the connection between the passenger car double-point policy and the carbon trading market, indicating the necessity of the connection between the passenger car double-point policy and the carbon trading market, so that both the passenger car double-point policy and the carbon trading market management can be Meet the requirements of various regulations and systems in the “Twelfth Five-Year Plan for Energy Development” issued by the State Council in 2013. Strengthen the development trend of passenger car electrification, reduce the consumption of crude oil in the development of the automobile industry, and demonstrate the advantages and internal necessity of the dual-point policy for passenger cars in linking with the carbon trading market.

Table 3 the Impact Of Changes in Vehicle Crude Oil on External Dependence under Different Scenarios

Year	Dependence on crude oil for vehicles		
	Baseline scenario	Mild situation	Radical scenario
2017 年	70%	70%	70%
2020 年	68%	68%	68%
2025 年	67%	66%	65%
2030 年	65%	63%	54%
2035 年	57%	48%	40%

4.3 Prediction of Carbon Emissions of Passenger Cars

When predicting the carbon emissions at the end of use combined with the double-point policy for passenger cars, the carbon emissions during the driving process of the double-point policy for passenger cars and the carbon emissions during the passenger car’s electricity production process should be analyzed step by step, while following reasonable requirements for comparison. Analyze the carbon emissions of passenger cars in each state, clarify the proportion of passenger car use end carbon emissions in recent years and the actual change trend, and then carry out energy-saving and emission reduction treatments on the use end of passenger cars according to the analysis results to reduce passenger car use. Car use end carbon emissions to ensure that the carbon trading market’s requirements for passenger car use end operation are fulfilled. Of course, in this process, the dual-point policy should be linked with the carbon trading market in accordance with the passenger car

end-use carbon emission forecast, and the new energy passenger car industry and the transportation industry should be combined with the relevant policies to achieve the technological development level of the new energy passenger car industry and the transportation industry. Improved goals. Demonstrate the necessity of connecting the dual credit policy for passenger cars with the carbon trading market, improve the efficiency of passenger car electrification and the level of energy saving and environmental protection, ensure that passenger cars can effectively meet the requirements of climate change in specific areas in the future, and control the greenhouse effect of corresponding regions And other ecological and environmental issues.

5. External Feasibility of the Connection between the Dual-Point Policy for Passenger Cars and the Carbon Trading Market

5.1 Planning and Perfecting the Convergence Policy

Although the mutual connection of the passenger car dual-point policy and the carbon trading market plays an important role in promoting the development of energy conservation and environmental protection in related industries, the passenger car dual-point policy and the carbon trading market will encounter some obstacles when they connect with each other, resulting in the convergence of the two policies The effect has deteriorated, and the external feasibility of connecting the dual-point policy for passenger cars with the carbon trading market cannot be fully demonstrated. Based on this, it is necessary to plan and improve the connection model based on the actual performance of the passenger car dual-point policy and related factors, and use related models and specific policies to ensure the correlation effect between the passenger car dual-point system and the actual management requirements of the carbon trading market, and deal with the passenger car in a timely manner. The problems encountered when the car-use double-point policy and the carbon trading market are connected have fully demonstrated the practical effects of various convergence policies. At the same time, relevant personnel must be required to conduct in-depth research on the scale and form of the carbon trading market and the specific requirements for various tasks, adjust the dual-point policy for passenger cars in accordance with the actual changes in the carbon trading market, and reduce the passenger car market and the carbon trading market. The gap between the various policies and the balance between the transition effects of various policies and the specific implementation indicators are guaranteed.

5.2 Implement Vehicle Energy Saving and Emission Reduction

In order to ensure the feasibility and practical effects of the dual-point policy for passenger cars and the carbon trading market, it is necessary to formulate and promulgate supporting standards and regulations after considering the obvious differences between the dual-point policy for passenger cars and the carbon trading market mechanism. The department combines various standardized rules and regulations to carry out the design and manufacture of new energy passenger vehicles to reduce the consumption of various energy materials during the actual operation of passenger vehicles. Meet the development requirements of energy conservation and environmental protection in related industries, and provide strong support for the connection between the dual-point policy of passenger cars and the carbon trading market. At the same time, it is necessary to carry out effective management of the dual-point policy for passenger cars and the carbon trading market in accordance with various requirements, and timely solve the hidden problems in the development of related policies and carbon trading market management. Thereby improving the effect of various policies in carbon trading market management and energy-saving development of related industries, ensuring the external feasibility of the connection between the passenger car double-point policy and the carbon trading market, and solving the double accounting of the carbon trading market and the passenger car double-point policy Problems in the application process highlight the practical application value of various policies.

5.3 Boundary Management of Passenger Car Carbon Emissions

Generally speaking, there are still carbon emission management boundary issues during the operation of passenger cars, including vehicle carbon emission accounting boundary issues and regional carbon emission management boundary issues. Therefore, relevant personnel must be required to conduct research and analysis on these two boundary management issues, and plan reasonable improvement measures based on the results of various analyses. Gradually improve the effect of the dual-point policy for passenger cars and the carbon trading market, so that the effect of passenger car carbon emission boundary management and the actual level of implementation of various tasks have been improved. In this process, research should also be carried out on the administrative boundaries involved in the development of passenger vehicles and related industries, and the boundary management problems encountered in the carbon emission process should be optimized and adjusted in combination with various research results and related information. Reduce the difficulty of passenger car carbon emission boundary management and the possibility of various problems, and then provide strong support to promote the effective connection of the passenger car double-point policy with the carbon trading market and the sound management of various management tasks, so that the passenger car double-point The link between policies and the carbon trading market can meet the requirements of external environmental construction and the development of related industries.

6. Conclusion

In order to ensure the effect of the connection between the dual-point policy for passenger cars and the carbon trading market, a reasonable strategy should be planned in accordance with reasonable requirements, so as to strengthen the connection between the dual-point policy for passenger cars and the carbon trading market and the comprehensive evaluation effect, so that passenger cars The actual effect of the double points policy and the development level of the carbon trading market have improved. At the same time, it should also conduct research on the internal necessity and external feasibility of the connection between the double-point policy for passenger cars and the carbon trading market, improve the effect of the connection between the double-point policy for passenger cars and the carbon trading market, and promote the steady development of my country's automobile industry in the direction of energy conservation and environmental protection.
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