



## Q4 FY23 Earnings Conference Call

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**MODERATOR:** **MR. NISHIT JALAN** – AXIS CAPITAL LIMITED

**Moderator:** Ladies and gentlemen, good day and welcome to the Q4 FY23 Conference Call of Endurance Technologies Limited hosted by Axis Capital Limited.

As a reminder, all participant lines will be in the listen only mode and there will be an opportunity for you to ask questions after the presentation concludes. Should you need assistance during the conference call, please signal an operator by pressing “\*” and then “0” on your touchtone phone. Please note that this conference is being recorded.

I now hand the conference over to Mr. Nishit Jalan. Thank you, and over to you, Sir.

**Nishit Jalan:** Thank you so much. Good morning, everyone. Welcome to Q4 FY23 Post-Results Conference Call of Endurance Technologies Limited.

From the Management Team, we have with us Mr. Anurang Jain – Managing Director; Mr. Ramesh Gehaney – Director and COO; Mr. Massimo Venuti – Director and CEO, Endurance Overseas; Mr. Satrajit Ray – Director and Group CFO; and Mr. Raj Mundra – Treasurer and Head - Investor Relations.

I will now hand over the call to Mr. Jain for his opening remarks, post which we can have Q&A. Over to you, Mr. Jain.

**Anurang Jain:** Thank you, and good morning to everybody.

I would like to share details of how we have done in Q4FY23 and in the whole Financial Year:

- a. In India, in Q4FY23 as per SIAM data, the 2-wheeler industry sales degrew by 4.15% compared to the previous financial year. Scooters grew by 11.9% and motorcycles degrew by 10.1%. The automotive industry in India had a degrowth of 0.5%.
- b. In Europe, in Q4FY23, there was an increase of 17.9% in the European Union Automotive Sales.

On the financials, I will briefly talk to you about the Q4FY23 and then the whole FY23:

1. In Q4FY23, our consolidated total net income grew by 7.8% and was Rs. 22,551.54 million as compared to Rs. 20,914.76 million in Q4 of the previous year. Consolidated EBITDA grew by 13.5% to Rs. 3,062.1 million from Rs. 2,698.12 million in Q4FY22.
2. Consolidated EBITDA margin was at 13.6%. The net profit grew by 0.2% and was Rs. 1,364.67 million at 6.1%. This includes the Maharashtra State Mega Project incentive in Q4 of Rs. 3.71 million.
3. In Q4 our standalone total income grew by 6.1% and was Rs. 16,595.76 million as compared to Rs. 15,640.65 million in Q4 FY22.
4. Standalone EBITDA degrew by 0.3% to Rs. 2,058.34 million as compared to Rs. 2,064.65 million in Q4FY22. The EBITDA margin was at 12.4%. Standalone net profit degrew by

- 8.9% was Rs. 1,045.11 million at 6.3%. This includes the Maharashtra State Mega Project incentive in Q 4 of Rs. 3.71 million.
5. For FY23, our consolidated total net income grew by 16.6% and was Rs. 88,494.73 million as compared to Rs. 75,901.78 million in FY22. Consolidated EBITDA grew by 7.6% and was Rs. 10,816.93 million as compared to Rs. 10,056.76 million in FY22. Consolidated EBITDA margin was at 12.2%.
  6. The net profit grew by 4.1% and was Rs. 4,795.76 at 5.4%. This includes the Maharashtra State Mega Project incentive of Rs. 589.27 million.
  7. Our subsidiary, Maxwell Energy, had sales of Rs. 180.29 million, with an EBITDA loss of Rs. 118.51 million.
  8. In FY23 our standalone total income grew by 18.8% and was Rs. 67,957.07 million as compared to Rs. 57,214.81 million in FY22.
  9. Standalone EBITDA grew by 7.2% and was Rs. 8,074.34 million as compared to Rs. 7,530.52 million in FY22 with an EBITDA margin of 11.9%. Standalone net profit grew by 7.1% and was Rs. 4,089.17 billion at 6%. This includes the Maharashtra State Mega Project incentive of Rs. 589.27 million.
  10. There was no net debt and consolidated positive cash available of Rs. 4,193 million.

Detailed financials are available with the stock exchanges and on the Endurance website.

I would like to share key points for the FY23:

- 1) In FY23, 77% of our consolidated total income including other income came from Indian operations and the balance 23% came from our European operations.
- 2) In India in FY23, Rs. 9,350 million of new business was won from OEMs other than Bajaj Auto which included HMSI, Hero MotoCorp, Ather Energy, Hero Electric, Mahindra, TVS and Tata Motors. This new business included Rs. 7,800 million of new business and Rs. 1,550 million of replacement business. The total business wins for EVs till date is Rs. 6,004 million. This includes Rs. 3,765 million new orders for EVs, mainly from Ather Energy, Hero Electric, Greaves Electric, which is Ampere and Aptiv in this financial year.

This Rs. 6,004 million of EV business wins at Endurance, does not include the Rs. 1,290 million of new EV business will at Maxwell Energy. In FY'23, EV business wins was 42% of the total business wins.

I would like to mention that we have Rs. 25,668 million worth of request for quotes from OEMs. Since FY20 in India, Rs. 28,880 million of business has been won out of which Rs. 21,060 million is new business and Rs. 7,820 million is replacement business. Out of Rs. 21,060 million new business, Rs. 4,410 million happened in FY23 and a further Rs. 6,920 million will happen in FY24 and the balance Rs. 9,730 million will happen in the FY25 and FY26.

Some of the new business wins, which will start in FY24 are:

- TVS Rs. 402 million suspension business which would start at a Kolar, Karnataka plant from November 2023.
- Hero Electric suspension business of Rs. 489 million which will start at Halol, Gujarat plant from June '23 onwards.
- CBS brakes business of Rs. 272 million from Okinawa, the EV scooter maker and this business will start from October '23 at our Waluj, Aurangabad plant.
- The Greaves Electric or the Ampere Suspension business of Rs. 155 million will start from our Kolar, Karnataka plant from August '23. In addition, the Greaves Electric Ampere Brakes business of Rs. 290 million will start at our Waluj, Aurangabad from August 2023.
- The Ather Suspension business of Rs. 150 million will start in June '23 from our Kolar plant at Karnataka. For the Ather Brakes business of Rs. 1,591 million, supplies have started, and this will reach a peak in the next financial year of FY'25.
- Apart from the Rs. 9,350 million business wins, we have received an additional Rs. 1,200 million order from Hero MotoCorp for supply of front fork and shock absorbers from our plant at Halol in Gujarat. This business has started in April '23.
- The ABS capacity is being now ramped up to 600,000 single and dual-channel ABS assemblies by July 2023 at our Waluj, Aurangabad plant.
- The new 35 dia air suspension forks to be supplied to KTM, Austria will start by end of this financial year, with the help of KTM technology from our Waluj, Aurangabad plant. The value of this business will be Rs. 400 million per annum and it will be directly exported to KTM, Austria.
- Our Battery Management System assembly line that's the SMT line will start operations from July '23 at our Waluj, Aurangabad plant. The value of the business when it reaches its peak will be at Rs. 800 million per annum.
- For the EV scooters, we are ramping up our capacity to 240,000 per annum for the battery pack and the motor housing aluminum castings. The total value of this business won is Rs. 1000 million per annum, which will start in this financial year and will reach the peak in the next financial year.
- For Ather Energy, we have started fully machined side channel aluminum casting at our Vallam plant with a full business volume of 200k per annum and the value of Rs. 410 billion. This business will peak in this financial year.

- For our aluminum forging business, which we have started with our collaboration with FGM Italy, we are increasing the capacity from 280,000 parts per annum to 600,000 parts per annum with an additional business value of Rs. 750 million from our Waluj, Aurangabad plant. This additional business will start this year and reach a peak in FY25.
- At our Chakan plant, Pune, we are installing machines for structural aluminum castings like swing arms, sub frames and structural fairings for both EV and ICE models which are going in for light weighting, for Bajaj Auto, KTM, Piaggio and TVS. This business starts this year and will peak in next financial year of FY25.
- The Suzuki scooter front fork business of Rs. 1,398 million which we won in the last financial year will start from our Waluj, Aurangabad plant in the next financial year of FY25 and we are installing a one million front fork numbers new line for the same.
- Apart from Bajaj Auto and HMSI, we have now added TVS for supply of inverted front forks. The supplies will start in Quarter 1 of FY25 and the business value is Rs. 212 million.

I would like to mention that our customers now recognize Endurance as a trusted and capable partner in their value chain in terms of both technical and financial strengths.

- 3) The electronic vehicles market continues to offer significant opportunity for growth to the auto component industry. It is estimated that the Indian EV market will touch Rs. 150 billion by 2030, growing at a CAGR of 90% in the next decade. Therefore, at Endurance we have taken a major step towards the same to harness this opportunity by executing a Share Subscription and Purchase Agreement of acquiring 100% of the equity share capital of Maxwell Energy Systems Private Limited in a phased manner.

We have concluded the acquisition of 51% stake in Maxwell in July 2022. Maxwell, as you know, is in the business of advanced electronics particularly in Battery Management Systems or the BMS for two-wheeler EVs and automobile and stationery storage battery packs.

We are happy to inform you that we have won Rs. 700 million order of BMS from Hero Electric and Rs. 495 million of business from Greaves Electric or Ampere, these supplies will start in July '23 and September '23 of this financial year respectively.

We have won new BMS business of Rs. 1,290 million in FY23 and Rs. 496 million till date in FY24. And we have a pipeline of RFQs of Rs. 1,310 million. Till date, since FY22, Rs. 3,286.2 million business has been won by Maxwell which is expected to be fully realized in FY26. With the current order book, order pipeline and technical strengths between Endurance and Maxwell, we are confident of achieving our goals in the embedded

electronics space. In FY24, we are focusing on substantial sales growth and a positive EBITDA.

- 4) To help our overseas operations to grow in the European two-wheeler-components profitable aftermarket business, we have acquired an Italian company Frenotecnica in July '22. This company is in the business of friction materials and components for braking systems like brake pads for two-wheelers.

Also, in November 2022, we acquired the Italian company New Fren Srl. New Fren is engaged in the business of brake discs, centrifugal clutches, pads and brake shoes for two-wheeler vehicles.

The acquisition of our past Italian collaboration partners Adler and Grimeca for clutches and brakes in 2020, Frenotecnica in 2022 and now with the acquisition of New Fren in November, we are creating a Centre of Excellence in Italy for the business of premium components in the two-wheeler segment, giving profitable growth opportunities to the Endurance Group. Last year we had sales of approximately €15 million and we want to double this in the next few years.

- 5) As brake assembly business is growing with the addition of Bajaj, TVS, Royal Enfield, Yamaha, Hero MotoCorp, Ather and HMSI our second plant at Waluj, Aurangabad has already started operations. With this new plant our disc brake assembly capacity has increased to 6.2 million numbers per annum and the brake disc capacity has increased to 8.1 million numbers per annum.
- 6) As you are aware, the supply of two-wheeler ABS assemblies to Bajaj Auto and Royal Enfield have started, we have reached a run rate of 400,000 ABS assemblies per annum. As you are all aware, competition is mainly from Bosch which controls the major market share in the Indian ABS two-wheeler market.
- 7) We are also in the process of supplying our dual-channel ABS, also by Q 2 of this financial year. And we are setting up additional assembly lines by 200,000 ABS assemblies per annum, which will take our capacity to 600,000 ABS assemblies per annum. We are further planning to increase the volumes to 1.2 million both single and dual channel ABS assemblies per annum by the second half of the FY25.
- 8) We have, in March 2023, also started manufacturing the ABS valves, which is an import substitute. It is not only a technology component but will help us in substantially lowering our costs.
- 9) Due to increased orders from Bajaj, Yamaha India, TVS and Hero Electric, we have added a new plant at Chakan to help increase our supplies and volumes to 4.5 million wheels per

annum from 2.8 million wheels per annum. This plant already started in July '22. We will reach peak supplies in Q2 of this financial year.

- 10) .As far as Europe is concerned, in FY'23 we have won €83.87 million new business mainly from the Volkswagen Group, Daimler and Stellantis. In the last two years, €158 million of business has been won.
- 11) I would also like to point out that Endurance, both in India and Europe, is actively pursuing its focus on gaining access to new technology and focusing on new product organic and inorganic growth.
- 12) As mentioned earlier, Endurance has also entered to backward integration product areas :
  - a) Aluminum forging axle clamps for inverted front forks with the help of collaboration with FGM Italy. We have already started supplies to Bajaj Auto and directly to KTM. We have also won orders for stem assembly and under bracket aluminum forging from Hero MotoCorp. And we are actively engaged on new business with other OEMs for supply of aluminum forging other than inverted front forks. As you note this is used by EVs for light weighting also. And that's why the capacity is being increased from 280,000 parts per annum to 600,000 parts per annum in our plant at Waluj, Aurangabad.
  - b) The second product is the wire steel braided hoses for ABS applications for mid and high-end bikes, these supplies already have started from last year. Both these projects are helping us in our profitable growth.
- 13) In FY23, our aftermarket sales grew 2.91% from Rs. 4,189 million in the previous year to Rs. 4,310.9 million. We are now exporting our aftermarket parts to 31 countries. And aftermarket sales growth is a large focus area for us.
- 14) In FY23 our export sales for India stand-alone business degrew by 5.6% from Rs. 2,241.19 million in the previous year to Rs. 2,116.23 million. The major impact was due to lower export sales to countries, in Africa, South America as well as our neighboring countries.

On the environmental front I would especially like to mention that Endurance is striving to be carbon neutral in its plants by effective use of solar power and wind power, creation of carbon sinks by driving tree plantation and thereby creating dense forests and also by driving use of natural gas and LPG gas in place of electric power and furnace oil.

As mentioned earlier, the use of furnace oil has been completely stopped at Endurance. We achieved a carbon neutral percentage of 22.6% in FY'23 and our aspiration is to reach 50% in the next three to four years. We are also focusing on lowering hazardous waste generation to achieve zero waste to landfill.

At Endurance it will be our continuous endeavor to grow through organic and inorganic growth with a focus on technology upgradation, quality improvement cost and environment and health & safety. We will do our best to fulfill our stakeholder expectations by following our five values of Customer Centricity, Integrity, Transparency, Teamwork and Innovation. At Endurance, we have a very positive outlook based on our new large business wins, including for electric vehicles in both India and Europe.

With these opening remarks, I would like to invite questions from all of you. We have one of the Maxwell founders Mr. Akhil Aryan and our Maxwell CEO – Mr. Vishwas also on the line for taking your question on Maxwell. Thank you.

**Moderator:** Thank you very much. We will now begin the question-and-answer session. We have our first question from the line of Aditya Jhawar from Investec. Please go ahead.

**Aditya Jhawar:** My question is on European business, Massimo if you can highlight what was the government contribution in Q4 on account of the energy prices. And considering the energy prices have come down, what is our expectation for government support in FY24?

**Massimo Venuti:** Yes, in Q4FY23, we had around 17.8% of EBITDA and we recovered 100% of the increase of energy cost considering the support from our customers and also the incentive from the government. Only for Q4 of the financial year, the Italian government gave 45% of credit asset to the company. We were able to offset the impact of higher energy costs, by considering 45% asset credit and contribution from customers and for these reasons we came back to this level of profitability. From the first of April, unfortunately the government will reduce this contribution from 45% to 20%. So, the expectation for the future is reduction of government contribution, but please consider that the energy cost is going down in an important way., Yesterday in the market, the energy closed with 120 and the gas with 35, and it is approximately 25% less compared to the previous quarter. Our expectation is that we can try to offset this reduction of contribution from the government with the reduction of energy cost in the market.

**Aditya Jhawar:** What is our expectation for margins in FY24?

**Massimo Venuti:** The expectation is to improve the profitability compared to the previous year. We closed FY23 with 14.5% EBIDTA margin and consider that with the same level of aluminum of the previous financial year, the profitability in terms of EBITDA should have been 14.9% and 5.1% in terms of net result. We are positive for the situation in terms of volume and also energy cost to improve the profitability compared to the previous financial year.

**Aditya Jhawar:** How is the outlook shared by the OEMs in Europe? Do you foresee a higher level of wholesale dispatches to replenish the inventory and how is the situation in terms of the consumer sentiments on the ground?

**Massimo Venuti:** Unfortunately, the sentiment is not so positive due to the high level of inflation, we are awaiting a recession not only Europe but probably in United States also. The previous quarter closed with an increase of new car registration numbers of 17.9% and the total financial year closed with an increase of 2.9%; but we are so far from the normal pre-COVID volume situation. The market closed with minus 24% compared to FY19.

The positive aspect however is that the exit quarter closed with a more-or-less 17% increase. And important to note the increase of production in Germany - in January, there was an increase of 29% of production, in February 24%, in March 67%. So from my point of view, it signals delivery of the car stocks to the dealers, which had suffered in the last 18 months for several problems including supply chain for semi-conductors. Now the OEMs are increasing the stock, waiting for the situation to improve in terms of demand, but in this moment the environment is not positive due to the inflation.

**Moderator:** Thank you. The next question is from the line of Mumuksh Mandlesha from Anand Rathi. Please go ahead.

**Mumuksh Mandlesha:** You have indicated the new models for both standalone and Europe that would be ramped up in next few years. This would be a gross addition right. And can you indicate on net basis considering the running down of old orders, what kind of growth or performance you see over the industry in both India and Europe?

**Anurang Jain:** As far as India is concerned, it is very difficult to know what will be phased out and what is going to be added and that also depends on the volumes which are mentioned in the LOIs or in the purchase orders. But we will always outperform industry. Last year the two-wheeler industry sales were up 8.3%, automotive sales were up 11.8% led by passenger cars, but Endurance sales growth was 18.8%. EU industry sales last year was up 2.9%, we have grown 12.7% in Euro terms. So, I can only say that we will outgrow industry. It is very difficult to say the impact of sales going down on existing orders, that is why we separately mention replacement business and new business. As mentioned in the opening remarks, we have an estimate of how the new business is going to increase in the next two to three years.

**Mumuksh Mandlesha:** On the EV specific component, we have made inroads into BMS; what are then plans to look at other EV specific components going ahead?

**Anurang Jain:** We are looking at other electronic components also, but right now our major focus is to consolidate and grow and become profitable in Maxwell. We have won a lot of new business since FY2022 and this year we want to be positive at the EBITDA level with substantial growth. Our focus is to strengthen Maxwell and make it a financially strong company with good orders. So that is a focus of Akhil Aryan, Alex Collet the founders, the CEO Vishwas as well as all of us at Endurance. BMS is a huge opportunity - we won two large orders and have pipeline of orders in the form of RFQs. We are really focused on really growing this company. So, for other electronics, if a good opportunity comes, we will take it side by side, but right now the focus is on BMS.

- Mumuksh Mandlesha:** How do you see the two-wheeler industry growth for this year? How is demand picking up?
- Anurang Jain:** The customers tell us it can be 10% to 12%. Having said that, it is difficult to predict how much growth there will be because there are so many unknowns in the future. Since new order wins is under our control, we are going after orders both in India and Europe, and in the last one year we have received very good business wins both for EV as well as ICE in Brakes, Suspension, Castings.
- Moderator:** Thank you. The next question is from the line of Jinesh Gandhi from Motilal Oswal Financial Services. Please go ahead.
- Jinesh Gandhi:** For European margins, the 17.8% EBITDA for 4th Quarter, how it would have been without compensation from the Italian government? And how do we see the trend over next couple of years on the European margins?
- Massimo Venuti:** So, regarding the incentive from the government, in Q4FY23 we received 45% incentive of the total energy cost. Starting from the 1<sup>st</sup> of April this incentive from Italian government will reduce it to 20%. In Germany, they fixed price cap with €150 and at current energy prices, we are not receiving any support, because the price of energy is lower compared to the price cap. Profitability in the last quarter of this financial year, compared with the previous financial year was not impacted, considering that we have been able to offset 100% of the increase of energy cost with government support or customer actions. Regarding the future, our expectation is to increase the profitability compared to the previous year due to the fact that the energy cost is going down in an important way - gas reached €30 compared to €15 of the pre-COVID situation 2019. In the previous financial year, electricity was €280 today we are seeing just about €120. For gas, €120 is down to about €30. If the prices will remain more or less the same with the stability of volume we can come back in the normal profitability.
- Jinesh Gandhi:** So, the 17.8% is a near normal margin for us?
- Massimo Venuti:** In the previous quarter, we achieved €67.4 million turnover with a growth of 8% compared to the previous year. Profitability is positively impacted by good volumes and reduction of energy cost. If the volume continues to be high compared to the previous year, I am pretty optimistic to maintain good level of profitability.
- Jinesh Gandhi:** And Massimo can you talk about what was the PAT for the Q4FY23?
- Massimo Venuti:** In the previous quarter, we closed with €4.5 million, 6.7% margin and for complete FY23, we closed to €12.1 million, 4.9% margin.
- Jinesh Gandhi:** With respect to the India business on the aluminum die-casting we have got good orders on the scooter side as well. So on the electric scooters, please comment on the content now what it is vis-à-vis the ICE scooters. In the past you have indicated it is broadly similar, now but since you have got the orders is it in line with what we were looking at earlier?

- Anurang Jain:** On EVs, we have got from Ather Energy, Hero Electric, Okinawa, Greaves Electric. We have orders for brakes, suspension and castings and of course for BMS. Ather has also given us order for the side channel castings. So, we don't see any concern in per vehicle content for brakes, suspension and castings. We really got into the market for taking new EV orders, just about 1.5 or 2 years ago. As mentioned earlier, already 42% of orders are for EV in the last year. So, we are now going very aggressively for EV orders. It will take time to add casting business for multiple EV OEMs. So, it's just a start of a journey, we have a long way to go. We have seen good order wins but still a long way to go.
- Jinesh Gandhi:** On the India business margin, we have had an impact of commodity prices along with lower volumes. With some recovery in two-wheelers and commodity prices seeing some moderation, would it be fair to say we should be back in early teens now in the coming year and then moving towards 14%, 15%?
- Anurang Jain:** Yes, it will depend on the aluminum and steel prices. In fact, aluminum prices are still going up. It's almost doubled compared to FY21. In FY21, our RMC percentage in India was 62%. EBITDA margin I think in that year was 15.57%. Now RMC is 66.7% in FY '23, 4.7% higher, and we closed at 11.9% margin.
- On the cost front, we are doing everything we can, whether it's Other Expenses, Employment cost or other heads. We are doing everything to see how we can sweat our assets, improve OEEs in our plants - original equipment efficiencies. I am told that the EBITDA amount in FY '23 has been the highest ever reported at Endurance in terms of absolute amount. This also indicates that we have done better in spite of challenging situation.
- Jinesh Gandhi:** Going forward the product mix will also be improving given fully machined castings and ABS?
- Anurang Jain:** It depends on the volume of the product mix- ABS, upside down front forks, brake systems are high value added parts. We are highly focused to increase these margins, we must come back to at least 13.5% to start with, you know.
- Moderator:** Thank you. The next question is from the line of Pramod Amthe from InCred Capital. Please go ahead.
- Pramod Amthe:** With regard to the aftermarket sales parts where I think you have indicated you are trying to nearly double the contributions of sales to around 10%. What actions you are taking? Because your total sales is organically growing and you plan to increase the contribution of aftermarket sales. So, it would be almost like 2.5x to 3x the current aftermarket sales run rate which you want to achieve in two years. So, can you give some color on that?
- Anurang Jain:** After-market sales as a percentage to India sales for the year is at 6.3%. Our ambition is to go to 10%, and to go step by step from 6.5 to 7.5, 8, and then take it forward in the next few years.

The issue which happened last year was in export markets - we didn't expect the issues which were there in Africa, South America, Sri Lanka, Bangladesh - there were a lot of issues related to availability of currencies, and other macroeconomic factors. These factors affected the aftermarket sales in FY23. This year starting from June-July, we should see improvement in Sri Lanka, Bangladesh Africa.

We feel that this year will be a much better than last year. And it's a high focus area And our target is to reach 10% of India's sales by FY '26. Exports forms a very important part for sales growth. We export to 31 countries. We want to add another 5 countries in this financial year. We are in the process of doing that. If you see our domestic aftermarket sales, that has really done quite well this year.

There are lot of actions happening, for instance in Indonesia and Brazil. We have launched a very special type of shock absorbers for Honda and other Japanese OEMs They are very different from the shock absorbers we supply in the Indian or the other markets. We are slowly gaining entry into these new large markets. It takes time for us to realize good volumes and good sales value. But there is a lot of effort.

Even in India, we are aggressively going into Tier-2, Tier-3 towns, focusing pan-India for all our products. So, there are many initiatives happening on that front.

**Pramod Amthe:**

With regard to your transmission parts business., it contributes around 5% of your sales. Considering the transition to EV and the risk, what are your thought process in terms of taking this business in the medium terms? Are there any new products possible there to make it a substantial part of your business?

**Anurang Jain:**

It is 5.5% of our business, 80% of that is from motorcycles. There we are not seeing much of a traction into EVs. So, for our transmission business what we are planning is to get new customers in, like we have done for ABS, inverted front forks.

For inverted front forks, we have gone into backward integration by making aluminum forgings. For ABS, we have started with steel braided hoses and now valves from March. Similarly, we are planning to start a friction paper manufacturing plant by July '23 which will help us be more profitable in Transmissions and lower the dependence on imports from the US and China.

So, once three-wheelers become fully EV by 2030 or maybe earlier, 20% will be impacted but 80% of this 5.5% business is for motorcycles where we do not see anything happening very soon. We are trying to focus to get more volumes on the clutch business or adding more customers.

**Pramod Amthe:**

On to new AIS standards for BMS, what is the actual change the industry has seen post April 4 meeting? And what impact on Maxwell in the next one year?

**Akhil Aryan:**

The new AIS standards are very important for the industry, and an opportunity for us to enter into long-term contracts with significant OEMs. We have won business and our focus is to become long-term partners with volume creators of 2025 and 2030.

We are not trying to go after all of the OEMs that are making say few hundred vehicles every month or so. We are basically focusing on the big business that we believe are going to lead the EV revolution at the country level.

Hero Electric is one of the significant players already on the road. They are making a big move with transitioning to Maxwell BMS even in their current models that are being deployed in hundreds of thousands of units every year – going forward will be using Maxwell BMS.

Ampere is also one of the significant volume creators after the acquisition by Greaves, they have actually doubled their capacity, their team, their plan for new vehicles and so on.

And with both of these companies, not only are we working on new vehicles but also helping them transitioning their existing vehicles to becoming AIS-156 compliant and meeting their localization needs, as their BMS was previously being bought from another country.

We are the sole player to Hero MotoCorp on their VIDA platform. We are also currently in conversation with a few large OEMs on their new vehicle launches, as well as helping them transition to AIS-156.

I want to reemphasize on the fact that Maxwell has been and is in a very strong position to enable OEMs to get a 100% localized BMS that is compliant with AIS-156, functionally safe. The new product that we recently introduced and which has enabled us to win some of the new businesses, which is the CT Lite, is a product that is specially designed to meet the needs of both cost and quality focused Indian two- and three-wheeler market. So we are absolutely living up and exceeding our plan on new order wins using the opportunity of AIS-156.

**Pramod Amthe:**

And the last one is, thanks for the detailed presentation. A small request is since your order book on EV is improving, like the other segments you have indicated sales consumptions on this order book. If you can give a next two, three years outlook in the PPT, how this order book can convert into sales, that will be helpful and a guiding force. Thanks.

**Anurang Jain:**

For EV, we have not given, but we have given overall rampup of new orders. We will have an internal discussion on that.

**Moderator:**

Thank you. The next question is from the line of Arvind Sharma from Citigroup. Please go ahead.

**Arvind Sharma:**

How do these new orders or new revenue from EV business compare with ICE business in terms of margins?

**Anurang Jain:** It's a very sensitive question, but I think I have answered in the past calls, I would say margins are good. We don't have interest in business where we don't make money.

Our focus is not only business win, but business win in our plants where the capacity being used is less, and that's why I specifically mentioned the new orders that are coming in our Kolar plant in Karnataka, Halol plant in Gujarat, plants which have a lower capacity utilisation. These will really help us in getting economies of scale and really improve the profitability in these plants which have been dragging us down in the last two years. So, these are also the focus areas, and we are putting EV business wins in these plants, you know, because they are doing the similar business of suspension, or castings, or brakes.

**Arvind Sharma:** Please share the revenue, EBIDTA and PAT for your Europe business in rupee terms for Q4.

**Massimo Venuti:** In Q4, our revenue was Euro 67.4 million compared to 62.6 million of the previous financial year, an increase of 7.6%. EBIDTA was 12 million of euros 17.8% EBIDTA margin, compared to 7.9 million of euros in the previous financial year with 12.6% margin and a YOY increase of 51.9% in terms of EBITDA. Net result 4.5 million of euro, 6.7% compared to 2.7 million euro the previous financial year with an increase of 63.4% compared to the previous year.

**Moderator:** The next question is from the line of Vimal Goel from Alchemy Capital Management. Please go ahead.

**Vimal Goel:** My question is on the engine casting business. What is specific differential between your content per vehicle in the engine castings for ICE vehicles versus your aluminum casting for battery cases. How are these two in terms of comparison? Is the content higher or lower?

**Anurang Jain:** If I compare ICE with EV 2W, for ICE we have 7 parts, the crank cases are two, covers are two, cylinder block, cylinder head covers, cylinder head. In EV, there is a battery housing upper and lower. There is plates upper and middle, terminal ground, terminal part, terminal phase, base MCU, there are 9 parts in total. But here weight is 2 Kg less. But the value add is just 5% less.

In three-wheelers, we have the similar 7 parts in ICE, but in EV we have 11 parts because you also have a case transmission left and right which is added to the 9 2W parts, and here the value is, of course, much higher. So, almost 25%- 30% higher on a weight which is 1.5 Kg lower. So, in fact, these businesses are very good. That is why we are expanding our capacity by 240K per annum sets of castings mainly for the battery housing, motor housing and such other parts.

**Vimal Goel:** For BMS business overall, do you see some of these OEMs actually taking their battery management in-house? In the passenger vehicle industry, we have seen that most of the Battery Management has been taken in-house.

**Akhil Aryan:** The reality is building a BMS is a higher risk and low value opportunity for OEMs. So, the BMS is a critical component that goes inside of the battery, and it's not just sort of an analog device which has

just hardware, but there are algorithms and software that need to be built both for safety as well as accuracy. So, whether it is state of charge, state of health, state of energy, state of power, all of these algorithms need to be designed - different configuration parameters that need to be put in place for working with different types of chargers, safety parameters for acceleration, for range estimation, or charging control so on and so forth.

You made a statement saying that passenger vehicles OEMs are designing their BMS in-house. I don't think that's accurate. I think that there is also a significant opportunity for us to enter four-wheelers in the near future.

There are components that OEMs are trying to build in-house, but when it comes to safety critical components, they are relying on companies like us - we have spent over eight years building the technology that we are putting out in the market today. We have deployed it over hundreds of thousands of vehicles that ran millions of kilometers validated with no failures on the road.

So, that credibility is something that really helps us build a narrative in front of OEMs that when they are designing new vehicles, instead of taking a bet on building something that could be detrimental, if there was any issue on the road even to their brand or to their product lines, they choose to work with people who have domain and in-depth knowledge as well as technology that is tried and tested on the road which is why we are seeing success with significant OEMs.

Now the OEMs that you might be referring to that has built their own BMS are perhaps OEMs that started much before. For example, Tesla or Ather or someone like that started 10, 11 years ago. At that time, they did not have a mature offering of Tier1 suppliers bringing the technology. So, they were basically forced to design the technology in-house and build it themselves.

But for significant OEMs that are launching their EV products today, they have to fight against time. They don't have five years to design their own BMS and design every single product and build sort of vertically integrated technology.

From the perspective of OEMs designing their own BMS we do not see that as a risk. What we do see is OEMs wanting to design their own batteries. They want to own the IP on the battery level, and so they typically want to source the cells, design the electromechanical assembly and buy a BMS from say a company like Maxwell and assemble it by themselves into a proprietary design.

So, that's what we are seeing on the two-wheeler side. I think that that trend will continue. There will be other advanced electronics like Anurang mentioned that we are also venturing into beyond the BMS. So, it's not like we are putting our head in the sand and saying okay, BMS will be here forever.

We are also exploring other advanced electronics beyond the BMS that we will be bringing to market very shortly under the Maxwell umbrella. Our mission is to accelerate the transition to an all-electric future. And for that there will be various different advanced electronics required. BMS is our flagship

offering today, and I think that will continue both for two-wheelers as well as passenger vehicles in the near future.

**Moderator:** Thank you. The next question is from the line of Mukesh Saraf from Avendus Spark. Please go ahead.

**Mukesh Saraf:** What proportion of the casting is fully machined. And how do you think that proportion can look in the next couple of years based on ongoing business?

**Anurang Jain:** So, I would say that 75% are either semi-finished or fully finished. There are some sticky customers who still want to do it in-house where most of the OEMs are giving it out because they don't want to get into the issue of rejections being sent back after machining. Today fully machined, we would be at a rough guess of about 40%, 45%.

But if we will be going to fully machined at 75%, 80%, that would be a good target to achieve. In fact, many customers are asking us to do that. And that requires investment also. So, we will go phase wise. I can't give when in future, but definitely I can only say that all the new business we are taking is only for machined castings.

These percentages are including Bajaj Auto. Among non-Bajaj business also, there are certain parts which are fully machined, there are certain which are not machined also. So, the non-machined parts are yet expected to go to semi-finished or fully finished. The mindset is to do machining in-house with a few of them. Bajaj Auto is a leader in doing fully machined.

And also, four-wheelers is largely fully machined only. Hyundai, Kia, Tata Motors, Mahindra is largely fully machined. There are some exceptions, but largely fully machined.

**Mukesh Saraf:** EV business wins for you stand at Rs. 6 billion. How are we looking at this FAME subsidy probably not being extended? Do you see a risk of the subsidy not being extended and the production at the OEMs falling?

**Anurang Jain:** We have to invest in the journey of EV where there is a large focus by the government and by the OEMs and for environmental reasons. Our job is to take the business, which we are doing. So if the volumes don't happen, we will do less sales, but most of these orders are from existing plants. We are trying to increase sales and profitability from the existing plants without much additional investment. We are not setting up a new plant, and most of the capacities are already there.

**Moderator:** Thank you. The next question is from the line of Aashin Modi from Equirus Capital. Please go ahead.

**Aashin Modi:** We have two products in testing and validation. One is CVT with HMCL and dual-channel ABS with Bajaj and RE. Could you tell us where are we on that?

**Anurang Jain:** CVT is still under approval at HMCL, but that is going a bit slow. The kind of traction we were expecting is not happening. And also with scooters going the EV way in Hero MotoCorp, we are also having a review whether to invest time and money on this or not.

As far as the ABS dual channel, that will go very fast. Our target is to start supplies of dual channel by Q2 of this financial year.

**Aashin Modi:** We have seen we have got good traction in the e-two-wheeler space. So, could it be replicated in the e-three-wheeler space as well? And what sort of the content difference can we see for us in ICE three-wheeler versus an EV three-wheeler?

**Anurang Jain:** For three-wheeler there are 11 parts versus 7 parts. The 11 parts are 1.5 Kg lower, with a much higher value add.

Similarly for brakes, we are already supplying to Mahindra Electric, and this month we are starting with Bajaj Auto for the three-wheeler EV brakes system, and we are in touch with others.

There is no front fork in three-wheelers, so we are focused on shock absorber business for 3W also.

**Moderator:** Thank you. Ladies and gentlemen, this would be the last question for today which is from the line of Aditya Jhawar from Investec. Please go ahead.

**Aditya Jhawar:** We are working with a construct where the OEM designs the battery and Endurance provide the battery management system. So, in this construct, how should we think about the warranty liabilities? Will OEMs accept the warranty claim?

**Akhil Aryan:** When we say the battery is designed by the OEM, it is essentially the electromechanical assembly. So, whenever there is a warranty claim, you have to be able to do a root cause analysis and figure out whether the failure was due to a design defect on the electromechanical assembly or whether it was a failure of an electronics board not able to say open or close a MOSFET, for example, in a specific case.

Before we supply all of our BMSs, we do a very significant and complete testing of all functionalities on every single board, because we want to be extra careful and we want to protect our reputation as well as Maxwell brand. We have been able to supply hundreds of thousands of units without having any significant failure on road so far.

So, before we ship out our BMSs, we actually do functional test of every single feature, and we also provide our customers with benches on their site, to enable them to retest all of these features along with the battery after battery integration before they install it inside the vehicle. They test the safety critical functionality before they put it inside, and that's basically where the handover happens.

But if for whatever reason that is a field issue, then there is a very detailed process to identify the RCA or the root cause analysis of the issue, and it has to be attributed either to a design defect on the battery integration, battery design, or design defect on the hardware or software of the BMS. So, there is a hard line which will allow you to segregate whose warranty claim it will be.

**Aditya Jhawar:**

In the presentation you had given a target of aftermarket reaching 10% by FY26. Similarly, can you give some sense that how should we think about four-wheeler contribution in India revenue which is now about 7.5%?

**Anurang Jain:**

In India, we supply only aluminum castings to four-wheelers. What we are looking at is opportunities for inorganic growth in the four-wheeler segment and technical collaboration in the four-wheeler segment. To do brakes, clutches or any other proprietary product in future, we need a good technology partner.

While we are actively pursuing that to take 4W share of business up, please note that our 2W business growth is expected to be rapid with value-added products really going up and supplying all our products to all our OEMs, and even BMS 2W orders fructifying. So, four-wheeler inorganic opportunity as well as collaborations in terms of JVs or collaboration agreements are being looked at to enter this area.

**Moderator:**

Thank you. Ladies and gentlemen, as that was the last question for today, I would now like to hand the conference over to the management for closing comments. Over to you.

**Anurang Jain:**

I would just like to thank everybody for joining the call.

**Moderator:**

Thank you, sir. On behalf of Axis Capital Limited, that concludes this conference. Thank you for joining us, and you may now disconnect your lines.