Sustainable Transport in Emerging Economies: Challenges and Options

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Conserving Now, Preserving Future
Key Challenges

- Transport sector is globally the second largest energy consuming sector after industry; it will continue to be so in future

Source – EIA (2016)
Key Challenges (cont.)

- Transport energy demand growth will occur almost entirely in non-OECD countries (including India) as transport demand will remain roughly flat in OECD regions.

*Source – EIA (2016)*
Key Challenges (cont.)

- Transport sectors’ GHG emissions have increased at a faster rate than any other energy using sector.

- In BAU scenario, CO2 emissions from transport sector will increase and share of non-OECD countries (including India) will increase at a faster rate.

Key Challenges (cont.)

• Heavy dependence on petroleum products

• 96% of the total energy used in transport sector globally comes from petroleum;

• Transport sector will be responsible for 57% of the world’s liquid consumption in 2040

Source – IPCC (2014); EIA (2016)
Key Challenges (cont.)

- Transport sector trends fueled by explosive growth in personal motor vehicles
- China and India to experience much faster annual growth rates of more than 7 or 8% per year

*Source – Sperling and Gordon (2008)*
Suggested Strategies for Low Carbon Transport Growth

- An integrated approach towards planning transport infrastructure; Encourage an optimal mix of rail, water and road transport for inter-city movement

- Diversify the fuel basket of transport sector – encouraging use of fuels other than petrol and diesel; Promote electricity as a transport fuel of future, keeping in view move towards renewables

- Give adequate priorities to energy efficient and non-motorized transport; Establish protocol for measuring and monitoring progress of energy efficiency measures

- Arrest the fast pace of motorization (ownership and utilization of vehicles); increase the share of public transport and non-motorized modes in urban areas

- Establish appropriate institutional, regulatory and fiscal frameworks to implement strategies
Thank you for your attention..