APAR
Tomorrow's solutions today

SEC/3008/2023 **E-Filing** August 30, 2023

National Stock Exchange of India Limited "Exchange Plaza", C-1, Block G, Bandra- Kurla Complex, Bandra (E), **Mumbai – 400 051.** **Scrip Symbol : APARINDS** **Kind Attn.: Listing Department**	BSE Limited Corporate Relations Department, Phiroze Jeejeebhoy Towers, Dalal Street, Fort, **Mumbai - 400 001.** **Scrip Code : 532259** **Kind Attn. : Corporate Relationship Department**

Sub. : Submission of Transcript of Investors Meet / Investors Day organized by APAR Industries Limited (the Company)

Ref.: Reg. 30 read with Para A (15) of Part A of Schedule III & all other applicable Regulations, if any, of the SEBI (LODR) Regulations, 2015, (Listing Regulations) as amended from time to time.

Dear Sir/Madam,

We refer to our letter no. SEC/2108/2023 dtd. August 21, 2023 vide which we had intimated Exchanges about the schedule of Investor Meet / Investor Day organized by APAR Industries Limited (the Company) on Thursday, August 24, 2023 for Analysts/Investors.

Pursuant to Regulation 30(6) of Listing Regulations, we are now submitting herewith Transcript of the Investor Meet / Investor Day organized by the Company on Thursday, August 24, 2023 for Analysts/Investors for the information of members.

The aforesaid transcript is also made available at the website of the Company at www.apar.com.

We request you to take the above on your record.

Thanking you,

Yours faithfully,

For APAR Industries Limited

SANJAY A RAJU KUNDER

Digitally signed by SANJAYA RAJU KUNDER
DN: c=IN, o=PERSONAL, title=7428, pseudonym=9fdab5687d624d86f9090b9361568600, 2.5.4.20=e1e7d445b70d0143f3f8fbc5d579df83d4f144d97b964a056bb8281762428b3, postalCode=400083, st=Maharashtra, serialNumber=0c5c938eb4e54110332d07255e723e3bd1a6849c5d87c4f34e93ac3333aa715, cn=SANJAYA RAJU KUNDER
Date: 2023.08.30 21:35:37 +05'30'

(Sanjaya Kunder)
Company Secretary

Encl. : As above

"APAR Industries Limited

Investor Day"

August 24, 2023

MANAGEMENT:

MR. KUSHAL DESAI – CHAIRMAN AND MANAGING DIRECTOR

MR. CHAITANYA DESAI – MANAGING DIRECTOR

MR. RISHABH DESAI – DIRECTOR, PETROLEUM SPECIALTIES FZE

MR. RAMESH IYER – CHIEF FINANCIAL OFFICER

MR. SHASHI AMIN – CHIEF EXECUTIVE OFFICER

MR. SUYASH SARAOGI – PRESIDENT STRATEGY & PROJECTS, CHIEF SUSTAINABILITY OFFICER

MR. SURYA SHOBAN BABU – SENIOR VICE PRESIDENT

MR. SUNDAR SUBRAMANIAN – BUSINESS HEAD, LUBRICANTS DIVISION

MR. GIRISH GUPTA – BUSINESS HEAD, TELECOM & CONVERGENCE

Ramesh Iyer: We welcome all of you at our Investor Day event. This event is being scheduled over a two-day period. Today, we will be taking you through the presentations on the business overview and tomorrow being the plant visit. Let me briefly take you through the agenda for the day. We will begin the session with an address from our Chairman cum Managing Director Mr. Kushal Desai and Managing Director Mr. Chaitanya Desai. This will be followed by the divisional presentations namely the conductor division, specialty oils and lubricants, cable solutions and telecom solutions.

Post that we will have the financial review and after that we will have a presentation on the ESG initiatives taken by the company. After that we will have the Q&A session. We request all the questions to be taken up during this Q&A session. There is a QR code, in each of the table and we request any questions coming up during the course of the presentations or even later, you can scan the QR code and post your questions online, which will be answered during this Q&A session.

For participants joining the live stream, you can put the questions on the chat room. Tomorrow would be the plant visit, it is being scheduled at our facility in Rakholi, in Silvassa and in the Khatalwada. And with that, I would now request Mr. Kushal Desai and Mr. Chaitanya Desai to please begin the session for the day. Thank you.

Kushal Desai: Good morning, everyone and a very warm welcome. This morning it is not raining and the weather seems quite good. So, we are in a position to begin pretty much on time. So this is the first Investor Day presentation that we have had and so as in APAR we keep learning as we go. So your feedback would be quite valuable in terms of, what you think about it and what are things that we can do. So, we are starting off actually by just, the first slide actually covers very quickly some of the mission and philosophy behind the company.

And we take it very seriously at our end. And you will find, as you go through the rest of the presentation that it forms an integral part of our go to market strategy and the way in which we have constructed our businesses and products. So our mission has been and all of this is available on our website to design and

manufacture building blocks for energy infrastructure, for transportation and telecommunication. The sectors that contribute meaningfully to this world and we want to be more energy efficient, more environmentally sustainable and create the world to be a safer place.

So you will see this running through the entire set of products that we have. We have also selected our verticals very carefully. We want to be a global leader in whatever we do and the focus is clearly on the energy infrastructure, transportation and telecommunication sector. And the focus that we have always had is to bring solutions to our clients and the tagline of APAR is Tomorrow's solutions today and so that's the main area of focus for us. These are the values that we have. Innovation has been at the bedrock of our industry. What has happened in the last 10 years is more than what you've seen products and services change over the last 50 years plus that the company's existence has been.

We are quite driven, proactively striving for better outcomes and solutions for our clients. We believe that we are a very entrepreneurial company. Our people are empowered to take ownership and this runs, down the ranks. You will meet today a whole set of business leaders who actually drive revenue, sales and strategy in the company. In terms of accountability, that is a value that is very important for the kind of execution that is responsible for sustainable growth. And then we've defined leadership as, inspired to lead the innovation curve. So that's how we have an ideal Aparian.

And that's something that we run all the way through the company. Current strategy of the company and its foundation pretty much was laid by late Dr. Desai, he was second generation, I'm the third. Rishabh is here who you will hear presenting, he is part of the management team, he is the fourth generation in the company. So one of the principles that Dr. Desai laid down and it continues to be a best practice even today for us is that we want to be a leader in the top three in our business segments and this has propelled us to be very focused in our business verticals and we have defined the market to be the world.

So, we want to be the best in those defined areas and we want to lead the innovation curve in each of our business segments and that is why the company motto actually is very important for us which is delivering tomorrow's solutions today. We went through a big branding exercise a few years ago and we've unified our logos, made everything more contemporary, gotten all our verticals and all that pretty much together. So we have our specialty oil group, we have the lubricant business, both of them will present.We have the conductor business, then we have our cable solutions business, and then we have a telecom solutions business. So if you see, one of the things that we've changed is that we've made sure that all our product offerings actually are a form of a solution to a client. Coming to the growth opportunities, we really see these six areas which are the primary six areas that the company is focused on and from where we see in APAR, the growth opportunities to take us from today over the next, 10 years.

The beauty is that these opportunities actually are not short-term opportunities. They are structural in nature and changing the way the world is going to operate. So, the first one which is probably the biggest driver in our business today and it's very closely linked to the transmission expansion side is the addition of renewable energy which is wind, solar and nuclear. So there are various commitments which governments have made. There is a huge ESG thrust which we are seeing from our clients.

It is actually coming outside, inside, so from overseas clients but even in India you see the reporting starting to come in and my colleague Mr. Saraogi Suyash will have a section to explain to you what our own initiatives are in this space. Public transportation is a major area that is changing, that is your trains within the cities etc. The whole transmission expansion that is in place to evacuate power from all these new additional sources. The telecom vertical is undergoing a massive change.

And in India, you have BharatNet and a whole lot of interesting products that are coming in with the 5G and with the manner in which data transfer is taking place. So you'll hear a little bit in terms of those specific products and solutions. Then

you have got general infrastructure development in this country. One of the great things that this current government has done is to allocate massive amounts of money for infrastructure development and that brings with it a whole lot of equipment's that are required and the moment you have an equipment, you have a lubricant. So you have a little bit of a coverage in terms of that.

And then finally, the manufacturing in China plus one. India is finally coming to a stage, and I'm sure you'll cover so many companies. A lot of capex is going in into manufacturing infrastructure and again there is a play there for both cables and lubricants. Coming specifically to the addition of renewable energy, we have kind of divided this slide into two parts, what is the sector opportunity and what is it that APAR has to offer, what is the advantage that we have kind of built in that sector.

So this presentation is going to be on the, I think it is already on the website or it is going to be on the website as soon as we finish. So you can pull all the slides, it is all going to be in the public domain. So if you look at the sector opportunity, the solar installed capacity is expected to grow by almost 225 gigawatts and the wind installed capacity is expected to grow by about 55 gigawatts during this 2024 to 2030 just in India alone. Similar sort of expansion is happening.

Our sense is that and our focus is on the G20 countries because to do this you need currency, you need investable dollars and the G20 countries are the ones which are in a better position to actually put the money in for infrastructure. It is not all government led, a lot of it is through private investment. India aims 45% less carbon and 50% renewable energy by 2030 and to be net zero by 2070. Even if you miss this number by a decade, the amount of work that is going to go on is just tremendous.

If you see what we have to offer with the leader in domestic solar cable segment, we are the most dominant player in the wind segment with over a 70% share. You will see a slide later on which kind of explains where these cables are used and our products are used in the whole network. The range that we have, it meets all

the global standards which is the EN standard which is the number one standard that operates globally. You have IEC, you have UL, you have CEE.

So we have products which meet all of these standards. So they allow us to participate not only in the Indian market but wherever this goes in the world. And in fact if you see the markets for us in terms of revenue, after India, the next largest is the United States and the third largest is Australia. If you look at the global renewable energy addition growth that is expected to happen, we are looking at 150 gigawatts from 2024 to 2027 and globally renewable energy share to increase from 28% to 38%. Basically substituting hydrocarbons in place and here wind in many countries around the world where you don't have the kind of sunshine that's there in Asia and in India etc. is going to be a very major player.

You see some of the largest wind turbine manufacturers are all located overseas. We deal with all of them. We have Vestas, you have Siemens Gamesa, you have Senvion, Envision which is a big Chinese player and they have set up manufacturing in India, Nordex and GE. GE are the world's largest wind turbine producer at the moment. They are also the largest exporter for cables and conductors from India and hope to continue this. So 50% of our revenues basically across all the three verticals comes from export.

In terms of the third area, you have extensive transmission and cable infrastructure required to transmit the power from these remote locations. And there is a chart as I said which will explain this to you much better. The concentration of expansion is happening pretty much simultaneously in the G20 countries today. So we have products serving the renewable energy infrastructure right from generation, the transformation, that is the substations and all which steps up, steps down power, transmission and distribution through the last mile.

So this chart, it may appear a little bit busy, but it gives you the full idea in terms of the end-to-end where APAR products are used in this whole renewable infrastructure. So the first portion is, the renewable power generation. So we have got a whole lot of cables in there, the string cables, low voltage cables, etc., etc. So it has got a, when you see the slide in detail, you can see all the different cable

types. But in short, you have got cables for solar panels and that gets connected to a junction box. The junction box goes to an inverter.

In the case of wind, you have the wind turbines, you have a cable that runs through the tower. Then it goes to a ground base. That ground base from there, the cables go into an inverter and both of these then go into a substation where you got a transformer and you have, the stepping up of power taking place. Then from that substation, you move into the overhead conductor side. So you have got a grid, either there is a new grid or there is an extension to an existing grid.

There is a whole lot of strengthening of grids happening where the amount of transformation is not adequate and it is being increased. It is allowing for a whole lot of re-conducting solutions also for which we are a leader. And then you have got again step-down transformers and then that leads them through underground cables and the full last mile distribution. So whether you do wind or solar, fundamentally the same network holds good. APAR is present in every stage of this and we offer these products not only in India but in all markets around the world.

In terms of public transportation including mobility, the big opportunity that is there is the infrastructure investments in India happening in the railways. So this is intercity, metros which is intra-city and also a high speed rail conversion. So not only bullet trains but even Vande Bharat and all of these. So the APAR advantage is that we have a full range of cables that go into coaches and locomotives and we have forward integrated into a full harness solution. So the entire piece can be then supplied to the railways and increasingly the railways are looking at outsourcing manpower intensive kind of work.

We are by far the largest cable supplier in the Vande Bharat train. So as the trains start rolling out, you will have more and more of APAR cables running in there. We are the market leader in supply of conductors for the Indian railway electrification. Most of that project is coming to a close. But you are now having upgradations happening because some of the Vande Bharat trains are not able to

run at its full speed because there is not enough power that is, there is not enough current that is driving or can be carried on those lines.

And my colleague Surya Babu has a specific slide that explains to you all the products that go into this whole railway side. And then you have the EV market is projected to grow by 49% CAGR, it is anybody's guess. But our sense is that this whole electric will move more in terms of public areas, so you have got buses, taxis, all these. And you will have a full charging infrastructure that comes in. At the moment, India has one charging station for 125 vehicles only in urban concentrated areas.

So forget about the rest of the country, just looking at a city like Mumbai for example and this is very, very low compared to the global average of about 6 charging points per vehicle to 20 charging points per vehicle. So there is a, these are all highly cable intensive and what do we have to offer? We have electron beam based auto cables, we supply those to JBM. Now we've got approvals at Olectra. We are working on getting it with Leyland. So as this transportation increases, and we supply this not only in the form of cable, but also the harness.

And we've also developed for the first time a complete indigenous manufacturing harness for the EV charging. So there is a charging cable, there is a connector, what you would use instead of a pump, you use that connector to connect, charging of the vehicle from an electric point. In terms of the infrastructure growth, the government has been allocating investments in building extensive road network, the freight transportation corridors, ports, tunnels, airports, commercial buildings, all of that.

And there is a steady growth also in personal mobility that is happening. So with this road infrastructure improving, what's happening is that we keep a track of generally the number of vehicles that are put on the road, which is trucks and cars. A number that's more elusive is how many kilometers each of these are actually traveling. And the lubricant consumption is a proportion of the amount you move. So the turnaround times are significantly better after GST has come in.

With these highways coming in, so the time that it takes today to go from Mumbai to Delhi is half of what it was in the pre-GST period. It's probably going to become another half, so it will be one quarter. Mr. Gadkari has been saying 12 hours, . So literally you can have the vehicle reaching there the next day coming back. So you can imagine the same vehicle's utilization going up, a lot of more fuel and lubricants being used by a vehicle. With the highways coming up, I'm sure a lot of you would prefer to just drive for distances 200, 300 kilometers. You're much better at driving than taking a train or a car.

So again, that's adding to the miles. We have a whole range of lubricants that go for off-road equipment for infrastructure which includes cranes, road construction. We have products for dredgers, we have products for tunnel boring machines, we have products that go into mining equipment. My colleague Sundar will actually cover a little bit more about that on the lubricant side. We are also offering a complete range of specialized cables that go into all the infrastructure equipment.

We have a cable that drives for example tunnel boring machine as an example. And then you have got this increased manufacturing opportunity in India, with the capacity increase taking place. And with the cost of labor going up, not only are you having a higher capacity coming in each industry, but you are also having more sophisticated equipment with a higher level of automation.

And so, as you get into that, you have more expensive equipment, lubricant consumption, anything that moves requires really a lubricant and, the value that is given for performance and protection of these equipment's keeps increasing. So there is not only a volume growth, you will see in the lubricant industry volume growth is 3%, 2% because the lubricants have a longer life and a higher performance. But the value is growing at a much higher rate.

So again, it is a similar thing as cars, it is not just the number of cars on the road, but how many kilometers is traveling, the same sort of effect is there on lubricants. Recently, Klein, which is one of the top research houses in the country, they have taken out a report on the Indian lubricant industry. And there are some, the summary of that is available on their website. So if any of you are interested to do

a deeper dive on that subject, this is a great place to look for it. We also have a full range of lubricants for the industrial applications, as I said, hydraulic compressor, metal working etc.

We are a trusted lubricant supplier into the whole gas pipeline CNG station filling area and then we are one of the largest suppliers of lubricants for tractor manufacturing and farming equipment. So we supply ITL, we supply Escorts, we supply TAFE Eicher, all of these for their first fill as well as their genuine oil requirements. I will now invite Chaitanya to actually just run through the remaining verticals and also the premiumization story that we have had.

Chaitanya Desai: Good morning. So on the transmission side, last five years in India we have seen about 80,000 circuit kilometers being added and 350,000 MVA of transformation capacity. And in this area, APAR has an advantage. We are not only manufacturing the transmission conductors, but also in this segment in the tariff based competitive bidding, which is the major requirement in India, the product that is now being used is moved to a specialty alloy.

It is a high efficiency conductor and there are very limited players of this compared to what the conventional type of product that was being used earlier in the TBCB. Besides the conductors, also cables are being used, also the transformer oil, then within the transformer we make the copper winding. So, these are the various products which we are supplying in the transmission segment. Another major driver within the transmission area is due to the right of way problem.

To put up the new towers, to put up the new transmission lines, there is a requirement to buy the land or to get the land from the farmers and people who own that land on the way to put up this transmission line. So because it's becoming such a acute difficult problem, the various utilities worldwide have been forced to re-conductor. That means they want to replace the old conductor with one which can transmit double the amount of power.

But the current entire infrastructure of the towers remain the same and there is already a certain ground clearance which is the distance from the ground to the

transmission line conductor that cannot be violated because obviously we do not want anybody bumping into a lifeline and getting into any safety issue. So, to maintain that ground clearance, the product that is being used is called a low sag conductor. So, it is a high power carrying capacity, but at the same time, in spite of it being at a higher temperature, there is the requirement of it not sagging down. So, therefore, it is called a high temperature low sag conductor.

And different parts of the world had moved to different type of technologies and APAR is able to produce all the varieties. And even within India, the different states of India and the different utilities depending on their requirements have been using different type of HTLS products. APAR has done more than 150 reconducting projects. We do this on an end to end basis because the conductor is a very major portion of this entire project. And also we have supplied 35,000 kilometers of HTLS, various types which are working satisfactorily.

There is a fair amount of technology in these products compared to even the high efficiency conductors which are used in the TBCB. Another driver in this transmission side is the replacement of earth wires which are used to avoid lightning strikes on the towers. Those are the traditional product and that has been replaced with a product called OPGW. This is earthing but it also has a optical fiber inside it.

So, this is another requirement which we are fulfilling because we have the entire manufacturing capability and also we have the re-conducting end-to-end solution. So not only we supply it but we also execute it at the site. There are in the export markets also slightly different variations of products which are required from what is required in India. And over the years we have been developing these capabilities and making these products. So there are significant barriers of entry, especially with these foreign clients who have a very, very vigorous requirement of audit before they give the approval to the vendor.

And they do not want to just buy on like the Indian utilities on a L1 basis. The thought process of these foreign clients is very different and that is why we prefer to cater to that marketplace also. And as we heard earlier, the railways are having

lot of electrification work to replace the diesel locomotive process. And not only the conductor which is overhead the tracks, but also feeding the power to the railways, that is another area which is growing and is a big driver to our business and accordingly these various type of specialty conductors are being used to feed the power to the railways.

In the telecom side, we have been seeing a lot of digital transformation evolving very quickly and also the GB per smartphone, we expect that to grow at 25% CAGR and we think that by 2028, there should be 55 GB per mobile usage. Here, APAR has the end-to-end telecom solution. We make the hybrid copper and fiber cables. We also think there will be about 10 billion mobile connections with the majority being smartphones by 2030. There is expected outlay of investment by the BharatNet, Government of India for 1.39 lakh crores and this project from the government is for the last mile connectivity across 6.4 lakh villages in the country.

Here we make the full range of offering including the fiber optic cables, hybrid cables, LAN cables, copper cables and the OPGW conductors and also in addition to these standard products we are customizing through innovations to make certain value added products for various clients. The third driver in this telecom segment is the advent of data centers and cloud computing. And we have the full set of cables for data centers and increasingly we are pushing for approvals through the consultants.

What has played well for APAR is that we have made a conscious effort for premiumization. Here we have worked not only in developing the products but convincing the clients to shift through explaining to them the value proposition from the conventional type conductor to high efficiency conductors is an example. Not only the Indian market has moved in this segment as I explained about the alloy type product for the TBCB and the HTLS type products, but also in the export markets where the clientele are looking for a very vigorous quality standard requirement.

Those markets are premium markets and we have been improving our margins through catering to both the domestic market and the export market through these

strategies. We have been taking on these various projects on end-to-end EPC turnkey basis, especially in the OPGW and the HTLS type markets. Another example of our effort to premiumize is through improving our mix of Naphthenic and special grades of oil, especially on the higher voltage classes. And in terms of the cables, we have been making a very conscious effort to grow in the elastomeric and special application cables used in various growing markets like solar, wind, shipping, mining, defence and railways.

So through this premiumization of portfolio, our return on capital employed and return on equity has improved and these are most important parameters that we look at. Another area is through our globalization effort. We export to over 140 countries now and also about 50% of the company's top line and in each of the three businesses of conductor, cable and oils, this 50% top line is being maintained for the export markets and obviously for the entire company as well our effort is to do more globalization.

We made an effort to reduce our dependence on the government utilities, which traditionally APAR used to do a fair amount of work. Right now it is hardly 1.6% of the company's turnover is coming from government companies and that means the remaining 98.4% is coming from private segment. There is a lot of synergy between all our businesses because within the power segment we have conductor, cables, transform oils and the various type of copper winding products going in the transform industries. We also have lot of relationships in terms of the common customers like the global utilities, EPC contractors and the OEM that we cater to.

So this globalization process has also helped in fragmenting our customer base. Another area that we worked is on innovation and increasing the robustness in trying to understand what are the customer problems and how we can provide a solution around it through innovative solutions. So these are some of the examples we have. When India wanted to go for a 800 KV HVDC application, then our oil we could design and we are the only manufacturer of that. Similarly we've come up with a high-performance biodegradable renewable transform oil which is launched first of its kind with extended life.

We are the only Indian company to have an electron beam house wire called APAR Anushakti which has 50% more current carrying capacity and much superior melt resistance and it can withstand higher temperature. So it improves the safety factor by a huge margin. We also make special FRP fiber optic cables for critical infrastructure projects. Similarly there are number of other products for the exports like the solid shape conductor, the air expanded conductor, dull finish conductors.

All of these improve the efficiency, they improve the sustainability for the client and ultimately better value proposition for the client. Similarly there is the transform oil any premium and similarly there is specialized renewable cables. We are also making harnesses, giving it as a solution so that it can reduce the amount of labour requirement for the client and also reduce the wastage that happens at the client place. So, these innovations for each of these divisions has helped in synergistic diversification.

So, we can use our common facilities, our core competencies to increase the product offerings with different markets and also improve our robustness. So in case for any reason there is a little slowdown in one segment, then some other can pick up the slack and we can utilize our assets in a better way. So to sum up, we feel we are in a favorable industry and our fundamentals are strong as a company. We see sustained growth opportunities. We are very focused in our sectors.

There are times in the past when the sector was not doing so well, but we stuck to our core competencies and growing in that area because we see enormous opportunities going forward and this is now panning out in the last few years as Kushal mentioned earlier. So our focus is in solving Tomorrow's solutions today and for our customers, enabling us to lead the innovation curve. And APAR embodies a long-term pursuit of excellence where our DNA drives us to keep ascending passionately and achieving responsibly. So with this I request my next client to take it forward. Thank you.

Surya Shoban Babu: Good morning, warm welcome again. My name is Surya Shoban Babu. I am Senior Vice President, taking care Sales and Marketing for Conductor Division. Today I will be covering mainly brief overview about conductor business market overview

and products and services we are offering to the industry. If you see we will be seeing and hearing a lot of investment is happening in the power infrastructure and transmission and distribution segment also lot of investments are happening.

But what is happening on the ground and the question is what it is driving this requirement or growth and how long this growth is going to sustain is an important question. So if you see the mainly everywhere the power demand is growing. Why what are the key drivers which is this is driving this growth? Mainly the electrification of transportation system, economic growth and population growth. And there is a decarbonization drive is going on because of this, there is a lot of pressure on the power sector that renewable energy generation has to happen.

So for that lot of solar, wind and nuclear energy generation is happening. So to this this renewable energy has to add up to the grid. So there is a requirement of transmission lines are coming up and also this fossil fuel cost is going up so renewable energy is an alternative solution so we need a lot of transmission and distribution network requirement is coming up. Then there is a smart grid requirement is there because we have been having you know our old transmission networks where the inefficient and power losses are more so we need the quality power and efficiency has to go up to reduce the losses.

So there is, again, a requirement of new transmission lines has to be established, or otherwise, old transmission lines has to be renewed or made with these smart grid solutions. So coming back to the market overview, domestic and export. So in India also, power ministry is saying a lot of infrastructure investment is happening. But what is there for APAR? in next five years, it is already there on the plan and in the execution is happening. 28,000 circuit kilometers, has to be completed by 2027 and 28. So, which means almost 12 lakh to 13 lakh metric ton of conductor requirement is there. Those who don't know what is conductor briefly, is a transmission line, distribution line, that is a big big towers are lying, and conductors are hanging on the towers.

So those are the conductors which carry the current. From generation to substations, these transmission lines are built. And from substations to the cities,

inside cities, those are called distribution networks. So the current carrying is done by the mainly aluminum overhead conductors. So, we manufacture those. Then there is an augmentation of transmission lines are there in almost 18,000 circuit kilometers are planned in next 5 years.

And there is an export market for APAR, almost in the similar tune of requirement across the global, wherein almost, 4.5 million metric tons of conductors is needed for next, 5 to 10 years. That means, almost 8 lakhs to 10 lakh metric tons of conductors are needed across the globe. Out of these, major investments are coming in India as well as, in Asian countries. But, and apart from India, we have a big market, USA market, and there is in Brazil, Australian market, also in Europe, a lot of renewables are coming up.

So there is an African market wherein, a lot of still, this power requirement is there. So basic needs still not yet fulfilled. So there is a lot of scope is there in the African countries. If you see our conductor journey, we have started in 1958. Then until 2012 we are focusing on the conventional conductors. In 2014 we had a technical collaboration with the CTC Global American Company, who manufacture carbon composite cores. And we started manufacturing HTLS conductors. These are called HTLS, is new age conductors.

In 2016, we started our Turnkey projects, end-to-end solutions. In 2017, we have started our OPGW cable manufacturing facility. And we have developed our in-house design capabilities. Then in 2018, we have entered into our copper business, started with the railway conductor. It is the largest conductor manufacturing facility for railways and we are first to manufacture copper magnesium for high speed bullet trains. In 2019, we started CTC conductors, these are a copper enamel conductors, paper covered and this is this conductors goes into transformer.

In 2022, we have started again few more products in the copper segment, busbars, strips and rods mainly serving to the switchgear industry and panel manufacturing, some of the motor industry also using this and some component manufacturers. In 2023 still, the demand is still growing, so in spite of having

largest capacity, we are still expanding our conductor manufacturing capacity to, meet the, domestic needs. These are brief, our product profile starting with conventional conductors.

Conventional conductor basically this ACSR and AAAC conductors have been under used since decades. And these conductors still are being used across the globe, like in American developed world we say.

In America, maximum conductors almost 90% of the conductors requirement is only ACSR conductor. Whereas in India, we have moved ahead like this – from the conventional conductor to new-age conductors and rest of the world is catching up. So we can say, India is the leader in terms of moving ahead to the latest technology. So the main industries we are catering to power transmission and distribution segment. Our major customers are mainly power utilities, developers and EPC contractors and some of small quantities goes through the dealers and distributors.

In this conventional conductor segment, our strong leadership and competitive is, we are having rich experience because we have been manufacturing since 1958. So we have developed our strong expertise in this manufacturing. And we have been supplying since last two decades to the global clients. So we have got very top global people uprolls we got. So we have got very good credentials and we are exporting to 100-plus countries. And we have a strong design capability that is -- we're in a lot of focus on R&D development. So these are our strong leadership qualities we developed.

And coming next products are HTLS conductors. These are new-age conductors. HTLS is High Temperature Low Sag conductors and we have supplied these conductors, almost 50,000 kilometers. That means more than 50%, almost 55% of the share. This is mainly in India and Bangladesh, Nepal. So these are the new-age and new technology conductors. We are a leader in a position we have and a bigger market share we have.

So in this segment, almost we have done end-to-end solutions, almost 155 transmission and reconducting projects were completed, 10 projects of distribution line conductors, we have completed. In this mainly the conductor used these majorly ACCC conductor. ACCC meaning Aluminum Conductor Composite Core which is I told you that we had a technical collaboration with CTC Global. They are the manufacturer of this carbon composite core. So this conductor predominantly used in India and Bangladesh, Nepal and across global, it is getting prominent in even North America and South America and even Europe also, it is getting popular.

And after this ACCC conductors, there are different like ACSS conductor, GAP conductor, STACIR, meaning super thermal alloy. The super thermal alloy conductors are Japanese market, actually. But in India, also one or two lines we have used. But majorly, if you see ACCC predominantly and more popular in our industry.

There's OPGW cable. This is in – actually from 2017, we started supplying and getting popular since 2017 onwards. Prior to this, in the transmission lines, normally, we used to use GI wire as an earth wire. In the normal transmission lines, you have a phase conductor and neutral conductor. In the neutral conductor means earth wire is there. Earth wire was made up of galvanized steel wire.

But after 2016 and '17, these OPGW Cable started using it because it is a dual-purpose conductor. It can be used as earth wire as well as in the center there is an aluminum and steel tube is there, which is having fibres in it. So this is used for a transfer of data for telecom. So we have also doing end-to-end solution for this, like taking out the old GI wire and replacing with the OPGW cable. So we have done a lot of projects in this segment.

Another products, aluminum specialty alloy rods. These are the rods and wires we are catering to various segments, mainly 6,000 series are electrical grade alloys. These are the main applications are mainly transmission and distribution line fittings. Then some of them are used for fasteners as well.

And another grade is mechanical alloy grades 5,000 series alloys. These 5,000 series are – the application is mainly fasteners. Nut and bolt manufacturing wire mesh industries. And some 4,000 series alloys also we manufactured. This goes to the mainly welding of aluminum plates and different, different applications is mainly building application. Then we also manufacture high conductivity, high temperature resistant alloys like super thermal alloys and extra super thermal alloys. And this is application is for only conductors.

Now coming back to the – our copper business, railway overhead conductors. This we have started in 2017. So in this segment, we are the largest number one in terms of manufacturing capability and as well as – and we sold – we have a 70% of the share. If you see in the train – above the train, there is line, an overhead line, which is called OHE line, which has got contact wire, the train penta-graph touches with the wire, so that is called contact wire. On top of that catenary wire, there is in between dropper and jumper wires are there. This is the network power. This is a 25 kV power line, which supplies the electric power to the train. So there is a penta-graph, if you see the penta-graph continuously touches the conductor. That is the reason why that is called contact wire.

So in this segment, if you can see 70% of our market share, that means 31,000 kilometers – route kilometers, this the conductor has been established. If you see 70% meaning almost everywhere, if you see in Bombay, Western line and even Central line, these all conductors is installed by APAR. 70% market share means a huge quantity. Literally, we are monopoly in this segment.

Next, conductors are CTC conductors. These are copper enamelled conductors in stripped with insulating paper, special insulating paper. These continuous transports conductors are used in the transformer winding. These are the heart of the transformer. These are very sensitive and highly technical and design-oriented conductors. And very difficult to manufacture because it requires in a special condition, dust free environment needed. So in this segment, we are supplying domestic as well as also export, but gradually, we are expanding in this space.

And other products, copper rods, wires, bus-bars, mainly industries we are targeting here is switchgear industries, electrical panel manufacturer and electrical substations and some of the products going to even motor manufacturers, very new. There is a larger diameter of copper rods are being used as a rotor inside the motor. So certain elements are also supply to component manufacturers. So various products we are continuously developing in this segment.

We are also apart from the only product supply, we are into end-to-end solutions, mainly turnkey projects. So we are into reconductoring mainly, but we have started with the conventional EPC. We have done four projects, Himachal Pradesh and Jammu and Kashmir. But we are mainly focusing and want to develop our expertise in the reconductoring space because in India and Bangladesh, wherever they the right of way isn't a big problem. So – and most of the old networks are now inefficient. So those networks has to be removed and modernized. And some areas because of the power demand has grown up, the existing infrastructure network is not having capacity. So we need to increase the capacity. If at all, you want to build up in a new transmission line, it takes minimum three years to five years to build a new transmission line and with a cost of INR3 crores to INR5 crores per kilometers.

So it is a good solution that the existing towers if you replace the only conductor part, so the time period and the cost, both will be saved and existing lines itself, the capacity can be doubled. So this is a big advantage. That is the reason why this space is going to grow in future, not only in India, also in Europe, everywhere across the globe, it is going to pick-up this business. That is the reason why we want to focus and develop our expertise in this segment.

So far, we have almost completed 155 projects and many more projects are in the pipeline, transmission lines and distribution lines almost 10 to 15 distribution lines also we have completed. We are also into live lines, replacement of OPGW cable. So in this segment also, we have done many, many projects, and we have done in the very challenging situations like we have created some world records in this segment. Like tallest place and very difficult terrains, hilly areas, such type of very

challenging situations, in Seas, backwaters, such type of areas, it is very difficult to execute the project but we got the expertise and experience in this segment. So we are well placed in this segment.

Also, we are doing telecom integration and also substation augmentation. Our next move is to go for EPC in the MVCC segment, that is Medium Voltage Cover Conductor segment and also EPC underground cables. These are the some snapshots where we have carried out our projects in sea, ocean areas and backwaters and mangrove areas, our highest towers and dense populated areas, then in the forest and in difficult hilly terrains such type of big, big challenge. So we got a lot of experience in this area.

We have a beautiful laboratory, which got accredited by the international laboratory. So we'll be able to conduct all the test type tests inside our laboratory, whereas our competitors has to go outside the country, which takes a lot of money and a lot of time. So this is the competitive edge compared to our competitors.

Then we have a strong focus on our research and development. So we are continuously developing new, new products. If you see APAR competitive edge over our competitors, premium of products, if you see HTLS conductor need technical know-how and you'll have to have the design capability and execution capability. In terms of execution, you need to have a special sophisticated machines and mechanism, and people have to be trained people's skills are required to handle the carbon composite cores. And the customers are looking at the – in this space, life cycle cost, end-to-end cost.

So for that, you will have to design conductors and transmission line itself for lower losses, so that overall cost to the customer should be lower. So that is the reason why here, certain qualifying requirements are required. So we have that kind of a qualifying requirement, so that is in a competitive edge. Solutions-oriented ecosystem for train manpower. We have got good over the years, developed our manpower skills and we build technology.

And export market, next one, the export clients are looking for specific requirements are there, like CND sir has mentioned, they are like they want material on the short notice. So being in the largest manufacturing capacity, we have that capability to deliver the goods within a very short period of time.

Then we have the customer preferring us because we can give them the one-stop solutions because we have the design capability. So if they come up with any kind of a requirement, we can design and give them the solutions. And at the same time, the export customers mainly looking for strong risk management framework, those who have got ability to manage the risk, so that kind of a requirement they are looking for.

And tighter audit requirements, documentation, transparency and quality, these are expectations making weaker players ineligible to this market. So that is the reason why we have great competitive advantage for getting the export customers. And we have a manufacturing excellence like, in-house R&D facility we have and we have got very good experience and trained people available with us and fastest delivery due to large manufacturing capacity we have so that we have competitive price we are offering.

End-to-end solutions like one-stop solution for the customers, almost we have 165 turnkey projects experience, we have execution experience. In-house design capability we have, then technology type with CTC Global. These are all things making APAR as a competitive player in the market.

Our future plans and new initiatives, we are focusing on continuously focusing and continuously developing new projects, new products, HTLS products mainly to meet the export needs. We want to go out in the global for this reconductoring, we want to expand and we are expanding our capacity in terms of AL 59 domestic market catering the domestic market needs. We have a large capacity. In spite of that, we are struggling with the orders, like delivery.

Delivery is now a big problem. So that means that much of orders are inflow is there. So we are still expanding our capacities and we are developing import

substitute products. It's like 2,000 series alloys, 4000 series alloys we are developing. These are currently getting imported. These are mainly application or aerospace applications. So a lot of products are under development.

Focus on market development for copper magnesium. Copper magnesium, we are the first to develop copper magnesium for the bullet trains mainly, and we got approved by the RDSO. I think no other player still got approved by the RDSO for copper magnesium and copper silver. And we are focusing on to increasing our market share. Presently, we have more than 55% of export market share is there, but we want to increase further.

Here, few awards and achievements listed here, a few of them being in the largest exporter, we are getting Export Excellence Awards since 2012 till 2018. Continuously, year-on-year, we are getting this Export Excellence Award. And also, we have got HTLS, we have supplied HTLS conductors and installed. Those installed lines are successfully running in our country first time. So Powergrid has given us this excellency award.

These are our global presence, almost 100-plus countries we are now supplying, our presence is across the globe. Thank you.

Rishabh Desai: Hi. Good morning, everyone. My name is Rishabh Desai, and I am currently looking after the specialty oil business. I know there's the designations as Director. I do sit on the Board of Directors, but currently, I'm looking after exports for specialty oils, I will get to which oil is exactly.

So here is just a basic overview of the business, specialty oil business. APAR is India's largest private manufacturer and exporter of specialty oils in terms of volume. We are the world's third largest transformer oil manufacturer. And our production capacity totally is over 5 lakh kiloliters of oil. And that's in our two plants in India. We also have a 100% wholly owned subsidiary in the UAE in Sharjah and Hamriyah free zone, which is where I sit. That has a production capacity of about 1.2 lakh kiloliters. So totally, it's over 600,000 kiloliters of production.

Main four product lines in specialty oils, number one is transformer oil. So that is the flagship product the Specialty Oil division was actually founded on transformer oil. It's my grandfather, who brought the technology to India in '69. So we've been doing this for over 50 years, and we consider ourselves experts in this field. We have over 30-plus grades of transformer oil.

So I'll get to that in a future slide, getting a little bit in depth on that. The brands we sell under the POWEROIL brand name, we've also developed a completely biodegradable transformer oil, so that sells under power oil, any premium, any stance for natural esters, there's a separate slide on that.

We then have – we manufacture technical-grade white oils. So that's used in a plethora of industries. A few of them, to name a few, it's used in textile, it's used in paints, it's used in spray oils for incenses and perfumes and what not. We have 15 fast-moving primary grades, but the beauty of APAR and why we have reached where we are right now is because based on our customers' requirement, we are very much able to tailor make a product to meet exactly the specifications that they require. We're basically master blenders. And so we work with the customer to meet their requirement and specification exactly.

Then thirdly, we do pharmaceutical grade white oils. So that's used in cosmetics that come directly in contact with the human skin. So we have got approvals from Johnson & Johnson, for example, we supply to them. Our UAE plant is approved by them. We supply to them in the UAE currently and are looking to supply to them in Italy and South Africa.

We have the approvals for Unilever. We supply to Dabur, Marico. So these are just a few names we supply are pharmaceutical grade oils too. We have 15-plus grades within pharmaceutical grade as well. And the applications, there's a plethora of applications.

I was just in Australia last month actually. And in Australia, for example, there's the biggest bread manufacturing company by the name of GWF, Globe Weston Foods. And they – like, if you go to any grocery store, the first company will see

loaf of bread, like it's on eye level. So there, for example, use our pharmaceutical grade oil. It's used to lubricate their cutting knives which they used to cut the loafs of bread.

So that's an application even we didn't know that exists. So it's quite mind blowing. There's about 40, 50 different applications that we can name of these pharma grade white oils. So that's a bit about that. It sells and the POWEROIL PEARL. And if we got to mention the technical grade, the brand name is POWEROIL TOPAZ. We also – the fourth segment is rubber process oils. So it's used in EPDM, tires, rubbers, etcetera, we also have 15-plus grades. And generally, the brand name is POWEROIL SAPPHIRE.

I'll just spend a couple of minutes elaborating on transformer oil because that is the flagship product, and we are known for that. So we've worked with the OEMs all over the world, and we've designed over the last 50 years, a full range of products used in all types of transformers. So there's just a pictorial representation. These are a few types of transformers.

Now to give you a little bit of an insight as to what's special about Transformer Oil, you see over here, power transformers. These are massive transformers. You can say it's almost -- the big ones can be about one-fourth the size of this room. So there's a really big structure. And there's a few kiloliters of oil that go in sometimes 20, 30 kiloliters of oil.

Now the oil is used as a coolant and an insulant to keep the transformer cool. And it's also used as a diagnostic tool. So like in a human body, you will take a sample of the blood to see the health of a person. So similarly, you will take a sample of the transformer oil, which you can use to study the health of the transformer because these are huge machines that are connected to the grid. So it can't just be turned off and turned on.

The oil that goes in this transformer by cost of making the transformer, it's about 5% to 7%. So it's not a huge chunk of the cost of the transformer. But if there's a problem with the oil and there's a build-up of sludge, which gets entrenched in,

say, the windings or damages the paper. That entire transformer can then get defunct, there could be an explosion or there's a big safety hazard and the transformer has to be disposed of.

So even though the oil is actually 5% only of the cost of the transformer, it's vital to the health of the transformer. And this oil has to last and perform in a transformer for 20 years, sometimes even 30 years. So for example, a car engine oil, you will change that every 10,000 kilometers, at least that's the rule generally they say, depending on the grade, of course, that will elaborate. But that's the rule of thumb, whereas here, you can only top up the oil bit-by-bit, but it has to last for 20 years, 30 years. So that's why it's such a specialized and technical product. And you will see, who, we have the approvals from. And there's a reason there's a very stringent approval process, etcetera.

So this is the slide with all the global approvals. So we've been approved in all the big OEMs. You can name everyone from ABB to Bosch to Hyundai, Hyosung, Siemens, to name a few. The utilities, we've – these are just a few. So we are obviously in SEWA, ADVIA in the UAE, we have Power Grid in India, Energy Australia. So there's a whole bunch. We are approved in all the following laboratories as well, Doble and eNZoil, etcetera, Laborelec.

So a few areas of focus and growth. So number one, transformer oil is a huge area of growth that we've identified. As spoken in the earlier slides, I won't get too much into it, but the grid is expanding. Electrification is required with the coming of electric vehicles and electricity just needs to reach the far corners, not only of our country, but of the globe as well, so for growth to take place. So that's a huge area of focus.

Number two, what I wanted to focus on a little bit is the biodegradable oil because that's a unique product that none of our competitors really have managed to make a product of this standing. So it sells under the brand of any premium. Now what makes this oil so much so special is that if you see the chart on the side over here, a regular oil, its own mineral-based oil, it's somewhere between 20% to 60%

biodegradable, whereas the any premium oil that we have developed using a genetically modified seed, we get the oil from that. It's at least 60% to 70%.

The latest product, any premium – the latest specs that we've developed is over 90% biodegradable. So where does this come in use? Many times, you have transformers in remote locations. So say you have a mine somewhere in the forest or in a hilly area. These areas are prone to natural disasters, maybe floods, maybe earthquakes or this transformer could be located next to a water body, for example.

So if there was to be a natural disaster or a leakage, whatever could happen, if it's a mineral oil and it leaks, it could lead to environmental contamination damage, etcetera whereas in the case of any premium, even if there is a bad incident and the oil was to leak, it's 90-plus percent biodegradable, so it's not going to really have a major impact on the environment or the ecosystem. So that's a big thing, you'll hear about sustainability later. So that's one of our kind of contributions in that sense. And the world is moving towards a more sustainable outlook and we have to be socially responsible. So this is a unique product.

What stands us out above our competitors is that the quality of our oil the life of our and any premium oil compared to any of our competitors, the life is almost 3x. So yes, we do charge a premium, but it's a very specialized product with a much better performance and life. So we're very bullish on this front.

Third, I would get to a product called hot melt adhesives. You can see hot melt adhesives that's used in a lot of hygiene products. It's used in diapers, sanitary napkins, fruit labels, medicine bottle labels now. I've just become a father. So I've got – I get my PhD in changing diapers, for example. So you know, the sticky part, which you unstick and then re-stick onto the diaper to tighten it, that is a hot melt adhesive. And our oil is used to manufacture that hot melt adhesive. Now where the oil comes into play is it reduces the cost, number one. It can be used to increase or decrease the viscosity, decrease the hardness and it improves the cold resistance.

So in cold countries, etcetera, you'll see that it's hard to stick things because of the temperature. The adhesive, it hardens and the stick comes off. So based on what the customers end requirement, we have tailor-made products. So we've actually worked with a lot of our customers to develop very niche products to meet their specific requirements because, for example, the hot melt you need on a diaper is very different from what you need on a medicine bottle, the stickiness of that adhesive is very different.

Like on a diaper it's supposed to re-stick, on a bottle it's a onetime stick, but it has to be a much stronger seal in that sense. So we've tailor-made our products to meet these various applications. Our competitive advantage is that we are only one of three global manufacturers of such a product. We offer the grades specifically for hygiene applications.

So you need very stringent approvals for that. Of course, as I mentioned, we have tailor-made products to suit our customers' needs. And of course, we have signed confidentiality agreements because the IP, it's -- I mean, the IP is the game over here. So of course, we have to keep those legalities in place.

Lastly, I will just come to the heavy grade of white oil, which is used in TPE/TPV. So TPE, it's used in the following applications. This is just to name a few. Number one is non-staining shoes. So in the soles, if you've played a racket sport, you have to wear special shoes on a Tennis Court or a squash court, which don't stain the court. So our white oils are used in that manufacturing. It's used for plastic bottles, toys for children, automobile parts, pen grips, toothbrushes, I mean it's used to make mobile covers. It's used to make seals, etcetera.

So there's a wide variety of uses of TPE/TPV. This is a very – it's an industry that we've identified as a very high-growth industry. There's huge opportunities in markets like Turkey, where we actually do have a joint venture, and we are blending certain products locally and selling to all these big TPE manufacturers. So in terms of a competitive advantage, again, on this front, we are offering tailor-made products to suit customers' exact specifications and needs.

We have variable blending capacity that empowers us to manufacture even micro batches for niche applications. So it's very different manufacturing a 500-kiloliter batch of transformer oil versus a 20-kiloliter batch of, say, a niche product that's required. The accuracy is completely different in making that blend. So we have that ability and the infrastructure in place.

Thirdly, as I mentioned, we have blending facilities around the globe. So in Turkey, we have a joint venture, and we blend transformer oils as well as these heavy grade white oils over there and sell in the surrounding markets. We do have a storage agreement in Australia. We have a storage agreement in South Africa. We have a plant in the UAE and in India as well. So globally, we've increased our global footprint in that sense to be able to deliver our products more efficiently and quickly and cheaper to our customers.

So I think that's it from my side. I'll pass it on to Sundar to go ahead with the lubricants. Thank you.

Sundar Subramanian: Good morning. I'd like to take you through the lubricant side of the business for APAR. The lubricant side of the business was started sometime in 2007. We are a relatively new entrant into the lubricants. If you're aware of the background on the lubricant side of the business. The lubricant side business was decontrolled by the Government of India way back in 1992.

The first wave of multinationals entering into these markets happened between 1992 to 1998, and the second wave broadly took place between 2001 to 2004. If we actually see the entry of lubricants for APAR, which is basically on the heavier side of the oils that we play on, we started this business sometime in 2007. Whatever we have done and we have built on this business is in the last 15 years, 16 years of what we have done on the lubricant side, where the markets more or less been more stable and markets got very organized.

Our foray into the lubricant side of the business happens through a technology can tie up with ENI of Italy, and that's how we started our entry into the lubricant

side of the business. We operate primarily two brands, which is ENI and ARKOS, which is an own brand for the retail venture that we do within the market.

We sell our industrial oils and industrial specialty lubricants under the POWEROIL brand. In a span of the last 15 years, 16 years, if you look at this market, the markets, the addressable additivated volume market for lubricants in India is about 2.3 million metric tons, and we've kind of in the last 15 years, grown this business to take a share of close to about 3% in the overall market of additives.

We are in the process of expanding our footprints globally also into this business, and we are looking at the extended Indian market, as you call it, basically Bangladesh, Sri Lanka, Nepal, where we are already present and have a well-established distribution network for lubricants and expanding now into Middle East and Africa into our business. Exports moving forward shall become a key area of focus for us in lubricants.

Just to give you an idea of the product range that we are talking about, basically, I would like to split this under two broad application categories, basically going towards automotive or on-road applications. Industrial, basically more B2B and four factories, various solutions across there. So if you look at the on-road automotive side of business, you're basically looking at personal mobility and commercial is basically looking at motorcycle oils, passenger car engine oils and, of course, commercial vehicles, light, heavy, all put together.

And on the off-road side of lubricants in the automotive side, you're basically looking at construction and infrastructure, basically looking at excavators, backhoe orders, stuff of those kind and also a very similar application of off-road is agriculture, basically tractors.

Just to give you some broad areas of why these markets are of interest, we are the third largest heavy commercial vehicle producer in the world. We are the largest tractor manufacturer in the world. And so a good presence on commercial, Infra -- we are the largest backhoe manufacturer. Second largest backhoe manufacturer

now in the world and should be soon the largest backhoe equipment manufacturer in the world.

So looking at construction, infra, off-road automotive applications will increasingly become more-and-more interesting as a business and very sustainable. On the personal side, of course, you will see some headwinds coming in basically of all the top that we have had our own EV.

On the industrial side of the business, you have a plethora of products for gearboxes, hydraulic applications, turbine oils basically so much of electrification activity going on in power generation, so turbine oils, compressor oils. And we also have a slew of product lines on the metalworking side, basically for cutting fluids, quenching oils, for example, for hardening of metals, stuff of those kind.

So very, very special. Where are we focused on some of the niche applications that we believe, which are going to be future where basically on gas engine oils generating power, both mobile and stationary gas engine oils applications. We see a lot of scope coming on for. We believe that moving forward, there will be a lot of gasification liquid fuel is getting converted into gaseous fuels for applications. So that's a big area of work. Marine Engine Oils is an area where we are working on and trying to expand into our business.

Personal mobility side increasingly moving away from manual transmissions to automatic transmissions for driving comfort. So you will see a lot of sludge – spurt of automatic transmission fluids coming in, niche products, high margin items. And we're also looking at specialty fluids like Coolants and Brake fluids, which are increasingly going to come. By the way, Coolants and Brake Fluids are going to be power agnostic, when I mean power agnostic, whether it's EV or whether it's fuel-led. This is an area of business that will continue to work, and it will be agnostic to the kind of fuel that you're using.

On the industrial side, we see a huge play coming up for specialty cutting fluids, Rust Preventives, Rolling fluids, Drilling Fluids, some of those special applications that you see and a huge push coming on the off-road side for Infrastructure and

Mining Solutions. We are working on those very aggressively and some of our growth and positions that we have taken over the last 15 years are going to be insulated from these kinds of changes that are happening in, which I'd like to take forward on my subsequent slides.

If you look at our business, on the automotive side of business, it's predominantly distribution-led. So having a good infrastructure, having a good distribution network is going to be key to moving forward in this business. So our infrastructural side, we have a well-established distribution network now. We have about five mega warehouses for stocking our products across the country and close to about 14 satellite depots which are fed from these mega warehouses. So the serviceability of our product lines through our distribution network is pretty much well established now.

If you look at just a break of how things have been moving on in terms of the network size that we have, we've kind of had almost around 485 distributors out of which close to about 370 are exclusively working on aftermarket retail automotive products and close to about 112 distributors working purely on the industrial side. So if you look at our distribution network now, we are well established to get product to the customers at the right time across all of our product lines, across the geography of our country.

So we're pretty much well established on our distribution side. If you look at the strengths that I wanted to bring on, we have a settled distribution now on automotive side, on the B2C side, both auto and industrial. Products have been well established. It's over 15 years that we have been putting up our products in. We are also working on newer products, which can be fed through the same distribution network so that we get a better productivity out of the same distribution network. So we are foray into Batteries and Tyres to reach the customer through the same distribution network.

We have worked extensively on digitalization of our distribution network. So we have, for example, we have, for example, a digital platform that's been established for influencers, which is a mechanic program that we have. We have over 75,000

mechanics enrolled in the program nationally, and we have close to about 30,000 who are active participating on it on a month-on-month basis on this program.

We are working on a similar program that we are running in for our dealers, which is our retailers across distribution in our channel. So we have a well – we are strengthening our digital initiatives on our distribution side of the business. And of course, we have started to work very closely with the four channel finance to our distribution so that we have the – we are insulating our businesses from the financial requirement needs that we want, and so we can expand through the same distribution network.

On the B2B side, we have a significant presence on Industrial Fluids. And moving forward, we believe that the B2B side will – the industrial fluids side of the business will grow far more aggressively than the automotive side of business and this is predominantly going to remain insulated from whatever changes are happening on the fuel side on the automotive side of the business. And we have a significant presence in industrial now. And similarly, we're working very, very aggressively on expanding our metalworking portfolios.

Our focus remains on infrastructure. We have specialized products now for off-road applications, both on infrastructure equipment as well as on agriculture, and agricultural sector remains our key strength.

Taking off from what I said on the last slide, we are a leading supplier for fluids in tractors. We have significant exposures on all the leading top 5 tractor manufacturers and also the Tier 1 suppliers for these tractor manufacturers, somebody like Carraro or Dana, for example, giving axle solutions to both tractor and construction equipment solutions. We are working with other leading Tier 1 OEM brands also in the aftermarket to expand our position on the lubricant side.

On the export side of the business, we've recently established our office out of Dubai for export opportunities, focusing around the Middle East market and also, to a large extent, into Africa, which I believe are opportunities that we need to capture and expand into very, very fast we would be probably one of the faster

movers in the segment for export opportunities that we are looking up for in these emerging markets.

Coming back to all the discussion that we had on EV. Our view on the EV side is that the personal mobility segment, which is basically motorcycles and cars are the ones which are going to be slightly impacted because of the move from fuel-led vehicles into EV but currently, the EV sales are just about 1 million units in a year in comparison to about 1.3 million units of ICE vehicles in a month. So it's going to be a substantial catch-up that needs to be done by the EV industry to even make a significant impact in a business like ours. So it's still early days for EV. And we believe with the recent changes on the subsidy that has been given on withdrawal of subsidies that have happened on the EV side of business for two-wheelers with effect from July.

The sales are actually tending to taper off for EV two-wheelers at around 50,000 units to 60,000 units a month. So that's – the game is still to play out. And our view is that it will be at least 8 years to 10 years before the EVs make a significant impact on the sale of ICE, internal combustion engine in two-wheeler vehicles.

On the passenger car side, our view is that pure EVs are going to have their own limitations. And we see the passenger car sector to be more moving towards hybrid vehicles, which is a combination of an ICE with a battery that's going to be the go-to choice simply because of the driving range requirements of the user and so that's a forward movement, and we don't see that to have a significant impact on the lubricant side of the business.

The take on commercial vehicles, you need to look at commercial vehicles in two different forms. One is, of course, buses for passenger movement. That's a segment which will predominantly get electrified, which is intra-city operations. We still believe the long-haul bus operations – intra-city operations will still remain fuel-led or will move to gas, basically a combination of either LNG or CNG. And the long-haul commercial vehicles will still remain predominantly fuel-led could be diesel or a combination of diesel and some moving towards LNG.

So we don't see significant impact coming from the commercial side of the vehicle lubricant demand. But yes, the personal mobility side will, in the short term, have very minimal impact. But in the long term, we'll have a decent impact in terms of how the lubricant business will play out. But I believe this will be more than compensated in the way the industrial business will grow and significantly compensate for whatever small losses that you will see on the electrification impact in the automotive side business.

We see significant positions that we have already built up both on the ENI and POWEROIL side to keep on continuing to grow and reap benefits for us on the industrial side of the business, with manufacturing focus coming in India, we see premiumization of usage of products that are coming in and especially niche applications.

The cost of equipment that's increasingly coming on to do some of the infrastructural jobs are significantly becoming higher-and-higher. And as a result, the choice of lubricants that are going into these kind of equipment's, are getting premiumized and the customers are more or less working with only organized oil players. And as a result, we are seeing better ability to penetrate and service those markets.

So premiumization is the way forward on the industrial side of the business for sure. And we remain focused on industrial metalworking infra and mining as a segment for us to move forward and grow our lubricant business.

On the automotive side, as I said, though the blips might be very, very small on the personal mobility side of business in the short term we still see that the vehicle park is significantly improving. So if you look at the two-wheeler and the passenger car space, you're consistently seeing growths happening at a CAGR of around 5% to 6% on the two-wheeler side, and you're looking at a CAGR growth of almost close to about 10% to 11% on the passenger car side, with a vehicle car park – vehicle park improving in the market. We clearly see the automotive segment continuing to grow at least in the near term for sure.

EV adoption option, as I mentioned, still remains reasonably low, and the infrastructure needs to really catch up, which was what was earlier also mentioned in the slide before EV starts to make a significant impact in the business. Our view is that gas adoption is more likely going to happen and that's what is going to be the way forward, at least in the near term for us, both in the personal mobility as well as in the commercial mobility segment.

That's about it from my side. Thank you.

Shashi Amin: Good morning, everyone. I'll just – before I start in the presentation, I would like to give you a brief about myself, being 35 years in the cable and wire industry. I started my career in cables and wires way back in 1988. Seven years in Nicco, two years in Ducab based out of Bahrain. Six years, I was on my own entrepreneurs, the distributor for cables and wires years. 19 years in Polycab, when I resigned, I was an Executive President of Polycab, and I'm in APAR for last 14 months now.

Like my earlier speakers, we are the market leaders in conductors. We are the market leaders in oil. As far as cable solutions are concerned, I think you can gauge yourself where we are today, but I would like to say that we are the market leaders in specialty cables. As my Chairman mentioned that we would like to be the top 3 players in whichever segment we are, yes, we have an ambition to be the top – to be in the top 3 cable and wire manufacturer in India.

Just to give you a brief about the cable and wire industry, cable and wire industry FY '23 was around INR65,000 crores. That means INR65,000 crores of cables and wires were produced in India out of which, some of which were sold outside India. As far as APAR is concerned, FY '23, we were the largest exporter of cables from India to different countries, and we were the largest exporter of cables to US market.

And if you see the breakup, 43% is low voltage cables. 37% was light-duty cables, light-duty cables, means house wires, flexibles and panel wires. In fact, three years back that 37% was 27% so lot of the small-scale manufacturers have wiped out,

and the focus has shifted to the larger manufacturer. That's the reason the share of the major players have gone up. And this data has – its a published data of IEEMA that is Indian Electrical and Electronics Manufacturers Association. If you see last year, the cable business has grown by about 26% and LDC business by 17%, overall growth is 23%.

And I think most of you would be tracking these numbers. Again, it's published numbers. If you see the growth, APAR has grown by 64% in last 12 months that is a FY'23 numbers and if you see some of the competition, the way they have grown and other aspect is we have continuously grown at a CAGR of about 23%.

So, the comparison is there, I'm sure all of you would be having this comparison. We are the only company who has got this wide range of products. The kind of products what we have, I do not think any other cable company in India has got the range what we have. Like power cables and wires, I think most of the guys would be having this. LT cables, HT cables up to 132 KV.

Then we have covered conductor again it's a unique product, what we have. We are the market leaders in conductors, so we produce covered conductors. And a lot of this utility companies have shifted to covered conductors in densely, I would say, forest area where the forest catches fire, so there is a protection on the conductor so that the fire is avoided. We are the market leaders in elastomeric and E-beam cables.

I will briefly explain you about what E-beam is all about. Solar, we are the market leaders. Wind, we are the market leaders. Railways, yes we are the market leaders then we have ship wiring, trailing cables, in the cement plant its trailing cables are used, welding cables, mining cables, EPR auto cables, house wire again we have Anushakti which is an electron beam house wire which others do not have.

And rest of the other products we also have like we have whenever someone is building a house, he needs a house wire, he needs a Cat 6 cable for computer application, he needs a coaxial cable for television, then he needs a telephone wire. So, we have the entire basket of product which would be used if somebody

is making a house. We are the only company with a maximum number of approvals from UL.

UL is a must for exporting cables to U.S. So, we have got around 18 such odd approvals. And very shortly I'm expecting an approval for medium voltage cables. Currently, we are there in low voltage cables, renewables, wind, solar, but very shortly, in another two months time, we will have an approval for medium voltage cables. Another vertical we have is the cable harness. We supply harness to solar, auto, railways and wind projects.

Harness is nothing, but we supply cables with conductors exact length what is required for the OEM manufacturers, so that there are no wastages and the crimping happens in the factory. It is a highly skilled automotive machines what we have, which does the crimping rather than depending on the low scale workers at the site. Some of the sectors we are there, distribution, power transmission distribution, we are there.

Renewable, we are the market leaders. Railways, I am happy to say 98% of the cables and wires used in Vande Bharat are of APAR. So, whatever trains you have seen on track, 98% of cables is ours. We are discussing with the other manufacturers. Bombardier has got an order from Indian Railways for producing Vande Bharat train. Happy to say that we recently got an approval from Bombardier for supplying these cables.

Siemens has got an order for about 1,200 locomotives to be supplied to Indian Railways in next 10 years I am happy to say that we are the only Indian vendor approved by Siemens Germany for supplying cables and wires to these locomotives. We work very closely with Defense, Honorable Prime Minister's project Aatma Nirbhar Bharat. We work very closely with military, navy and air force in indigenizing the import component of cables and wires.

Automobile, yes, EV charging and electrical vehicles, we are there in, I think my Chairman mentioned of some names, JBM, Olectra, Switch we are working with. IT and data center is a new customer base we thought we will attack on and I'm

happy to say we recently received an order for about INR17 crores for Microsoft data center in Hyderabad. It's a beginning for us and most of the consultants have approved us, name it a consultant of Amazon, NTT, STT, IOTA.

So, in next couple of years we will have a major foray in the data centers. Real estate, again we formed a separate vertical to tackle the real estate business. Industrial, we are already there. What is it, when I said that we are the market leaders in specialty cables, innovation is at core as far as APAR is concerned. Solar cables life is 25 years, ultraviolet radiation because the string wires are exposed to atmosphere.

It has to sustain the temperature and it has to sustain the anti-rodent, take care of the anti-rodent properties when strings are used in solar panels. Anushakti high-ampacity wires, again I will be presenting. We have supplied fire survival cables to Sydney Metro, Australia. World over the fire survival cable has to sustain a temperature of 950 degrees centigrade. In Australia, the specification called for 1,050 degree centigrade.

We got our cables tested in Australian laboratory and we supplied fire survival cables for Sydney Metro. Currently, I am supplying fire survival cables to a tunnel project from Sydney airport to a particular station which is a 16 kilometer tunnel being built by the authorities there and we are the only Indian player who are supplying these cables there. Again, as I said, since we are working very closely with defense, like we've developed this optical fiber cable for torpedoes for Indian Navy.

We also developed Tether cables for DRDO, it's for Air Force. Then we are also develop tactical cables for military operation and my team is working very closely with defence in developing some of the critical cables and wires used in the defence. This coming to the E-beam technology like house wires, what others are selling are normal PVC house wires, the market leaders who are there. We came out with a product called Anushakti, which is an electron beam product.

So what is E-beam? E-beam is nothing but it's a small reactor. Again, an approval taken from Bhabha Atomic Research Center, which they visit our factory, and on a periodic basis the approvals are given. There is an electron gun which accelerates and bombards electron on the wires. By doing this what is happening is the bonding of the chemical properties of the compound used is far, far superior than the way the other normal manufacturers are producing wires.

So, this electron beam irradiated cables and wires of a superior performance based on the compound used either it's PVC or XLP or elastomeric. So, this is a unique product. In fact, we were doing this cable for nuclear power cooperation. The nuclear reactors, the life of a nuclear reactor is 50 years. Tarapur nuclear plant 1 and 2, I think they are completing 50 years in another 1 year or 2 years.

So, NPC is going to decide whether they want to dismantle and put up a new nuclear plant in Tarapur. So, we did a load cycle test, a long duration test and our cables produced with E-beam technology surpassed those 50 years life. When this happened, APAR felt, the management or the team felt, why don't we introduce this product in domestic wires. So, we introduced this product in domestic wires.

Now what happens to this product? This wires can sustain a temperature of 105 degree centigrade against 70 degree centigrade of normal PVC. By increasing the properties of the insulation, this wires can carry 50% more current than the normal PVC. As I said, since we have done this test for nuclear power corporation, the life of this wire is 50 years plus. Oxygen index 33%, what is oxygen index?

Oxygen index is the time taken for the fire to travel on the wire. So, when it is 33%, it takes a longer time in case of a fire so that it does not become a transporting agent for fire. Most important in Anushakti electron beam house wire, it is melt resistant. The compound does not melt. Normally in the event of fire, short circuit happens at the contact, at the place where the switch is and the fire travels through the wire.

Here we are saying nothing is going to happen to your wire even though you increase the temperature by about even 75% to 80%. So, it takes care of the

overload current. So, it is a melt resistant wire. We are promoting this product big time with the fire authorities. We are trying to see whether we can form a legislation, so that this product can be introduced by other manufacturers also.

We are talking of safety of the human life and in fact today there is a conclave happening in Geo Center on fire safety where we have participated. My team is there. So, we are trying to promote more of this product to take care of the human life and majority of the people die because of the fire takes place because of the short circuit and people die mainly because of suffocation.

So, it is very important, what is the type of insulation one uses in producing the wires. Last year we did around 3,300 crores. We had a capacity utilization of 88%. In case I have to grow my numbers, I have to increase my bandwidth, I need to have the capacity to produce further. So, these are some of the capex what we are doing in FY'24. We recently commissioned a CCV line for rubber cables which I am, by commissioning this I am adding another INR250 crores of production.

We commissioned, in July we commissioned a new plant in the existing, near that existing premise I think some of you would be visiting our factory tomorrow. It's a plant which is commissioned with 7.5 acres which can add or produce around 900 crores of cables and primarily the entire production is meant for U.S market. Then we commissioned one more CV line for HT cables, which can produce up to 132 KV, which will add another 250 crores.

And we are going to commission an electron beam line. We already have four lines. We are the largest E-beam installed company. So, we're having one more line, which is coming up for 1.2 MeV which we will use for house wires. Exports 51% of my last year's turnover was export. 18 UL approvals, CPR approval required for European market. Enel is a utility company based out of Italy.

We are the only Indian vendor approved at Enel. Enel has a utility network in Italy, Spain, Romania, Chile, Peru. So, we are one of those preferred vendors as far as Enel is concerned. MV Cable's UL approval is expected in two months. Market leaders in renewables, I told you about FS cables. Out of this 51% of the exports

what we did, 66% was to U.S and Latin America, 10% to Africa, 10% of the turnover to Australia, 10%... sorry, Australia is around 8% and Europe is around 10%.

We are again a larger supplier of solar cables into Australia market besides this fire survival cables. Demand drivers, I think my Chairman has articulated well in the previous slide. I do not want to go deep into it, but whatever investments are happening, maybe it is infrastructure, railways or renewable. Sometime back, as an industry leader, we had an opportunity to interact with the Honorable Power Minister, Mr. R.K. Singh and he is very clear about the numbers what he is talking about.

He is talking about doubling the power generation capacity by 2x by 2030. So, when he is talking of 2x and out of which 80% of the generation is going to happen from renewable. Maybe it is wind, solar, nuclear. So, he was very clear, he made one statement, if you guys do not increase your capacity, if you are not – will be in a position to supply material, do not blame me if I open out exports or imports.

So we, company like us, we are gearing ourselves to expand and we are again talking of a three year expansion capex so that we fulfil the requirement what is required for the Indian market. Coming to the B2C segment, APAR was always a B2B company. Last year 6% of our turnover was B2C. When we say B2C, it is the house wires and flexibles which are being sold through the retail channel, but in next few years' time, we want to take it somewhere between 10% to 12%. This is a very conservative number. I am sure this would be more than that.

We are the first company to produce E-beam house wires. We signed off Sonu Sood as a brand ambassador last year. We were an associate sponsor in February 23 for Women's Premier League. We have finalized sponsorship for Asia Cup which will be on by this month end. So, we are doing lot of activities as far as ground is concerned to promote our Anushakti product.

At this point of time, we are focusing more on Tier 2, Tier 3 cities and now in this financial year maybe by Q3, Q4 we will be in Tier 1 and metro cities too. Footprints expanded to 19 states. Successful pilot model are in Kerala and Gujarat. I sell

roughly about 75 crores to 80 crores out of 250 crores of wires in Kerala alone. So, what are we trying to do to increase this business?

Expanding distribution to reach 50% district in this financial year. Out of about 650 odd district, we want to be more than 300 district in this financial year. Expanding retailer network and maximizing direct reach. We formed a separate vertical for builders and MEP consultants and builders do form a major portion of buyers when it comes to house wires. So, we are focusing on top 250 builders of India. We are focusing on top 250 MEP consultants and MEP contractors in India, we have identified those customers. The team is in place.

So we have station guys on a strategic location wherever major consultants are located. And we are doing a lot of electrician meets and Nukkad meets so that our product is a preferred product. Like as I said, Gujarat and Kerala, it's a pilot. See, we are purely on a distribution mode. We are following up the distribution model what FMCG companies are doing. We are not dependent on wholesalers.

So, we have a distributor in each and every district. So, we are talking of, maybe if I am talking of say 300 districts in this year, there will be 300 distributors also in this financial year. So, all the pink ones are the new territory which we entered in last year Q4. Yellow ones are those ones which we have just formed a team in Q1 FY'24. White patches are yet to open. We are strategically opening out the markets.

So, we are not there in MP, Chhattisgarh, Orissa, Ladakh, Punjab, Uttaranchal and even some of the North East. We are present in Assam, we are present in Mizoram, we are present in Manipur, but strategically we are opening up the market for the 90 metres. When it comes to channel expansion, as I said, our target I mentioned 300 districts, but our target is we should have around 267 distributors.

We have identified the towns where we should have presence. FY'22, our retail presence was 276. FY'23 was 2,400. We want to take it to 6,700 retailers, state presence from 2 to 13 to 19 in this year. Number of electricians whom we have connected was 73,000 in FY'23 which we want to take it to 1,46,000 or 1,50,000

electricians. As Sundar mentioned earlier that in automobile lubricants he has got mechanical loyalty program and retailer loyalty program. We would be launching an electrician loyalty program and a retailer loyalty program on 1st of October so that we have direct connect with all those electricians and the retailers.

The best part of ours is, if I have to convince someone to buy Anushakti wire, and if I'm going to tell them that, okay, this wire will carry 50% more current, it is a melt-resistant, I need to prove it. So we have a demo kit. Every sales executive carries a demo kit. We demonstrate in front of the customers how and why we are saying that our product is superior. So, we do a lot of demos.

In fact, when we say demos, demos are meant for individual customer, the person who builds the individual bungalow or who is renovating a house. So, our guys go there and do demonstration. So, our target is to do around 60,000 demonstration in this year, that means 5,000 demonstration every month. Electrician meet and Nukkad meet put together is around 7,000, so we are talking of on a daily basis 20 to 25 Nukkad meets and electrician meets happening on a pan India level.

So, we have taken a huge budget as far as doing this activities going forward because we need to establish our brand. What is the competitive advantage? There are market leaders as far as cables and wires are concerned. One thing, let me tell you one thing, earlier there are lot of smaller companies who are playing around with the quality of the product. Today most of the larger players have started playing around the quality of the product.

I am making this statement, I think some of my industry colleagues also probably would make this statement. And at APAR, the kind of products what the conductor and oil has been producing, we will not play around with the quality, we will not play with the safety of the people, we will ensure that whatever we produce meets all the requirements. I am proud to say that last year we supplied 1,100 crores of cables to U.S market. We have not received a single complaint neither from U.S nor from Australia nor from any other part.

So, whatever we produce it will be a quality product. India's only cable company we will be having, we have got plans of adding on more E-beam lines. Leading player in solar and wind as far as India is concerned, we would like to take that into the global market. Highest number of UL certificate for Indian manufacturer. Harness is one business, we are very serious about it. Even in Solar when we supply string wires, we do receive complaints on workmanship at the site, where the labours do the crimping, people who are not very educated, not very qualified do the crimping to the site.

So, we thought we will have a high-tech, state-of-the-art harness factory going forward, so that the problem of crimping and termination of the site is taken care of. So, by doing this, we will solve problems of lot of contractors who are doing work for Indian railways, wind manufacturers, solar and even auto.

Going forward I think we have formed a telecom business, Girish will talk more about telecom, that is one business I think we will be jointly working together, I think we will take that to a different level and besides that Indian defense has looked at APAR as their partners going forward and they are discussing only with us for development or indigenization of various cables and wires which they would have bought from Russia, France or Austria. So, we are one of the most preferred vendors as far as Indian defense is concerned. Thank you very much. Thanks a lot.

Management: We have a tea break now for about 15 minutes. Request everybody to join back by 11.45 for the next sessions. Thank you.

Girish Gupta: Can I have your attention please? Welcome back from the tea break. And let me introduce myself. I am Girish Gupta. I've joined APAR approximately 10 months back and heading the telecom vertical responsible for building telecom vertical for APAR. And I would like to congratulate each one of you in this room for landing of Chandrayaan yesterday and it's because of this communication which happens between the space station and the lander which landed at the moon.

So I'll walk you through a telecom vision of a APAR primarily. My earlier speakers had a journey of 15 years, 20 years, 50 years. I have a journey of 15 months,

where we started and how we started. We'll talk about that, but what's the vision of APAR, why APAR is here, what it entails to APAR and how APAR plans to do that. That's the whole purpose of telecom vision which we would like to share with you and I will start with the why part of APAR.

I hope each one of you will be able to relate this in your lives that that 2010 was the era from 2000 that we were all voice dominated industry. Then 2010 to 2020 we became a video dominated industry. And now the telecommunication is changing shape to virtually, what we call a virtuality based industry from now onwards to 2030 depending on the country. But what exactly changed?

The phones have changed from featured phones to smartphones now to connected devices. What exactly it means, basically, for all of us in this room. KBPS to MBPS to GBPS, we all understand we need more data. But what exactly is happening is, earlier we were digitally connected, then we were actually consuming digital era which was video. Now actually we are living digital life. Any one of you can say if we don't have phones, if we don't have connectivity, is there a life for us? The answer is no.

And that's where the world is changing. But this world is transforming, changing, but how fast, how quick, it's important for us to understand. If I look at it, video consumption has been 60% till date. Primary consumption of the data comes from video consumption because that's a basic way of doing it. Gaming and software, another area where the industry has picked up. There are a lot of gaming companies which are becoming now unicorns across the world market because of this reason.

Social networking, another Facebook, like any social working site is making a stride into the market. AR, VR is just entering into this space. But where is India in this space? Typically, worldwide, the consumption per user, a mobile user, is 20 GB, but India stands at 25 GB. And this is growing at a rate of 25% CAGR as we speak. And it's expected that today what we consume will consume double of that in the next five years.

If we are going to consume double of that, what we are using today, how are we going to sustain that? Where is it going to come from and even on the data side, today, world is consuming 120 exabytes of data. And if you see this graph carefully, this graph tells the consumption of data is going to go down, so we are moving towards a downward trend. But look at that aspect, that 30% of that consumption will be more than consumption done in 2018 or 2019.

Whole year consumption, that is the kind of consumption growth we are expecting, the market is expecting to happen. But if this kind of consumption is going to grow, what is required in our networks and what exactly is changing? That's very, very important. Does this video consumption and gaming going to give us that kind of data growth? The answer is no. What exactly is happening?

Beyond 5G, which we all heard here every day as a buzzword in the industry, beyond 5G, a lot of happening. My previous speakers spoke about agriculture, transport, healthcare, education. Think of this with what we are selling in the other divisions. All of them will require a telecommunication system. Today, high-speed internet is moving. Gaming sector is moving from local servers to cloud gaming.

I want to play with the people sitting in Europe, people sitting in U.S, people sitting in some other parts of the world, in some cities. That's where the gaming is shifting. Agriculture, it's going to be AI, ML-based information, technology, developed solutions provided into the market to deliver that. And logistics, which is a big play for everyone, it's going to be fully integrated based on the whole solutions, telecom solutions, IoT solutions, which are going to run a different set of.

Healthcare again, remote villages are getting connected. You will be able to provide the best healthcare to the remote locations with the help of telecommunication again. And this is changing. Education has seen some light in day of COVID, time of COVID. Now education is shifting much faster. We are seeing the home schools coming. Homeschooling is coming to India and different parts of the world.

So, what exactly it means basically? By 2030, we'll have 15% more SIM connections. SIM connections are not going to go up, but 114% of the penetration of connectivity will happen. But one larger shift which is happening in the market is 50% of our network will be 5G-based network, which is today only 12% and 4G will be balance of that 40%. And only all 2G, 3G, all kind of technologies will go off, only 8%, 10% will remain in that. That's one big shift which is happening.

Second big shift which is happening is IoT devices. Machine-to-machine communication is going to become a very, very integral part of our life and we project that 5.3 billion devices will get IoT connected in the times to come. And it will create definitely a number of jobs and it will contribute 5% to the GDP of the world, which is USD6 trillion, that's where the telecommunication industry is heading to. And that's where we want to – APAR make a foray in that set of industry.

So, today the telcos who are the primary customers for the telecom consumption in the world, what does it mean for them, their network, we talked about all these applications coming in, we talked about the number of connections, but they have to double down their investments. If somebody is investing x today, they'll be investing 2x in next five years. That kind of investment we envisage in the market coming for us.

There's IoT and a private sector play. IoT I spoke about, private enterprises and private networks is another play which is evolving, emerging in the market of our telecommunications space where we'll have a hybrid network. The industries like APAR, other industries will have their own networks to communicate between the IoT devices and they'll have a 5G network running on it.

Edge datacenters, to address the latency part of the network, there'll be huge investment happening in Edge datacenters, that's a sector I think Shashi spoke about as well, that on the power side we are addressing on the telecommunication side also, we'll be addressing that sector as well. Then, quality of service, that's a very big task. We have moved from 3G to 4G to 5G, but the call drops is still an issue, the quality of the network is still an issue.

The operators plan to spend a huge set of money to deliver that quality of service in the networks. Basically, what it means is the telcos have to become from a mobility company to a technology company to a whole telecommunication IoT based entities, that's where the industry is going to shift and that's where APAR play is going to come as we speak, move forward.

I see roughly USD1.3 trillion to get spent by the operators in next five years, which turns out to be USD0.2 trillion annually, which is a big number in this space. One is what they will invest, and the other is where the investments are already being announced in different parts of the world. India we know that we are only 35% connected on the towers. We have roughly 2.5 lakh towers, mobile towers I'm talking. 2.5 lakh towers which exist in Indian market.

And with the advent of 5G, this number of towers is going to go multi-fold. I'll talk about that. But this needs at least to get 70% fiber connected and that's our primary product, which APAR has optical fiber cable, that's the core product for that kind of connectivity. Worldwide, I see that roughly 530 operators have tried their hands on 5G networks right now. But out of that, only 50% of that is able to officially launch 5G.

We can imagine the amount of 5G networks getting launched across the world market. Only 41 careers are doing standalone based 5G, rest all are still on a non-standalone basis. So I'll say five years onwards also, 2030 onwards also, this demand is going to peak further up as we get into this market. Fiber to the home, we all heard that fiber to the home, it was not that prominent before COVID, but after COVID, we realized connectivity is the key and fiber to the home became the necessity of life.

And India added roughly 10 million homes in last two years. The way we are today, we will add 10 million homes in last two years. The way we are today, we will add 10 million homes year-on-year basis as a country and that's where we are heading to as a nation. Worldwide, if you say UK has announced very clearly they will have 25 million homes by 2025. China is the market leader in this space.

And they already have deployed fiber to the home. Now they are moving ahead, which we are not thinking as a country right now, is Fiber to the Room. Each room to have a fiber connected so that you can have those IoT devices in each of your room where you can move it forward. There's another, one is this urban network we talked about 5G, fiber to the home, then there are rural networks where the government investment is coming, BharatNet, two weeks back, cabinet has approved 1.39 lakh crores in this program to connect to 6.5 lakh villages across India.

They have already connected 1.7 lakh villages, 7,000 villages – 70,000 villages and they plan to connect balance. It's a big layout, it's a program rolled out for next three years that 24, 25, 26 is going to be this money spent in India itself. U.S as a market has itself has announced 42 billion dollars getting spent on rural connectivity of U.S markets, again for connecting the rural U.S where the connectivity is less than 25 Mbps.

So, it's again a program of 4 years starting 2024, launching till 2028. So, that's another set of huge opportunity available to us. UK has launched USD5 billion Giganet project, where they said they will connect every rural home approximately 85% by 2025, and 99% by 2030. So, that's a set of investment, if I say, in telecom sector which is happening, both by private sector as well as the government bodies across the global markets and that's the play which APAR is trying to play in, get into it.

Just to give you a perspective what 5G means, we all hear 5G across, but what 5G means for APAR or how 5G is relevant for APAR. As I mentioned earlier, we are talking about 10 times the speed of the network from 100 Mbps to 1 Gbps. We are talking about latency of 10 milliseconds to 1 millisecond. Both latency and speed makes the network different. In 3G network, we always needed only a 1 tower in 10 kilometer area.

In 4G network, that becomes one site at 2 kilometer area. In 5G network, one site become a – like there are 20 sites in 0.5 kilometer area, every 0.5 kilometer you'll have a site and 10 kilometers will have number of sites. What does it mean for us?

It means that whatever fiber was getting consumed in the past 16 times more fiber will get consumed in the networks and that's where the fiber demand of the country will go up multi-fold with the help of 5G.

So, why APAR falling into telecom solutions business? We said the market dynamics are right for us. There's a massive digital transformation happening, whether it's zero latency, whether it's hyperscale to Edge data centers, whether it's Web 3.0, These are focus areas. We have identified our focus areas that converge networks and data centers remains a focus area for us. Rural connectivity happening, 5G IoT M2M is happening.

All these multiple investments are happening for next five years to seven years. There's enough tailwind for any organization to enter in this space. So, we defined our portfolio of APAR that these are the solutions, OFC solutions, LAN and 5G solutions, convergence network solutions, and network services to provide end-to-end services and why these solutions, it's a very, very important when we identify this, where do we play as a competitive advantage in this space.

We have a largest product range for the evolving market needs, not from the past market, but what is lying in future will have the largest product range in that space. I will talk about that product range We already have NABL lab, which is the extensive testing lab for any kind of fiber plus copper network solutions then we have a capability like all of my earlier speakers spoke about, innovation is the key, customization is the key.

And that's where we have a capability as an organization to customize the solutions and provide with an innovative mindset to provide a value to our customers and we leverage upon our experience of exporting to more than 140 countries. As a company, we do that. So, that's another thing which adds value straight away to the telecom solution business of APAR. In telecom solution business, we have first line of business is optical fiber cable which we manufacture at the full range like any other company in the world.

We have a full range of optical fiber cables which meets any standards, global standards where we can further address the market. We acquired this entity in 2008, but slow. We will build this up. OPGW, my colleague, Surya Shoban, spoke about that. We started that business in 2017. Along with OPGW, we have ADSS cable. We'll address the power line industry fully on end-to-end basis as a telecom solution.

Then tower and IoT connectivity solutions which is a new – which we are starting this year. This is a hybrid product which we are bringing to the market to address the tower and IoT need. The strength of APAR, I think APAR will be one of the few companies in the world to have these kind of products who has a strength of power as well as optical fiber. And that brings a different set of products which we have launched in the market this year, and which will bring a different revenue for us.

Then enterprise and DC solutions, we had few products, power products, like Shashi mentioned earlier, and we have added the full range of LAN and the fiber solutions to lots of DC solutions. So, that brings us to a full end-to-end solution for the data centers and the IoT applications into the world then we are adding another division of rolling out, building these networks within the telecom solutions.

Since there is an investment across India by private telcos to build these networks, or by the government of India, like I said, BharatNet, which the government of India has announced. We are launching this vertical as well, which will be up and running in 2025 for us to deliver that. I'll talk a little bit more about that. So, in telecom, which has become a part of integral part of every industry, pure telecom will play in, which is the operators and the data centers.

Railways, we have a huge play, investment has been shared by my team earlier, but similar investment, I won't say similar investment in terms of value, but similar kilometers will be required for the telecom products in that space as well. Defense, we are getting very aggressive on defense because defense is investing to create a digital wall against the borders to protect the country from China and Pakistan primarily, and there's a huge set of telecom spend happening in that space.

Power energy we've spoken, industrial applications, IoT is moving way, way I'll say, ahead of telecom curve. I think the solutions required there will be much, much larger than what we are in. So, as a strategy, we follow a purely, purely customer-centric strategy. My Chairman spoke about initially that we believe in growth, continuous growth, which is like global. So, growth will for us on optical fiber field will come going global in this space. We have been more of an India-centric.

So, we are growing this business to global markets. We have created a camp structure for the global markets. I have identified the markets globally, roughly 20 markets we are going to address. When I say 20 markets, it is 20 countries out of the seven continents. So, we have created the structures around that. We have identified the partners in those markets. We are moving ahead in that direction.

We have increased the focus on our global customer approvals as well and the qualifications in the region. Certain UL approvals we have. We have added for the CPR approvals, UL approvals respective to the markets, that's where we are heading in. And next two to three months, we'll be fully ready to launch ourselves fully in the global markets, capable to deliver a much, much larger volume out there.

There's a equal exercise to do positioning of APAR in those global markets and primary focus of APAR will remain India, Europe, and Middle East Africa from a telecom perspective. The second piece we talked about, premiumization or customer retention, that's what comes from our value creation initiative, where we are producing the innovative and customized solutions to stay relevant and command a premium from our customers. Not only premium, we retain those customers for a longer period of time.

Design knowledge that discussions are happening, we have purely gone from a product sale to a solution sales with our customers. We have the design discussions, technology discussions happens with them, and we are creating those stickiness with the customer then we are arranging a local availability of the products in those different markets, that's where, like Shashi talked about

distributor model, we'll create a global distributor model for telecom business across global markets.

And that's the way we'll lead those 20 markets as we move forward. This is not going to happen until and unless we augment our internal capabilities. So, third strategic priority for the telecom business is augmenting the whole team and the process to address these global markets that's a continuous process. The last four months we have invested in hiring more people, and next 6 months we are doing the same. There's a strategic partnership with the fiber suppliers to provide globally the products which we have initiated, and definitely end-to-end service capability we are building as an organization.

Moving forward, just to give you a glimpse what we have done in last six months in this space. One piece which I said is growth, where we have the customers globally, but we didn't have the products. So, we created the new products and launched to the new markets. So, new products to us, not to the market, but launched in a newer markets, global markets. So, we developed micro cables, we developed micro module cables, we developed fire resistant cables, and these products get into the global market for us.

We already started executing the orders in the global markets in this space and this will allow us to capture European market and African markets. So, it's a large set of market which opens up with these set of products. The second set which we created is new to the market and new to us, which is like hybrid cables and that's where APAR Strength comes in. No other manufacturer in India, I'll say, has this kind of capability which we have built in. That it has got a copper and it has got a fiber in a single cable, which provides you a lot of benefits as a customer, because it's a purely customer-centric approach.

He doesn't have to install multiple times. It will be faster for him to deploy. It will be easier for him to deploy, and definitely it will be cheaper for him to deploy. And if I say ESG is a word, it will be greener for us to deploy, because the lesser plastic will be deployed in the environment. So, that's the kind of product we are entering in and that's the kind of product we have launched into the market.

And then another thing where we went in and we realized, like as I said earlier, we entered into a technology-based discussions with the customers. We realized the pain of the customer lies in actually executing the things in the field and when it comes to a technical stuff, when it comes to a technology. Shashi mentioned about we are the largest leaders in the wind field, and we actually went into the wind fields and changed the designs of those products.

We saved the cost of them, we saved the time to install, and we saved the errors in the field, because now the product which goes from APAR is pre-connectorized directly deployable in the field. So three sets, one is new to us, but old to the market, second is new to us and new to the market, and third is absolutely providing a solution which delivers a different value to the customer. It's not only new to us or new to customer, it provides a lot of gain to the customer.

So this is just a reference product for all of you to see that where we are heading to and how we are heading into the market and making a good headway into the markets. This is beyond products, which I touched upon earlier as a service business. Telecom service has three or four verticals if I put it. One is a passive solution which is a foundation of a telecom network, typically a passive layer.

Then on top of that you always have an active layer, layer two, layer three, layer four, or layer five then you get into a fifth layer of operation and maintenance of that layer and then there is a layer of only pure management. Here we are talking about as a telecom business, we plan to enter only in the first layer of telecom services which is a passive solution belt and there is a reason to it that we have done some services in our conductor business and there is some level of products we have in-house that allows us to be stronger in this space compared to any other entity.

So typically, there are three sets of, we have gone deeper into that space. We looked at the challenges in this space. There are multiple kind of networks which are evolving due to 5G, due to FTTS, due to rural networks, border networks, fiber to the home, these all passive networks, border networks, fiber to the home, this

all passive networks and it's not easy to operate because of multiple issues on the ground.

Then there is an execution variability which comes in. Each soil is different. When you operate in Maharashtra, it is different than what the way you operate in Gujarat or the way you operate in Himachal Pradesh. And to get all the product from a single source. There are multiple products acquired. There's very few entities who can do that.

So APAR is becoming that entity eventually to address these challenges of reliability, visibility of the network, the integrated approach which is required for such network, even the predictable capex for that network because operators are very clear, the revenues are tight and we want a very predictable capex around it and then definitely sustainability of delivery on time.

These are the five levers which are typical challenges in these kind of networks and APAR is gearing up with the tools, tech tools, technology, products, service models. So we are getting this ready and this whole vertical will be up and running, you can say another three to four months kind of time frame. I will say for next financial year you will see the revenue in this vertical as well. And it will definitely be faster than the market and it will create an impact into the market.

So telecom business is primarily the products, we are growing multi-folds, and we are adding a service vertical to do these services end-to-end. Thank you.**Ramesh Iyer:** So, I will take you through a brief of our financial overview of the business verticals. Let me begin by presenting this slide that actually talks about who are our customers. These are the people whom we actually sell and these are data from the 12-month consolidated financials for FY '23. Close to about half of our customers are from export market. About 16 percentage we sell to industries corporate that includes cosmetic industries, pharma industries, rubber, plastics and lubricants.

Then there are specific industry groups like rail, defense, shipping, mining and telecom that we sell about 8 percentage to 9 percentage. There are OEMs that we sell about 6.5 percenrage of our total turnover. And then there are transmission

companies, both EPC and utility transmission companies, to whom about 5 plus 7, 12 percentage of our products goes there.

Renewables is about 3 percentage. There's a lot of renewables that also goes on the export that you see on the top 50% turnover. These are the renewables that is part of the domestic business that goes. The state electricity boards, utility companies in India, we sell about 1.6 percentage of the consolidated turnover. And then there are others and EPC companies that's about 0.5 a percentage and 3 percentage.

So these are the customers who are – we are actually servicing. And this mix has changed so that in terms of our exposure to some of the state-owned electricity boards has gradually come down over the last several years.

In terms of our quality of receivables from where the customer mix is there. Out of 100, if you had to put a number, close to about half is secured under various means that we operate upon different terms of credit and payment terms. 50 percentage is secured under various means. About 20 percentage are customers from government transmission and sector-specific companies that we talked about rail, defense and various other industries that was there in the earlier presentation.These are pure government and sector-specific companies, about 20-odd percentage. And the rest about 28 to 30 percentage is unsecured, of which if you see about 65 percentage are entities, where APAR has business relationship of over 3 years. So we know the customers very well, and we've been dealing with them in terms of the credentials. That's the quality of the receivables. Again, this is based on FY '23 closing data.

I would also like to take you through three specific risk management slides, which are very critical for our kind of industry and the products that we serve. The first and the most important is on the commodity risk, where our conductor business and cable business is actually involved basically in terms of aluminum and copper. And because these prices of these metals are so fluctuating, we actually maintain a 100% metal hedge book for our aluminum and copper.

And there are different price contracts that we enter into with customers, some are fixed price contracts, some are variable price contracts. Based on the terms and condition of each contract, we maintain 100% metal hedging. This is a very important aspect of this business where our back-end team has been working to ensure that there are no contracts where the metal hedging is exposed.

So what this also means is that typically, you don't find any inventory gains in the aluminum, the conductor and cable business because we run a complete 100% metal hedging. There is no metal variation exposure to the company because of this. For non-hedgeable major materials and services, like freight, etcetera, we ensure that the duration of the contract is very less.

We don't quote a very long-term contracts or price formula with them so that the margins are pretty much under the – within the threshold brand. And also, we try to include a lot of price variability clause for long-duration contracts so that the price variation automatically takes care in the cost and pricing formula.

The second risk management we do is on currency risks because of the spread of our business and the export and import that we have. We have natural hedges within each divisions, we also do synergies across the divisions, wherein there are surplus exports or imports in one division gets offset against another division. Wherever there are non-dollar denominated currency, we also do the cross-currency hedge. So this also forms an integral part of the risk management frame book.

And the third important risk relevant to the audience is on the customer risk. A lot of credit evaluation actually happens before we accept an order from the customers out of financial background checks, out of KYC checks actually happens here. We do have an internal risk committee who reviews medium-term and long-term contracts, and these are part and parcel of the order acceptance process. Besides this, we do have insurance channel financing, factoring to improve liquidity and mitigate credit risk.

So these are the three big risks management framework that we apart from some of the other operational risk management. But I thought these things are very important to – for the company like us and in terms of industry and the customers that we serve.

I would like to take you through the P&L metrics and the balance sheet metrics for the consolidated division of APAR as well as the individual divisions. So let me first start with the consolidated P&L metrics. In terms of last 5 years performance, we have been growing from about INR8,000 crores in FY '19 to about INR14,300 crores in FY '23.

Our EBITDA has been increasing year-on-year basis. We stand at about INR1,300 crores of EBITDA post forex in FY '23. Margins has grown because of the various reasons that we talked about in terms of our spread of our products, in terms of premiumization that has happened in last year. EBITDA margin is about 9 percentage. Our PAT margin is about 4.5 percentage.

EPS has grown from about INR36 per share in FY '19 to about INR167 per share in FY '23. Our return on equity has been steadily about 11 to 15 percentage from FY '19 to '22, has gone up sharply in FY '23 to about 32.3%. This is a very important metric that we focus within the company. And similar trend you see in ROCE going up from 15 percentage in FY '19 to about 37.5 percentage in FY '23.

In terms of balance sheet metric, our working capital has increased in line with the increase in the business, stand about INR1,500 crores – about INR1,500 crores of working capital. We have a fixed asset or net block of about INR1,000-odd crores. And the capital employed in the business is about INR2,500 crores.

But in terms of number of days, if you see, we've been consistently maintaining it in the range of 30 to 35 days, across all the divisions, across the years as well. So that's a number that we have been working very closely and minutely to ensure that our working capital is within that acceptable limits.

Capex has been fairly consistent in the last 5 years. We have been investing more and more to build capacity ahead of the demand, and we've been consistently

spending the capex over the last 5 years. Debt-to-equity ratio has been low. We work on a very low debt-to-equity ratio. It's been consistently in the range of 0.2, 0.17 and it's come down as low as 0.14 in FY '23.

This is on the consolidated cash flows. Again, here, you see the FY '23 numbers are very high because of the profitability being high. And as you see, the investment in working capital has been increasing. The movement in working capital has considerably been increasing. That's also in line with the business requirements. And we see an increase in cash flow. I think the last – I think it's an increase in cash flow instead of the decrease in cash, the brackets are a typo over there.

Very briefly, in terms of conductor. The big story is on premiumization of this portfolio as well as exports that's driving growth. We have the volume numbers you see on the bottom left side of the chart. One question that typically keeps on coming is that the volume growth is about 182,000 has come down to 160,000 in the last 5 years.

The main reason is that with premiumization happening in this portfolio and also because of a change in the product mix, the quantum of metric ton that is needed per kilometer has actually come down. And that is the reason that you see that the volume is almost flat or slightly lower. But what has happened is that the quality of the product is actually improved. And therefore, you see the EBITDA per metric ton is actually going up.

So if you see, the premium share on the second slide has been gradually increasing from FY '19 to FY '23. That's the reason of the volume growth not happening, but if you see the per unit profitability is increasing. The domestic export ratio has changed considerably. We were about 39 percentage exports in FY '19, has risen to about half of the conductor division in FY '23.

And strategically, we have been positioning the premium products largely around India and Asian markets, and the non-premium products has been there in the export market. This is the EBITDA trend. Clearly, you see the premiumization and

the exports actually playing in FY '23 as you've seen in the business presentation as well.

In terms of oil, also, if you see in terms of volume growth, it was about 430,000 KL in FY '19 and about 486,000 in '23. And here also post FY '19, strategically, the business has actually reduced volumes to customers where we felt that the credit could be an issue. And therefore, we were actually – we actually had to reduce the volumes in FY '20 and '21 to get – to improve the quality of the customers.

And therefore, you see there's a drop in the volume. So like the same story about conductors, here also the quality of the customers has actually improved even in the oil business and has been steadily increasing from FY '21 onwards.

Our export mix in oil has also increased from 33 percentage to 45 percentage over the last 5 years. EBITDA had a very strong EBITDA in FY '21 and '22 due to favorable oil prices, and FY '23 is about 4,800 per kl. It's more representative of a long-term average EBITDA that we see. Similarly, PAT trend has also moved high in FY '21 and '22 and it's been about INR85 crores in FY '23.

Cable. In terms of cable, the story is on the strategic expansion into export market as we saw in Shashi's presentation. It's gone up from 10 percentage in FY '19 to as a 50 percentage in FY '23. And you see the sales going up and the export mix also going up because of that. During FY '23, we were the #1 exporter of cable and wires from India. And on the EBITDA trend, you see that the margin profile has gone also reach double digit, which is also there in pre-COVID times. But in FY '20 – '21 and '22, the number was low. Now with the products and better margins and product mix, we've gone back to the double-digit margin there.

So that was in some very brief profile about APAR on a consolidated basis as well as three division things. Thank you.

Suyash Saraogi: Good afternoon. I'm Suyash Saraogi. So in addition to the designation that is mentioned here, I'm also the Chief Sustainability Officer for this company.

So in companies where excellence in sustainability parameters is critical to getting business from customers and to be an integral part of the global supply chain. It is important that strategy is embedded in the way we work to remain sustainable.

So these are the stakeholder demands on APAR. So our customers, they want eco-friendly products, they want lower embedded carbon, they want transparency, and they want ethical practices. Our regulators, they want compliance, they want to limit this GHG emissions, they want to improve the water consumption so that they don't give the consent to operate otherwise, they want circular economy, they want the EPR, that is extended producer responsibility. Employees, they want the inclusive work environment, work-life balance, wants to work with companies, which is an ESG leader.

Suppliers and partners, we expect them to transition to renewable energy, that we want them to adopt to energy-efficient practices so that the costs go down. Shareholders, they want long-term value creation, they want financial disclosure, climate risk management emission reduction targets and shareholder engagement. And local communities, they want local economic development that is business for them. They want water security, that we can't take too much water out of the area, and they want employment for the local youths.

So when we look at ESG, we have to look at all these stakeholders. So now based on that, we are working on all fronts, where we want to be transitioned to renewable energy, and I'll touch upon them in later slides, the climate risk management, water security and employment, we need to reduce our water consumption. We want low carbon products for customers, and we want an inclusive work-life balance – inclusive work environment and work-life balance for our employees to attract the best – and attract and retain the best talent.

Now how do we start when you look at sustainability? So we have a Board of Directors. The Board of Directors is basically having oversight on all the ESG initiatives. Every Board meeting these topics are discussed, debated. Then we have a Sustainability Steering Committee, which consists of leaders from the manufacturing and from the business divisions. We meet regularly where

decisions are – where progress is updated, where decisions are taken, where there is some approvals to be taken as well as the most important thing, silos are broken. And there is transparency across all the three businesses about what's going on, what we need to do, sharing of best practices.

And then we have sustainability champions. There are 17 of them embedded in the factories, in the plants, where they work together, then talk to the reporting managers. They identify projects with their colleagues. They get the approvals from the reporting managers. They help in the execution and update us on the progress. So what we try to do is we try to make it absolutely inclusive, spreading across all the company.

There are 17 UN SDGs, that is UN Sustainable Development Goals. So as APAR, we are aligned to eight of them, and these are marked in green, which is basically good health and well-being; decent work for economic growth; industry innovation and infrastructure; sustainable cities and communities; responsible consumption and production; climate action; peace, justice and strong institutions; and partnerships for the goals. So these are the eight SDGs. Whatever we do, we align to these. And that is inherent in our strategy, in our operations and the way we – in our future plans.

So this is a busy slide. I'll just quickly go through it. So carbon foot print is basically the emission of GHG gases, which is a carbon dioxide actually. We measure everything in terms of carbon dioxide equivalent. So APAR in this operational boundary, that means all our plants, the warehouses, the offices. Last year, in the year '22, '23, we emitted 105,000 tons of carbon.

Now there are two parts to this, something called Scope 1 and Scope 2. Scope 1 is the fuel that we consume, the diesel, the furnace oil, the LPG, PNG, CNG, refrigerants, that's what we use. That was Scope 1. Scope 2 is the electricity that we take from the grid. So in India, what happens is that since most of the electricity is produced by coal, so there's an emission factor of 0.715 that means that for every megawatt hour of electricity that we take from the grid, there is a 715 kilograms of carbon emitted, so which we account for it as part of Scope 2. So

you can see that our Scope 2 emissions are much higher because there's a lot of electrification within our company. The conductor business, of course, is the biggest user of energy. So this is what the numbers are.

Now we look at this – I'll just go through how we are working. Now if you look at the first column, it's the oil business. The oil business, the emission went down from 6,860 tons to 3,197 tons in 3 years. The production went up from 384,000 kiloliters to 468,000 kiloliters. Therefore, the intensity per kiloliter – intensity of carbon emitted per kiloliter went down from 0.018 to 0.007. And that's the key metric for us because our production is going up. We need to ensure that the energy intensity and the carbon intensity of our production goes down, which, of course, is very good for the balance sheet also.

Then we look at the cable business. The cable business went up – the emission went up from 29,000 tons to 35,000 tons, which was accompanied by an increased production from 55,000 tons to 81,000 tons. And therefore, the intensity went down from 0.527 to 0.439.

In the conductor business. The conductor business, the production went up – the emission went up from 56,000 tons to 65,000 tons. The production went up to from 222,000 tons to 270,000 tons. Now you might wonder that you have shown a presentation just before when they said that our production in conductor is 160,000 tons. And here, I'm showing is 270,000. It is because there's an alloy rod – there's a wire rod that we made, conductor rod. That rod is double counted. And why we need to double count is to show the – because sometimes we buy these rods, sometimes we manufacture them, sometime we do both. So we need to show the – to show the comparison, we need to do this. Then of course, the intensity has gone down.

So this is what we are trying to do. So basically, we are working very hard to reduce the energy intensity. So we've been continuously working. We work – we focus on electrification. We are trying to get renewable energy. And therefore, we have been able to do this. So this is an effort, which is there, all-encompassing across the company.

So now how do we do that? We can't have a – we have a very scientific approach. So what we do is we got energy audits done by reputed companies like DESL, that is Veolia, and TERI. So we got it done in our two plants in Silvassa, which are the biggest plants, that is in Rakholi and Athola. We understood and they identified about 62 projects, which will save about 7,000 tons of carbon. 7,000 tons of carbon over 1 lakh tons is 7%.

It's very material. And therefore, we have started implementing them. 7 have already been implemented. The balance will get implemented within this year. What happens is we save 7,000 tons, we save INR500 crores of opex every year – INR5 crores of opex every year, and we have a payback of less than 2 years. So what's good for the environment is good for our business.

Now we are doing – we have just completed our energy audit at Khatalwada, which is our biggest plant in – for cables. As we speak, the projects are being compiled, the paybacks are being calculated, and we should be ready with it in the first week of September. Then of course, we'll report up to the management for approvals, and then we will start work on that. So it's all very scientific. And what happens with this is that the plant – the colleagues in the plants get very enthused by it. There's actually a very palpable sense of enthusiasm and it fosters inclusivity and it fosters of course, effectiveness.

So I mentioned about renewable energy. We've just commissioned our wind solar hybrid of 3.3 megawatt electric and wind and 2.8 megawatt solar for Gujarat. It's going to generate 15 million-kilowatt hours in a year. And we have about 5.13 megawatt peak of solar already – rooftop solar already installed. So we are working – every year, we are improving our renewable energy posture. And that, of course, is 0 carbon. And it saves cost. For example, in case of the wind-solar hybrid, we save INR3 per kilowatt hour from the grid electricity.

So this is the status. So as we started this year, we were 4% renewable. We already are at 18% renewable with the commissioning of wind-solar hybrid and another 1.2 megawatt of Jharsuguda solar rooftop. And we are working on another turbine, and so we should get commissioned in the first quarter of next year. So we will

reach 30,000 – 30% renewable. Assuming electricity remains constant, to the extent that electricity demand goes up, it will reduce correspondingly. So this is one thing. Now we are working on – this is basically – we are also trying to now do interstate renewable. We are working on that. Hopefully, we should get something planned by next quarter. And then we can implement it in the year, '24, '25.

So I think this was touched upon earlier. So we basically ask for customer requirement, low carbon products are very critical. So the ACCC conductor and power NE, that is Natural Ester, things all mentioned earlier. So we are focused on this is just an example. So ultimately, everything has to go towards a low carbon.

Water footprint. Water footprint is very critical because it directly impacts the communities where we are. It also is very important from a consent to operate at all our plants. And of course, it's – so we had a 328,000 kilolitre footprint. That is a footprint we took – water we took from natural resources. We have an intensity target of reducing it by 12% this year. By the way, I forgot for carbon, we have an intensity target of 10% this year. So we'll have a further reduction of 10% this year. For water, we have taken a 12% target this year. And every year, we will come up with a fresh target. The idea is that relentlessly we will keep on reducing it. So we are doing all these things.

So – in Khatalwada, we've implemented a state-of-the-art water harvesting system. The process is mentioned in this chart. But intrinsically, what it means is that we do proper understanding of what the aquifers are under the factory – under the ground. We know what is the water carrying capacity. And we then do rainwater harvesting to ensure that we utilize that capacity. Also, at the same time, we cannot afford any chance of any contamination in the groundwater. We expect that the year '24, '25, we will make Khatalwada water neutral. That will be the first plant and then other plants will follow. So this is our target.

In terms of social, employee engagement is the most important thing because it reflects the degree to which employees are emotionally connected and committed to APAR and to the role. And therefore, it improves their productivity and

efficiency. So if you can look at the numbers, we have an outstanding 92% survey response rate. 81% of the employees in APAR are engaged, which is absolutely amazing. And – and if you compare it with the industry averages, which is there at the bottom right of the slide, you can understand the impact that has had. So this is all because of the psychological safety that is there in the company, I experienced it, I've been here now for 3 years, and the way people connect to the greater objectives.

For corporate governance, the Board is committed in managing APAR in a transparent manner with the objective of maximizing long-term shareholder value. So basically, all these things you know. So the composition of the board reflects the industry experience that APAR requires and it has an appropriate complement of qualified and independent directors.

Shareholders relations and interests are looked after by Share Transfer and Shareholders Grievance-Cum Stakeholders Relationship Committee. The number of shareholders increased from 35,000 to 72,000. There's an increased interest in APAR. And shareholder grievances have been very little, complaints, and they've been addressed promptly.

So this is what I want to also mention that CRISIL in May 2022, they released a report where they ranked 586 of the top Indian companies, that included Infosys, all the Tata companies, everybody. So APAR got a consolidated score of 59. And we came 148 among the 586 companies. Now I can – believe me, since then, we've come such a long way that if this year, they do it, we'll be in the top 100 for sure, maybe top 75. And in the industrial segment, we came third out of the 48 companies – 42 companies. And this is based on information they got from the public domain. There was no reference to us. We did not submit anything to them.

So what it means? If you look at it, from environment, we got a score of 56, social were a bit lower than average, but then we've really improved – it was more on the policies and the disclosures, which we fixed it. Internally, everything was good. It was just information was not available to them. And governance, there was never

a problem anyway. So this is what it is. So I think – I hope they have another survey, and I hope that – and I'm sure that we will do very well.

So what are the key milestones we have done? We have a TCFD report. We have – the ESG rating has done by CRISIL, I mentioned earlier. DNV, we get all our carbon – the carbon footprint that I mentioned is all audited by DNV, which is the international body. CDP is the Carbon Disclosure Project, which is a global platform, where we submit our response to their questionnaire, so that is available to overseas investors and to overseas companies who might want to know about APAR.

So they get an absolutely tabulated comparative how we stand versus our peers. So we submit that. Last year, we got a rating of B. This the first time we submitted our – we did our submission, and we got B, which was actually very good. We thought we – normally, companies get a D, D for Delhi. We got for B, B for Bombay.

EcoVadis is another platform, global platform, run out of Europe, where, again, a lot of social parameters, where we submit our response to them so that the investors can and customers can take data from there. Then wind-solar hybrid, I touched about. Now this year, we will start – we have started doing our Scope 3. Scope 3 is the bigger one. It's where we start engaging with our value chain partners. We look at our – look at the embedded carbon of the products that we buy. Now that's the big thing, which we are working on. We've already had webinars with our suppliers. We've taken 244 suppliers through our sustainability journey and got them to sign our supplier code of conduct and given them questionnaires. We've had eight webinars and 244 suppliers. And this year, we will continue with the work.

And then, of course, we have environment product footprint. So what happens is that certain companies in Europe, they want us to look at the embedded carbon from credit to get from the time the original aluminum was mined. So we have done for 4 products. It's there – everything is there on our website.

So we'll sum it up. So we are measuring and disclosing and reducing our carbon emissions, water footprint and reducing our waste reduction, the big thrust on renewable energy. We have partnered with leaders, then all the compliance requirements, including voluntary disclosure to CDP, EcoVadis, BRSR are up to date. CRISIL, I mentioned, we got a rating of B in CDP, which I mentioned. Customers are demanding and we are doing it.

And therefore, I would like to end by saying that please look at our sustainability report – look at the sustainability section of our website. Everything is there. Our reports, TCFD, all the products, EPDs, our policies, everything is there in the sustainability section of the website. Please go through it.

And I'll end by saying that revenue growth is good, profitable growth is better. Profitable growth that advances ESG priorities is best. Thank you.

Moderator: Good afternoon, everyone. I'll begin with a question – set of questions we received on the Q&A link. So the first set of questions we received from Atul Bhole from DSP Mutual Fund.

The – for the Cable division, what's APAR's market share in special covered wires, supply to transformer manufacturers? The second question is for the Conductor division. Details on the end-to-end turnkey projects, the nature of contracts, bidding our capabilities, customers margins and working capital requirements and as a percentage of total revenue.

And the last question for the Lubricants segment. How's APAR's lubricants are different from Servo or Castrol in B2B or B2C in the backdrop of conductors or cable business where company has created edge with product innovation, and market shares in the B2B and B2C segments.

Surya Shoban Babu: Yes, I'll answer regarding this copper CTC conductors. Actually, when we started in this segment, actually, a lot of government approvals and individual customer approvals were needed. So first few years, it has gone by for getting the major approvals. So now last year and this year onwards, our production capacities of now sales have picked up. So we are hoping that next – this year and next year,

our market share is increasing. Right now, it is 20%. We are aiming to go to 30%, 35%.

Chaitanya Desai: Number of turnkey projects that we have done are over 100 so far already commissioned.

Ramesh Iyer: Pradeep, if you can just repeat the next question.

Moderator: Okay. So on the conductor, I think as far as already answered, but I still repeat. The details on the end-to-end turnkey projects, the nature of contracts, bidding our capabilities, customers' margins and working capital requirements and as a percentage of total revenue.

Ramesh Iyer: Okay. I think in terms of percentage of total revenue, the turnkey EPC work that we do is about 10% to 12% of total conductor business. And yes, this part of the business is working capital heavy, because it is project-based. At the same time, we also get a milestone-based payment, so that actually eases the working capital number there. And in some cases, there are also retention money, that we get the payments after the close and after the successful completion of the project.

Chaitanya Desai: Niche of contracts or products that we are dealing with are HTLS and OPGW. And the bidding is based on prequalification requirements pass supply is successfully done. And also technical specifications, there are certain quality standards, which have to be met. And even if there is a party which bids for a job, but they are not able to be eligible for that technically, then they will be disqualified.

And the customers are now, not only the utilities like power grid and the private utilities who are taking the boot projects, but also the EPC players who are taking on various jobs for the solar and wind projects, and they have to connect to the grid. So these are some of the customer profile we have.

Moderator: We have another question. How's APAR'S lubricants are different from Servo or Castrol in the B2B or B2C, in the backdrop of conductors or cables businesses where the company has got created edge with the product in the innovation and the market shares in the B2B and the B2C.

Sundar Subramanian: On the lubricant side of the business, some of the key initiatives that we have done to differentiate ourselves from some of the other leading players in the market, is specifically to work on solutions which are customer-centric and customer-specific.

So just to give you a simple example, based on the agriculture side of the business, which is the tractor business that we are talking about, where we've taken leadership positions. We've actually moved away from standardization of products, meeting global standards, API standards or any of the other European standards, to start tailor-making products very specific to their equipment and very specific to the OEMs.

So as a result, it's very difficult to benchmark your solution, your products with competition products. Thereby, you bring in uniqueness into your product. And so the stickability of that business over a long-term period is substantially very high. The reason why we took our exposures on agricultural sector is simply because the loop consumption for every 100 liters of fuel that you burn is probably one of the highest in the lubricant industry.

So a consumption pattern of lubricants to the overall fuel index is substantially higher in agriculture. And with these unique products specifically developed for a certain OEM or a certain application, the longevity of the business is substantially higher.

So if you look at some of our OEM clientele that we have developed, we've been working with them from 2009 in terms of Sonalika, Escorts, we've been working with them for first fill and aftermarket from 2014. We started to work with TAFE Eicher from as early as 2018 now. And we continue to run all these 3 OEMs with a very advanced rate of share of business, and the businesses have aged for almost about 12, 13 years on a consistent basis year-on-year, and we've been growing our share of business. That's what we have done on the lubricant side of the business.

Now coming back very specifically to the industrial products that you're talking about. The focus is on demonstrating superiority at the user place. So the focus,

that's why is more on cutting fluids where you can differentiate your products by the application.

So we start to work on tool life productivity, the number of operations that you do per tool. Those kind of metrics that we develop, thereby you differentiate yourself from the cost reduction that you're delivering to consumers. And that, again, you consistently hold on to your share of business.

So ultimately, at the end of the day, this whole process is to look at customers very specifically and drive value back into that, value not on a per unit basis, but on an overall consumption basis on a year. So if you're so long as you are extending your product life, giving in better productivity, you still are able to get away by charging a premium over competition. But at the end of the day through productivity, we're able to deliver back value. That's the strategy we follow in lubricants, both on industrial as well as in automotive.

In automotive, we work on fuel efficiency as a key criteria for differentiating ourselves from all the competition products. So to give you indications on the question of shares that you've asked for, we clearly are far more better positioned on industrial. We almost work at almost close to about 6%, 7% market share is what I can talk on the industrial side of the business.

The automotive side is relatively lower if you compensate for what we have in positions of OEM. In a cumulative basis, we look at a 3% market share in the overall product category that we do, both B2C plus B2B put together, but our B2B shares are substantially close to almost about 1.5x that of the overall market share that you're looking at.

Moderator: Thank you very much sir. We have the next set of questions from Sachin Relekar from Bandhan AMC. This is for the Conductor division. What is the growth outlook for conductors in exports and domestic? What is the order book to execution cycle? How much is the current order book?

The next question, also provide some information about the working capital and sustainable profitability in the above. While you have given details about your

EBITDA to ton guidance, the opportunity as well on premiumization where we are targeting, which should also result in an improvement in spreads. Can you share your thoughts on the same?

Ramesh Iyer: So our order book as it stands as of first quarter end is about INR5,300 crores. About 45 percentage continues to be in the premium portfolio that we've been talking about, then close to 50 percentages on the export front. Sorry, Pradeep what was the first question?

Moderator: Sir what is the growth outlook...

Ramesh Iyer: So growth outlook, we are looking about 10 percentage volume growth happening. And last year, FY '23, we grew about 50 percentage. So on top of that, we expect the growth to be in the range of 10 percentage with premiumization and exports continuing in the years to come.

Chaitanya Desai: In terms of the order book execution cycle, typically, most of the contracts are supply contracts in our conductor division. And depending on the products, some of them are like cash and carry type products. Some of them are with the LCs also. So as we dispatch, we get the proceeds for that.

There are some projects which are on a turnkey basis. As Mr. Ramesh Iyer had mentioned, those have the milestones. And typically, it is about 6 months project timeframe that we get. But in this project work, we also have to sometimes get the outage, the downtime, so that we can replace the old conductor with the new one. In the case of OPGW, we don't have to wait for the outage, because we have the expertise to do the lifeline OPGW installation.

Moderator: We have a follow-up question from Sachin Relekar on the Cables division. Cables business, as of now, have adequate capacity, but our growth aspiration seems conservative given the market share, which is quite low. So again, the second thing, which I think this is a more of a view, maybe, Sachin, if you wanted to elaborate a little bit more on that. And the E-beam technology, does it provide a competitive edge in terms of pricing advantage versus peers?

So maybe the first question I'll repeat. Sachin is asking about that our growth aspirations seem to be very conservative on the cable.

Shashi Amin: Yes. We had planned initially that we would be growing at the rate of around 25% this financial year, because we had invested for a new plant last year. And fortunately, for us, we have commissioned that plant ahead of our plan, and having 3, 4 months gone into putting up the plant.

I mentioned earlier the capacity utilization is 88%. In different case, I have to look at a growth I need to have capacity. So some of the machines have got commissioned, some of the machines are yet to be commissioned. Considering the capacity, we are envisaging a growth of about 25%. Even though if you look at the market share, what we have against the total turnover of about INR65,000 crores, we are at about 5%.

So that also keeping in mind the bottom line, the way market is being, the way competitors are being, we are a bit conservative as far as the numbers are concerned. Our primary focus going forward this year would be B2C products.

We are putting in a lot of money in promoting the unique technology what we have of E-beam. You also asked about the price difference. Yes, this is a unique product. The compounds are different. There's a slightly expensive compound as compared to the normal PVC. And plus the entire process, the cost is involved.

Currently, this product is about 7% to 7.5% more than the normal PVC products what we have. So we are also pushing with the MEP consultants. If you can look at using one size lower because this carries 50% more carrying. So it's a win-win situation for them and even for us also.

Moderator: Thank you sir. We have the next set of questions from Parin Gala from SageOne Investments. In reconductoring space, this is for the Conductor division. In the reconductoring space, what is the opportunity size that has come up? And to your best knowledge, how much of new transmission circuit kilometers can be laid in the next 5 years?

Chaitanya Desai: We are estimating about INR2,000 crores, is the current market, and it is growing at a rate of 30% plus in the markets in India itself. Similarly, is the situation abroad. Some of the countries, as it was explained in the earlier presentation by Mr. Surya Babu, the U.S. market and some other markets are still on the conventional conductors, but they are slightly different from what we have been making earlier in India.

So these engineers in those countries also are getting the meetings and presentations to move to the premiumized type products and see the value proposition. So if that phenomenon happens, then it can totally change the entire world market towards the premium, like how it has happened in this part of the world also. In which case, the growth can be significant, much higher also for these premiumized products, which we are trying to push for. And as he explained in his presentation for the new conventional conductor – new lines, transmission lines, it is about – I think you have mentioned.

Surya Shoban Babu: Yes, mainly the augmentation in India, we have a plan for 18,000 circuit kilometers. That may convert into a huge like almost 100,000 lakh to 120,000 metric tons requirement. So for next 5 years, it's clear visibility is there, in India, definitely.

But in export market as well. Like I told you in U.S., still they are 90% of the projects coming up with the conventional connector, but very rapidly changing in that part of the world as well. Also in Europe, I told you in Southern American countries, it is picking up very fast because it has got a premium margin and value proposition is there. So other part of the world, it is catching very fast.

Kushal Desai: So let me give you a totally different perspective on this, right? I know it's always nice to put numbers in buckets, which for this quarter, this year, etcetera. But I'll give you a number, which is just blow your mind. One of the number one think tank as far as business is concerned with research and etcetera, is Mackenzie. And so Mackenzie has issued a report on energy consumption and energy consumption patterns.

So today, you see the electrical consumption out of total energy is running at around 20%. And that research report indicates that in 2050, that intensity will go from 20% to 40%. So there is a growth in energy consumption also happening as population and all the different GDPs are growing, etcetera, etcetera. But the mix is going to – they are predicting it to change from 20% to 40%.

So it gives you an idea in terms of where this whole market is going to move. Now what are we trying to do over here, it's very difficult to predict exactly how much growth is going to happen in which segment? So the strategy, and I think what we've tried to convey to all of you all today is, that there are multiple levers of growth.

If you see, fundamentally, we look at APAR as a full 4-wheel drive company. You saw the 4-wheels. They are all capable of independently growing. There is no taking away – there is no cannibalization or a zero-sum game. If the Cable business grows, it doesn't take away anything from the Telecom business. If the Telecom and Cable grows, it takes away nothing from the Conductor business. And if all of these things grow, the Transformer oil and the Lubricant business also runs on its own.

So the way we've structured ourselves for the next 10 years, is to make sure that each of these businesses is extremely well-manned and self-contained, and you provide resources to the – obviously, there is a proper screening criteria to do resource allocation. But if the resources are provided to each of these, they can all independently grow. There is no cannibalization of growth happening from one to the other.

Secondly, as you can see, there are synergies in place. Like for example, I'll give you, I think one of the things that Sundar had mentioned in his tunnel boring machines. India has the largest population of tunnel boring machines running today, for 2 reasons. One is we have metro rails coming up and all like, for example, you take the entire Mumbai Metros, most of it is at 100 feet below sea level.

So we had multiple tunnel boring machines which we are running. So this tunnel boring machine requires a very specialized lubricant, because you're basically drilling through monolithic rock. In this case, it is 100 feet below the bed, because Mumbai is – a lot of reclaimed land is there so you can't go at any other height.

Now each of these tunnel boring machines has to be remotely powered. It's moving, it's drilling, right? So the end which is providing power to it, requires a very specialized cable that's running over a very rough surface, which has just drilled. So APAR is the only company that has now developed.

So our lubricant guys developed the first relationship with the tunnel boring chaps to supply the lubricant. And now we have designed a specific cable that provides the power and data to the tunnel boring machines. And it's a consumable. It's such a rough terrain. Every few months, it needs to be changed.

So on one hand, you've got these businesses which are running independently and pursuing opportunities that each business has both domestically and globally. On the other hand, we are trying to provide a platform, where this is continuous exchange that happens between sales teams, business leaders, etcetera, to see how we can synergize products.

Same thing in the data centers. You've got that Microsoft data center that Shashi spoke about, each data center about INR15 crores to INR20 crores of cables that go in electrical cables. On top of that, there are evacuation of data from the data center and data coming into the data center. So you've got 10 fiber optic lines which are there, finally needs to connect to an OPGW circuit. So there are – so there are a lot of these things which – a lot of synergies which are in place. So whereas you can't put numbers in here, exactly how these things are going to pan out. You can't say when COVID was going to end or you couldn't say how many people are getting infected. But you know the trend which was happening.

So the whole idea that we have as a business is to make sure that we have, and that's why providing customer solutions are very, very important. Because the closer you are to the customer, the easier it is for you to pick up the trend, before

competition for putting products in there, which can actually make a meaningful difference in terms of their performance.

Like you said, for example, Sundar mentioned about tool life. So you can either sell the lubricant by the litre or you can sell a lubricant, which the customer starts evaluating in terms of how many tools they can produce using that sum. So the equation becomes a bit different. Even if your product is a bit costlier. Finally, they're looking at how many tools have been engineered, right, using that lubricant.

So as a company, we are trying to move more and more into that direction. So just, that number is a staggering number, 20% to 40%. And how it's going to grow, you see all the products which are out there, which are all going to be an integral part of this journey, of 20% to 40%. So I hope that gives some perspective.

Surya Shoban Babu: I wanted to add one important point regarding reconductoring business. If you see existing transmission line, these are old, age-old transmission lines has got transmission losses of 30%, in the tune of 30%. Whereas at global level, the transmission losses are at 17%. So now, Indian government has taken a target to reduce from 30% to 20% by 2030.

Currently, this year, we are at 27.5% of transmission losses. That means, if we generate 100 units at the generation, only 70 units is reaching to the customer. So that means, 30% of the power generated is getting wasted in the transmission lines. So if you see 2022, the consumption of electricity in India is 1,486 billion units. That means 30% of 1486 billion is huge, billions of rupees, actually. So if you can reduce 1% or 2%, it's a huge saving.

So that is the reason, why Indian government has got a plan to modernize the existing transmission lines. So that is the reason why reconductoring business is going to grow, not only in India, across the world, because all old transmission lines are inefficient lines because of that lot of transmission losses are happening.

Moderator: **Thank you so much. Thank you Kushal Bhai** Amazing perspective. We have the next set of questions from Maulik Patel from Equirus Securities. This is for the

Oil division, and for the Cable. For the oil, what has been the volume growth for different sub-segments, transformer, white oil, industrial oil within the PSU segment? And for the Cable division, the question is, in the Cable, what kind of margins would APAR be likely to achieve in the next three, four years from the current 11%?

Kushal Desai: So let me answer the first one. So in terms of the segments, which are there within the Oil division. So the transformer oil business, we've stated in all our earnings calls, etcetera, we can see clearly about a 7% – anywhere in the 7% to 8% kind of growth. It was sub 5%, but because of all this getting added all over the world, that percentage is clearly growing.

Similarly, in some of the other segments, you take white oil, etcetera, we have approvals all over the place. So the volume is really not the criteria. What we've been using to gauge our business is, what are the margins that you're making? What is the risk that you're taking? And what is the collection cycle that you have available? And our focus has been more, not in terms of volume on white oils and all these segments, but more in terms of the application, like Rishabh spoke about.

For example, hot melt adhesives. We worked on it for 10 years. We are only one of three companies now in the world. We've just got approvals in the last two years from Bostik, Henkel, Avery Dennison, H.B. Fuller. These are all world players in this handful of companies that actually control this hot melt adhesive business. So now we started in India, now we started expanding. We are supplying them in Europe, Egypt, Mexico, Turkey, Saudi Arabia.

So the idea is really that the volume for us is actually not the game. We can just buy market share, we can grow volumes if we want. The whole focus has to be really in this business and what we are focused on, is to see how we can increase the applications which can get us better retention in terms of margin. You focus on these niche places.

With GST coming into India, the lower-end products have become too competitive, because a lot of traders come in and just offer their products. And

some of the manufacturers have improved their capability to be able to handle more flexible incoming specs. India is a make-shifter country. So to reduce costs, people are ready to do all kinds of things. And that's one of the reasons, why we are focusing on the overseas business as well as applications which require much more understanding of oil chemistry and application chemistry. In terms of the cable side...

Shashi Amin: I think what you said applies to cable, too. So I don't think I have got much to add on it. We are focusing on some niche products, where the margins would be better. And we are looking at providing solutions to the customers. So we are not into this price war games currently. So hopefully, we will be where we are at this point of time. As regards, margins are concerned, slight improvements would be there.

Moderator: Thank you so much, sir. We have the next set of questions from Riya Mehta from Aequitas. This for the conductor division and the cable. In the conductors, where is the competition increasing from? Will we have to undercut or increasing our market share in the US? And with the cables, what kind of increase in marketing budgets are we looking for? Since we are about to get approval for medium-range voltage cables, what kind of market are we seeing for this?

Chaitanya Desai: On the conductor side, prior to the TBCB product, which was earlier being used ACSR. There used to be about 33 players, who are approved by the Power Grid, who is the main TBCB party. Now with the change in the product, which is the AL-59, there are about four players. There may be one or two more on the anvil, but again, they are much smaller players.

In terms of the US and other markets, China used to be well entrenched in US market. And we used to knock on the doors and we used to get very small market share earlier on. Since the earlier President and now continued with the current President of the US, the policies have remained same, where they have increased the duties, very high for the Chinese product. And that's how they got us in very quickly, we were already in that market, but we were in a small way. But once this

whole situation changed then, as we talked about this China Plus One, that gave us a big jump in the conductor business for certain markets.

In other markets, where we were having a disadvantage versus China because for example, in Australia, there used to be a 4% duty on Indian product like other parts of the world, but China and Australia had the FTA. And then subsequently, India also got an FTA done with Australia. So we are now at the equal basis. Generally, in the export markets, we are able to outsell the Chinese on the conductor side.

Shashi Amin: Can you just repeat the question? Sorry, this is for the cables?

Moderator: For the Cable, what kind of increase of marketing budgets are we looking at for? And since we are about to get approval for the medium-range voltage cables, what kind of market are we seeing for this?

Shashi Amin: See, as per marketing spend was concerned, we were to spend some amount last financial year, but we couldn't do it because our products were not well-placed. We were there only in two states, and currently, we are present in 19 states. So as I said, first, ATL advertisement will start in Asia Cup. Subsequently, we want to be present in the news medium and probably, we will do these Women's Premier League. I'm looking at – if I look at the total budget of my complete cable business, it could be somewhere around 1.5% to 2%. And if I'm looking at only my B2C product, our LDC product, it could be around 6% to 7%.

And second question regarding the medium voltage cables are concerned as far as US is there, it may take some time, even though I would be having the UL approval in two months' time. Getting our products certified at the customer's level, their visit to the plant. It's not that as – once I have a UL approval, my order flow would be there. It may take some time, maybe in Q4 onwards, we would expect that kind of business.

In US alone, there are more than 3,000 plus utilities, who would necessarily be needing this medium-voltage cables. So there is a clear-cut business plan. There's a clear-cut strategy. How we're going to attack this market as far as US is

concerned. I'm sure next year onwards, we will have a major share, which I could speak about. Currently, it's hardly anything.

Moderator: Thank you very much, sir. We have the next set of questions from Amit Anwani from Prabhudas Lilladher. This is for the conductor division. I'm limiting the questions to three per person, and we'll see if we have some more time.

Ramesh Iyer: May I suggest you just ask one at a time, we will answer that then you go to the next one…

Moderator: Sure. Okay. So this is one question only for the conductor division, if you would be comfortable. What are the premium products contribution opportunity for the conductor division for the next five years and for the domestic as well as the international market? That's one. And how would you see the contribution coming from the US, Europe market for – and the opportunity for us in the next five years?

And how is the addressable market for the domestic reconductoring market? And are we looking for reconductoring opportunities in the other emerging markets? You just mentioned. So what are the premium products contribution opportunity in the next five years in the conductor for domestic and the international markets?

Chaitanya Desai: So as we explained earlier, about 45% of the order book is the premium products, currently. And also in the rest of the markets, rest of the percentage, we have a fair amount, which is in the export markets, which are the premium markets, even if they are not premium products.

Ramesh Iyer: Yes. And as Shoban Babu was saying that as – there's a lot more from the globalization point of view. Still, it's more the non-premium products. But as you see premium products going there, the market is – will be increased. So we don't have a number as such, exactly as of now, but we are able to visualize the trend over the next five years to 10 years going forward or so.

Moderator: So would you like to share some details on the contribution coming from US, European market as an opportunity prospect for the next five years, in particular, for the conductor division?

Chaitanya Desai: So for the US and European and I would club also some of the other markets like Australia and Latin America, because these are like almost one segment in that sense. There is a fair amount of growth there. There was last year, a frenzy because of the supply-demand problem and supply chain disruptions. So they were hoarding a lot of material. Now they are destocking all that. But over a period of time, we think about 40% of our business may come from these different countries.

Moderator: One last question. How much is the addressable TAM, which is Total Addressable Market size for the domestic reconductoring market? And are we looking for reconductoring opportunities in the other emerging markets?

Chaitanya Desai: Outside India, we are doing mostly the sales, that means outside the subcontinent, rather than taking on the EPC reconductoring job as a whole, currently. And over a period of time, we will also – once our confidence level builds up, that we can take on work outside India because there it needs a whole different ecosystem to manage. So we'll take it up gradually. Right now, we are not doing that.

Moderator: Thank you so much, sir. We have the next set of questions from Gaurav from Axis Mutual Fund. This is for all the divisions related to exports. Can you please share your outlook on the growth in the export market? If that is repeated, but can you please share your outlook for the growth in the export markets? And how the same has evolved for the last few years? And is there any possibility of competition heating up, pushing down the margins in exports in particular, in a year or two?

Kushal Desai: So some of the key drivers which are that we put up six key drivers. So some of them, like renewable energy, the transportation networks changing. These are themes which are – infrastructure growth in India is more than in most other countries. What this renewable energy theme is actually going to be a universal theme. So a lot of stuff will happen there around cable conductor and even transformer oil as we showed in that value chain.

Our expectation is that, our export will always remain a significant portion of our business. And I mentioned earlier also in some of the earnings calls, it's easier for us to start selling premium products in the Indian market, because you have to do

a full solution sale. So there's a lot of time invested in working with specifiers, utilities, regulators, all that to move from one format to another format.

Also, we are able to prove it here because we do the job end-to-end. There's a lot of scepticism around it. Can you really deliver these savings? Can you really do all this? So unless and until you prove pilots over here and prove that, whatever you had committed in the beginning, when you got the order, you were able to actually deliver that at the end. So these cycles take some amount of time.

So we've not ventured into that overseas yet because you want to build enough internal expertise and credibility to be able to go overseas on that. The opportunities in India on the standard products, clearly the export markets are definitely more premium because of the way in which the evaluation is done. We mentioned that a few times from that perspective.

But otherwise, the basic transformer oil products, the conductor products and cable products, where the market overseas is just – it's significantly bigger than the Indian market. So that opportunity is very much there, and we'll continue to focus on it and grow that segment.

Moderator: Thank you so much, sir. We have the next set of questions from Nemish Shah from Emkay Investment Managers. And this for the telecom division. What is the current revenue base? And what kind of revenue potential are we looking at? And what will be the margins in this business? And what are the investments we are making for this business specifically?

Girish Gupta: So as far as current revenue is concerned from this business, it's around INR200 crores, what we do in this business. And the plans for us to next three years is to ramp up this business from INR500 crores to INR1,000 crores. That's where we see this business growing. And as far as margins are concerned, you can say telecom is a little higher segment, and it's a solution-based business where we are entering in.

The approach is more of a customized and innovative solutions towards the market. So we see our EBITDA margins in the range of 23%, 25% range, that's where we see our EBITDA margins in that business.

Moderator: Thank you so much, sir. We have the next set of questions from Rishabh Kothari from Investec. This is for the cable division. Where would you like to see yourself to position – Where would you like to position yourself in terms of pricing as compared to peers, such as Polycab and Havells in foray, in retail wires and cables? And what are the three key entry barriers for exports of wires and cables from India to the US and the other markets?

Shashi Amin: See, as far as pricing is concerned, yes, it's very competitive. As mentioned earlier, we are focusing on the niche product and special product, where we can create a place for ourselves and where the margins are better. Earlier, when we started the business, yes, we are in the price war. Currently, we want to move out of that and provide solutions to the customer.

And many a times, we are not there in the rat race as far as the price is concerned. But depending upon the customer, depending upon the strategy, depending upon the long-term goal, probably we may be very selective in being competitive as far as those markets are concerned. And as regards international business is concerned, what was the second question, can you please?

Moderator: What are the three entry barriers for exports of wires?

Shashi Amin: See, entry barrier, if you look at earlier, it used to be China who are very competitive. The last few years, that competition has reduced. If at all, anybody wants to export to countries like US, you need to have a UL approval that is mandatory, and at the same time, there will be an approval process of the end customers, too.

And if you look at Europe, Germany would have its own approval process. France would have its own approval process. So getting approvals at in Europe also is mandatory. Like you need to have your product certification from KEMA, you need to have your product certification for cable as per VDE specification. You need to

have product certification as per EN specification. This is not that easy for anyone to get in. So that is the most important barrier to enter into that market.

When I spoke about Australia, fire survival cables, 1050 degrees centigrade. It is not everybody's cup of tea to manufacture and get approval from an Australian body. So this is one of the most, say, barrier for getting into the export market. And we are very much into it at this point of time.

Kushal Desai: So I can just add to what Shashi has said, partly that question was how are we pricing our wires compared to Polycab and Havells, etcetera. So we are in the similar sort of price bracket, depending on how strong a company is in a particular market. So it's not that Polycab has a uniform price across the country. They have different price points, depending upon how strong they are in an entrenched market. So we are not higher than them. We are somewhere in that 5% bracket. But the product that we offer is significantly superior.

So our whole idea here is to try to demo, get as far as possible to decision makers and electricians and electrical contractors, who can swing the customer through a proper discussion and a demo. And what we find is that – like in Kerala, we've had tremendous success because it's a Bungalow market. You see most of the houses are stand-alone.

So when someone is building their own house or their own bungalow, it's a very large portion of their income. So they get much more involved in everything that's purchased there. Moment they see the demo. If you see the demo when you're renovating your house, I can guarantee you will buy an Anushakti wire over any other wire. Because it's so apparent, it's such a simple demo. Two wires running in parallel crank up the current, you can see when the insulation melts off on one and when it starts smoking and what happens to the other wire. As simple as that.

So what we are trying to do here is to just popularize this in terms of its brand, safety, etcetera. And we are finding that as long as we price is within the same bracket as these guys, there's still enough margin for us to take home and reinvest in growing the brand.

As far as entry barriers for export, we are talking about house wires to be exported, very difficult to export it to America or any of these countries. Because it's a relatively simpler product to make. It's just a one single insulation on top of standard conductor or a solid conductor as the case may be.

So when you have the freight and you have all the distribution costs and all that. So our strategy has been to get into more complex products when you have to export, because we have a lot of machinery and a lot of flexibility to customize. So wherever your polymer is a bit different, like what Shashi mentioned here, 1050 degrees, there are hardly few companies that actually get into that high temperature sort of polymers.

There are some other products which we supply which are quite complex. Girish mentioned about hybrid products. You need to actually produce copper and fiber optic in the same plant to be able to produce a hybrid product. There aren't too many people who do that necessarily in the world. There are some huge fiber players, and there are some huge copper players. Our Khatalwada plant happens to be one where you do both in the same plant.

So when you get into complexity of manufacture in places like the US, Europe, etcetera, these are a little bit more manually-oriented, because you just don't necessarily have dedicated equipment. You have to run it on multiple equipments to be able to achieve these things. So that's where it's easier for you, if you have the technology, the design, etcetera, you can come up with a good cost arbitrage or a good cost benefit. I hope that answers.

Moderator: Yes. So with the time constraint, I'll just take two sets of questions. One set of question from Himesh Satra from Purnartha PMS. This was the conductor division. Given that we are running at a peak capacity in the conductors, and the new capacity will take another 12 to 18 months to come, what is our outlook for conductors beyond FY '24?

Chaitanya Desai: It's not going to take so long for us to expand, and we have already ordered out new equipment. So we'll be in the process to cater to that increased demand. And

what we are doing now is also adding on a few more sites, Greenfield sites, where we'll be putting up new equipments and also having the additional facility to add on more machines as the demand grows gradually for us. So this has been our strategy.

Kushal Desai: A lot of the Investments already INR400 crores -odd, as Ramesh mentioned, about INR400 crores -odd is the capex that has been planned, that capex cycle is already underway. As Chaitanya mentioned various purchase orders have been placed, etcetera, because the delivery time for equipment has increased compared to what was in 2019, etcetera.

So this entire INR400 crores capex will be completed in the next year 2024. You'll have all of it going in. It consists also for the cable side, a 42-acre Greenfield property, which is between Umbergaon and Khatalwada. So it's in that same vicinity but it's a Greenfield site because our existing sites are pretty much getting maxed out on the cable side.

On the conductor side, they've expanded by buying property in that whole Silvassa area. And some of it is actually bought in auctions from banks and stuff. You already have the land and building shed in place. So these expansions will keep on coming in as the requirement is there.

A significant portion of the cable conductor expansion or capex is also going into rod making and alloy making capability. Because that's the key to be able to meet all these special requirements which are there. The moment you get into high temperature, high efficiency it's all alloy based. Moment you get into the US market, 8,000 series.

So there are various alloy requirements which are there. And by expanding at the back end, by increasing our capability of producing rods, and it can cater to both the conductor and the cable business. The conductor business supplies the rods to both the businesses.

In fact, one of the areas where somebody asked what is the competitive advantage that we have. Two things in there, right? One is the conductor in the other end,

what is the cable at the end, the conductor in the middle with an insulation outside and in various ways, shapes and forms.

The advantage which we have is that in conductor making, the metallurgy is a very important aspect. If you – moment you move away from a pure aluminum. Pure aluminum, you can specify what quality you want from Hindalco from Nalco or from Vedanta, any of these guys and just get it.

Moment you get into alloying, it means you have to mix something in there. And then it requires a metal treatment to take place for it to get homogenized and aligned. And then you've got different requirements of drawing, stranding, etcetera. And at the end of all those processes, you need to meet certain criteria, like a breaking load, a certain amount of conductivity, those sort of things.

So the big advantage which we have is that since we do our own alloy manufacturing, right? We don't look at it as just somebody who's just selling an alloy meeting certain specifications. We glow back from what those characteristics are for a client, and then work our process back to tweak the method in which we do the alloying. There's a big difference.

We don't – there is no handover from APAR that happens. You buy a pure aluminum and you deliver a finished cable, versus if you were to buy a rod from Hindalco or from anybody else, they just make the rod and hand it over, and then somebody else has to then work. So in our case, there is no handover process. It actually runs within the company, end-to-end.

And we have capability of doing compounding. We have major compounding facilities for, especially the Elasto business is driven with compounding. In the case of UL, again, we have compounding capabilities. The compounds are far more complex than the same cable being sold in India. And I must say that, the system that is followed, many of you are familiar with the pharmaceutical industry.

So there, you get an FDA approval and the process that runs is that FDA comes in and does a plant inspection. But besides that, they just pull out a product from

anywhere, any shelf and get it tested. And if you fail, then your license is on suspension.

So the same thing is there in the UL, in the sense that they can draw every meter of your product has your UL number printed on it. So they know exactly – and it's a unique number. So know exactly whose approval they have given. They just draw the product random. You have no idea where they're drawing it. It can get tested. And if it fails then your license is suspended for that particular product.

Moderator: Thank you so much sir. So we have a last set of questions from Rahul Modi from Nippon Mutual Fund. And after this question, I will ask you to have the closing remarks. So this question, and we can take up the other questions offline. This is for the conductor and the cable division, both.

What is the target capacity expansion across conductors and cables, we are operating? Are we operating more than 80% in both? The kind of revenue growth in the next three to four years in both the segments and capex in rupee terms in the capacity is with location for the growth, for both the divisions?

Ramesh Iyer: Yes. So we have been guiding this INR400 crores of capex. And the way we plan our capex is that we invest ahead of time to take care of the requirements. Right now, as you also saw in the presentation, we are about 85% to 90% capacity utilization. And we are almost there for this part of the year.

And capex is something that happens continuously. Even if you had seen it in my slide over the last five years, we have been investing in capex ahead of the time to look for the capacity for the next financial year. So that's what we feel on the capex. I hope I've answered the question.

Moderator: Yes. For both the divisions?

Ramesh Iyer: Yes. This is for all the divisions.

Chaitanya Desai: Expansions are mostly happening in and around the existing places only, as opposed to totally new sites or different states.

Kushal Desai: Greenfield is closed.

Chaitanya Desai: Yes. So conductor is mostly in Silvassa and the cable is mostly in South Gujarat.

Moderator: So concluding remarks...

Kushal Desai: Well, first of all, thank you very much for taking out the time. I know these are part of trading hours, and there's always that -- and these are volatile time every day, something rupee is going up, something or the other is happening.

But I just wanted to mention that, a couple of cultural things, because what differentiates one company from another is really the culture of a company. And the culture of a company is really the collective behaviour of its business leaders. And technology can be copied, products can be copied, etcetera, but culture is very difficult to copy.

And so we've tried to build a culture in here where you're very close to the customer, you're very focused on delivering meaningful solutions. We don't want to have fancy presentations which don't tell you what is being done. We were walking the talk, more transparency you have in terms of strategy and where we are going is playing a very important role.

We try to maximize a very simple equation, which is better, faster, cheaper and now greener. So whatever we do, fundamentally, we want to focus on making sure that you make the best quality product. It's delivered to the customer on time. And you have the right cost position. And there's a difference between being the cheapest and being competitive. So we target being competitive.

And what Suyash mentioned here when he presented is that this whole ESG thing it's taking off first in overseas markets where today, in some of the tenders, which we fill in, they want this full breakup. And they want to know where you're getting it from. That's why this whole scientific process tend to have a business leader who is at the top level, driving this whole initiative. It is a much bigger deal than we ever thought.

We got into this journey in 2021 – 2020 actually. Saying that, one fine day, this is going to become important because we've just been pulling out from the earth and from nature too much more than we should. It's not sustainable. So we started this journey and we got all these champions and things like that. And then lo and behold from '21 onwards, companies and utilities started asking us for all this data.

And fortunately, because we had started early on the journey, because we had made very significant commitments to pursue this. It has actually helped us in growing in the overseas markets. Yes, Shashi mentioned names of some big utilities where we are the only Indian player that's been selected. The first screener that they had was on ESG. They don't want to see what capacity you have, what – if you didn't have something that was moving in that direction, you weren't called for the RFQ. And some of the RFQs are really big.

I mean they're running into thousands of crores. Not that we will get all of that business, we may get a small portion of it. But it's just giving an indication of the way in which the world is moving. And so the biggest advantage that – or the biggest competitive advantage that you're trying to build in the company, is first to make sure that, all the businesses are addressing growing markets, number one. Number two is that, we do have a competitive advantage in terms of servicing that market.

Number three, if you are very close to your customers, these markets are all changing. You come early in the game in terms of understanding what are the products, what are the solutions that they're looking for. And number four is optimizing that equation, because without optimizing the equation, nobody in this world is ready to pay you any premium, not for engineering products. It can only be linked in to performance or the greenness criteria that is – that it is discovering or being met.

And finally, as I said, just to summarize that the quote that I picked up from the Mackenzie study, as this world is going electric, the energy needs are going to be met through electricity. If you see the renewable energy, which is there, the cost position is not a problem. The world has to work on a formula by which or a system

by which is available 24x7, and there's no problem in terms of the unit price of generation.

Suyash just mentioned in your after paying all the government charges, wheeling charges, everything. We are locked in for this 3 megawatts and 1.8 megawatts about over 5 megawatts of renewable energy for the next 25 years, it's fixed. So it's irrespective of the inflation, right? It's – everything is fixed other than whatever taxes the government may charge for wheeling.

So affordability is not an issue, that's already in place. The question here is, how are you going to deliver it 24x7. And there's a whole lot of things happening in that area, which is going to make it more and more sustainable, as the main source of power.

So some of these projections, which are there, even though if the timelines get extended by a few years, because the numbers are very ambitious, whether it's India's number or the US number or European number. Australia is one country that is probably going to hit those numbers, because they have really been investing more than any country that I have seen on a per capita basis.

But even if it gets pushed out by a few years, all of this is going to happen, whether it is on the power side, on the transportation side, on the communication side, etcetera. And so we see this long runway in there. There will be competitors that come in. The – in India, as all of you know, moment a market is there and somebody sees some margin, people jump into it. But we believe the easiest thing to do is to set up a factory. The more difficult thing is to start the factory and the most difficult thing is to keep that factory running efficiently 10 years after it has started.

So that's about it. I don't know, whether Chaitanya, you would like to say anything, but thank you so much for being here and even during lunch, if you have any other questions or queries, we'll be around. Thank you so much.