Session: Financing transport climate adaptation – Strategies that work

25 May 2023, 16:30-18:00 | Session outline

This session focused on strategies to make the transport sector more resilient to climate change impacts and options to finance these programmes. The panellists shared insights from the developing world, Brazil and Sweden, focusing on road networks and aviation. The experts agreed that programmes for low-carbon transport must not neglect investments in a more resilient transport system that complements emission-reduction measures.

Adaptation investments are indispensable. They protect transport systems against climate-change impacts that are no longer avoidable and tend to concentrate on developing countries. For example, road networks in coastal regions are vulnerable to sea-level rises and extreme weather events. Road upgrades reduce risks of infrastructure breakdowns that hit some countries especially hard. For example, a disaster damaging a road link could block a landlocked country's connection to international markets and increase food prices.

The World Bank helps client countries identify potential breakage points in their road systems, reviewing the technical standards of infrastructure components, and investing in maintenance to increase resilience. Transport infrastructure can last generations, and promoting climate adaptation during the planning and construction phases can reduce the costs of later repairs and upgrades. Sweden requires projects to anticipate climate-change impacts during the planning stage and promotes upgrades to legacy infrastructure.

Aviation has a long history of risk management. Airports' prevention strategies incorporate risks from extreme weather events and other threats, preparing them for crises when they are often the first gateway for evacuations and disaster relief.

Mobilising sufficient funds is a priority to enable more resilient transport networks. Many governments apply fuel taxation to finance infrastructure maintenance. However, these funds may struggle to keep up with growing investment needs, and a transition to electric vehicles could erode fuel taxation revenues. Private investments are essential for infrastructure financing, and private-public partnerships can facilitate it. The World Bank representative referred to the example of Uruguay, where road concessions were issued to attract funding from the finance market. Airport projects also increasingly rely on private investments.

The discussion touched on infrastructure and vehicle investments to reduce emissions, which are at the core of many low-carbon transport strategies. Panellists stressed that mitigation and adaptation are equally important policy objectives. Airports invest in reducing emissions from on-ground operations and refuelling infrastructure compatible with emerging fuel technologies, including hydrogen, to help airlines decarbonise.

Sweden invests in domestic charging infrastructure, promotes a pan-European charger rollout, and commercialised electric trucks. Brazil also walks the talk, and CNT shared insights from a private-public partnership to electrify bus fleets and a program that assists logistic operators in improving their environmental performance, for example, by deploying next-generation biofuels.