

India



India has experienced a large increase in transport activity in line with the country's economic growth. Passenger travel more than doubled and car ownership levels increased by 50% between 2005 and 2015. Transport is the country's third-largest CO₂-emitting sector, and the most dominant mode is road transport.

India has set up significant frameworks to improve urban mobility and accelerate the uptake of electrified transport, including electric-powered rickshaws. The railway sector has experienced a strong increase in electrification, and domestic freight transport is shifting towards rail.

Income group: Middle-income

Human Development Index: 0.65

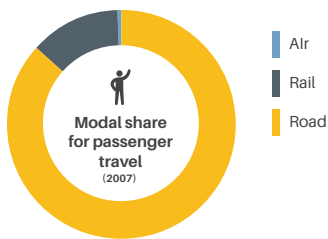
	Population size (2020)	Urban population share (2020)	GDP per capita (2019)
Total	1380 million	35%	2 169.1
Growth <small>(2010 to 2020)</small>	11.8%	26.9%	76.9%

Mobility Demand Trends

Passenger travel activity

20 879 333

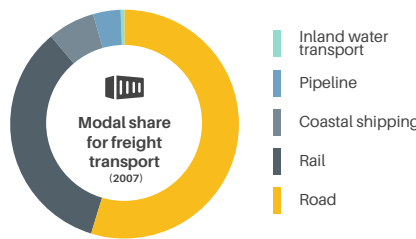
million passenger-km in 2017
+ 122% (2010 to 2017)



Freight transport activity

3 094 502

million ton-km in 2017
+ 51% (2010 to 2017)



Fuel consumption (2018)

103 767

thousand tonnes of oil equivalent
+60% (2010 to 2018)

Average light duty fuel economy consumption (2017)
5.6 Lge/100 km (WLTP)



Car ownership growth (2005 to 2015)

22 vehicles per 1,000 people



+51%

Vehicle sales (2019)

Passenger (Growth 2010 to 2019)
2 962 052 **-12.8%**

Commercial
854 839 **-15%**

Diesel
US cents per litre (2018)

100

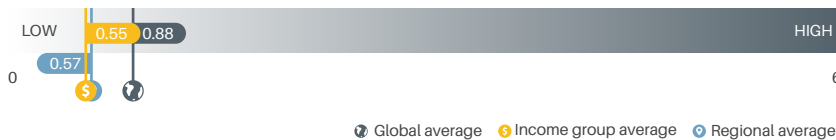
Super gasoline
US cents per litre (2018)

107

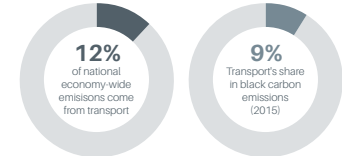
Transport Emission Trends

Transport CO₂ emissions (2019)
306.8 million tonnes

Per capita transport CO₂ emissions (2019)
0.2 tonnes

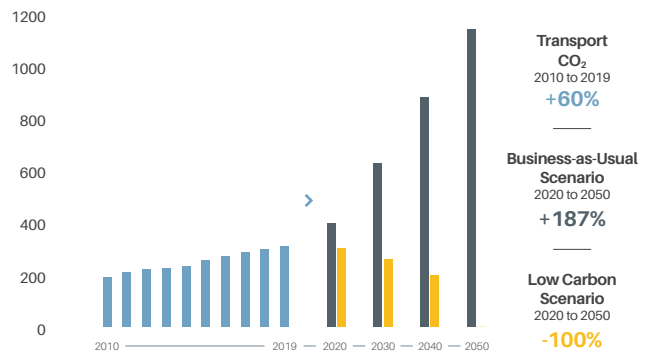


Third-largest CO₂ producing sector in the country



Low Carbon Transport Pathways

Transport strategy identifies climate change	✓
Long-term strategy submitted to UNFCCC	Not submitted
NDC submitted	1st NDC
NDC highlights transport for GHG mitigation	✓
Transport mitigation targets in NDC	✗
Other non-emission related transport targets in NDC	Not available
Voluntary National Review highlights transport	✓
2020 VNR with transport linkages to SDG 5, SDG 11 and SDG 13	



Transport measures in NDC

- | | | | |
|-------------------|--------------------------------|-------------------------------|--|
| Mitigation | • Expansion of infrastructure | • Biofuels | • Use of renewable energy |
| | • General shipping improvement | • Emission standards | • Expansion of infrastructure |
| | • Electric vehicles | • Fossil fuel subsidy removal | • Public transport integration and expansion |
| | | | • Not available |
| | | | |

Adaptation

Sustainable Mobility Planning & Transport Demand Management

National Urban Mobility Framework (2020)	✓
Targets	<ul style="list-style-type: none"> • People-centered urban development • Low-carbon transport growth
Sustainable Urban Mobility Plans (2020)	✓
Low Emission Zones (2020)	1 city

Walking and Cycling

National walking and cycling strategies (2020)	Walking and cycling combined in Guidance Document for NMT-Planning
Targets	<ul style="list-style-type: none"> • No specific modal share targets
Cycling infrastructure in capital (2020)	No separated bikelanes currently, network of 200 km planned

Urban Passenger and Freight Transport

Bus rapid transit (2020)	228 km in 9 cities
Urban rail (LRT, metro, tram) (2020)	485 km in 11 cities
Bus rapid transit daily passenger volume (2020)	497 411
Rapid Transit to Resident Ratio (2019)	4.4

Passenger and Freight Railways

Rail network (2019)	68155 km
High-speed rail (2018)	Not available
High-speed rail travel activity (2018)	Not available
National plans for passenger and freight rail expansion (2020)	✓
Targets	<ul style="list-style-type: none"> • Increase the rail modal share for freight from 27% to 45% by 2030 and achieve net-zero carbon emissions by 2030
Rail travel activity (2017)	1 161 333 million passenger-km
Rail freight activity (2017)	654 285 million ton-km

Shared Mobility Services

Bike-sharing systems (2020)	30 systems
Electric scooter services (2020)	1 operator in 6 cities
Carsharing services (2021)	58 services
National legal frameworks for shared mobility (2020)	Not available
Autonomous vehicles in operation or in preparation (2020)	Not available
Autonomous vehicles strategies (2020)	Not available

Fuel Economy

Emission standards for LDVs (2018)	Euro 3
CO ₂ emissions performance for LDVs (2017)	135 gCO ₂ /km
Emission standards for HDVs (2018)	Euro IV
Targeted CO ₂ emissions performance	113 gCO ₂ /km by 2022

Electric Mobility

Electric vehicles (2019)	11 200
Market share of electric vehicles (2019)	0.1%
No. of cities with electric buses (2019)	12
ICE phase-out targets	✗

Renewable Energy

Biofuel blend mandate (2019)	20% Biodiesel, 10% Ethanol
Renewable energy (biofuels and electricity) share in transport (2018)	2.4%
Targeted % of renewable energy	Not available

Aviation

Air passengers carried (2019)	167.5 million people
Air freight activity (2019)	1938.2 million ton-km
Carbon-accredited airports (2020)	8 airports
<i>of which carbon neutral</i>	3 airports

Shipping

Liner shipping connectivity index (2019)	55.5
Container port traffic (2019)	17 053 200 TEU

COVID-19

Traditional transport infrastructure investment	Not available
Clean transport infrastructure investment	Not available

Examples	<ul style="list-style-type: none"> • Investments in electric buses and charging stations
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This fact sheet is part of the SLOCAT Transport and Climate Change Global Status Report - 2nd edition.

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List of acronyms

GDP	Gross-domestic product
HDV	Heavy-duty vehicle
ICE	Internal combustion engine
LDV	Light-duty vehicle
LRT	Light-rail transit
NDC	Nationally determined contribution
TEU	Twenty-foot Equivalent Unit
UNFCCC	United Nations Framework Convention on Climate Change
VNR	Voluntary national review of the Sustainable Development Goals
WLTP	Worldwide harmonised light vehicles test procedure