



# Subros



*Cooling the Planet*

## Investor Meet

March, 2019



1. Company Introduction


2. Business Outlook

2. Subros Business

4. Past Performance and Future Plan

# Subros

Cooling the Planet



About  
Subros

Established in 1985, Subros is the Largest Air Conditioning & Thermal Products company in India.  
A Joint Venture company between



<b>Equity Distribution</b>	Suri's (Indian Promoters)-36.79%, Denso-20%, Suzuki-11.96%, Public-31.25%
<b>Business</b>	Integrated Thermal Products manufacturer for auto and non auto products
<b>Segments</b>	Car, Bus, Truck, Refer, Railways and Home AC domain.
<b>Plants</b>	7 Locations (Pan India Presence)
<b>Technical Centre</b>	1 Location(Noida)
<b>Tool Engineering Centre</b>	1 Location (Noida)
<b>Certifications</b>	ISO 14001,IATF 16949, OHSAS 18001
<b>Market Shares</b>	40% (Passenger Car AC) 60% (Truck Aircon/Blower)
<b>Gross Revenues</b>	Rs 1964 Cr (2017-18) (307 Million USD)



Noida Plant



Pressure Die Casting



Pune Plant



Manesar Plant-1



Chennai Plant



Sanand Plant



Manesar Plant-2



Technical Centre



Tool Engineering Centre



## Location wise Product Profile

### Engineering & Development Centres :

- ❖ Denso Subros Engineering Services Centre ( Design JV ) - Noida
- ❖ Central Technical Centre – Noida
- ❖ Product Engineering Centre – Chennai
- ❖ STEC- Tool Engineering and Manufacturing-Noida

### Plant wise Product Profile :

- ❖ Noida – Compressors, Heat Exchangers, Pressure Die Casting , Press Shop, Injection Molding (Small Parts)
- ❖ Manesar – Car ACs, ECM products,
- ❖ Gujarat- Car AC products
- ❖ Pune – Car / CV Ac products
- ❖ Chennai – Car / CV Ac , Rail AC, ECM , Off Road ECM, Bus ACs, Truck Refrigeration Systems, Home AC Condensers

**Total Land area -all plants-256,568sq mtr**  
**Total Building area-all plants 136,419sq mtr**

## Passenger Car Segment (AC+ECM)



**Mahindra**

**DENSO**



## Commercial Vehicle Segment (Bus, Truck, Tractor)



**DAIMLER**



**DENSO**



A VOLVO GROUP AND EICHER MOTORS JOINT VENTURE

## Railways (Driver Cabin +Coach )

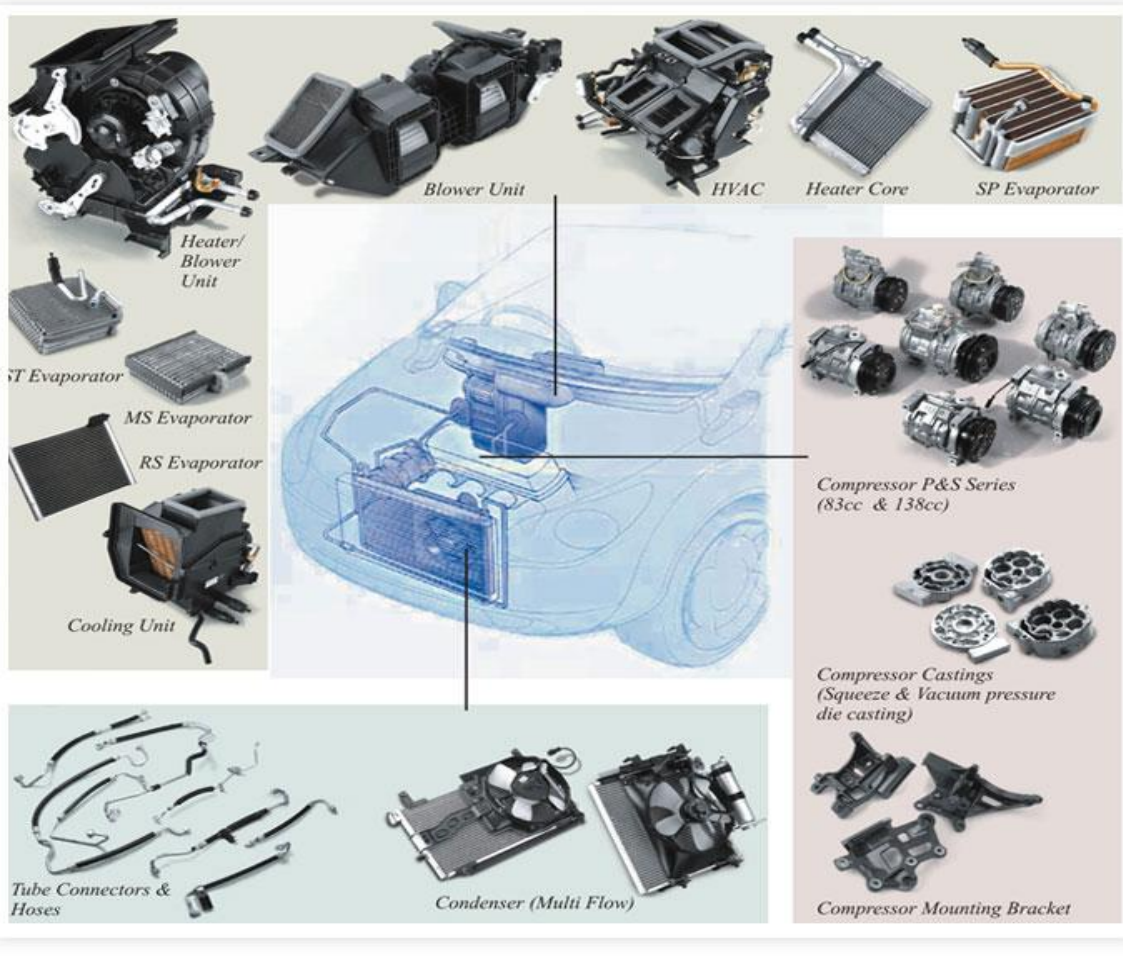


## Home AC-Hx



## Refrigeration Trucks

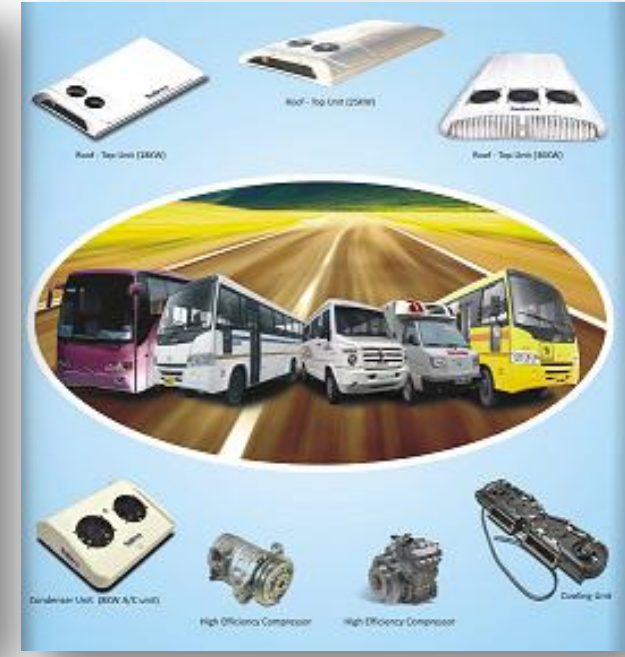




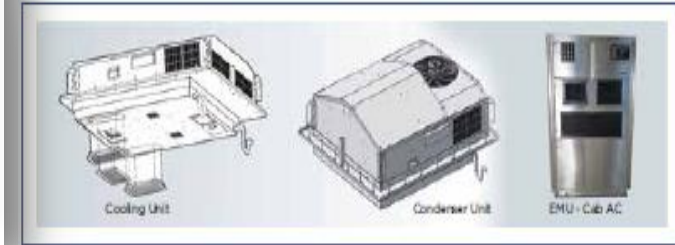
**Passenger Car Thermal Products**



**Refrigeration Truck Thermal Products**



**Bus Thermal Products**

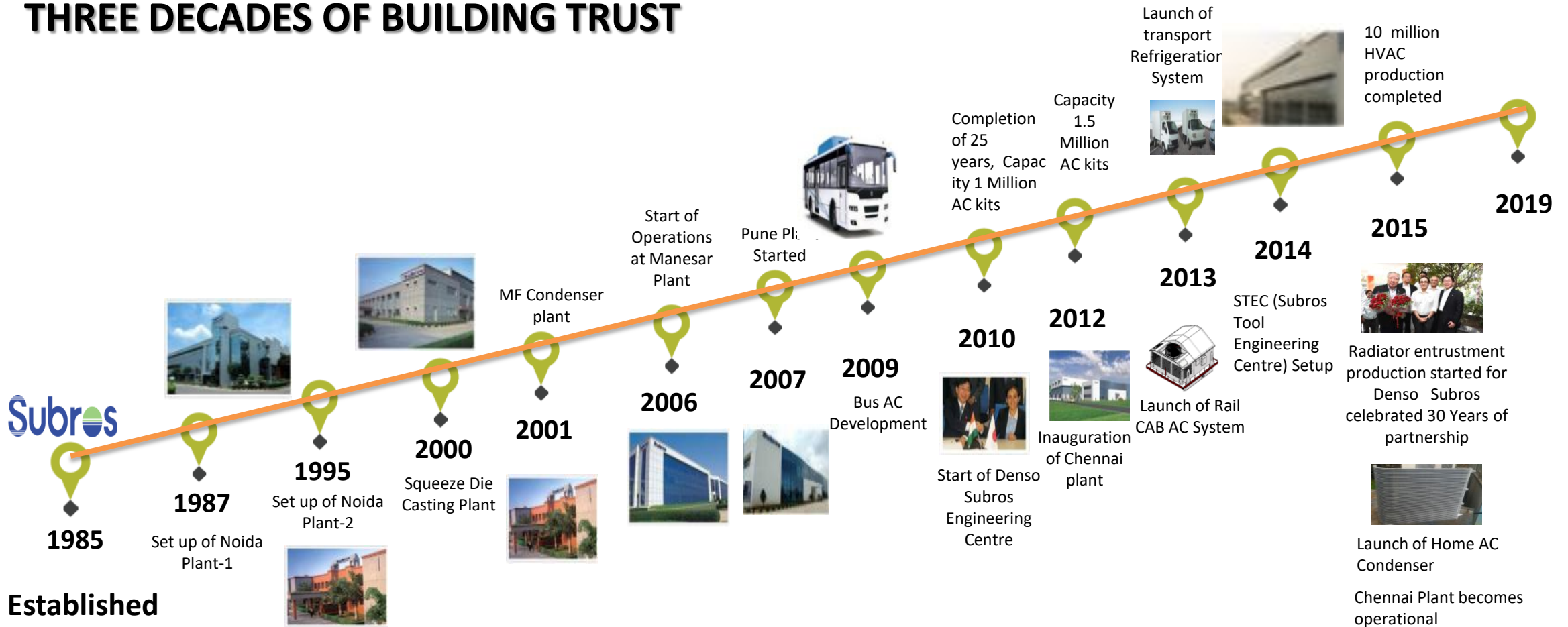


**Railways Thermal Products**



**Home AC Heat Exchanger**

## THREE DECADES OF BUILDING TRUST







Shop Floor



Condenser Assembly



Compressor Assembly  
(Clean Room)



Helium leak test machine



Robotic Vision inspection



RS Evaporator Line



Nocloc brazing furnace  
for Condenser



Robotic manipulator  
extractor



Injection molding machine



Squeeze & vacuum pressure die  
casting machine



Robotic surface treatment machine



HVAC assembly line



Tube liquid line

**Presence of world class manufacturing infrastructure**

## Technical Centre & Tool Room



System Calorimeter



Vibration Resistance Testing



CAD-CAM Facility



Die spotting press



Computer aided engineering (CAE)



Environment Test Chamber

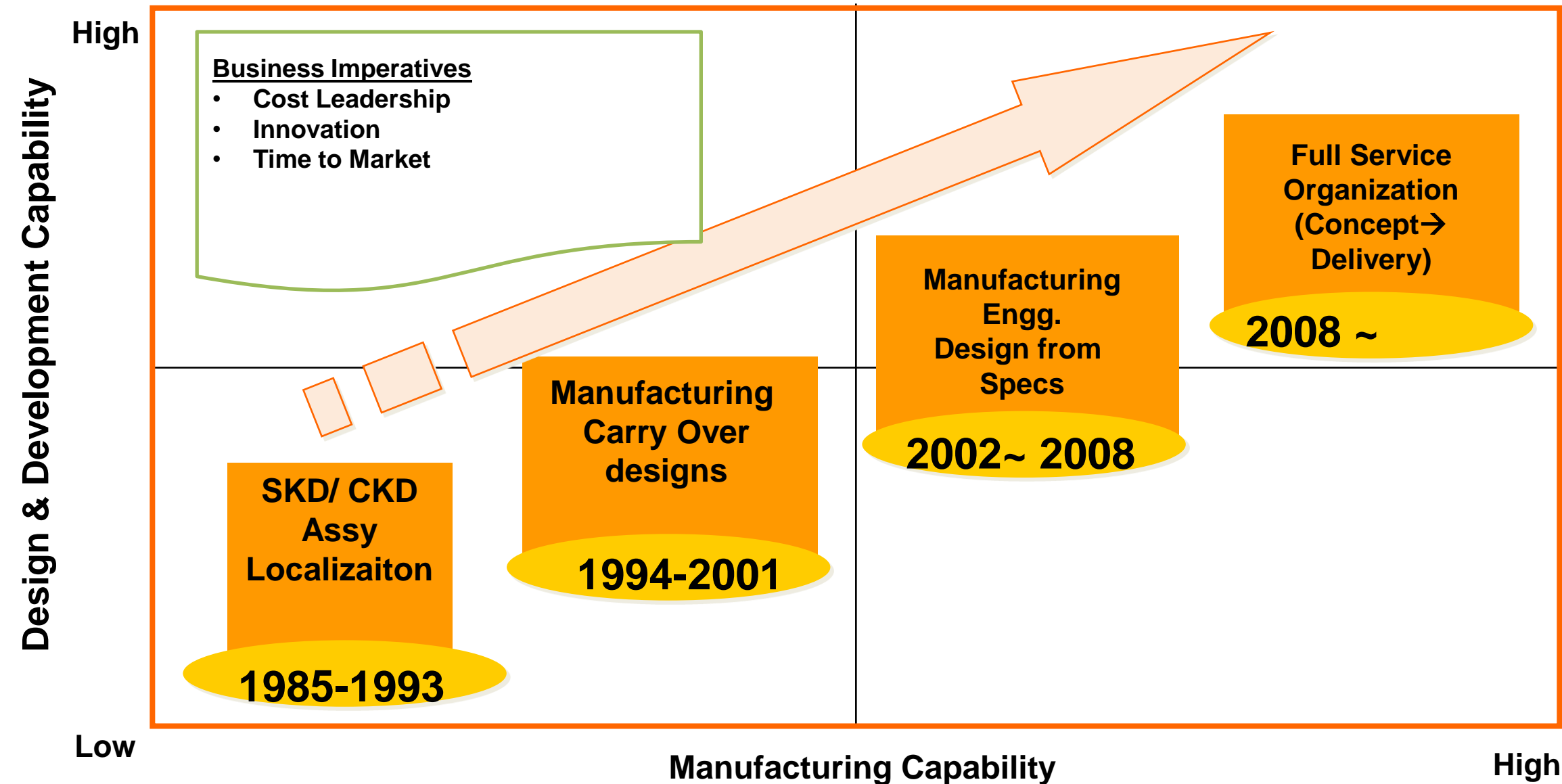


Noise Chamber



CNC VMC VF6

**Equipped with all infrastructure required for product design and validation locally**



## CORE IDEOLOGY

### Core Purpose

Subros



Cooling the Planet

## ENVISIONED FUTURE

### Vision

We aim to provide comfort by adopting new and innovative technologies, while striving to make the planet a better place.

Core Ideology  
•Core Purpose  
•Core Values

Envisioned Future  
Vivid Description

### Core Values

#### Respect

Respect for individual irrespective of level  
Respect for all stakeholders

#### Passion & Commitment

Inspired minds  
Drive Excellence  
Keeping Promise

#### Trust

Integrity - Personal & Professional  
Transparency

#### Team Work

Shared Purpose  
Collaborative Action  
Joy & Happiness at the Workplace

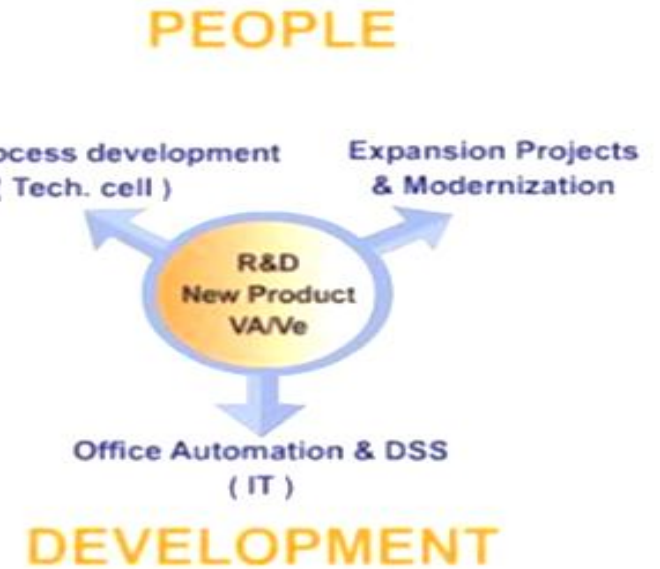
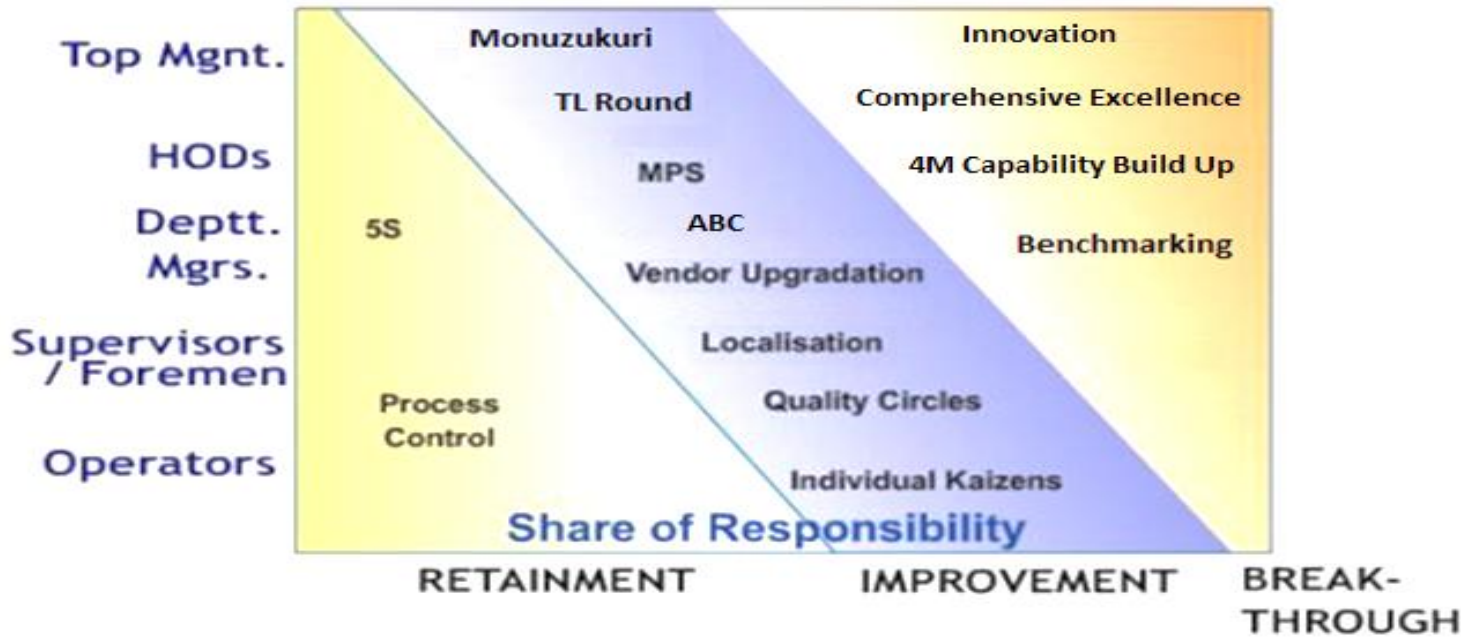
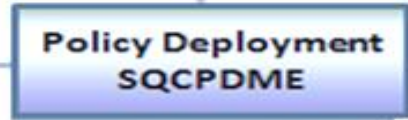
### VIVID Description – 25 Years Later

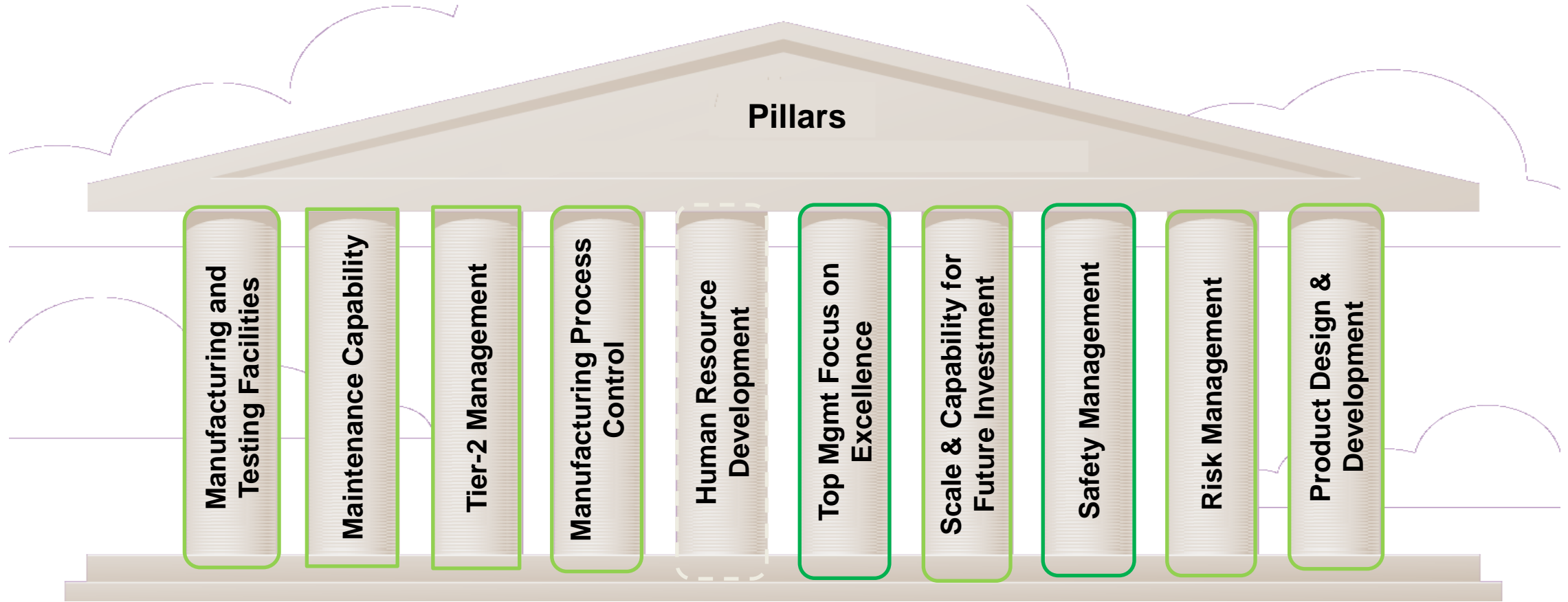
In not too distant a future, we shall be redefining “Cooling Comfort” while reducing our Carbon footprint.

We shall be finding new ways of doing “More and more” while consuming “Less and less” in efforts and resources, through innovative designs and processes respectively.

We shall be actively contributing to “Sustainable Energy” and “Sustainable Transport.”

Our products and services shall expand to all areas where thermal management becomes crucial – Public Transport / Smart Buildings, and Cold Chains.





*Subros strives continually to excel on all 10 pillars of Comprehensive Excellence in our Journey of Excellence*

Monozukri Activities

MSSE Activities

TL Round Activities

DOJO Activities

*Subros follows policies at company level, plant level and Individual level to identify and execute CSR projects*

To contribute to a better world, Subros will provide solutions to social issues through its business activities, thus **delivering new value to society.**

As a Company earn the trust and meets the expectations of people thru providing **Cooling Comfort**

Long-term Policy of **"preserving the Earth's environment"** and **"creating a society that ensures security and safety."**

**1**  
**Community Development**

**2**  
**Skilling up of Human Resources**

**3**  
**Environment Friendly Products and Sustenance**



Keep Environment Green Campaign (Delhi, Gurgaon, Noida)

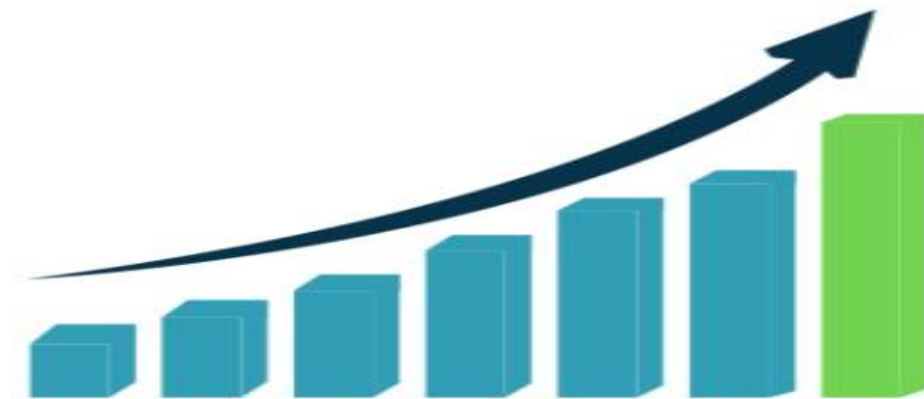
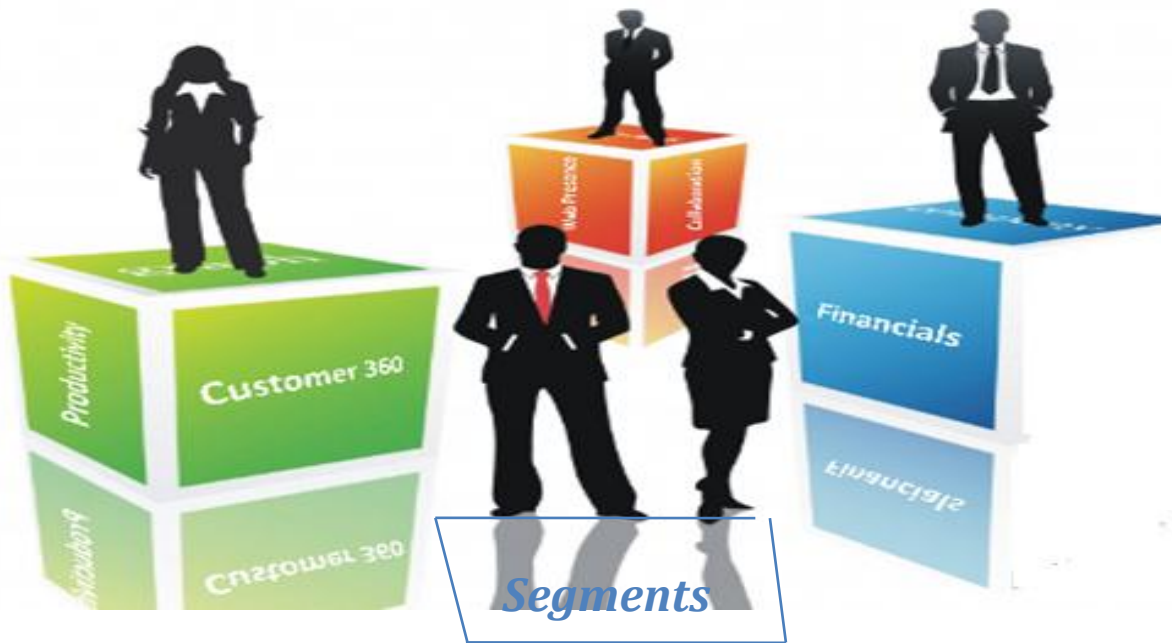


Adoption of Schools



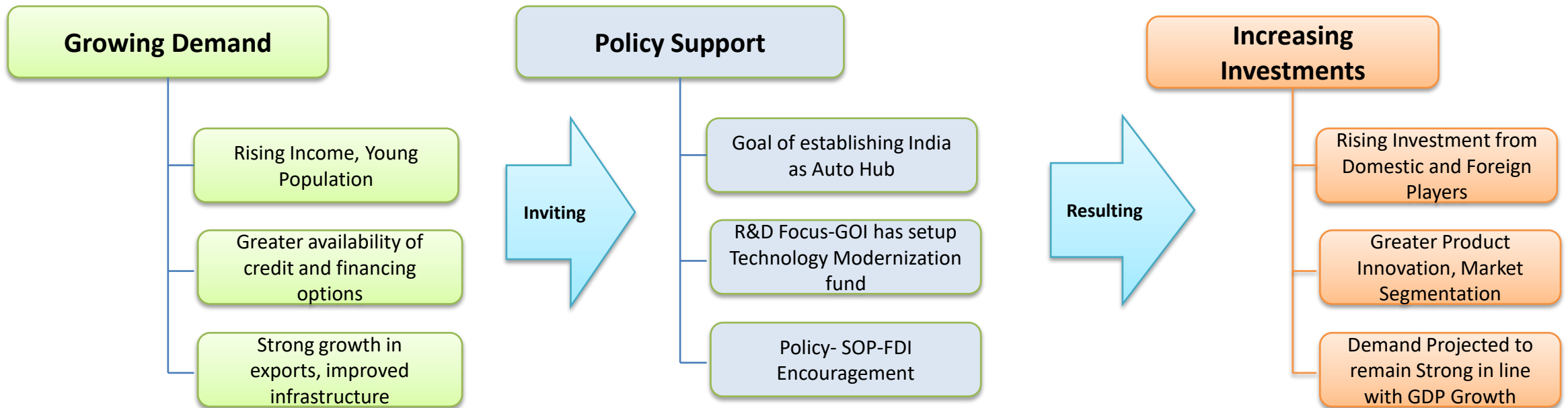
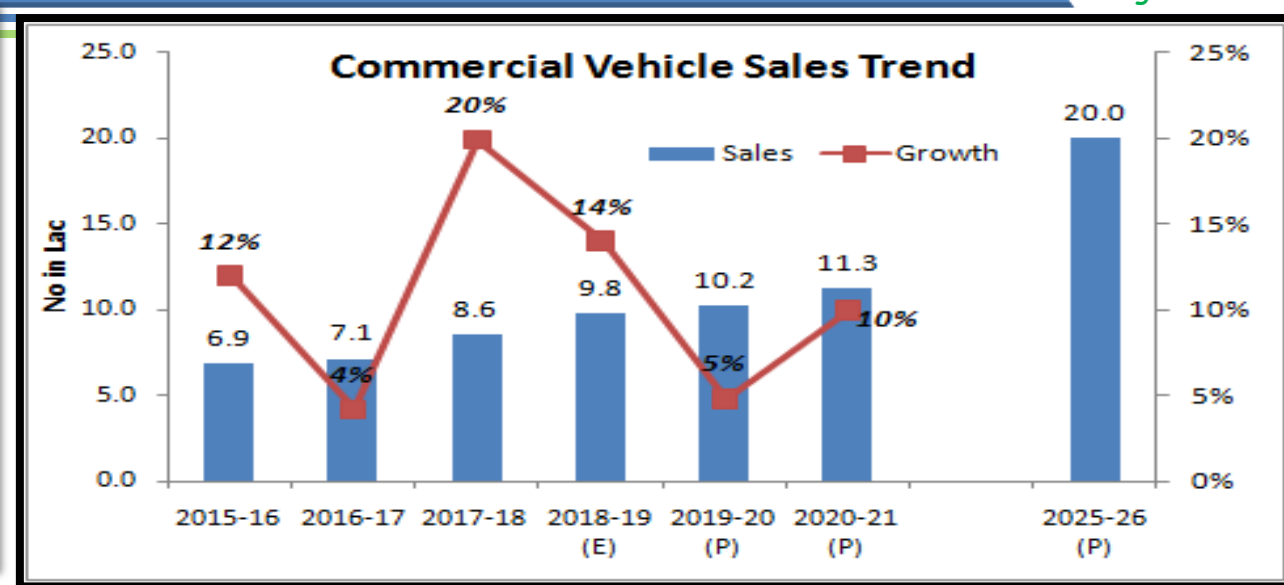
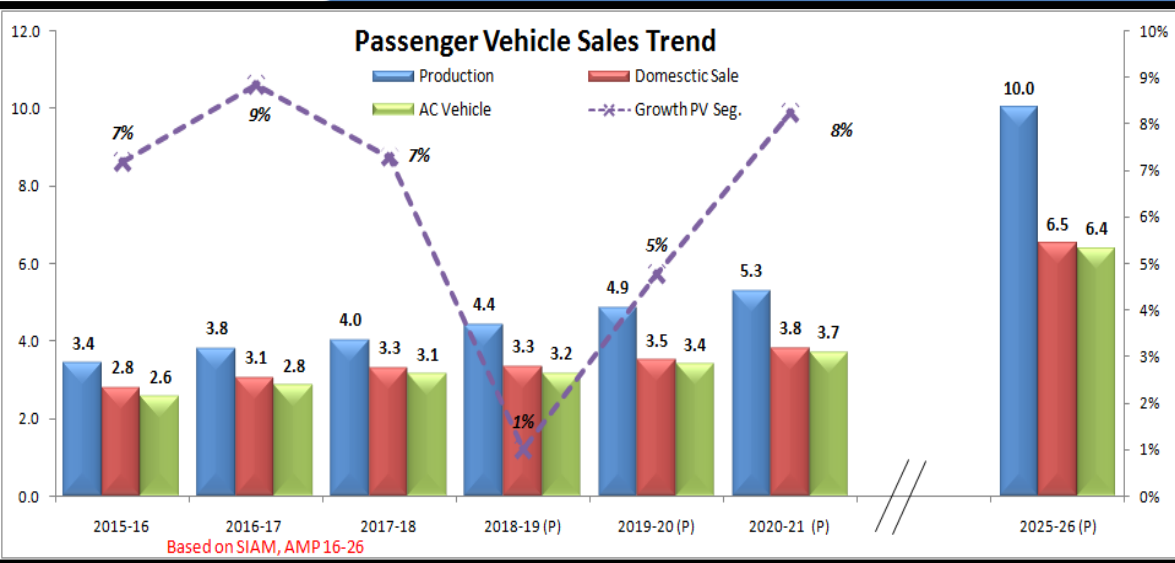
Blood donation camp

# Business Outlook

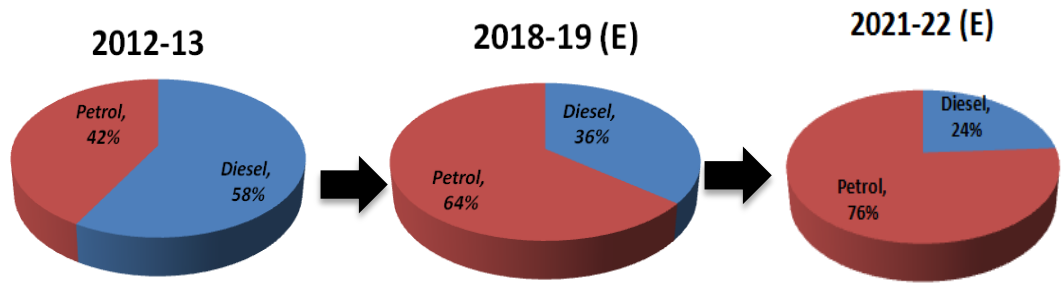




This presentation might contain forward looking statements which involve a number of risks, uncertainties and other factors that could cause the actual results to differ materially from those in the forward looking statements. The Company undertakes no obligation to update these to reflect the events or circumstances thereof. Secondly, these statements should be understood in conjunction with the risks the company faces.

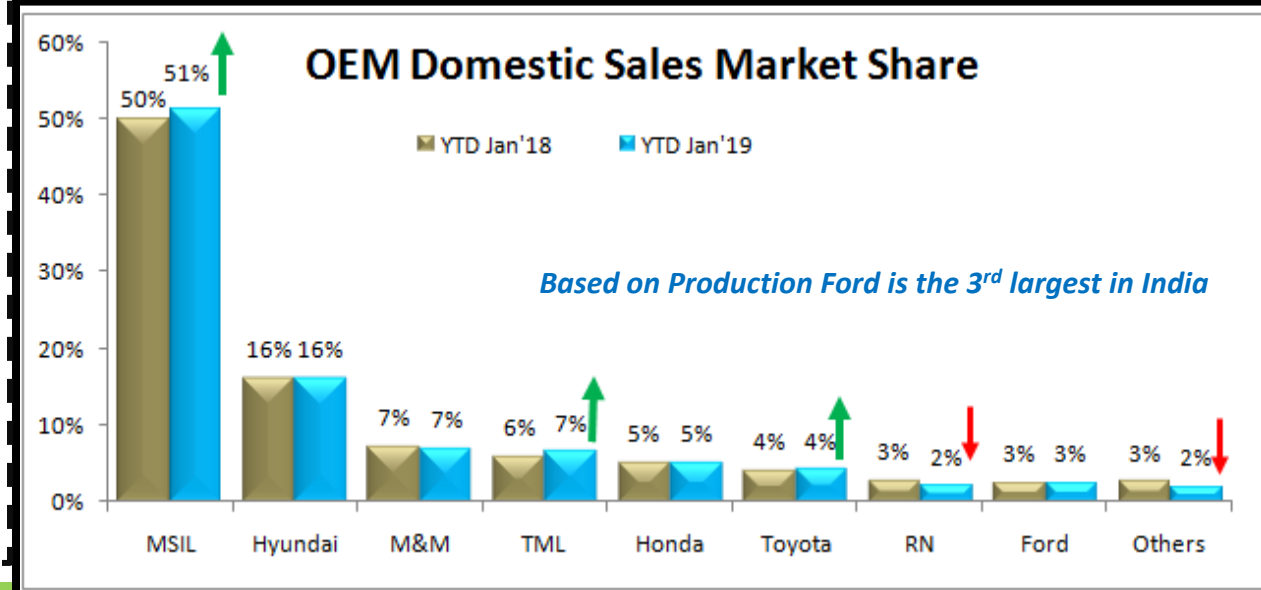
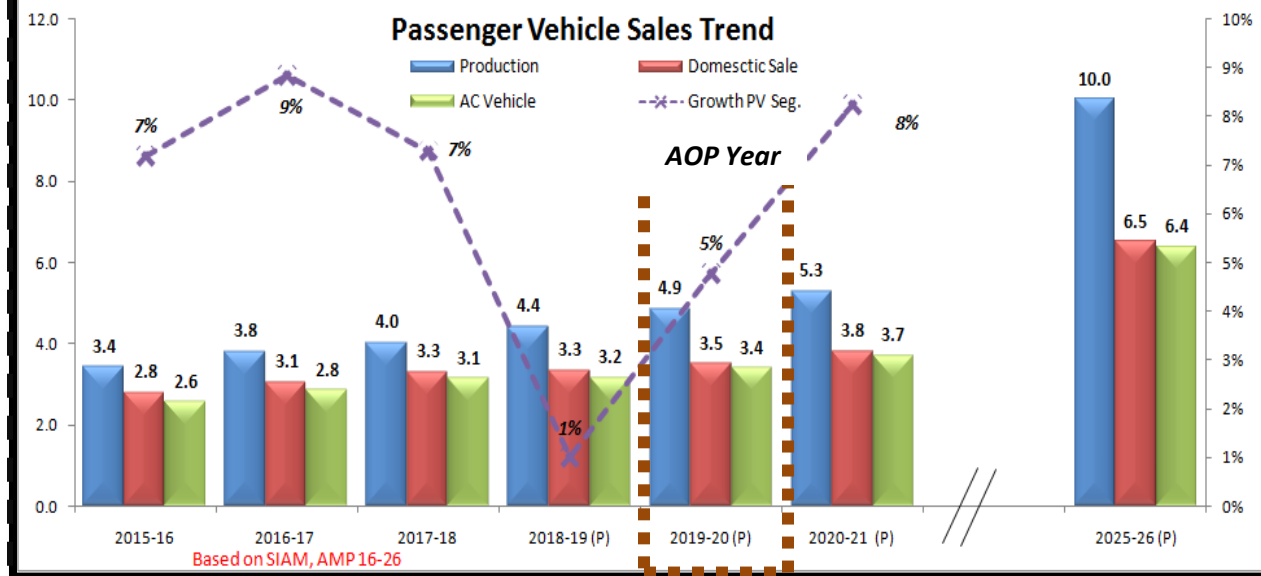


- ❑ PV Industry to grow @ **1% in 2018-19** & likely @ **4~5% in 19-20** due to current situation, elections and shift to BSVI. Price impact also.
- ❑ Major New Launches in 2018-19 MSIL- **New Ertiga**, **New WagonR**, M&M- **Marrazzo**, Alturas & XUV300, TML- **Harrier**, RN- **Kicks**, Hyundai- **New Santro**, Honda- **New Amaze**
- ❑ MSIL is market leader in PV segment with market share of **51%**
- ❑ Due to rationalization of Diesel & Petrol pricing gap, Diesel engine vehicle demand is reducing. In 6 yr time the ratio has changed from 42:58 (P/D) to 64:36 (p/D) and further expected to be 76:24 (p/D).



Source- ICRA research

- ❑ New OEM Launches in 2019-20 MG Motors- **Hector (SUV)** and Kia- **SP2i (Compact SUV)**.



## Development

### Rising Fuel Prices

### Weakening Rupee

### Bharat New Vehicle Safety Assessment Program

### IRDA making Long-term third party insurance mandatory

### Leapfrog to BS VI norms

## Impact

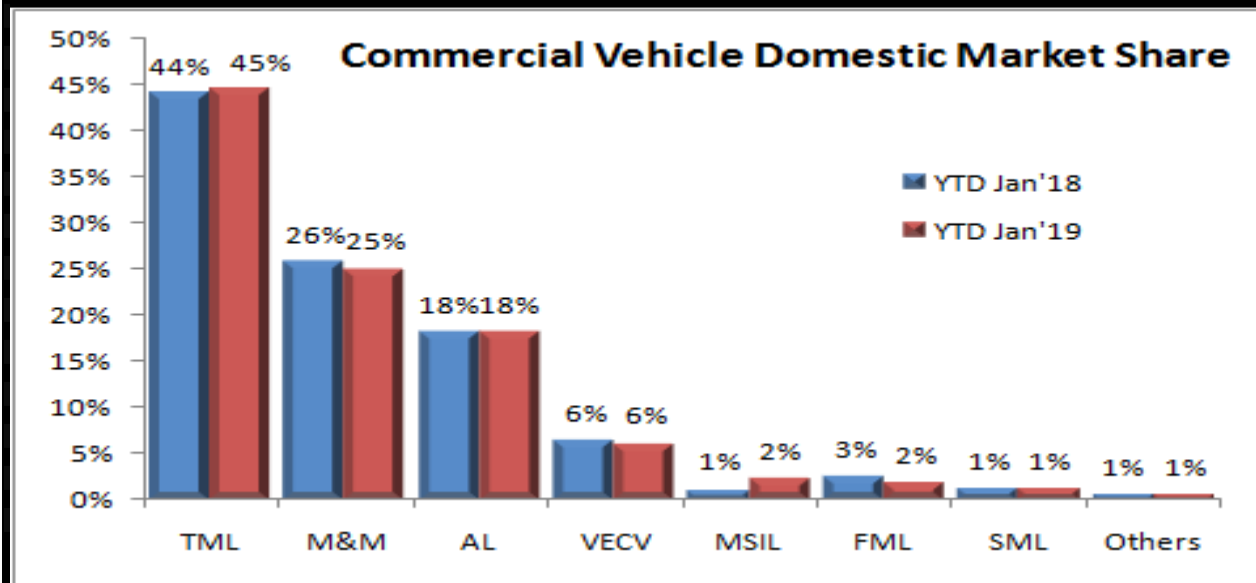
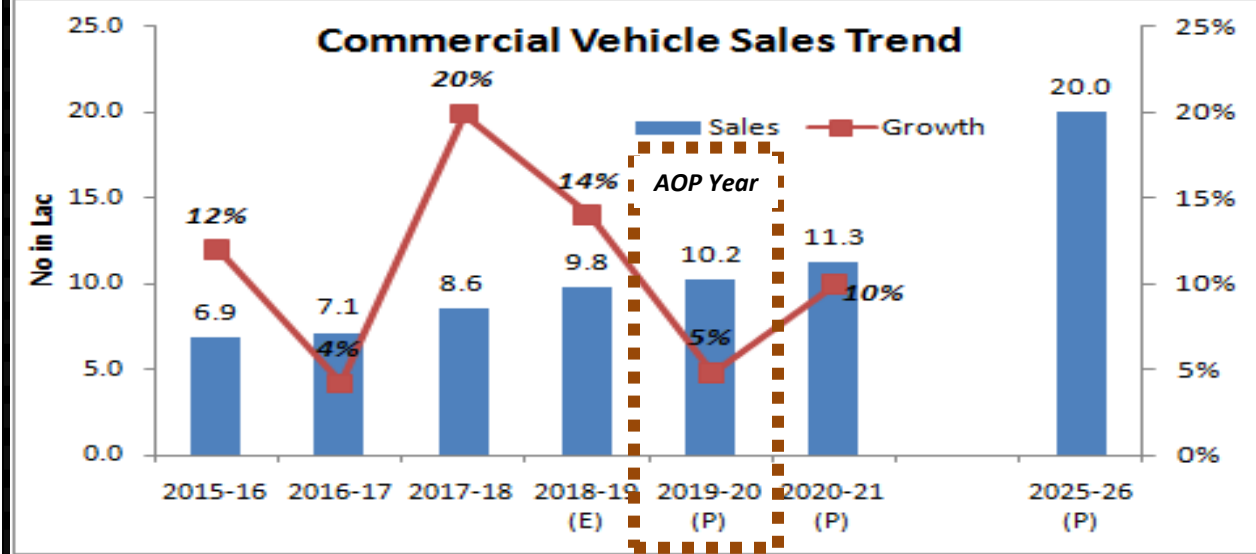
- Increase in freight rates which will impact commercial vehicle segment
- Hitting profitability of fleet owners as well
  
- Shrinking margins of suppliers
- OEMs increasing product prices
  
- All cars manufactured after March 2019 to have critical safety features
- From October 2019 every single car sold will undergo a crash test certification
- Vehicles in India will cost 8-15% more resulting from compliance with these norms
  
- First premium will increase as it will include lump sum premium for 3<sup>rd</sup> party insurance depending on engine capacity of vehicle
- This will impact the planned budget of consumers and they may switch to lower variants
  
- NO<sub>x</sub> and PM emission limits for Diesel vehicles are considerably lower than BS IV levels . Technology upgrade price of Diesel vehicle is more than Petrol
- This will further reduce attractiveness of buying diesel cars

## CV Segment

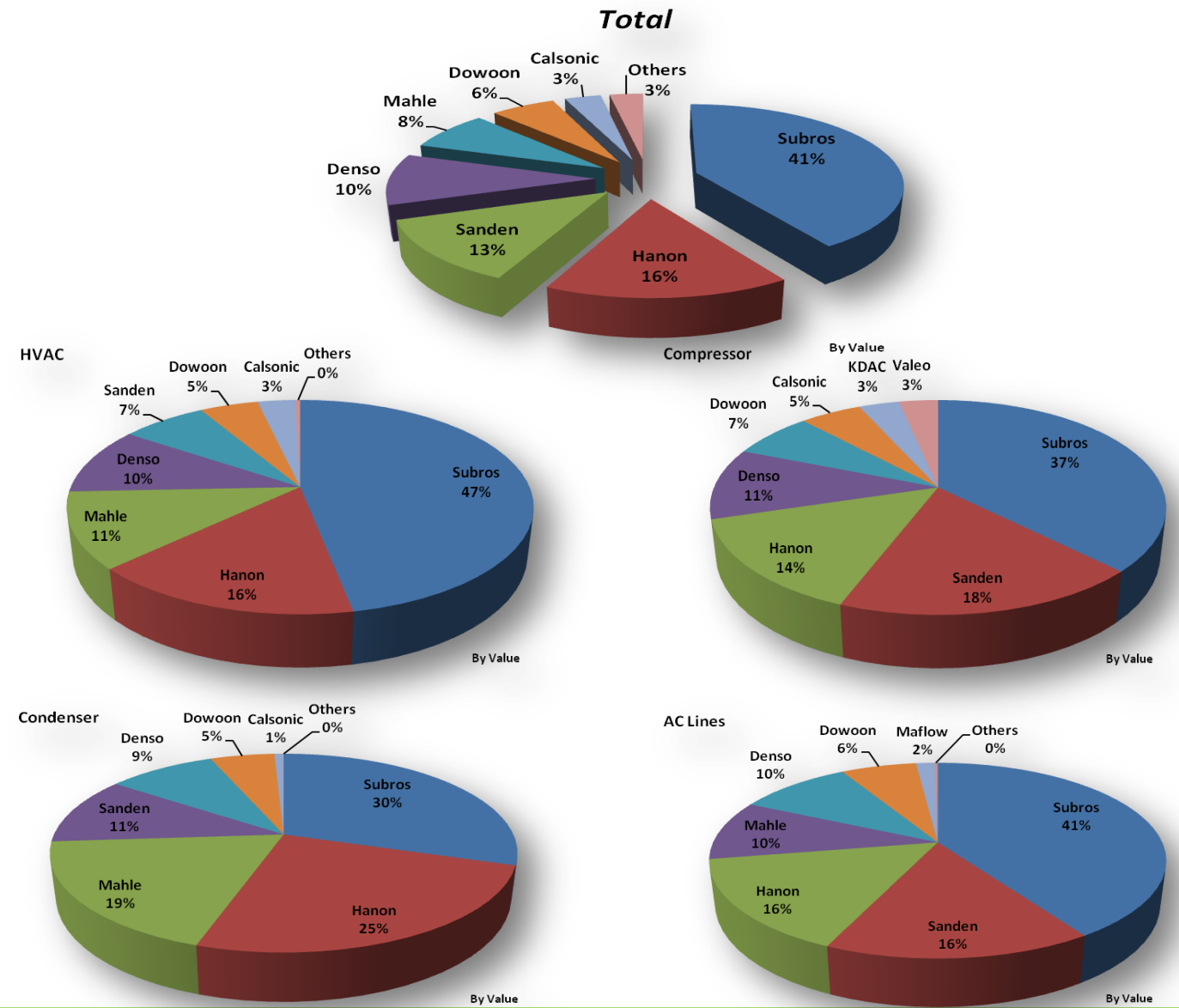
- ❑ CV Industry to grow in **2018-19 @ 14%** and likely @ **4~5% in 19-20**. due to current situation, elections and shift to BSVI.
- ❑ Sales in 2<sup>nd</sup> half subdued mainly due to market sentiments.
- ❑ Major New Launches TML- ACE Gold, FML 33/41 seated bus, M&M - New ICV range
- ❑ BSVI engine introduction from Apr '20
- ❑ Electrification of CV gaining momentum. STU bus in future are likely to be with Electric operated. Big tenders are in pipeline.
- ❑ AC regulation delayed and now expected along with CAFÉ norms only

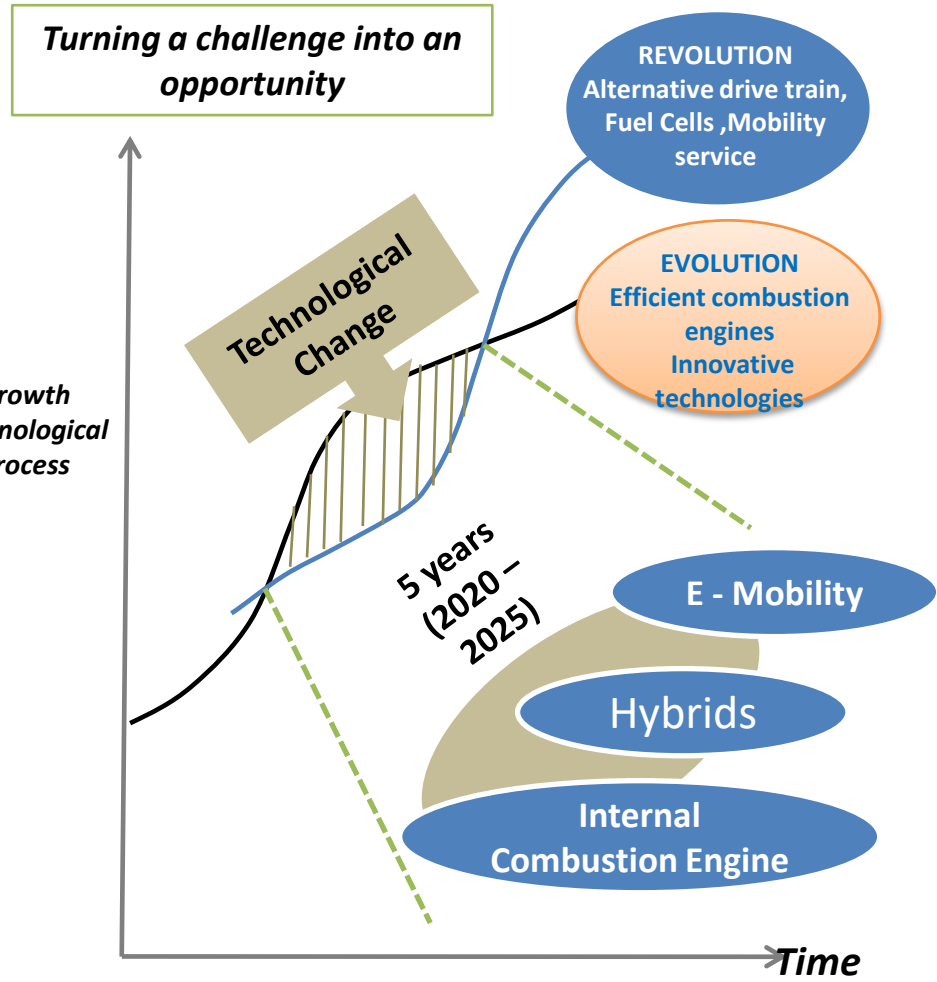
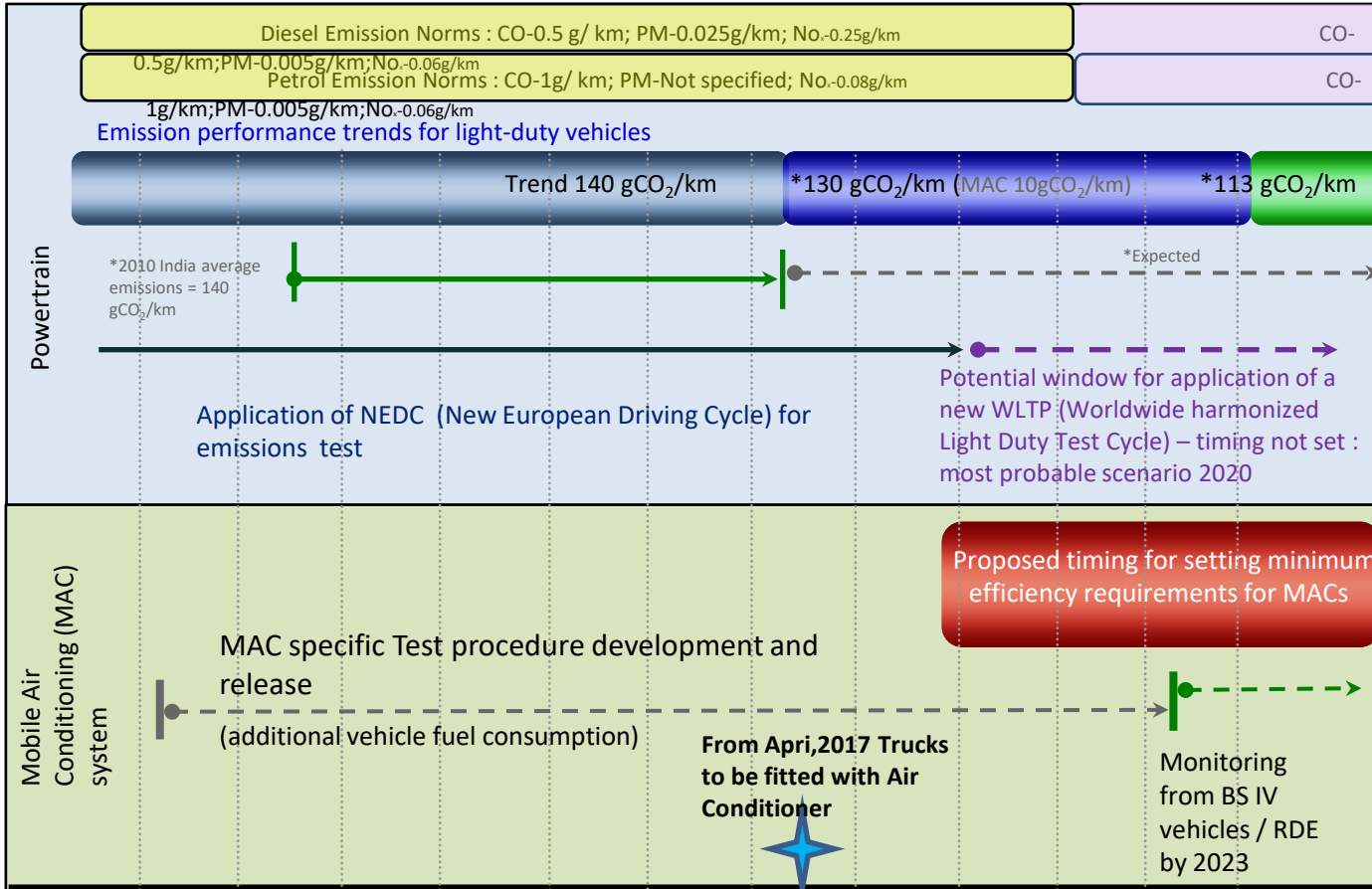
## Railways

- ❑ Diesel locomotive changed to Electric , hence existing business was put on hold. Electric unit developed in 18-19
- ❑ **Launch of Train-18 having Subros driver Cabin AC**
- ❑ All AC Coaches to be refurbished for every Six years: Indian Railways
- ❑ Indian Railways set to give nod to make Aluminum Coaches to increase Train speeds
  - MCF Raebareilly is working on this Project
  - ICF will start Manufacturing AL Coaches by 2020
  - AC Unit with AL body to be developed by 2020
- ❑ Indian Railways plans Roadmap for three-fold increase in Production by 2022.



- *Subros is market leader in domestic market with overall SOB of 41% by value.*
- *In last three years, Subros has launched new technologies as below:-*
  - *Slim HVAC (22% saving in weight.) & Increase performance (small size = current model)*
  - *Complete localized Heat Exchangers (RS Eva, and SFAII Heater)*
  - *SLC hose : Compactness & weight reduction (30%)*
  - *Condenser - Slim 11.5 D thickness ( lower weight and high performance to meet R1234yf requirement)*
- *Timely introduction of New Technology would be key for sustenance of leadership position.*
- *Business Discussion for all future platforms are ongoing with customers up to 2021 and beyond..*





**Subros is planning Investment in new technologies to remain future proof**

• Nitti Aayog (Government of India Body for India's Policy Commissioning) report “India Leaps Ahead: Transformative Mobility Solution for All” intends to move to Electric Vehicle's in 2030 (as per below table)

CATEGORY	2015 ALL SCENARIOS (%)	2030	
		BAU (%)	Transformative (%)
Ownership Mix of 4 Wheel <sup>†</sup>			
Private	73	77	50
Commercial	27	23	50
Percent Electric <sup>**</sup>			
2 Wheel	0	5	40
3 Wheel	0	5	100
4 Wheel			
Personal	0	1	40 BEV
Commercial	0	5	100 BEV
Public Transit	0	1	100

**BAU- Business as Usual**

\* Data presented on this slide are based on RMI's modeling of a medium-growth scenario. This scenario is based on historical macroeconomic data including GDP/capita from the World Bank and a 2015–2030 GDP compound annual growth rate of 6.7%, which aligns with NITI Aayog's ESS 2047 modeling efforts.

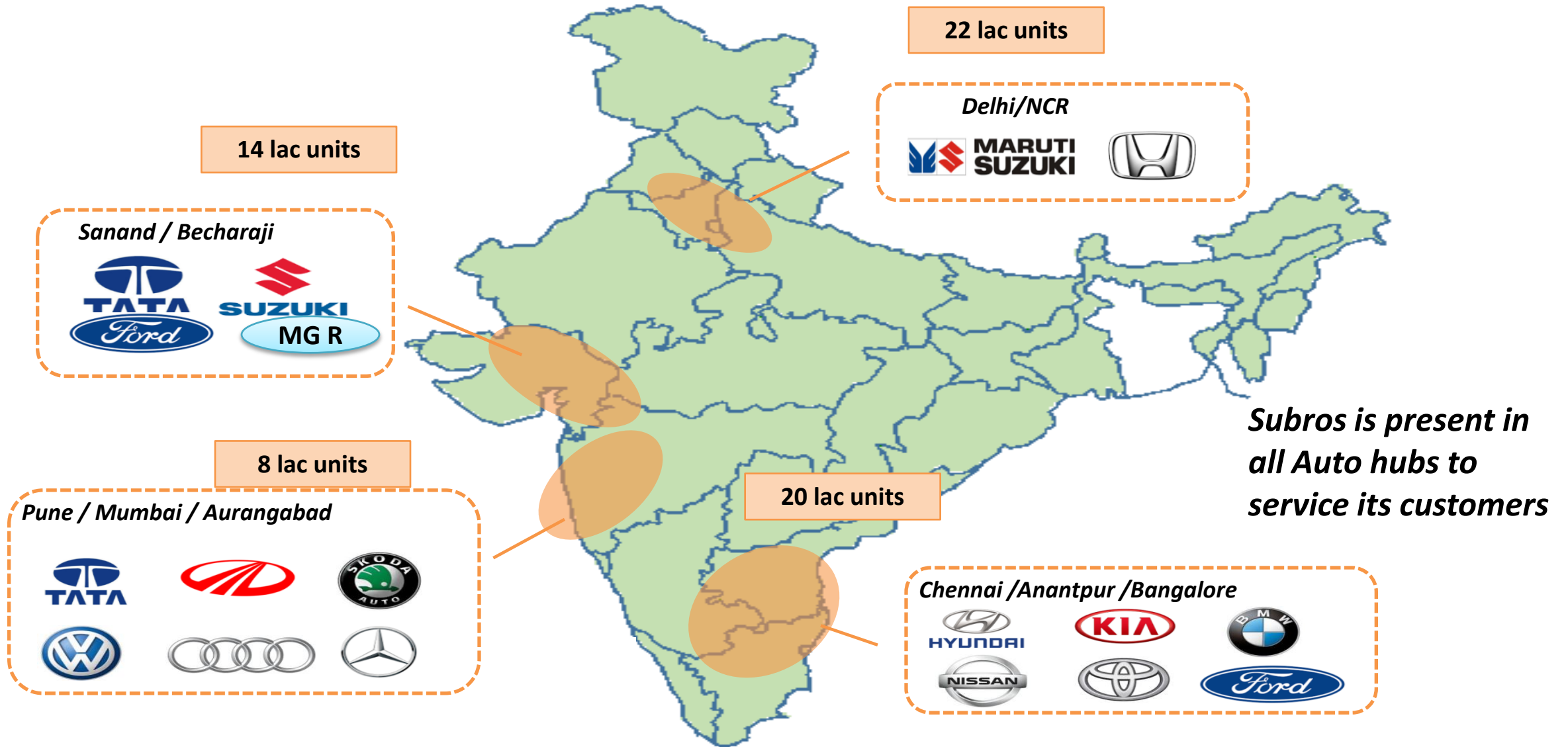
\* With respect to vehicle kilometers per vehicle type  
\*\* With respect to number of vehicles per vehicle type and ownership

**This actions is expected to reduce energy demand by 64% & carbon emission by 37%**

**It is projected that from 2021-22 onward each OEM will launch 8-10% of their total production as EV or Hybrid to ensure review of EV development, field experience and Infrastructure integration.**

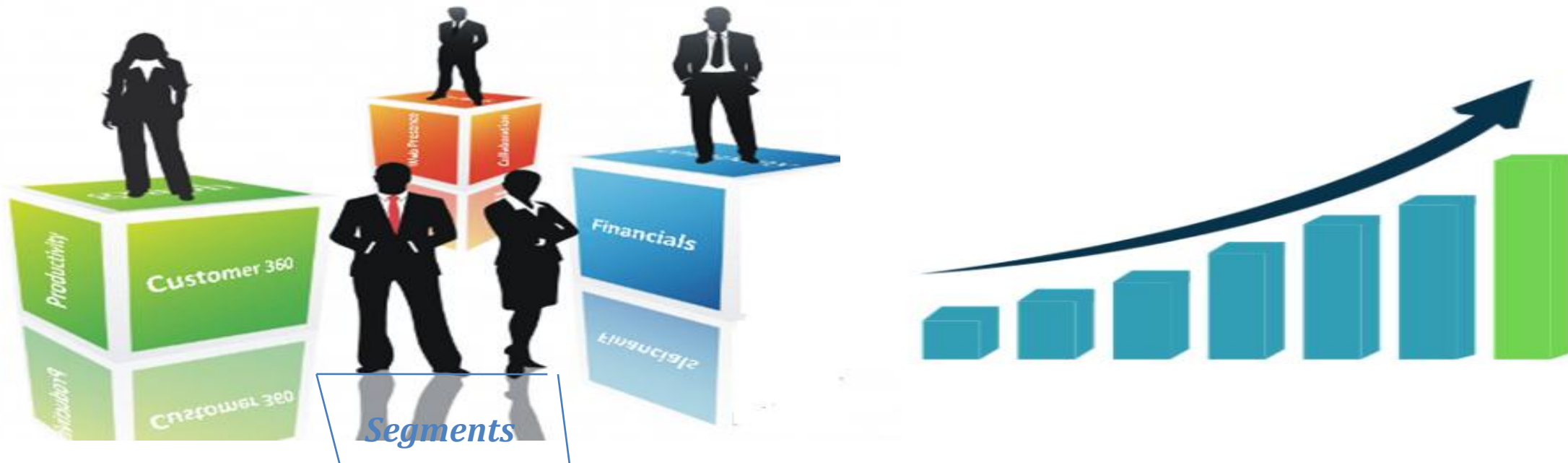
**Subros is gearing up for realisation of this opportunity**





# Subros Business

## Past Performance & Outlook



- *Steady growth in revenues in dynamic market situation*
- *Strong operational performance in FY 2018-19 (9M) with 18% growth in sales and 18% growth in EBITDA*
- *PBT (before exceptional) grew by 55%*
- *Growth of 43% in post tax profitability in FY 2018-19 (9M)*

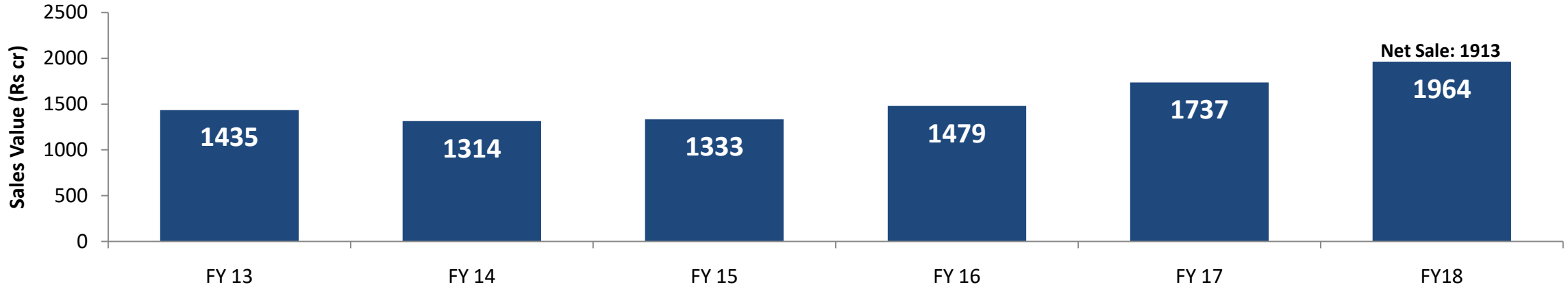
## Financial Highlights Nine Months FY 2018-19

Indicator	Amt (Rs. In crs)	Growth*
Revenues	↑ 1,606.41	18%
EBIDTA	↑ 181.45	18%
PBT (before exceptional)	↑ 87.87	55%
PAT	↑ 59.90	43%

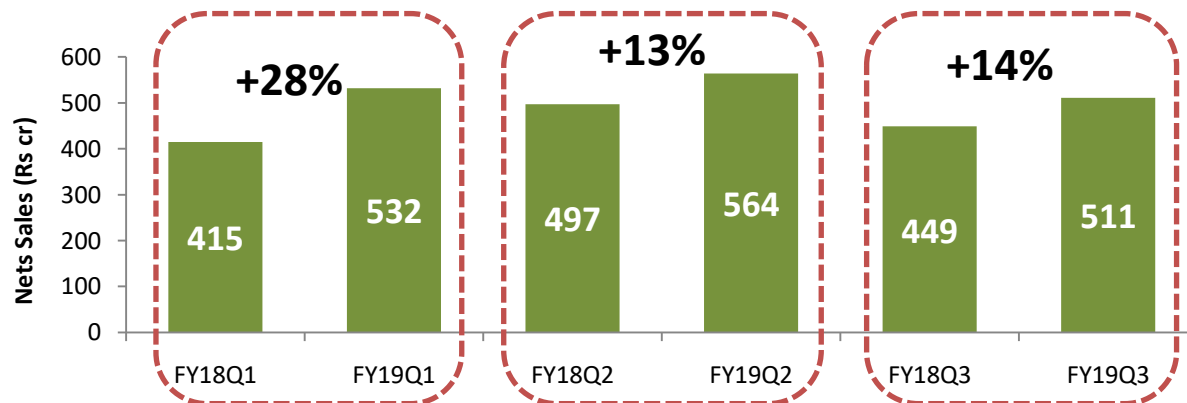
\* The comparison with the corresponding period

## Revenue Trends

\*up to FY17 with ED and FY18 (Q1 with ED, rest is net sales)



## Net Sales – Quarter on Quarter Growth



## Growth Drivers

### Performance

- Actual growth in 9 months in FY 18-19 compared to corresponding 9 months in FY 17-18 is 18%

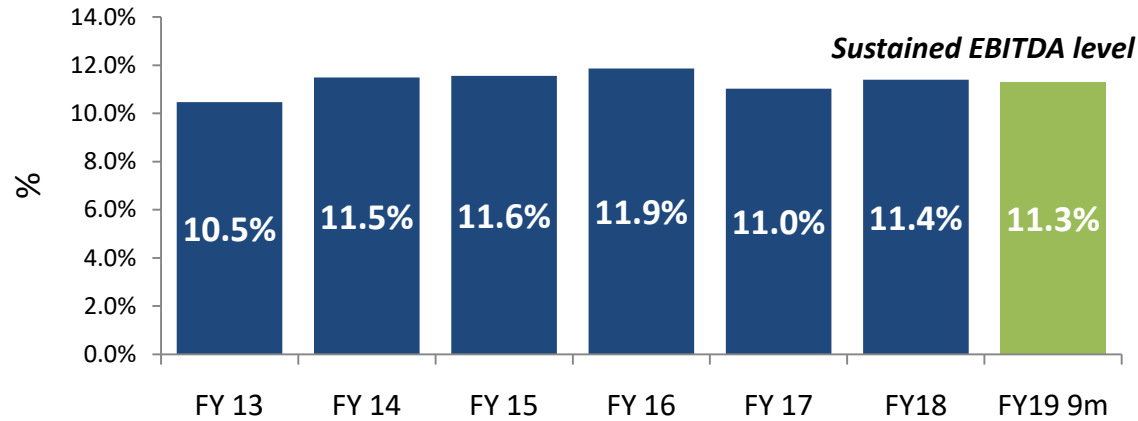
### Initiatives

- Acquisition of new customers in PV and CV segment
- Entry into new markets like CV, coach AC and Home AC for de-risking from PV segment

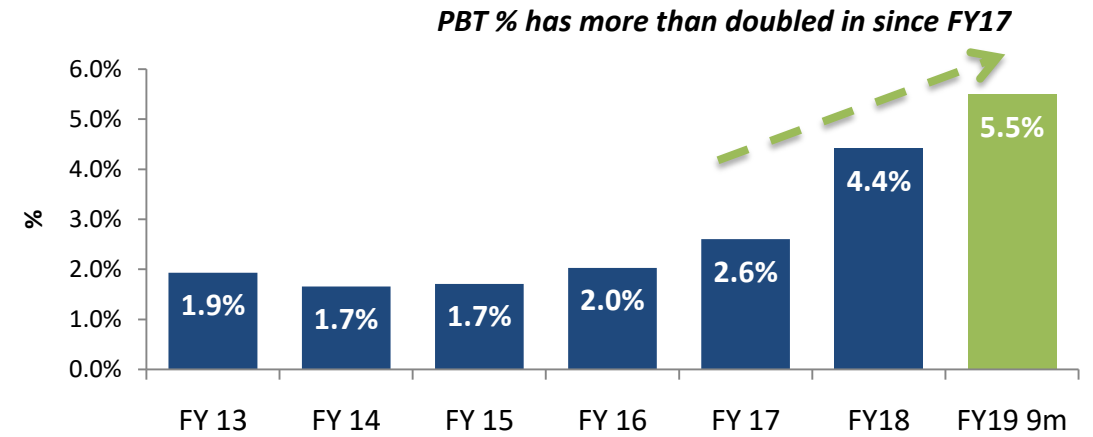
### Outlook

Growth target in next 4 year is CAGR 15%

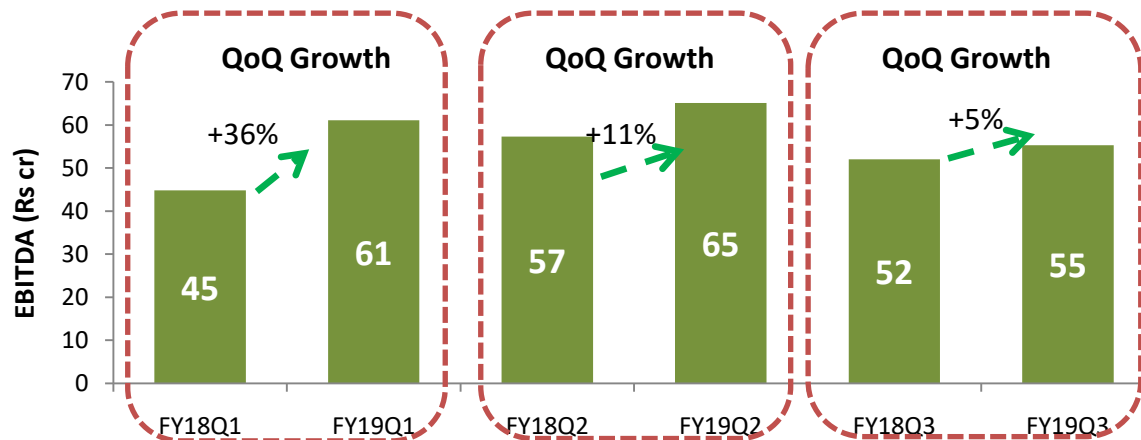
## EBITDA



## Profit Before Tax & Extraordinary Items



## Quarterly performance – EBITDA



## Growth Drivers

### Performance

- ☐ Sustained EBITDA levels despite market disruptions and FE and Commodity impact.
- ☐ PBT has increased in from 2.6% of net sales in FY17 to 5.5% in 9m FY19 due to operational efficiency

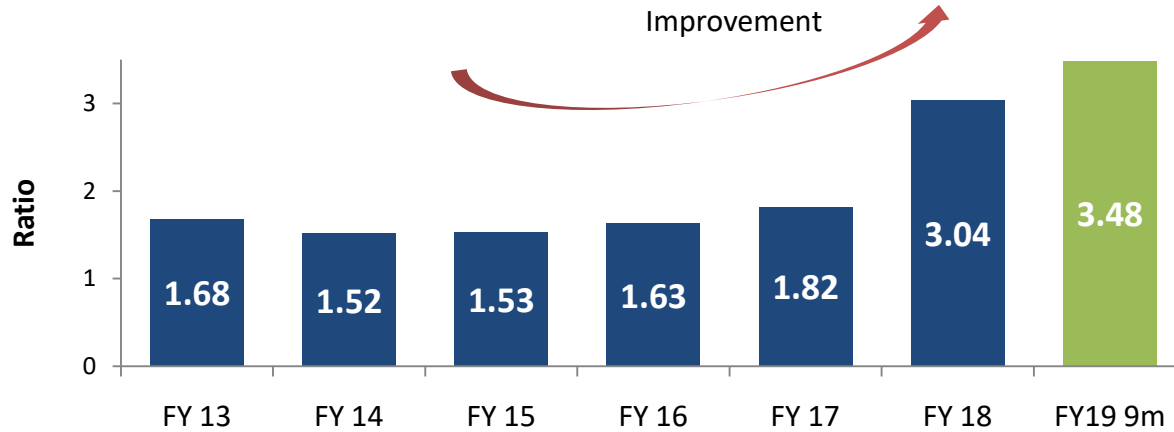
### Initiatives

- ☐ Localisation of 1.5% in 3 Years
- ☐ Complete backward integration and operating efficiencies
- ☐ Strategic locations for manufacturing of every product

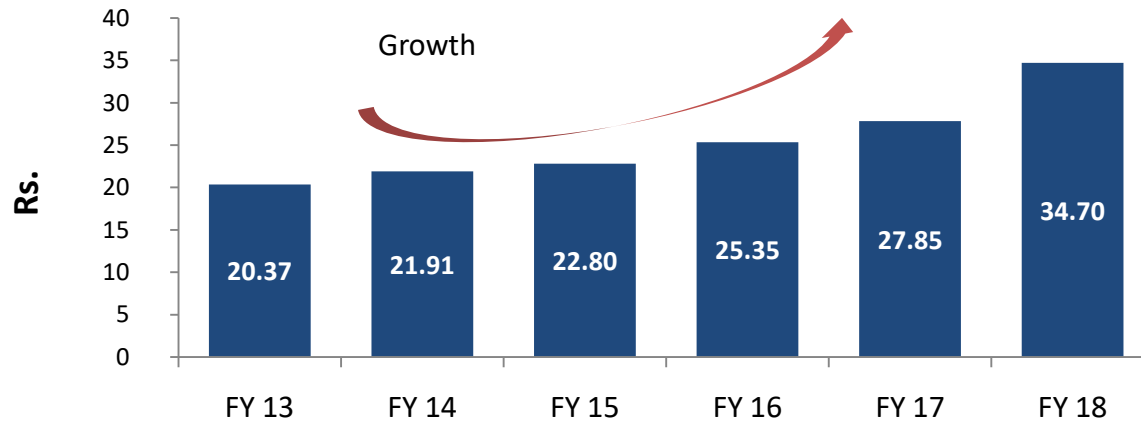
### Outlook

We target EBITDA of more than 12% on back of new growth opportunities and cost improvement initiatives aligned strategy roadmap by 2021

## Interest Coverage Ratio



## Operating Profit Per Share (Rs)



### Growth Drivers

#### Performance

Interest coverage ratio has increased over last from 1.95 in FY17 to 3.48 in 9 m FY19. Capability to pay current interest payment is improved

#### Initiatives

- Investment in all strategic projects are now getting realized
- Non-Current liabilities have reduced

#### Outlook

We target to further improve interest coverage ratio

### Growth Drivers

#### Performance

Operating profit per share has improved to 34.70 Rs. This is a 25% improvement from previous year

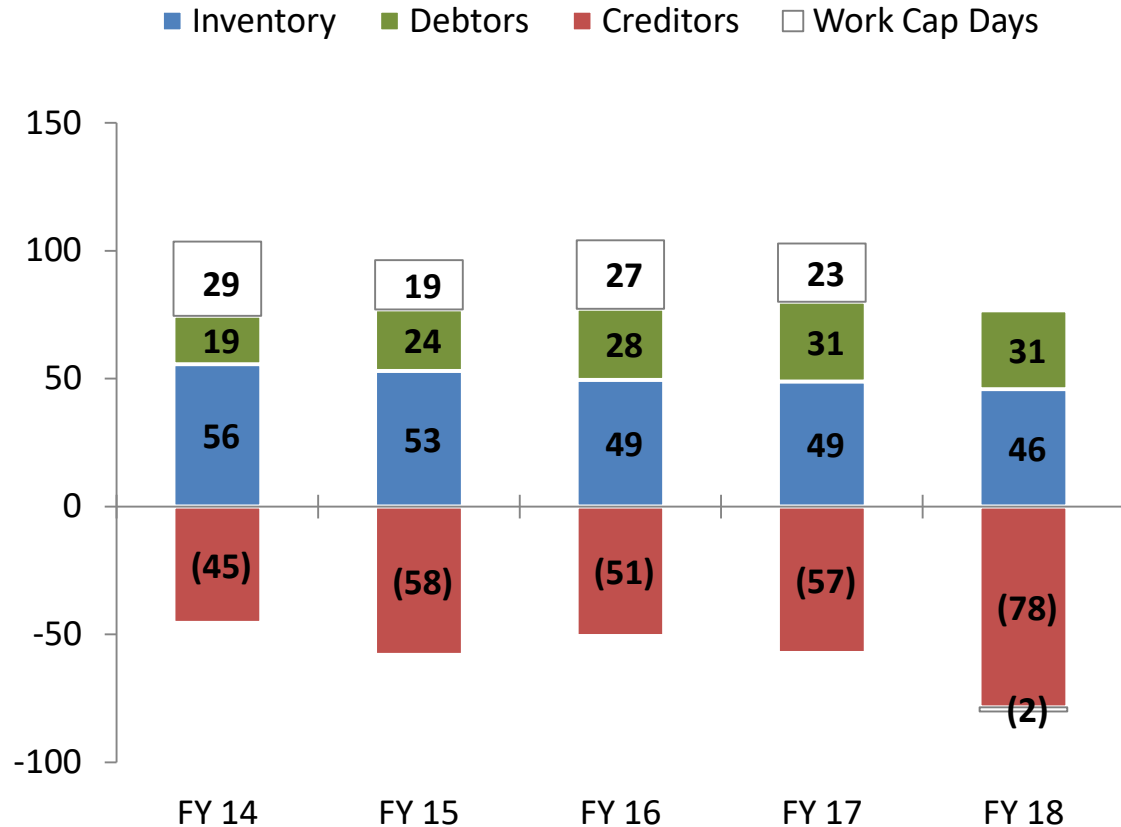
#### Initiatives

- Well defined long term strategy roadmap
- Expansion into new markets
- High profitability

#### Outlook

Target is to further improve on operating profit by executing long term strategy roadmap

## Net working capital days



### Growth Drivers

#### Performance

- FY189 is exceptional year for Net Working Capital Cycle.
- The payment terms are now aligned to customers specially for Non Car segment and OEM other than MSIL.

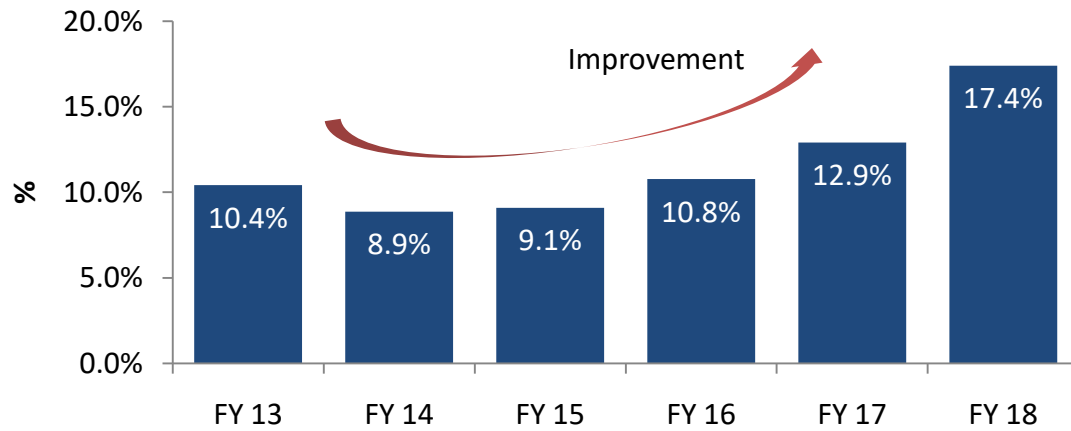
#### Initiatives

- Efficient management of –
- Inventory,
  - Creditor cycle in line with Debtors cycle
  - To Realise cost benefit of payment terms better than market

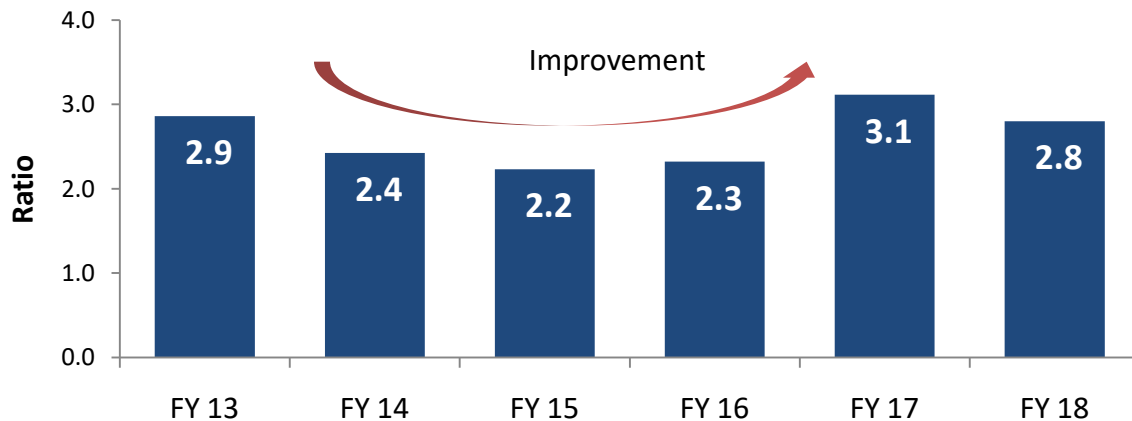
#### Outlook

- The company is working on optimising WC Cycle at 5-6 days

## Return on Capital Employed



## Assets Turnover (Net block)



### Growth Drivers

#### Performance

ROCE will remain approx 18% in FY 19 post Equity infusion

#### Initiatives

- All Investments are based on ROCE
- Market expansion
- Accurate business planning

#### Outlook

We target ROCE of more than 20% as all past strategic investments are now getting realized

### Growth Drivers

#### Performance

Our asset turnover ratio has increased from 2.3 in FY16 to 3.1 in FY17 and 2.8 in FY18, which implies assets are efficiently utilized in generating sales

#### Initiatives

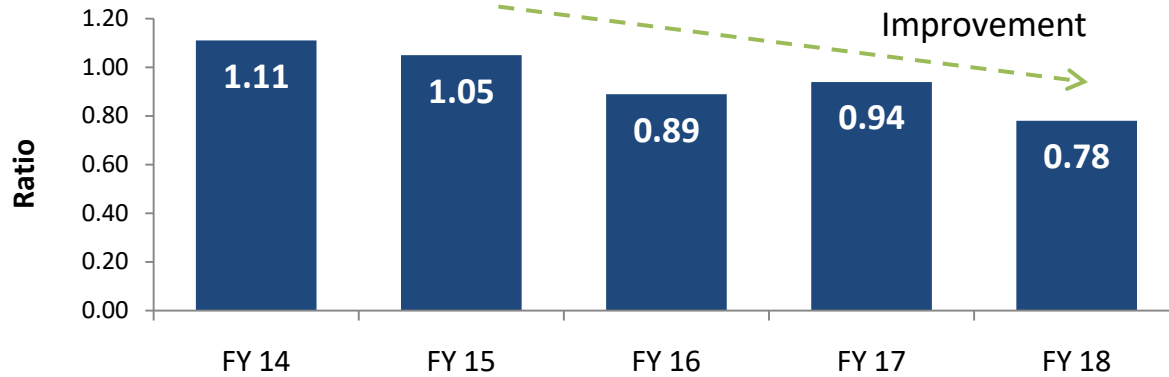
- Effective utilization of fixed-assets
- Increase in sales attributed to new customers & markets

#### Outlook

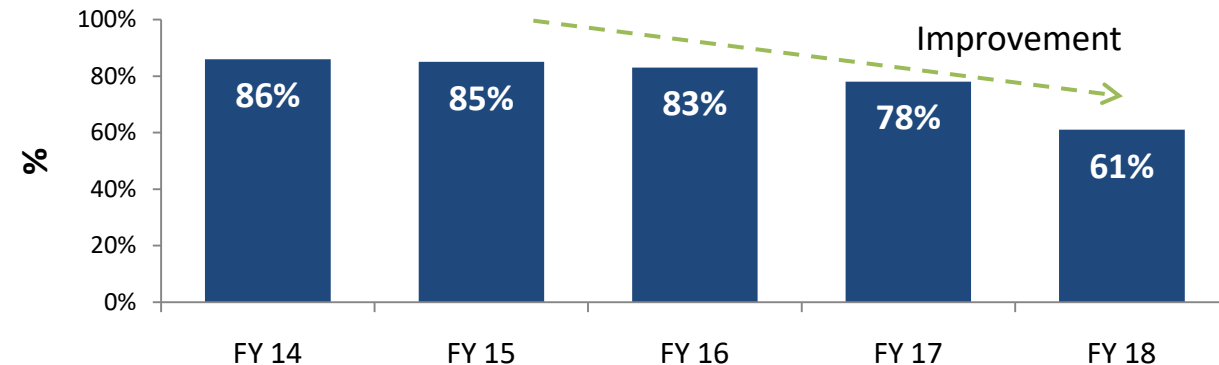
Asset turnover will further improve as we target strong growth in coming years



## Improvement in Debt to Equity



## (Int+Depr)/EBITDA



### Growth Drivers

#### Performance

- ☐ Ratios have improved from more than 1 to 0.78
- ☐ In capital intensive industry ratios are higher

#### Initiatives

- ☐ Increasing profitability
- ☐ Better management of inventory

#### Outlook

We are in capital intensive field, and have to take on a higher ratio. We will work out payment plan that will recover and re-stabilize the ratio

### Growth Drivers

#### Performance

- ☐ Improvement from 85% in FY 15 to 61% in FY18
- ☐ Percentage is still higher as peer group benchmark is 40%

#### Initiatives

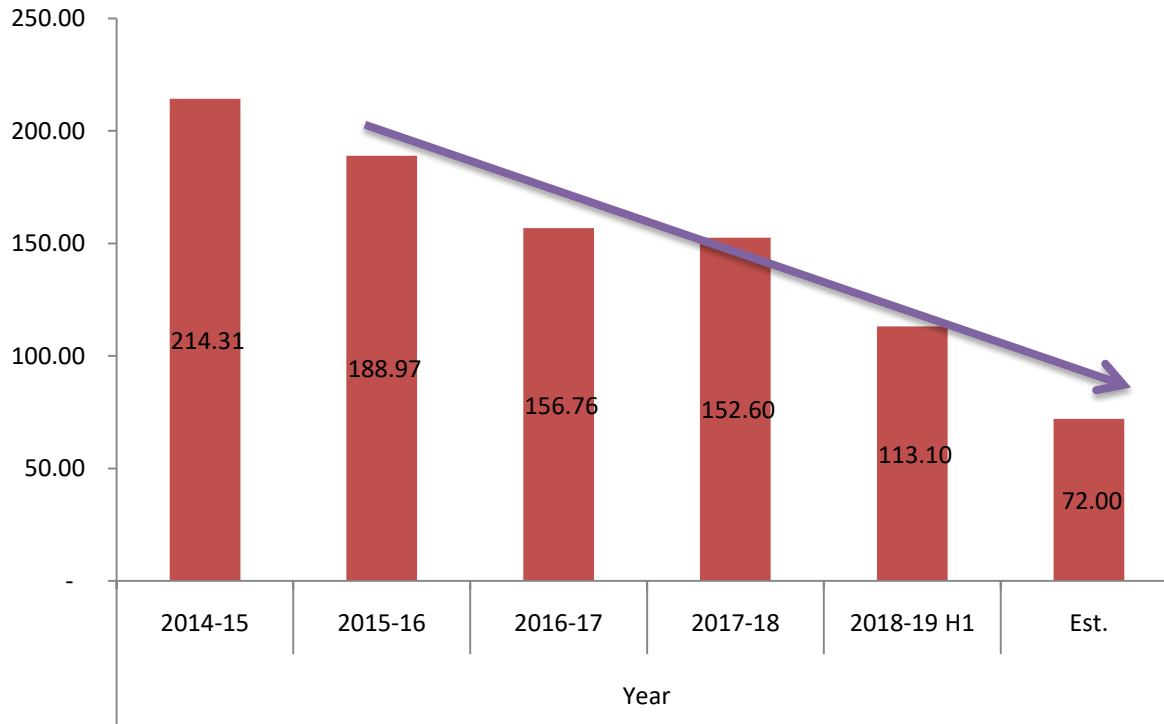
- ☐ Effective utilization of fixed-assets
- ☐ Increase in operating income
- ☐ Cost down initiatives

#### Outlook

We are targeting to reduce this percentage to below 40%

## Long Term Borrowing trend

### Long Term Debt



### Growth Drivers

#### Performance

New Plant Setup in Chennai & Gujarat. Capacity expansion based on Geographic OE location.

#### Initiatives

Product positioning to have maximum utilisation of Capacity at all location.

- Expansion of Product Portfolio

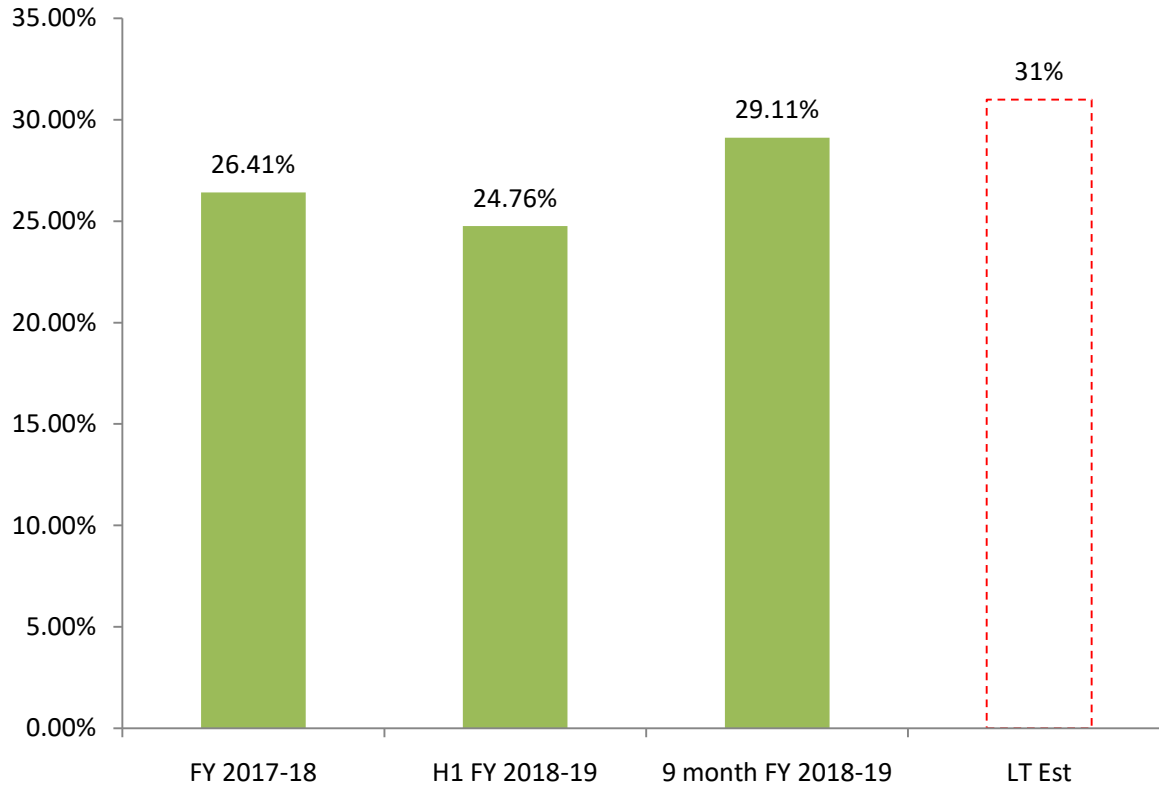
#### Outlook

Driven by innovation in technology and regulatory changes -

- Product specific technology
- Electric Mobility
- New CAFE norms

**Improvement in Bottom line resulting reduction in Borrowings and repayment of loans.**

## Tax Rate Trends



## Key Drivers

### Performance

Increasing trend of Tax rate is induced by:

- R&D Rebate being reduced from 200% to 150%
- Increase in profits as a result of increase in operating margins, lower depreciation and lower finance cost

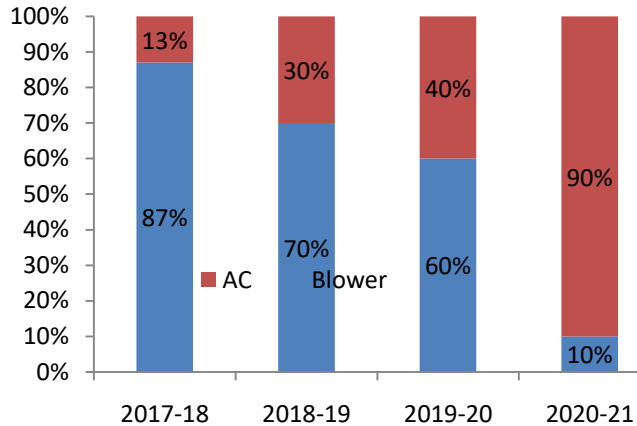
### Initiatives

R&D benefit will continue as long as the scheme exist.

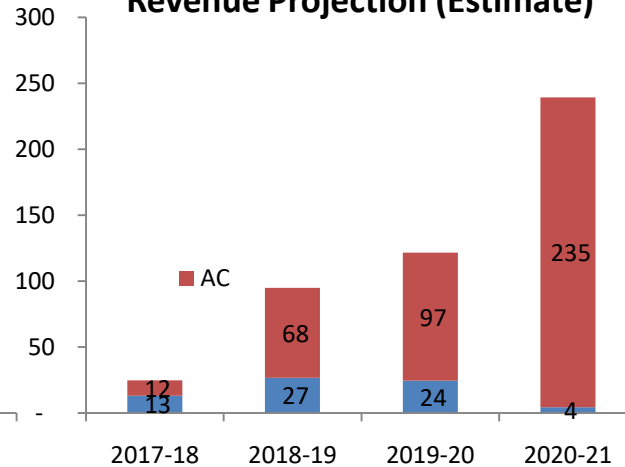
### Outlook

Tax rate will remain as moderate rates due to consistent profitability estimates in future

**Projected Ratio of Blower vs AC**



**Revenue Projection (Estimate)**



1. As per government notification all commercial vehicles with a gross vehicle weight of 3.5 tonne and above **will need to have natural or forced ventilation.**
2. **Growth in M&HCV** segment will drive growth of Blower business. Sales of this segment grew by 19.4% in 2017-18
3. There are **new investments, strategic partnerships/joint ventures** in truck segment
4. Improved **interconnectivity** and better roads
5. All the OEMs, including Tata Motors, Ashok Leyland, VE Commercial Vehicles and Mahindra & Mahindra have **recorded strong M&HCV**

## Current Status

- Since Industry to move from BS-IV engines to BS-VI by Apr'20, hence Truck Air Con , Introduction of IHX and VDC compressor would be required.

## Growth Driver

- Air-conditioning with excellent cabin would enhance driver efficiency and pave the way for trucks to be run for 20 hours a day
- It can help prevent serious accidents as it helps the drivers to stay fit and focused during long hours

## Railway Segment Drivers

**Market in 4 years : ~2,000 Rail coaches annually  
: ~1,000 Driver Cabin annually**

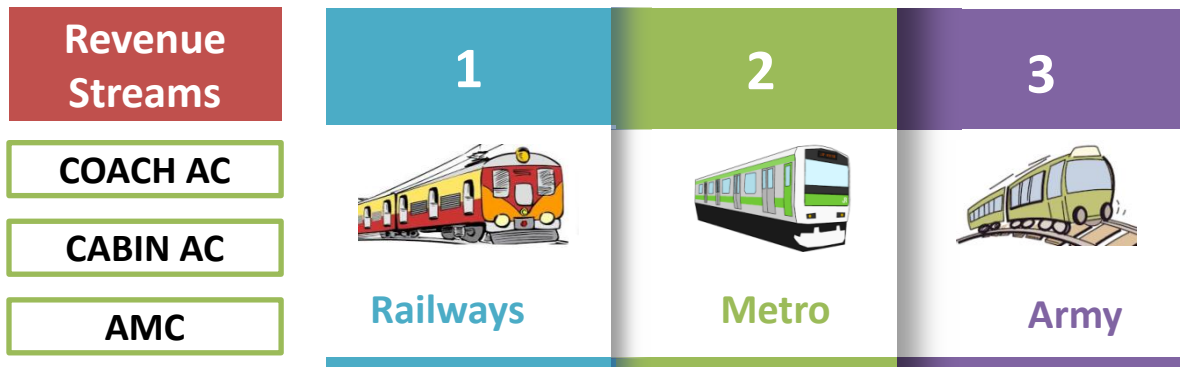
1. Railway **infrastructure investment** are expected to increase
2. Foreign Direct Investment (FDI) **inflows** into Railways Related Components from April 2000 to June 2018 stood at US\$ 920.21m
3. The Government of India is going to come up with a '**National Rail Plan**' which will integrate rail network with other modes of transport

## Metro Segment Drivers

**Market in 4 years: ~1000 Metro coaches annually**

1. A total of **3,343 railcars** are **planned to be added** to the metro network over a period of five years (2018-23)
2. Around **69 per cent of the demand for railcars is expected to come from the Mumbai metro and Kolkata metro** extension projects
3. Development of the **light rail transit (LRT) system** is also expected to create new demand for rolling stock

## Strategic Segments



**Targeting cumulative ~150 cr in next 3 years from Rail segment**

## Transport Refrigeration Market

**Market in 4 years ~ 5,000+ Reefers annually**  
(organised refer market)

Reefer segment will grow by 15 to 20 per cent annually  
*India has 12,700 reefer trucks as on Mar-2018  
and ~250 reefer transport operators*

- ~ 250 reefer transport operators
- ~ 80% transport is for dairy products
- ~ 40% vehicles are for long haul movement
- ~ 60% vehicles are for short haul movement

## Strategic Segments

Reefers

Vehicle Engine Driven

Diesel Engine Driven

Battery/Electric Driven

Eutectic Type

Target  
Segments

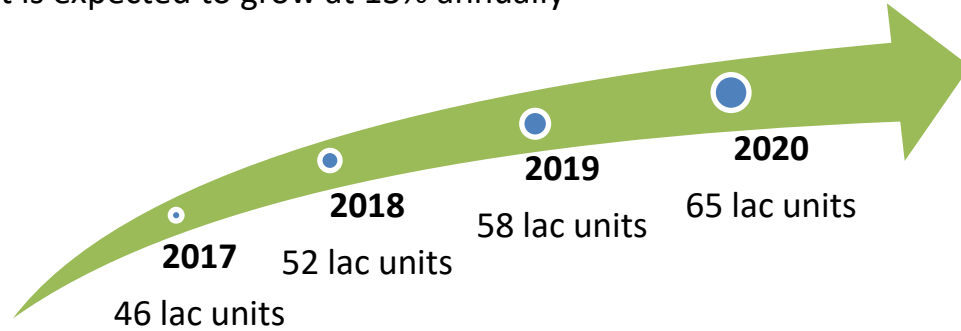
## Growth Drivers

1. Rapid urbanization and **evolving food consumption patterns**
2. **Pharmaceutical cold chain logistics** represent an emerging opportunity
3. Strict **regulatory compliance and costs**, leading to increase in demand for cold chain transport infrastructure
4. Domestic market for **refrigerated container services is yet unexploited**
5. Specialised logistics companies are expected to drive in **technological advancement to improve cold chain efficiency**
6. Establishment of modern cold storage facilities facilitated by **Government subsidies/incentives**

**Long term strategy of 20% SOB (Targeting 25cr /Year)**

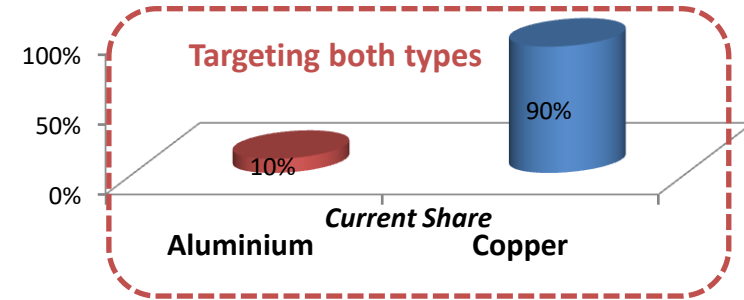
## Volume projections of Home AC market

Market is expected to grow at 13% annually

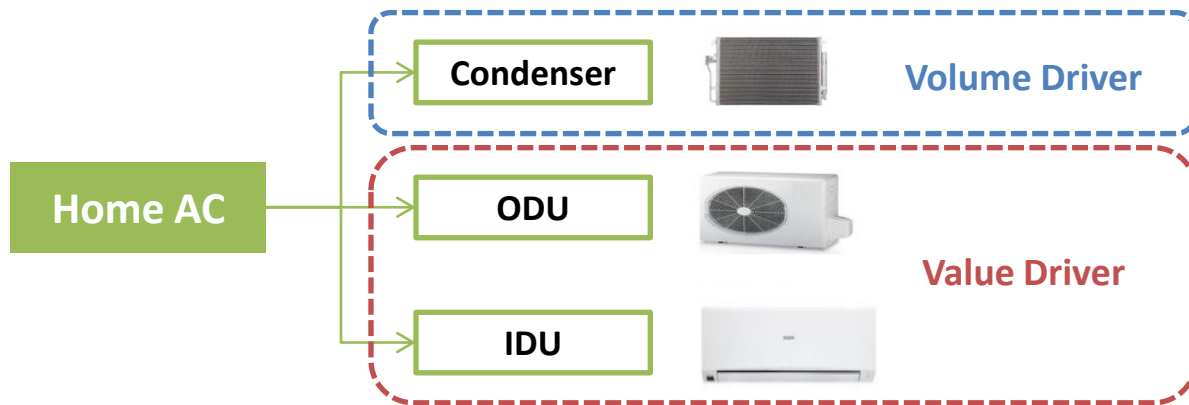


## Condenser Type

Copper condenser share has considerably increased



## Strategic Products



## Growth Drivers

1. Market is estimated to reach 65 lac units by 2020 and is growing at 13% annually
2. Very few IDU manufacturers in India
3. Home appliances manufacturers prefer multiple suppliers
4. Price point will be a major factor for customer acquisition
5. Increasing real estate and infrastructure development activities across all major sectors

**Long term strategy of 20% SOB among all products (Revenue Target 75~100 Cr/Year)**

**1** **Manufacturing technology as well as product design and technology** has been a core focus of our growth story, which we have leveraged in meeting customer and product requirements over the years

**2** Subros has extensively **leveraged information technology in business processes**. Many of our business processes in SAP, design tools etc. have strong IT enabled processes and decision support systems.

**3** Our teams with collaboration with our **Technology partner “DENSO”** are working proactively on meeting anticipated requirements through advanced technologies for meeting India future requirements.

**4** Subros has **DOJO centres** which have skill training facilities and are training grounds for fresh and existing workmen. These centres help professionals, thoroughly **preparing them on manufacturing processes and technologies** before being deployed on shop floor

**5** We have invested heavily in our manufacturing **facilities** by creating state of the art manufacturing infrastructure

**6** Our plants are **integrated with global manufacturing practices** and deliver advanced technology products. We follow Maruti Production System ( TPS)



*At Subros, we have realized complete backward integration, 75% localization level of child parts for our Products, 100% of Tooling Localisation (Injection Molds, Die Casting and Sheet Metal ) and 60% of Localize design activities*

*We aim to provide comfort by adopting new and innovative technologies, while striving to make the planet a better place.*



Thank You



*Cooling the Planet*

[www.subros.com](http://www.subros.com)