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Theme: Robust decarbonisation and resilient logistics: Progress in the last decade and a roadmap to 2035

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Unpacking the policy landscape to assess the status of road freight decarbonisation

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"If you can't measure it, you can't improve it." This is a famous quote by Peter Drucker that stands true in the case of the transport sector as well. Transport is often considered a black box and almost no country in the developing world has transport data that thoroughly explains the transport sector performance vis-à-vis the transport-relevant targets. And there are even lesser instances where countries or subregions comprehensively detail out the existing policy landscape for improving the situation.

Thus, in 2020, the Asian Transport Outlook (ATO) (https://asiantransportoutlook.com/) was initiated by the Asian Development Bank (ADB) to strengthen the knowledge base on transport in the Asia-Pacific region. The ATO serves as an instrument to track the implementation of the Sustainable Development Goals (SDG), the Paris Agreement and other relevant international agreements on sustainable development in the transport sector. It also assists in prioritising investments and tracking the implementation and performance of the policies.

This paper sources the data and policy information from ATO products and unboxes the state of play of sustainable freight policies for the Asia-Pacific region. It includes analysis of the national freight policies with respect to the policy measures, targets, and ambitions stated by the national government. The analysis of the policy landscape lays the background to assess the data, specifically in terms of decarbonisation of the road freight sector in the Asia-Pacific region.

Only 33% of the Asia-Pacific economies have a dedicated Logistics policy. While the rest 66% have references in other transport related documents or have no specific policy measures for the freight subsector at all. Majority of them have been published after 2016. It indicates that the freight policy landscape is comparatively recent and that it can be expected to include measures supporting the SDG and Paris Agreement alignments. Only 4 countries have logistics related quantitative live targets.

Analysis of the NDCs reveal that there is a significantly larger emphasis on the Improve measures compared to Avoid or Shift. There is also far more coverage of passenger transport-related measures compared to freight. This signifies a weaker linkage of the freight subsector with the overall transport decarbonisation objective. On the contrary, the data analysis reflects a situation of urgency.

Over the last two decades, transport demand in Asia has more than doubled. Freight activity has outpaced growth of passenger transport activity. As of 2020, freight was 2.7 times the 2000 levels. The annual growth rate of freight between 2000 and 2015 was roughly 5%, and then it dropped to 3.5% between 2015 to 2020. A relative decoupling of freight activity with GDP growth is visible in Asia. However, it continues to grow faster than the population.

Highlighting progress in the subsector, road contribution to the freight sector has reduced by 8% in 2020 compared to the 2000 levels. In the same timeframe, IWT increased from 11.5% to 21% and railway freight modeshare remained the same at about 35%. Although, the road subsector is still dominating the freight transport activity, countries like PRC are successfully leading with example by sustainable modal shifts from road to rail. Other Asian countries are also catching up.

Many Asian economies are at an early stage in their economic development and thus still more dependent on the production and export of low-value commodities that must be moved in large quantities relative to GDP. At the same time, some Asian economies (ex-PRC, Viet Nam) have rapidly industrialized and become global manufacturing hubs, generating high freight activity per GDP and capita.

By 2050, freight activity in Asia could be in the range of 28–55 trillion tonne-kilometers. Thus, the region would become the largest generator of transport demand globally by a significant margin, even under the more pessimistic growth scenarios. And most of the activity would still be dominated by Roads, under a BAU scenario.

It is understood that the road freight sector is progressing with respect to decarbonisation of the sector, but there is a need for more aggressive and consistent action. This paper identifies the broad contours, key insights, and characteristics of the sub sector and the consequences for transport policy, planning, and investments. It concludes that the road freight transport sector decarbonization in Asia will require a systemic transformation.