

### **About Smart Freight Forum China**

Smart Freight Forum China seeks to gather executives and professionals dedicated to a more sustainable and efficient freight sector. The Forum is organized by Smart Freight Centre China to join hands with other key partners leading China's freight sector development to

- Facilitate information sharing and collaboration among key partners
  on green freight and logistics development
- Present and showcase progress made on sustainable and green freight from business leaders, i.e. green shippers, LSPs and carriers
- Brief participants on policy and regulatory trends, discussing industry development pathways, and introducing fuel efficient technologies, measures and sustainable freight solutions.



#### Forum Partners















#### Disclaimer

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Z Smart Freight Forum China Modal Shift from Truck to Rail Summary Report

#### **Summary Report**

### Background

The Smart Freight Forum China is a series of closed-door workshops jointly organized by the Smart Freight Centre China, the Transport Planning and Research Institute (TPRI) of the Chinese Ministry of Transport (MOT) and GIZ, supported by Energy Foundation China, IKEA and Scania. Representatives from MOT, the Ministry of Ecology and Environment (MEE), China Railway, international shippers and logistics providers, the SFC China expert council, Beijing Jiao Tong University and the Beijing Transport Institute participated in this forum focused on the modal shift from truck freight transport to rail.

#### **Objectives**

The Truck-to-Rail Modal Shift Forum was designed to gather influential freight industry leaders to discuss challenges and opportunities in implementing a government-led "Truck-to-Rail Modal Shift Initiative", and make industry voices be heard on collective efforts in mitigating policy impact, better preparing the industry for the shift, and most importantly, providing a forum for industry leaders to exchange opinions with other key stakeholders of the industry, in specifically government representatives, the national railway industry, OEMs and technology providers, and international development agencies and research institutes.













#### Forum Summary

The forum began with representatives of the government delivering a detailed introduction and interpretation of the "Truck-to-Rail" policy. A representative from the Transportation Service Department of the MOT introduced the "Three-Year Action Plan for Promoting Transport Structural Adjustment (2018-2020)", including the background, objectives, specific action plans, potential impact on the industry and next steps. A representative from the Department of Atmospheric Environment Management of the MEE introduced progress towards the prevention of pollution, the status quo, the process of transport modal shift policy development, the management of mobile source pollution and future policy trends. Two experts from TPRI introduced the policy direction of "Truck-to-Rail" in the Beijing-Tianjin-Hebei (Jing-Jin-Ji) region and international experience in multimodal transport. IKEA, Wal-Mart and China Merchants Logistics Group, representing the shippers and transport companies, exchanged their successful experiences in multimodal transport and expressed their business needs for complying with the "Truck-to-Rail" policy. After the initial presentations were complete, the representatives and experts had a discussion on how to further strengthen policy guidance by government, how to further optimize China Railway products and services, and the impact of "Truck-to-Rail" policies on shippers and carriers as well as the difficulties and challenges faced by companies.

#### The Beijing-Tianjin-Hebei (Jing-Jin-Ji) Action Plan

The Beijing-Tianjin-Hebei region and its surrounding area have the most serious air pollution as well as the strongest cargo intensity in China. As a result, it has the most severe situation and the most arduous task in adjusting its transportation structure. According to the "Implementation Plan for Construction of a Transport Structural Adjustment Demonstration Zone in Beijing-Tianjin-Hebei and Surrounding Areas (2018-2020)", this region will build a national demonstration zone for transportation modal shift over these three years.

Some of the main objectives and measures include:

- At coal terminals of major coastal ports such as Tangshan Port and Huanghua Port, coal shall be transported by railways before the end of 2018;
- Bulk goods such as ore and coke will mainly transported by railway before the heating season in 2020;
- Regional railway freight volume should increase by 40% over the level in 2017; and,
- The proportion of dedicated rail lines entering the important ports should reach 70% by the end of 2020.

In order to achieve the above objectives, the Beijing-Tianjin-Hebei and surrounding areas will implement nine major projects, specifically:

- Dedicated railway line construction
- · Railway freight service upgrades
- · Port bulk cargo "Truck-to-Rail"
- · Industrial and mining enterprises bulk cargo "Truck-to-Rail"
- · Container combined railway and waterway transportation expansion
- Multimodal transport information interconnection and integration
- Freight vehicle overload inspection
- · New energy vehicle promotion for urban delivery
- Combined railway and road transportation for urban production and daily household materials

At present, five challenges experienced transport modal shift in Beijing-Tianjin-Hebei and surrounding areas include:

- The price advantage of railway transportation has not yet been realized, making railway freight rate uncompetitive;
- 2. The convenience and timeliness of railway transportation services cannot meet the transportation requirements of the market;
- Management of the road transportation industry is not standardized, leading to low efficiency. Additionally, problems like overloading, oversized loads and high pollution-emission vehicles exist;
- "Truck-to-Rail" modal shift for bulk materials has not yet established a long-term mechanism and lacks relevant fiscal and tax policies and market regulation measures;
- 5. "Truck-to-Rail" modal shift may affect the stable development of some industries.







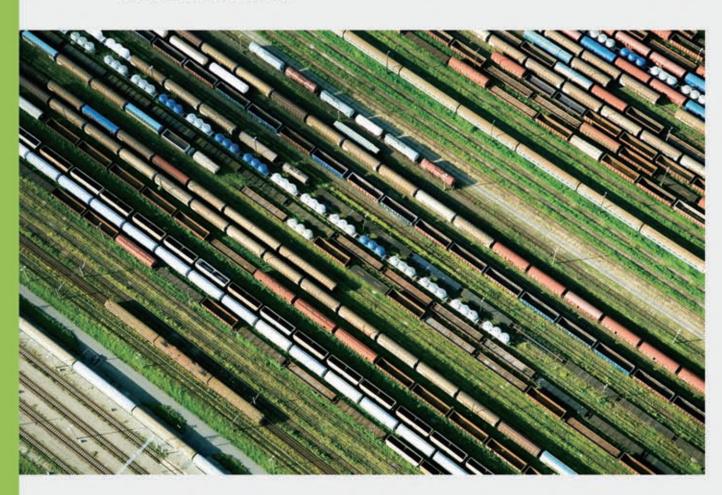






The "Truck-to-Rail" shift mainly refers to the shift of long-distance and bulk cargo road freight towards railway and waterway transport. When considering the sustainable and continuous development trend of the road freight sector, as well as the increase of short-haul in this truck to rail scenario, and as a result the size of the sector might not necessarily decrease significantly. In addition, the transportation structural adjustment is a comprehensive policy, and measures must be taken for railways, highways and waterways to optimize the transportation sector at large and improve overall transportation efficiency. It is certain, however, that road freight will still be the main mode of freight transportation. For pollution resulting from road freight volume that cannot be transferred to railway and waterway transport, reductions could be achieved by promoting vehicle standardization, using clean energy and utilizing technologies to reduce emissions levels of equipment and vehicles.

Based on the full discussion of this forum, the recommendations for the government, railway departments, cargo owners and transportation companies are as follows:





### Recommendations to government:

- 1. Since the adjustment of transport modal structure is a difficult challenge, the formulation of policies should consider long-term effects. Government could enact policy standards to form a benign competition market, and then gradually promote the market to play a major role;
- The formulation of policies related to adjustment of the freight transport modal structure should take into account necessary changes to industrial and energy structure;
- 3. The stability of some industries (such as the road freight industry) should be considered, with the government formulating effective prevention and mitigation measures;
- 4. It is necessary to track the progress of the adjustment of the transport modal structure in a timely fashion, summarize relevant experience, and then further optimize the related policy. Key goods (such as coal, ore, port, logistics park) and industrial activities (such as large industrial and mining) should be prioritized when making the implementation plan;
- Local governments should formulate the specific measures for the implementation of national policies, provide policy interpretation and consultation, and offer guidance to enterprises to develop comprehensive, sustainable solutions.

### Suggestions for the railway sector:

- 1. Create market-oriented services that can serve the requirements and demands of industry, taking into account routing and timing;
- Improve existing infrastructure, including new construction, modification and upgrading of railway infrastructure where needed;
- 3. Provide more predictable schedules and prices for transport services, innovate railway freight service products, provide customized transportation services, give specific support policies, interconnect with other modes of transportation, achieve convergence with other transportation platforms, and adopt the Roll-on/Roll-off (ROLO) model to realize "Truck-to-Rail" modal shift;
- 4. It is important to strengthen coordination, promote the cooperation between different road bureaus, realize "Coal from the West, Goods from the East" bidirectional transport utilization, and strengthen cooperation with road and waterway transport, to gradually develop full-scale logistics services.





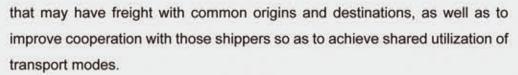
# Recommendations for cargo owners and transportation companies:

# Common suggestions for cargo owners and transport companies:

- 1. It is necessary to keep track of, and implement, the national policies relevant to transport modal structure adjustment, especially the specific implementation policies and plans of the government departments where the enterprises are located, and strengthen communication with local government departments;
- Shipper and transport enterprises should actively cooperate with each other and jointly formulate freight strategies and product plans suitable for "Truck-to-Rail" transport services;
- 3. Cargo owners and transportation enterprises should strengthen communication, learn successful cases, and grow together.

### For the owners of goods:

- Undertake careful logistics demand planning, cultivate the demand for multimodal transport, formulate corresponding strategies and measures to achieve modal shift at the enterprise level, respond to national policies, and seize opportunities;
- 2. Large enterprises should take the lead in understanding other shippers



3. It is necessary to contact with the railway carriers much earlier than with the road freight carriers. The companies with large demand for carriage should plan special services such as unit trains or other mass services as early as possible, as transport capacity may become a core area of competitiveness in the future.

#### For transportation companies:

- Seize policy opportunities for transportation modal adjustment, considering the allocation of infrastructure in the vicinity of railway hubs and make full use of railway infrastructure in the physical layout of logistics services;
- Improve transportation capacity, cultivate the ability to provide diverse transport services, and identify and make use of equipment, technology and information systems for multimodal transport;
- Prepare to upgrade vehicles and equipment, increase the application of new and clean energy, and cooperate with railways and ports to develop diverse logistics systems.
- 4. Adjust road freight transportation towards short-distance or first- and last-mile transfer, formulate response plans and measures, and arrange for the transformation and development of enterprises and personnel.







