The Asia Pacific Rail Market: Current Dynamics and Investment Trends

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Asia Pacific in the Context of Global Transport

With around 20% of worldwide CO2 emissions originating from transport, this sector is fundamental for achieving the global climate targets. Without further action, global transport emissions are expected to keep rising by another 16% until 2050, even under the presumption that today's decarbonisation commitments are fully implemented (source: ITF Transport Outlook 2021). Among the global transport markets, Asia Pacific plays a pivotal role. Demand for regional passenger transport is forecast to increase significantly from 2015 levels in Asia Pacific, greatly outstripping the global average demand growth, and this is expected to continue until at least 2050. On the freight side, Asia Pacific is expected to account for almost half of global freight activity by that time. Consequently, transport emissions might rise 48% from 2015 to 2050 at the regional level.

Importance of Rail Transport in Asia Pacific

Individual passenger transport and freight transport by road account for a significant proportion of these emissions. While emission levels vary significantly at the single country level, helping to shift these shipments to rail by increasing the share of rail transport has become a key objective for national transport strategies within the region.
Given that rail is among the most carbon-efficient transport modes, it offers substantial decarbonisation options for various parts of the region's transport sector. On the freight side, a well-functioning rail network provides the backbone of several countries' logistics sectors. Especially in countries like Australia, New Zealand or Indonesia, freight accounts for the larger share of railway traffic volumes (source: UN ESCAP, 2021) given the long transport distances. In contrast, passenger rail is for example dominant in Singapore, South Korea and Thailand in terms of railway traffic volumes where it supports reduction of road traffic and pollution in dense urban areas.

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Moreover, with a view to non-urban passenger transport, rail could offer a low-carbon alternative to air-city connections.

Growing Demand for Rail Investments

In response to the growing rail transport demand, many countries in Asia Pacific have developed significant investment plans into mainline rail & public transport projects. Plans at the country level include the following non-exhaustive examples to illustrate the broader trend in the region:

- The New Zealand Rail Plan, which outlines the long-term vision and priorities for the country's rail network
- South Korea's Fourth National Railway Plan, which aims at around 100bn USD of rail investments
- The continuing implementation of Thailand's Transport Infrastructure Development Strategy (2015–2022), which contains different plans to guide the development of e.g. intercity rail network developments and improvement of urban public transport networks

Investments in New and Existing Rail Systems

The implementation of national transport strategies across the Asia Pacific region requires on the one hand investments in new rail infrastructure projects in order to expand the respective country's railway network and to increase connectivity. On the other hand, investments are needed to support the incremental renewal of existing systems.

New projects aim to foster the modal shift from road to rail but also the decarbonisation of the railway operation itself. In several countries of the region the rail electrification rate is still relatively low. Accordingly, new railway projects provide an opportunity for implementation to benefit from electrification's substantial emission reduction potential, especially in the area of long-distance passenger and freight transport. At the same time, investing in existing rail systems exemplarily by replacing older and less efficient rolling stock with modern and environmentally friendly technology is also of high importance to utilise available resources and to optimise the decarbonisation impact.

Increasing Importance of Funding Structures

Increasing the share of rail within the Asia Pacific transport sector is a capital-intense endeavour and requires substantial investments. This comes at a time when government budgets are constrained by the Covid-19 pandemic and various public sectors compete for budget funding priority. Globally, the pandemic has increased volatility in the markets and impaired growth with Asia Pacific being no different. This resulted in decreased economic activity and less cargo traffic on the freight side. Rail commute decreased while volatility in commuter numbers increased. The good news is that the rail sector has shown itself to be relatively stable with comparably strong crisis management. In this context, the current crisis has especially emphasised the stability of freight transport by rail as demand quickly recovered inter alia driven by the increase in e-commerce. At the same time, securing an adequate funding structure is key for project implementation and the careful selection of financing options becomes increasingly important. In addition to public funding, investors and financial institutions will play a central role, including KfW IPEX-Bank with a great deal of expertise in financing passenger and freight transport projects worldwide. The bank has been continually expanding its financing in the railway sector for years.

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