



ENDURANCE



Endurance Technologies Limited

Feb-2023

The presentation may contain, without limitation, certain statements that could be considered forward-looking. Such forward-looking statements do not guarantee future performance; and may involve risks and uncertainties that could cause actual performance or results to be materially different from those anticipated in these forward-looking statements. The Company is under no obligation to update any forward-looking statements contained herein, should material facts change due to new information, future events or otherwise.

For historical financial numbers, readers are advised to refer to the financial statements approved by the Board of Directors of the Company, as appearing in the Annual Reports and quarterly Stock Exchange filings. The financial numbers in this presentation are from financial statements prepared and reported under Indian GAAP (I GAAP till 2015-16 and Ind AS thereafter). Financial ratios have been calculated based on customary definitions.



Experience in the two-wheeler, three-wheeler and four-wheeler Automotive Components Industry

1. **1985** - Commenced high-pressure die-casting operations in Aurangabad ⁽¹⁾
2. **Largest Aluminium die-casting** company in India⁽²⁾
3. **Leading 2W and 3W** auto component supplier in India.



Multi-solution Provider with a Diverse Product Portfolio

1. **Four key product categories** - Aluminum Casting and Machining, Suspension, Transmission, Braking Systems. Tier I supplier to 2W, 3W and 4W OEMs.
2. Acquired Advanced Electronics company, Maxwell Energy Systems Private Limited in July-22



Strategically Located Facilities with Close Proximity to Original Equipment Manufacturers (OEMs)

31 facilities in **multiple** locations primarily in India and Europe.



End-to-end Service Provider to Customers

Capabilities across Design, Development, Testing, Validation, Manufacturing, Delivery, and aftermarket sale for a wide range of technology-intensive auto component products



Strong R&D Capabilities

1. **31** Patents and **20** design registrations received, **87** Patent applications and **4** design applications, **5** DSIR⁽³⁾ approved R&D facilities (including newly set-up Driveline R&D facility), **2** Tech Centers in Italy 29 acre proving ground in Aurangabad
2. **250+** R&D personnel globally



Profitability with Scale, Improved Return on Capital Employed and Deleveraged Balance Sheet

1. **Track record of consistent outperformance to broader industry growth with standalone revenue growing at a CAGR of 7.5% as against India two wheeler production growing at a CAGR of 1.4% over FY 2012-22**
2. Financial highlights: **FY22** – Revenue **INR 75,902mn** ; FY22 Average ROCE :**14.6%**;FY22 Average Return on Equity: **12.3%**; Net Debt/Equity:**(0.12)X**



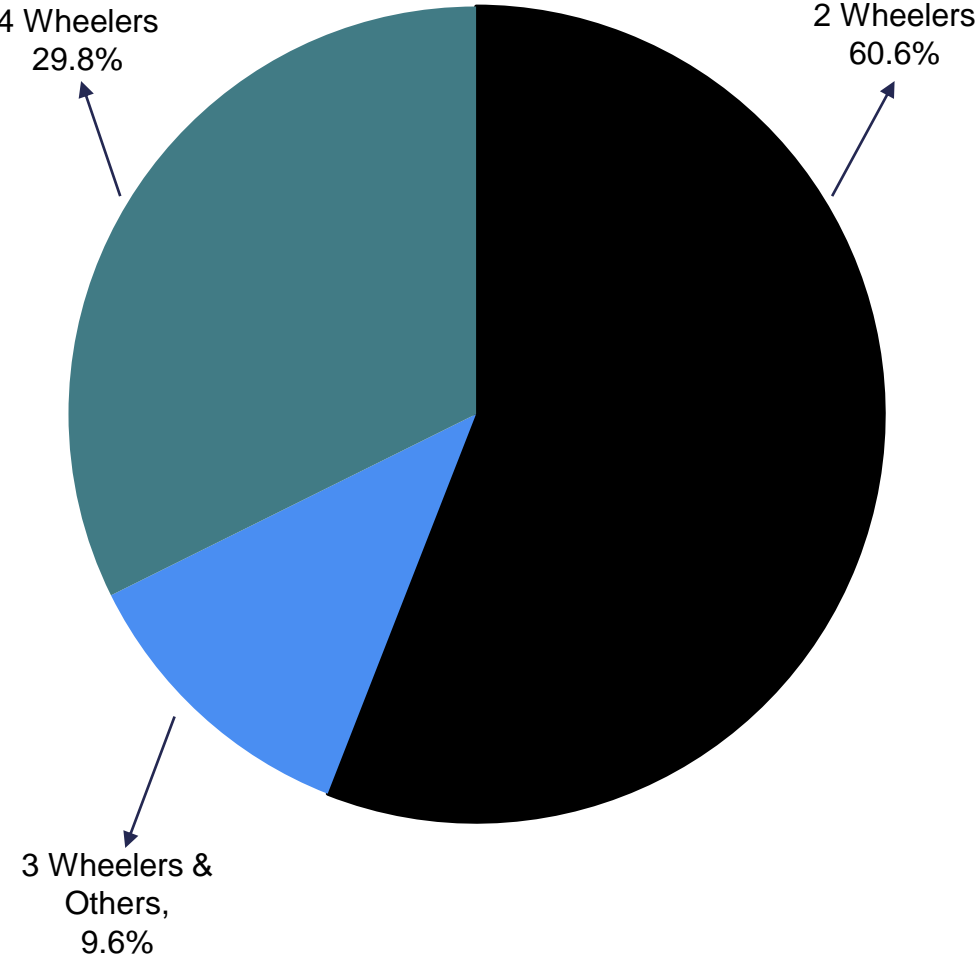
Stock performance (amount per equity share of Rs. 10 each)

Oct-2016 IPO Offer price: Rs. 472; Listing day closing price: Rs. 648;
OFS in Mar-19 :Floor Price Rs. 1100. OFS subscribed 2.7 Times
Closing price on 10th Feb, 2023 : Rs. 1378 (192% over IPO Offer price)

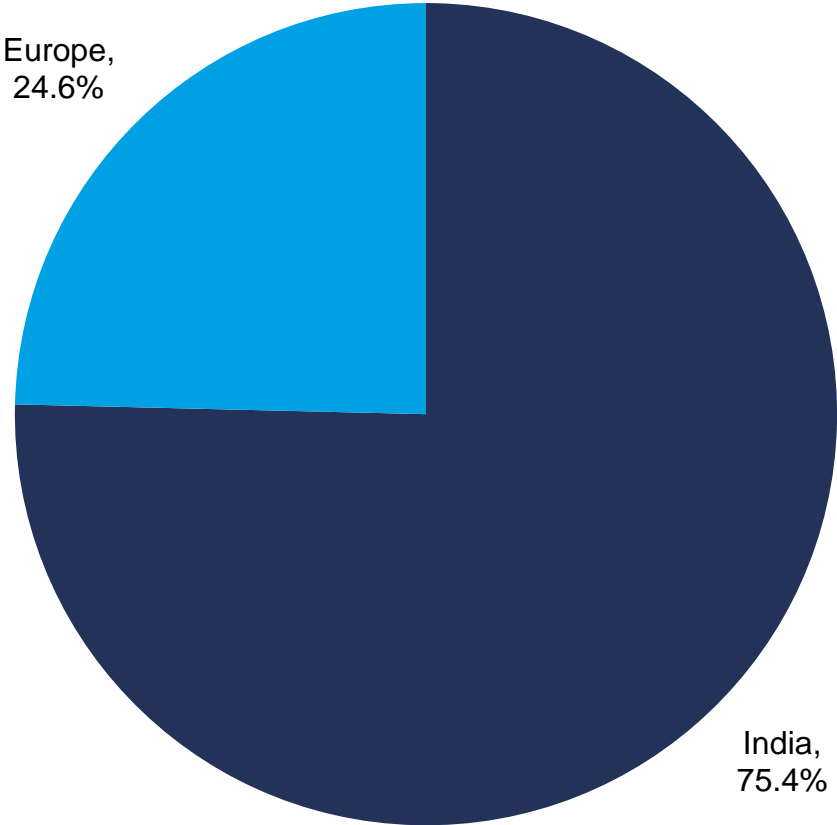
Revenues Profile⁽¹⁾ across Vehicle Type, Product Type and Entity

FY 2022

Revenue by Vehicle Type

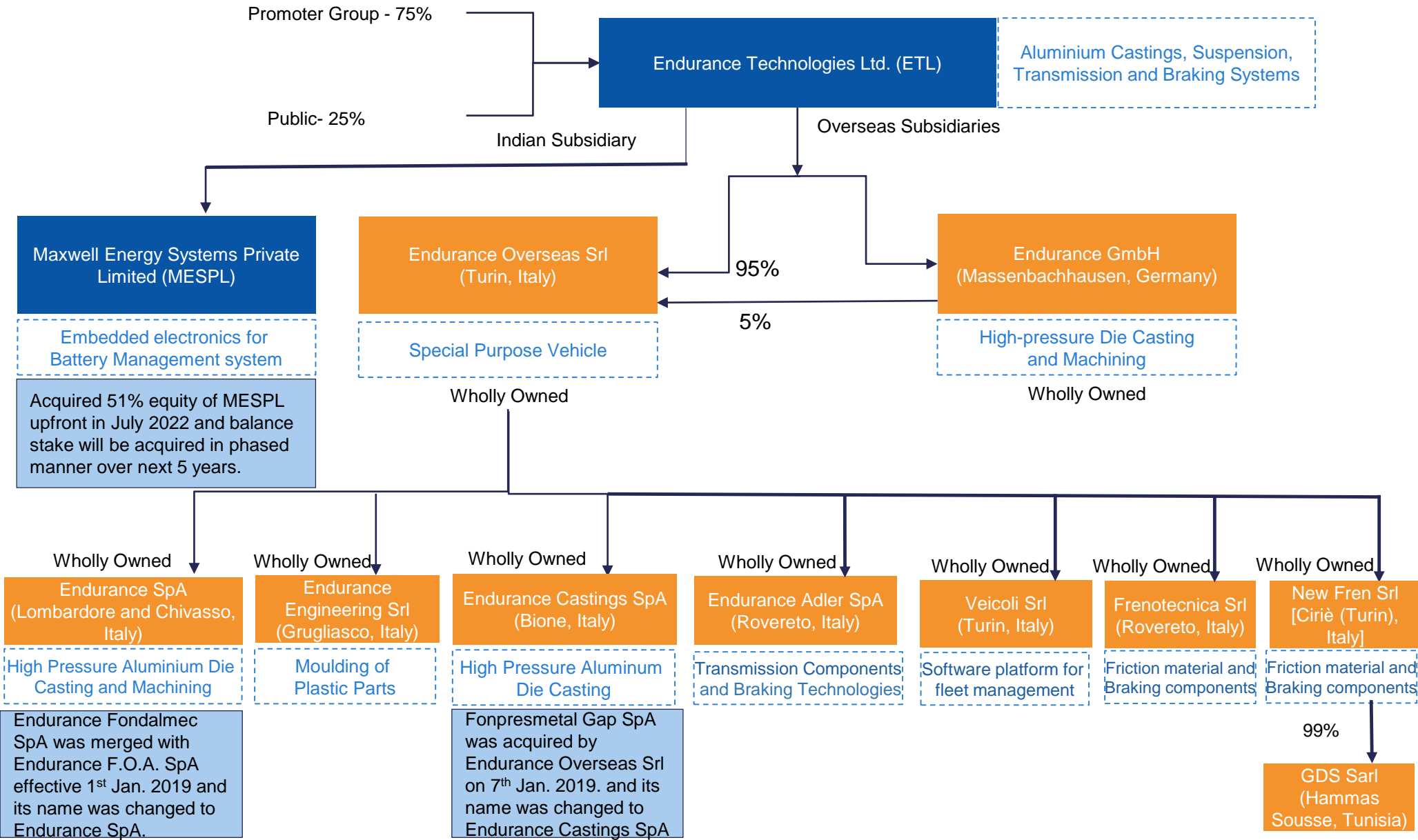


Revenue by Entity



Note: 1. Based on consolidated financials.

Corporate Structure

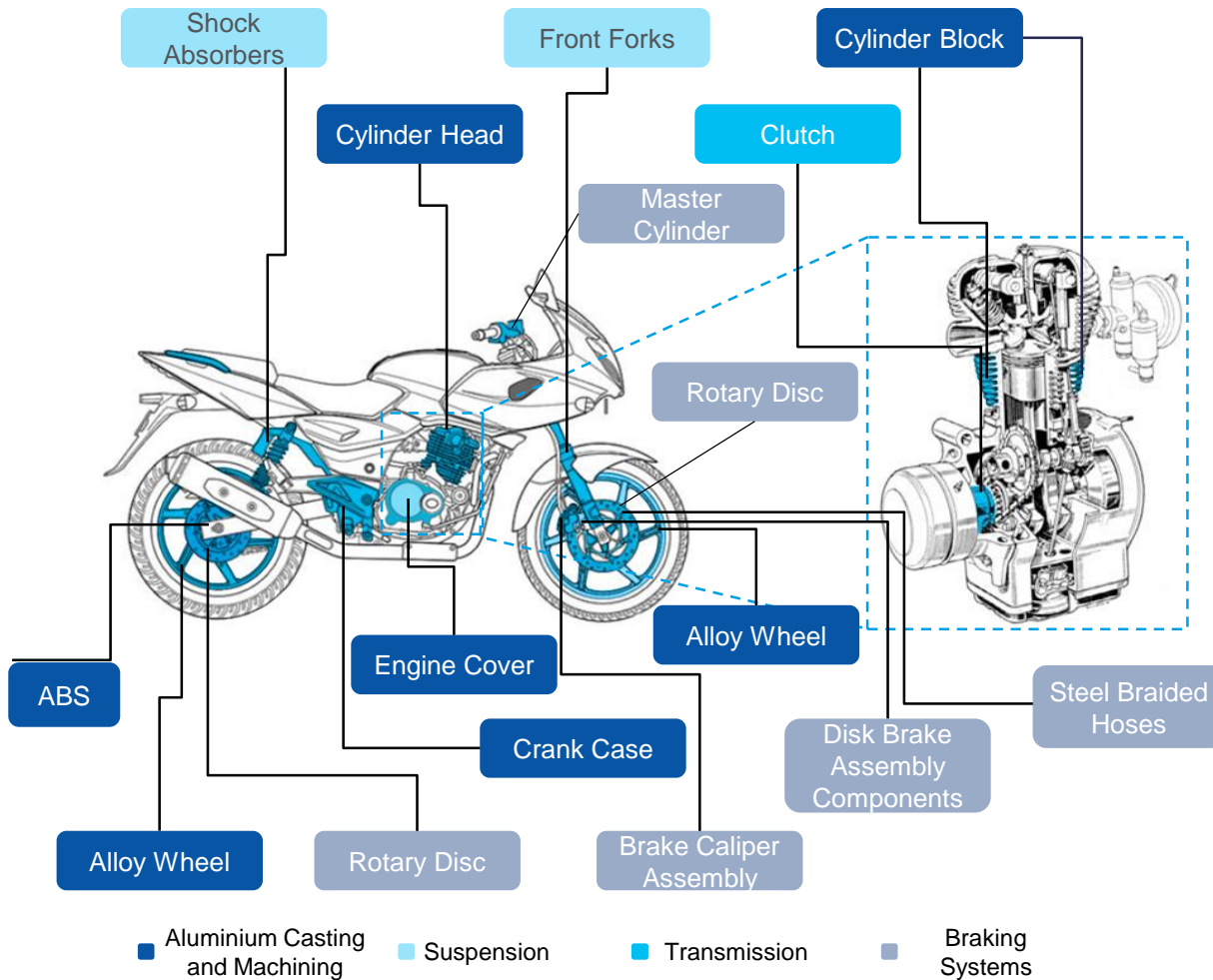


1. Effective 15th April, 2020, Endurance Overseas Srl acquired 99% stake in Adler SpA (Renamed as **Endurance Adler SpA**) ; stake increased to 99.86% in May 2021 and 100% in March 2022.
 2. Effective 21st May, 2020, Endurance Adler SpA acquired 100% stake in Grimeca Srl, Italy. Effective 1st January, 2021, Grimeca Srl and Adler RE Srl merged into Endurance Adler SpA.
 3. VS San Marino Srl is an additional subsidiary of Endurance Adler SpA and has been in the process of voluntary liquidation prior to acquisition of Endurance Adler SpA by Endurance Overseas Srl
 4. Endurance Overseas Srl, Italy acquired 100% stake in Veicoli Srl, Italy effective 12th November, 2021 and 100% stake in Frenotecnica Srl, Italy effective 10th June, 2022, 100% stake in New Fren Srl effective 16th November, 2022.

India: Tier 1 Supplier of Diverse Product Offerings to OEMs

Endurance supplies a diverse range of technology-intensive products to 2W / 3W / 4W OEMs

Two Wheelers



Three Wheelers

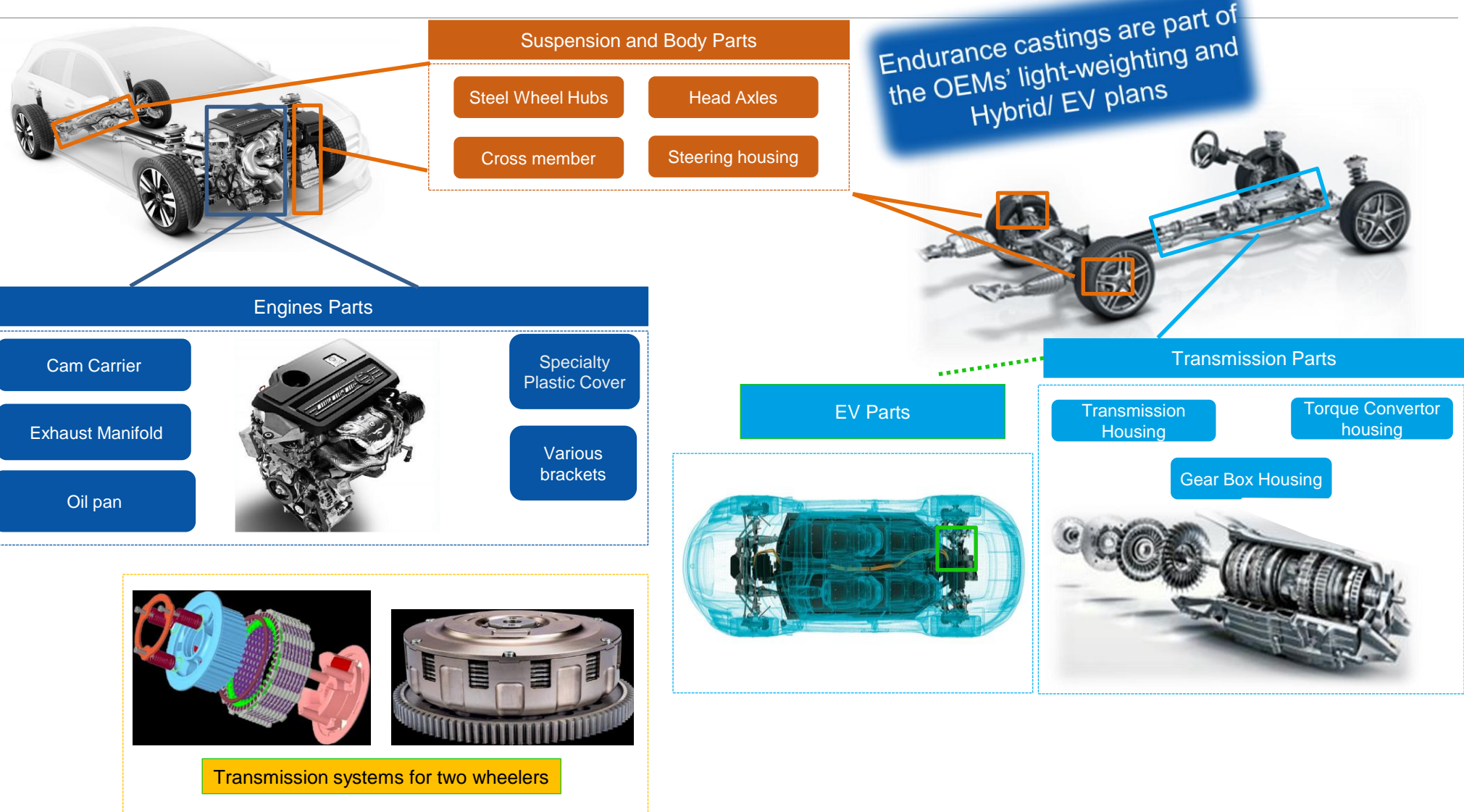


Four Wheelers



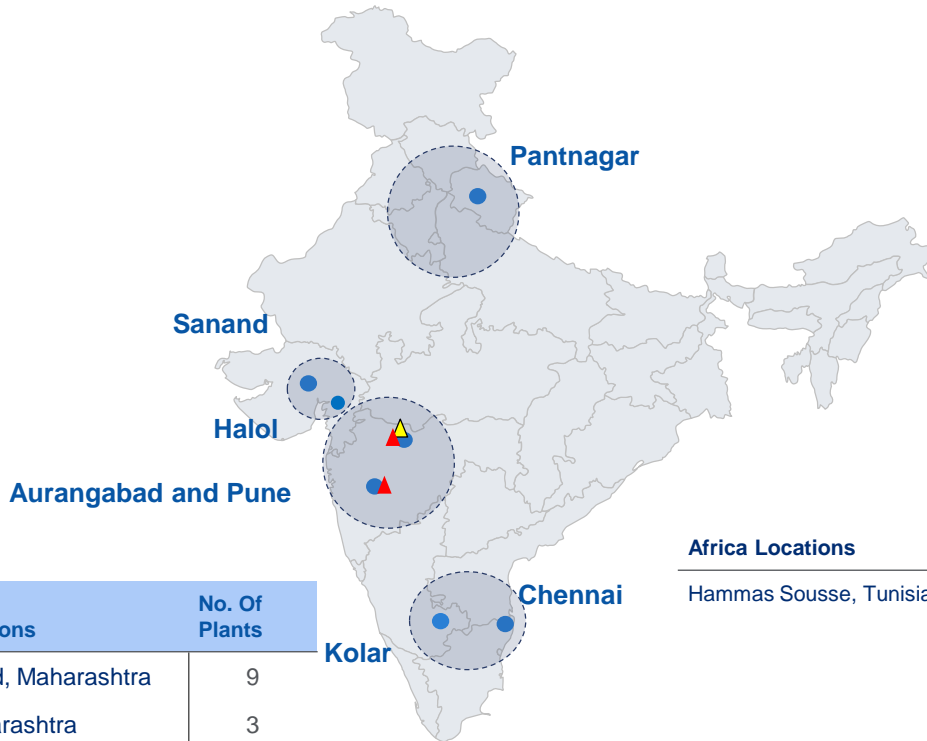
Europe: Diverse Product Offerings to OEMs

Endurance is a Tier 1 Supplier for multiple technology intensive products to 4W OEMs

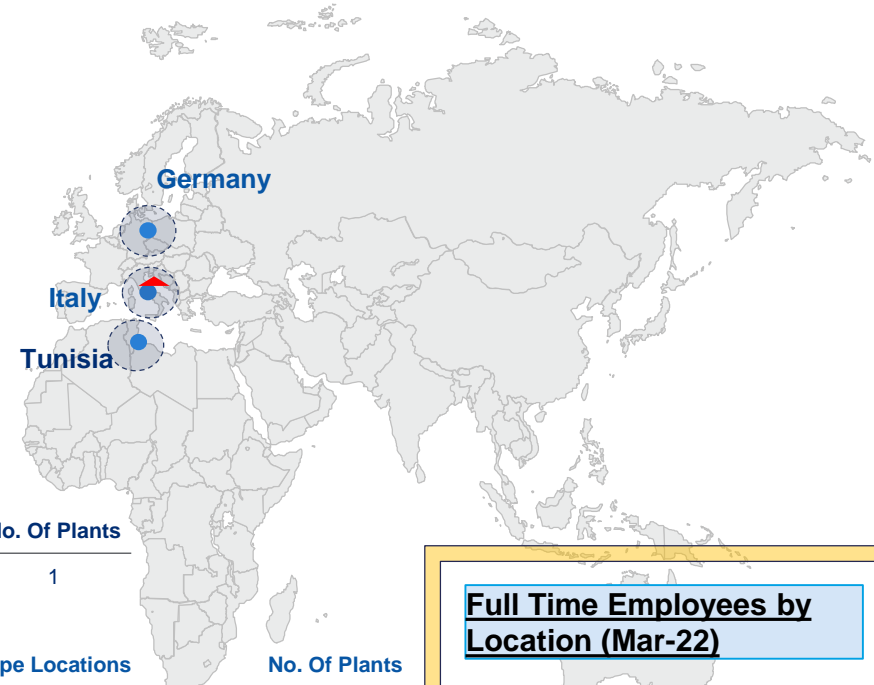


Strategically Located Facilities with Close Proximity to OEMs

31 plants in multiple Locations across India , Europe and Africa



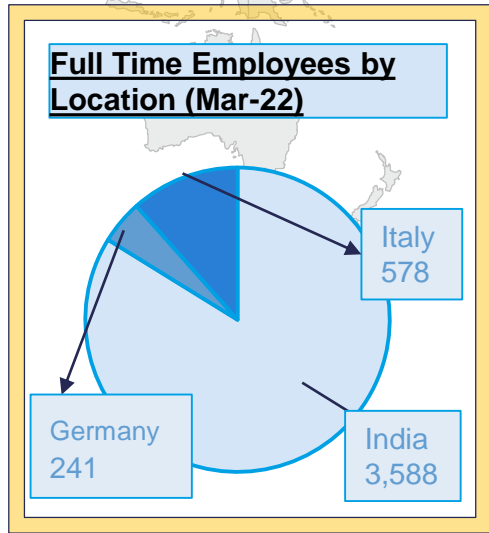
Africa Locations	No. Of Plants
Hammas Sousse, Tunisia	1



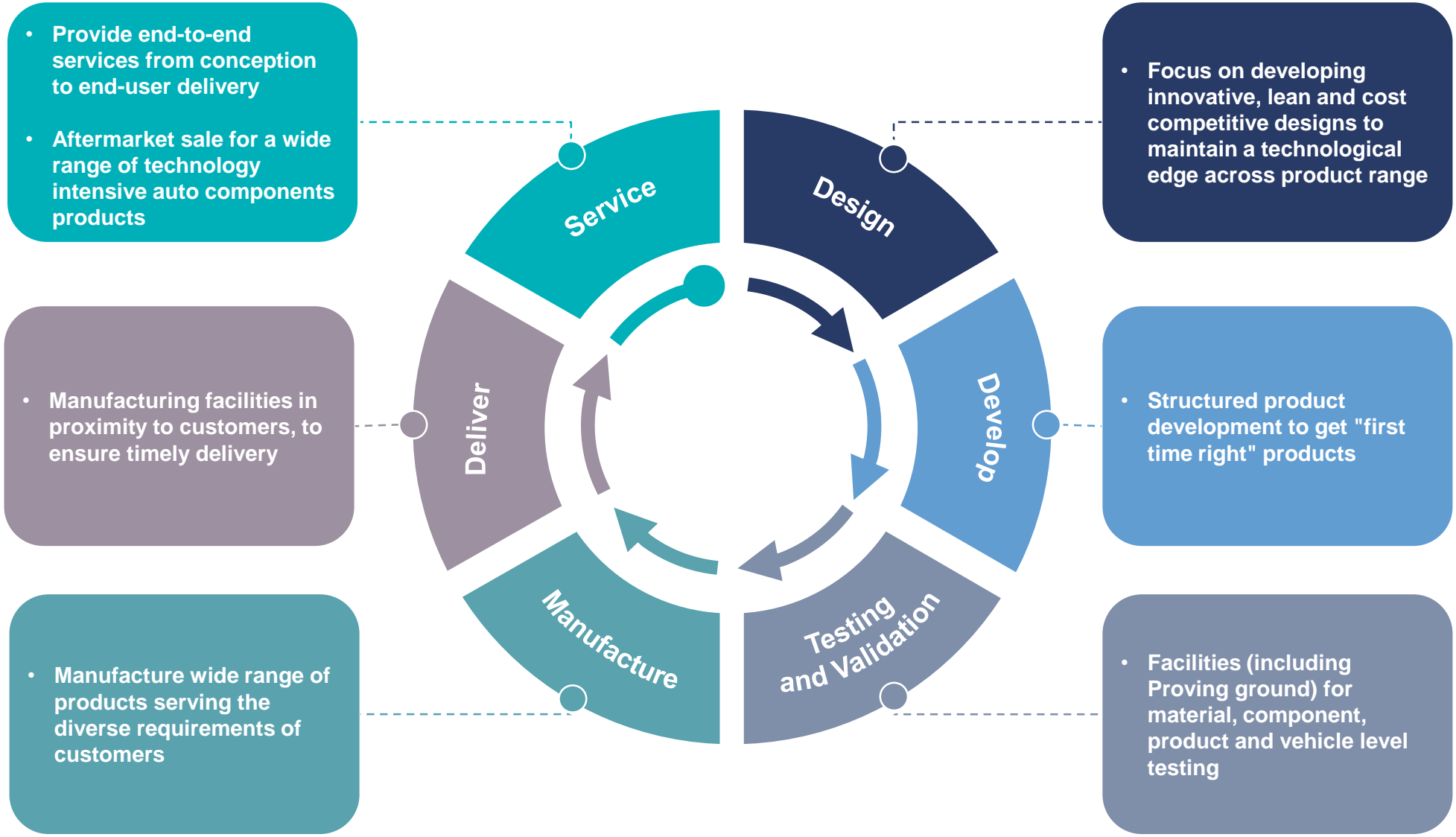
Europe Locations	No. Of Plants
Massenbachhausen, Germany	3
Grugliasco, Italy	1
Chivasso, Italy	2
Lombardore, Italy	1
Cirie Turin, Italy	1
Bione, Italy	1
Rovereto, Italy	2
Total	11

R&D Facilities	
Aurangabad, Maharashtra	4
Pune, Maharashtra	1
Total	5

▲ Test Track
 ● Manufacturing Facilities
▲ R&D Facilities / Tech. centers



End-to-end Solution Provider to Customers



QCDDM focus leading to customer satisfaction

Consistent Outperformance over Industry Growth

Endurance has consistently outperformed growth in the broader industry by successfully expanding its customer base, focus on R&D, ability to manage costs and reducing new product development time.

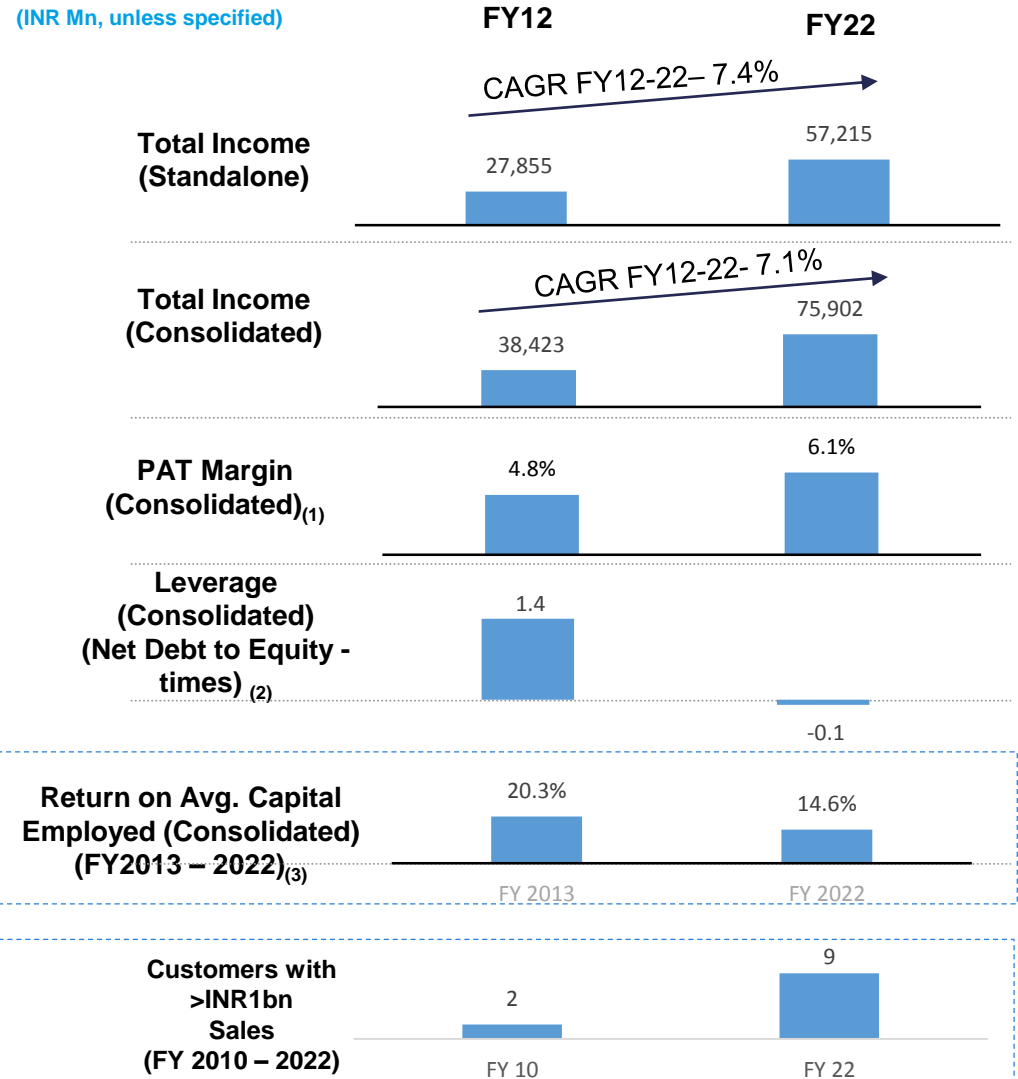
While Industry has shown reasonable growth...

India Production - FY12 vs. FY22 ('000s)

	FY12	FY22	CAGR FY12-22
Motorcycles	11,983	12,894	0.7% ↑
Scooter	2,659	4,362	5.1% ↑
Moped	786	473	5.0% ↓
2W Industry	15,428	17,729	1.4% ↑
3W Industry	879	754	1.5% ↓

...Endurance has Transformed its business between 2012 – 2022

(INR Mn, unless specified)

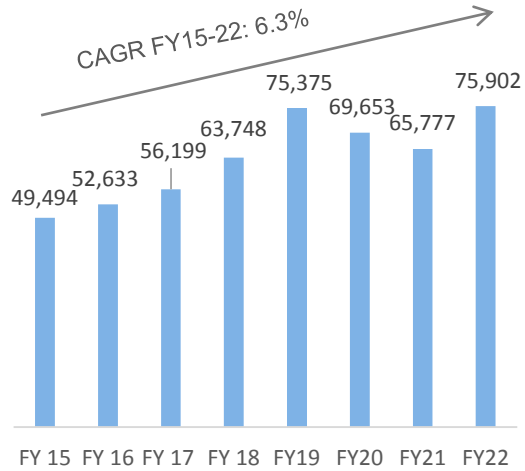


Notes: Source: Industry data sourced from SIAM. Financials are under INDAS from FY 15-16 onwards & under IGAAP till FY 14-15.

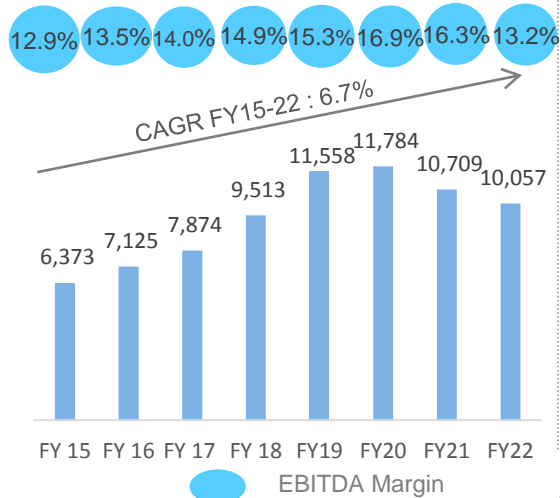
1. Calculated as profit before minority interest divided by total revenue.
2. Net Debt to Equity = (Long Term Borrowings + Short Term Borrowings + Current maturities of long term borrowings – Cash and bank balances – Current investments) / Total Shareholder's Funds.
3. ROACE = EBIT/(Average Capital Employed). Average Capital Employed calculated as Average of Shareholders Equity and Total Debt

Profitable Growth, Strong ROCE, and Deleveraged Balance Sheet ⁽¹⁾

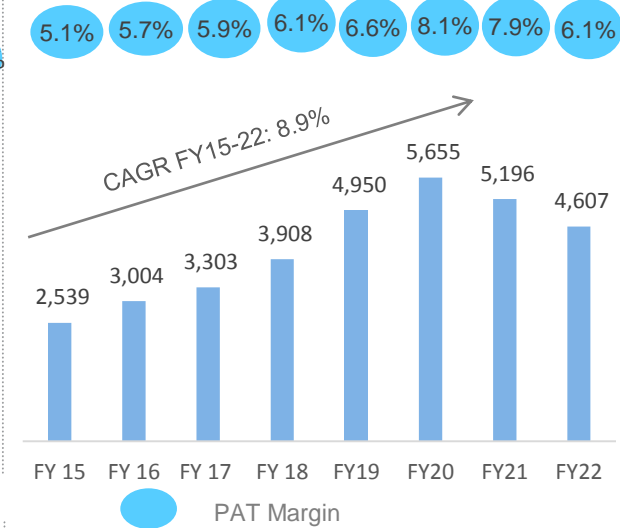
Total Revenue (INR mn)



EBITDA and EBITDA Margin (INR mn / %)



PAT and PAT Margin ⁽²⁾ (Before Minority Interest) – (INR mn / %)



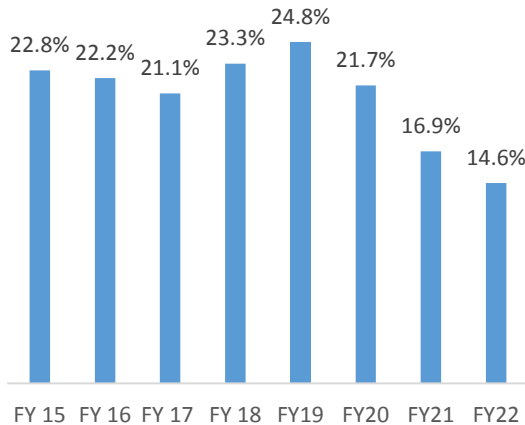
Track record of ahead of industry growth. EBITDA and PAT growth have outpaced revenue growth.

Strong return on average capital employed

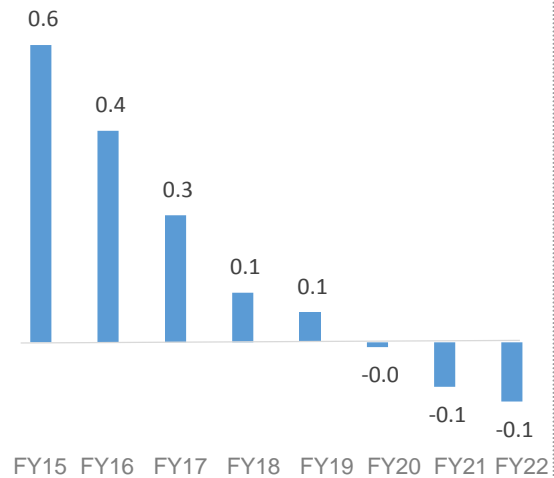
Deleveraged balance sheet, consistent financial performance and risk mitigation led to improved ratings – Long term: ICRA AA+ (Stable) and Crisil AA+ (Stable). Short term: A1+ from both agencies.

Focus on employee productivity.

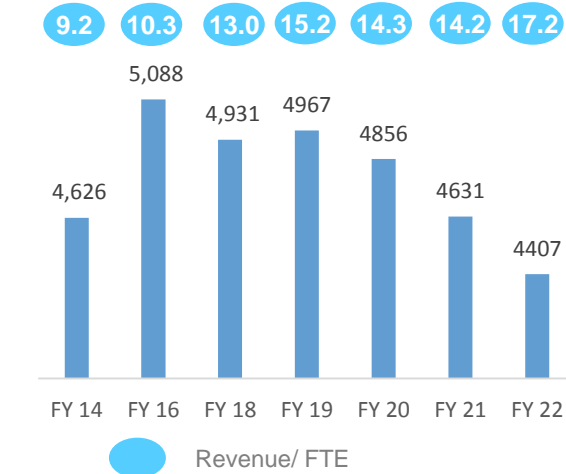
Return on Average Capital Employed ⁽³⁾ (%)



Net Debt / Equity Ratio (x)



Headcount (numbers) and Revenue per Full Time Employee (Rs M / FTE)



Notes: 1. Consolidated financials: From FY 15-16 onwards under INDAS & till FY 14-15 under IGAAP (FY18 & FY19 numbers are after incorporating IND As 115)
 2. Calculated as restated profit before minority interest divided by total revenue
 3. ROACE = EBIT/(Average Capital Employed). Average Capital Employed calculated as Average of Shareholders Equity and Total Debt

Key Investment Highlights



1 ▪ Leading 2W and 3W Auto Component Manufacturer in India

2 ▪ Multi-solution Provider of a Diverse Product Portfolio to a wide variety of OEMs

3 ▪ Focus on R&D with Emphasis on Lean Design and Continuous Improvement in Product Performance, Cost & Reliability and Quality. Technology inputs from overseas collaborations and recent acquisitions.

4 ▪ Focus on Operational Efficiencies to Improve Returns

5 ▪ Profitable European Business

6 ▪ Expansion of Presence in Aftermarket Sales Services

7 ▪ Strategy for profitable growth

Largest

2W and 3W auto component manufacturer in India⁽¹⁾

Largest

Aluminium die-casting company in India⁽²⁾

Top 2

in each product segment offered

Tier 1

supplier to OEMs

19

Manufacturing plants in India

Technology Tie – Ups

**Leading European
Suspension company
(KTM Technologies)**

- Technology tie-up since 2008 for development and manufacturing of suspension components.
- Current agreement was executed in 2015; it is valid for a period of 10 years and is renewable.
- Scope of existing agreement - Technology for the manufacture of new series of motorcycle suspension components.

**Leading global brake
and suspension
company
(BWI)**

- Entered into an agreement in 2017.
- For manufacture of Anti-lock Braking System (“ABS”) for application in two & three wheelers.
- Agreement is valid for a period of 20 years.

**European technology
provider in Aluminium
Forgings
(FGM)**

- Entered into an agreement in 2019.
- Technical support related to Aluminium Forging Technology

Endurance has acquired 100% stake in Adler SpA and Grimeca SrL, its erstwhile technology collaboration partners for clutches and brakes respectively.

Endurance Proving Ground (EPG) at Aurangabad

- EPG enables us to test our products on vehicle and further strengthens our position as a Complete Solution Provider.
- EPG is meant for Handling & Manoeuvrability, Ride Comfort, Driveability, Brake/ABS performance and Reliability evaluation.
- Consists test surfaces required for evaluation of Suspension, Transmission & Brake assemblies of 2W, 3W & Quadricycle.
- ABS test surfaces have provision of testing the brake system under wet and dry condition on different friction surfaces (Basalt tile, Ceramic tiles, High μ (0.9) asphalt, Polished concrete and loose Gravel).
- Ride & Evaluation track comprises of Belgian pave, Pot holes, Cobble stone, Speed breakers, Long/Short wave pitching, Kerbs.....



Growing and Profitable European Business

Growth in Europe

FY07	FY08	FY10	FY13	FY14	FY15	FY19	FY21	FY22	FY23
<ul style="list-style-type: none"> Acquisition of 100% stake in Amann Druckguss, Germany 	<ul style="list-style-type: none"> Incorporated Endurance Overseas Italy, a SPV to make strategic overseas investments Acquisition of 51% stake in Fondalmec Italy 	<ul style="list-style-type: none"> Increased equity stake to 100% in Fondalmec S.p.A., Italy 	<ul style="list-style-type: none"> Acquisition of 15% stake in FOA S.p.A., Italy 	<ul style="list-style-type: none"> Forayed into moulding of plastic components through acquisition of assets by Endurance Engineering Srl 	<ul style="list-style-type: none"> Acquisition of remaining 85% stake in FOA S.p.A., Italy 	<ul style="list-style-type: none"> Merger of Endurance Fondalmec with Endurance F.O.A. and name changed to Endurance S.p.A. Acquisition of 100% stake in Fonpresmetal Gap S.p.A. by EOSRL; name changed to Endurance Castings S.p.A. 	<ul style="list-style-type: none"> Acquisition of 99% stake in Endurance Adler S.p.A., Acquisition of 100% stake in Endurance Adler S.p.A., 	<ul style="list-style-type: none"> Acquisition of 100% stake in Veicoli Srl, Italy 	<ul style="list-style-type: none"> Acquisition of 100% stake in Frenotecnica Srl, Italy Acquisition of 100% stake in New Fren Srl, Italy

Focus on High-end Casting Products



Long-standing relationships with world-renowned OEMs in the Passenger and Commercial Vehicles space.

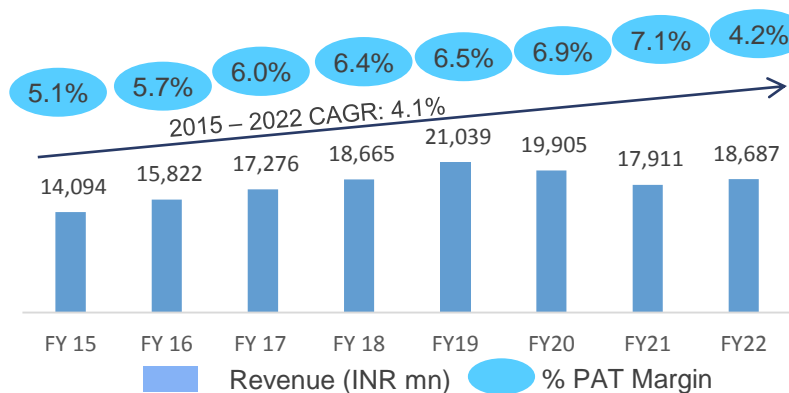
Expansion Strategy

- ✓ Focus on profitable growth
- ✓ High margin products
- ✓ Marquee customers
- ✓ Inorganic growth
- ✓ Aftermarket Presence (2 wheeler)

Capital Efficiency Improvement

- ✓ Diversification of product technology and material solutions
- ✓ Increasing machining automation for high-value products
- ✓ Introduction of higher-tonnage PDC machines for large and complex castings.

Profitable Revenue Growth⁽¹⁾ (INR mn)



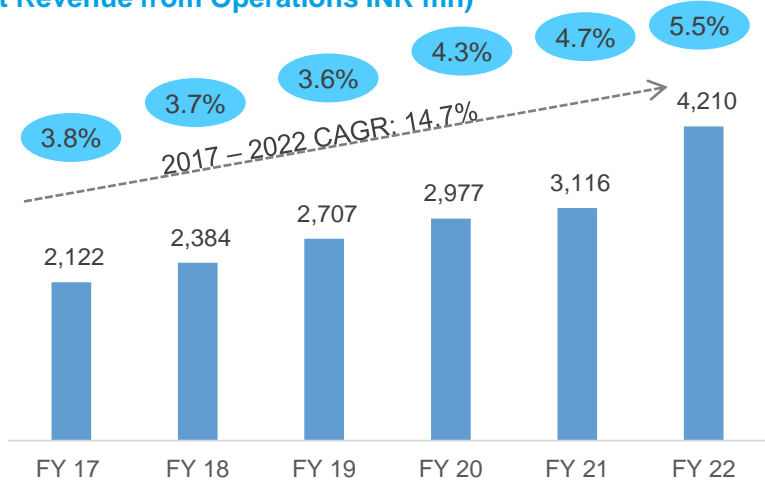
Notes:

1. Net Revenue from Operations: From FY 15-16 onwards under INDAS & till FY 14-15 under IGAAP (FY18 & FY19 numbers are after incorporating IND As 115); PAT margin calculated as restated profit before minority interest divided by total revenue

Expansion of Presence in Aftermarket Sales

Aftermarket Sales

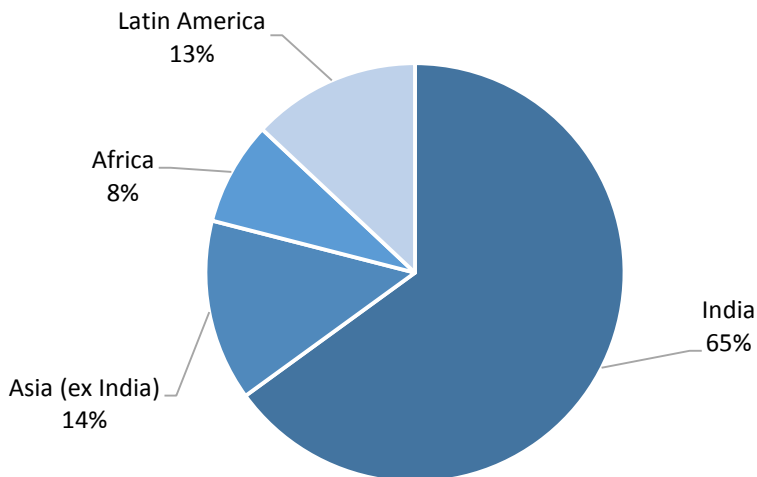
(Net Revenue from Operations INR mn)



● % of consolidated Net Revenue from Operations

Geographical Distribution

FY 2022



2001
Established Aftermarket Business

31
Export countries

3
Company run Distribution Centers (of which 1 for tyres)

501
Distributors/ dealers in India (Including 106 for tyres)

42
Distributors Overseas

Professional team comprising **69** full time employees across **36** locations

Key Highlights



Higher Margin

- B2C Business Model



Branding

1. Program for increasing retailers / mechanics contact & loyalty towards the brand
2. Improve brand image and visibility

Growth Strategy



Product Growth Drivers

1. Product penetration by introducing products for new models.
2. Trading of 2W & 3W auto parts not manufactured by Endurance



Expand Distribution/ dealer Network



Domestic Growth

- Focus on, Rajasthan, Gujarat, Telangana, Andhra, Tamil Nadu and Karnataka



Exports


- Entering new countries every year in line with OEMs

Strategy for Profitable Growth

 Focus on critical markets such as two-wheelers, three-wheelers and passenger cars in India. Supplies for passenger cars in Europe and foray into 2W components.



Growth for India and Europe by pursuing Organic and Inorganic Expansion

 Continually improve R&D capabilities in order to focus on advanced technology, high value-add products, including higher cc bikes



Harness R&D for new products, higher OEM penetration for Existing products – for Consistent Profitable Growth

 Expand presence in the aftermarket sales



Increase exports from India, enter new countries in line with OEMs

 Continue to pursue strategic alliances, inorganic growth opportunities and leveraging home grown technologies.



Combine low-cost base and manufacturing capabilities with technology from acquisitions / alliances

 Focus on operational efficiencies to improve returns



Deploy multi-pronged cost reduction strategies in manufacturing and sourcing

A CULTURE



- We, Endurians, are **proactive, hardworking, result-oriented**, and committed **team players** who **lead by example, walk the talk** and believe in **continuous improvement**
- We are **passionate** about what we do and what we create. We believe in challenging ourselves and **inspiring passion for excellence**
- We have **built a safety first culture** with a focus on contractor safety management
- We **celebrate wins** even the small ones

B DIVERSITY

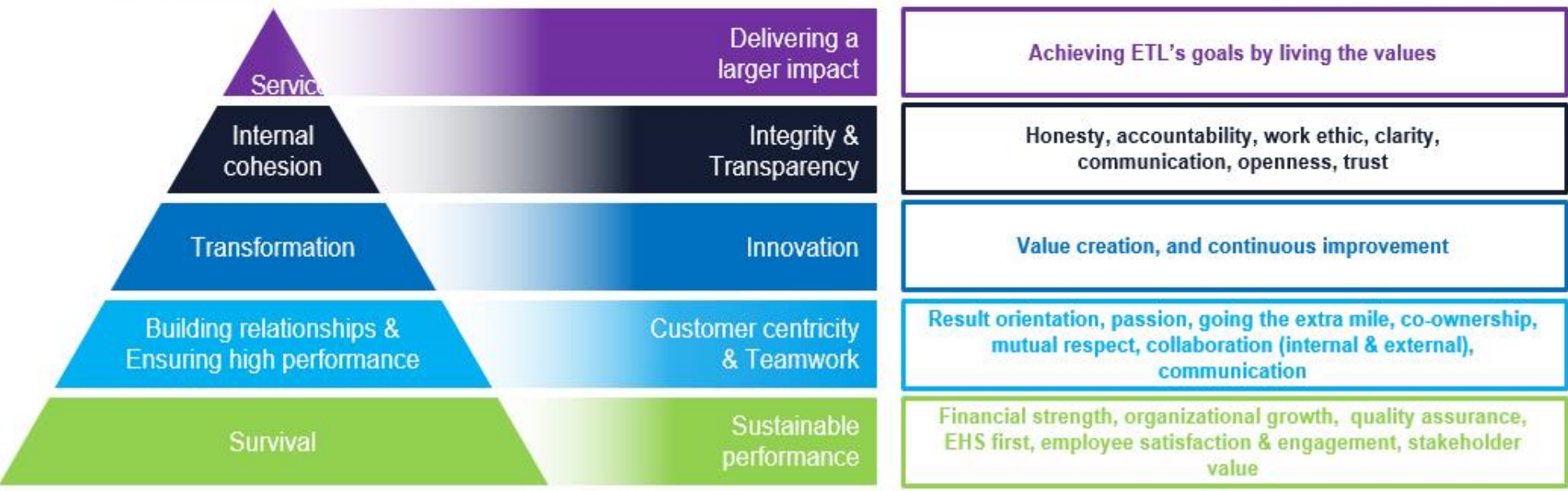


- At Endurance, we don't just accept diversity (be it gender, race, ethnicity, region) – we **celebrate it**.
- We believe that this diversity is key to challenging ourselves and **fostering creativity**. It is through diversity of our employees that we are able to continue to innovate and grow together.
- Diversity is a **strategic priority** for Endurance

C PEOPLE DEVELOPMENT



- We empower our employees to become **capable leaders** and enable them to achieve their **true potential** by **capitalizing on their strengths** and challenging them to overcome their weaknesses via objective assessments, mentoring, consistent constructive feedback & detailed development plans
- We have **focused initiatives for our high potential employees** for them to continue excelling in larger roles.



A

MANAGEMENT OF CHANGE



- At Endurance, we prioritize human life and environment in our business decisions
- All material changes, design changes, layout changes, expansions, greenfield/ brown field projects require certification from our EHS team
- We measure impact of our decisions on EHS parameters, incorporate EHS in our decision making and align our actions accordingly

B

DAILY SAFETY CHAMPIONS, VSL, & CONSEQUENCE MANAGEMENT



- Daily safety champions nominated across all locations are motivated to transparently share gaps, and recommend improvements
- As part of Visual Safety Leadership, senior mgmt. visit plants to evaluate safety practices, conduct mock drills, share learnings & horizontally deploy best practices
- We have built a EHS first culture ensuring zero tolerance for EHS violations

C

CONTRACTOR SAFETY MANAGEMENT



- Driving contractor safety management is essential to build an a safety first culture
- We have classified contractors into different risk categories based on the nature of their work and set mandatory criteria for each group
- We develop their capabilities by providing trainings on best practices, EPRP, hazard identification & management, risk assessment, competency mapping for employees

A

DRIVING CARBON NEUTRALITY



- Endurance consistently strives towards achieving carbon neutrality in all our operations via effective utilization of natural resources
- By developing dense forests and driving plantation, we have created carbon sinks
- We are transitioning to renewable energy with wind energy and solar power plants across locations

B

OPTIMISING ENERGY CONSUMPTION



- Based on the emission factor of different sources of energy, we are driving use of natural gas and LPG in the place of furnace oil and electricity
- Energy efficient furnaces and LED lights have been fitted & sensors have been installed in common spaces to avoid wasting energy
- We proactively arrest air leakages from compressors and optimize use of energy

C

RECYCLING WATER & DRIVING ACTIONS TO SAVE WATER



- Sensor based overhead tanks, water guns instead of water hoses, and water saving push type taps are used to reduce water consumption
- We have switched from painting to powder coating in several plants, leading to water savings
- We reuse water from treated effluent for gardening, cooling towers, toilets
- We drive rain water harvesting and proactive arresting of leakages

D REDUCING HAZARDOUS WASTE GENERATION



- Sustainability is a key corporate objective for Endurance and reducing hazardous waste generation supports us to achieve this objective
- By switching from painting to powder coating in several plants, we have reduced hazardous waste generation
- We use oil skimmer in tanks to recover & reuse oil and we continue to drive actions to proactively arrest leakages of oils and coolants

E CO-PROCESSING HAZARDOUS WASTE



- Hazardous waste generated from our manufacturing facilities is used as raw material for other industries
- The paint sludge from our operations is used as raw material in cement industries and our grinding dust is converted to iron oxide for paint industries

F DRIVING ZERO WASTE TO LANDFILL



- In our endeavor to achieve zero waste to landfill, we have been driving several actions including using returnable packaging and composting waste
- We recycle metal waste wherever possible inside our plants
- We recycle non-hazardous waste with the help of authorized recyclers

Delivering Lasting Impact With Every Community We Transform, Every Individual We Empower And Every Child We Inspire

A

EDUCATION



Renovated 34 schools with libraries, computer labs, and toilets



Distributed 178 bicycles to girls to safely commute to school



Trained 75 teachers in life skills



Inspired 3800+ children for 100% attendance



Empowered 1150 individuals via "World on Wheels" computer training

B

HEALTHCARE & SANITATION



Organized health camps for 5236 villagers with 137 cataract surgeries



Implemented cleanliness drives in 11 villages benefiting 4700 villagers



Constructed 2023 toilets and trained 20,000 villagers in 30 villages



Renovated 3 health centres benefiting 38,000 people in 51 villages



181 men de-addicted from Alcohol; conducted yoga camps for 600+

C

ENVIRONMENT



Deepened 40kms of natural canals, creating water capacity of 27 Cr. litres



De-silted ponds in 9 villages benefiting 350+ farmer families



Laid pipeline of 1.5km for drinking water provision to villagers



Constructed 5000+ mangers saving 40% fodder



Developed 11 dense forests (19.75 acres), Planted 40k+ plants (>99% survival)

D

LIVELIHOODS



Trained 1500+ individuals at ECOVE (collectively earn Rs.34Cr.+ annually)



Empowered & supported 1857 + women to start their own businesses



Supported 93 farmers in drip irrigation, 26 farmers in hydroponics & Trained 137 farmers



Employed 47 women for cleanliness drives, sanitary napkin manufacturing,



Trained & supported 23 farmers for livelihood in poultry industry & treated 3000+ animals

Awards and accreditations



The Company has been recognised by customers and industry forums with many awards and recognitions. Some of the key awards are:

1. Recognized amongst India's "Best Managed Companies-2022" by Deloitte.
2. Awarded as 'Most Innovative, Disruptive and Transformational company' at Moneycontrol Pro's Indian Family Business Awards for 2021.
3. Award for New Product Development 2018-19 by Honda Motorcycles & Scooter India Pvt. Ltd. in March 2019
4. Grand Award for QCDDM performance in 2016-17 by Honda Motorcycles & Scooter India Pvt. Ltd. for excellence in Quality, Cost, Delivery, Development and Management.
5. Global TVP Award for the Alloy Wheel Plant at Chakan (Pune) by India Yamaha Motor Pvt. Ltd. for developing Theoretical Value of Production.
6. National Energy Conservation Award by the Bureau of Energy Efficiency.
7. Gold Award to the plant at K228/229, Waluj by International Convention on Quality Control Circle, at Japan in Sep-19. Par Excellence Award to the plant in TPM category by National Convention on Quality Concepts in 2020.
8. Gold medal in the "National Awards For Manufacturing Competitiveness" for the FY 2017-18, by the International Institute for Research & Manufacturing (IRIM), Mumbai to the plant at E-92 & 93, Waluj.
9. Gold category Award in the India Manufacturing Excellence Awards 2019 by 'Frost & Sullivan' at E-92 & 93, Waluj.
10. Silver Certificate of Merit to the plant at K-120, Waluj by the Executive Committee of 'Frost & Sullivan' in the FICCI India Manufacturing Excellence Awards 2017, for enhancing Manufacturing and Supply Chain Excellence.
11. Bronze Award under Excellence in Manufacturing 'Very Large Category' for the year 2016-17 by Automotive Component Manufacturers Association of India (ACMA) to the plant at E-92 & 93, Waluj.
12. Supplier Quality Excellence Award 2019 to Endurance SpA from General Motors.

INDIA:

- **Rs. 8.77 bn** of new non-Bajaj orders won in India till date in FY23 from HMSI, HMCL, Ather, Hero Electric and TML.
- **Rs. 27.4 bn** of orders won in India in last 4 years- of which **Rs.19.6 bn** are new business wins and rest are replacement orders. SOP for Rs.19.6 bn:- **Rs.4.4 bn** in FY23, **Rs.6.7 bn** in FY24, **Rs.8.5 bn** in FY25 and FY26.
- Efforts to target new customers paying off.
 - Orders from Mahindra Auto and Tractors for casting and Mahindra Electric for 3W brakes. Special focus on adding Mahindra to our list of OEMs with sizeable business.
 - Over **Rs.1 bn** orders from non-auto clients - a multi-national telecom infrastructure player and a multinational generator manufacturer. Further non-auto business under discussion.
 - Focus on casting exports.
 - EV customers include Bajaj, Mahindra, Tata (Indirect business), Bounce, Hero Electric, Ather and Polarity. Started supply of brakes, suspensions, castings for 2W/3W EV's. Aggregate EV Orders of **Rs. 5.8 bn** till date.
 - Actively in discussion with various EV manufacturers (traditional and new OEMs).
 - Cumulative orders of more than **Rs.3 bn** from TVS.
 - Cumulative orders of more than **Rs.2 bn** from Hyundai/Kia.
- **Rs. 19.8 bn** of RFQs under discussion with various OEMs.
- For Inverted Front Forks, we began with Bajaj and KTM models. Now, we also have orders from HMSI and HMCL.
- ABS supplies (single channel) for Bajaj and RE have begun. Expecting supplies for Dual Channel ABS by June 2023.

EUROPE:

- Till date in FY-23, orders worth **Euro 67.4 mn** won from Daimler, Stellantis, VW including Porsche.
- In FY22, orders worth **Euro 71 mn** won from Porsche, Daimler, CNH, BMW and Stellantis. In FY21, **Euro 19 mn** of new orders were won in FY21 from OEMs such as Audi, Daimler, VW, FCA and Maserati.
- With the latest orders, we have a total peak annual order portfolio of ~ **Euro 80 mn** for Battery Electric Vehicles of Audi/VW, Porsche, CNH and ~ **Euro 120 mn** for hybrid models of VW, Daimler, BMW, Stellantis and Maserati. Peak volume to be reached in FY27.

Certain Other Updates- India : 8th February 2023

- Disc brake assembly capacity increased from year 2020 level of 285000 numbers p.m. to 570000 numbers p.m. through project executed in Pantnagar and larger project in the form of second brakes plant in Aurangabad commissioned in December 2021.
- Similarly, brake disc capacity to increase from 375000 to 675000 numbers p.m.
- These capacities could make Endurance the largest disc brake supplier to Indian 2W industry.
- 85% of 2W ABS market controlled by one multi-national. Market size is 3.5 mn assemblies. Deliveries begun to Bajaj in September 2021 and to RE in February 2022 .Production is expected to reach installed capacity of 400000 units p.a. by February 2023. Additional 200000 capacity will be ready in Q1 FY24.Targeting dual channel ABS orders also. Further, increase in capacity planned to 1.2million units p.a. by Q3 FY25.
- We will be the only supplier in India that manufactures the entire assembly with ABS unit.
- LPDC cylinder head plant with 720000 numbers capacity started in Pantnagar from September 2021.
- Chakan alloy wheel capacity increased from 240000 to 380000 numbers p.m. from July 2022.
- Backward Integration : Wire braided hoses plant began operations in June 2021. Supplies from new forging plant started from April 2022.Insourcing of valves for ABS by March 2023.In-house paper making for clutches by Q1FY24.
- Adler/Grimeca IP to facilitate larger play for Endurance in 200cc + motorcycles: Start of production of brakes from end 2021, and clutches SOP expected in FY24.
- Capex in India was Rs. 3.5 bn in FY22 and Rs. 2.6bn till Q3FY23.
- PSI 2013 scheme – Rs. 3.24 bn income has been recorded and Rs. 1.97 bn has been collected in the last 4 years, out of Rs. 4.66 bn of eligibility. We booked Rs.0.6 bn each of such incentives in FY22 and till Q3FY23. Government of Maharashtra continues to encourage investment in backward regions like Waluj.
- After-market exports are currently to 31 countries, 4 more countries will be added in this year.
- New project completed in Aurangabad for production of driveshaft. The plant also has dedicated R&D facility. Supplies started to first customer in July 2022. New orders won from 3W OEM's.
- Facility for embedded electronics manufacturing to be setup in Aurangabad. Expected to start in early FY24.

Certain Other Updates- Europe : 8th February 2023

- Registration of new passenger cars in EU+UK for Q3 FY23 up by **14.9%** YoY and down **1.9%** YoY for YTD Dec-22.
- Germany production numbers up **19.3%** for Q3 FY23, indicating inventory buildup for upcoming demand.
- Registration of new passenger cars in EU+UK for FY22 was down by **4.9%** compared to FY21 and **22.7%** compared to FY20.
- Production of new passenger cars in EU for the calendar year 2021 was down **7.1%** compared to 2020 which was already down **23.3%** compared to 2019.
- Higher energy prices:
 - Gas prices up from 19 c€/Smc in Q4FY21 to around 100 c€/Smc in Q4FY22. They further increased and reached 208 c€/Smc in Q2FY23. In Q3FY23, average prices reduced by 52% compared to previous Qtr high.
 - Electricity prices up from 59 €/MwH in Q4FY21 to around 250 €/MwH in Q4FY22. They further increased and reached 472 €/MwH in Q2FY23. In Q3FY23, average prices reduced by 50% compared to previous Qtr high.
 - Endurance Europe EBITDA margin without aluminium cost increases stood at 14.7% for Q3 FY23; previous year same quarter was 11%.
 - European governments are providing short term support to industry to counter higher energy costs. Also, acceptance by all major customers to compensate for approx. 60% of total delta energy costs compared to previous year.
 - Started investment in solar panels for clean electricity generation at lower cost.
- Total Capex in Endurance Europe in FY22 was **€ 21 mn**, and till Q3FY23 was **€19.7 mn**.

Update : Maxwell Acquisition: 8th February 2023

- Maxwell is an advanced embedded electronics company with battery management system (BMS) as its flagship product.
- Deep technical expertise and experience of deploying 65000 units of BMS over 5-6 years.
- Such skills to be complemented by Endurance's strength in customer connect, supply chain and operations.
- 70 customers in 15 countries.
- Robust sales and profit growth plan, including launch of new products.
- Order from one of India's largest 2W-3W OEMs and one of India's largest 2W EV OEMs.
- Total orders of Rs.1.9 bn till Q3 FY23 to be executed over next 3 years and leads worth Rs. 1.4 bn being pursued.
- Revenue Rs.35 mn, Rs.66 mn, Rs.91 mn, Rs.195 mn in FY19, FY20, FY21 and FY22 respectively. FY23 revenue outlook not as strong as envisaged earlier due to delayed vehicle launch by OEM and chip shortage issues. Future plans expected to be achieved on healthy order booking outlook.
- Certifications including ISO 26262, MSIL D, ASIL C, CE. On track to be AIS-156 compliant for all the products in a short time.
- BMS algorithm with over 260 configurable parameters. Faster go-to-market.
- BMS application in 2W/3W/stationary storage. Initial foray into 4W BMS.
- Fits well with ETL strategy on embedded electronics R&D and product development. Maxwell has commenced R&D on telematics.
- Plan to strengthen technical resources. Head count expected to increase from sub-100 to 250.
- Acquisition involves upfront payment of Rs.1.35 bn for 51% stake. Includes primarily component to cater to initial cash needs in Maxwell. Transaction consummated on 1st July 2022.
- Remaining 49% payable over 5 years with variable payout maximum Rs.1.73bn.

- Endurance Overseas acquired 100% stake in Frenotecnica Srl, for a consideration of Euro 5 mn.
- Frenotecnica is based in Rovereto, Italy
- It is engaged in the business of designing and manufacturing of friction materials and components for braking systems for two-wheelers.
- The primary business activity comprises sale of brake pads under its registered trademark "Brenta" and on orders from third parties.
- In the year ended 31st December 2021, the company achieved a turnover of Euro 3.5 mn with EBIDTA margin of Euro 1 mn.
- Endurance Group will benefit from a stronger presence in the after-market and replacement business, as the business comes with a renowned brand.
- This acquisition also gives access to know-how for production technologies of friction materials, particularly for brake applications.

- Endurance Overseas srl, Italy has acquired 100% stake in New Fren Srl, for a consideration of Euro 1.15 mn.
- New Fren is based in Cirie (Turin), Italy and its subsidiary GDS Sarl, situated at Hammam Sousse, Tunisia.
- It is engaged in the business of designing and manufacturing of brake discs, clutches, centrifugal clutches, pads and allied components for two-wheeler vehicles.
- In 2021, the company achieved a turnover of Euro 5.4 mn with EBIDTA margin of Euro 0.4 mn.
- It has a strong presence in the after-market and replacement business, as the business comes with a well-known registered trademark “Newfren” .
- This acquisition is another step taken to create a 'centre of excellence' in Italy for enhancing our presence in the premium two-wheeler components segment, providing growth and synergy to the Endurance Group.

Thank You