



ArcelorMittal

Automotive and ArcelorMittal in India

October 8, 2013

Key contents



The automotive industry in India

ArcelorMittal & automotive

Our role in India



The automotive industry in India

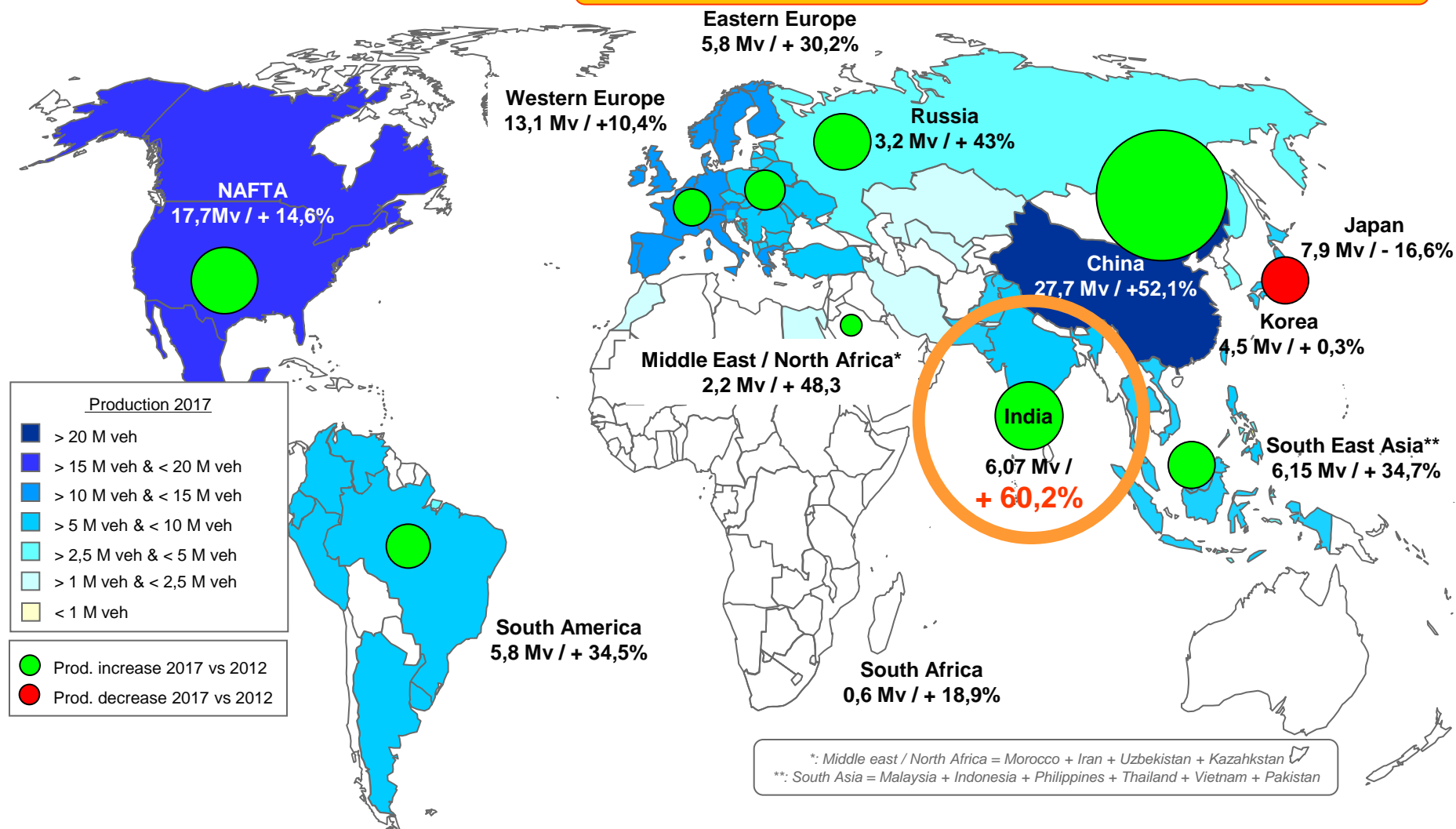


India: the world's most dynamic auto market



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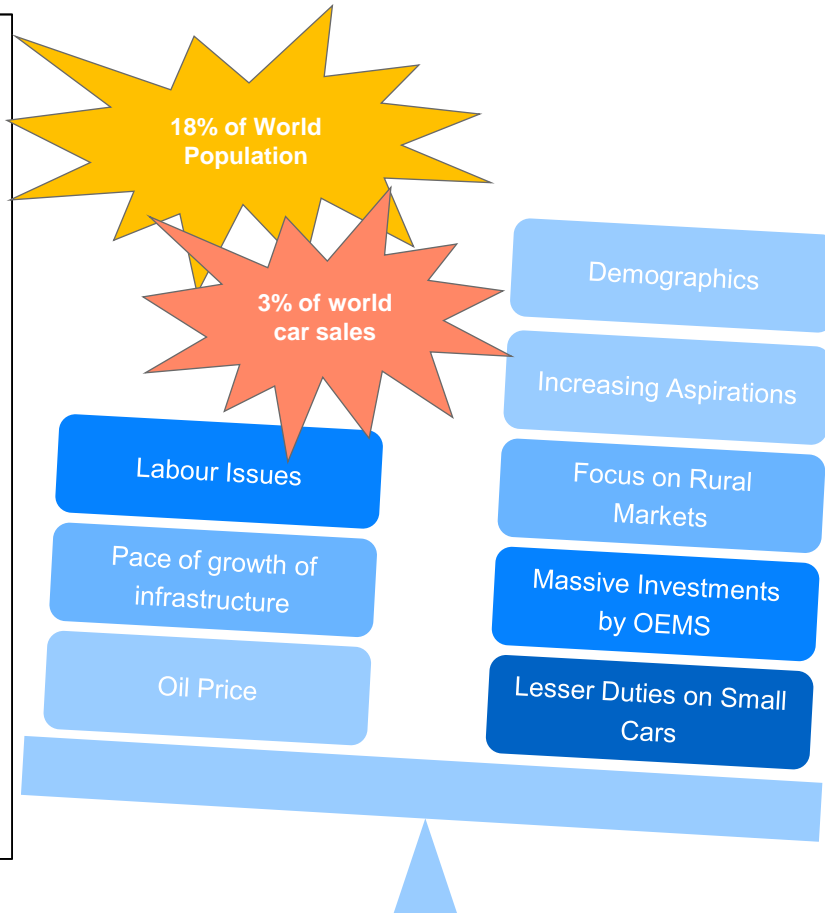
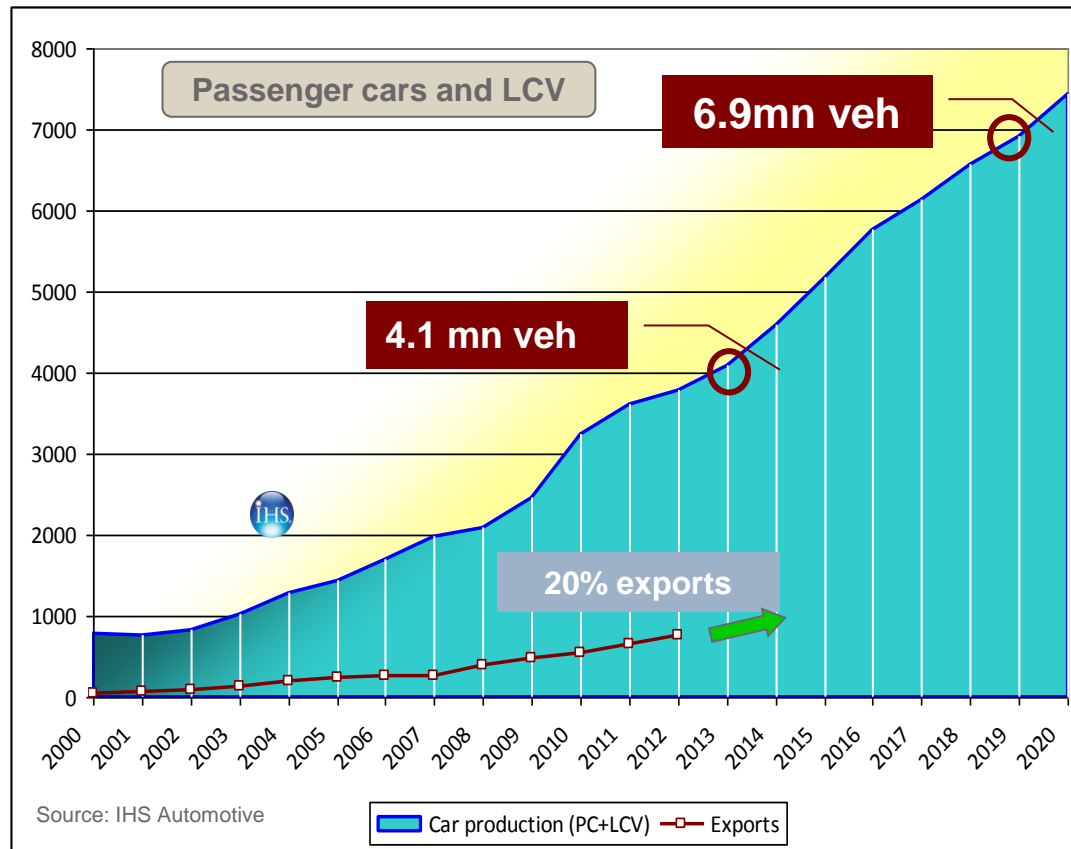
Global 2017 production: 101 Mveh / + 25% vs 2012





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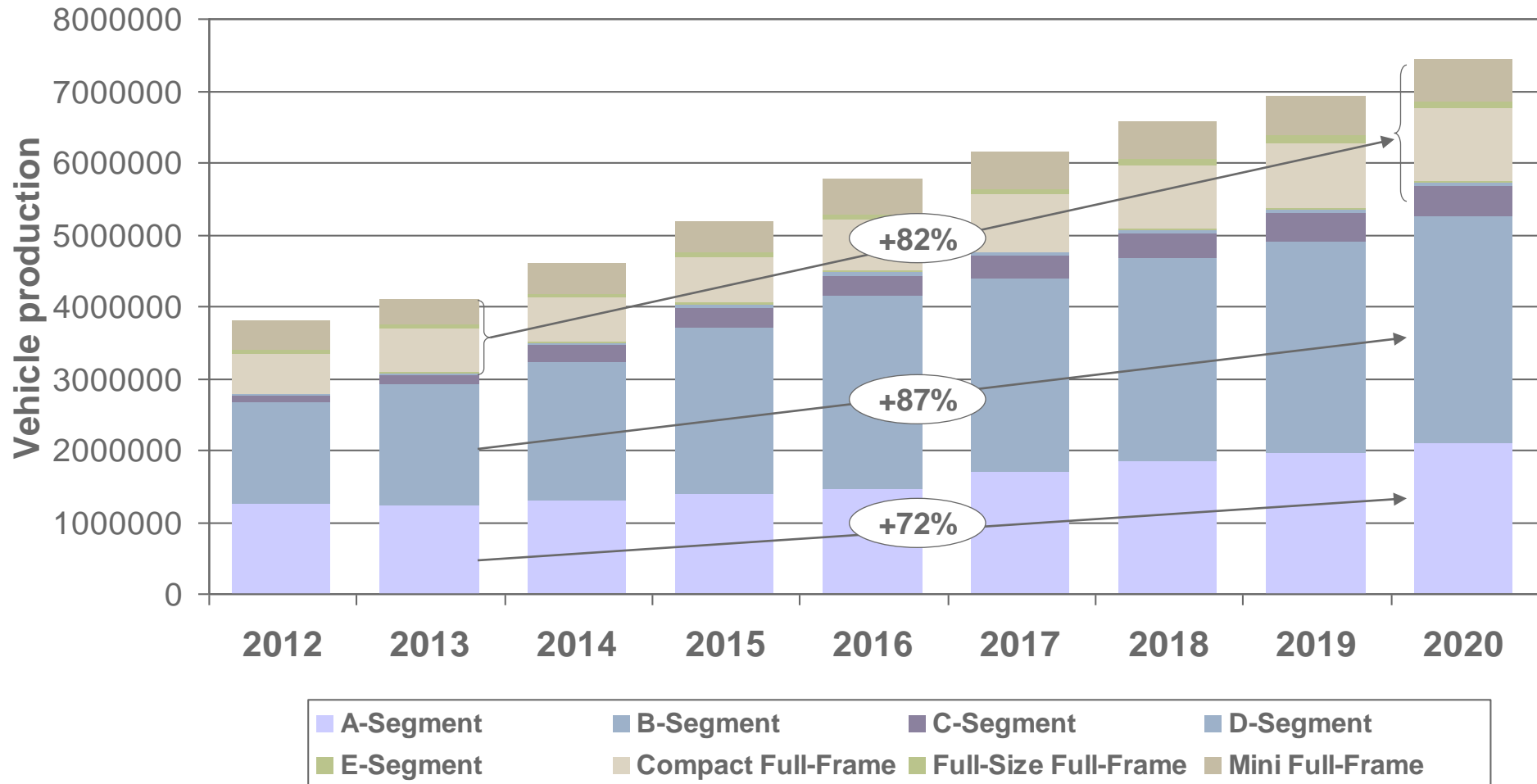
From 1 to 7 Million cars/year in 1,5 decade



- Doubling of light vehicle volumes by 2020 ; 3.5 M units will be added
- 196 programs will start production between now and end 2020
- 55 programs are expected to be local designs

2020 India's global ranking: from current 6th to the 3rd position

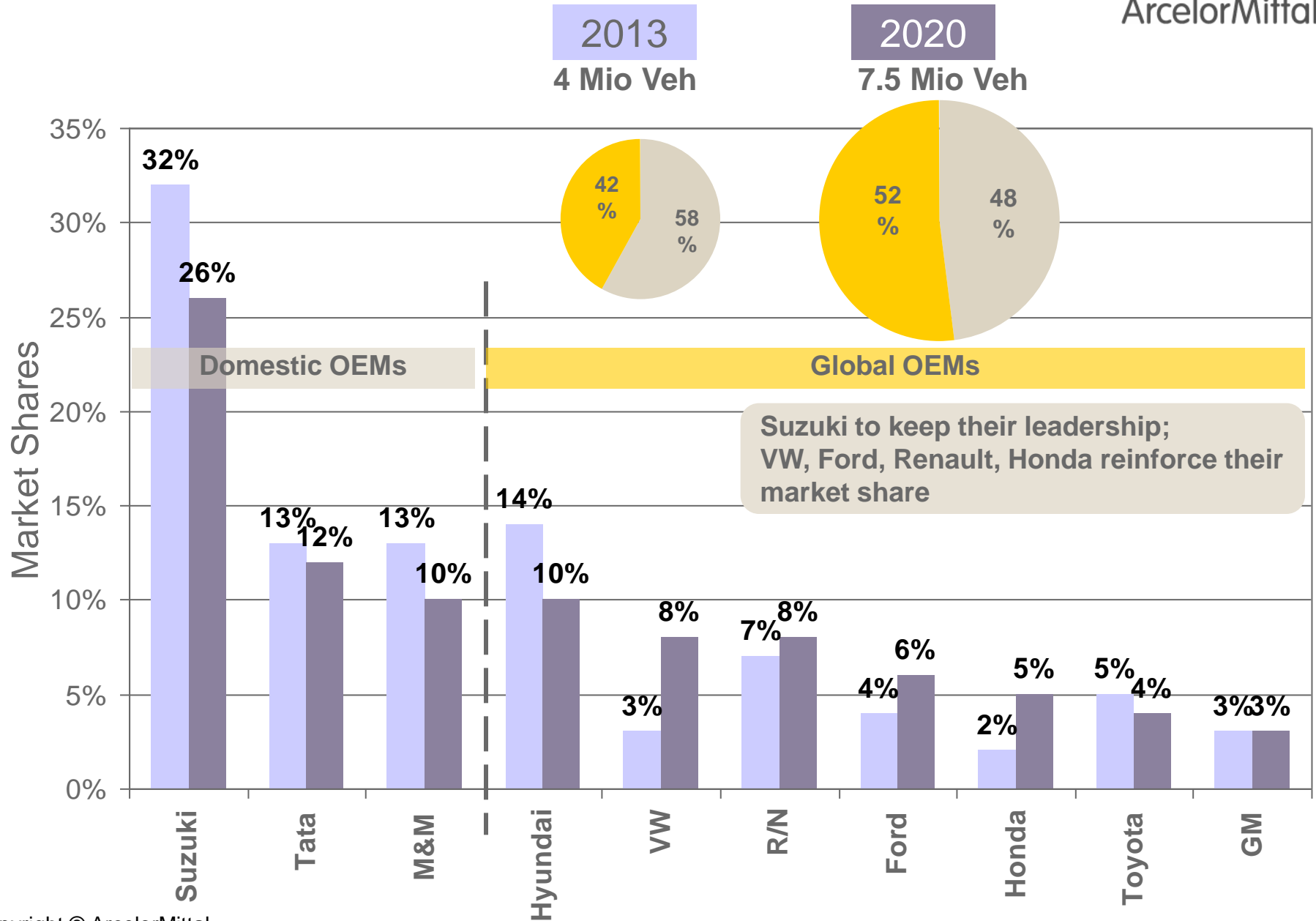
Small cars make the market (70% A & B segment)



Asian carmakers dominate the market



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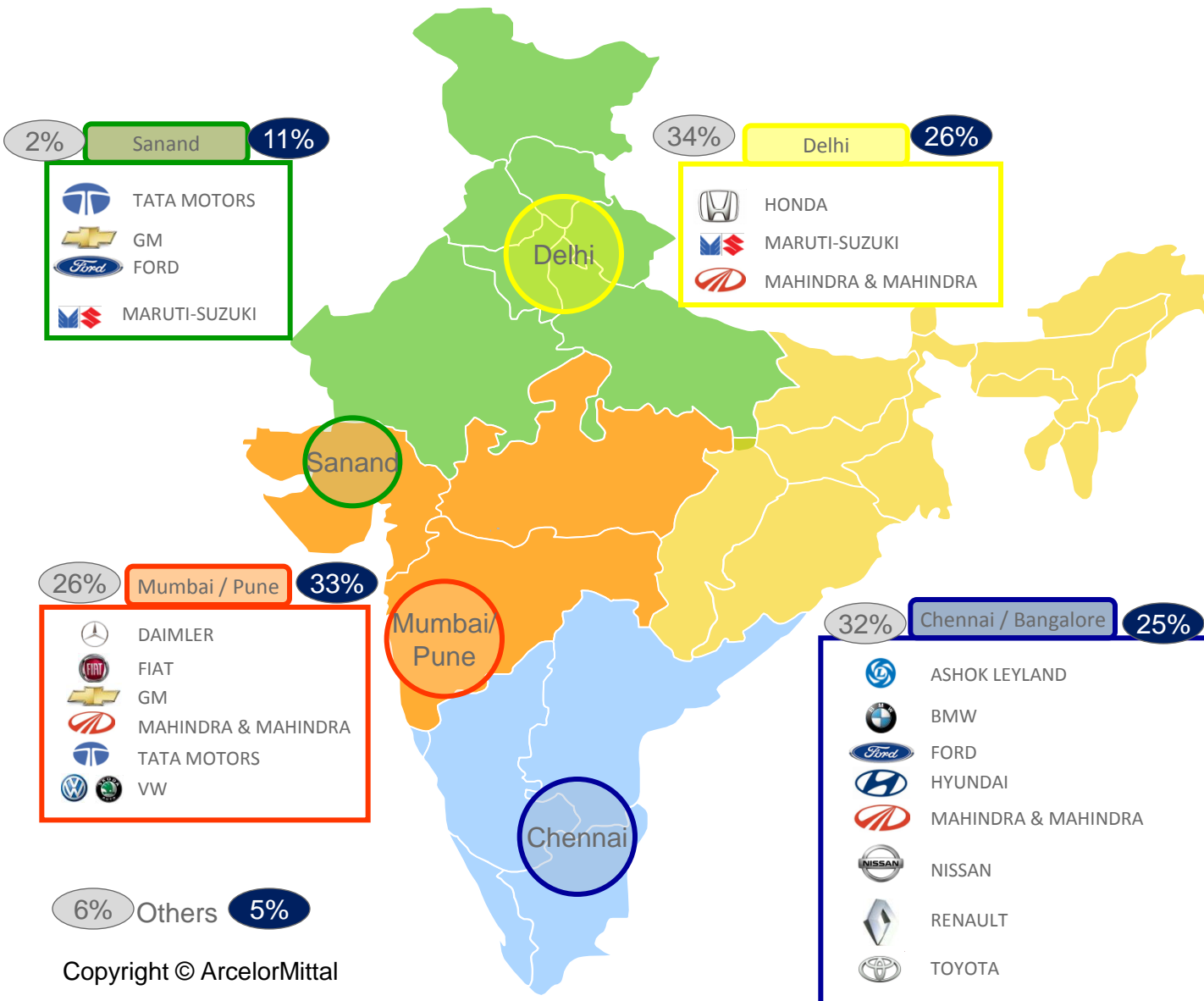
4 clusters of production



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xx% % market share-
(no. of cars in 2013)

xx% Projected % market
share- (no. of cars,
2020)



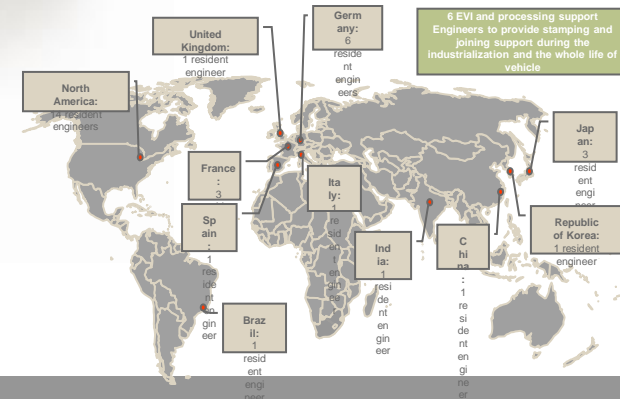
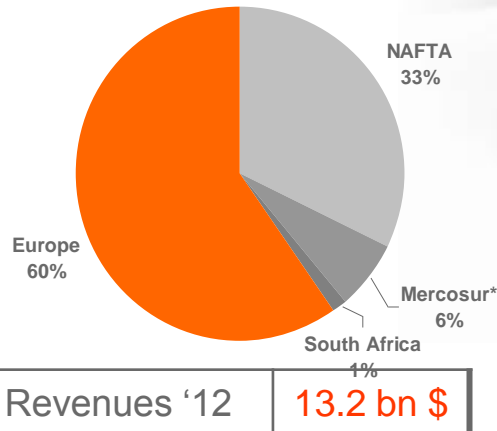
Mumbai and Sanand clusters expected to grow significantly gaining higher share of market (~45% by 2020 from current ~28%) mainly with new plants dedicated to **export market** (Suzuki and Ford in Sanand)



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Our steel drives automotive solutions



A global footprint - multinational customers – standardised solutions and consistent quality around the globe.

Changing dynamics in the car industry



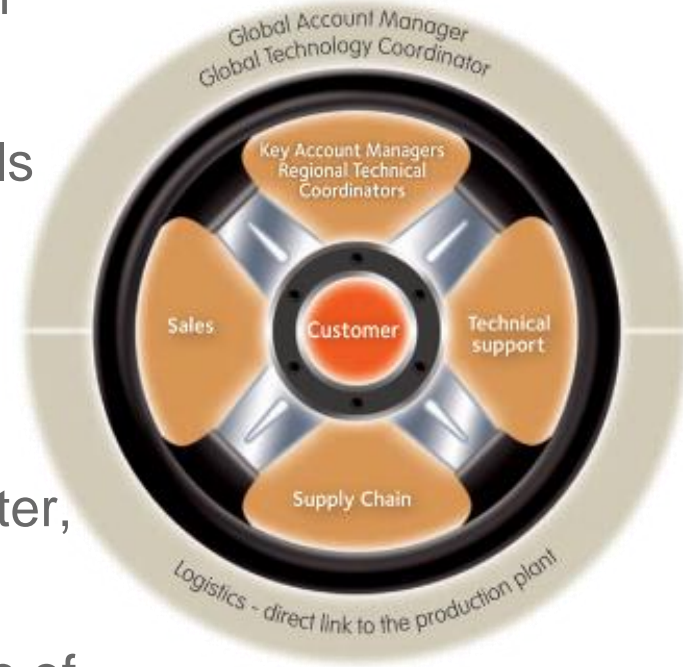
- China : largest car market
- Fundamental changes in the industry
 - Consolidation to cut costs
 - Mega platforms to reduce development costs
- Tightening standards for emissions and safety
 - Reduction of CO₂ emissions
 - Penalties (EU)
 - Shift to electrical/hybrid
 - Recycling/Life Cycle Assessment (LCA)

continuous innovation required
from ArcelorMittal

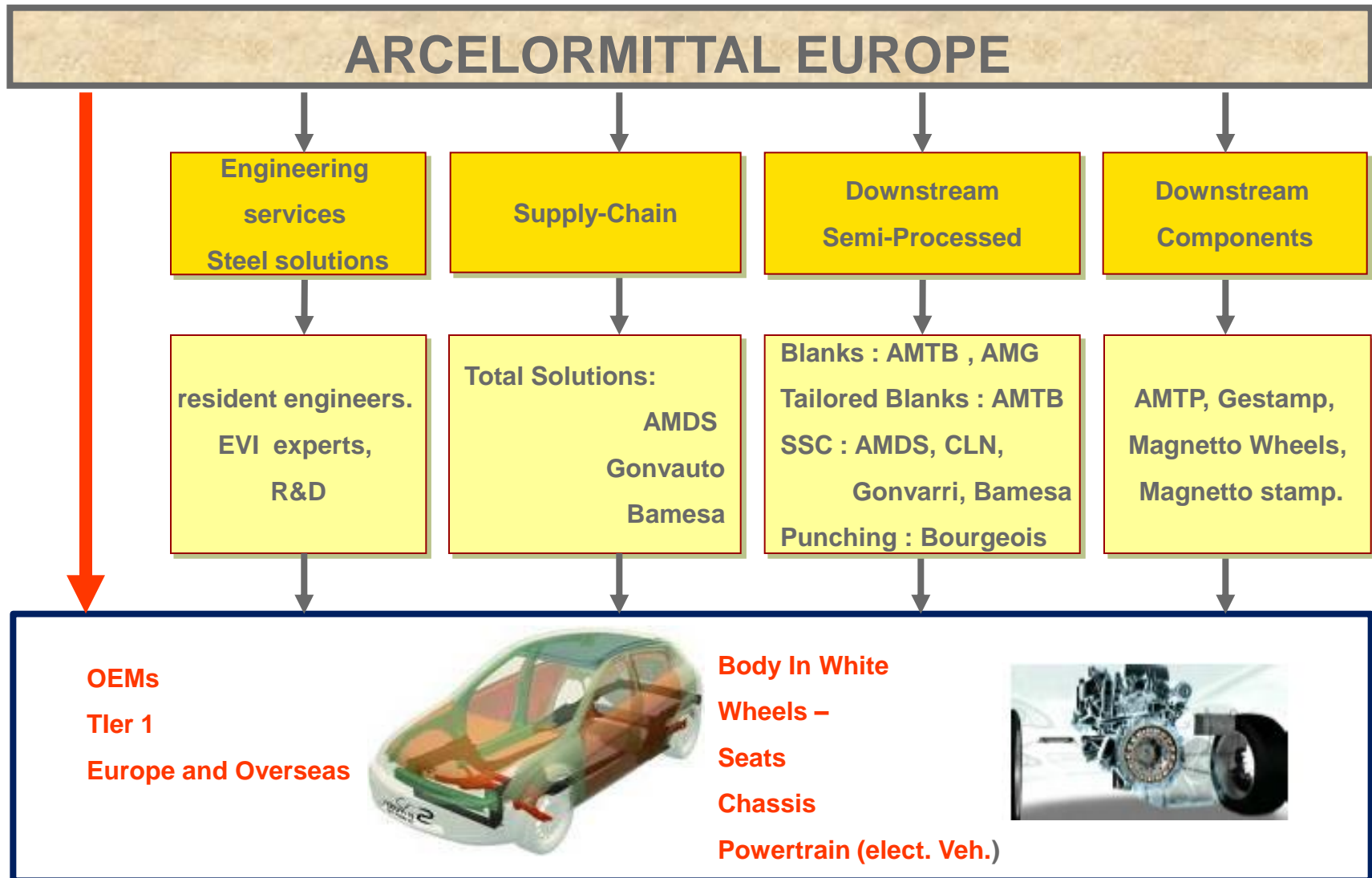
Supporting car makers worldwide in the challenges on passenger safety,
weight savings and reduction of CO₂ emissions

Anticipating the needs of the car industry

- From a steel provider to a global steel solution provider:
 - know-how in Advanced High Strength Steels (AHSS) & exposed surfaces
 - vehicle design – 40 resident engineers
 - 565 automotive experts in R&D
 - engineering solutions to make vehicles lighter, safer and more fuel-efficient.
- A **worldwide** presence, delivering a large scale of products, solutions and services to automotive customers with the same **quality** focus in all regions



Our associated network assures our growth through innovation





Our role in India



A local automotive team connected with the global automotive organisation



- Present in the 3 automotive clusters to deliver advanced steel solutions
 - Logistics and localization support
 - Technical and design support
 - Product development
- Part of global automotive network
- advanced « **niche** » products from Europe
 - **very high strength steel grades** for weight reduction programs and **specific coated panels** for exposed applications or fuel tank application
- **Support OEM's** with our downstream network (AMDS, ANTB, Magnetto, Gestamp, Uttam).
 - Localization of the business with **Uttam steel service center** solution in Mumbai and Pune area
 - Local **Supply-Chain solution with AMDS India** (warehousing, distribution, JIT deliveries)
 - **Product development** and **localisation** of some parts
- **Indirect business** with local re-rollers
- Opportunities for **automotive JV** with a local partner

Our downstream associated partners provide solutions for localization programs...



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JBM Magnetto Pune



ANTB



Arcelor Neel Tailored Blanks :

- Pune
- Chennai



VW India
Pune

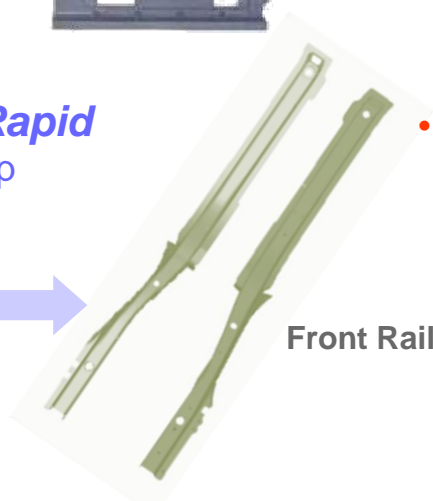
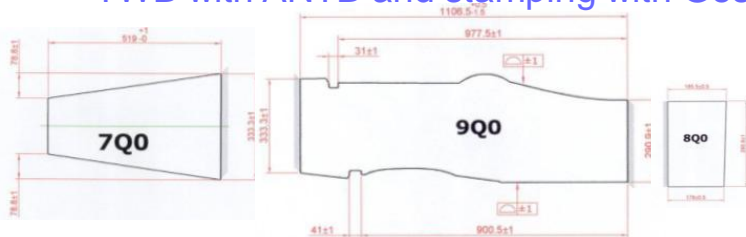
B-Pillar



- Technical support provided to VW India in Pune area for localization program
 - Laser welding blank solution with ANTB Pune (transfer from Spain to India)
 - Stamping solution with Gestamp India
 - SSC solution with Uttam and JBM Magnetto (transfer from Italy)
 - Product development on Usibor for local application (HRPO 1.85mm) for B-Pilar

Parts under localization

Front rail LH/RH– Polo, Fabia, Vento & Rapid
TWB with ANTB and stamping with Gestamp



Front Rail

ANTB, our laser welding JV with JBM...

Chennai operations

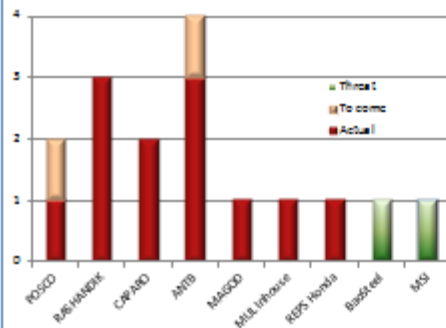


Pune's team



2012 : ANTB takes leadership

Competition : number of lines



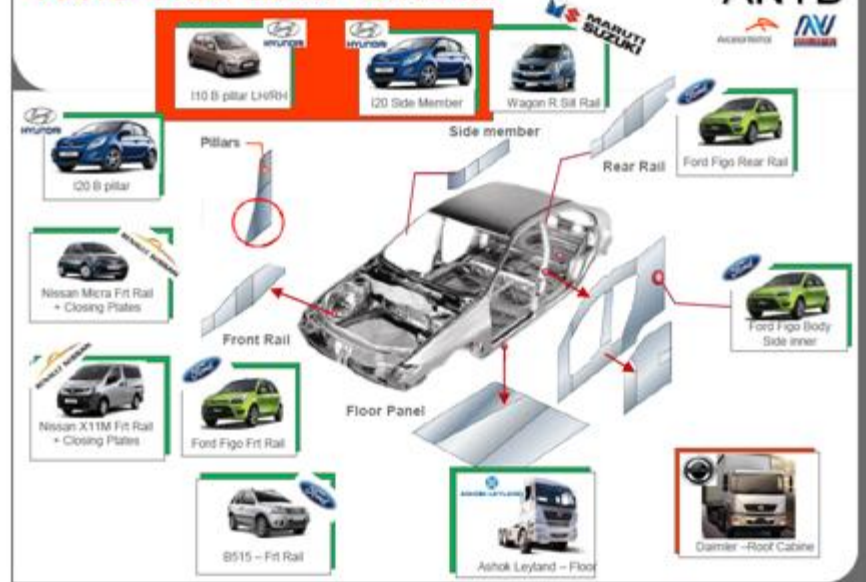
Volume for 2012 : 2,5 millions TWB
Planned volume for 2013 : 4 to 4,5 millions.

Customer Portfolio

09-10	2011	2012	2013
			
			
			
			

Application examples

ANTB Order Book - Chennai





We provide steel solutions for local design...

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Ford India
Chennai



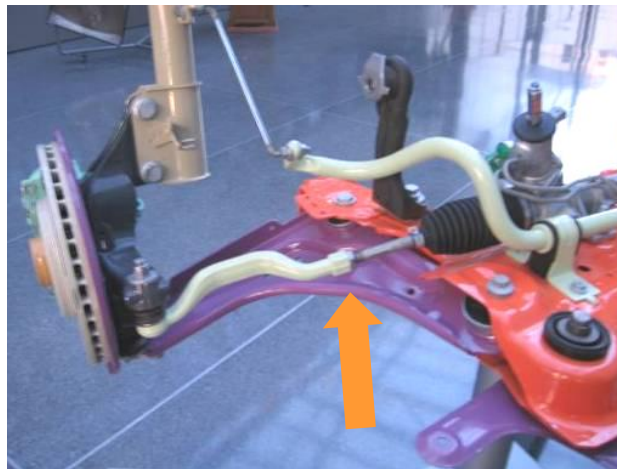
- Ford Ecosport (B515) ... success story
- Strong technical support from global R&D right from vehicle design to vehicle launch
 - AM global network (collaboration between Brazil, Germany and India)
- Hot Stamping solution via Benteler for front bumper beam and chassis application (cold forming with FB600)



Front Bumper beam

With uncoated - Usibor – 1.8mm –

Hot Rolled



**Control Arm Shell
LH/RH**

FB600 – HRPO
2.25mm / 3.75mm





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And steel solutions to meet environmental norms



TERRANO



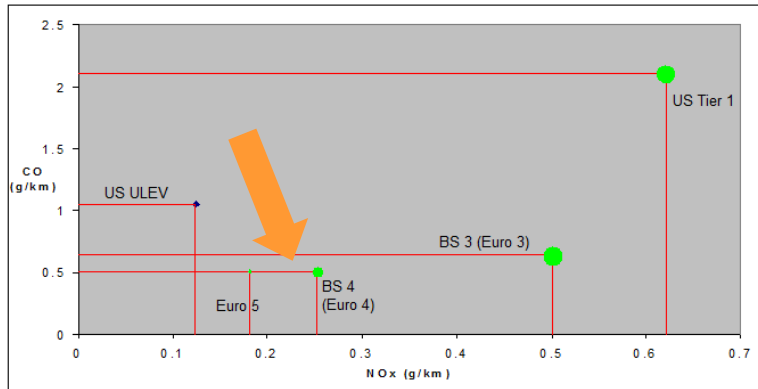
Duster

Renault Nissan India
Chennai



- Renault Nissan H79 projects (Duster and Terrano)
- Design to meet BS4 emission norm with AluSi solution
- Technical support to design and deliver steel solution for fuel tank application
 - Technical support regarding the seam welding
- Localization of supplies with AMDS network and processing (Coil CTL) with Uttam SSC

Euro US Indian diesel emission standards



Conclusion



Our steel – the fabric of life

