

## Role of Electric Mobility in Energy Transition

### Keynote Session D II

**Date: Saturday, Dec 18, 2021**

**Time: 11:40 AM-12:35 PM**

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#### **Abstract:**

To hold global average temperature increase to 1.5°C, global CO<sub>2</sub> emissions need to reach net-zero by 2050, with rapid decarbonisation in all sectors. Global transport emissions have continued to steadily increase, with transport emissions accounting for about 24% of direct CO<sub>2</sub> emissions from fuel combustion. In India, transport sector accounts for about 14% of our energy related CO<sub>2</sub> emissions and road transport accounts for about 90% of transport sector's energy consumption. The energy and carbon intensive sectors include manufacturing, construction and electricity generation. Electrification of transportation provides us an opportunity to decarbonise transport sector and achieve zero emissions by 2050 in this area. Our rail systems are electrified to a large extent and there is an urgent need to phase out remaining diesel locos. Interestingly, electrification of road transport provides an opportunity to reduce emissions by 50% from BAU scenario by 2050. Light duty vehicles (cars, 3W etc) and 2 W constitute over 60% of vehicles on road and are the major source of emissions (inefficient 2 stroke and 4 stroke ICE). In Delhi scenario is no different. Therefore Delhi EV Policy notified in 2020 provide for incentives including purchase and scrapping incentives, interest subvention schemes, waiver of road taxes and registration fees. The focus is on 2W / 3W / 4W (both freight and passenger) as well as e-Buses. It also provides subsidy for AC chargers (first 30,000 AC charging points). Delhi Discoms have launched first of its kind of the empanelment of partners for providing single window EV charging as a service for its consumers in Delhi. (bundled with subsidized EV tariff as per Regulatory Commission). Times ahead are exciting and the race to zero emissions is getting hotter by day. We must seize this electrification opportunity while aggressively pursuing the strategy to green our power portfolio enabling complete decarbonisation of the sector.