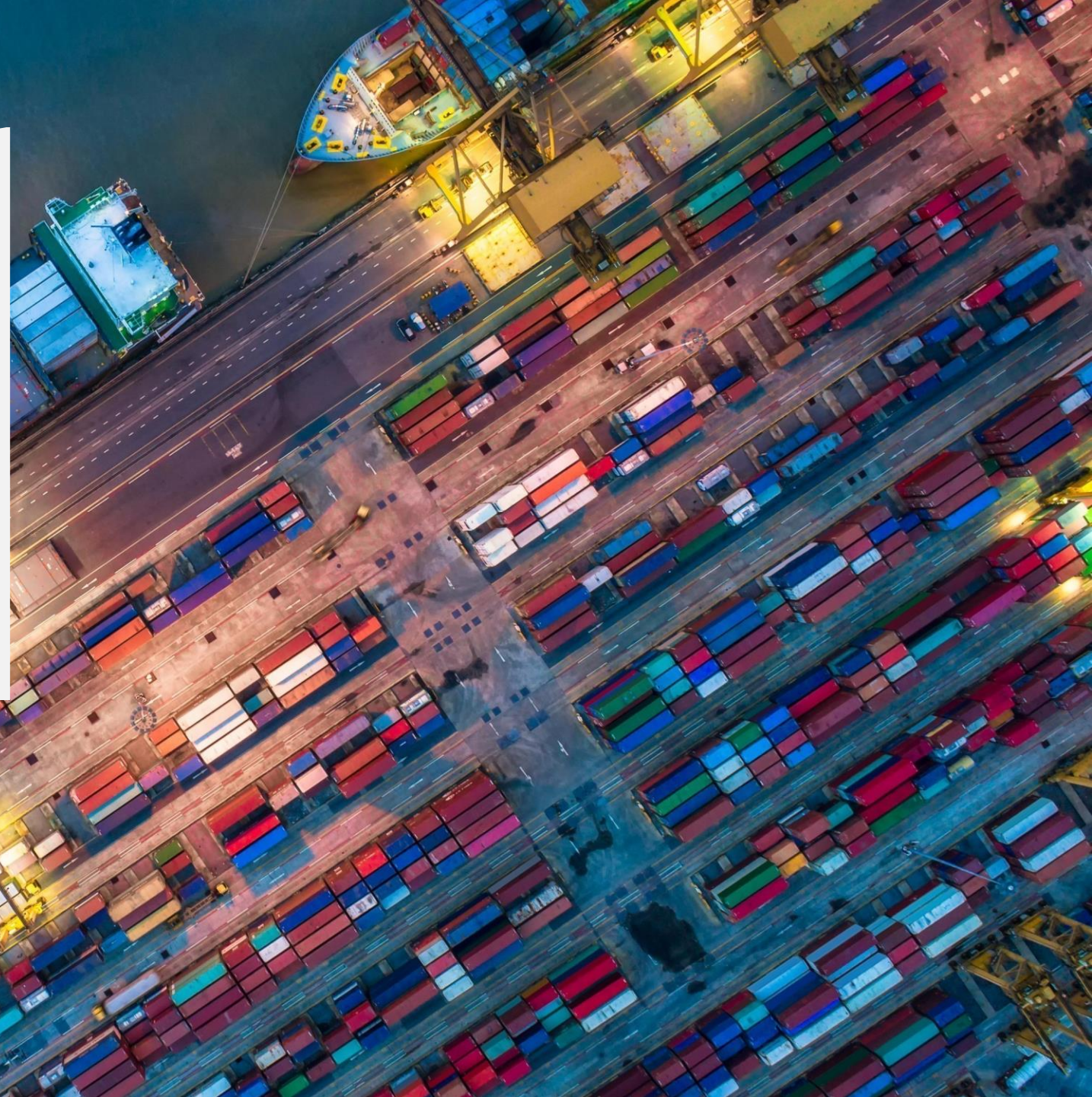


SIAM / ACMA

Report on the Localization Assessment  
for Indian Automotive Sector  
Phase II

Draft Update

10<sup>th</sup> March, 2023



# Overview of the approach adopted and next steps



## Data collection

218 6-digit HS codes data collected

Codes classified under 11 categories and 64 subcategories



## Data analysis

Multiple cuts of data - vehicle segments, importer type etc.

Build insights into 11 categories



## Data validation

18 primary interviews with industry leaders completed

Representation of net impact of localisation efforts

Compilation of localization efforts by the industry and govt.



## Next steps

Further validation from ~4 primary interactions

Preparation of final report

# Table of Contents

## 1.Executive Summary

FY 20 Import Assessment

Localization targets of Phase 1 Study

Localisation initiatives by the Automotive industry and the Govt.

Progress on localisation by the Automotive Industry

Planned initiatives for future localisation

## 2.Category wise import analysis

Engine

Electricals

Electronics

Tyres

Tools, Dies and moulds

Fasteners

Rubber Components

Iron and steel

Drive Transmission and Steering

Body Chassis

Interiors (Non- electronic)



# 1

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## Executive Summary

# Summary of Automotive Imports : FY 2019-20\*

FY 22 snapshot

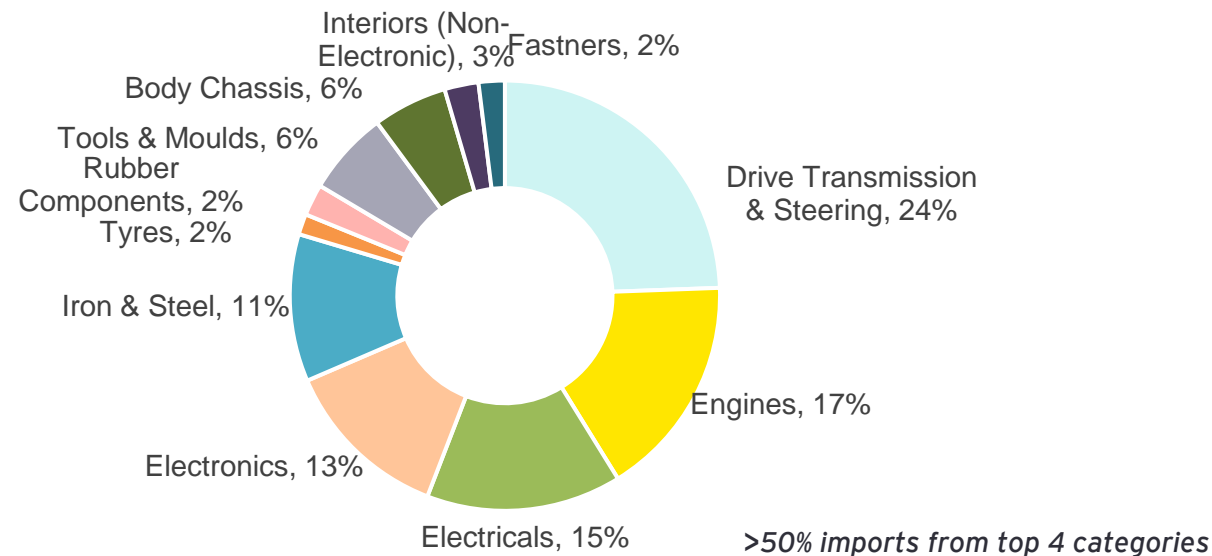
## Automotive Import

Estimated total value of automotive import :  
~ INR 1.83 lakh Crores

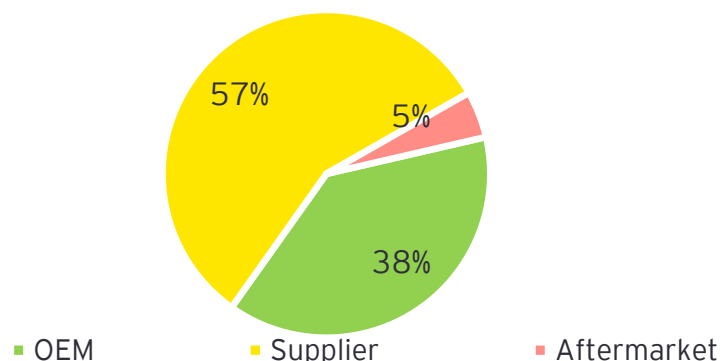
Top 11 Categories' Import Value :  
~ INR 1.27 lakh Crores

Top 11 Categories' Import Value, excluding  
Aftermarket :  
~ INR 1.21 lakh Crores

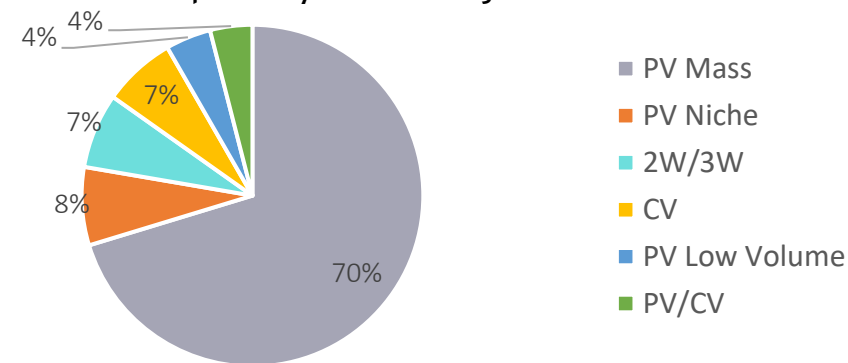
## Imports by Component Category\*\* #



## Imports by Automotive Players' Category#



## Imports by Vehicle Segment ##



\* Adjusted for BS-VI transition

\*\* Including import for Aftermarket

218 6-digit HS codes were considered for analysis of top eleven categories

# Charts baselined as per top 11 category imports: INR 1.27 Lakh Cr

## Chart baselined as per top 11 category imports for OEMs: INR 0.48 Lakh Cr

# In FY20, the automotive industry outlined a roadmap to localize major automotive components under the top 11 categories contributing to imports

Component Category	FY20 Import Value (INR Cr.)**	Localization Targets (% and INR Cr)			
		0-2 years		2-5 years	
Drive Transmission & Steering	29,860	3-5%	896-1,493	15-19%	4,394 - 5,742
Engines	21,093	1-3%	211-633	13-17%	2,822 - 3,653
Electricals	17,540	4-6%	702-1,052	15-20%	2,637 - 3,438
Electronics	14,992	2-6%	300-899	18-25%	2,756 - 3,677
Iron & Steel	13,615	5-10%	681-1,362	25-30%	3,394 - 4,073
Tyres	1,545	10-13%	154-201	41-49%	634 - 761
Rubber Components	2,938	-	-	6-8%	177 - 221
Tools & Moulds	7,785	6-9%	467-701	18-21%	1,378 - 1,647
Body Chassis	6,883	2-4%	138-275	11-13%	742 - 890
Interiors (Non-Electronic)	2,939	3-7%	88-206	14-17%	406 - 507
Fastners	2,304	-	-	21-25%	484 - 580
<b>Total for top 11 categories*</b>	<b>1,21,494</b>	<b>3-5%</b>	<b>3,637 - 6,822</b>	<b>16-20%</b>	<b>19,823 - 25,188</b>

The baseline Import Value includes Semiconductor parts as well, on which no reduction in imports has been considered. If we exclude semiconductor parts, the reduction % would be higher.

\*The Localization Targets for the entire Automotive industry have been estimated by assuming a 10-15% import reduction for other components (besides the top categories listed above). Component deep dive has not been conducted for the other components, thus, the numbers are based on high level estimation.

\*\*All import figures excluding aftermarket

# The industry and administration have worked hand-in-hand and made strong strides towards the goal of localization



## Industry initiatives\*

*\*Click for detailed view*

Collective efforts put in by the OEMs and OESs in the past 2 years to drive localization

### 1 Capacity expansion in India

- SMT process and assembling capacity for electronic components like ESP ECU etc.
- Radiator motors, AMT motors
- Tyres and Seating systems
- PCB manufacturing
- Condenser extruded microtubes

### 2 In-house tech development

- Indigenously built **AMT gear shifter**
- BS-VI compliant Exhaust systems & **Low-cost ABS solutions for 2W**
- Establishment of R&D centres to tap for **new age automotive electronics**

### 3 Technology Partnerships/JV

- Local assembly of sensors: e.g. Wheel speed, TPMS
- TFT clusters: assembly of infotainment
- Reflectors and interior lighting
- Blower Motor

### 4 Product Design

- Reducing dependency on global entities by:
  - Establishment of design centres for developing India specific **mechatronics solutions**

400+

Localisation projects undertaken<sup>#</sup>

₹3000 Cr+

Investments towards localization initiatives<sup>#</sup>

<sup>#</sup> Industry approximation done basis inputs received from primary conversations with few OEMs and OESs



## Government schemes

Policies and initiatives by the government of India which have been instrumental in aiding the industry's efforts

### 1 Engine

- Critical engine parts like **CRDI control units, injectors and fuel pumps for GDI** have been included in the PLI list

### 2 Drive Transmission & Steering

- Comfort driven premium **components (AT, EPS etc.)** to be in the Auto PLI list
- Dumping duty on **Axles for trailers** from China was imposed

### 3 Interiors (Non-electronic)

- Rationalised duties to promote localisation:
  - **Safety glass** to 15% from 7.5%-10%
  - 15% for **saddles, pedals** etc
  - **Textile PLI** to promote safety airbag production

### 4 Electronics

- Focus on safety has paved the way for including **ADAS related sub-systems, sensors** in the PLI scheme.
- Connected technology components like **CGU, connectivity-5G modules** being included in the PLI scheme

### 5 Rubber components & Tyres

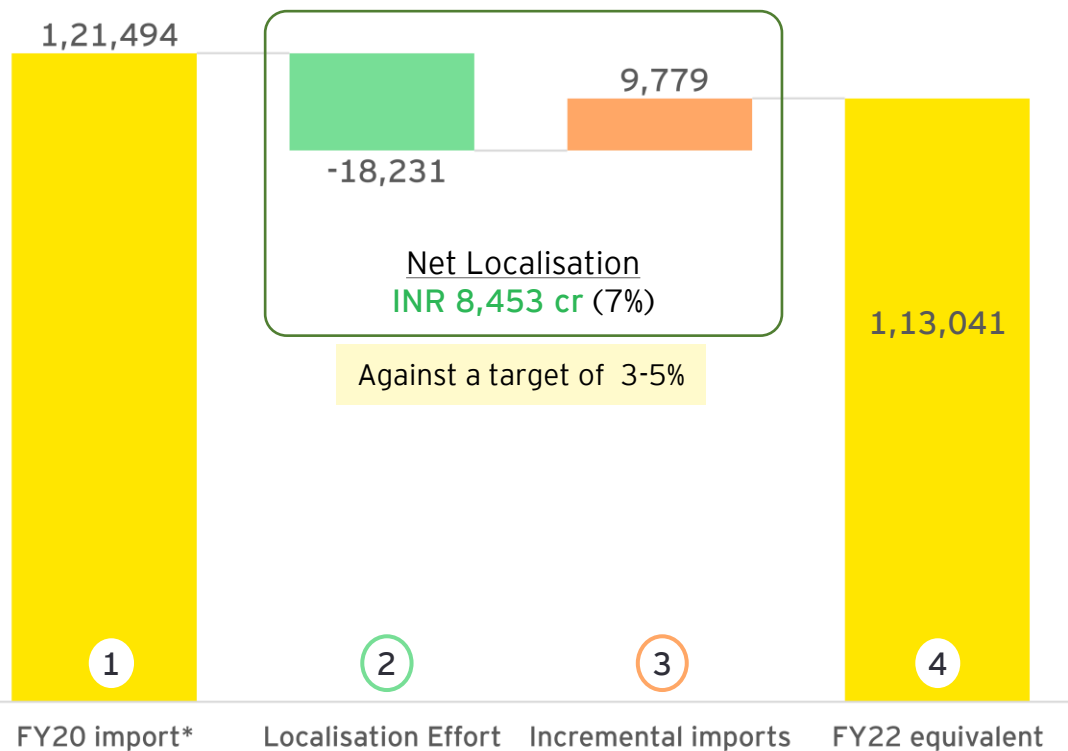
- Revoked the anti-dumping duty on **Tyre cord fabric** facilitating easier local production of tyres
- Promote local tyre production by introducing **restricted license**

### 6 Electricals

- To promote localisation GOI rationalised **duty of ignition wiring sets** to 15% from 7.5%-10%

# Localization efforts in the past two years have culminated in reducing automotive industry imports by ~7% (1/2)

Net localisation impact is the net result of localisation efforts by industry and rise in imports due to feature addition, premiumisation and regulatory impact.



## 1 FY20 Import value

Total absolute import value for FY20, for OEMs and Suppliers

## 2 Localisation Effort

Net decrease in imports on account of localisation efforts by the industry between FY20 and FY22

## 3 Incremental Imports

Net increase in imports between FY20 and FY22 due to consumer and regulatory trends

## 4 FY22 equivalent

Total import value for FY22 net of localisation on FY20 value

OEM imports for FY22 is **12% as of OEM sales turnover**  
(vs 14% in FY20)

Supplier imports in FY22 is **29% of supplier sales turnover**  
(vs 30% in FY20)

\*Only OEM and OES imports considered  
All Figures in INR Cr.



## Net localization achieved across 11 categories

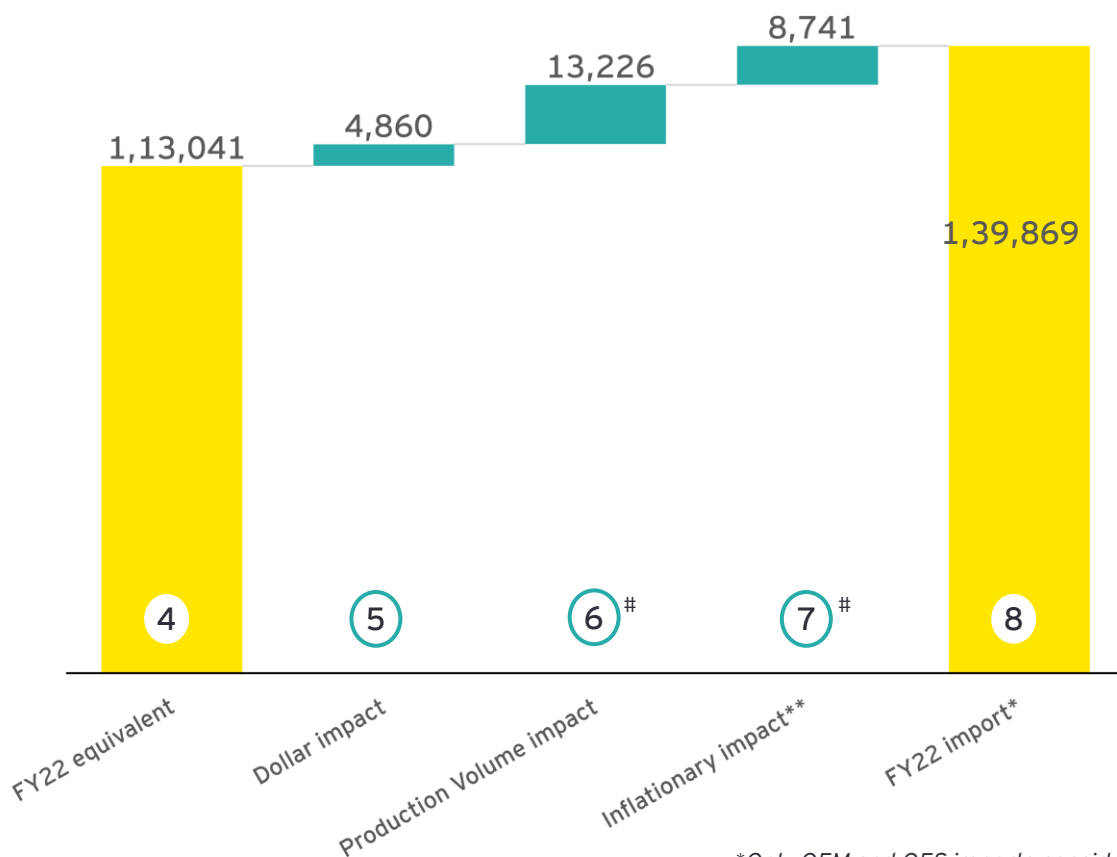
Component Category	FY 20 import value (INR Cr.)	FY 22 Equivalent (INR Cr.)*	Net Localization(INR Cr)
Engines	21,093	16,843	-4,250
Electricals	17,540	16,139	-1,401
Electronics	14,992	10,282	-4,709
Tyres	1,545	646	-898
Tools, Dies and moulds	7,845	5,846	-1,939
Fasteners	2,304	1,827	-478
Rubber Components	2,938	2,911	-27
Iron & Steel	13,615	16,291	2,676
Drive, Transmission and Steering	29,860	32,017	2,158
Body Chassis	6,883	7,170	287
Interiors (non-electronics)	2,939	3,068	128
<b>Total for top 11 categories</b>	<b>1,21,494</b>	<b>1,13,041</b>	<b>-8,453</b>

\*FY 22 equivalent is before adjustment for dollar, production and inflation

# The gap in import values can be explained through impact of rising dollar, production volumes and inflation in commodities (2/2)

Despite localisation efforts by the industry, few factors have led to increase in import value:

- Dollar fluctuation
- Production volume changes
- Inflationary impact



\*Only OEM and OES imports considered  
\*\*Includes pricing, insurance, freight  
#Click to view details  
All Figures in INR Cr.

## 4 FY22 equivalent

Total import value for FY22 net of localisation on FY20 value

## 5 Dollar fluctuation

Difference on account of change in dollar exchange rate (4% rise between FY20 and FY22)

## 6 Production Volume

Difference on account of changes in automotive production volumes across segments over the two years (Source: SIAM production numbers for OEMs and ACMA report for OES)

## 7 Inflationary impact

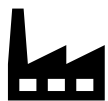
Difference on account of category specific price inflation or reduction (raw materials, freight, etc.) (Source: Primary discussions and secondary sources)

## 8 FY22 Import value

Total absolute import value for FY22, for OEMs and OESs.

# The automotive industry has initiated plans to increase localization across major imported categories

Detailed view



## Capacity Expansion and production line shifting

Shaft sub-assemblies and drive gear sub-assemblies	Engines, engine control and VCT	Sunroof and child parts	Power steering MCU child parts- Rotor and connector
Exhaust management components	Tyres	Tools for moulding and stamping operations	



## Partnerships

ABS units for 2W	Exhaust after treatment systems	Variants of EPS - Rack EPS etc.
ESP units (aluminium block extrusion)	Seat ventilation systems	Electrical Steel & Wear resistant steel



## Greenfield investments

Automatic Transmission and Transmission components	Airbag components - inflators	Certain sensors like NOx, EGT	E2W Frames & Chassis	DCT assemblies
PV electrical switches	Special application motors	Tooling for interior plastic moulded parts	360 degree camera assembly	



2

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Category wise import  
analysis

# Top 11 categories as part of the study

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1

Engine

2

Electricals

3

Electronics

4

Tyres

5

Tools, Dies & Moulds

6

Fasteners

7

Rubber Components

8

Iron & Steel

9

Drive Transmission & Steering

10

Body Chassis

11

Interiors (Non electronic)

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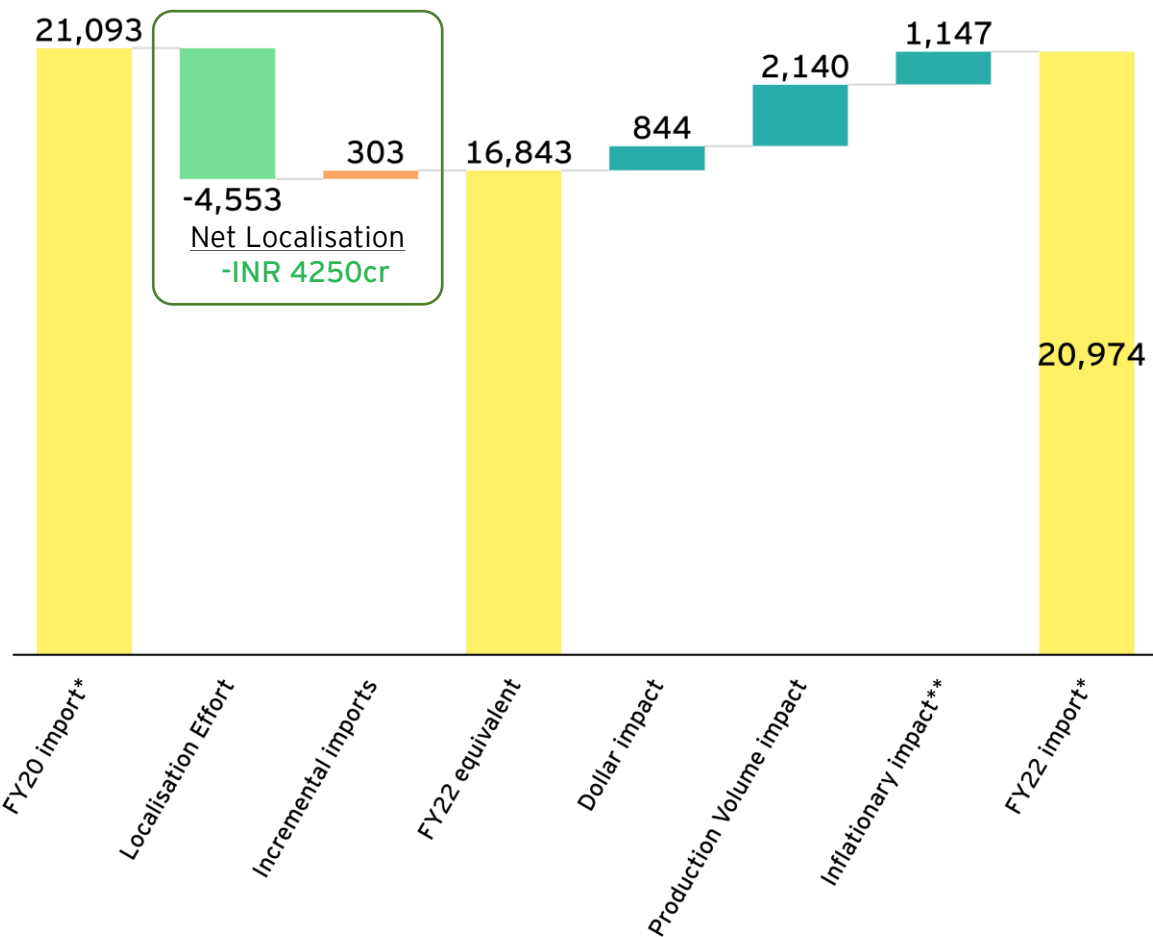
# Engine

 Back



# Engine manufacturing remains largely localised except for critical components/systems which are imported due to technology constraints

Engines



Subcategory	Key components localised in the last 2 years	Key components contributing to import#	Remarks
Tubes, Pipes & Hoses	Rubber and plastic tubings and hoses, steel piping, folded tube		
Engines	Cast components such as crankcase, blocks, pistons, crankshafts, mounts	Premium PV segment engine parts, High precision parts - valves, seals, nozzles	Quality concerns, IP protected parts and tech availability are key reasons for imports
Engine components	Ignition coil assy (certain varieties) and parts, EGR assembly	Fuel injector components, Exhaust sensors, SCR components, EGR parts	Doubling of fuel injectors and incorporation of emission control components are contributing to imports
Others	-	EATS parts - PGMs, Urea modules, etc.	Contains precious metals and special steels leading to imports

List of components is representative sample with substantial contribution to localisation/imports

\*Only OEM and OES imports considered

\*\*Includes pricing, insurance, freight

#imports due to consumer, technology and regulatory requirements

A hand is shown on the right side of the frame, holding a large bundle of multi-colored electrical wires. The wires are in various colors including red, yellow, orange, black, white, blue, green, and purple. The background is solid black. A large yellow rectangular box is overlaid on the right side of the image, containing the word "Electricals" in bold black text.

# Electricals

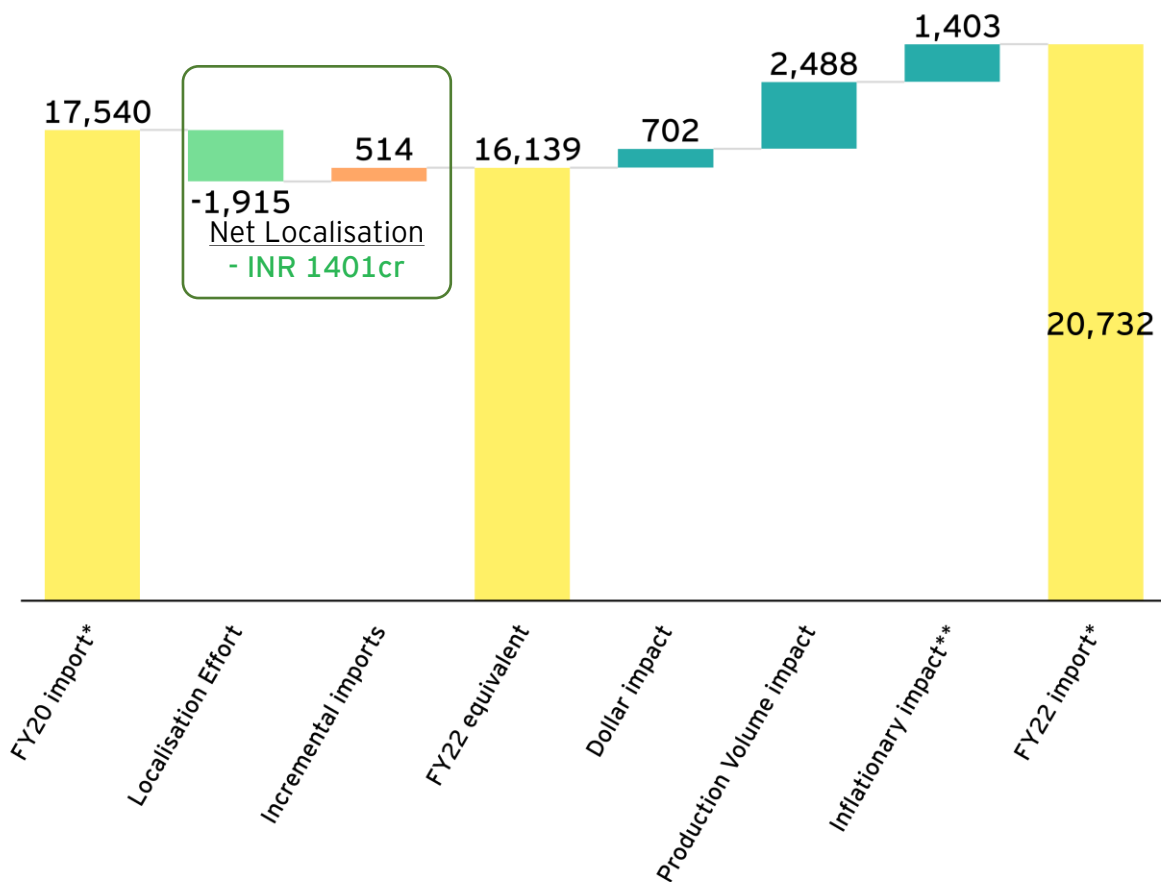
 Back





# Concerted efforts in electricals category have resulted in localisation despite customer driven trends of premiumisation

## Electricals



\*Only OEM and OES imports considered  
 \*\*Includes pricing, insurance, freight

Subcategory	Key components localised in the last 2 years	Key components contributing to import#	Remarks
Motors & Motor components	Starter motor, alternator, Radiator motors, AMT motor	Micro motors, Motor child parts-commutator, carbon brush, Grade 6,7 magnets (rare earth)	Premiumisation related features like sunroof, powered tailgate, EPS are witnessing increased demand
Lighting systems and components	Reflectors for headlamps, Head lamp beam control module, lamp housings	Lens for headlamps,	<ul style="list-style-type: none"> <li>Technological advancement and adoption of projector headlamps</li> <li>Cost also plays a key role in OEMs &amp; Suppliers importing the lighting systems &amp; components (due to FTA)</li> </ul>
Cables, Wires & Wiring harnesses	Wiring harness, junction boxes, housing	Terminals and connectors	Mother plants concentrated in China and European nations

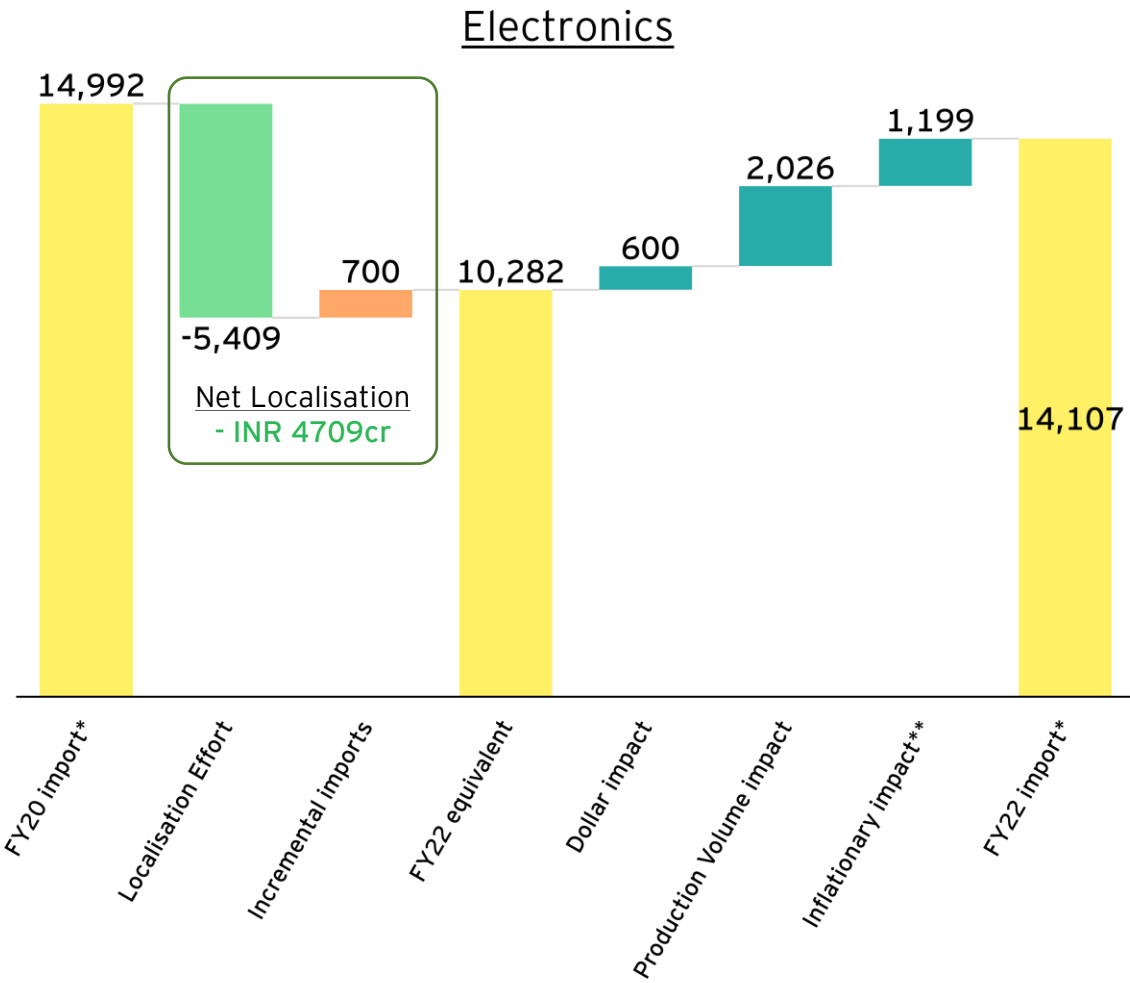
List of components is representative sample with substantial contribution to localisation/imports

#imports due to consumer, technology and regulatory requirements

# Electronics

[← Back](#)

# ~30% localisation is achieved in the electronics category on the back of investments in infotainment systems and non-semiconductor parts



Subcategory	Key components localised in the last 2 years	Key components contributing to import#	Remarks
Infotainment	Final assembly & SMT process for smart display audio	Heads up Display, LCD/TFT screen, digital instrument cluster, Telematics	Customer driven trends leading to rise of new age electronics in a vehicle
Cameras	Assembly process for camera controllers	Front, rear camera, 360 degree ,camera module	Driver assist features on the rise on account of safety trends
Sensors & ECU	ECU assemblies : Lamp, ESP, ABS, EMS,BCM, gateway controller, assembly for airbag controller	Radar ,emission control sensors, ESP, Airbag controllers , PEPS, specialised ECUs	New safety features coupled with enhanced comfort require new age controllers in the vehicle
PCB, Electronic Components and Diodes & Semiconductors	2 layer PCBs, diodes and child parts	4,6 Layer PCB, integrated chips	Lack of Technology, Raw Materials, Fab manufacturing in India

It is to be noted that supply chain shocks in semiconductor based components have significantly impacted the electronics imports

List of components is representative sample with substantial contribution to localisation/imports



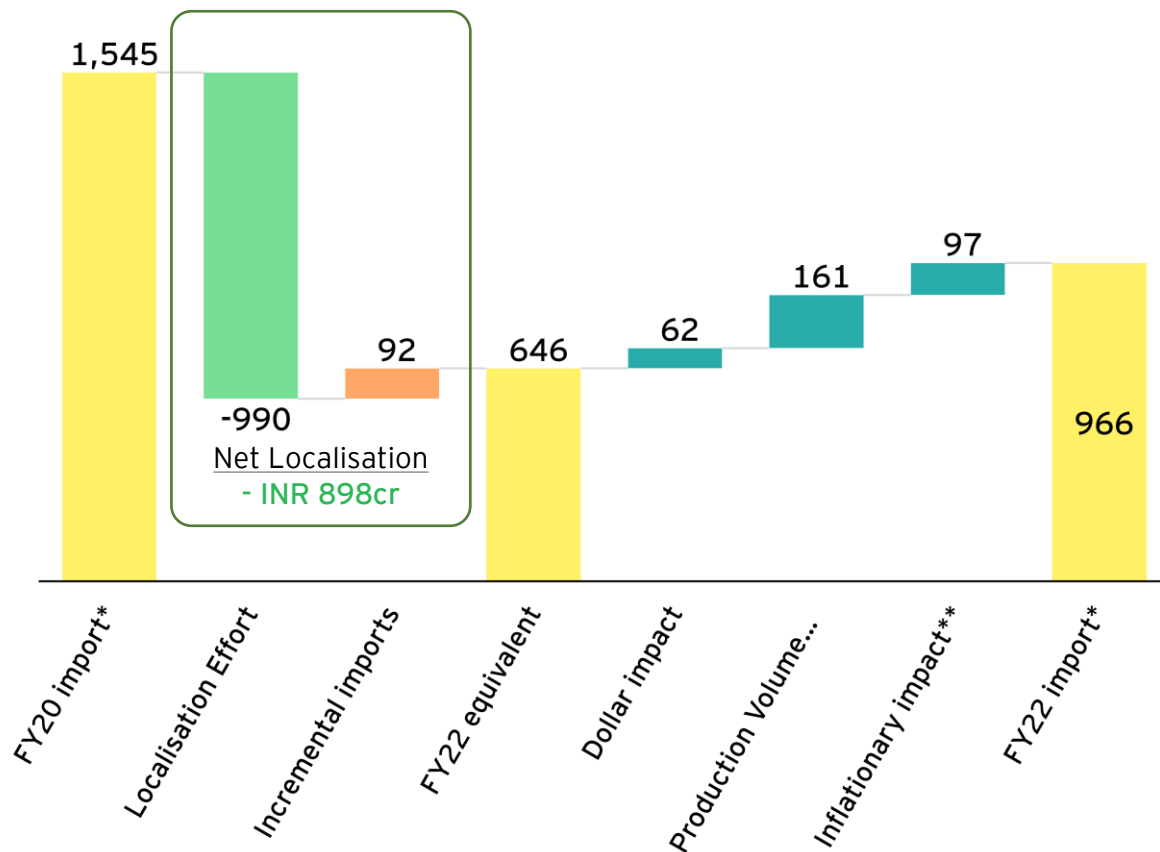
# Tyres

Back

# Regulatory push has led to localisation of tyres to a large extent barring imports for specific requirements



Tyres



Subcategory	Key components localised in the last 2 years	Key components contributing to import#	Remarks
Tyres for PV	Tyres for all vehicle segments except luxury vehicles	Niche segment tyres, EV specification tyres	<ul style="list-style-type: none"> <li>Luxury segment tyres are primarily imported</li> <li>Specific homologation requirements and customers' preference for select brands of tyres in global markets for PVs lead to imports</li> <li>Speciality tyres are imported due to non-availability in India</li> </ul>

List of components is representative sample with substantial contribution to localisation/imports

\*Only OEM and OES imports considered  
 \*\*Includes pricing, insurance, freight

#imports due to consumer, technology and regulatory requirements



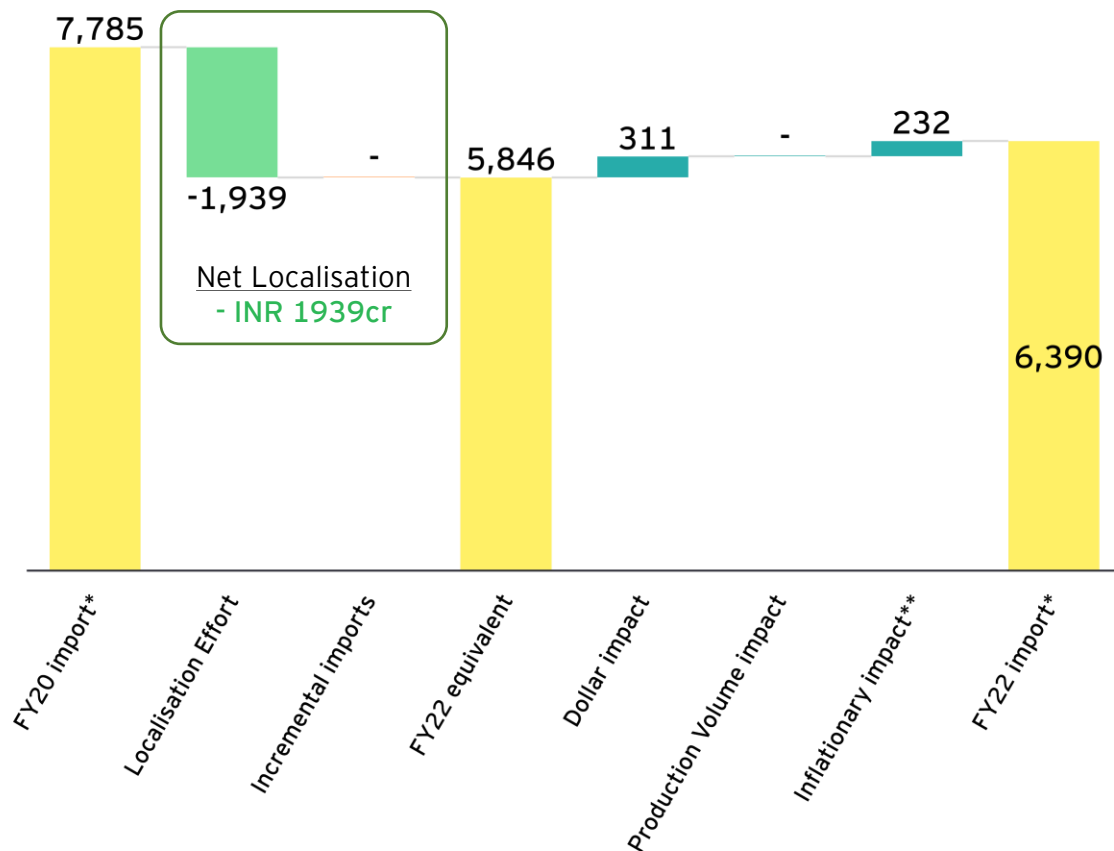
# Tools Dies and Moulds

[← Back](#)

# India's strengths in casting and forging are evident in the increasing localisation of tooling components



Tools & Moulds\*



Subcategory	Key components localised in the last 2 years	Key components contributing to import#	Remarks
Press (Stamping) Tools & Dies	Transfer tools for BiW and cabin components, die casting tools for control arms, Tooling kits for 2W lamp sets	Tooling kits for lamp sets 4W, Tools for skin panels	<ul style="list-style-type: none"> <li>Dependence on tooling for lamps due to technological complexity</li> <li>High Investments with longer gestation period to reap benefits</li> <li>Lead time constraints</li> </ul>
Tools for Plastics & Rubber Components	Tools for select interior plastic parts like glove box etc.	Moulds for lighting systems	<ul style="list-style-type: none"> <li>Limited supplier providing end to end tooling solutions</li> <li>Lead time constraints</li> </ul>

Tools & mould category imports are more closely linked to new product launches than production volume changes.

List of components is representative sample with substantial contribution to localisation/imports

\*Only OEM and OES imports considered  
 \*\*Includes pricing, insurance, freight

#imports due to consumer, technology and regulatory requirements



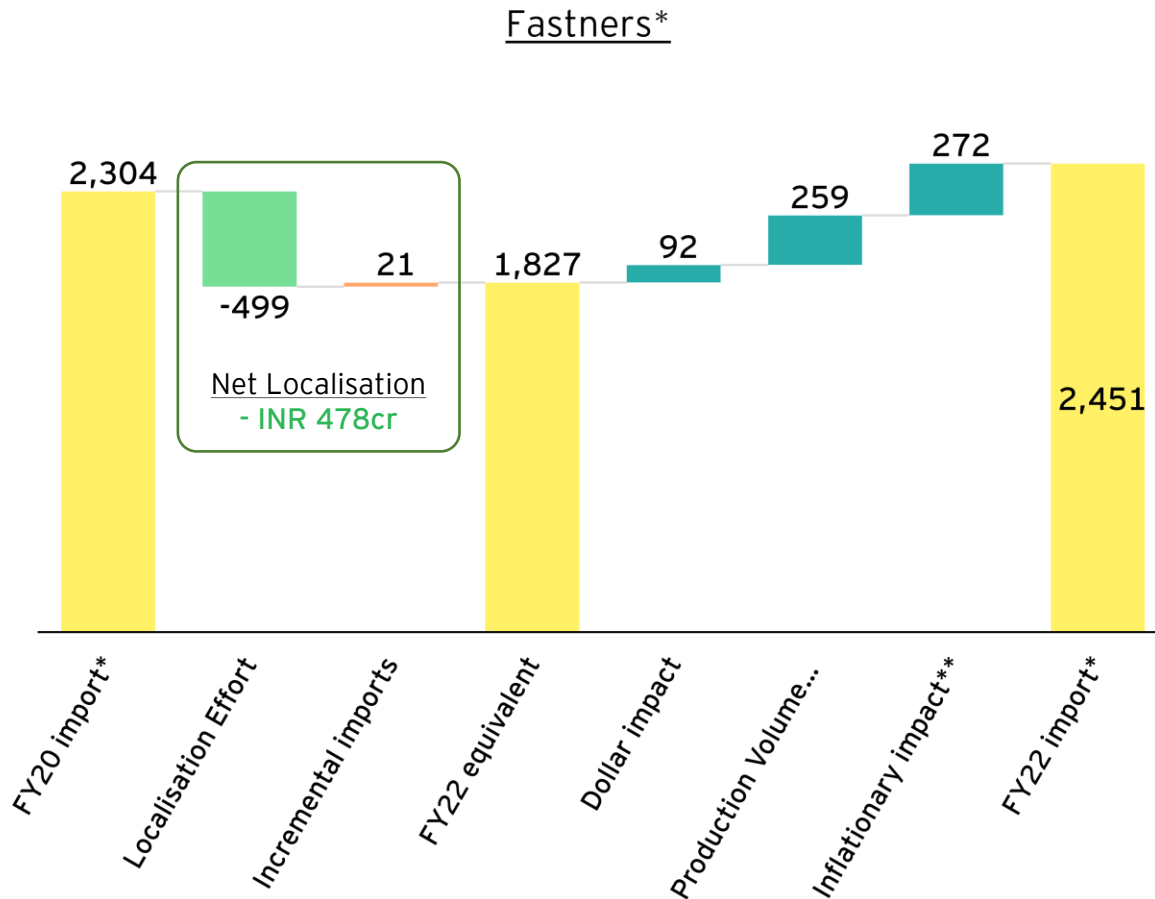
# Fasteners

(Nuts, Bolts, Washers & Rivets)

[← Back](#)



# Significant localisation efforts have paid off; high tensile fasteners continue to be imported for critical applications



Subcategory	Key components localised in the last 2 years	Key components contributing to import#	Remarks
Bolts, nuts, washers, rivets	Knurled Bolts, Flange bolts, Flange nuts, wheel nuts	High tensile fasteners (for safety critical applications)	<ul style="list-style-type: none"> <li>• Safety critical applications - significantly higher cost of failure - OEMs prefer proven &amp; existing sources</li> <li>• Cost &amp; lead time for switching is high - stringent/rigorous testing &amp; validation needed</li> <li>• Lack of integrated surface treatment for high tensile fasteners</li> </ul>

List of components is representative sample with substantial contribution to localisation/imports

\*Only OEM and OES imports considered

\*\*Includes pricing, insurance, freight

#imports due to consumer, technology and regulatory requirements

A collection of various rubber components is displayed on a black reflective surface. The items include several large, dark grey gaskets with multiple circular and irregular holes, some with a blue rubber sealant applied to their edges. There are also numerous smaller components: a group of blue O-rings, a group of silver metal O-rings, and a group of red O-rings. A yellow rectangular box is overlaid on the right side of the image, containing the text 'Rubber Components'.

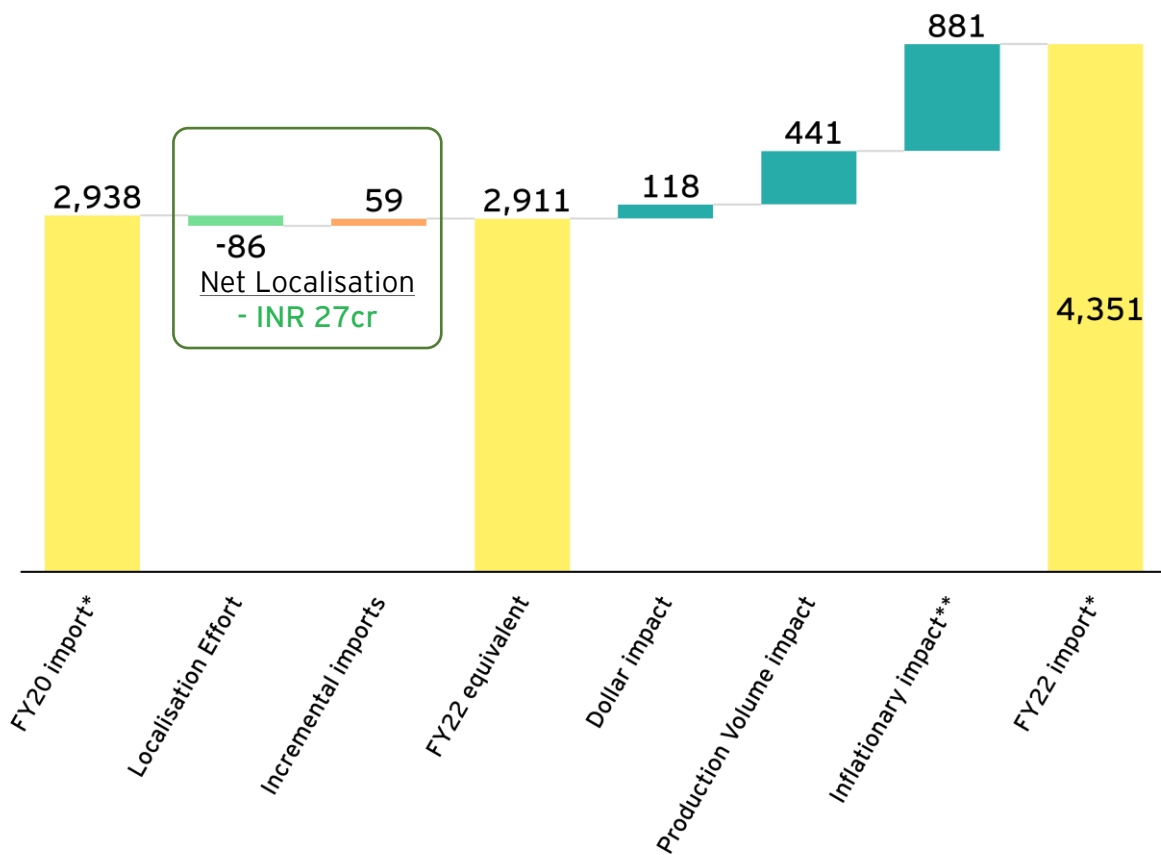
# Rubber Components

 Back

# Rubber components have seen localisation, however volatility in rubber prices and heavy dependency on Nylon-66 for tyre cord fabric have been deterrents



Rubber components



\*Only OEM and OES imports considered

\*\*Includes pricing, insurance, freight

Subcategory	Key components localised in the last 2 years	Key components contributing to import#	Remarks
Tubes, Gaskets, washers and seals: Pipes & Hoses	Grommets, pipes, hoses for general applications, door seals	Niche segment parts - gaskets, o-rings, seals	Companies also follow global standards and therefore, prefer to source globally
Tyre cord fabric	-	Nylon 66 tyre cord fabric	Shortage/ low availability of Nylon 66 for tyre cord fabric

List of components is representative sample with substantial contribution to localisation/imports

#imports due to consumer, technology and regulatory requirements



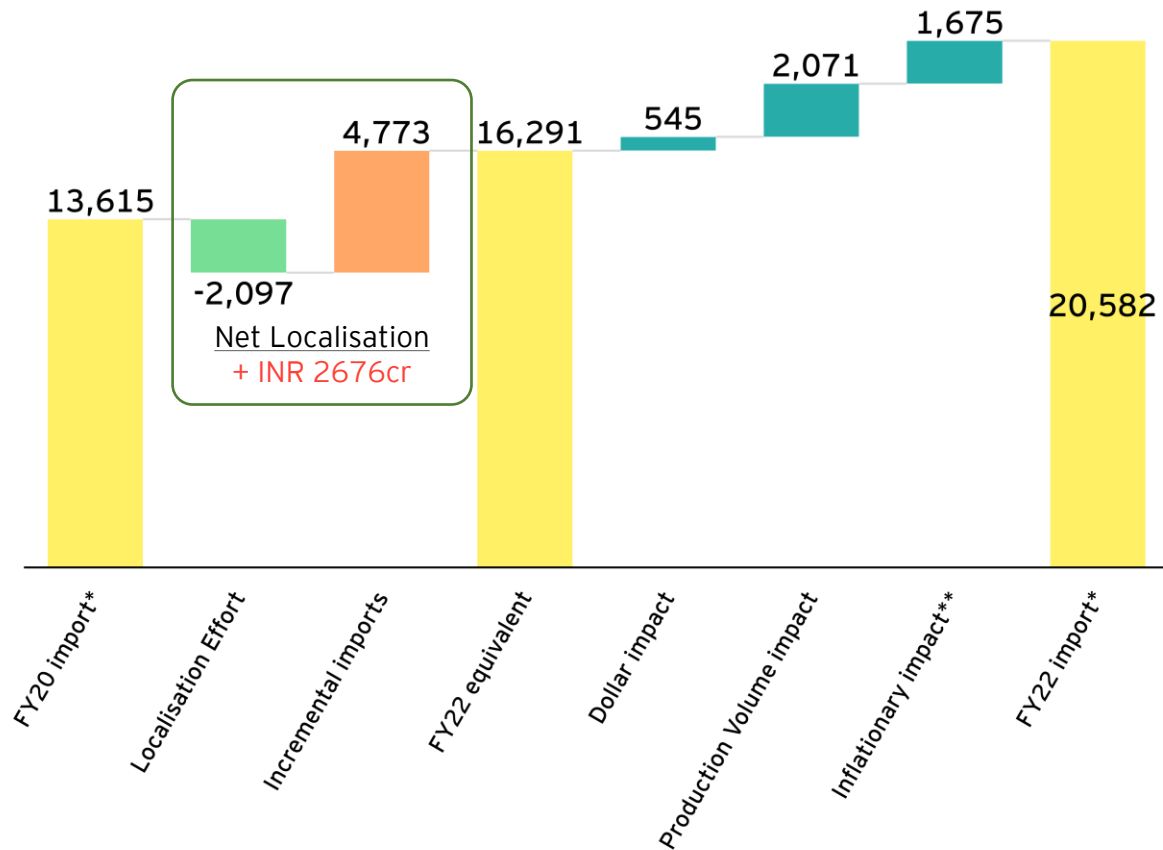
# Iron and steel

[← Back](#)

# Iron and steel import value has been driven up by fluctuating commodity prices, supply chain shocks and increased demand of specialty grade steels



## Iron & Steel



Subcategory	Key components localised in the last 2 years	Key components contributing to import#	Remarks
Flat Rolled	Stainless steel for EATS applications,	Galvanised steel, electric steel, Cold rolled - High tensile steel and Ultra high tensile steels	<ul style="list-style-type: none"> <li>EGR and SCR applications, Electrical grade steel for motor manufacturing</li> <li>Consistency in quality of coated steel grades as per industry requirement</li> <li>High grade steel used in catalytic convertor in short supply</li> </ul>
Structural Parts	-	High strength steels	Used in structural parts: Chassis

List of components is representative sample with substantial contribution to localisation/imports

\*Only OEM and OES imports considered  
 \*\*Includes pricing, insurance, freight

#imports due to consumer, technology and regulatory requirements



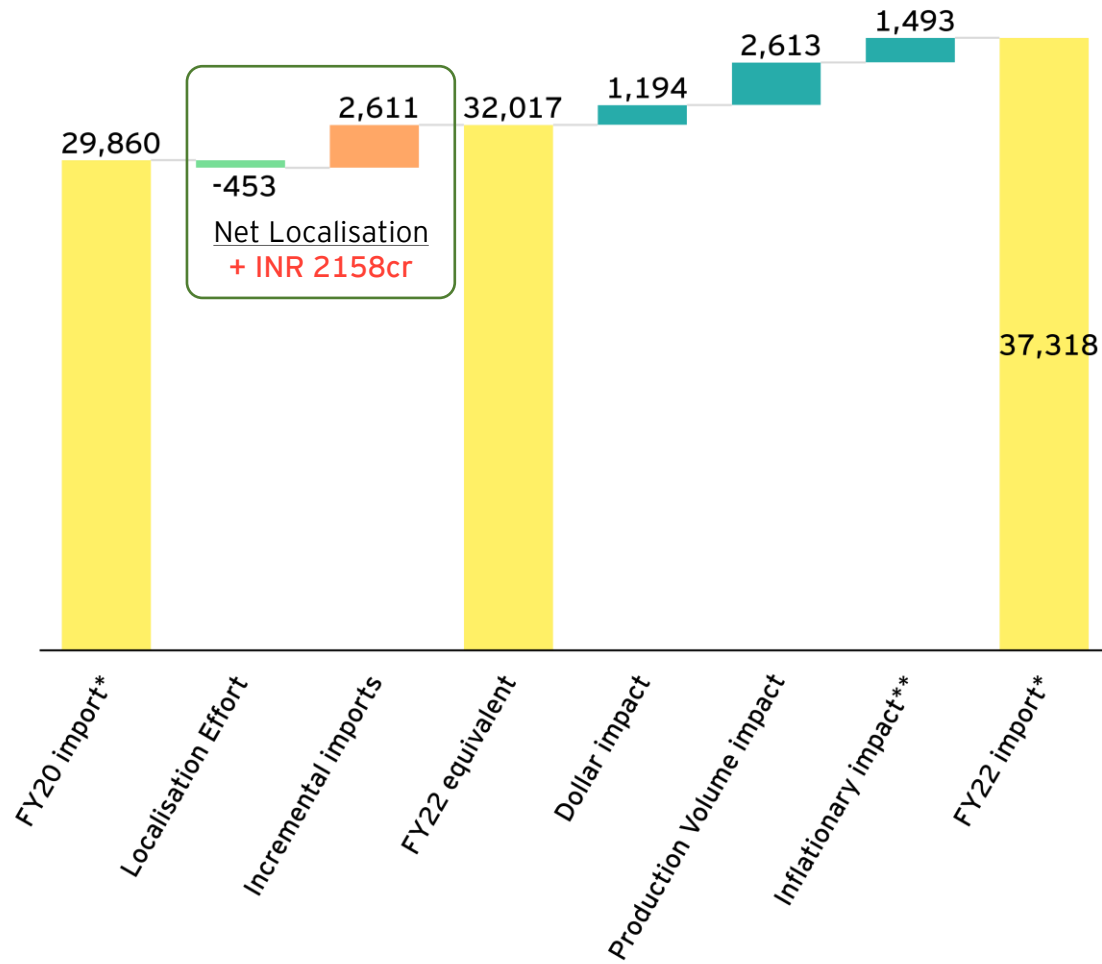
## Drive Transmission & Steering

[← Back](#)

# Significant localisation has been achieved in this category but a rising trend of increased adoption of automatic transmission and alloy wheels has contributed to increased imports



Drive Transmission & Steering



Subcategory	Key components localised in the last 2 years	Key components contributing to import#	Remarks
Alloy Wheels	Alloy wheels for PV segment	Alloy wheels for 2W segment	Alloy wheels has seen 20% penetration in FY 22 with estimated domestic capacity to rise from <20M to 35M
Steering Components	EPS motor yoke, gear reduction, Steering wheel armature, Steering column	Power steering motor assembly	Preference for EPS has seen penetration rise from <25% in FY20 to 35% in FY22
Transmissions and Transmission components	AMT system and child parts	Automatic transmission systems, Torque converter, Higher precision gears and shafts and other child components	Penetration of automatic transmission has risen from 13-14% in FY20 to 22%-24% in FY22

List of components is representative sample with substantial contribution to localisation/imports

\*Only OEM and OES imports considered

\*\*Includes pricing, insurance, freight

#imports due to consumer and regulatory requirements

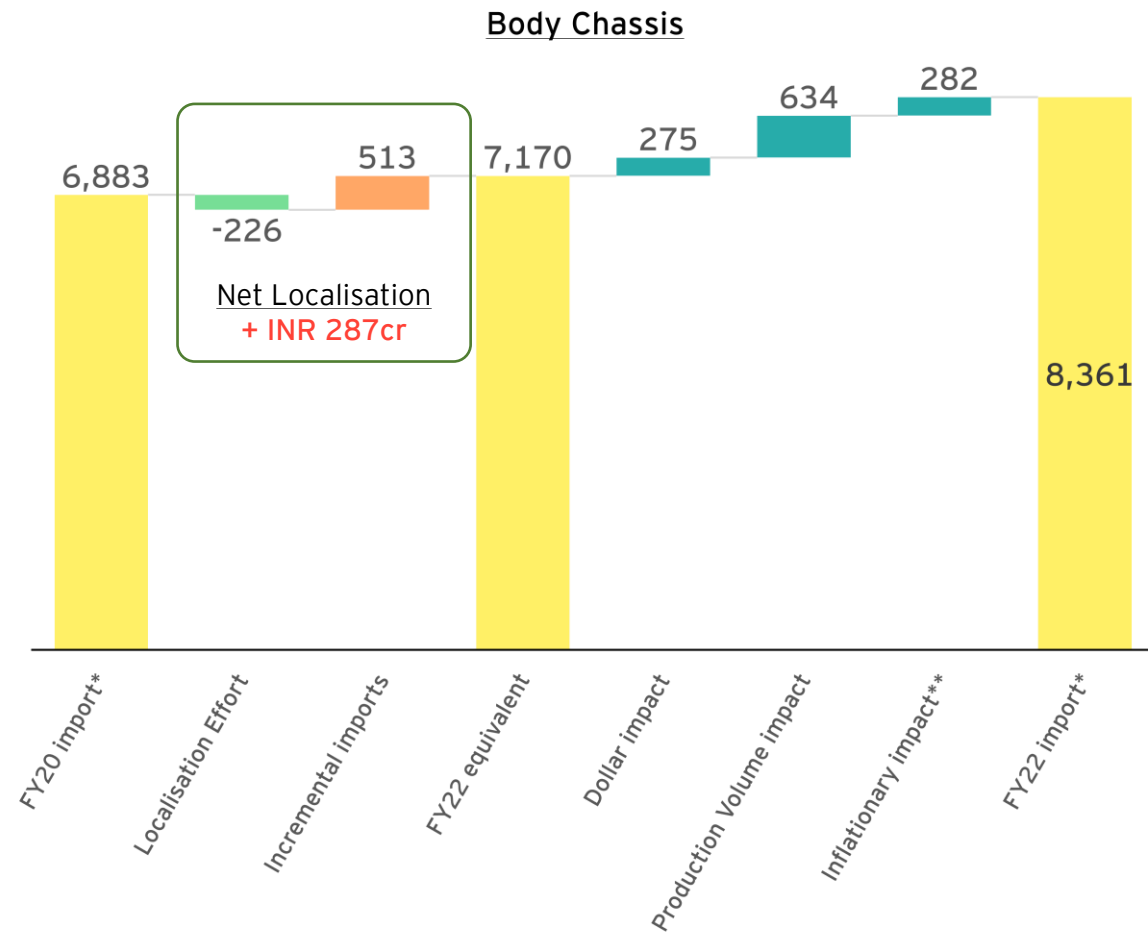


# Body Chassis

[← Back](#)



# Increased adoption of features such as sunroofs and electrically adjustable ORVMs have negated the impact of localisation efforts in the category



Subcategory	Key components localised in the last 2 years	Key components contributing to import#	Remarks
BiW Fittings	Miscellaneous brackets, tabs, holders, Door latches	Mountings for sensors and clamp assemblies for critical applications	
BiW and Sub Assy	Sheet metal parts, body panels	Sunroof assemblies, Electrically adjusted ORVM	Sunroof systems have emerged as an important category with adoption increasing to <b>10-12 %</b> in SUV's and <b>2-3%</b> in sedans from negligible adoption rates

List of components is representative sample with substantial contribution to localisation/imports

\*Only OEM and OES imports considered  
 \*\*Includes pricing, insurance, freight  
 \*\*\*Includes localisation, import for exports, etc.

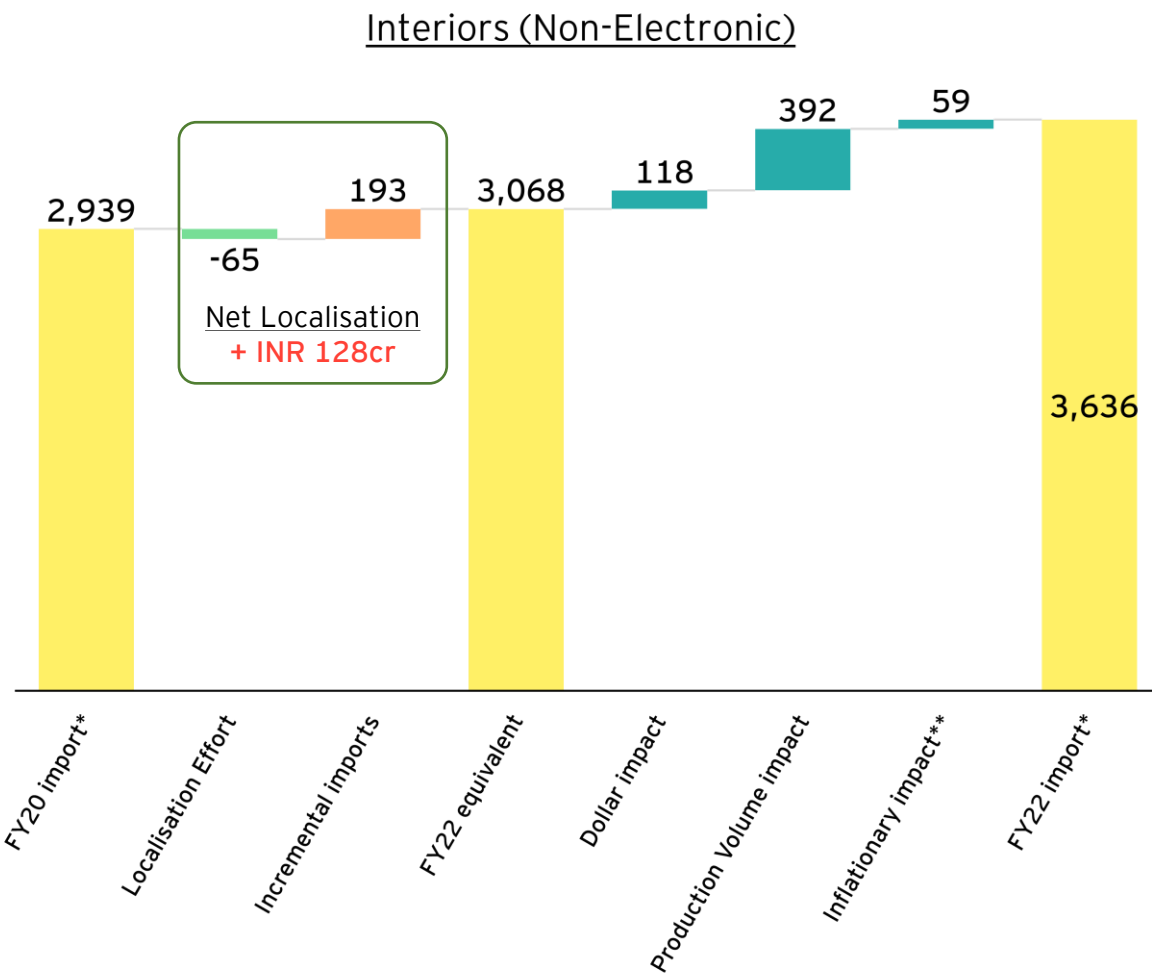
#imports due to consumer, technology and regulatory requirements



## Interiors (non-electronics)

Back

# Localisation efforts in the Interiors category have been offset by rising adoption of comfort features such as ventilated seats



Subcategory	Key components localised in the last 2 years	Key components contributing to import#	Remarks
Seating	Front head rest rod, seat belt reminder switch, seat belt fabric, retractor	Seat ventilation systems, PT seatbelts, micro gas generator,	<ul style="list-style-type: none"> <li>Increasing customer preference for ventilated seats</li> <li>Expected regulations mandating the adoption of 3 point seat belts in rear centre seats has seen increased demand</li> </ul>

List of components is representative sample with substantial contribution to localisation/imports

\*Only OEM and OES imports considered  
\*\*Includes pricing, insurance, freight

#imports due to consumer, technology and regulatory requirements

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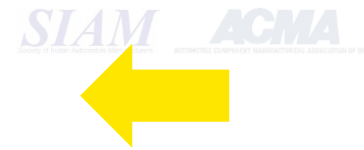


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Annexure

# Localization efforts in the past two years have culminated in reducing automotive industry imports by ~7%



Net localisation impact is the net result of localisation efforts by industry and rise in imports due to feature addition, premiumisation and regulatory impact

Category	Production Volume change (%) (FY22 vs FY20)
PV	7%
CV	6%
2W/3W	-17%
PV/CV	7%
Suppliers	16%*

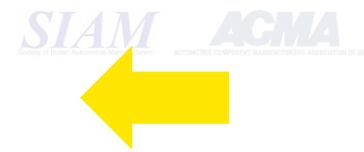
\*growth in addressable auto component industry turnover (under validation)



\*Only OEM and OES imports considered  
 \*\*Includes pricing, insurance, freight

- 1 FY20 Import value**  
Total import value for FY20, for OEMs and Suppliers
- 2 Localisation Effort**  
Component categories which have seen overall decrease in imports between FY20 and FY22
- 3 Incremental Imports**  
Component categories which have seen overall increase in imports between FY20 and FY22 due to consumer and regulatory trends
- 4 FY22 equivalent**  
Total import value for FY20, for OEMs and Suppliers
- 5 Dollar fluctuation**  
Difference on account of change in dollar exchange rate (4% rise between FY20 and FY22)
- 6 Production Volume**  
Difference on account of changes in automotive production volumes across segments over the two years (Source: SIAM production numbers for OEMs and ACMA report for OES)
- 7 Inflationary impact**  
Difference on account of category specific price inflation or reduction (raw materials, freight, etc.) (Source: Primary discussions and secondary sources)
- 8 FY22 Import value**  
Total import value for FY22, for OEMs and OESs.

Localization efforts in the past two years have culminated in reducing automotive industry imports by ~7%



Category	Inflationary impact* (%) (FY22 vs FY20)
Drive Transmission & Steering	5%
Engines	5%
Electricals	8%
Electronics	8%
Iron & Steel	12%
Tyres	6%
Rubber Components	30%
Tools & Moulds	3%
Body Chassis	4%
Interiors (Non-Electronic)	2%
Fasteners	12%

\* under validation

\*Only OEM and OES imports considered

\*\*Includes pricing, insurance, freight

- FY20 Import value**  
Total import value for FY20, for OEMs and Suppliers
- Localisation Effort**  
Component categories which have seen overall decrease in imports between FY20 and FY22
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- FY22 Import value**  
Total import value for FY22, for OEMs and OESs.

# Insights into Automotive Imports : FY22

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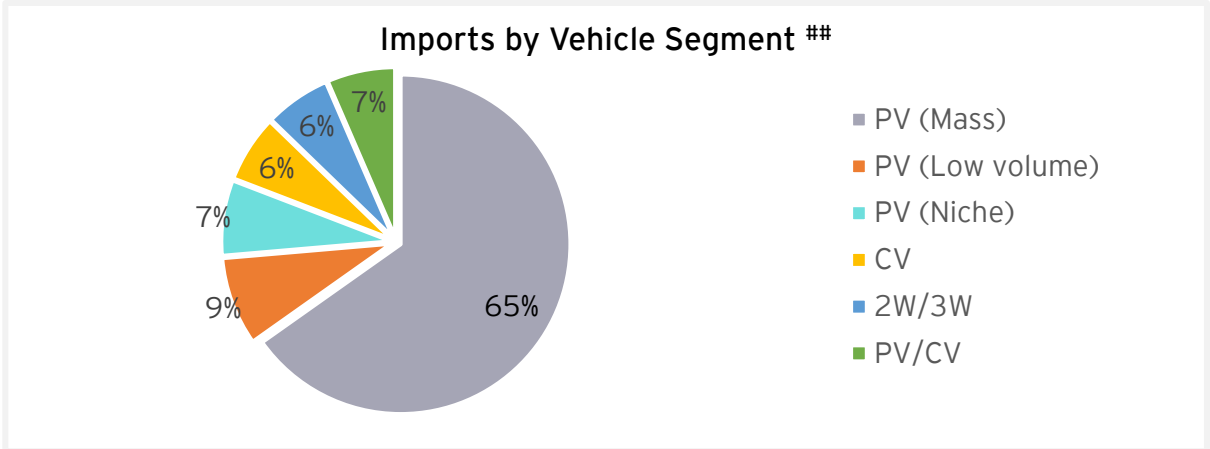
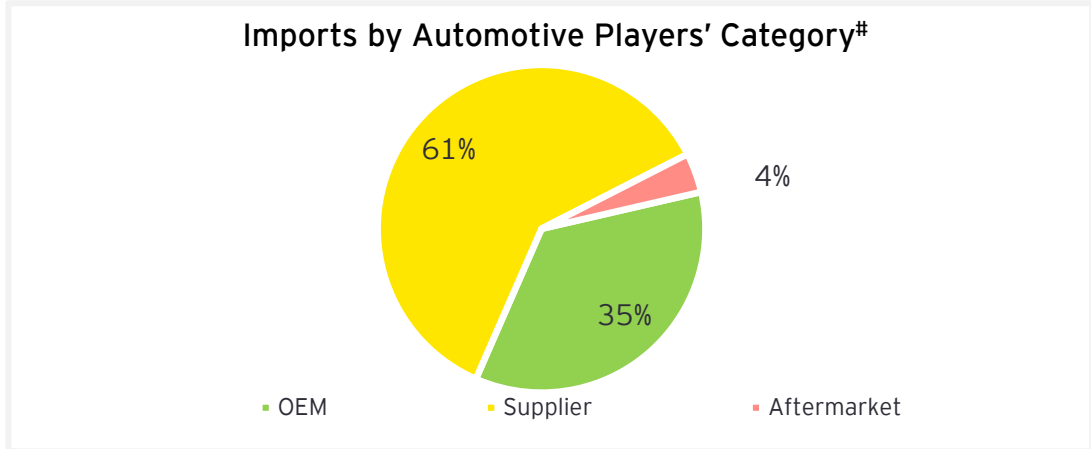
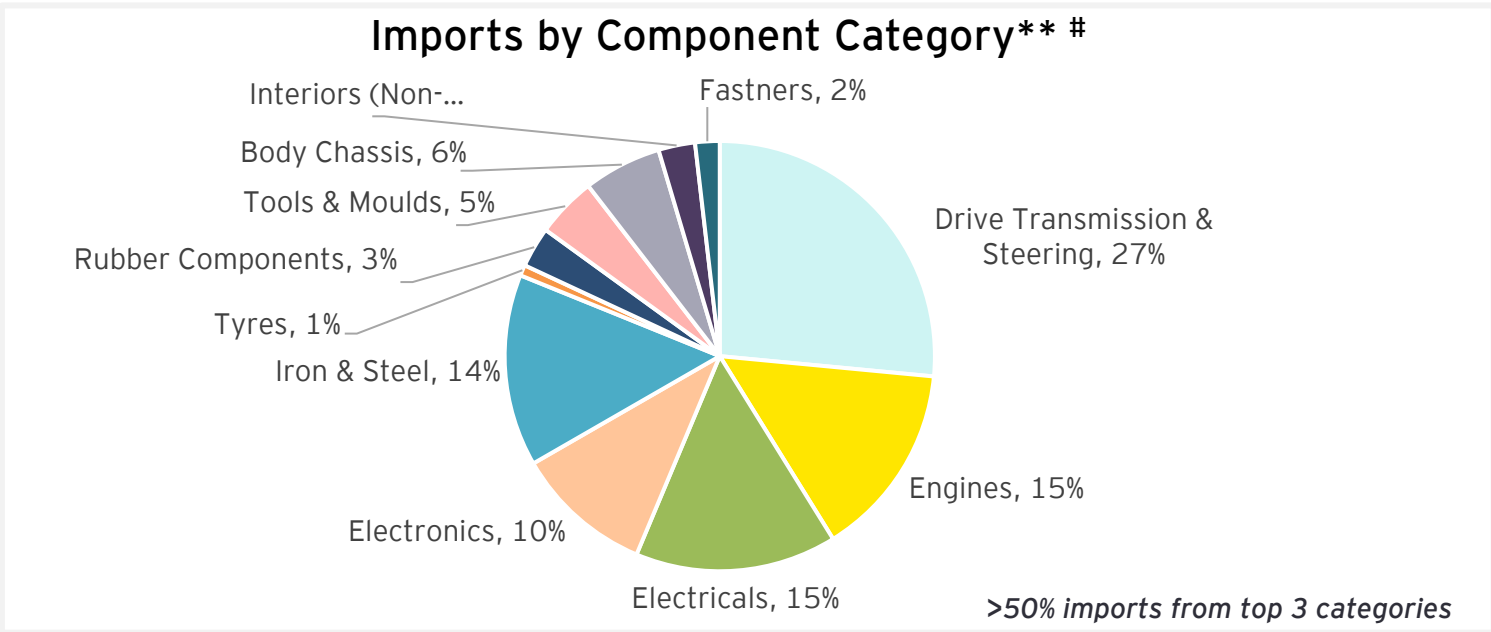
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## Automotive Import

Estimated total value of automotive import :  
~ INR 2.07 lakh Crores

Top 11 Categories' Import Value :  
~ INR 1.45 lakh Crores

Top 11 Categories' Import Value, excluding  
Aftermarket :  
~ INR 1.39 lakh Crores



\*\*Including import for Aftermarket

218 6-digit HS codes were considered for analysis of top eleven categories

#Charts baselined as per top 11 category imports: INR 1.45 Lakh Cr

## Chart baselined as per top 11 category imports for OEMs: INR 0.51 Lakh Cr



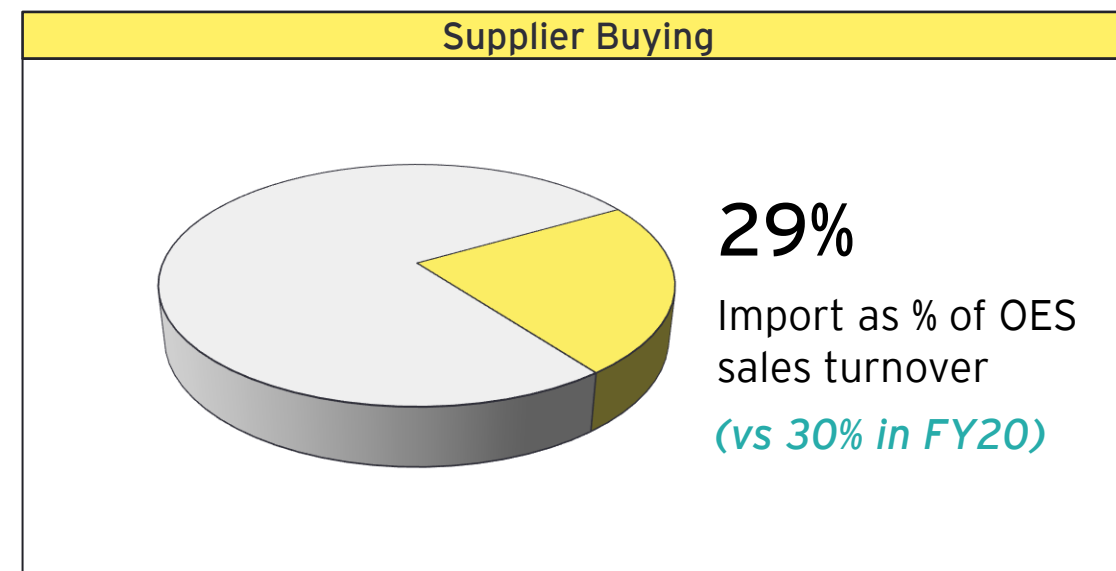
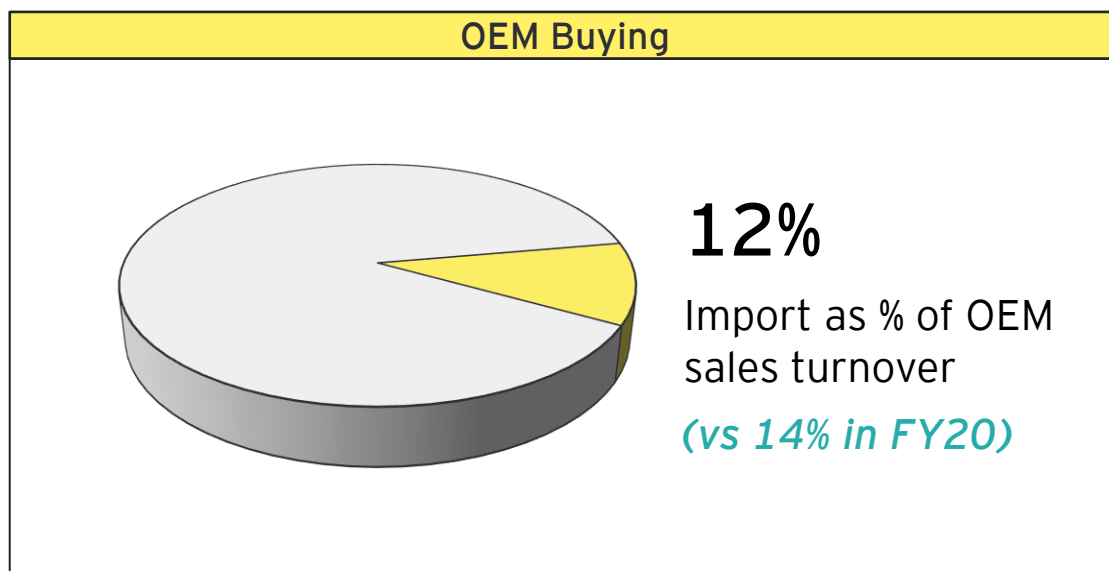
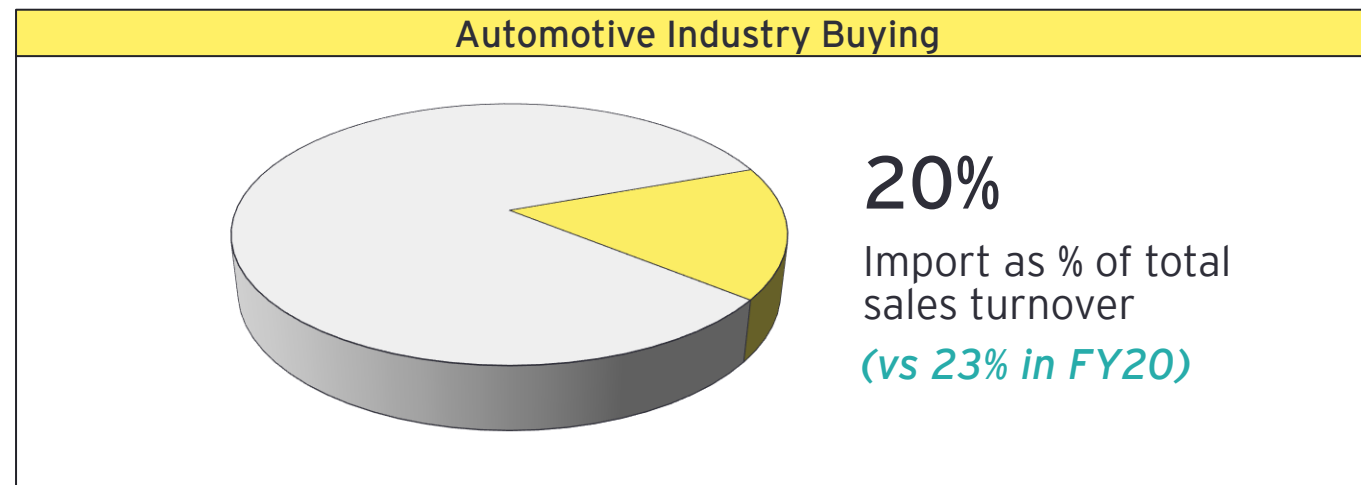
# Insights into Automotive Imports : FY 2021-22

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Automotive Import Summary (INR Lakh Cr)*		
Category	Import#	Sales Turnover
OEM	0.73	5.97
Supplier	1.26	4.20
Total	1.99	10.17

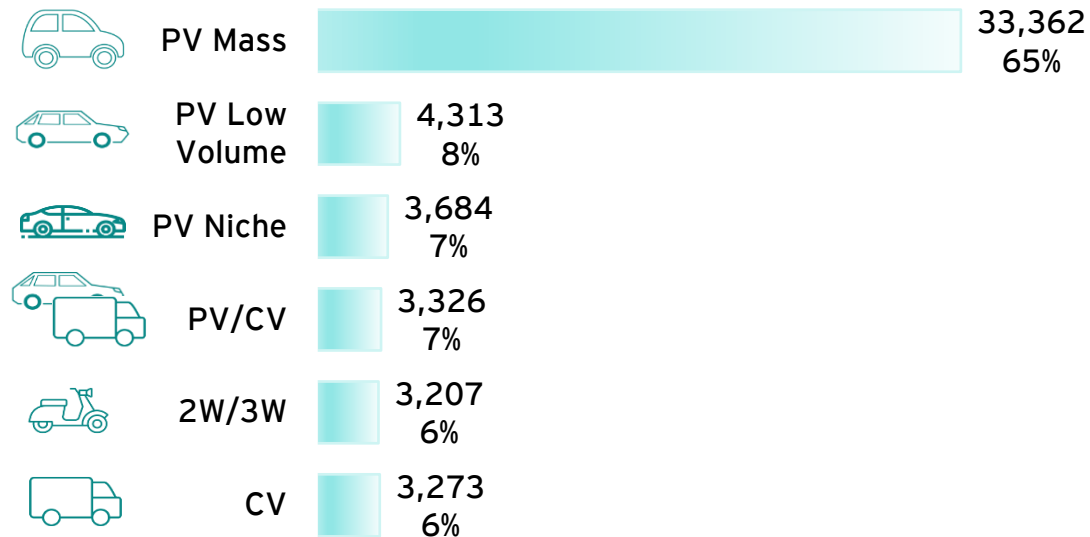
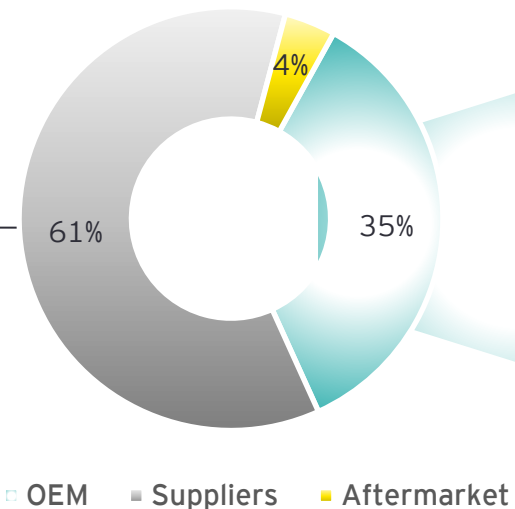


\*As per inputs from SIAM and ACMA  
# Absolute import values FY22

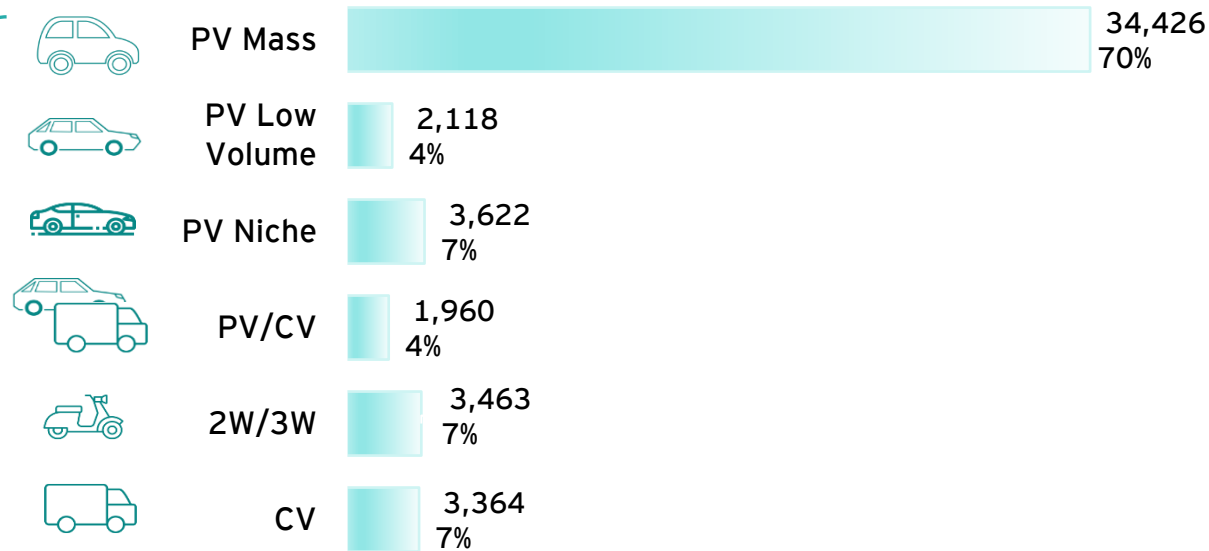
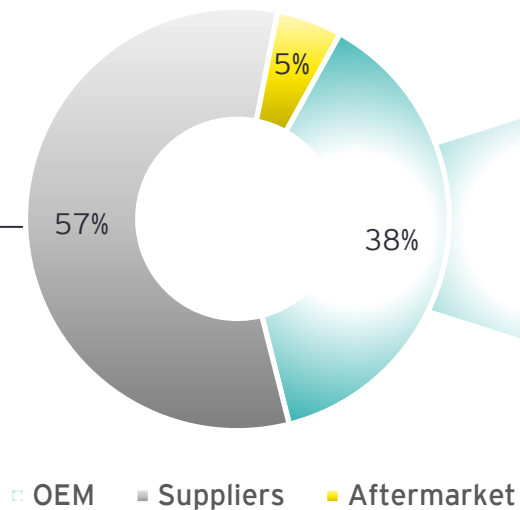
# Vehicle segment wise comparison

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**FY22**  
**INR 145.48K Cr**  
*Total Automotive Imports*



**FY20**  
**INR 127.38K Cr**  
*Total Automotive Imports*



# The automotive industry has seen efforts from the government, automotive manufacturers and suppliers in localizing a significant number of component categories - (1/3)

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## Automotive and Auto-comp supplier initiatives\*

### Category



Drive Transmission & Steering

New Delhi-based Tier-1 manufacturer, developed **India's first indigenously built automated manual transmission (AMT)** gear shifter and is 100% localised barring minor electronic components

American auto- parts maker has invested **\$50 million** in the past two years to increase to local **production capacity of axle and drive train components by 15-20%**



Engine

A JV has been setup in Chennai for the **R&D of full Exhaust After Treatment Systems** to meet the TREM V off-highway and BS VI Stage 2 emission standards

Pune based auto engineering company has developed in-house competence to manufacture **BS-VI compliant 2W exhausts**. They are also, evaluating **entry into PV and CV segments** via Tech. collaboration with a German exhaust technology company.

A metals company formally launched its foray into **aluminium alloys which are critical to manufacture cylinder heads etc.**



Electricals

Investments to the tune of **150Cr** have been made **in Lighting manufacturing by a Tier 1** component manufacturer in Gujarat to push for localisation

Electrical and lighting Tier-1 has **localised procurement of 2 layer PCBs** for 2W applications through a Pune based PCB manufacturer.

A manufacturer and supplier of **lead-acid battery separators** for automotive, industrial and specialty applications has **doubled their capacity** citing demand in the Indian market



Iron & Steel

Multiple steel manufacturers started on focusing on **light-weighting and made investments in the past two years** to support OEMs in meeting emission norms

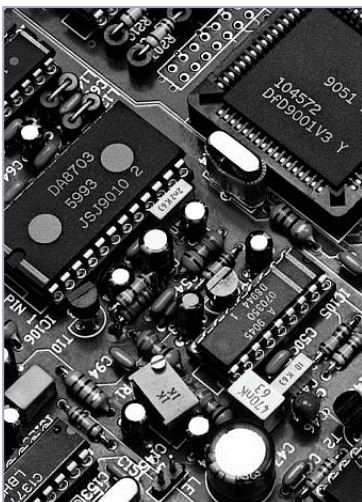
Commercial vehicle OEM has **localised stainless steel** requirement in its Exhaust aftertreatment system (**EATS**) enclosures

# The automotive industry has seen efforts from the government, automotive manufacturers and suppliers in localizing a significant number of component categories - (2/3)

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## Category

## Automotive and Auto-comp supplier initiatives\*



Electronics

Global electronics Tier 1 started **local manufacturing of Digital instrument clusters and infotainment systems** to support the localization drive of the industry

Global design and technology services company has opened a Global Engineering Center (GEC) along with a solution provider offering **mechatronics solutions for transportation** to **promote design capabilities** in India

Stringent vehicle safety mandates and a growing consciousness for safety has driven a braking system provider to start **local production of ABS modules in India**

Automotive lighting player entered into manufacturing of **Body Electronics** (BCM, Access Passive Entry, Remote Keyless Entry, RPAS, Immobilizer), **Sensors & Actuators**; Headlamp Levelling Actuators, Vacuum Pump, EPS Torque & Angle Sensor, Climate Sensor, Rain Sensor

Audio electronics company **invested INR 350 Cr. to triple its production and double plant headcount** in Chakan, Pune focusing on Connected Car Electronics Solutions

**~ 100Cr** Investments have been made in PCB manufacturing for the lighting business by a Tier 1 component manufacturer



Rubber Components and Tyres

Japanese tyre maker has doubled its local production capacity from **8 Lakh tyres per year to 1.6 million tyres** per year as part of their localization drive

A new manufacturing facility has been established by a tyre manufacturer in Maharashtra to produce **medium and small diameter tyres** as part of their localisation drive

One of India's largest tyre makers has invested **~ 2000 Cr.** in India and has plans to its **capacity from 30k tyres per day to 34k-35k tyres per day** in the next 1 year. They also announced investment into R&D to develop & manufacture EV-specific Tyres locally in the next few years

A premium tire manufacturer expanded its truck tires production capacity at the Modipuram plant in Uttar Pradesh for increasing the product range to 20 inch and 22.5 inch tyres

# The automotive industry has seen efforts from the government, automotive manufacturers and suppliers in localizing a significant number of component categories - (3/3)

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## Category

## Automotive and Auto-comp supplier initiatives\*



Body/Chassis/ BiW

A global sunroof player has already setup a plant and started **local manufacturing in 2021** in order to tap the growing demand for sunroofs in India

A vehicle components manufacturer, has inaugurated its manufacturing facility in Himachal Pradesh to **manufacture sheet metal parts for 4Ws and 2Ws**



Tools, Dies & Moulds

**Tool rooms** have been established by an auto-component manufacturer to **manufacture moulding tools for lighting systems** in India

Investments have been made in the **3-d printing and additive manufacturing technology** to develop **advanced automotive dies** locally by a Tooling company part of huge conglomerate



Interiors (Non-Electronic)

Tool rooms have been established by an auto-component manufacturer to manufacture **new cabin interiors**

Partnership between two auto-component players has been etched to combine capabilities in **lighting and interior module** manufacturing



Fasteners

A renowned Fasteners manufacturers had already announced setting up a **100 crore SEZ** (special economic zone) unit to manufacture and export high precision engineering components

\*Preliminary inputs, to be updated

# The automotive industry has initiated plans to increase localization across major imported categories (1/2)

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## Category

## Key initiatives to ramp up localization in the next 3 years\*



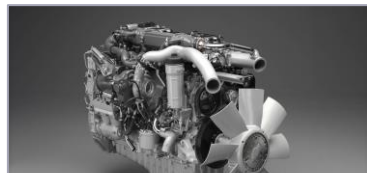
Drive Transmission & Steering

German auto component maker would **invest over 300 cr. in the next four year years** in setting up a new manufacturing facility in Hosur, The proposed plant will manufacture transmission components and systems for automotive industry

A German OEM is aiming for **95% localisation of India 2.0 models**. Most of the models will come with 90 percent localisation in the coming years

A fasteners company is planning to invest **Rs 200 crore** to support the new orders under the six-year long purchase package involving the supply of shaft sub-assemblies and drive gear sub-assemblies.

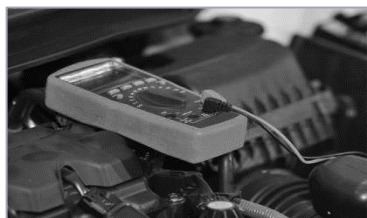
A tier 1 component manufacturer has set aside **INR 500 Cr to locally manufacture DCT** in India with an initial production output of 100,000 units



Engine

Global auto-component player has inaugurated another plant in India, which provides extensive manufacturing, assembly and storage space. Assembly of **high-performance engine control and variable camshaft timing (VCT) systems** will be centralized in the new facility

Japanese OEM has commenced manufacture of global engines from its fourth factory in India to produce **50,000 engines in the first year of production**



Electricals

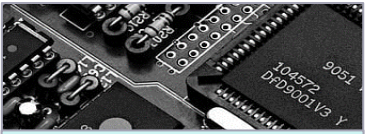




Tier I component manufacturer is also setting up a new manufacturing plant to cater to increased demand of **4W automotive switches from domestic and overseas customers**. The project cost for setting up Phase 1 will cost the firm around **₹110 crore** which is expected to be completed by September 2023

Japanese electric motors company is looking to spend **\$78 million** in building a new plant at its existing facility for **motors for automobiles**

\*Preliminary inputs, to be updated

# The automotive industry has initiated plans to increase localization across major imported categories (2/2)

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Category	Key initiatives to ramp up localization in the next 3 years*	
 <p>Electronics</p>	<p>An auto component supplier has its first series of productions in the powertrain solutions products that include engine management systems, sensors, and actuators, as well as exhaust management components for passenger cars and commercial vehicles</p>	<p>German sensor manufacturer is in process of localising production of sensors such as NOx, Knock, temperature etc.</p>
 <p>Iron &amp; Steel</p>	<p>Domestic steel maker plans to invest Rs 8,500 crore in India. The company is in process of expanding capacity of its plant in Kalinganagar, Odisha to 8 MT from 3 MT</p>	<p>One of India's bead wire manufacturers expects its volumes to increase by at least 20-25% in the current fiscal</p> <p>OEMs are developing partners to localise special steel grades such as electrical steel and high wear resistance steel</p>
 <p>Rubber Components and Tyres</p>	<p>Japanese tyre maker is looking to scale up its manufacturing capacity by over 10% next year amid a surge in demand from OEM and after market segments</p>	<p>Indian tyre manufacturer is investing ₹1,000 crore on expansion of its manufacturing facility near Hyderabad</p>
 <p>Body/Chassis/ BiW</p>	<p>A e-3W Manufacturer has planned to manufacture E2W Frames &amp; Chassis At Its New Facility, it will be investing around Rs. 25 crores in phase manner for setting up the new manufacturing unit</p>	<p>All major PV OEMs have implemented plans to localise procurement and assembly of sunroof systems over next 2 years</p>
 <p>Interiors (Non-Electronic)</p>	<p>French glass and building material major is planning a capital expenditure of Rs 1,800 crore to expand capacities in India in 2023</p>	