Event Report

Exploring the Transition to Electric Mobility in Jaipur City

Wednesday, August 28, 2019

Hotel Jai Mahal Palace, Jaipur

1. Introduction

1.1 CUTS International, along with Bask Research Foundation and World Resources Institute (WRI India), organized a one day roundtable on 'Exploring the Transition to Electric Mobility in Jaipur City' on 28th August, 2019 in Jaipur. This is the second event in continuation with a previous roundtable organized on 25th May, 2019. The initiative is supported by Friedrich Ebert Stiftung India (FES India) as a part of our Grow-GET (Green Growth and Energy Transformation) project. The initiative is aimed at developing frameworks for a "low carbon mobility plan" and an "EV Integration plan" for Jaipur city.

1.2 The previous roundtable was focused on building a narrative amongst the diverse group of stakeholders from national, state and city level jurisdictions. Healthy private sector participation from Ola Mobility Institute and Mahindra & Mahindra enriched the discourse. The second roundtable was more inclined towards assessing the political-economy of electric mobility and integrating the technical, commercial and infrastructural aspects of it with the larger consumer aspirations and perceptions. The significance of this event was in presenting our findings after the first event which included findings from secondary literature analysis as well as detailed field inquiries.

1.3 The event was chaired by Additional Chief Secretary (Transport), Government of Rajasthan which proved to be beneficial for all in terms of gaining the traction of the Government in our endeavors. He highlighted the case for brainstorming on solutions to make EV integration feasible and acceptable by all. This would require deliberations on ways to break the vicious cycle of economic-social-political considerations around electric vehicles. To work in this direction, CUTS International was invited to convene a core working group which would provide ready-to-use research inputs to the GoR. Other participants included representation from Civil Society Organisations, consumer representatives, private automobile players, researchers and various city & state level state authorities.

1.4 These remarks paved way for multiple presentations followed by detailed discussions on the various facets of electric mobility. These include the needs, goals and integration strategy of electric vehicles in the larger mobility framework, the stakeholder aspirations and perceptions (including consumer perception) & financing strategy for the same. Some of the key issues discussed are explained in the later sections.

2. Low Carbon Mobility: Needs, Goals and Integration Strategy

2.1 System's analysis of state EV policies & other country's policies highlighted multiple goals that the main goals of e-mobility include:

- Strengthening the balance of payments by reduced oil imports.
- Energy security
- Reduced air pollution
- Sustainable transport ecosystem

2.2 Presentation was made on impact assessment of electric vehicles (Jaipur Specific) on air quality, electricity tariff, discom's finances and consumers. This curated the discussion towards discussing the goals and objectives of electrification of the mobility landscape as well as the potential costs and benefits to various stakeholders in that process.

2.3 Goals of sustainable mobility discussed: A mobility plan therefore builds on the involvement of all concerned stakeholders through participatory, transparent and accountable decision-making. Taking due consideration of integrating various factors, a coordinated effort should be made into the development of a Sustainable Urban Mobility Plan (SUMP). Following minimum goals are proposed for Jaipur city.

2.3.1 Accessibility and Connectivity for all

Mobility ecosystem by definition is meant to provide connectivity in an efficient manner. Complexity of mobility needs demand focus on mid mile and last mile connectivity to comprehensively meet mobility needs of people and businesses. But accessibility lays out a paradigm for affordability, comfort, efficiency, safety and above all social equity. The mobility ecosystem needs to serve people from all walks of life, and needs to be conscious of needs of underserved, specially-abled, all genders and all age groups.

2.3.2 Zero Accidents

Zero accident is a philosophy that aims for road safety that will eventually work towards zero loss of life, injury and damage to property. It places extremely high value to all forms of life forms, human and animal. The vision shall include both survivability after accident and avoiding accidents in the first place.

2.3.3 Convergence with Urban Planning

Traditional urban focused disciplines such as urban design and planning do not have the tools and scope to accommodate multi sectorial planning such as solid waste management or transport planning. Converging methodologies and urban design tools must have a co-modal approach to urban mobility wherein two overlapping current planning issues of expanding capacity to handle private traffic and extending upgrading transit mass system are integrated together under a unified policy vision.

With various initiatives undertaken in the urban development of a city and to cater to the growing mobility demands of the users, it is imperative to bring a policy convergence that leads to a clear, consensus based sustainable urban plan. Further, to eliminate future 'retrofitting', one

must view transport/mobility planning as an integral part of urban plans wherein all changes in land use interventions are connected and coordinated with urban spatial expansion and development.

2.3.4 Financial viability and sustainability

For any mobility system to continue to serve its intended purpose, financial viability is central to its sustainability. While the state may choose to subsidise or cross- subsidise, same shall be done after carefully mapping and budgeting resources; for the purpose of social benefit and create a positive bias.

2.3.5 Low carbon and environment friendly

Mobility system is amongst the most significant contributors to emissions and air pollution. Moreover, development of mobility infrastructure can have a significant impact on natural ecosystem and the construction process itself typically has a high carbon and emission footprint. Hence, it is critical that emission limits for CO2, SOX, NOX, particulates and other pollutants are identified, regulated and controlled, which account both vehicular movements and supporting infrastructure development.

3. Stakeholder Participation and Support

3.1 Demand and Supply market modifications are core strategies that can help improve a city's approach towards sustainable mobility. Actionable measures can be taken if the supply of transport is tweaked, thereby modifying behaviors (infrastructure investment). While we can reduce supply by limiting usage of vehicles that have a comparative lower sustainability (as defined by concerned authorities). Alternatively, actionable measures can also be taken if the demand is taken care of, which invariably involves congestion control considering most people move around the same areas within a city perimeter.

3.2 There is enough evidence that suggests that many interventions and plans for addressing mobility challenges in the past have often failed, either because of resistance by locals or because of mismatch between design and behavior patterns of intended target populations. Transport infrastructure and mobility plans often impact established livelihoods, social interactions or religious practices; wherein even well intended interventions fail to meet their objectives.

4. Financing of Low Carbon Mobility

4.1 There is a need to assess the ways, means and source of financing available at the state's disposal to meet the low carbon mobility needs. New ideas like green bonds and municipal bonds, manufacturing clusters (for OEMs and EV manufacturers). Climate Bonds is working with CEEW (Centre for Environment, Energy and Water) to identify ways to break the financing conundrum. Also, state EV policies that have offered incentives and subsidies for electric vehicles (to both producers and consumers) should be assessed for their cost-effectiveness and viability.

4.2 Transport subsidies are a common tool used to make public transportation cheaper for the masses. Operating Costs of buses by the state and city authorities is subsidized in different areas,

but transportation subsidy differs largely from location to location (Jaipur vs Ahmedabad) and also from means to means (City bus vs City metro). There is need to address this, using evidence-based research.

5. Way Forward

After vetting the initial findings and analysis in the roundtable conference, the project team aims to draft the final framework of the low carbon mobility framework. The comments and feedback received in terms of designing and disseminating the framework would be used to better influence the change makers towards working for a low carbon mobility regime in Jaipur.

Participants

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1.	A.K. Bohra	Former Managing Director Jaipur Vidyut Vitran Nigam Limited Jaipur
2.	A.K. Gupta	Jaipur Vidyut Vitran Nigam Limited Jaipur
3.	Alok Thakur	Mahindra Lifespaces (MLDL) Jaipur
4.	Anmol Soni	Bask Research Foundation Jaipur
5.	Anshuman Gothwal	Bask Research Foundation Jaipur
6.	Arun Machaya	Jaipur Traffic Police Jaipur
7.	Balwant Tak	Maheswari Bus Services (Intra-City Operatory) Jaipur
8.	Bhuvnesh Mathur	Rajasthan Pollution Control Board Jaipur
9.	Harsimran Kaur	Council on Energy, Environment and Water New Delhi
10.	Himanshu Khurana	Rajasthan Electricity Regulatory Commission Jaipur

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11.	Kailash Verma	Jaipur City Transport Services Limited Jaipur
12.	Kuldeep Singh	Jaipur Tipahiya Chalak Union Limited Jaipur
13.	Lalit Sharma	Rajasthan State Road Transport Corporation Jaipur
14.	M.L. Khatri	Rajasthan State Road Transport Corporation Jaipur
15.	Manish Pareek	Former Deputy Mayor, Jaipur Municipal Corporation Jaipur
16.	N.C. Mathur	Jaipur Development Authority Jaipur
17.	Narender Singh Saini	Ashok Leyland Jaipur
18.	Neha Kumar	Climate Bonds New Delhi
19.	Pankaj Kapoor	Rajasthan State Road Transport Corporation
20.	R.K. Gupta	Rajasthan Electronics & Instruments Limited Jaipur
21.	Rahul Prakash	Jaipur Traffic Police Jaipur

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22.	Rajeeva Swarup	Transport Department, Govt. of Rajasthan Jaipur
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25.	Sahil Jain	Start-up Oasis Jaipur
26.	Shuchi Sharma	Rajasthan State Road Transport Corporation
27.	Shyam Lal Goojar	Jaipur City Transport Services Limited Jaipur
28.	Simran Grover	Bask Research Foundation Jaipur
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32.	Vikash Saini	Malaviya National Institute of Technology Jaipur
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38.	Kapil Gupta	CUTS International
39.	Madhu Sudan Sharma	CUTS International
40.	Nimra Khan	CUTS International
41.	Sarthak Shukla	CUTS International