

Management discussion and analysis

INDUSTRY OVERVIEW

In CY 2022, total global light vehicle sales were around 79.2 million units, according to S&P Global Mobility, 1.3% lower than the previous year. All our international markets –North America, Europe, and Asia (excluding India) also saw a single-digit percentage annual decline in sales volumes. During the year, the European auto industry suffered from supply chain disruptions, energy concerns, and higher raw material prices due to the Russia-Ukraine war. The North American market also struggled with supply chain issues, labour shortages, logistics, and inflation. The Asian market also remained volatile due to the uncertainties related to post-Covid reopening in China. However, the Indian markets performed well in all vehicle segments during FY 2022-23 and witnessed a growth of 27%, 34%, and 12% in passenger vehicles, commercial vehicles, and tractor segments, respectively, due to resilient demand despite facing many issues in the supply chain [Data source: The Society of Indian Automobile Manufacturers (SIAM), Tractor Manufacturers Association(TMA)]. The semiconductor shortage also impacted global light vehicle production but to a lesser extent than the previous year, as this issue started easing out slowly during the year; however not reached a full recovery yet. As a result, towards the end of the year, global production of automobiles started to recover due to the order backlog and increasing acceptance of battery electric vehicles (BEVs).

The future of mobility is E.P.I.C.

Besides the sluggishness in sales volumes, the automotive industry is undergoing a massive transformation as the future of mobility moves towards E.P.I.C. – Electrified, Personalised, Intelligent, and Connected.

Electrified

In the last few years, the automotive industry has experienced various uncertainties; however, the trend of powertrain electrification has accelerated. Being driven by all stakeholders with rising awareness regarding climate change, OEMs taking ambitious targets of reaching 100% sales of zero-emission vehicles, consumer preferences to reduce CO2 emissions, and government support with favourable policies and incentives, electrification is changing the industry landscape.

As per IEA's Global Electric Vehicle Outlook 2023, the sales of electric cars – BEVs and plug-in hybrid electric vehicles

(PHEVs) – saw another record year in CY 2022, exceeding 10 million worldwide, up 55% relative to CY 2021. The share of electric cars in total car sales jumped from 9% in CY 2021 to 14% in CY 2022, more than ten times their share in CY 2017. The global BEV penetration increased to ~10% of total light-vehicle sales in CY 2022, increasing from 6% in CY 2021 and 3% in CY 2020.

China accounted for around 60% of global electric car sales. In Europe, the second largest market, electric car sales increased by over 15% in CY 2022, meaning that more than one in every five cars sold was electric. Electric car sales in the United States – the third largest market – increased by 55% in CY 2022, reaching a sales share of 8%. The experts and independent automotive research agencies expect an aggressive ramp-up in BEV penetration over the next decade. CY 2022 marked an inflection point in the electrification trend as BEV penetration reached ~10%, and nearly all major automakers have announced or indicated a pivot to electric vehicles (EVs).

Under the IEA Stated Policies Scenario (STEPS), it expects the global outlook for the share of electric car sales based on existing policies and firm objectives to increase to 35% in CY 2030. IEA expects China to retain its position as the largest market for electric cars, with 40% of total sales by CY 2030. The United States will double its market share to 20% by the end of the decade as recent policy announcements drive demand, while Europe will maintain its current 25% share.

Personalised

Technological advancements and rapid digitalisation have enhanced all vehicle life cycle stages, including R&D, design, production, and on-road performance. Apart from tangible technological improvements, customers now expect intangible enhancements in the form of better personal experiences, such as the customised features and functions that the vehicle must offer. They have started viewing vehicles as connected digital objects that can integrate with and act as an extension of their digital ecosystem.

In an article, McKinsey has defined the levels of user experiences in connected cars as follows [Source: Setting the framework for car connectivity and user experience - McKinsey Quarterly, November 2018]:

	Basic Vehicle monitoring	Driver Profiles for digital services	Personalisation for all occupants	Live interaction with the vehicle for service recommendation	Virtual Chauffeur for all explicit and unstated needs
Level 5					
Level 4					
Level 3					
Level 2					
Level 1					

Many vehicle makers are currently rolling out basic personalisation features such as memory seats, multiple user profiles, and the capability to extend the user's mobile interfaces to the vehicle infotainment system. When we move up in the levels, the user experience shifts from reactive to a more predictive and customisable form with artificial intelligence. The experience not only remains limited to the driver but also extends to all the occupants by offering them personalised controls, infotainment, and digital services. They can even interact with the vehicle through their voice or gestures for their needs. At the highest level, the vehicle predicts the unstated needs of the occupants and offers them customised services, which will completely transform the consumer experience in the future.

Intelligent

Scalable central computing clusters embedded artificial intelligence (AI) capabilities, and connected experiences delivered through vehicle sensors and tech ecosystems will characterise future vehicle architectures. According to a report from Deloitte, a modern car currently has 100 million lines of code [Source: Autonomous Driving – Deloitte Research, Jan-2019], which is nearly four times the code in an F-35 fighter jet and more than eight times from the Android operating system.

New automotive applications and services leverage various sensor technologies to communicate road conditions, analyse the driving environment, improve ride safety and experience, and improve car efficiency. Alongside digitalisation, the development of assisted and autonomous driving remains a crucial factor for the future of mobility. And as the vehicles are equipped with more and more ADAS sensors and onboard computing, the requirement for software content will further multiply, and a fully autonomous vehicle will need more than 500 million lines of code.

Connected

Vehicle connectivity with the entire ecosystem will also be the next level of technological advancement, where all the vehicles will talk to each other (V2V), transport infrastructure (V2I),

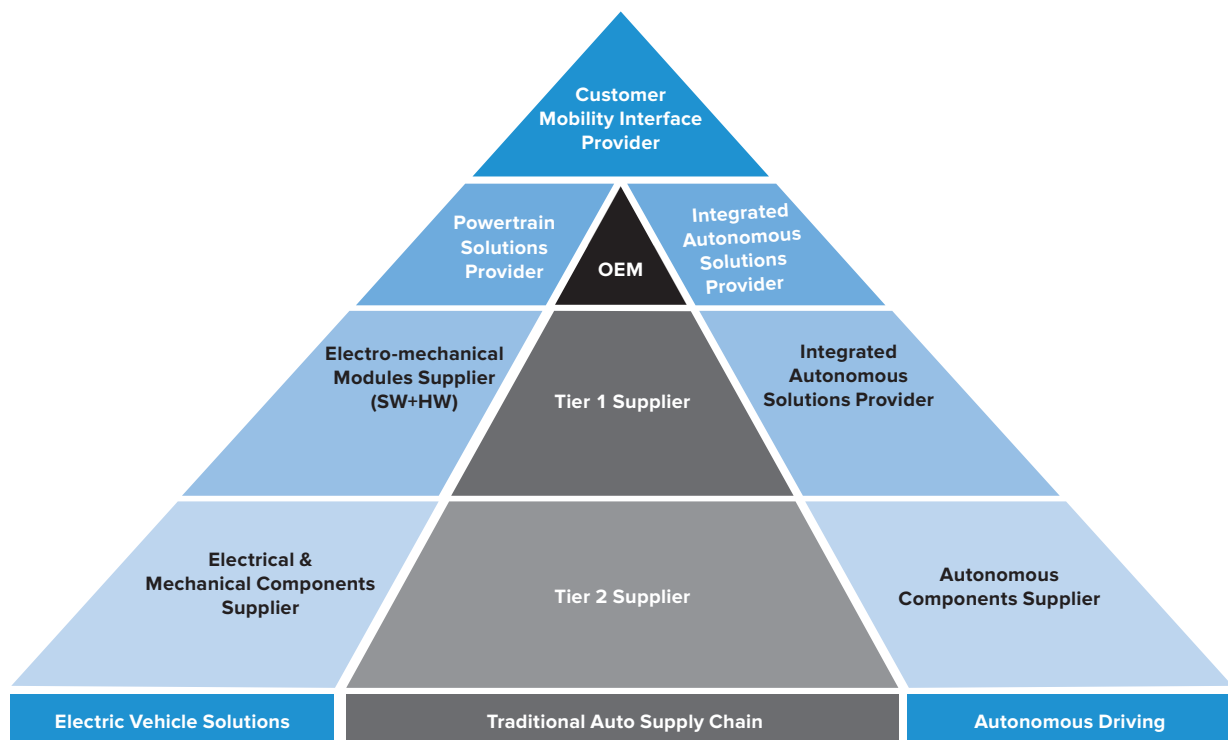
network (V2N), and pedestrians (V2P). This will be a key to the development of smart cities. These V2X connectivity features will provide a safer and more efficient way of commuting.

This movement has already started with Vehicle-to-Customer connectivity through mobile applications with which the customer can access all driving and vehicle parameters. This also enables fleet monitoring and driver behaviour monitoring in logistics applications. This movement will further accelerate toward V2V and V2I connectivity, where all vehicles will share their driving data and the infrastructure to ensure traffic minimisation and route optimisation.

Beyond this, connectivity will also play a key role in providing a personalised experience to the vehicle occupants. As per McKinsey, more than 45% of the global new car sales could have level-3 or above personalisation/connectivity level by CY 2030 [Source: The future of mobility is at our doorstep – McKinsey Centre for Future Mobility, Dec-2019].

E.P.I.C. automotive value chain

The above global megatrends of the E.P.I.C. automotive world will also require a structural change in the automotive value chain. The traditional value chain of OEM being the manufacturer and taking systems from Tier 1 suppliers who buy components from Tier 2-n suppliers will transform drastically. With the advancement of technology in the mobility space, mobility interface providers will be at the forefront of the value chain interacting with customers to serve their needs. These mobility interface providers can be anyone out of the rental fleet operators, technology-based taxi aggregators, or even the OEMs. These mobility interface providers will buy the vehicles from the OEMs, whose primary value addition will be to assemble the vehicle hardware and software systems. These complete systems will be supplied by specialised powertrain or autonomous solution providers, who will assimilate the role of a Tier-0.5 supplier. The integrated hardware and software module suppliers who will buy the hardware components from the suppliers present down the value chain will support such solutions' development. This structural shift is evident with the large Tier-1s seemingly moving up the value chain.



COMPANY OVERVIEW

Sona BLW Precision Forgings Limited (Sona Comstar) is one of the world's leading automotive technology companies, designing, manufacturing, and supplying highly engineered, mission-critical, high-quality, complex, and bespoke systems and components for global automotive OEMs for both electrified and non-electrified powertrain segments.

It was incorporated in 1995 as Sona Okegawa Precision Forgings, a JV between Sona Group and Mitsubishi Materials. It pioneered the technology of precision-formed bevel gears in the Indian automotive market. Later, the Company acquired Thyssen Krupp's precision forging business, BLW, which was the inventor of this technology, and renamed itself Sona Comstar. In 2019, it acquired Comstar Automotive to add motor capabilities and formed a new brand identity – Sona Comstar.

Headquartered in Gurugram, India, Sona Comstar is a leading supplier for the fast-growing global EV market, with 26% of its revenues from the EV market. It is also a global supplier with nine manufacturing and assembly facilities across India, the USA, Mexico, and China and ~70% of its sales is for international markets. It has a diversified revenue base across geographies, products, vehicle segments, and customers.

Sona Comstar has strong R&D, engineering, and technological capabilities in precision forging, precision machining, mechanical and electrical systems, and base and application software development. Across its three R&D centres, it develops driveline and motor solutions providing 'more torque per gram' and meeting the evolving demands of its customers. It is one of the few companies globally able to design high-power density EV systems, handling high torque requirements with a light-

weight design while meeting stringent durability, performance, and NVH specifications, enabling EV manufacturers to enhance the vehicle range, acceleration, and overall efficiency.

Sona Comstar aspires to become one of the world's most respected and valuable auto technology companies.

OPPORTUNITIES

'Electrification' – Capturing market opportunity in the growing EV space

With the increasing electrification of vehicles across all vehicle segments globally, Sona Comstar's product offerings place it attractively to leverage this mega opportunity. Its commitment to technology, innovation, and quality supports the development of cutting-edge technologies and new products that helps faster adoption of EVs in India and globally. The Company's extensive EV product portfolio helps it respond to customers' requirements with agility and stay competitive. As part of its growth strategy, the Company plans to increase its presence in the EV segment in both the Indian and overseas markets for both of its major product lines:

- **EV geartrain components:** Anticipating the overall market shift towards electric mobility as early as 2016, it started developing various EV geartrain components, such as differential assemblies, differential gears, and transmission gears, with core design features meeting the increasingly stringent demands of EVs, such as high-power density, improved fuel efficiency, low NVH (noise, vibration, and harshness) characteristics and reduced weight. The Company has started supplying differential gears in the global EV market since April 2016 and differential assemblies since 2018. Afterward, it developed many other products,

such as Spool Gears and Epicyclic Geartrain during the FY 2022-23 and Electronically Locking Differential (EDL), Intermediate Gears, and EV Input/Rotor Shafts during the FY 2022-23 to enhance its EV product portfolio further. The consistent efforts undertaken by the Company to grow in this segment have enabled it to garner new business awards and strengthen its position to compete in the global marketplace. As of 31st March 2023, it had 42 EV program awards for supplying the above products to EV manufacturers across North America, Europe, Asia, and India. The Company remains confident of benefiting from the growing shift towards electrified drivetrains by further increasing its customer base and expanding its share of business with existing EV customers.

- **EV traction motors and motor control units:** With the growing market shift towards the electrification of vehicles, the demand for electric cars, electric two-wheelers, and three-wheelers are growing rapidly in India and globally. As the Company already designs and manufactures traction motors and motor control units for electric two-wheelers and electric three-wheelers, it is well-positioned to benefit from the expected growth in the Indian EV market across all vehicle categories. It commenced the supply of traction motors for Indian electric two-wheelers and three-wheelers in November 2020, and within three years, these products reached zero to 4% of our revenues. Further, working in partnerships with IRP and Enedym Inc., it is developing magnet-less motors for the Indian EV market. In May 2023, it also announced a collaboration with Equipmake for their patented spoke motor technology for supply to various vehicle segments in the Indian market and Equipmake's requirement for global markets. As part of its growth strategy to establish market leadership, it is targeting to develop products with the right motor technology for the right vehicle segment, and it aims to increase its customer penetration and acquire new customers for its traction motors and controllers.

'Automation' – Capturing market opportunity in the growing autonomous space

The future of mobility is shifting towards higher and higher levels of automation, making vehicles more and more intelligent. Our hardware and software engineering capabilities and abilities to create integrated systems are gaining importance as vehicles and the systems inside become increasingly more intelligent and autonomous. We marked our entry into this space by introducing the Integrated Motor Controller Module during FY 2022-23. This module, consisting of two million lines of code, adjusts a vehicle's predictive active suspension system, offering comfort and convenience to the occupant.

Making vehicles more intelligent, sensors and software will play an oversised role in the automotive. According to a McKinsey report, by CY 2030, the ADAS sensor market will grow to USD 43 billion, dominated by radar sensors, which will contribute USD 14 billion [Source: Automotive software and electronics 2030 – McKinsey, Jul-2019]. During the FY 2022-23, we took a big step in this direction by adding a new pillar of growth, 'Sensors and Software,' by signing a binding terms sheet to

acquire a 54% stake in NOVELIC, a Serbia-based company and a leading provider of mmWave radar sensors, subject to successful negotiations, finalisation and execution of definitive agreements and regulatory approvals. NOVELIC's sensing and perception capabilities, adding to our mechanical, electrical, and electronics capabilities, would help us to start building the third business vertical of sensors and software.

Increasing market share globally

- **Achieving significant global share from existing systems and components:** Sona Comstar has increased its global market share of differential gears and starter motors to 7.2% and 4.1% respectively in CY 2022 from 5.0% and 3.0% respectively in CY 2020, as per the data from the Ricardo Report. As part of the strategy, the Company intends to penetrate the European market by supplying differential assemblies and differential gears, where it currently has a limited market share for its driveline products.
- **Benefiting from the industry trend towards multi-axle vehicle drives:** According to CRISIL, the global automotive industry is experiencing an increased market preference for multiple-axle vehicles in PVs, CVs, and tractors. A gradual shift in demand towards four-wheel-drive vehicles, particularly in the utility vehicle segment, is projected to result in higher per-vehicle gear content. It expects this trend to increase the demand for its differential gears significantly. It aims to achieve its growth objectives by capitalising on this shift in market preference for multiple-axle vehicles.
- **Benefiting from integrated powertrain systems in EVs:** Today, it is among the limited number of players who are well-placed to combine its motor and driveline capabilities to offer a compelling value proposition to its EV customer base. Integrated drive units have three key components: differential assembly, high-voltage traction motors, and high-voltage inverters. Since it already manufactures electric drive motors and inverters for electric 2-wheelers and 3-wheelers, as well as differential assemblies and transmission gears for battery electric passenger vehicles, it is placed uniquely to integrate the three key constituents of the electric powertrain into a single matched unit, offering an efficient and compact solution to EV OEMs.

Continue to focus on R&D to develop new and innovative systems and components

With its deep emphasis on R&D and innovation, it aspires to consistently enhance and adopt newer technologies. The Company has developed extensive in-house capabilities to develop embedded systems, application software, and integration capabilities to offer its customers a complete solution. The strong in-house capabilities of the Company have also enabled it to deliver evolving green technologies for future mobility.

Additionally, the Company aims to capture the growth trend in revenue realisation per vehicle through increasing electrification by continuously investing in R&D to develop and deliver new and innovative systems and components. It is

progressing well by developing seven new products within the last two years and looking forward to developing many more by leveraging its technology capabilities.

Although the core of its strategy is to continue achieving growth organically through investment in its technological capabilities, business development skills, and customer relationships, the Company will continue to evaluate inorganic growth opportunities, such as acquisitions and strategic alliances, that would provide it with complementary technologies that have a similar financial profile.

THREATS, CONCERNS, AND RISKS

The Company has a strong mechanism to anticipate and manage risks. The Company's robust systems, processes, standards, code of conduct, organisational structure, and appropriate review mechanisms enable it to conduct its business and actively monitor, manage, and mitigate potential risks.

The business of the Company is susceptible to certain risks and uncertainties arising from the following factors:

Escalation of geopolitical uncertainty

The Company's business is dependent on the performance of the automotive sector globally, including key markets such as USA, Europe, India, and China. The Company has operations in multiple countries that can be impacted by expected and unexpected changes in the legal and regulatory environments in which it operates. Additionally, having its business operations across the globe and geopolitical instability in these countries or regions could impact the Company and challenge its overall performance.

Volatility in key raw materials

The Company's business could be affected by commodity price volatility which could affect the firm's overall cost of manufacturing operations. Though it has adequate mechanisms to monitor and manage various market risks, the effects of changes in commodity prices cannot always be predicted, hedged, or offset with price increases to eliminate the impact on the Company's overall profitability.

The risk from a potential disruption due to Covid-19 or any other pandemic or event of similar nature

The Company operates globally and can be affected by unprecedented general crises like the Covid-19 pandemic. This

pandemic led to a significant downturn in the global economy and substantial curtailment of business activities worldwide. There remains a possibility that this crisis or a similar public health threat, could substantially affect the businesses' financial condition and operations.

Change in regulations and industry trends

The automotive industry is subject to environmental and other regulations. Therefore, any adverse impact on the industry in general and the Company's customers due to any change in such rules can affect its business. Further, there has been a gradual shift in the industry from pure ICE-dependent vehicles. An acceleration in this trend will adversely affect the ICE-dependent business of the Company.

Risk mitigation, internal control systems, and their adequacy

The Company believes managing existing and emerging risks effectively is vital for realising its objectives. The Company has a well-covered risk management framework that works at different levels across the institution. The Company's internal control systems are regularly tested for design, implementation, and operating effectiveness. Overall, the Company has a robust risk management framework enabling it to manage and report on risks effectively.



OUTLOOK

In FY 2022-23, we saw some recovery from the impact of the Covid-19 pandemic and the semiconductor chip shortages in the automobile industry. But this year posed new challenges in the form of geopolitical disturbances in Europe impacting the overall supply chain, commodity and power prices inflation, and a slowdown of economic growth worldwide.

S&P Global Mobility forecasts global light vehicle sales to reach 83.6 million units in 2023 and witness a 5.6% growth over the previous year. The auto industry continues to navigate supply chain challenges, geopolitical uncertainties, high inflation, deteriorating economic conditions, and fading pent-up demand.

Over the years, the Company has widened its offerings to focus on the electrification trend sweeping the automotive landscape. The Company has fortified its R&D capabilities and has built an experienced and capable team with expertise in its focus areas. It serves large-scale global OEMs and Tier-1 customers and boasts a rich track record of delivering high-

quality automotive systems and components for EVs and conventional powertrains.

Growth in the EV segment, global market share, and entry into the autonomous segment would be the cornerstones of the Company's growth strategy. Electrification is set to gain further traction, and projections by renowned industry publications indicate an acceleration in the customer preference for electrification due to multiple factors such as improved infrastructure, reduced cost of ownership, and fiscal incentives over the foreseeable future. The Company remains confident that it is well-positioned to gain from this megatrend. Further, the increasing level of autonomy in the vehicles would require various types of sensors and perception software. These trends, coupled with digitalisation and connectivity, will provide the customer with a cleaner, safer, and more personalised experience in a vehicle.

Overall, the Company remains confident that it is well-placed to meet the challenges ahead and continue to generate sustainable long-term growth for its stakeholders in the new E.P.I.C. automotive world.

FINANCIAL OVERVIEW

Consolidated income statement summary

Particulars (INR in million)	(INR in million)		
	Consolidated		
	FY23	FY22	y-o-y (%)
Net revenue from operations ¹	26,756	21,306	26%
Total expenditure	19,798	15,715	26%
EBITDA	6,958	5,591	24%
Other income	116	200	(42)%
Finance cost	169	183	(8)%
Depreciation	1,780	1,420	25%
Adjusted PBT ²	5,124	4,189	22%
PBT	5,091	4,322	18%
Tax	1,138	706	161%
PAT	3,953	3,615	9%
EPS (Diluted)	6.75	6.21	9%

¹Includes Foreign Exchange Gain (net).

²Adjusted PBT is PBT plus exceptional expense or minus exceptional income.

Revenues from operations

The consolidated revenue in FY 2022-23 grew by 26% over FY 2021-22. The BEV revenue registered a growth of 33%, whereas the non-BEV revenue grew by 23% on a y-o-y basis while light vehicle sales in our top-3 markets (North America, India, and Europe) grew by only 2%.

Expenditure

The total expenditure registered a y-o-y increase of 26% at INR 21,747 million in FY 2022-23 compared to INR 17,318 million during FY 2021-22.

Expenditure Break-up	FY23	% of Total Income	FY22	% of Total Income	y-o-y change (FY23 vs. FY22)
Material cost ¹	12,200	45%	9,456	44%	29%
Employee cost	1,804	7%	1,689	8%	7%
Finance cost	169	1%	183	1%	(8%)
Depreciation	1,780	7%	1,420	7%	25%
Other expenses	5,795	22%	4,571	21%	27%
Total Expenses	21,747	81%	17,318	81%	26%

¹Material cost includes the cost of materials consumed and changes in inventories of finished goods and work-in-progress.

Material cost

The cost of materials consumed primarily includes the cost of raw materials such as special steel alloy bars, iron castings, steel blanks, bolts for the manufacturing of differential gears, differential assemblies and steel forgings, copper enamelled wires, machined aluminium pressure die castings, bearings, magnets, plastic moulded components, other proprietary parts for manufacturing starter motors and BLDC motors. Material cost accounted for 45% and 44% of our total income for FY 2022-23 and FY 2021-22, respectively. It has gone up despite a favourable sales mix due to increase in raw material price.

Employee benefit expenses

Employee benefit expenses primarily includes salaries, wages, bonuses paid to our employees and employee welfare expenses. This increased by 7% to INR 1,804 million in FY 2022-23 from INR 1,689 million in FY 2021-22 due to an increase in the number of employees because of increased scale of operations and annual increments paid to employees during the period.

Finance costs

Finance costs decreased by 8% to INR 169 million in FY 2022-23 from INR 183 million in FY 2021-22. The decrease is primarily due to a reduction in the average borrowings because of the repayment of long-term borrowings from IPO proceeds.

Depreciation and amortisation expense

Depreciation and amortisation expenses increased by 25% to INR 1,780 million in FY 2022-23 from INR 1,420 million in FY 2021-22. The increase in depreciation was on account of the addition of property, plant and equipment primarily for increasing the production capacity of differential gears and differential assemblies.

Other expenses

Other expenses primarily comprise manufacturing, administrative, selling, and distribution expenses.

Manufacturing expenses mainly consist of expenses on account of sub-contracting, stores and spares consumed, power and fuel, repairs and maintenance towards plant and machinery and manpower hiring on contract.

Administrative expenses mainly consist of legal and professional charges, travelling, conveyance and vehicle expenses, insurance, repair, and maintenance among others.

Selling and distribution expenses mainly comprise of freight, clearing and forwarding charges, and consumption of packing material.

Our other expenses increased from 21% in FY2021-22 to 22% of the total income in FY 2022-23. Other expenses were higher due to change in product mix, one-time expenses related to tech partnerships and increase in travel costs due to post-covid pick-up in business travels.

Exceptional items

Exceptional item of INR 34 million during FY 2022-23 represents expense incurred for diligence work for acquisition. During FY 2021-22, an exceptional item of INR 133 million represents the recovery of IPO-related expenses incurred by the Company until 31st March 2021 from the selling shareholder.

Tax expense

Our tax expense was INR 1,138 million (ETR 22.3%) in FY 2022-23 compared to INR 706 million (ETR 16.3%) in FY 2021-22. The effective tax rate in FY 2022-23 was higher due to a suppressed base in FY 2021-22 caused by certain one-time tax impact.

EBITDA, PBT and PAT

As a result, EBITDA for FY 2022-23 increased to INR 6,958 million from INR 5,591 million in FY 2021-22 and Adjusted PBT for FY 2022-23 increased to INR 5,124 million from INR 4,189 million in FY 2021-22. PAT for FY 2022-23 increased to INR 3,953 million from INR 3,615 million in FY 2021-22.

The table below reflects the cash and debt position of the Company.

(INR in million)		
Description - Borrowings	As on March 2023	As on March 2022
Long-term borrowing	487	438
Short-term borrowing	1,688	266
Total debt	2,175	704
Cash and cash equivalent and other bank balances	698	773
Current investment	2,281	65
Net debt	(804)	(134)

The Company's total debt stood at INR 2,175 million as of 31st March 2023 compared to INR 704 million as on 31st March 2022. The net cash and cash equivalents, other bank balances, and current investment available with the Company as on 31st

March 2023 were INR 2,979 million and the negative net debt amounted to INR 804 million. The Company generated free cash flow of INR 1,996 million from operations.

²Net debt has decreased due to the free cash flow of INR 1,996 million generated from operations.

³Return on equity decreased due to primary equity raised in the IPO.

Key financial ratios

The key financial ratios of the company are given below:

Key Financial Ratios	FY23	FY22
EBITDA margin (%)	26.0%	26.2%
PAT margin ¹ (%)	14.8%	17.0%
Net debt to equity	0.00	0.00
Net debt to EBITDA ²	(0.12)	(0.01)
Return on equity (%) ³	26.6%	36.3%
Return on capital employed (%)	30.4%	32.4%
Working capital turnover	4.2	3.9
Current ratio	2.4	2.5

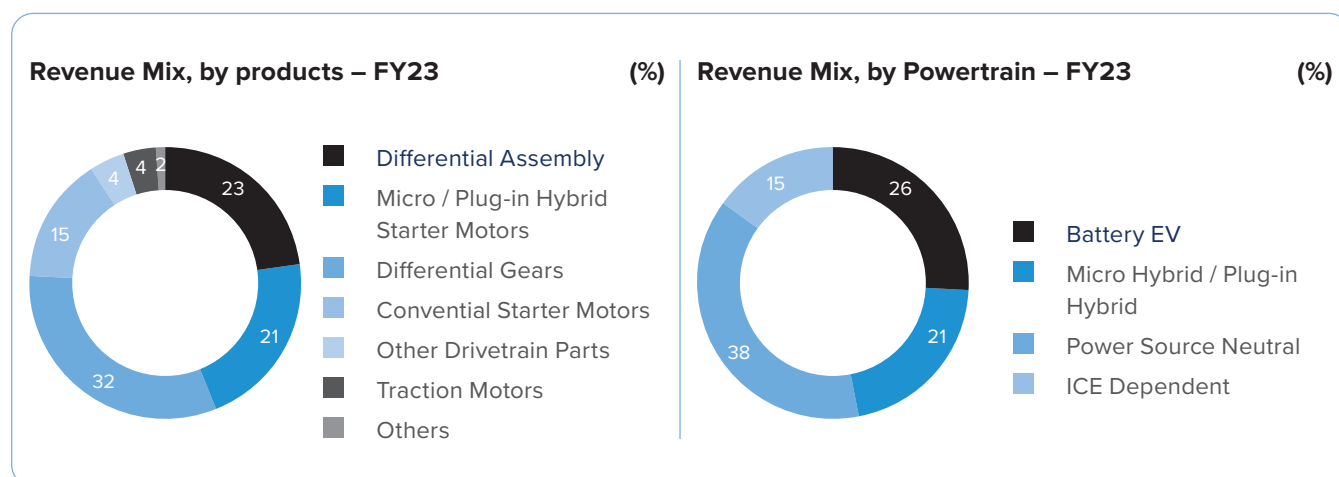
¹FY 2022-23 PAT margin registered a decrease of 220 bps on a y-o-y basis. This is due to exceptional income from IPO expense reversal and one-time tax impact in FY 2021-22.

Basis of calculation of the ratios:

- Net debt to equity is calculated as short-term and long-term debt less cash, bank balances, and mutual fund investments/equity.
- Net debt to EBITDA is calculated as short-term and long-term debt less cash, bank balances, and mutual fund investments/EBITDA.
- ROE (%) is calculated as PAT/Average tangible net worth.
- ROCE (%) is calculated as EBIT/Average tangible capital employed.
- Working capital turnover is calculated as revenue/average net working capital.
- Current ratio is calculated as Current asset/Current liabilities.

SEGMENT-WISE OR PRODUCT-WISE PERFORMANCE

Diversified presence across product categories and powertrain segment



Our revenue mix by products is diversified with sale from differential gears being the largest contributor at 32% of revenue, followed by differential assemblies at 23%, micro hybrid / plug-in hybrid starter motors at 21%, conventional starter motors at 15% and traction motors and other driveline parts at 4% each.

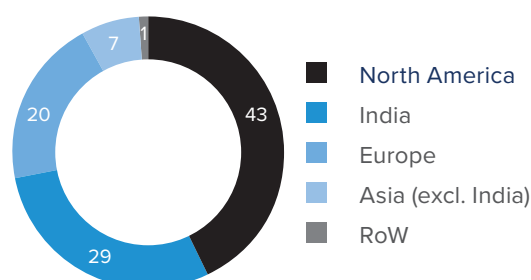
In revenue mix by powertrain, Battery EV share of sales increased to 26% of revenues in FY 2022-23. Micro hybrid/hybrids contributed 21% and power source neutral and ICE accounted for 38% and 15%, respectively.

The increase in BEV revenue share was due to the start and ramp-up of new EV programs during the year, especially from the traction motor programs. Our ICE dependence continued to decline this year as well.

Diversified presence across geographies and automotive segments

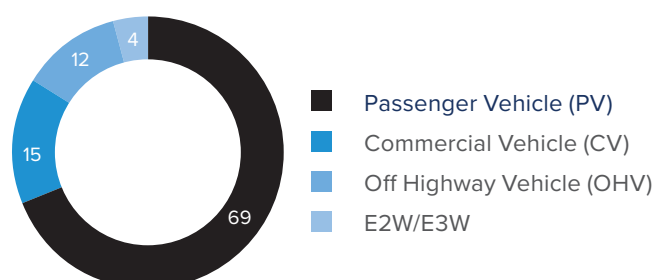
Revenue Mix, by Geography – FY23

(%)



Revenue Mix, by Vehicle Segment – FY23

(%)



Being a global supplier, 71% of our revenues were dependent upon geographies outside India and the remaining 29% from India. Key regions for the Company are North America (43%), Europe (20%), India (29%), and Asia (excluding India) (7%). Growth in North America was primarily driven by the start and ramp-up of new programs during the year. Despite a weak start this year due to geopolitical disturbances the Europe market recovered by the end of the year and reached almost a similar percentage as of the previous year.

In terms of vehicle segments, Passenger vehicles (PV) contributed 69% of FY 2022-23 sales, and Commercial vehicles (CV) and off-highway vehicles contributed 15% and 12%, respectively. Revenues from electric 2-wheeler and 3-wheelers increased to 4% this year from only 1.5% last year because of the ramp-up of the programs for this segment.

HUMAN RESOURCE DEVELOPMENT AND INDUSTRIAL RELATIONS

'Great Place to Work' certification - a testament to exceptional workplace culture

The Company has always considered its employees an important stakeholder for its success, and its vision statement reflects that. This year the Company proved its excellence across all five dimensions of a high-trust and high-performance culture-credibility, respect, fairness, pride, and camaraderie by becoming 'Great Place to Work' certified. This prestigious recognition reflects our commitment to creating an exceptional workplace that values and supports our employees and serves as a testament to our efforts in fostering a positive work culture, promoting employee engagement, and nurturing a supportive environment for personal and professional growth.

Diversity, equity, and inclusion

We are committed to creating a fair, inclusive, and collaborative work environment where all the employees can learn, develop, and achieve their full potential. As an innovation and people-driven Company, our success is driven by the success and satisfaction of our employees. A diverse workforce brings together a wide range of perspectives, ideas and experiences,

leading to enhanced innovation, and creativity in problem-solving and decision-making processes. As part of our focus on creating an inclusive work culture and a strong pipeline of talent, we have taken the target to have more than 5% of women employees by the CY 2024.

Learning and development

Our customers see us as a technology leader with excellent products. We have invested heavily in creating new capabilities, skills, processes, and systems to meet their demands with a high level of responsiveness and flexibility.

In today's dynamic business landscape, continuous learning and development are vital for organisations to thrive and for employees to reach their full potential. With our focus on empowering growth and excellence, we have digitised the technical and behavioural competencies and undertaken initiatives to equip the leaders and managers to embrace new challenges by acquiring new skills through an online program, in partnership with NASSCOM on the latest technological trends.

To enhance the skill competency of the front-line workforce, we run structured DOJO programs across all locations with the modules standardised and digitised. We continue to nominate our bright talent for the focused program Visionary Leader for Manufacturing (VLFM) to develop them into the leaders for tomorrow.

Employee engagement

We undertake various employee engagement programs around the Skill Enhancement, Wellness, Climate Change, Urbanisation, Globalisation, and Digitalisation to foster a culture of learning and continuous improvement so that we give our customers, business partners, employees, and shareholders an idea of the path that we want to pursue over the next few years. We conduct an annual exercise to develop a focused 5-year strategy roadmap by combining long-term thinking and the success factors that have established us over the years – Quality, Technology, and Innovation – with a systematic orientation towards the future. To strengthen the

leader's connection with the team, we run multiple forums such as monthly communication meetings, reward and recognition programs, suggestion programs, and quality circles to discuss work-related challenges and team building.

Employee well-being

Employee well-being is no longer a mere employee benefit but a critical driver of organisational success. By investing in initiatives that support physical, mental, and emotional well-being, organisation fosters a culture of care, trust, and engagement.

Our company strategy enshrines our deep commitment towards ESG under which we have initiated several practices with employee safety being of utmost importance. We also ensure the health of our employees with frequent health checkups. We also conduct various sports activities and tournaments to improve both the mental and physical well-being of the employees. Our commitment to safe work culture and TQM remains uncompromised. We are continuously strengthening the goal deployment through Managing Points and Checking Points, adopting the Problem-solving approach, and working towards identifying and eliminating unsafe situations so that all employees continue to have a safe work environment.

Digitalisation and automation

As technology advances, digitalisation and automation have become game-changer in streamlining HR processes, improving efficiency, and enabling HR professionals to focus on strategic initiatives that drive organisational success. Our

efforts for digitalisation in various areas like performance management and feedback and payroll management have already made a significant impact. Soon, we will automate various other HR processes including recruitment, learning and development, and employee engagement for increasing effectiveness and efficiencies.

Future outlook

Emphasizing the Company's commitment to continuous improvement, unleashing creativity and collaboration to thrive with the industry's ongoing evolution, we will continue to promote an innovation culture among our employees. Focusing on being the market leader, our idea of innovation at the centre catalyses creative thinking, problem-solving, and driving transformative ideas that propel our organisation forward.

Cautionary statement

Some of the statements in this management discussion and analysis that describe the Company's objectives, projections, estimates, and expectations may contain certain forward-looking statements which are within the meaning of applicable laws and regulations. Actual results could differ from those expressed or implied. There are a variety of factors that may cause real events or trends to vary significantly from those reflected or implied by these forward-looking statements and predictions. The Company assumes no responsibility to publicly amend, modify, or revise any such statements. The Company disclaims any obligation to update these forward-looking statements except as may be required by law.