e-Bus goals call for an urban-transport reset

The Prime Minister e-Bus Sewa Scheme which aims to put 10,000 electric buses on city routes across the country will help reduce greenhouse gas emissions, a key goal set by Prime Minister (PM) Narendra Modi at the 2021 Glasgow climate summit. The Centre wants to replace 800,000 diesel buses — a third of the number running the country — in the next eight-10 years. There were 6,745 registered electric buses across the country on January 11, 2024. Any change in the mode of urban transport in India is a huge task and needs a clear plan. The following approaches need to be kept in mind.

First, greater efficiency in city bus services is possible if it is handed over to private operators. This will curtail government spending on bus services and cut the losses suffered by the state-run transport corporations.

Second, a structured bus service must be created in smaller cities that lack one today.

Third, the number of electric vehicles in the country must be increased, and bus services in urban and semi-urban areas must shift to electric buses entirely.

Fourth, mobility in cities must be made more competitive, and be better placed to take the national economy to $30-trillion by 2047. Providing an efficient city bus service is an important part of the strategy to make cities catalysts of economic growth.

Fifth, the switch to electricity-run city transport services would help meet the climate goals promised by the PM at the Glasgow climate summit.

Sixth, costs of urban transport systems can be reduced by improving the economies of scale by procuring electric buses from manufacturers in large numbers.

Each of these approaches poses significant challenges. First, state transport authorities must shift from being operators of buses to being regulators. It is not easy because the change requires a different set of skills. It would make a large segment of the staff of the road transport corporation redundant; a policy re-skill them and redeploy them would be needed. In some cases, a generous voluntary retirement package would be necessary. This is a politically sensitive issue.

Second, cities without local-government-run bus services and, thereby, no transport authority, will need local transport authorities to play the role of the regulator.

Third, private bus operators running unstructured bus services in smaller cities and between cities need to create structured service. This needs new skills. Programmes to build this capacity must be designed.

Fourth, the operation of electric buses is quite different from running diesel-run buses because the charging time of the former is long, and mid-day recharging has to be planned meticulously. The refill time of diesel buses was short.

Fifth, if the electric bus operations are to be run efficiently, it will be necessary to create an information-technology (IT)-based monitoring system. Two levels of information flow will be needed—one at the operational level, and the second at the management level. Operational level information must be transmitted to the management level to keep the operations smooth. The IT-based monitoring system with standard protocols for data collection and management should be in place across the country.

Sixth, the electricity load must be managed well. The recharging process should not result in outages due to grid overload because that would lead to a breakdown of the system. The grid should be equipped to withstand the overload.

Clearly, aggressive capacity building programmes will be needed to equip private-sector operators as well as public-sector regulators. While the private operators will need to better understand complex skills like bus and crew scheduling, public-sector agencies (regulators) will need to better understand the complexities of demand estimation, route and network design, procurement, and monitoring. The staff of the state transport corporations who had been offered voluntary retirement packages should be enabled in forming cooperatives and bidding for operating bus routes. The government will do well to start systematically working on each of these.

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