



Endurance Technologies Limited Q4 FY22 Earnings Conference Call

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MODERATOR: **MR. NIKHIL KALE – AXIS CAPITAL**

Moderator: Ladies and gentlemen, good day and welcome to the Q4 FY22 Earnings Conference Call of Endurance Technologies Limited hosted by Axis Capital Limited. As a reminder, all participants' 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 '*' then '0' on your touchtone phone. Please note that this conference is being recorded. I now hand the conference over to Mr. Nikhil Kale from Axis Capital. Thank you and over to you, Sir.

Nikhil Kale: Thank you, Margreth. Good morning, everyone. Welcome to the Q4 FY22 Results Conference Call of Endurance Technologies. From the management team today 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 & Group CFO, and Mr. Raj Mundra – Treasurer & Head Investor Relations. I will now hand over the call to Mr. Jain for his opening remarks, post which we can start the Q&A. Over to you, Mr. Jain.

Anurang Jain: Thank you very much and good morning to everyone. I would like to share details of how we have done in the Q4 of FY22 and in the full year,

In India, in the Q4 of FY22 as per SIAM data, the two-wheeler industry sales de-grew by 18.4% compared to the previous financial year. Scooters de-grew by 22.4% and motorcycles de-grew by 16.5%. The automotive industry in India had a de-growth of 13.6%. In Europe, in Q4 there was a de-growth of 10.8% in the European Union (including UK) automotive sales.

On the financials, I will briefly talk to you about the Q4 FY22, and then on the financial year FY22 numbers. In Q4 FY22, our consolidated total net income were Rs. 20,914.76 million as compared to Rs. 21,397.7 million in Q4 FY21. Consolidated EBITDA was Rs. 2,698.12 million as compared to Rs. 3,390.47 million in Q4 of FY21. Consolidated EBITDA margins was at the 12.9%. The net profit was Rs. 1,361.8 million at 6.5%. There was a Maharashtra state mega-project incentive in Q4 of Rs. 43.47 million.

In Q4, our standalone total income was Rs. 15,640.65 million as compared to Rs. 16,015.26 million in Q4 of FY21. Standalone EBITDA was Rs. 2,064.65 million as compared to Rs. 2,394.16 million in Q4 FY21. The EBITDA margin was at 13.2%. Standalone net profit was Rs. 1,147.34 million at 7.3%. There was the Maharashtra state mega-project incentive in Q4 of Rs. 43.47 million.

For the financial year FY22 our consolidated total net income was Rs. 75,901.78 million as compared to Rs. 65,777.31 million in FY 21. Consolidated EBITDA was at Rs. 10,056.76 million as compared to Rs. 10,709.24 million in FY 21. Consolidated EBITDA margin was at 13.2%. The net profit was Rs. 4,607.09 million at 6.1%. This includes the Maharashtra state mega-project incentive of Rs. 633.9 million.

In FY22 our standalone total income was Rs. 57,214.81 million as compared to Rs. 47,865.83 million in FY21. Standalone EBITDA was Rs. 7,530.52 million as compared to Rs. 7,451.35

million in FY21 with an EBITDA margin of 13.2%. Standalone net profit was Rs. 3,817.43 million at 6.7%. This includes the Maharashtra state mega-project incentive of Rs. 633.9 million.

There was no net debt and there was a consolidated positive cash available of Rs. 4,586 million. The detailed financials are available with the stock exchanges and on the Endurance website.

I would now like to share certain key points for the FY22.

1. In FY22, 75% of our consolidated total income including other income came from Indian operations and the balance 25% came from our European operations.
2. In India in FY22, Rs. 7,450 million of new business was won from OEMs other than Bajaj, which included HMSI, TVS, Hero MotoCorp and Royal Enfield. This included Rs. 1,595 million of new orders for EVs, including Rs. 530 million order from Ather for brake systems and Rs. 700 million worth of order from Polarity Smart Bikes for suspension and brakes. New order wins also included the non-automotive casting business of Rs. 1,200 million for applications like gensets and 5G telecom. Both these businesses will start in this financial year. I would also like to mention that we have Rs. 20,380 million worth of requests for quotes from OEMs which are in process.
3. We are extremely happy to inform you that we have executed the Share Subscription and Purchase Agreement for acquiring 100% of equity share capital of Maxwell Energy Systems Private Limited in a phased manner. Maxwell is in the business of embedded electronics, particularly in the Battery Management Systems (or the BMS) for automobile EVs and battery packs. With the rapid transition into EVs, the battery management systems business is expected to have a good growth. We plan to leverage Maxwell's deep technical expertise developed over the years and its BMS deployment experience both in India and Europe.

We aim to offer our products to multiple new clients, including Indian and overseas automotive OEMs and manufacturers of battery packs. At present Maxwell supplies to over 70 automotive OEMs and battery pack makers spread across 15 countries including India, France, Spain, and USA. Since its inception, Maxwell has deployed over 65,000 smart BMSs in EVs and stationary storage system and has active orders in the pipeline of over Rs. 1,500 million from OEMs in India and Europe. This also includes orders from one of the largest two-wheeler OEMs in India.

The upfront fixed payout for 51% equity stake is Rs. 1,350 million. The balance payout of maximum Rs. 1,730 million will be based on achievement of targeted financials between FY23 and FY27. The 51% stake will be purchased in Q1 of this financial year and the balance 49% stake will be purchased in five tranches spread over the next five years.

4. As informed in the February quarterly investor call, we have added a new product which is the drive shaft. The drive shaft is a high technology proprietary product and an EV-agnostic product in an automotive application. A drive shaft transforms torque generated from an engine through its transmission to the wheels. The application is for three-wheelers and four-wheelers including some LCVs. The Indian drive shaft market is approximately Rs. 20,000 million per annum for three and four-wheeler applications. The competition in India is mainly from GKN Driveline, and Nexteer Automotive. We are starting business with Bajaj Auto from July 2022 as a new state-of-the-art plant is already set up at Waluj, Aurangabad.

We have also started development of drive shafts from Mahindra for the Alfa electric vehicle three-wheelers and samples have been supplied for testing at Mahindra. We also recently got the LOI from TVS for drive shafts for their Duramax three-wheelers. Our USP at Endurance is our short development lead times, competitive price, world-class manufacturing, and a strong supply chain.

5. At Endurance Overseas, as informed earlier, we have acquired 100% stake in a small company, Veicoli Srl, Italy. Veicoli enables fleet operators to increase route efficiencies, enhance safety, optimize maintenance activity, and lower fuel costs. With this acquisition, we seek to expand our innovative solution offerings in the mobility sector in Europe.
6. I would also like to mention that Endurance is focusing on a more value add and profitable product mix in its future business which includes :
 - a. braking, suspension, and casting supplies to two and three-wheeler electric vehicle OEMs and startups.
 - b. 200 CC+ motorcycle brakes and clutch assemblies with help of acquisition of Adler and Grimeca in Italy in the year 2020. The 200 CC+ motorcycle brake business has already started last year. And the 200 CC+ motorcycle clutch business will start in Q4 of FY23.
 - c. Paper based clutch assemblies replacing the cork-based clutch assemblies for motorcycles, continuous variable transmissions, or the automatic clutch for scooters. We are in advanced stage with Hero MotoCorp where the testing, has already been cleared and we expect to start supplies from Q4 of FY23.
 - d. ABS business for 150 CC+ motorcycles with our collaboration partner Beijing West Industries. We have started supplies of ABS to Bajaj Auto and Royal Enfield. In September, 2021 we have also started supply of two-wheeler ABS assembly for Bajaj Auto. Also, ABS assembly supplies have started to Royal Enfield from February 2022 onwards. Our plan is to reach a run rate of 400,000 ABS assemblies per annum by September 2022. As you may be aware, competition is mainly from Bosch which controls the major market share in the Indian ABS motorcycle market which requires approximately 3 to 3.5 billion ABS assemblies per annum. There is a large business opportunity for Endurance

- as there are very few suppliers and all are foreign companies due to the high technology requirements.
- e. 200 CC+ motorcycle inverted front forks and adjustable rear mono shock absorbers. This is with the help of our collaboration partners, KTM AG. We are working with KTM to increase supply of on-road vehicles and also start with off-road motorcycles. We have made a three-year plan for it, as the volumes will substantially increase over the next three years.
 - f. Fully finished machine castings as compared to raw castings and semi-finished castings for two wheelers, three wheelers and four wheelers.
7. As far as the brake assemblies are concerned, this business is growing with addition of Bajaj, TVS, Royal Enfield, Yamaha, Hero MotoCorp and HMSI new business. We are increasing supplies of brake assemblies from 285,000 brake assemblies a month to 570,000 brake assemblies a month. And discs from 375,000 numbers a month to 675,000 numbers a month. Our second plant at Waluj, Aurangabad has already started operations. By October 2022, we should be supplying 470,000-disc brake assemblies a month from both our brake plants.
8. We are also focused on supply of our products for EV two and three-wheelers. We have already started supplies of brake assemblies, suspension, and aluminum castings, for electric scooters and three-wheelers. Our focus is to supply our EV products to two and three wheeler OEMs both existing and new, including Ola Electric, Ampere, Okinawa, Polarity, Ather, and Hero Electric. We are also focusing on E-bicycles business, especially for our suspension and brakes, both for India as well as overseas.
9. Due to increased orders from Bajaj Auto and Yamaha India, and a new Rs. 1,446 million alloy wheel order from TVS, we have added new capacity at Chakan, Pune to help increase supplies from 240,000 alloy wheels a month to 320,000 alloy wheels a month. This plant will start operations in this month. The supply for TVS will start in June 2022. We have also recently won the front alloy wheel rim order from Hero Electric and supplies will start in current financial year. The volumes are expected to increase to Rs. 1.2 million wheels per annum by FY27 with an approximate sales value of Rs. 1,350 million per annum.
10. As far as Europe is concerned in FY22 we have won €71.4 million of business from Porsche, Daimler, Case New Holland, BMW and Stellantis. This includes a €40 million new order for transmission housings, for mild hybrid applications for Stellantis. This business will start in the second half of 2023.

11. I would also like to point out, 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. I would also like to mention that Endurance has also entered two backward integration product areas which are import substitutes also. First is the aluminum forging axle clamps required for our inverted front forks. Endurance has entered into a technical collaboration with FGM, Italy and supplies have started at our Aurangabad plant from April 2022. The second product is the wire steel braided hoses for ABS applications for mid and high-end bikes. This supply has already started from June, 2021 from our Aurangabad plant. Both these products will help us in our future profitable growth
13. In FY22 the aftermarket sales grew from Rs. 3,116.21 million in the previous year to Rs. 4,212.33 million in FY22. The aftermarket business was at 7.36% of our net India standalone sales in FY22. This is the only B2C business we have in the group. We are exporting aftermarket parts to 30 countries, and we are adding 4 more countries in this year.
14. The export sales for India standalone business increased by 22.15% from Rs. 1,834.84 million in FY21 to Rs. 2,241.19 million in the financial year FY22. This mainly included increase of sales of machined aluminum castings to Getrag, as well as our aftermarket exports.

On the environment front, I would especially like to mention that Endurance is striving to being carbon neutral in its plants by effective use of solar power and wind power, creating carbon sinks by driving tree plantations and thereby creating dense forests and driving use of natural gas and LPG in place of electric power and furnace oil. We are also focusing on lowering hazardous waste generation and to achieve zero waste to landfills.

At Endurance, it will be our continuous endeavor to grow through organic and inorganic growth with a focus on technology up gradation, quality improvement, cost, and environment health and safety. We will do our best to fulfill all our stakeholder expectations by following our five values of Customer Centricity, Integrity, Transparency, Teamwork, and Innovation.

We are extremely happy to announce that we have both the Maxwell founders, Mr. Akhil Aryan, and Mr. Alex Collet to take your questions on Maxwell. Thank you.

Moderator: Thank you very much. We will now begin the question-and-answer session. The first question is from the line of Nitin Arora from Axis Mutual Fund. Please go ahead.

Nitin Arora: In this new acquisition, we would like to know what was the push for the existing promoters to sell this business, when the business is doing so good as per your opening commentary? And

also, how do you bring value to the table in this kind of a business, because it is a very new business and you are more of a suspension and die casting Company?

Anurang Jain:

Firstly, the battery management system is the brain of a battery pack. The battery management system is among the highest value EV products. I believe it's about 5% to 7% of an EV vehicle. That's the wallet share, which it enjoys. There is government push on EVs with focus on environmental aspects and, sustainability. We did not want to miss such an opportunity with the company having experience over the last 5 years and having deployed their product in over 65,000 vehicles. For more technical details, Akhil & Alex will brief you later. Along with strong client base, which Endurance enjoys over the last 34 years, we have strengths in manufacturing and supply chain. 95% of our products are EV agnostic, and this is the first EV specific product for Endurance. Also this is a product with high value addition. This was the rationale of getting into this space, and of course we all believe in EV growth story. We believe EV scooters, buses, three-wheelers are already gaining traction which will increase in future and we had to be part of this journey.

Nitin Arora:

BMS contribution will be 5% to 10% of vehicle value. Motor or motor controller may contribute 15 % to 20%. Why not there as well? The question is that we have zero R&D in these products. Generally companies which acquire any new tech product have done some R&D and they want to scale up that R&D to an eventually good product. What Endurance will bring to the table – other than the money, considering that in the area of thermal management, you have not done any R&D?

Anurang Jain:

Firstly, like we mentioned that Maxwell has a very strong technology base, which we will request Mr. Akhil Aryan and Alex Collet to explain. They have experience over the last 5 years of deploying on more than 65,000 vehicles, both in Indian and European roads. There are many companies where the BMS is available, but Maxwell has a rich experience in deployment of BMS. They have strong orders worth Rs. 1500 million, and plan to achieve a revenue of Rs. 400 million in this financial year. We see a great opportunity as this acquisition includes the complete technology, the strength of its people and whatever they have worked for in the last six years to build a very strong technology company So, we request Mr. Akhil Aryan as well as Alex Collet to answer the first part of your question.,

Akhil Aryan:

Hello everyone. My name is Akhil. I think to answer the question around R&D and technology, the first thing I would like to highlight is that Maxwell is not a BMS company. It's an advanced electronics company and the BMS is our flagship product. With regard to motor controllers, telematics and other electronics, we have built the company from the standpoint of developing core capabilities around advanced electronics and BMS is a manifestation of that in its first format.

Coming to the point of what Endurance brings to the table and why we are very excited and interested in this partnership. I think that we must acknowledge that when it comes to electric vehicle, the market is at an inflection point. Not only are there new age OEM's that have launched their vehicles, but now the age-old tried and tested OEM's that have deployed millions

of vehicles in India and abroad are taking electric vehicles very seriously. Hero, Bajaj, TVS, Honda, you name it, they are all entering the EV market either this year or the next one. There is an exponential growth in demand from end -customers for electric vehicles. But the reality today when it comes to companies like Maxwell is that there are supply chain challenges with regard to semiconductor access. Even though we have a strong product, R&D, technology and team, when road meets the rubber, we have to be able to scale up our manufacturing and supply chain to be able to deliver to large OEM's that are relying on us to supply these products on the assembly line. From our standpoint, both the ability to take technology to market and get into conversations with global OEM's, Endurance has the ability to showcase and deliver our technology for mass production. Maxwell will benefit from Endurance's skills around operational excellence, supply chain. We believe, Maxwell will benefit from additional resources that will come inside of Maxwell as part of this transaction to help us expand the advanced electronics R&D team and the BMS is not going to be just the only product in our product portfolio. With Endurance, we are planning on building a portfolio of high value addition products that will help improve the pace at which the planet and especially India is moving to an electric future.

Moderator: Thank you. The next question is from the line of Aditya Jhawar from Investec Capital. Please go ahead.

Aditya Jhawar: We have seen some ramp up in the last couple of years in the Maxwell revenue stream and expectation is that it will only increase in the next 3 to 4 years. What could be the profitability that you expect when the business reaches a critical mass? And on the BMS line, what is the thought process of having an in-house manufacturing for this product versus outsourced manufacturing and what could be the CAPEX requirement for BMS over the next couple of years?

Anurang Jain: We never give forward-looking numbers. As mentioned, we have over Rs. 1500 million worth of orders, and Endurance always believes in profitable growth. We have a track record of profitable growth in the last 6 years since the IPO. We can only say that with the strength of our supply chain, manufacturing capability and future plans with clients who trust us, and the strong technical capabilities which we have at Maxwell and the experience they have of the deployment of vehicles on road, and extensive proving of the product, we can only say that we have made a very robust plan up to FY27 and our focus will be on profitable growth here as well.

Aditya Jhawar: Anything on CAPEX?

Anurang Jain: As far as CAPEX is concerned, on the technology front, the CAPEX is already a part of the business plan, but yes, any investments which will help to further grow the business, beyond the business plan, of course, we would like to do it. We would not like to miss any opportunity there as far as the sales growth is concerned. Also, in future, once we evaluate and decide to start in-house operations, whatever investments are required will be made. I believe this will not be very high for a company like Endurance. While we evaluate, we will consider the fact that Maxwell today has a very strong main supplier. Though we cannot name them, but we appreciate their

strength as a very-very strong supplier in this area. So, we would like to work with them, but with growth in business, we also have plans to evaluate and do this in-house. CAPEX is not significant enough to really affect Endurance.

Aditya Jhavar: Entry into BMS and driveshaft could potentially add about 1.5% of revenues in the next couple of years each. Do you have any % of revenue number in your mind that would come from the new areas that you would like to enter, whether organically or inorganically, technological partnership?

Anurang Jain: We have a revenue projection number for Maxwell. We also have a number at Endurance, but I cannot give these numbers at this stage because I don't like to give forward-looking numbers, as there are so many uncertainties in this world. Maxwell acquisition is a part of our focus on embedded electronics and this focus started with ABS. Even high-end clutch products of Adler also have electronics. We are also working on an adaptive electronic rear shock absorber and in future, a front fork. So, electronics is something we have taken up. We will be setting up an electronics lab at Chakan in Pune soon. We have a very strong team at Maxwell, which will also help us in our journey of embedded electronics. So I would say that apart from our above products and BMS, as Mr. Akhil Aryan said, we have also planned new products. BMS is today the flagship product and that's why we are talking more about that and that is also a high value add product. That's the opportunity which we saw in Maxwell and we took it.

So, you have to see what opportunities are available and we are very confident of this product and new electronics products, which will be done both at Maxwell and at Endurance. These will definitely be much more than 1% to 1.5%, let me assure you of that. And it will lead to profitable growth. We don't acquire businesses or get into new lines of business for small incremental growth.

Aditya Jhavar: My next question is on Europe business. So, how should we think about Margins in FY23- are you seeing some of the headwinds of metal and gas prices receding? While we have a pass-through clause for aluminum, but for gas price increase were we able to pass a significant portion to the customers?

Massimo Venuti: The situation today in Europe is really tough due to high energy costs. Prices of energy and gas had reached unbelievable levels also before the Ukraine war. Also for the next 6 to 9 months, prices will be more or less at current levels, as the futures price is more or less flat with the actual price. In the last quarter, we have had an increase in the base cost of gas of more or less 430%, and 320% for electricity compared to a year ago. This situation is not sustainable in the long term, as without price increases, a majority of casting suppliers might go bankrupt, and this is well understood by our customers. BMW is one customer from whom we recovered a part of energy price increases. Even if BMW is less than 5% of our turnover, this recovery is very significant. We are also discussing with the other customers. A quick solution between NATO /Ukraine and Russia is the only way to reduce the prices of energy and gas in the European market, because we need a lot of time in order to be independent from Russian gas supplies, and this is not feasible in the short term. In the previous quarter, as Mr. Jain told you, EU lost 10%

in terms of market. The month of April was also very bad with -20% and the situation for May is more or less the same.

Regarding the material costs, for sure it's a big problem. We have seen an important increase in price of aluminum, though in the last week apparently there was a reduction of 2% to 3%. For us, it is not a problem as you know because we charge these costs to the customer. However, this increase of material costs affected our EBITDA %. We closed this financial year with 14.1% in terms of EBITDA, but without considering higher metal cost, EBITDA should have been 15.2%. So, 1% is the reduction of EBITDA due only to the increase of aluminum price. And on top of this, the energy cost effect in the total financial year 2021-22 was €6.4 million, so it means 3.2% of our sales. So, without higher metal and energy costs, Endurance Overseas would cross 18% profitability, which is more or less the same profitability of the previous year. For sure, the only way to overcome this tough situation is to expand the volume. If the market does not again touch the normal level of volume, the situation would be very tough. A lot depends on the semiconductor supplies, the war in Ukraine and also the inflation. As you are aware, in European market, we are not used to 6% to 7% inflation and so I believe that in some way in the next months, the situation will continue to be tough.

We want to underline one aspect in the European market over the previous financial year. We have been able to acquire €71 million of new business. This is the best performance of the last 5 years in terms of order acquisitions. A large part of these orders are for EV/hybrid, and so it means that the market is moving into the electric technology. Endurance is a reliable partner for the customers, otherwise we would not be able to acquire this level of business. We continue to be optimistic for the future profitability of the Company.

Moderator: The next question is from the line of Jinesh Gandhi from Motilal Oswal Financial Services. Please go ahead.

Jinesh Gandhi: On Maxwell acquisition- What is the minimal valuation which you will have to pay for the balance 49% acquisition of stake, maximum indicated Rs. 1.7 billion, but minimum would be?

Anurang Jain: It depends on the targeted financial achievement in the next 5 years. We are not keen to share further details.

Jinesh Gandhi: What is the competitive advantage which Maxwell brings to the table on the BMS side, vis-a-vis many existing players considering the fact that neither Endurance nor Maxwell has PLI benefit unlike some of your other competitors? What gives us confidence to gain share despite incentive disadvantage?

Anurang Jain: I will request Mr. Akhil Aryan to answer this. But just let me tell you one fact. Our manufacturing operations will be at Waluj, Aurangabad which enjoys a mega project incentive from the Government of Maharashtra. Whatever we invest, we get 100% back within six or seven years. We are fortunate to be in an area like Waluj, Aurangabad, which is in D zone for this purpose. With Maharashtra state, we have a very good experience of collecting this money,

well on time. Only during COVID, there was a slight delay from the Maharashtra government. Whatever we invest, we are going to get a very large incentive of 100% of all the investments we do. This is a unique advantage in Waluj. I would like Mr. Akhil Aryan to answer further.

Akhil Aryan:

Maxwell started as a company in 2017. For over 5 years, we spent time not only just working on the R&D in the lab, but really deploying the product and technology inside of vehicles that are on the road, that are driving for millions of kilometers. If you look at the other BMS players out there, you either have, for example, some mega suppliers like Continental Bosch, X, Y and Z that are focused primarily on the 4 wheelers in Europe or North America. The companies that are actually supplying BMS and advanced electronics to the OEMs that have mass deployment in India are not necessarily coming from India. They are either simple protection circuit modules that are being imported from China or some small in-house development. That's what the new age start-ups are doing. There are some global BMS players that are trying to enter India through some partnership or contract manufacturing in India, but the reality is that there is absolutely no company like Maxwell that has deployed these products on Indian roads, learned from the issues, and the challenges that are very specific to India. We are not a European company trying to push products into India, which is 'optimized manufacturing'. We have optimized the product; we have value engineered the product. So, from a cost standpoint, it's not just about incentives, it's also about choosing the right components, it's about how do you build better software and embedded software that goes inside of the microcontroller that eliminates some of the hardware components and reduces costs.

I think that given the fact that we have tried and tested this product, they're also far safer and more reliable as a choice for Indian OEMs or OEMs that are wanting to deploy in India or abroad. We have also been one of the only companies in the world, not just in India, to build functionally safe ISO 26262 compliant BMS that are automotive grade, which are MSIL D, ASIL C rated, and this is an extremely difficult certification to get. There are less than 10 companies globally including the OEMs that would potentially have this. And we are one of the few companies that started the journey in 2018. It took us 3-3.5 years to get there.

I also want to highlight that from a technology standpoint, since we started the company and also coming from a strong software background myself, we have built the entire product and technology on the platform. So, we have taken a platform approach instead of a product approach, which allows us to essentially leverage the same code base across all different BMS, which means that whether you are deploying a BMS for a small 2-wheeler, 4-wheeler, bus, truck, the core technology, and algorithms will be consistent and the learnings that we get from one deployment will inherit into the future deployments.

This also means that there is a strong technology and software backend to the actual hardware that has been supplied. So, I want to stress upon the fact that we are a technology company, and the hardware is a delivery mechanism of the embedded software that we are developing. What does that mean? It means that every BMS that we are deploying has over 260 configurable parameters that we can configure, this software flexibility allows us to use the same hardware across different chemistries. I'm sure all of you are aware there are different lithium-ion

chemistries that are being deployed in different types of vehicles. There are different types of cells and technologies that are being used in the electrification journey. Now, instead of having to do R&D every single time and develop new products and new boards for every new chemistry, we've invested into the technology of a platform that allows us to configure the same hardware and use it across chemistries, across applications.

The software also allows us to get to market faster, because we have spent a lot of time on the R&D and built it in a configurable manner. So, we have faster time to market, we have a better inherent technology, the algorithms for state of charge, state of health, state of energy and power, which effectively lead to better range estimation, faster charging, and range optimization as well, all of those have been optimized for India. But like Anurang also mentioned, we have deployment in 15 countries. So, we are CE certified, we're supplying to customers in Europe in production. And so these algorithms have really advanced over the last 5 years to a point that they are highly accurate. So, that helps us beat competition when we are in the market.

Also, we have built a very strong in-house R&D team. We are not doing a licensing business where we license technology from somewhere and we are just contract manufacturing and supplying it over here, like some of the other players in the Indian market today. We have over 100 team members in India that are focusing on R&D. So, if there is, for example, a new feature that needs to be developed if there is some new R&D to be done for faster charging, improved range, better safety, we can do that in-house inside of our company in India and deploy it at the customer end. Lastly, like you mentioned, incentives could play a big part in the costing. But I believe that the product itself has to be designed, value engineered and designed for the safety, the features that you want to offer to the customer, and also value engineered for mass deployment. So, we really focused on the design and the product itself. And now with Endurance leveraging better supply chain, operations, manufacturing, we'll be able to beat competition on prices, while also offering better quality and value to the customer.

Jinesh Gandhi:

Who are our key customers currently and which all segments do we cater to?

Akhil Aryan:

So, we work with various different OEMs. Of course, there are many new age OEMs that we work with, I can name a few of them, some of them I can't name just yet. For example, the ones that we are in production with include Electric Motion in France that has been building motorcycles with our BMS for over 3 years now. There is Ray Electric in Spain that we've also done a press release with that are building high performance scooter, and they have been in production with us for quite some time.

In India, we've been working with many large battery pack makers. So, again, unfortunately, can't name them just yet, very soon now that they know about this partnership, we will get their consent and we'll be able to name them in the future. But as it stands, I can tell you practically speaking, the top 5 battery pack makers in India, whether lead acid or lithium ion, are working with us and in production. When it comes to OEMs in India, again, unfortunately can't name some of these OEMs because they have not yet formally launched their vehicles, or formally announced their suppliers and partners. But I can tell you that, one of the world's largest, not

only one of India's largest, but one of the world's largest OEMs has selected us as their BMS supplier after a rigorous testing and validation of almost 1-1/2 years. It's also their entry into electrification, so they want to make sure they're choosing the right partners. And this has led to a very strong order pipeline like Anurang mentioned, and we will be entering into production with these OEMs very shortly this year and also next year.

Jinesh Gandhi: When you said largest OEMs, are you referring on the 2-wheeler side?

Akhil Aryan: Yes, 2-wheeler and 3-wheeler.

Jinesh Gandhi: What about the other products which you are working on, which would be your focus area beyond BMS?

Akhil Aryan: The way that you should think about Maxwell is a company that is focusing on building core capabilities. At the intersection of those core capabilities, we'll be building new products in the future. Those capabilities can be defined as sensing, estimation, and functionally safe actuation which means that we will be using advanced sensors to sense data, use that data, have proprietary algorithms that estimate values from the data. And based on that estimation, take action in a functionally safe manner, and BMS is of course one of the key products at that intersection.

Now apart from BMS one of the products that we have already started doing R&D on is Telematics. We believe that the Telematics controllers are going to be a very valuable component into the sub-assemblies of electric vehicles as the world moves towards not only an electric but also a connected mobility environment moving forward. Practically all the new age OEMs want their vehicles connected to the cloud, they want to collect data from that, they want to analyze that data, they want to offer services on top of that, and all of those things will be unlocked with a Telematics Gateway, which has to be, again, functionally safe and automotive grade.

We also have a high voltage BMS that will be built for automotive, I would say, 4-wheeler and buses, trucks application, so we're going to be investing heavily on building an ISO 26262 compliant automotive BMS for high voltage applications, not only on the mobility side, but also on stationary. So, as we move towards renewable energy, there's a big opportunity for Energy Storage Systems (ESS), grid connected batteries, UPS, telecom 5G and 4G, and the battery backups that go inside of these applications. There are really a lot of different variations in terms of application of the BMS that we will build for, and also new product platforms like the TCU.

Jinesh Gandhi: Did we indicate for Europe that we have been only able to recover energy cost inflation on 5% of our portfolio and on balance 95%, we are in discussion with customers?

Massimo Venuti: Regarding the energy price increases, it affected our profitability in the previous financial year, by 3.2%. We are discussing recovery of higher energy costs with our customers. Till date, only BMW has recognized the increase of these energy costs, but BMW unfortunately is less than 5% of our customer portfolio. The increase of price by BMW has an impact of more or less €350,000

per year. Now, we are discussing with our major customers. Our major customers are Volkswagen Group with more or less 25%, Stellantis Group with another 27% and Daimler with 18%. We are trying to convince them to pay us a part of the increase of energy in our price.

Jinesh Gandhi: And in this quarter, we have seen substantial increase in the European business RM cost on Q-o-Q basis. Is that more to do with the mix or that's a reflection of higher aluminum and energy prices?

Massimo Venuti: We have had an impact in the cost of material of €6 million in the quarter due to increase of aluminum prices over last year. In the total financial year, the increase is €15 million. But this increase, of course, is 100% recognized by our customers. And so you have the impact in the cost of material and in the revenue. Thus, we had a reduction in EBITDA % because while the total amount of EBITDA remains the same, but in terms of percentage we had an impact of 1.1%. In fact, we closed the fiscal year with EBITDA of 14.1%. Without considering the increase of aluminum prices, the EBITDA would have been 15.2%.

Jinesh Gandhi: Are the India business incentives getting over by FY24? And the additional incentives which we are aiming to get and are in discussion with the government- can you clarify that?

Satrajit Ray: Jinesh, out of roughly Rs. 446 crore incentives that we are already eligible for, over the last few years we have booked Rs. 265 crore. The balance will be booked over the next 3 to 4 years. Importantly, out of Rs. 265 crore that we booked, we've already recovered Rs. 147 crore from Maharashtra Government.

And we'll apply for the 2019 to 2024 scheme where the threshold of application is on CAPEX spend above Rs. 350 crore. So, I can't tell you what the number will be when we apply, hopefully next year. At that point in time, once we get an eligibility certificate, we'll be able to talk about these details for the new scheme.

Moderator: The next question is from the line of Ronak Sarda from Systematix. Please go ahead.

Ronak Sarda: On the Maxwell acquisition, out of the upfront payment of Rs. 135 crore, how much of the value goes into the company and how much is paid as a part of buying shares of promoter? And secondly, did you give a breakup of the Rs. 150 crore order book in terms of how much is exports, domestic or the vehicle segments? If not, if you can share that, please?

Anurang Jain: The breakup of Rs. 135 crore between primary and secondary, we'll not be able to share at this point in time.

Akhil Aryan: On revenue breakup, this year our business is going to come about 50:50 from India and from Europe; we plan on increasing the India share moving forward, because India is the key market for us. So, in terms of orders, especially the orders that we have in our pipeline, a large portion of that, say over 80%, comes from India. These are fundamentally driven by the OEMs that I previously mentioned we are entering into production with not just on the vehicle side, but also on the battery pack manufacturing and assembly.

I also mentioned in the start that we are at an inflection point in India when it comes to electric vehicles and lithium-ion batteries in general. So, a lot of business growth is coming from India. With some Indian customers, we have been quoting and integrating our products for the last 1.5 years. In other cases, we are in the final stretch of entering production very soon this year, as well as bringing some products next year.

In terms of the split of applications, a large portion of our focus has been 2-wheeler and 3-wheelers. So, I would say at least again from the order pipeline, about 70% of that will come from 2-wheelers and 3-wheelers, the rest of it will come from a split of stationary storage, industrial applications, some other automotive applications that are smaller in size, which includes bicycles, scooters and so on. And last but not the least, some sample test that we've started for the 4-wheeler application, because we want to try and enter that maybe, starting next year. We want to start quoting to customers and integrating with them as soon as possible, so that, when push comes to shove, we have a product to launch.

Ronak Sarda: Will you be targeting the entire spectrum of automobiles from 2-wheelers to buses. So, how do you see the 'development to production' time now with Endurance back-end and cost leveraging opportunity?

Akhil Aryan: I think the company right now is already in production. So, we are not waiting for production. We are in supply and in production with many of our customers. The Endurance partnership helps us amplify that. So, we are looking at this partnership to both consolidate our supply chain operations, manufacturing, R&D, and at the same time amplify business growth by entering new OEMs, new markets, new customers. Endurance has access to customers much better than us. So, we already have a supply chain in place. We have a strong partner for manufacturing that is helping us assemble these boards, delivered to our key customers that are in production. And as time passes, we will potentially try and bring that in house, again consolidate the strength, lower the costs for us, improve our margins, and be able to control the supply chain fully instead of having to depend on external sources. We would also be able to further optimize 'development to production' time.

Ronak Sarda: On the India business could you highlight what was the ABS production for FY22 or sales value and how do you see that in FY23? And similarly, what was the revenue from let's say Hyundai, Kia, or 4-wheeler Aluminum Casting? Have we ramped up to the overall order book of around Rs. 200 crore?

Anurang Jain: As far as Hyundai and Kia is concerned, we have done about Rs. 140 crore in FY22. And of course, this figure will increase now. We have won Rs. 235 crore worth of orders from them. We had a new plant in Vallam set up for that.

For ABS, by September '22, we'll reach the run rate of 400,000 per annum. Though we started in October 2021 and have gradually ramped up the production, the bottleneck was pertaining to semiconductor supplies from Mando-Hella. Even the Shanghai lockdown didn't help much. As you know, there was a lockdown in the last few weeks. But now things are opening up and the

situation has improved. We are very confident, based on the visibility given by Mando Hella pertaining to material in pipeline, that we'll be able to reach the full run rate soon because we are talking to other OEMs for new orders, after having started supplies to Royal Enfield and Bajaj. The opportunity is huge - 3 million to 3.5 million a year, mainly controlled by Bosch. So, we have a long way to go. And then of course, we can think of starting to increase the capacity beyond 400,000.

- Moderator:** The next question is from the line of Arvind Sharma from Citi. Please go ahead.
- Arvind Sharma:** Revenue and EBITDA for the European operations in euro terms- if you could please share for fourth quarter?
- Massimo Venuti:** We closed the previous quarter with a total income of €62.6 million compared to €61.4 million in the same quarter of the previous financial year. Total EBITDA was €7.9 million compared to €11.4 million in the same quarter of the previous financial year, 12.6% in terms of EBITDA percentage. Net result €2.7 million compared to €5.5 million in the same quarter of previous financial year, 4.4% net result. Without aluminum and energy cost increase, the EBITDA in the quarter would have been 18.3% compared to 18.6% in the same quarter of the previous financial year.
- Arvind Sharma:** Will you be reporting Maxwell's revenue as a part of a standalone numbers or would it be reported as a separate entity?
- Satrajit Ray:** As and when the acquisition is consummated, it would be a subsidiary of Endurance. It will be a part of the consolidated accounts, but at the time of the annual report you will get to see separate subsidiary numbers as that reporting is a statutory requirement.
- Arvind Sharma:** Is there any trend where the OEMs might be in-sourcing and going for backward integration in terms of BMS?
- Akhil Aryan:** I will repeat my answer on competitive advantages to some extent. Teslas or Daimlers of the world, when they were trying to get into market, had invested 10 years to try and build the product. But now with the electric vehicle journey becoming very real, a lot of OEMs need to get to market faster. So, the time-to-market has to be kept into consideration.
- Also, from a safety and reliability standpoint, OEMs need to focus on offering vehicle level services to the customers, whereas at the component level they need something that is tried, tested, safe and reliable, and that can hit the roads in a swift, but reliable manner and so they are looking for strong partners that have done the R&D just like us. We started in 2017 when the EV revolution was not as strong and we spent time removing different issues and glitches that come along the way.
- Next, like I mentioned from an R&D standpoint, there are lot of improvements that can happen at an algorithm or embedded software level - power management and battery management including charging and range optimization. For R&D, today we are a 100 member team which

is doing that work. With Endurance support, we plan to grow to over 250 people and any OEM would not think of setting up a 300 member team to try and build one component, or to optimize that component.

The last thing that I want to highlight is about semiconductor shortage and supply chains and operations. You have seen the cost of semiconductor components going up significantly. In our case, because we are supplying to many OEMs both in India and internationally, we have the advantage of being able to buy in larger volumes and therefore have stronger relationship with the suppliers and are able to ensure that components reach up in time. So, what we have to offer to OEMs includes faster time to market, better technology, tried and tested supply, in house R&D, optimized cost, improved features. Ultimately, all of that comes to them at an optimized cost when they work with us versus trying to do everything by themselves.

Moderator: Thank you. The next question is from the line of Karan Kokane from Ambit Capital. Please go ahead.

Karan Kokane: What is the mix of engine parts within castings that can get impacted by the shift to electrification?

Anurang Jain: Like I have mentioned earlier also as far as casting are concerned, we already started supplies on Bajaj Chetak and soon will be starting supplies for the Bajaj EV three wheelers. We are also in touch with other EV makers for castings. So, just to give you a flavor of why casting is EV agnostic - in an ICE two wheeler, you have right and left crank cases, covers, cylinder blocks, cylinder head. When it comes to a two-wheeler EV, you have the base MCU, terminal phase, terminal power, terminal ground, housing battery upper, housing battery lower, plates and motor housings. So, you have more number of castings and the value is the same in spite of weight being lower. So, you have 7 components in ICE which are higher weight than 9 castings in an EV which are lower weight, but the value add being similar.

When you come to three-wheeler you have similar castings, but you also have the case transmissions both LH and RH added to it. So, the types of castings are different. There are more number of castings having lower weight of course in three wheelers. There are almost 11 types of casting in EV three wheeler versus 7 in ICE three wheeler, but the weights are lower. The value add in an EV is much higher.

Karan Kokane: Second question is on the Europe business. We have seen a strong sequential growth in revenues in the European business in Q4, so is that largely explained by the input cost inflation pass through or is there something else going on over there as well?

Massimo Venuti: In the last quarter, there was Euro 1.2 million increase of turnover compared to the same quarter in the previous year. If we offset the increase of material cost, the reduction of turnover would have been for 7.9%. The increase of turnover in the last quarter is only due to the raw material costs. In total financial year there is more or less an increase in turnover of 10.6 million Euro,

compared to the previous year. This is an increase of 5.1%. If we offset the increase of material costs there is a reduction of more or less 2.2%.

Sequentially, turnover was higher in Q4 versus Q3 due to higher sales volumes in the automobile industry, and partly due to metal prices.

Karan Kokane: Last question on the Maxwell acquisition - do we have any synergies with our existing business?

Anurang Jain: Like I mentioned we have started our foray into embedded electronics when we got the ABS business from our clients and like I said we are setting up our own embedded electronics lab in Chakan in Pune and we are getting into electronic products like brakes, transmission and suspension high end products and at the same time we are getting into new electronic parts also. Maxwell would also be adding a lot of new products which they had planned and what we have planned. So, it will make our journey much easier. Now, with such a strong team of 100 people at Maxwell and going up to 250, and having our own electronic lab at Chakan, embedded electronics is clearly a very large focus at Endurance for the future.

Moderator: Thank you. The next question is from the line of Jay Shah from Capital PMS. Please go ahead.

Jay Shah: I just wanted to get a macro picture from you. The auto industry as a whole has been facing lot of brunt due to the EV transition and commodity headwinds etc., but you still manage to somehow stay strong. What is the picture looking like on a macro basis going forward?

Anurang Jain: I will talk about India. In our India business, 80% is for two wheelers - largely motorcycles. The two-wheeler sales or manufacturing in India in FY18 was 23 million two wheelers. In FY19 it was 24.4 million. FY20 which was amongst the bad years saw 20.9 million. FY21 went down to 18.4 and FY22 saw 17.9 million units. Due to the semiconductor shortages, OEMs are losing anywhere between 40,000 to 60,000 vehicles a month. And they believe there is strong pent-up demand here.

We have to wait and see till Q2 if this issue continues. Our ABS, which needs semiconductors is expected to reach full scale by September. India is, I have always mentioned, a 24 million two-wheeler market and it has to grow. There are reports saying it should go to 30 million by FY26/ FY27. So, there is considerable dependency on the external environment. Today, with the commodity prices going through the roof in the last 7 quarters, ocean freights which have gone up substantially, shortage of containers, we are living in a very difficult period. We are a cash positive company, but it has been one of the most challenging years, both in India and Europe. Despite that, we were able to reach these numbers because of our past strategy which includes outsourcing to good suppliers, consolidation of our plants and operational efficiency. That is why you see the kind of margins in one of the most difficult periods we have faced after the 2008 financial crisis.

I am of course very positive about the future, I really hope the semiconductor issues get sorted out fast. It is the major reason now for lower volume both in India and Europe. Massimo, would you like to add anything for Europe.

Massimo Venuti:

First of all, Jay, I note your remark regarding the stronger situation of Endurance compared to the market. One of the major points of strength for Endurance is our financial strength. Despite a difficult financial year in 2022, we have been able to increase our net financial position in Europe by nearly €5 million. Today, we have €21 million net cash and this can make the difference. The last year was very tough from industry volume perspective. Apparently, projections of May, June will also be very tough.

The European market lost almost 4 million of new car registrations. You can imagine what it means for a manufacturing company, when you reduce volumes by 30% - 35%. In Endurance, we lost probably 17% -18% due to acquiring new orders in the past. I am optimistic for the future because we are taking new business. Please consider that one of the major problems in the past was our dependence on diesel technology, or on gasoline for internal combustion engine.

Endurance, in 2027, is expected to have more or less 80% of the portfolio in EV, electric, plug-in and mild hybrid. Despite a tough year, with volumes 20% below FY20, we closed with 14% of EBITDA and are making cash profit and reducing our financial debt and increasing our liquidity. With visibility of more or less €60 million investment that we have to do in the next three years for orders acquired in the electrical field. I want to be optimistic even if the situation today is very tough. Apart from energy, another problem that Europe faces is that 90% of the raw material to produce battery comes from Russia and China, and sooner or later we have to talk about the diesel transition because probably we have to postpone the plans for transition currently targeted for 2030. At Endurance, we continue to stay positive on the back of the significant new orders for the future.

Moderator:

Thank you. The next question is from the line of Jay Kale from Elara. Please go ahead.

Jay Kale:

You have acquired Maxwell and you want to increase your content per vehicle on the EV side. If I have to look at the existing products' market share, your share in EVs is less than ICE vehicle market share, e.g. for the suspension products. What steps is the company taking to improve EV market share in the existing products and how should one look at that portfolio in the next four, five years be it suspension or casting products for the EV two wheelers?

Anurang Jain:

We have already won about Rs.1,550 million worth of orders for EVs for brakes and for suspension - mainly with Bajaj two wheeler and three wheelers where we are at 100% SOB. It is very early days because today EV are less than 1% of the total market. We are engaged with every single EV Company which matters and we are going all out to take business. Like I said last time, we were a bit late in the day in starting our engagement process with new OEMs but we are making up pretty fast now because of the strength of our technology and our pricing. It is a bit too early to talk about wallet share. I can only say that the pricing is quite similar. For casting, I have already shared that the value addition is quite similar. In suspension also, we see

pricing quite similar in EV suspensions - compression and tension parameters may vary, but pricing is similar. Also, braking prices are similar.

So, I do not see any issue once the market is large enough as we will get the business. In fact, major business is coming from EV scooters where today the Endurance share of business in ICE scooters is hardly 8% of India revenue. Fortunately EVs are coming more in scooters compared to motorcycles. So, for us all the EV scooter business which we win is going to be extra because I am not seeing many motorcycle companies coming in barring Revolt or Tork. I think EV scooter business will be additional business for us, but having said that we are fully engaged on scooter, motorcycles and three wheelers for EV business.

Moderator: Thank you. We will take one last question which is from the line of Kumar Saurabh from Scientific Investing. Please go ahead.

Kumar Saurabh: Your depreciation is almost 16% of net fixed assets. Usually in the auto industry it is around 10% - 12%. What is the reason for high depreciation and what is your annual maintenance CAPEX? Also, your asset turns fell from 3.5 to 2.8, so can you highlight the reasons and how do you see it panning out in next two, three years?

Satrajit Ray: I do not think one should look at Endurance and compare it with other auto ancillaries in India because Endurance is distinctly broken into four businesses. One is die casting, one is suspension, one is brakes and the fourth is clutch or transmission. So, the asset requirement of these businesses are different. In case of Endurance you will see that our depreciation annually is about Rs.200 crores. We follow the Companies Act rate of depreciation. In any case, if you would like to see the percentage, it should be on the gross fixed assets and not on net fixed assets. You are seeing a blended number at the company level comprising four different businesses. So, probably that percentage is not comparable with peers.

Maintenance CAPEX is next to nothing because in the last two years about 70% - 75% of our CAPEX has gone into expansions. Last year, the major two expansions were in brakes and alloy wheels. Maintenance CAPEX is around 3-5% of total India Capex.

On asset turns, last year was probably not the best year to compare. In Quarter 1 of FY21, we were at low revenue, then the next three quarters were very strong. Also, this year has seen metal price increase. So, asset turnover numbers probably are not as representative as they would be in a steady state business situation.

Kumar Saurabh: Are we confident that once the demand comes back, your numbers here will bounce back?

Satrajit Ray: Yes.

Moderator: Thank you. As there are no further questions from the participants, I now hand the conference over to the management for closing comments.

Anurang Jain: Well, we have no further closing comments. Whatever we had to say were covered in my opening remarks.

Moderator: Thank you. On behalf of Axis Capital Limited that conclude this conference. Thank you for joining us and you may now disconnect your lines.