



# Urban Public Transportation Aiding Net-Zero Emission Target

## THEMATIC TRACK SUMMARY

Venue: Tamarind Hall, India Habitat Centre

Date: February 23, 2023

Time: 14:00 PM - 15:30 (IST)

#### **Suggested Citation**

World Sustainable Development Summit (2023), Urban Public Transportation Aiding Net-Zero Emission Target, Thematic Track Summary, (Rapporteurs: Anushree Harde and Kunal Kumar), New Delhi: The Energy and Resources Institute.

# **Actionable Messages**

**Message** I: Propagation of the use of technology as part of urban mobility scenario, bringing stakeholders together, users, and commuters with necessary modal options at their hand according to their preference are crucial considerations.

**Message 2**: Public transport is not growing due to a lack of cultural aspirations. Government reforms should be revisited and efforts to encourage public transport should be made that would ultimately help facilitate emission reductions.

Message 3: Efficient, reliable, and accessible public transport should be the goal and not be limited to urban areas.

**Message 4**: To urge people to use buses and make public transportation more reliable, it would require more than actionable agendas and the role of State Transmission Utilities (STUs) would play a crucial role.

**Message 5**: It is important to promulgate the idea of mobility as a service and technological intervention must be introduced in a manner where people have a choice. Multiple stakeholders should be brought to a common platform where gender and inclusivity are common themes of discussion. This can help achieve overall development in the transport sector.

### **Narrative**

The thematic track session titled, "Urban Public Transportation Aiding Net-Zero Emission Target" was conducted as part of the World Sustainable Development Summit (WSDS) - the annual flagship initiative of The Energy and Resources Institute (TERI). The aim of the session was to discuss actions that are essential to augment urban public transportation. In the thematic track, key issues were structured around experiences, challenges, and solutions from experts in the public transport sector, the role of active transportation and multi-modal integration was also discussed. It further focused on multi-modal integration across all public transit modes. The moderator for the session was **Prof. Geetam Tiwari, Professor and Head, TRIP-Centre, IIT-Delhi.** Discussions on various topics unfolded, which included: government mechanisms to support multi-modal integration for urban mobility, policy recommendations, and infrastructure developments to enhance last-mile connectivity and complement public transportation, finance-related challenges, and solutions for the provision of public transport, actions to be taken by local governments for mitigation of climate change and its impact on urban transport.

The session started with a context-setting presentation by Mr Sharif Qamar, Fellow & Area Convenor, TERI. He initiated the discussion by presenting the scenario of the time spent on roads due to traffic conditions in Indian cities, particularly Bengaluru and Pune. He mentioned the issue of air and noise pollution and its relation to the transport sector. He pointed out that the transport sector is the major contributor to air pollution apart from road dust and construction-related emissions, which have a negative impact on our health and well-being. He deliberated on private vehicles, especially two- and three-wheelers, contributing majorly to pollution, (both air and noise), and congestion on the roads in comparison to public transport. He highlighted that the truck and HDV/LDV sectors contribute immensely to fuel consumption. He further remarked, there has been deterioration in terms of public transport availability and passenger carrying capacity. In terms of the metro, there has been a steep surge in availability in different cities with 18 cities having operational metro systems in the country. He mentioned that there have been various challenges to achieve efficient public transport, such as gaining multiplicity of transport bodies at the state level, no multi-modal integration, decrease in fleet strength of public buses, low fleet utilization ridership, poor financial performance, etc. He concluded the presentation by putting forth discussion points for the session to ponder over.

Following the context-setting presentation, **Mr Shri Prakash**, **Distinguished Fellow**, **TERI**, delivered the welcome address. He started by pointing out the inadequate bus scenario in various cities. He highlighted that the lack of buses in the cities is primarily due to the poor financial condition of the transport corporations and the state governments not being sound. He raised a pertinent point that during the Jawaharlal Nehru National Urban Renewal Mission (JNNURM), the number of buses increased but in the present scenario, the numbers seem to be stagnant. He highlighted that shuttles can be a boon for people commuting long distances, and in fact, buses and shuttles should be included to carry people from one point to another. He remarked, there is still a major section of marginalised communities that cannot afford fares in public transport. Though there are several government interventions, such as free travel for women, bus fares should remain within the limit so that everyone is able to avail those services, and if this is in place, it can be more beneficial than metro systems. He further deliberated that even metros are inaccessible to a major section of population and this has caused a rise in the number of two-wheelers. Public transportation should be affordable and accessible to all.

Following Mr Prakash's welcome address, **Prof. Geetam Tiwari, Professor & Head, TRIP-Centre, Indian Institute of Technology-Delhi**, moderator of the session steered the discussion by pointing out that about one-third of population lives in urban areas and within that, 30-35% reside in very small cities which do not have an organized public transportation system. Even a 12-metre bus is not feasible on roads,

with 90% roads being collector roads. She highlighted that 2-wheelers have seen an exponential crisis. The moment the bus fleet goes or service quality comes down, there is a modal shift, which is a cause of concern. She further mentioned that the shift from CNG to electric is good to tackle local air pollution. She emphasized that net zero is all about having modal shifts, but this has been increasing in a negative direction with a shift more towards two-wheelers. In conclusion, she opined that to urge people to use buses and make public transportation more reliable, it would require more than actionable agendas and the role of State Transmission Utilities (STUs) would be crucial.

Ms Nitika Krishan, Key Expert, EU Funded Project highlighted the aspect of propagation of use of technology as part of urban mobility scenario. It is essential to bring stakeholders together, users, and commuters with necessary modal options. It is important to promulgate the idea of mobility as a service and technological intervention must be introduced in a manner where people have a choice. Multiple stakeholders should be brought to a common platform where gender and inclusivity are common themes of discussion. This can help toward an overall development in the transport sector while meeting emission targets, she added. She also emphasized that to bring in last-mile connectivity and give citizens a say and further help them in generating livelihoods, necessary actions must be taken, primarily focused on digitization through apps and other tools. Dynamic pricing, necessary trip management, decisions-making can reduce emissions in a sustainable manner.

Mr Akash Passey, President (Bus Division and E-Mobility), Volvo Eicher Commercial Vehicles initiated the conversation on last-mile connectivity and how it is failing in several cities. He pointed out that India is lowest in the world in terms of number of buses available for people. Rural areas do not have facilities as compared to urban areas. Therefore, discussions on public transportation must concentrate on both urban and rural areas. He emphasized the increased commute time, which is alarming. He further pointed out, metro projects are being taken up on a large scale, but does the same happen for buses? He explained the tax paying difference between buying a private vehicle and public transport. He opined that more the aggregate, the more taxes one has to pay. Cities are already congested, and we must invest our time and energy on better decision-making, he said.

Mr T Surya Kiran, Executive Director, Association of State Road Transport Undertakings proceeded by saying that public transport all over the country should be the goal and the discussion should not be limited to urban areas only. He mentioned that the reason public transport is not growing is due to the lack of cultural aspirations and that government reforms should be revisited. He deliberated that efforts to encourage public transport should be made to help facilitate emissions reduction. The taxation in fuel prices of public transport, buses owned by different agencies, resulting in a lack of coordination has led to deterioration of public transport. Occupancy during peak hours is such that even a common citizen cannot get into a bus. In such circumstances, if people are unable to access a bus, it becomes a cause of concern. Systems must change to bring in a shift to public transport, and thereafter, the larger objective of emissions reduction must be taken into consideration, he said.

Ms Harpreet Kaur Bajaj, Principal Transport Economist, Ramboll, the final panelist brought a different aspect to the discussion and highlighted that transport and mobility are not gender neutral. She pointed out that when transportation is planned, gender is not taken into account, in terms of how men travel versus women. Since women use public transport more than men, it should cater to the specific needs of women, she added. It is a matter of concern that women are reluctant to use public transportation due to issues related to safety and reliability. Provision of better services would lead to women feeling safer and secure to use public transportation. She concluded by highlighting the case of the newly built city, Nordhavn (The North Harbour) in Copenhagen, where people do not use cars because

these could be useful toward the achieving the target of net zero emissions.	

the '5-minute concept' of everything within reach is followed. These learnings should be taken forward as

# Making Words Count @WSDS 2023

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66	Without public transport it is very difficult to control the emissions.	
	The biggest surprise of all, the government increased bulk diesel price last year, which is costlier	
	than CNG now, then the question is if the public transport buses survive?	
	Public transport has to start getting importance at all the levels.	
	AA. T.C Vinne	
	Mr T Surya Kiran Executive Director, Association of State Road Transport Undertakings	
	Unfortunately, we also seem to be the lowest in the world when it comes to buses per thousand	
66	persons.	
	The more aggregates you have, the more you will have to pay.	
	Get more standardization in the industry when it comes to bus design.	
	Mr Akash Passey	
	President (Bus Division and E-Mobility), Volvo Eicher Commercial Vehicles	
	Linking public transport with eveling and walking infrastructure should come in place	
66	Linking public transport with cycling and walking initiastructure should come in place.	
	Transport and mobility are not gender neutral.	
	Ms. Harþreet Kaur Bajaj Principal Transport Economist, Ramboll	
	Frincipal Transport Economist, Kambon	
66	Can mobility as a service be introduced as a technological intervention where we could have choice	
6.6	and equal opportunity	
	We need to bring the last mile service providers in the form of cooperatives or any other aspect by	
	which they could have a seat in the system.  Ms Nitika Krishan	
	Key Expert, EU Funded Project	
44	Large section of marginalized people is still not able to pay fees for the public transport which is	
	already very low.	
	DDT	
	BRT system is better choice, but the number of buses is still not increasing.	
	Mr Shri Prakash	
	Distinguished Fellow, TERI	