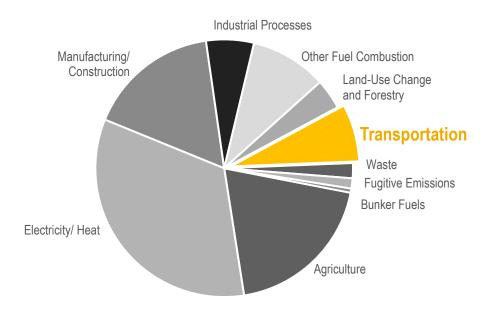


Transport accounts for 15% of global emissions

Source: WRI Climate Watch, India 2nd Biennial Update Report







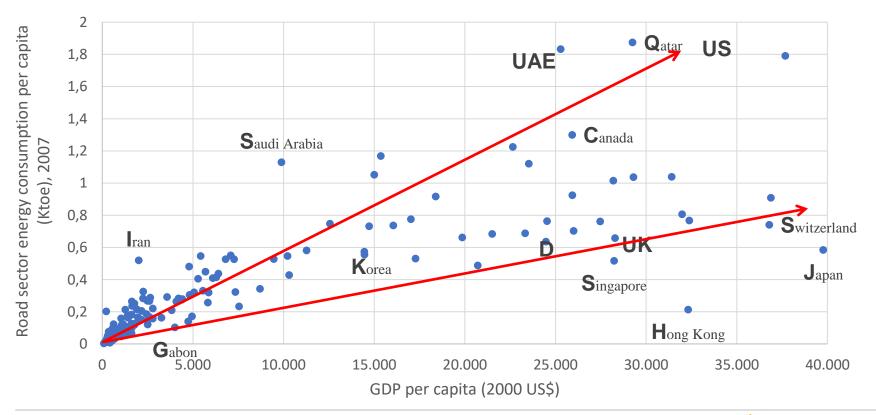
Only 7.5% of emissions in India

But expected to grow faster than other sectors' emissions

Source: WRI Climate Watch, India 2nd Biennial Update Report



As national income grows, transport emissions become more important, but there are alternative models



90% of India's transport emissions are from road vehicles

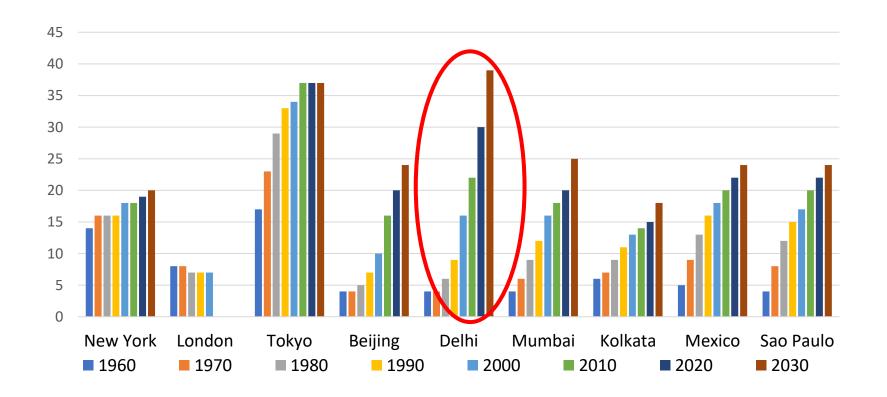


Emissions from urban transport growing rapidly

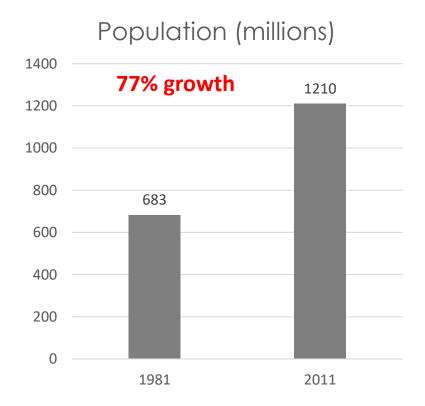
4 – 6% growth per year in some large cities – World Bank study

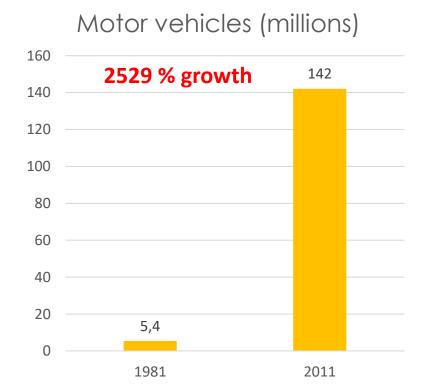


The world's biggest cities will be in India

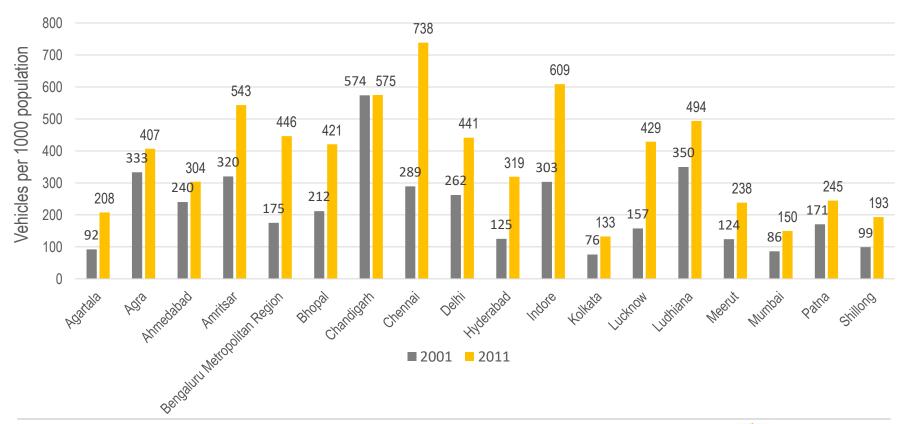


Galloping motor vehicle growth

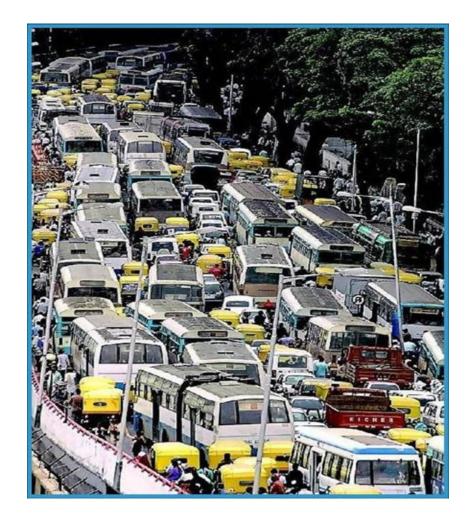


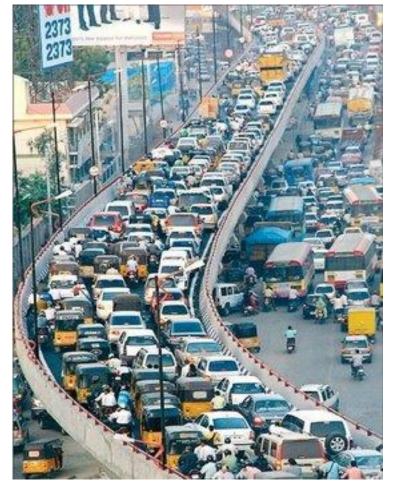


Vehicle ownership increasing in all cities



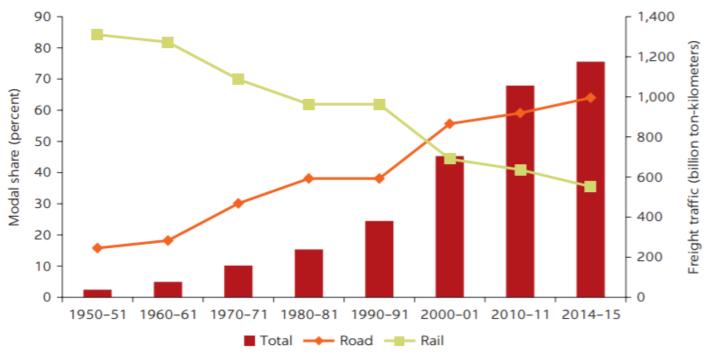






Freight traffic in India is growing but modal share of rail has declined

Freight traffic and rail and road modal shares in India, 1950-2015



Inland waterways

NATIONAL WATERWAY 1 River Ganga Length (KM): 1,620 Declared (Year): 1986 Brahmaputra River Ganga River NW 2 NW1 Sunderbans Brahmani River NW River Brahmaputra East Coast Canal Length (KM): 891 Declared (Year): 1988 Eluru Canal -Kakinada Canal √rishna River NW4

Commamuru Canal

Buckingham Canal

Champakkara Canal

Udyogamandal Canal

West Coast Canal

NATIONAL WATERWAY 4

Kakinada-Puducherry Stretch of Canals

Length (KM): 1,078 Declared (Year): 2008

NATIONAL WATERWAY 3

West Coast Canal

Length (KM): 205 Declared (Year): 1993

NATIONAL WATERWAY 5

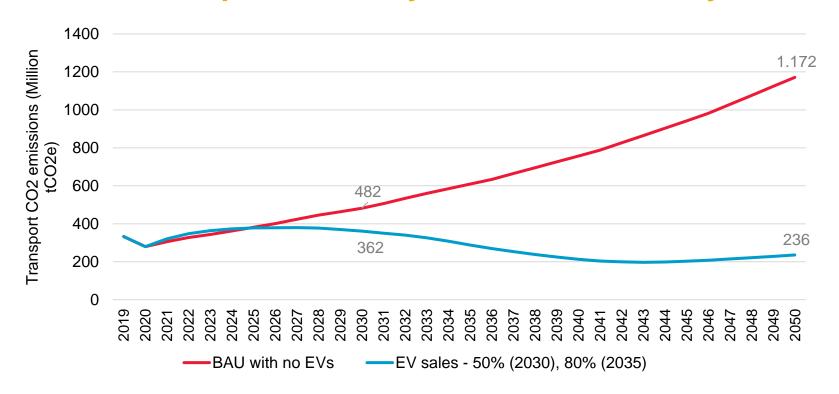
NATIONAL WATERWAY 2

East Coast Canal

Length (KM): 1,078 Declared (Year): 2008



EV sales mandate can reduce cumulative CO2 emissions from the transport sector by 55% in the next 30 years





Future of Motorized Mobility

Shared vehicles

Electric Vehicles

Connected systems

We have to leverage these



Mobility as a Service is a rapidly emerging concept

- Allows people to book a trip, using multiple modes, through a single App
- This can obviate the need for people own a personal motor vehicle

4 – pronged strategy



Clean Fuels

Electric vehicles
Hydrogen
vehicles



Modal Shift

Increasing the share of cleaner modes – rail, waterways, shipping, walking, cycling



Integrate

Interconnected modes

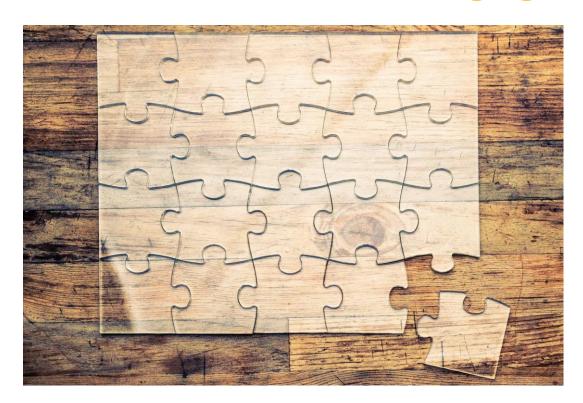
– not standalone



Optimize

An empty seat in a moving vehicle is a wasted resource - Reduce redundancy

Multi-Stakeholder Engagement



All this can happen only when multiple stakeholders come together towards a common goal

Forum for Decarbonizing Transport









The Forum for Decarbonizing Transport is a platform to bring diverse stakeholders together to advance this agenda

















Agenda Conveying Forum for Decarbonising Transport Action Research