

Research on Promoting the Modernization of Green Transport Governance in the New Era

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Abstract: As one of the important features and strategic tasks of the Powerful Transport Nation, speeding up the development of green transport and the modernization of governance system and governance capacity, was not only a powerful measure to implement Xi Jinping's Ecological Civilization Thought, but also an inherent requirement and proper meaning for promoting the high quality development of the industry. On the basis of sorting out the necessity and challenges, some suggestions on speeding up the modernization of green transport governance in the new era were put forward from the aspects of policy standards, responsibility supervision, talent guarantee, finance, taxation and finance, scientific and technological innovation, and civilized publicity.

1. The Necessity of Strengthening Green Transport Governance

The Fourth Plenary Session of the 19th Central Committee of the Communist Party of China made major arrangements for upholding and improving the socialist system with Chinese characteristics and promoting the modernization of national governance system and governance capacity, which also pointed out the direction and provided guidance for promoting the construction of the Powerful Transport Nation and industrial governance. As one of the important features and strategic tasks of the Powerful Transport Nation, speeding up the development of green transport and the modernization of governance system and governance capacity, was not only a powerful measure to implement Xi Jinping's Ecological Civilization Thought, but also an inherent requirement and proper meaning for promoting the high quality development of the industry[1]. On the basis of sorting out the necessity and challenges, this paper put forward some suggestions on speeding up the modernization of green transport governance in the new era.

1.1. Green Transport Governance is the Key to Realize the High Quality Development of the Industry

Transport industry was one of the key areas of national energy conservation and emission reduction and climate change control. Industry governance was the fundamental and long-term fundamental work[2]. Therefore, it was an important content and path to implement the new development

concept and realize the coordinated and sustainable development of economy, society, resources and environment to build a diversified and efficient green transport governance mode and clarify and standardize the behaviors of all participants[3].

1.2. Green Transport Governance is the Key to Deepen the Reform of "Release, Control and Service"

As a concentrated representative of public interests, the government played an important and indispensable role in green transport governance with public attributes[4]. The government realized scientific governance by means of policy formulation, market regulation and social co-governance, and embodied the purpose of "governance is service" while playing a leading role in active guidance. This was consistent with the "original intention" of building a service-oriented government with Chinese characteristics.

1.3. Green Transport Governance is the Key to Support Regional Economic and Social Development

At present, a considerable number of transport hubs and transport lines had problems such as separation from urban functional areas, insufficient integration with regional land and industry, and were becoming the bottleneck restricting the improvement of transport efficiency, improvement of transport service level, promotion of land intensive utilization and realization of green development[5]. It was urgent to promote the coordination of green transport departments, standard planning and service convergence from the industry governance level to support regional economic and social development.

2. Development Status of Green Transport Governance

2.1. Green Transport Construction has Been Highly Valued at the National Level

General secretary Xi Jinping stressed the importance of building ecological civilization in the overall position of work, enabling the good ecological environment to become a growth point for people's life, becoming a support point for sustained and healthy development of the economic society, and becoming a force point to show the good image of our country, which pointed out the direction for building a green transport system.

The Ministry of Transport (MOT) had thoroughly implemented the spirit of a series of important speeches of general secretary Xi Jinping and the new ideas and new strategies of governing the country, taking green transport as a strategic measure to strengthen the construction of ecological civilization and realize green development in the transport industry. The MOT had formulated and issued a series of policy documents, such as "Opinions on comprehensively and deeply promoting the development of green transport", "Implementation opinions on comprehensively strengthening ecological environment protection and firmly fighting the battle of pollution prevention and control", "Green transport standard system (2016)", which provided the support and follow of mechanism, standard and key task list for the construction of ecological civilization in transport industry.

2.2. The Development of Green Transport in the Industry has Been Promoted in an all-round Way

In the process of promoting the construction of ecological civilization in China, the transport industry had actively carried out a series of exploration and practice of green development, which was transforming from single application of green transport technology to comprehensive energy conservation and emission reduction in a certain field and region, exploring systems, technologies and implementation schemes applicable to different regions and projects, so as to promote the green development and transformation of the whole industry, all fields and links.

(1) Infrastructure: By the end of 2019, the national green transport infrastructure system had been basically completed. The total mileage of comprehensive transport network had exceeded 5 million kilometers.

(2) Equipment: The green upgrading of transport equipment had been gradually realized. 1.2 million yellow label vehicles had been eliminated. The level of specialization, standardization and large-scale transport equipment had been continuously improved.

(3) Organization network: The green and efficient transport organization network had been steadily promoted. The annual passenger volume of urban public traffic had exceeded 90 billion person times. The efficient transport organization modes such as multimodal transport were booming.

(4) Technology innovation: The green transport technology innovation had been continuously strengthened. The technology research and application of transport energy conservation, emission reduction and ecological restoration had achieved remarkable results. The big data, cloud computing, mobile internet and other new technologies had greatly improved the operation efficiency and the efficiency of energy conservation and emission reduction.

(5) International cooperation: International cooperation on green transport was deepening. China-Europe trains shuttled back and forth across the vast Eurasian continent. The MOT had actively promoted the formulation of market measures for international aviation emission reduction. China was gradually establishing a good image of promoting green and sustainable development for transport in the international community.

3. Challenges of Green Transport Governance

3.1. Solving the Problem of Unbalanced and Inadequate Development

Due to the uneven distribution of resources and the unreasonable industrial layout in some regions, as well as the transport's problems of insufficient total supply and poor structure of infrastructure, extensive mode and low quality of development, and relatively lagging overall development level of equipment, the situation of over distance transport, circuitous transport, no-load transport and overload transport was more prominent, and then it would cause a great waste of resources and energy and ecological environment impact.

3.2. Dealing with the Window Period of Infrastructure Construction and New Technology Development

Under the new development pattern of "double cycle", the traditional transport infrastructure and "new infrastructure" would still be in the construction period with a reasonable scale for a long time in the future. In addition, the rise of big data, artificial intelligence, cloud computing, and new energy frontier technology, as well as the research and application of new business forms, such as unmanned driving, shared travel, vehicle road coordination, intelligent shipping, and smart port,

would not only provide a rare window opportunity for the development of green transport construction, but also put forward new and higher requirements for the modernization of green transport governance.

3.3. Alleviating the Contradiction Between Individual Needs and Intensive Transport

With the upgrading of social consumption, the adjustment of industrial structure and the improvement of energy structure, the consumption oriented, personalized and customized passenger transport demand for tourism, vacation and cultural leisure, as well as the standardized and customized freight demand with high technology content, high added value and high timeliness, would be increasingly strong. By comparison, the proportion of large-scale passenger transport and long-distance freight transport would gradually decrease. In the future, efforts should be made to solve the contradiction between individual transport needs and efficient, energy-saving and environment-friendly intensive transport.

3.4. Curbing the Decline of Green Travel Proportion

Due to the rapid acceleration of urbanization and the continuous improvement of people's living standards in China in the short term, the number of cars had risen rapidly and maintained a high growth rate. In addition, the planning and construction of urban public traffic and slow traffic were lagging behind. All of these made the share rate of green transport modes such as bicycle, walking and public transport in many cities show a rapid downward trend. The problem of vehicle exhaust pollution and urban road congestion was still imminent.

4. Suggestions on Promoting the Modernization of Green Transport Governance

4.1. Constructing the Policy Standard System of Green Transport

Firstly, the top-level design of green transport strategic planning needs to be further strengthened. The transport industry needs to formulate medium and long-term strategic planning of green development in accordance with the construction requirements of the Powerful Transport Nation, and focus on the relevant contents of green transport development and ecological civilization construction in the national and local comprehensive transport planning.

Secondly, the regulations and standards of green transport need to be further improved. Based on the concept of the whole life cycle, green transport standards for infrastructure, transport equipment, transport organization, etc. need to be gradually constructed. At the same time, the evaluation standards of green transport should be formulated, the energy efficiency standards and energy consumption monitoring standards of key energy consuming equipment in the transport industry should be improved, and the international green transport standards should be deeply involved.

4.2. Constructing the Responsibility Supervision System of Green Transport

Firstly, the inter-ministerial coordination and communication mechanism of green transport could be established. The establishment of the "Inter-ministerial Joint Conference System of Green Transport" participated by relevant ministries and commissions, such as the Ministry of Transport, the Ministry of Ecological and Environment, and the Ministry of Natural Resources, would be explored, so as to coordinate the issues related to the in-depth promotion of green transport development at the national level, and study and solve the green transport governance issues crossing the industry and cross.

Secondly, green transport supervision and assessment mechanism could be improved. The environmental supervision and pollution control in the whole process of "construction, management, maintenance and utilization" of transport infrastructure would be strengthened. The national environmental protection "three Simultaneities" and environmental impact assessment system would be strictly implemented. A regulatory information notification system and a green development effectiveness evaluation mechanism for the government and enterprises could be established.

4.3. Constructing the Talent Guarantee system of Green Transport

Firstly, the quality and professional level of green transport management cadres would be further improved. The education of green development values for relevant managers would be strengthened. The effect of green transport development should be included in the cadre evaluation and incentive mechanism to encourage the cadres to take on the responsibility.

Secondly, the high level green transport science and technology talents would be actively cultivated. We should adhere to the guidance of high-end talents, build a green transport science and technology talent system with high-end experts as the guide, professional backbone talents as the support and comprehensive practical talents as the foundation, and support interdisciplinary and interdisciplinary talents to enter green transport related industries. We would deepen the cooperation between government and schools, the docking of government and enterprises, and strengthen the construction of high-end think tanks for green transport.

4.4. Constructing the Taxation and Finance System of Green Transport

Firstly, the innovation of green transport finance and taxation mechanism in line with national conditions would be strengthened. We would increase tax support for green and low-carbon transport infrastructure and transport services, and implement differentiated vehicle and vessel tax policies. We would make full use of the leverage of green transport financial funds and the guiding effect of tax policies, accelerate the research and application of green transport technology, and promote the development of green transport to industrialization and marketization.

Secondly, the investment and financing of green transport funds would be increased. Financial institutions could be properly encouraged to participate in investment and financing activities in the field of energy conservation and emission reduction in transport. We would actively introduce investment funds for basic industries, promote the establishment of diversified risk investment and financing mechanism, and explore and build a carbon financial trading system for transport.

4.5. Constructing the Science and Technology Innovation System of Green Transport

Firstly, the research and development of green transport technology would be strengthened. We would continue to track new technologies, new products, new energy and new equipment, and focus on the forward-looking, basic and strategic research on green transport, such as energy-saving in super long tunnels, prevention and control of vehicle and ship exhaust gas, automatic driving, intelligent shipping, smart port, and vehicle road coordination, and achieve a number of breakthrough results as soon as possible.

Secondly, the transformation and demonstration application of green transport scientific and technological achievements would be promoted. We should improve the incentive evaluation system for the transformation of green transport scientific and technological achievements, strengthen the dominant position of enterprises in green transport technology innovation, give full play to the decisive role of the market in the allocation of scientific and technological resources, and

accelerate the demonstration, promotion and application of advanced, mature and applicable green technologies.

4.6. Constructing the Civilized Propaganda System of Green Transport

Firstly, multi participation to build green transport would be encouraged. We should improve the working mechanism, fully mobilize the enthusiasm of relevant departments and social groups, and give certain functions to social organizations such as low-carbon environmental protection association and green travel association, so as to play their unique role in the construction of green transport civilization. We could guide enterprises to widely use energy-saving and environmental protection technology and equipment, and cultivate and create a number of green transport benchmarking enterprises.

Secondly, the scientific level of green transport publicity work would be comprehensively improved. We should strengthen publicity, bring the cultivation and publicity of green transport civilization into the assessment system, carry out differentiated education and training for different industries and groups of people, and expand the breadth and depth of public participation.

5. Conclusion

As one of the important features and strategic tasks of the Powerful Transport Nation, speeding up the development of green transport and the modernization of governance system and governance capacity, was not only a powerful measure to implement Xi Jinping's Ecological Civilization Thought, but also an inherent requirement and proper meaning for promoting the high quality development of the industry. On the basis of sorting out the necessity and challenges, some suggestions on speeding up the modernization of green transport governance in the new era were put forward from the aspects of policy standards, responsibility supervision, talent guarantee, finance, taxation and finance, scientific and technological innovation, and civilized publicity.

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