Asia-Pacific
Economic Cooperation

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China's Green Transport "14th Five-Year" Development Plan

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Asia-Pacific Economic Cooperation

China Green Transport "14th Five-Year" Development Plan - Low-Carbon Field

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LEG meeting

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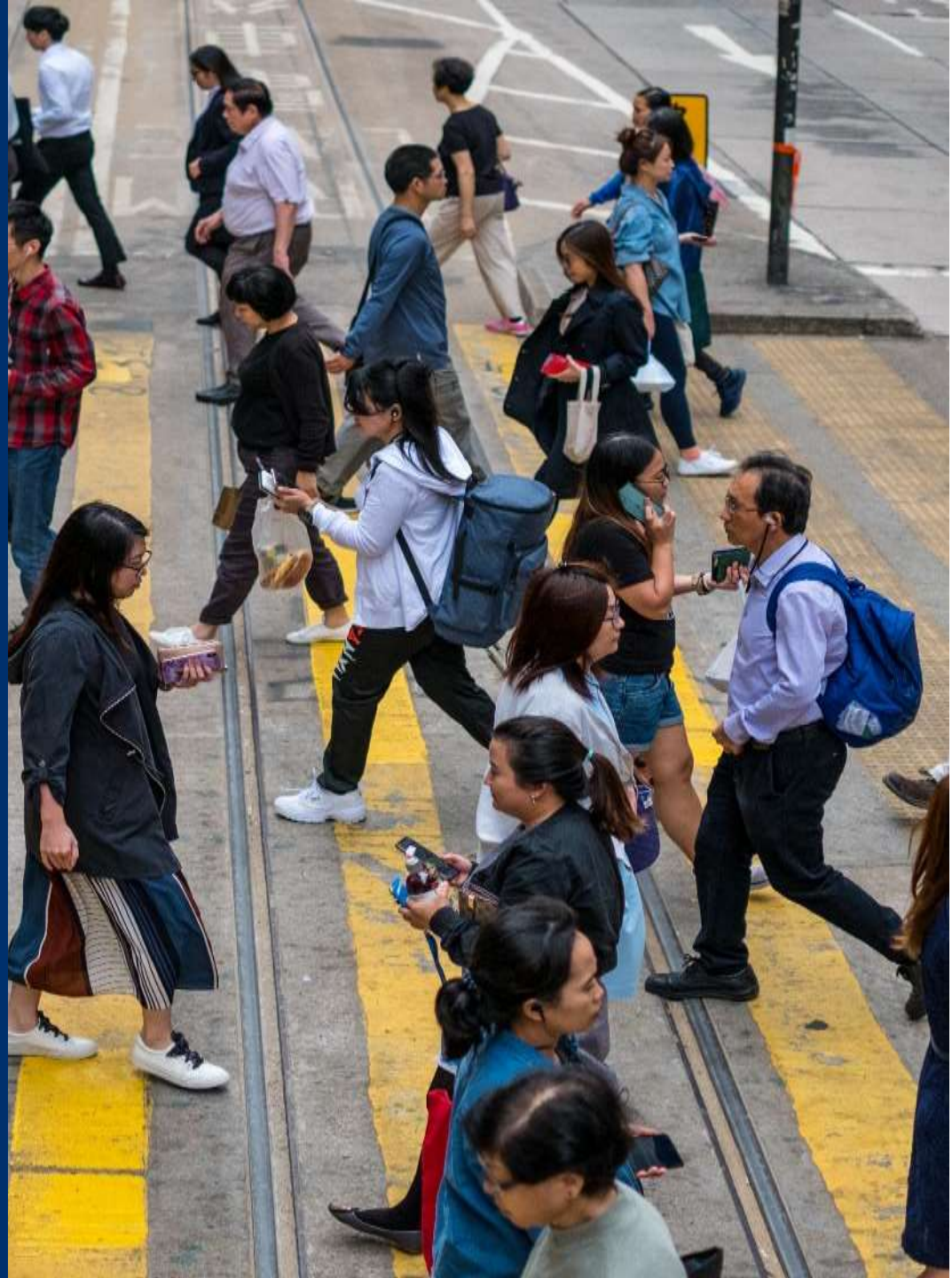


Advancing Free Trade for Asia-Pacific Prosperity

Achievements in the development of green transport in China since the 13th Five-Year Plan (2016-2020)

- ——**Accelerated efforts to conserve energy and reduce carbon.**

We continued to accelerate the application of new energy and clean energy, and the total number of new energy city buses, taxis and urban logistics vehicles reached more than 1 million, and more than 10,000 charging piles in highway service areas. Compared with 2015, the CO_2 emission intensity of service trucks and ships decreased by 8.4% and 7.1% respectively, and the CO_2 emission intensity of port production decreased by 10.2%.

- ——**Optimized and adjusted the transportation structure.**

Further promoted the "road-to-rail" and "road to water" of bulk cargo and medium and long distance cargo transport, accelerated the construction of railway and railway special lines, and increased the proportion of railway, water and belt transport in the main coastal ports in key areas by 2020 compared with 2017. From 2017 to 2020, the combined volume of container hot metal at ports in China increased by 25.8% annually. It has organized and implemented three batches of 70 multimodal transport demonstration projects, two batches of 46 urban green freight distribution demonstration projects, and three batches of national public transport urban construction demonstration projects in 87 cities.

Achievements in the development of green transport in China since the 13th Five-Year Plan (2016-2020)

- **——Strengthened ecological protection and restoration**

Twenty thematic pilot projects of green highways have been completed, and 33 typical demonstration projects of green highways have been carried out, making highway construction more integrated and coordinated with the ecological environment.

14th Five-Year Plan (2021-2025) Green Transport- Situation Demand

- During the "14th Five-Year Plan" period, China's ecological civilization construction has entered a critical period with carbon reduction as the key strategic direction, promoting the synergistic efficiency of pollution reduction and carbon reduction, promoting the comprehensive green transformation of economic and social development, and realizing the improvement of ecological environment quality from quantitative change to qualitative change.
- Transport has entered a new stage of accelerating the construction of a powerful transport country and promoting the high-quality development of transport. To serve the national achieve carbon peaking and neutrality goals, and fight the battle against pollution in depth, we must fully, accurately and comprehensively implement the new concept for development, coordinate pollution control, ecological conservation and combat climate change.

14th Five-Year Plan (2021-2025) Green Transport- Development Goals

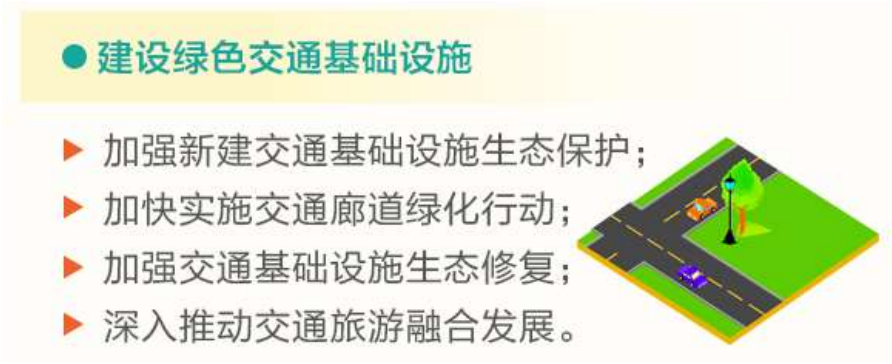
- By 2025, a green and low-carbon production mode in the field of transportation will have taken shape, basically realizing environment-friendly infrastructure, transportation equipment is clean and low-carbon, and transportation is organized intensively and efficiently, breakthroughs will be made in key areas, and the level of green development will generally meet the phased requirements of the construction of a transport power.

The main tasks of the 14th Five-Year Plan

Optimize spatial layout and build green transport infrastructure

- **Optimize the spatial layout of transport infrastructure.**

Strengthen the guiding and restraining role of territorial spatial planning in the planning and construction of transport infrastructure, and promote the formation of a comprehensive three-dimensional transport network that is coordinated with ecological protection red lines and compatible with the carrying capacity of resources and the environment.



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The main tasks of the 14th Five-Year Plan

Optimize spatial layout and build green transport infrastructure

- **Deepen the construction of green roads.**

Strengthen the protection of highway ecological environment, do a good job in the protection of native vegetation and near-natural ecological restoration, the construction of animal channels, and the connection of wetland water systems, and reduce the impact of new reconstruction (expansion) projects on important ecosystems and protected species. Improve the carbon sequestration capacity of transport infrastructure, and by 2025, the greening mileage of expressways and ordinary national and provincial trunk highways in humid areas will reach more than 95%, and the greening rate of semi-humid areas will reach more than 85%.

- **Promote the recycling of transport resources.**

Promote the comprehensive utilization of waste materials, facilities and equipment, construction materials, etc. in transport infrastructure, and encourage the large-scale application of waste tires, industrial solid waste, and construction waste in the field of transport construction.

The main tasks of the 14th Five-Year Plan

Optimize the transport structure and improve the energy efficiency of comprehensive transport

- **Continuous optimization and adjustment of the transport structure.** Accelerate the construction of port collection and distribution railways, logistics parks and railway special lines for large industrial and mining enterprises, and promote the "road-to-rail" and "road-to-water" transport of bulk cargo and medium- and long-distance cargo. Promote the use of green transport modes such as railways, water transport, closed belt corridors, new energy and clean energy vehicles for bulk cargo in ports and large-scale industrial and mining enterprises.

The main tasks of the 14th Five-Year Plan

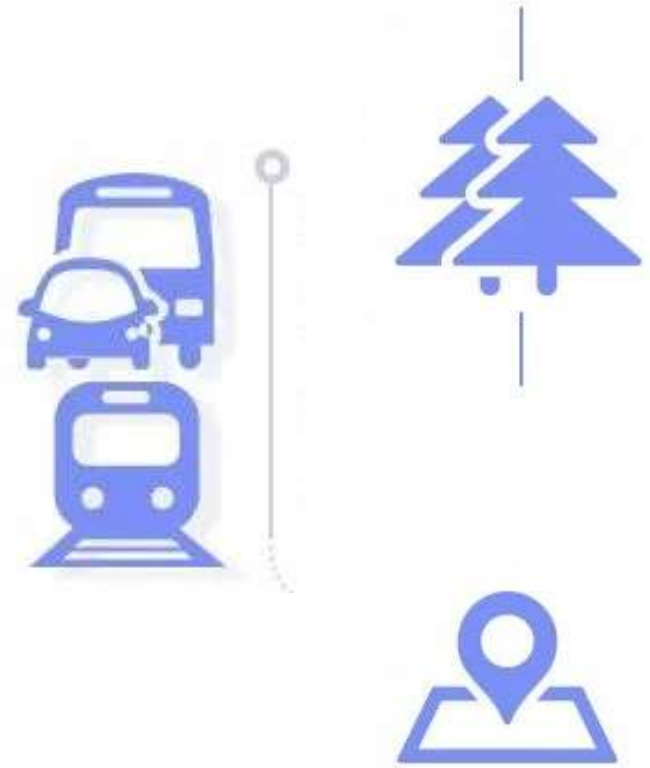
Promote the application of new energy and build a low-carbon transport system

- **Accelerate the popularization and application of new energy and clean energy transport equipment.** Accelerate the promotion and application of new energy vehicles in urban public transport, taxi, logistics distribution and other fields. The proportion of new energy vehicles in new or updated public transport, taxi, logistics distribution and other vehicles in the national ecological civilization pilot zone and key areas of air pollution prevention and control shall not be less than 80%. Encourage the pilot application of hydrogen fuel cell vehicles. Promote the construction of power charging (replacement) facilities in highway service areas, passenger transport hubs and other areas to facilitate green transport and green travel. Promote the rational layout of photovoltaic power generation facilities along the highway, service areas and other appropriate areas according to local conditions.

The main tasks of the 14th Five-Year Plan

Optimize the transport structure and improve the energy efficiency of comprehensive transport

- **Improve the efficiency of transport organization.** We will further promote the development of multimodal transport, promote the construction of integrated freight hubs, and promote the development of molten iron, public rail, public water, air and land and other combined transport. Promote the construction of multimodal transport demonstration projects and accelerate the cultivation of a number of leading multimodal transport enterprises with global influence.
- **Accelerate the construction of a green travel system.** Build a public transport system with urban rail transit and rapid bus as the backbone and conventional bus as the main body according to local conditions, and strengthen the integrated development of "rail + bus + slow travel" network. Deepen the construction of national public transport cities, improve the service level of urban rail transit, and continue to improve the public transport travel experience.



The main tasks of the 14th Five-Year Plan

Adhere to innovation-driven and strengthen the support of green transport technology.

- **Promote innovation in green transport technology**. Build a market-oriented green technology innovation system, and support applied research on new energy transport equipment and facilities, hydrogen-fueled vehicles and ships, LNG and biomass fuel ships; Accelerate the research of new energy vehicle performance monitoring and guarantee technology, transport energy internet technology, infrastructure distributed photovoltaic power generation equipment and grid-connected technology.
- **Accelerate the popularization and application of key technologies for energy conservation and environmental protection.** Increase the promotion and application of key energy-saving and low-carbon technologies in the transport industry, continue to formulate and publish a catalog of key energy-saving and low-carbon technologies in the transport industry, focus on selecting a number of energy-saving and low-carbon technologies with large emission reduction potential and wide scope of application, and strengthen technical publicity, exchange, training and promotion and application. Relying on the transport science and technology demonstration project, strengthen the integrated application demonstration and achiev transformation of energy-saving and environmental protection technologies.

The main tasks of the 14th Five-Year Plan

Adhere to innovation-driven and strengthen the support of green transport technology

Improve the system of green transport standards and norms. Revise the green transport standard system and strengthen the effective supply of standards in terms of new technologies, new equipment, new materials, and new processes. In terms of resource conservation and utilization, formulate and revise standards for new energy vehicle batteries, asphalt pavement materials and construction waste recycling. In terms of energy conservation and carbon reduction, standards such as the access to energy consumption limits for operating vehicles and port machinery and equipment, technical requirements for new energy and fuel cell operating vehicles, and green operation of urban rail transit have been formulated and revised.

The main tasks of the 14th Five-Year Plan

Improve the promotion mechanism and improve the green transport supervision system

- **Improve the promotion mechanism for green development.** Improve the organizational leadership system of the Ministry of Transport's carbon peaking and carbon neutrality work, and strengthen departmental coordination. Formulate policy documents such as action plans for green and low-carbon development of transport. Coordinate and carry out research on carbon emission reduction and carbon peaking paths, major policies and key technologies in the transport sector. Explore the application of market mechanisms such as carbon credits, contract energy management, and carbon emission verification in the industry.
- **Strengthen green transport assessment and supervision.** Improve the green transport statistical system, and promote the collection of data on energy consumption, carbon emissions and pollutant emissions from highways, water transport, and urban passenger transport.

Improve cooperation mechanisms and deepen international exchanges and cooperation.

- Deeply participate in the global environmental governance of transport. Strengthen international exchanges and cooperation on green transport.

Safeguard measure

- **NO1: Strengthen organizational leadership.**

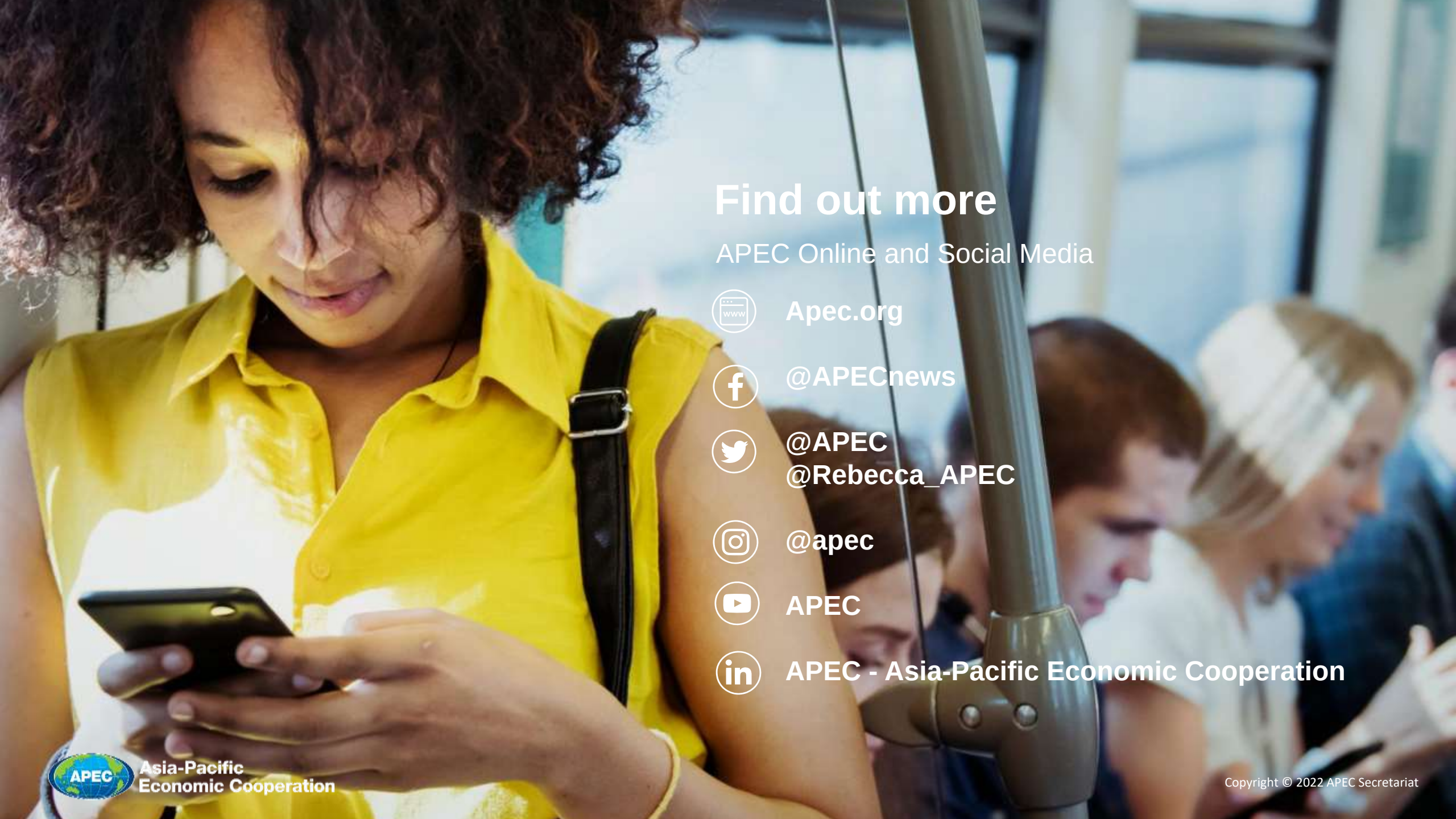
All levels of transport authorities should attach great importance to the green development of transport.

- **NO2: Innovation support policies.**

Establish a green transport development and construction investment mechanism guided by national and local government funds, with enterprise funds as the main body.

- **NO3: Increase publicity and implementation training.**

Continuously carry out green transport promotion and education, guide the entire industry to enhance the concept of ecological civilization, and form a joint force of the whole society to care for, support, and participate in the green development of transport.



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