

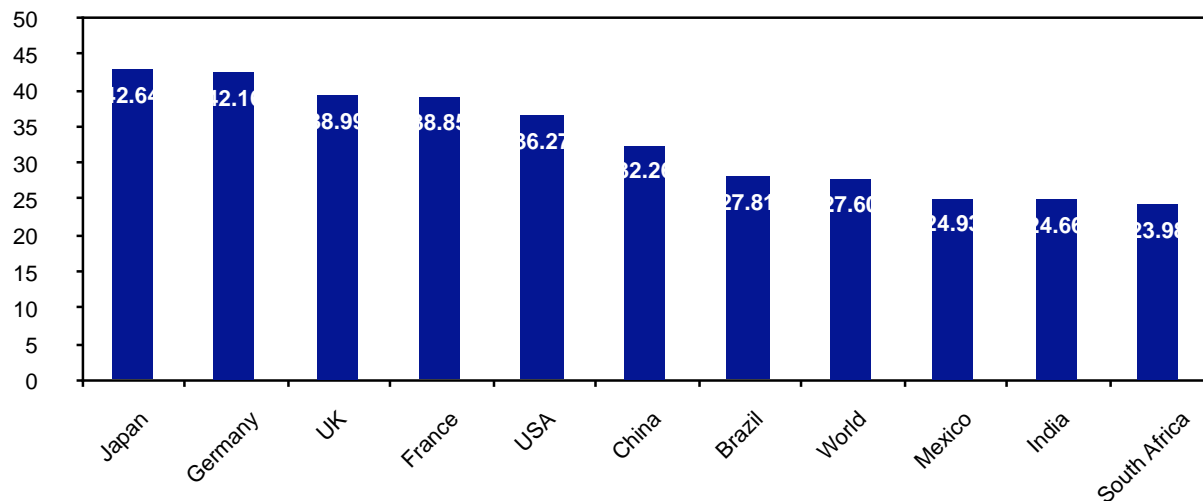
VOLKSWAGEN

INDIA PRIVATE LIMITED

INDIA and REST OF THE WORLD
Opportunities and Challenges

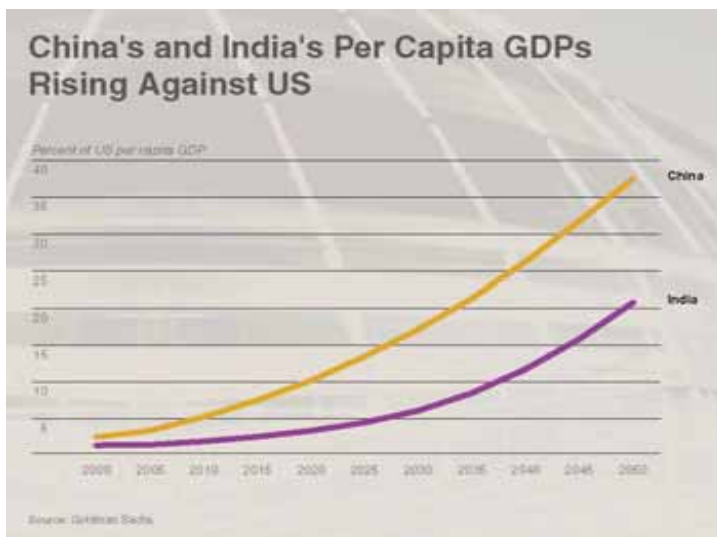


INDIA and Rest of the World – Context setting

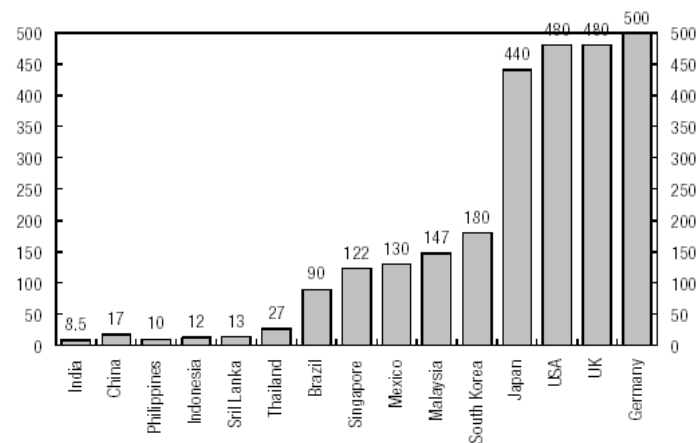


HEADY MIX FOR GROWTH

- Growing GDP + Robust Domestic Demand
- Population Demographics
- Rapid Urbanization 20% - 32 %
- Low Vehicle penetration Vs Per Capita GDP and population



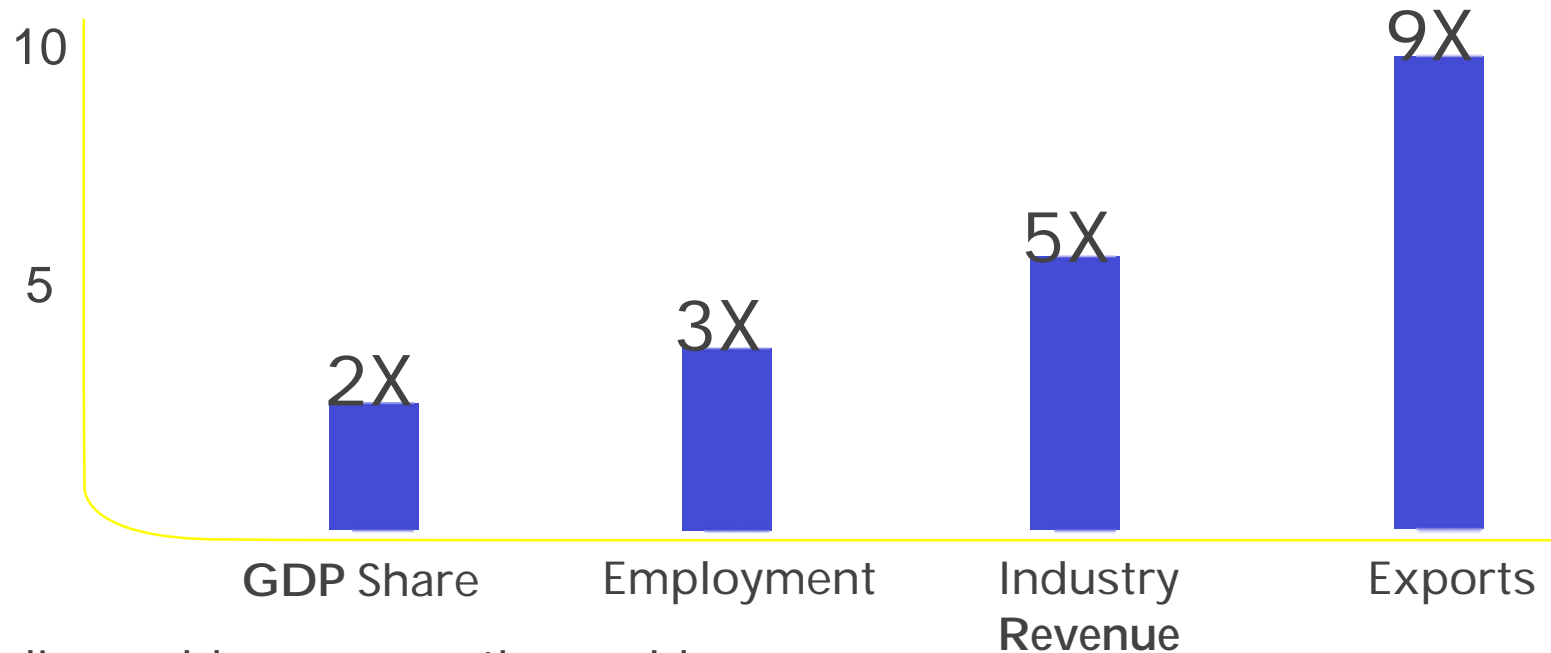
Per Capita Passenger Car Penetration (Per Thousand Population)



Source: Wards Automotive, World Bank, SIAM, Smith Barney estimates.



GLOBAL AUTO INDUSTRY AND INDIA – AMP Projections 2016



India would emerge as the world's

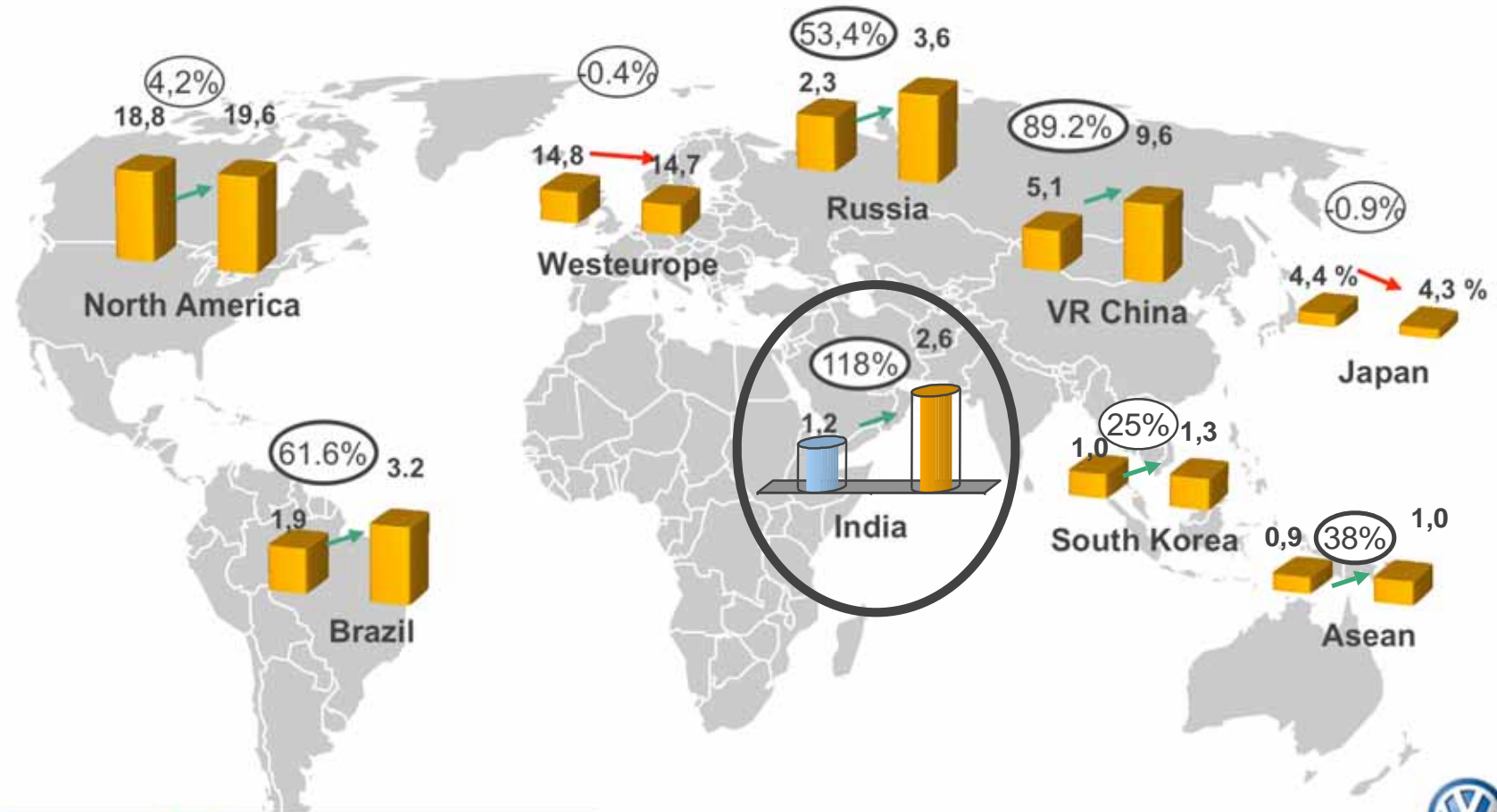
- 7th largest car producer
- 4th largest position in world truck manufacturer
- Remain 2nd largest two wheeler manufacturer



INDIAN POTENTIAL

Car Market

Worldwide Growth



Opportunity exists – What are the Challenges !

- Start up / Ramping up Challenges
- Operational Challenges
- Operational Environment Challenges
- Emerging Challenge

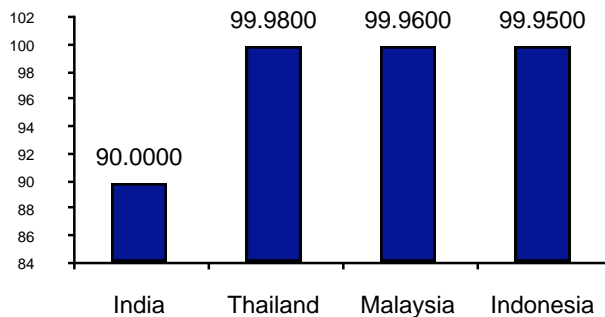
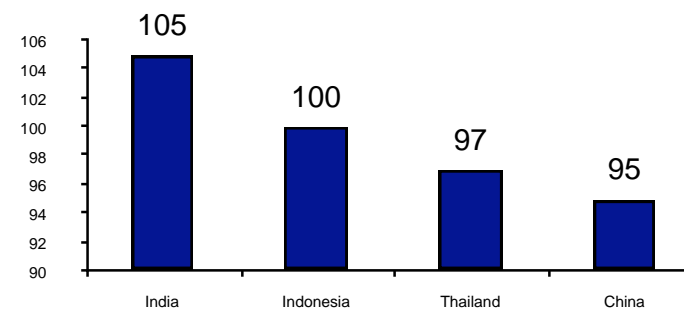
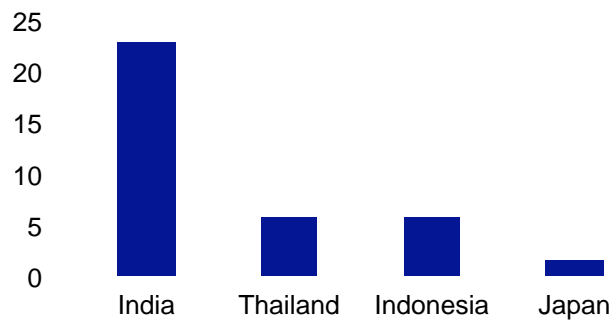


START UP / RAMPING UP CHALLENGES

- Land – Acquisition
 - Post Singur
- Man Power
 - Mismatch of education and Industry Requirement
 - Extensive Training
 - Qualification and Training of Trainers
 - Developing Adopting Training concepts according to available skills and situation on site – VW world wide Coaching
 - Adoption of ITI s by Auto industry – 100 ITI s



OPERATIONAL CHALLENGES



- Need to Bench Mark to East rather than West
- Need improvement in all parameters – Quality delivery and cost
- VW Global Support Group – to support Suppliers Ramp up



OPERATIONAL ENVIRONMENT CHALLENGES

- Infrastructure
 - Roads
 - Railways – Under utilized for Auto Transport
 - Ports , and others
- Labour Laws
 - Need revamp
 - Low flexibility – Hours, Hiring, Woman workers etc




EMERGING CHALLENGES

- SUSTAINABILITY
 - Emission Norms Moving towards Bharath Stage 4 and beyond
 - Voluntary Fuel Efficiency declaration
 - Development of New technologies
 - Ultra low emission – Blue Motion
 - Hybrids
 - Hydrogen
 - Electrical


Volkswagen BlueMotion Strategy

BLUEMOTION
TECHNOLOGIES


Golf BlueMotion
99 g CO₂/km – Euro 5
1.6l TDI Common-Rail




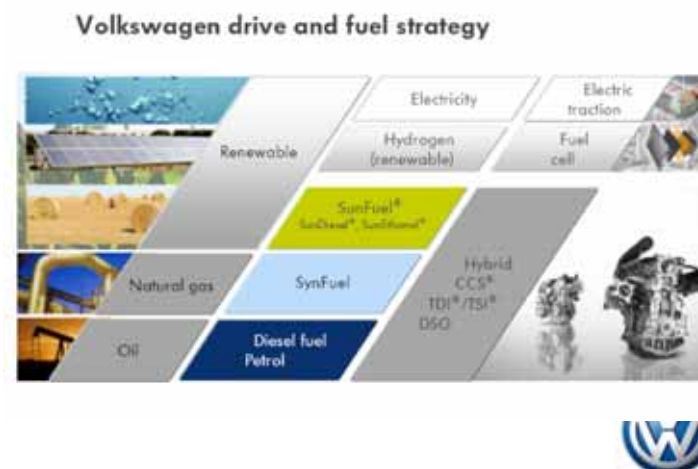
Polo V BlueMotion
87 g CO₂/km – Euro 5
1.2l TDI Common-Rail



Passat BlueMotion BlueTDI
109 g CO₂/km – Euro 6
2.0l TDI Common-Rail

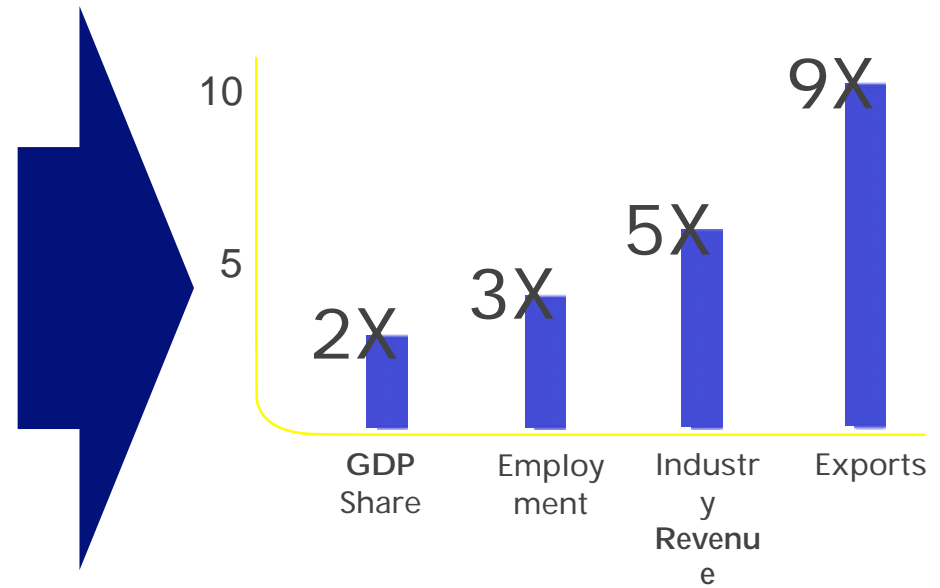


34 4th Environmental Award Vehicle Conference - The way to the optimum drive system

Destination

- Start up / Ramping up Challenges
- Operational Challenges
- Operational Environment Challenges
- Emerging Challenge



Thank You

