

, Tel Aviv, Israel 2018 Smart Mobility Summit
29.10.2018

Mobility Revolution in India ? – Inclusive, Sustainable and Transformational

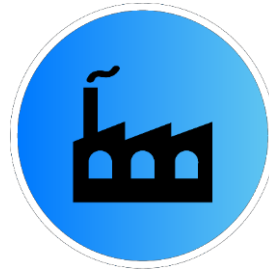
Guenter Butschek, CEO & MD, Tata Motors

Indian economy is well placed to become one of the largest automotive hubs



Economy

7.4% GDP Growth rate ~
Fastest growing economy in the world
(IMF report) 18 FY)
Rising per capita income



Auto Industry

of GDP 7.1% Auto contributing
of manufacturing GDP 49%
million people employed 29
people 1000 Cars/21 Huge latent demand with



Competition

Price sensitive market
Level playing field with global players
Disruption by new market entrants

Growth story well supported by Government Initiatives



Make In India

Foster Innovation
Facilitate Investment
Enhance Skill Development
Build Best in Class Manufacturing
FDI 100%



FAME Incentives

Faster Adoption & Manufacturing
of Electric Vehicles in India

Subsidies, tax heavens for
promoting EVs



SMART Cities

Comprehensive development
of institutional, physical,
social and economic
cities 100 infrastructure of



Automotive Mission

years 5 growth in next 10-15%

2026 By
rd largest in world 3
million passenger vehicles 9.4
billion in annual revenue 300 US\$
million additional jobs 65

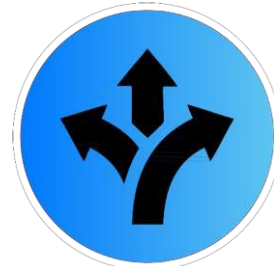
However, there are some fundamental challenges



Safety →



Environment →



Regulatory Framework →



Infrastructure →

Road Accidents
minutes 4 fatality every 1

(?) Reinforcement by law

(!) Behavioral & Discipline issue

Traffic congestion
(Km/hr 20 average speed)

Auto contribution to
15% Pollution ~

most polluted 15 out of 14
cities globally are in India
94 level > 2.5 (PM
(micrograms/cubic m

L 2 Higher cess on Diesel engine >
, 2020 transition coming in 6 BS
to catch up with RoW

nd largest road network, but 2
low quality

To be solved by leapfrogging & leveraging the CESS ecosystem



Conected



Electric



Shared



Safe



Connected Vehicle Platform,
advanced electronics,
comfort & convenience

Lead in EVs,
- alternative fuels
Invest in tech & powertrain

Ride sharing, freight
aggregation, BRTS

Solve India's problems at
root, adapting global NCAP
measures

Evoking a strong focus on IST approach to Mobility



Inclusive

- All ecosystem partners' alignment to enjoy best value (Govt., OEMs, Suppliers, Customers, drivers, community)
- Joint platform for policy making
- Implementation enabled by Govt/PPP



Sustainable

- Better fuel economy, light weighting
- Improving efficiencies in value chain
- Alternate fuels, xEV solutions



Transformational

- Diffusion of advanced technologies
- Crashing timelines
- Use of Digital, Big Data
- New business models, revenue pools

We are actively looking for partnerships to lead the mobility future

Vision

We innovate mobility solutions with passion to enhance quality of life

TATA MOTORS
Connecting Aspirations



Israel's USP



A hot spot of mobility disruption, innovative technologies

Great Opportunity to learn and collaborate in the smart mobility movement

Good match to Indian auto industry's 'need of the hour'