



Hindalco Industries Limited

“Investor Day 2023”

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MR. DEV AHUJA – CHIEF FINANCIAL OFFICER –  
NOVELIS INC.**

**Moderator:** Good evening, Ladies and gentlemen. So, a very warm welcome. Welcome to Hindalco's Investors Day 2023. I'm pleased to announce that we have with us today Chairman of the Aditya Birla Group and Hindalco, Mr. Kumar Mangalam Birla. Also, present is the Hindalco Leadership Team, Mr. Satish Pai, Managing Director, Mr. Steve Fisher, President and CEO, Novelis, Mr. Praveen Maheshwari, CFO, Hindalco and Mr. Dev Ahuja, CFO, Novelis.

May I now invite on stage Mr. Satish Pai.

**Satish Pai:** Thank you everyone. I think it's good that we all could come back and have a physical meeting after a very long time. So, from the Hindalco and Novelis side, we are really looking forward to telling you all about the company. But first, let me invite our Chairman, Mr. Kumar Mangalam Birla, who has recently been conferred the Padma Bhushan to come and give some introductory remarks before we get into the presentation. So, Mr. Birla, if I can please invite you. Thank you.

**Kumar Birla:** Good evening and good morning to all the investors who have joined today's event. On behalf of the Aditya Birla Group, I welcome you to the Hindalco Investor Day 2023. As you perhaps know, this is the Third Annual Investors Day by Hindalco, which is a concerted effort to engage more deeply and more meaningfully with investors.

Three years back, the pandemic felt apocalyptic in its proportions, but the strength of our collective feedback is equally remarkable. As a same time, we are learning to live with new disruptions, a new strain of a virus, a new version of an AI model, a new chapter in a protracted war. It could be anything actually, ~~Deception~~ disruption is indeed, the new normal.

The world is changing at a pace that is becoming increasingly hard to predict. For example, the recent banking turmoil has created a fresh round of uncertainty, even though, thankfully, it hasn't quite pushed the global economy over the edge. India, though appears to be in a sweet spot, we should grow at 6.5% to 7% in 2023. We are likely to see strong growth even as inflation stays under control, thanks to prudent fiscal and monetary policies during the pandemic, we do not have high inflation or a high debt.

More significantly, India is well placed to gain from the geopolitical realignments that are taking place. Against this backdrop of global change and uncertainty, Hindalco continues to deliver a resilient and strong performance across its businesses. Better volumes, operational efficiencies, strategic product mix, and stronger growth in the downstream businesses in India have enabled this performance.

In 2021, we committed to a capital allocation plan and over the last few years, Hindalco has demonstrated financial prudence in its capital allocation. At its core, a prudent capital structure prioritizes allocating free cash flow towards growth projects in India and overseas. Hindalco has deleveraged significantly which is consolidated net debt to EBITDA, down from 3.1x in December 2020 to 1.6x as of December '22.

The India business has also reduced its net debt to EBITDA from 2.9x to 0.27x in the same period. Last year, we embarked on a new transformational growth phase at Novelis and our India business. A detailed growth map was shared at the Investor Day in 2022. Despite the current

global macro-economic uncertainty, I believe that the long-term market outlook across businesses remains very robust.

Novelis has a proven track record of investing, building, and utilizing new capacities to drive a strong return on investments. The current macro headwinds, like volatile energy prices, cost inflation, customer destocking, tightness in scrap supplies, etcetera, have somewhat muted the near-term performance of Novelis, but I believe this is only transitory. Novelis is now pacing its spends on its growth capital expenditures while prioritizing \$3.3 billion of projects that are already underway.

The timing of further potential investment opportunities will be based on market conditions. In India, we are investing \$3.1 billion over the next five years. Out of this, \$1.1 billion is currently under execution, and close to 80% of this investment is towards organically expanding the downstream part of the business and therefore enriching the product mix. Even after these significant growth investments, we expect Hindalco's consolidated debt to EBITDA to remain around targeted level of 2 times.

This is a testament to Hindalco's financial discipline and a reflection of our commitment to creating long-term value for our shareholders. A prudent capital structure creates a foundation for value-enhancing growth. This is a key strategic priority. Hindalco is on a path to transform itself from a manufacturing company to a manufacturing solutions provider. Hindalco is doing this by moving further down the value chain to co-create solutions for its customers.

This enables the company to access an extended value pool in high-growth market spaces with fabrication and precision engineering solutions. Here are a few examples. First is co-designing and manufacturing of aluminium-based battery enclosures for cars and two-wheelers.

Second, building lightweight load bodies for commercial vehicles that will help operators increase their fuel efficiency and reduce total cost of ownership. Third is co-designing and fabricating aluminium panels and railway freight wagons with passenger rail coach manufacturers. The first such rig by the way has already been introduced.

And finally, Hindalco under its own brand 'Eternia' has uniquely designed window solutions customized to deliver high performance by combining advanced design with unique alloys. This will help those consumers seeking reliable and efficient solutions for their fenestration needs. Value-enhancing growth is ultimately driven by the company's commitment to sustainability and responsible business practices.

At the Aditya Birla Group, ESG credentials are not just a marker of good corporate citizenship but in fact a driver for sustainable growth as well. Hindalco has been rated as the most sustainable aluminium company in the world for the third year in a row by the DJSI which is the Dow Jones Sustainability Index rankings and continues to be a part of the DJSI World Index and the S&P Sustainable Yearbook for two consecutive years now.

Hindalco is, in fact, in the top one percent S&P Global ESG score in the aluminium industry worldwide. Hindalco is firmly committed to sustainability and is taking several initiatives across the value chain with an ambition to achieve carbon neutrality by the year 2050. The global

pressures of energy transition and recycling coupled with the pressing need for industrial development in the emerging world are likely to accelerate demand for both Aluminium and for Copper.

Hindalco is amongst the world's largest non-ferrous metal companies with a full suite of solutions from packaging to automotives to building and construction to aerospace. I now hand over to Steve and Satish to take you through the roadmap of our group's journey ahead. Thank you for joining us today.

**Moderator:**

Thank you Mr. Birla. I now invite Mr. Fisher, Mr. Maheshwari and Mr. Ahuja to join Mr. Pai and take us through today's presentation. May we all welcome them together on the stage.

**Satish Pai:**

So, before we start our presentation, I would like to of course remind you of the Safe Harbour statement that's up on the slide and urge you all to go through it. In today's presentation, me and the rest of my colleagues are going to take you through a little bit about what Hindalco and Novelis is about, an update on sustainability, a market outlook. We'll be going into quite a little deep dive on each of the end markets that we participate in, an update on the growth projects, talk a little bit about the strength of our balance sheet and the financial strength that we have developed over these last few years, and summarize with a few key takeaways.

So, I would like to remind as Mr. Birla just said in his talk that Hindalco is probably one of the largest non-ferrous companies in the world today. Now if we take a look at the two pillars of Hindalco today, one is the Indian operations. In the Indian operations we have a fully integrated aluminium company. I would like to remind you that the alumina capacity is at 3.6 million tons and we have a further brownfield expansion happening there. And also on the value-added side, this year we have reached around 400 Kt of value-added products and with the projects that we have we are on our way to reach 600 Kt by FY27, that I have been talking about.

Novelis is the world's largest flat rolled products company in the world, dealing with very good end markets that are growing like beverage can, automotive specialties and aerospace. With a 4.1 million tons rolling capacity and they recycled in the last year about 2.2 million tons. So, Hindalco today on a trailing 12-month basis is a company with \$28 billion of revenue and a consolidated EBITDA of \$3.2 billion.

Our strategic priorities have not really changed from the last time that we met you. We are committed to a very prudent capital structure. The strength of our balance sheet is important to us and our growth capex as we will be continuously mentioning throughout this presentation is supported by our positive cash flow generation and a strong balance sheet.

We are focused on value-enhancing growth to create shareholder value and this will be done largely organically. Cost optimization and predictability through enhanced resource security largely on the Indian side, whether it comes to bauxite and coal are critical to us and we are focused on achieving that soon.

We are extremely focused on our ESG commitments and I'll show you that besides being ranked number one, we have a very holistic view to sustainability that goes beyond just carbon, covers all other aspects like waste, biodiversity, water positivity, etcetera. We are committed to a

portfolio enhancement advancing from just a manufacturing company to become a solutions provider by closely working with our clients. We continue to work on enriching our product mix and we'll show you a number of examples throughout the presentation today.

But let me first take you through sustainability updates, because I think that this is a license to operate for any large company going forward and especially in the sectors we play like aluminium and copper, these are becoming what they call hard to abate and hence very critical for various stakeholder bodies, our shareholders, our employees and our customers. We look at sustainability in a holistic way. Besides carbon, we are focused on biodiversity, waste management, emissions of all forms including carbon, water, employees and communities.

So, as you can see, we have taken ESG targets that you see here on the right-hand side of a net zero by 2050 along with water positivity, no net loss to diversity and I think in last year's presentations you saw that. But if you take a look at the highlights, we have specific targets that we have achieved along the way. We have, Novelis has recycled 2.2 million tons of aluminium scrap in FY22, 80% of the waste generated in Hindalco has been recycled in this year.

We are on track to reduce the net water intensity by 30%, greater than 18 million cubic meters of water is conserved annually. We are replanting 190 hectares of green cover every year and of course as I will tell you our renewables and green energy strategy is quite well advanced. If I talk about Novelis's ESG ambitions, they do have a long-term target of 2050 carbon neutral but a 30% reduction in carbon footprint by 2026. So specific targets taken are a 10% reduction in energy intensity by 2026, 10% in water and 20% in waste to landfill. I think the key part you will see in Novelis presentations is rather than just a 2050 goal, we are going to give you specific targets in the interim period that we are focusing on.

Circularity, recycling and the circular economy is at the core of our ESG strategy. So, as you will see right from mining, where we are making a great headway to completely re-use the Red mud or the bauxite residue, 50% is re-used today. The Bauxite Residue from Utkal is undergoing a pilot project for mine backfilling which will make us 100%.

On the fly ash, we are recycling more than 100% of the fly ash we generate. The spent pot lines which all over the world is a big issue. In India, we are close to reaching 100%. Recycling of the spent pot lines used in aluminium smelting. And as you look at Novelis, they're a world leader in aluminium recycling, currently recycling 2.2 million tons of UBCs, in the beverage cans.

But I would like to show you that they are getting into more and more other types of complex scrap and going to increase this recycling percentage going forward. Generally, ladies and gentlemen, when you look at ESG targets, you generally see companies mostly talking about carbon reduction which they put under climate change.

So, if you actually see this McKinsey chart, you will find that majority of the Fortune 500 companies have got climate change or carbon related targets. But very few, if you go down, talk about water, chemical and plastic pollution, forest cover or biodiversity. I think this is where, Hindalco differentiates versus most of the other companies and which is why that we are ranked

so high in the ESG space. Hindalco's biodiversity target, the steps that we have taken are actually industry leading. We have planted about 4 million trees. We have about 2188 hectares under green plantation.

And as I said earlier, we are adding every year 190 hectares. So, we have biodiversity management plans in place for most of our plants with a lot of attention given to flora and fauna and the wildlife. Specific targets now on carbon reduction. So, as you can see, besides the longer-term goal, Novelis has achieved a 24% reduction in carbon intensity in the FY '23, that's the year that we are just completing. And Hindalco would have achieved about 20.5% from the base year.

So, we are taking interim targets along the way to that journey for net zero. And we have specific milestones for every five years or ten years of what we are going to achieve. To give you a flavour of some of the key sustainability projects that we are investing our time and money in. carbon capture is a topic that everybody talks about, but we have got some very interesting projects on mineralization, which is after you capture the carbon, you convert it into minerals that can be used.

We have a significant renewables portfolio, along with pumped hydro, which will give us Round The Clock type of power that we are working on. I already talked about Bauxite residue that we are going to use for road building and mine-backfilling.

On the Novelis side, I wanted to talk about two interesting projects you may have read in the public releases. Novelis has a net zero lab in Valais in the Sierre region of Switzerland. And they are working on different technologies to reduce carbon. The first one is the electric pusher furnace that has now been commissioned in our Sierre plant.

And they are working with a company Sortera to work on separating and using much more complicated and mixed scrap rather than just the UBC. So, I think to achieve the carbon goals, we will have to try many different things. And I wanted to show you that both in Hindalco and in Novelis, quite a lot of projects and money is being invested in these technologies for sustainability.

And as a result of all that, we have been ranked as the number one aluminium company. And actually, we make it into the top 1% of the companies that the Dow Jones Sustainability Index monitors. And we make it to their sustainability yearbook.

And you can see the scores that we have achieved. Again, the reason why we make this, even though we have coal as our power in India, is because we have a much broader sustainability agenda, which covers all the other topics like waste, water, biodiversity. And this is where we end up ranking very high.

So, with that update on sustainability, I'm going to hand it over to Steve, who's going to take you through the Novelis part of the presentation.

**Steve Fisher:**

Thanks, Satish. And good afternoon and good morning to anyone joining us from Europe or North America. It's good to see everybody and excited to talk about the long-term outlook and

reiterate what we talked about last year. For those of you that might not be as familiar with Novelis, or just as a reminder for hopefully most of the people on who Novelis is, we are a global aluminium leader in flat-rolled products. We're the world's largest aluminium recycler.

Just for a few key facts, \$17.1 billion in revenue in fiscal '22, over \$2 billion of adjusted EBITDA, about 3.9 million tons of FRP shipments, with 57% recycled content. You can see that we have an unmatched scale and global presence across all four regions, with a diverse, high premium product portfolio, very much focused on premium products, which is a significant portion of our portfolio, number one in can, number one in auto.

We also see a tremendous amount of growth in the aluminium flat-rolled product industry over the next five years, a 4% compounded annual growth rate. And with our market-leading position and robust financial profile, we continue embarking on this transformational organic growth period to further our ambition to be the world's leading provider of low-carbon, sustainable aluminium solutions that not only advance our business, but advance industry and society towards a more circular economy.

Now, the long-term market outlook broadly remains robust, and our guidance for a sustainable \$525 EBITDA per ton remains in place. But there are some macro headwinds that are muting our near-term performance, and I think we saw this in our week Q3 results. I'll reiterate that Q3, fiscal '23, is the trough. We do think that's the low point, but we do expect some of these headwinds to continue through fiscal '24.

So, before I go into more on the long-term trends, I want Dev to talk a little bit more about these headwinds that we're seeing in the near term.

**Dev Ahuja:**

Thank you, Steve. So really, let me start by reaffirming our guidance for a \$525 per ton EBITDA on a sustainable basis. Going back to November, when we announced our Q2 results, we indicated near-term headwinds, as Steve just alluded to, because of which we will see an impact of \$75 per ton to \$125 per ton headwinds on that sustainable guidance that we gave.

As Steve also mentioned, our Q3 performance turned out to be even a little worse than that, and that is because of a much higher than anticipated destocking that happened in Q3. We said at the time of announcing the Q3 performance that we expect a significant bounce-back in Q4 to enter the range of the \$75 per ton to \$125 per ton below the sustainable guidance, and we believe that are going bounce back to a certain extent in Q4 of this fiscal and shall then gradually improve over the upcoming quarters.

So, the near term does continue to be a challenge, and let me just go into some of the aspects of what these challenges are. Number one, energy and inflation. And I will largely focus on energy relating to Europe, where we are bearing the biggest brunt because of the geopolitical situation, i.e., the Ukraine war that has been impacting us around \$25 million a quarter.

Now, as we look at entering fiscal year '24, this is going to continue and could even be a little higher. We could be in the range of anywhere between \$25 million to \$35 million continuing impact. We are taking the uncertainty out, and we are significantly hedged in terms of energy cost, in excess of 70% in this year. So, we have really mitigated a large part of the volatility and

uncertainty by taking some very constructive hedges, but we are still exposed to the spot rates where there is some uncertainty. So, this is headwind number one. This headwind will settle over time because if this sustains, then the inflation pass-throughs, which come with a lag, will address it, and at some stage, the War is expected come to an end, and we will see some normalization happening. So, this has been going a little longer.

Second is the tightening of the UBC supply in South America. So, in South America, because of a large inventory build-up in the channel, UBC release had slowed down. Now we are confirming that UBC supply is normalizing to pre-COVID levels, and we should see an improvement in the situation, which should be reflected in our ongoing results. So, there is the correction and rebalancing happening when it comes to UBC supply in South America.

Now let's talk about what are the demand factors that are getting impacted. And while our aerospace demand and automotive continues to be robust, in some of the markets like specialties, particularly building and construction, we are seeing headwinds arising from very high interest rates, which basically slows down how home buying decision and home construction decision.

So, building and construction and in general, the specialties markets are going to see the impact of continued high interest rates and inflation, which we expect will start settling down in the second half of next fiscal. So, this is really the third part of it. Then we have some challenges on the beverage packaging side.

So, there is a continuing destocking that is happening, and I will get into more details on what we are seeing on the short-term headwinds on the Can side, particularly destocking. So, I will be coming to that in some more elaborate detail in the following slide. So, what are we doing in the meanwhile?

As you will see, we are taking a number of mitigation actions. Number one, managing cash very efficiently. We had indicated to you that the fourth quarter will be a very-very healthy cash flow generation, and we had guided you to a \$400 million free cash flow for the full year. We still stay attached to that guidance as we announce our Q4 results in the following month, number one.

Number two, we are capturing pricing opportunities and inflation pass-through opportunities. You will see the waterfall chart on the right-hand corner of this slide, and you will see that we are able to significantly pass on inflationary headwinds over to our customers. So, this is the second mitigation action that we continue to take.

And then, of course, we are looking at opportunities to drive cost efficiencies, better cost management, looking at some restructuring. For example, the Richmond Pellet casting plant, where we are going to be doing some restructuring and really closing down a facility which we think is not viable in the long term.

So, on the whole, we are taking a number of mitigation actions, and we think that we are well positioned to navigate through these headwinds which are going to last in the short term. So let me now go to a little more detail on what is really happening on the can side, and more particularly the destocking that we alluded to.

So, what really happened is that as the whole world was coming out of COVID, consumption habits basically started shifting back to normalcy, i.e., the pre-COVID time. During COVID, we saw some surges which was really COVID-related, and consumption patterns really went on the exceptional side when it came to can consumption. So, the can market is normalizing, but the inventories that got built during those COVID times need to normalize, and that is the destocking that we have seen, number one.

Number two, we are also looking at some pullback of promotional activity that has happened from the beverage folks, and just given the overall macro environment, this lack of promotional activity is starting to have some impact on the demand. We expect the promotional activity to come back as we enter summer months. And therefore, it should have a positive impact on volumes.

The third thing is that -- besides the normalization of consumption habits, the third thing is basically supply chain disruptions that were very-very prominent and visible during COVID times are now normalizing, as a result of which the channels and the Can makers i.e., our customers, no longer feel the need to keep all the safety inventories that they have built up during that time, during the time of COVID, and that is a factor that is leading to some more destocking impact. So, all of these are really the key drivers and will carry on for some time.

Now, we just need to be reminded that can is essentially a very-very resilient product, and particularly during economic downturns, can does very well because there is a surge in home consumption. So fundamentally, we are in a very good market situation where fundamentally, demand is growing, supply is tight, and Steve is going to talk in more detail about that. So over to you, Steve.

**Steve Fisher:**

Thanks, Dev. So, understanding those shorter-term transitional headwinds that we're dealing with, we really want to pivot and talk about the long-term can sheet demand, which does remain very robust across all our regions. But to put it and make sure that we understand who know Novelis is in this marketplace, we are the largest supplier of beverage can sheet, with 40% market share ex-China. We shipped 2.2 million metric tons of can sheet in fiscal '22.

To put that in perspective, that's larger than any of our aluminium competitors' total flat-rolled products. So, this does, our position in the marketplace does provide us with keen insights into both the short-term trends that are happening and the longer-term market trends. And despite what Dev just went through, we reiterate that demand remains strong at 3% to 4% compounded annual growth rate across all our regions.

On a global basis, we're just above 3%, which is in line with CRU projections. And so, to talk a little bit about the trends that are driving this growth in beverage packaging, they are the same trends we talked about last year. It's substrate shifts driven by increasingly demanding consumers around sustainability. New products are being launched more and more in aluminium packaging, increasing share across new product launches every quarter we see this.

Second is the consumer-driven demand, huge growth in energy drinks. And energy drinks, 90% of this category is in aluminium beverage packaging. We also see it in a smaller amount in

alcoholic ready-to-drink drinks, some flavour water categories. And still water is an emerging opportunity that still comes.

The last factor is the form factor innovation, sleek, small cans. This shift we've been seeing over the last several years, it is allowing consumers to consume beverages in a variety of different sizes, shapes. It supports the health and wellness initiatives of many of the brand owners as well. So, these trends are driving growth globally, but the fastest acceleration of sheet capacity needed is in the North America market. So, I want to spend another minute on the North American market here.

You can see from 2018 to 2022, a 7% compound annual growth rate driven by the secular shift to sustainability trends that we just talked about and pandemic impact. There's no doubt that there was some pandemic impact. You can see from 2022 to '31 we see a 3% compounded annual growth rate as we normalize coming off the post-pandemic era.

Now, when you look at this market, it is drastically undersupplied. In 2022, approximately 500 Kt undersupplied, forcing our North American customers to rely on imports that carry geopolitical, supply chain, quality, and ESG risks. They want to domesticate this 500 Kt. Then when you add on the 3% growth from '22 to '31, that translates into another 500 Kt short.

So, the market today, as we project out to 2031, is 1000 Kt short, allowing our capacity at Bay Minette, our debottlenecking projects, and our competitors to fill this market that has tremendous growth over the next decade. So, we're taking advantage of building a first mover advantage to build a new low-carbon, state-of-the-art aluminium recycling and rolling facility in Alabama that we've already announced, primarily serving aluminium beverage can sheet, but also some automotive, which I'll talk about next. Construction is well underway, and we continue to leverage this first mover advantage, our market-leading position, our long-term relationships with our customers that drove quality, service, and innovation to take advantage of bringing this facility to the market first.

We have almost fully contracted our beverage packaging portion of this, which we said was 2/3, about 400 Kt out of the 600 Kt, through the end of the decade with very attractive prices. And this is helping not only to capture the growth in this marketplace, but also to fill this need to localize the can sheet capacity. So now let's move on and talk a little bit about auto body sheet. Three main factors here driving auto body sheet demand, also very consistent and largely associated with the global sustainability trends we've been talking about.

First, just take a look at 2020, 2021, and 2022 on this sheet, and you can see the significant under build compared to the pre-pandemic levels. There is a pent-up demand for the need for vehicles that have aged on the road globally. That pent-up demand we see in our order book as we continue to look into this calendar year 2023 and into 2024 as we look today.

The second is vehicle mix. SUV pickup trucks that need to be more light-weighted, drive a lot more aluminium, continue to be a big portion of the market and continue to grow. And then you got the premium battery electric vehicles growing through 2030, 40% of new vehicle bills at that

point in time will be battery electric vehicles. And what we know about battery electric vehicles is that they need about two times the amount of aluminium on the vehicle.

So, when you look at that in North America, as an example, Ducker worldwide projections moving to above 550 pounds per vehicle by 2030, driven by these trends, driven by the higher content aluminium on the vehicles, new systems, including battery enclosures in electric vehicles. And we also think there's an opportunity from a rolled, flat-rolled product standpoint to displace some extruded aluminium in the form of new innovation of old-form aluminium.

So tremendous opportunity here. Now, with all those strong market drivers, our five-year outlook for aluminium demand remains very robust at 11% compounded annual growth rate. We are a clear market leader here for auto body sheet today. You can see 40% in North America, 35% in Europe, market share 20% in Asia. And we continue to expand.

We've already expanded in the US and we expanded in China to grow alongside this market and grow alongside our customers. I think you can look and see that we are uniquely positioned to capture this growth through our network of customer solution centers that demonstrate advantage of our product versus other materials with our customers.

As a leader in automotive recycling, we're investing in both the process capabilities, new innovation on technology of sorting so that we can get more closed-loop systems in place, sorting a process scrap from our OEMs, as well as end-of-life scrap as the vehicles come back out of service.

And demonstrating to the OEMs, the light-weighting effects that aluminium can have on electric vehicles, not only just for distance but also to take up less natural resources, precious rare earth elements. These are all factors that OEMs are looking for now. And so, with these uniquely positioned advantages and our collaboration, I would say, throughout the industry with this consortium, aluminium usage will continue to gain traction against steel.

So let me turn now to our specialties portfolio. We take a strategic approach to this diverse portfolio of high-end, some high-end products and very different by region. Broadly, this market's going to grow more in, think about it more in an economic growth-cycles, growing in a 3% to 4% range.

Our flexibility here allows us to optimize to the higher-end products as we find these different products and capture the margin. And it also allows us to leverage our strengths in both product quality innovation and innovation specifically around high-recycled content and alloys. When you think about North America and Europe, it's largely building and construction in market, very high recycled content in this market. Yes, we do have some headwinds as we sit here today as it relates to new house builds.

But when you look at the very significantly undersupplied housing market in the US, this will be a growth market as we look into the next five years, 10 years. Most recently Burns US H.A. has published their latest projections of US. Single family homes with a 3% compounded annual growth rate through 2026, also we have light gauge and foil products. That market's largely intact.

We also have transportation and truck and trailer markets that are benefiting from the last mile delivery vehicle initiatives by many and light-weighting trends that we've seen in our auto business as well. In Asia, we focus on premium electronics. We're a small player in this market, so we very much focus where we can make a difference, and that's in electronics and some battery segments. In South America, very competitive. Here, we're just optimizing our asset base as appropriate.

So, turning to aerospace now. Aerospace industry is back post-pandemic. You can see the increased traffic. You can see the increased prices. The need for airlines to modernize their fleets will drive growth. OEMs are forecasting traffic to grow by 3.6% on an annual basis, which is going to drive about 40,000 new aircrafts in the air. And the positive there is 80% of these will be single aisle aircrafts where aluminium is more intensive.

With that said, this is a relatively small market overall. Globally, it's a 400 Kt market. For Novelis, it's less than 5% of our portfolio. So, our aspiration here is to continue to hold our market share at 25% to take advantage of deep bottlenecking, take advantage of our dual presence in both China and in Europe, which is the only Western plate producer to have that position and offer a full range of products to our customers and continue to grow to be number one in Europe and Asia.

We think with leveraging our recycling capabilities, there's a big opportunity here to make aluminium the real green choice for aerospace through more closed loop systems and increased recycled content. So, turning to the projects, we maintain our favourable views on the long-term growth outlook across really all of our end markets. We have attractive opportunities with good returns to grow with our customers.

Last year, we announced the transformational organic growth plan, talking about \$4.5 billion of capital expansions over a three year to five-year period. We remain committed to that organic transformational growth plan and to grow alongside the market and our customers. With that said, we're going to do it in a more paced manner based on some of the headwinds that we've seen here, and where the market conditions are.

And so, we're going to stay very focused on the \$3.3 billion of projects that are already underway, which are broken up into three different categories. First, and the largest, is our fully integrated rolling and recycling and casting facility in Bay Minette, Alabama. \$2.5 billion capital investment, 600 Kt to commission in fiscal Year '26.

We will take our decades-long rolling and recycling experiences in the aluminium industry, our ability to work with our customers from a quality standpoint, all the learnings we've had on automation over the years, and we will make this the most sophisticated, the most automated, the safest, and the greenest aluminium rolling mill in the world.

As I said before, we are largely committed to long-term customer contracts already. Beverage packaging is almost full, which is 400 Kt of the 600 Kt facility, and we feel very good about the order books associated with automotive as well. The second bucket is in the realm of recycling.

We've announced the Guthrie, Kentucky 240Kt automotive focused sheet ingot recycling facility. It will come online in fiscal '25. The facility is \$365 million.

It's advanced sorting technologies focused on closed-loop recycling with process scrap from our OEMs as well as end-of-life scrap. And this is demonstrating our commitment to sustainability as well because this facility will save us a million tons of carbon on an annual basis. We also have announced or started a \$50 million expansion in Korea, again, 100Kt focused on casting and recycling. This reduces our carbon footprint by 420,000 tons per year.

And the last category is high return, quick payback, debottlenecking projects. Here, we have a \$350 million bucket, 265 Kt of finished goods capacity through North America, South America, and Asia. Those will come on over the next two years to three years as well. With the remainder of the \$4.5 billion of investments, we'll pace that with market conditions. We do stay committed to it, but we will pace it with market conditions.

With that, I'm going to turn it over to Praveen to go through the Indian business.

**Praveen Maheshwari:**

Good afternoon, everyone. I'll take you through the India business and the growth prospects. India, as you know is the fifth largest economy in the world now. It is the only economy, which is largely growing at such a fast pace even now. Post-COVID, post-war, there are many things which are helping us.

There's China Plus One strategy which is helping us. Indian government is focused on the manufacturing in India, make in India, etcetera. All that is really helping the industry. And we being a non-ferrous industry in aluminium and copper, which are really young metals and really no substitute for them, we are in a very sweet spot where we can really take advantage of this opportunity which is being offered today to our country.

So, I'll take you through the different segments and show you where we are. Aluminium is expected to double in terms of consumption in the country in the next one decade, from current 4.5 million tons to about 9 million tons by FY '23. And this has multiple usages, as it is replacing steel in many areas.

And many of these are building and construction, automotive, packaging, electronics, consumer durables, etcetera. You name it, we are there. We are the only large, organized player in the downstream side which can really take advantage of this opportunity which is being offered. And India is low in terms of consumption today per capita, so it offers a huge potential going forward. Many of these markets will be the third largest market in the world in the next 10 years.

So, this really offers enormous opportunity for us to play in this area. And I'll take you through some of the initiatives that we have taken. These are just some examples. But this will demonstrate where these opportunities lie and how we can take advantage of that. So, one example is the aluminium battery enclosures. This is driven by the EV application which is happening.

So, as EVs grow in size and percentage of share in the Indian market, you will see the requirement for battery enclosures going up. EVs by nature and by design cannot accept any

metal as light as aluminium. It cannot have any steel or anything because the requirement for battery goes up.

So, battery enclosures which is one of the prime applications is going to be made by extrusions and FRPs and we have made a foray into that. We have already started working on it and there is a facility which is coming up by December '23 where we are going to make battery enclosures. So, this is just the beginning and as the EV applications grow, the requirement for this product will grow.

Aluminium trailers are another example where in a large way steel is getting replaced by aluminium. This also we have started with a rolling partner, and we have already made a beginning here. With the size of the market that is available in the country, if this gets replaced, it is going to be a huge opportunity for us.

Similarly, the trains where both freight and passenger trains will see huge changes coming up by introduction of aluminium into coaches and wagons. In fact, last year the first aluminium wagon train was already flagged off by the Railway Minister in the country. Where the entire wagons were made of aluminium.

This offers commercial advantage apart from being sustainable because then the with the same load capacity it can carry a larger load because aluminium per se is going to be lighter and therefore the freight that can be earned by the railways is much larger. Similarly, passenger coaches, Vande Bharat is already announced.

So, we are going to see some aluminium coaches coming in and that will open up huge opportunities for us and we are already preparing ourselves in terms of setting up facilities to take care of that. Our Eternia brand is another example which has been there and we are getting into closer to the customers, designing solutions, building solutions for doors and windows, unique in every aspect and it is getting traction very prominently.

So, some of these examples basically demonstrate that from a purely a metals company we are moving into a product and solutions company where we are getting closer to the customers, we are providing value added services, this is kind of decoupling ourselves from just LME fluctuations and thereby providing steady cash flows.

It is a long journey, but I think we have made a very good start here. Coming to copper again like aluminium, copper consumption is expected to double in the next 10 years from the current 1 million ton to 2 million tons. It again offers huge opportunity, copper is irreplaceable as far as conduction of electricity is concerned, it is the only metal which can be used. So, it offers huge opportunities.

Again, EVs are extremely copper intensive, renewable power is extremely copper intensive and many other areas where for example air conditioning is one market where it requires large amounts of copper. We are making quite a few forays here where this will be very helpful in terms of make in India in copper industry.

We are actually moving downstream here as well as the proposal is also to have a recycling. So, I will take you through the initiatives that we are doing here. There is one copper alloy rod product project which is already under implementation. This is for railways; they need wires under the electrification which consume different alloys of copper.

So, we are pioneers here and we are going to see more and more usage of this. So, it is a magnesium copper alloy which is for the first time in the country is going to be used. Inner group copper tubes is a product which is used in air conditioning. This is a plant we are setting up under PLI scheme and here the entire requirement of the country is currently imported. So, this is a huge, imported substitution opportunity for us.

Air conditioning market in India is growing at double digit rates for the last several years and is expected to continue to grow in the same way. So, this again is an example of how downstream copper can be used profitably in the country.

Similarly, recycling is another area where we are focusing our attention and this is again a new area where very little has been done in the organized sector and really, we will be the first pioneers probably here again where in an organized way, in an environmentally friendly way we are going to recycle copper and e-waste that is going to be quite interesting and profitable for us as well.

Coming to specialty alumina which is a specialty product for us. It is a segment which is similar to alumina, but alumina offers very specific advantages of being very hard in terms of as a substance. It can provide fire retardation. It is very good fire retardant. It can withstand high temperatures and it can also be used as a very strong material. So, it has applications in multiple areas like refractories for steel industry. It has usage in cement industry. It has usage in building and construction, ceramics, water purifiers and fire-retardant cables and wires.

So, multiple applications are there and the interesting part here is it is just not the domestic market, but it is a global market which is very attractive for us. Domestic market actually is growing at double digit levels here and even global markets are growing at 5% to 6% in different applications. So, we are the only players here again in this area and this offers huge opportunities for us in India as well as globally.

Some of the examples are given here. Precipitate and hydrate with fine particles is a 1 micron or 2-micron particles very hard which have applications in zero halogen wire which is the new requirement as per the safety standards in the country plus paints and other areas it is going to be used. High precision sub-micron alumina which is less than a micron in terms of size particle size and this again is very hard substance and it provides excellent protection in terms of insulation.

High crystalline alumina is another one which is with reduced soda content again another very specialized applications. Industrial ceramics is another area where this product can be used. So, multiple usages and very niche products good profitability and therefore, we see this as an as an opportunity for us going forward. I will give you a brief update on the projects under execution.

So, you will see that it is spread across aluminium upstream downstream copper specialty and even energy. So, upstream we have basically alumina expansion is already underway. This as well as the extrusions Silva in Silvassa is likely to be completed in FY '24 itself and this is going to start production itself.

Most of the other projects which are largely in the aluminium downstream space and some in the copper they will be commissioned in FY '25. In the energy side we have Chakla Coal mine coming up which is going to be operational in FY '26, but this is going to reduce our dependence on purchased coal which you have seen in the last one year is subject to a large amount of fluctuation and therefore, a lot of uncertainty will go away.

These are the projects under execution about more than a billion dollars, but our cash flows are sufficient to support them. Future growth opportunities again divided into different parts of businesses including the upstream we have the possibility of expansion in both alumina and aluminium.

Depending upon alumina as far as alumina is concerned it is the bauxite mining. On the aluminum side smelter, we are waiting for a successful experimentation of our renewable energy because we really are concerned about ESG requirements, and therefore, we don't want to grow on a thermal basis. And if this round-the-clock energy that we are trying to get of 100-megawatt as a pilot basis, that is successful, this offers another opportunity for us in the smelter area.

And then we have multiple opportunities, some of them I've already talked about. Meenakshi coal mine is the other big one in the energy side, which can help the company reduce its dependence on the purchased coal. So really speaking, we have some exciting options here, close to \$2 billion, depending upon all these conditions that we have talked about here. We can implement them if those conditions are fulfilled. The most interesting and most important slide, probably the last one before Satish takes over, is the strength of the balance sheet.

We as a part of Aditya Birla Group and as Hindalco, we are very focused on ensuring that we are very well disciplined, and we have our capital structure in a proper way. We are not overleveraged at any point of time. And you would see that the net debt-to-EBITDA, which is the basic measure of leverage has continuously come down today on a consolidated basis and we stand at 1.6 times at the end of December 2022. In India, we are very close to being almost net debt zero by the end of this fiscal.

And therefore, we are in a very strong position to basically take advantage of the balance sheet flexibility to drive growth. We have the potential to grow much faster, and that is what we are going to leverage upon. Our debts which are given here, both in India and Novelis are having long-dated maturity profile.

So, financing has been done in a very strategic way, in a very thoughtful manner, where it allows us the flexibility to really spend money on growth capex and grow the company even bigger. We maintain very strong cash balances all the time, more than \$1 billion in Novelis and similar level in Hindalco as well. In terms of faith of the banks and rating agencies, we stand very high

in terms of our financial strength. So, I now hand over to Satish for to summarize our today's presentation.

**Satish Pai:**

So if I had to summarize all what we have heard, I think it's important to reiterate that we are very focused on getting the right financial and operational performance. Yes, there can be headwinds in certain quarters in certain markets as has been described to you. But I think the underlying operational engine that are both in Hindalco and Novelis continues to be very robust, and I think that's very important in uncertain times like this.

I think I hope we have convinced you that whatever are the short-term headwinds in certain markets, the long-term market outlook across most of our business segments is very healthy. I think that both aluminum and copper has got many applications. They are sustained by many of the ESG initiatives of many of our customers.

And I think that whatever are the short-term winds, they will be transitory and the overall longer-term outlook that we have projected to you bodes well for the company. I want to also emphasize that we are very focused on our ESG targets. I think that for most companies, this will be a very important license to operate going forward. And besides taking very long-term targets to 2050, I hope we have presented our interim targets as we are spending a lot of time, money and effort to achieve a broad range of these sustainability targets.

As Praveen just mentioned at the end, we are very focused on keeping the balance sheet strong and making sure that we don't over lever, markets can go up and down, and I think the strength of the balance sheet is very important to go through those downturns. As I've said probably last year as well after the Aleris acquisition, we have no major inorganic growth initiatives in sight.

So, we are largely focused on growing the company through organic growth, largely based on downstream expansion as well as resource securitization, which is both on the bauxite and coal that we mentioned. And I think last but not the least, we will continue with our capital allocation and shareholder return that we spoke about. I think compared to last year, the only thing we can say is majority of the cash we generate will go into organic growth, and we remain committed to the 8% to 10% that we will be distributing as shareholder returns.

With this, I would like to thank you all for your attention, and I will now hand it back to the moderator so that we can then start the Q&A session.

**Moderator:**

Thank you for the insightful presentation. We will now open for a Q&A round. We will take a couple of questions from the room, and then we will move to the online participants. Audience here can raise their hands, to ask the question. Participants connected virtually, please click on the live interaction button, to ask a question. You will get an option, to click on join. Once your name is announced, you will have an option, to unmute audio and video. Given the timeframe, we aim to give three minutes to each individual. We will now begin to the Q&A session. Please raise your hand to ask questions.

**Amit Dixit:**

Yes. I'm Amit Dixit from ICICI Securities. My question is around the India growth projects, the one that are being contemplated. You have mentioned that in case of the aluminum projects are going to be complete subject to different third-party approvals by FY '27. Now FY '27 in

aluminum balance is like quite near. So has -- is some work being done on the project itself or you are still waiting for the clarity on power?

**Satish Pai:**

Yes. As I think probably in our last quarterly analyst call that we have made, we have signed a contract with a large RTC provider for pumped hydro. And that should be starting, hopefully, in the next six months, that RTC Power renewables. So we want to make sure that we can get that power and use it in the existing smelter and make sure that it all works.

So once we do that, then we'll be ready to launch a smelter expansion. So yes, we are quite far ahead. The contract is signed. We are getting on the 400 kV grid in Aditya. So by end of this year, we should be starting to see how this RTC Power actually could work in the smelting.

**Amit Dixit:**

Sir, the second question is on Novelis. So Dev did indicate that there is some restructuring of certain facility. So just wanted to get a little bit more clarity on that. And since long-term outlook, you have mentioned looks quite good. So what is the thought process behind this restructuring? And can we expect some more restructuring of such assets in the future?

**Steve Fisher:**

So you're referring to the announcement we made last week at Richmond, Virginia facility. It's one of the facilities that was acquired in the Aleris acquisition. This is a historical facility that in downturns in building and construction, specifically has been furloughed. There is both a hot mill and cold mill at this facility.

The hot mill is very unique technology, technology that's not very much in the marketplace and one that there's not a lot of skill set on the hot mill technology itself. This has been a struggle for years in continuing to get the output from this hot mill. And so we made the decision in this downturn that we would permanently close the hot mill due to the long-term outlook on the technology side.

We believe we know that we can get capacity out of other places in the system to feed the cold mill. So overall, capacity-wise, we won't lose, but it will result in some fixed cost savings. We'll look at everything as it relates to cost out initiatives. We already are and we will continue in this near term. Again, our longer-term outlook, as you rightly said is a very robust and we do think this is a couple of quarters. So I don't think you'll see a lot of structural restructuring, but we will be very mindful of getting as much cost out of the business in the next couple of quarters as possible.

**Pinakin:**

Hi this is **Pinakin** from JP Morgan. You mentioned that \$525 per ton target would be hit when the headwinds subside. So do you expect that number to be hit in FY '24? Or do you think it's more like an FY '25 achievement?

**Dev Ahuja:**

So Pinakin based on the best visibility that we have now and some clear understanding that transitory headwinds like destocking will come to an end in the foreseeable future, we think that we should be able to hit that in the fourth quarter of fiscal '24.

**Pinakin:**

My second question is, so OPEC production cut, oil price moving higher. We have seen gas prices, coal prices also started moving higher. Is it fair to say that the best of energy price

disinflation in the spot market is now behind us and the next price resets or cost resets would be higher. Is that a risk to that margin guidance?

**Dev Ahuja:**

Yes. So let's just kind of slice and dice energy a bit. I think that we saw the worst of the worst of energy last year in the September, October period when, particularly in Europe, prices flared up to 4x to 5x even like for a phase 6x to 7x of the pre-war levels. I think it is absolutely unlikely, never say impossible, but it's absolutely unlikely that we will ever go to those levels, right? So that phase is completely behind us.

Now you also see from the waterfall that we demonstrated a significant pass-through of inflationary cost besides price increases. So basically, the pass-through process is happening in some businesses, where we have annual contracts like specialties, I mean, we have successfully negotiated prices, which ensure the pass-through in this year.

So the point I'm making is that I think that the worst of energy that we saw last year is clearly behind us. Now with all the OPEC decisions, yes, there could be some noise, some volatility, but I think that we are in a very decent position now. As I said that the European headwinds, in particular will stay at the levels we have seen until sort of we have the next round of pass-through, which will be like January next year, and that's why I mentioned fourth quarter. That supports the hypothesis that in fourth quarter of the next fiscal, we'll see some more mitigation happening.

Short answer, the worst is behind. The continuing headwinds are going to be there for some time because of the geopolitical uncertainty. I think that we are in a decent position with hedges and everything that we are doing in pass-through to be able to kind of navigate this and get to the end.

**Pinakin:**

So my last question is, can you give us a sense of consolidated capex for F '24 and F '25 because now we have broken down into ongoing projects and potential projects on. At least on ongoing projects, how should we look at annual spend?

**Satish Pai:**

I think that Pinakin that's probably better we'll give the sort of annual capex guidance when we do the Q4 analyst call.

**Satyadeep Jain:**

This is Satya from Ambit Capital. A couple of questions. One on the entire slide on the Can demand growth of a decent healthy growth for the next few years. When we look at history in the early '90s when the industry, the North American Can industry was taking market share from steel and the market was growing at a very healthy rate. And then after that, we saw 0% to 1% demand growth for many years.

How is this particular slowdown in the new normalization that we're seeing right now or maybe not a normalization, different from what we saw in the '90s and in the early 2000. And what is the risk to the assumption that the demand is going to go at a healthy rate, but it doesn't and all these capacities are coming online. So can you just elaborate on how this is different from what we've already seen in the past? That's the first question.

**Steve Fisher:**

So from a short-term standpoint, it's very clear to us that this is -- headwinds associated with a strong shift in off-premise, on-premise, lack of promotional activities as a lot of the brand owners took price over the past year. And ultimately, supply chain challenges that required our customers and our customers' customers to hold more inventory than anyone would want to.

And so as the correction is being made right now and they can see the long-term trends, they need to correct the inventory levels in the supply chain. That's what the short term is about. It's not about demand destruction, it's all about what occurred over a couple of quarters versus expectations of continued off-premise consumptions, continued promotional activities and maybe a little bit more growth in certain product categories that haven't panned out as of yet.

We firmly believe, and we spend a lot of time on this, obviously, spend \$2.5 billion on a Greenfield plant in the United States on these long-term shifts. And that's the difference. It's all about the end consumer and sustainability of the package and how they want to be perceived versus other materials with something in their hands.

And you see that over and over with -- when they launch -- when the brand owners are launching new products, a significant increase in percentage of those products are being launched in aluminum packaging now. Different varieties shapes, sizes, innovation and ultimately, new ways of consuming different types of beverages are adding to all of that, but it is absolutely driven by this trend around the aluminium package being a material of choice for the end consumer as it relates to sustainability, infinitely recyclability.

**Satyadeep Jain:**

The other question is on the pricing offsets for the inflation that you're seeing higher energy prices built in for next year as well. When you look at some of the new contracts that are going to get signed for Can sheet as we understand the new facility that's going to come online will have much higher pricing than the existing contracts you have, but the existing contracts also get reset, so just wanted more clarity.

Are you going to see more of that impact in FY '24 also or material impact from these pricing resets will be in FY '26? And also on that PPI resets, as you see these annual PPI resets happen, when are some of those more material PPI resets, is that towards the -- is that why you're building four Q FY '24? Or do you see some trajectory where they start kicking in and you see a linear growth rate in that PPI reset?

**Steve Fisher:**

So I mean overall. First of all, our beverage packaging contracts, majority of them do have PPI prices and have had PPI prices for a long period of time. So those are typically annual contracts. There might be one or two that might not be on an annual, might be on March 31 or April 1 basis. But traditionally annual PPI pass-through on those contracts as they exist today.

The second or the first part of your question is on pricing as it relates to new contracts that support the growth, those pricings are coming at significant increased prices that support a mid-teens return on that investment. And that's consistent with what we said last year, those contracts are now, for the most part for Bay Minette locked in through the remainder of the decade, but they will not be in effect until we bring Bay Minette up from an increase in that pricing. You want to talk a little bit more about PPI pass-through?

**Dev Ahuja:**

Yes. So I think the one thing, adding to what Steve said is that you have to realize that these PPI clauses are based upon a basket, it's index-based and sort of what happens is that when you have some aspect of cost like energy cost, which is growing much above the basket that remains uncovered in an annual PPI pass-through.

It does not get completely covered, and it happens over time. So when you have sustained cost that we just keep sort of lingering on, in this case, European energy, there is a bit of a lag in that pass-through. At the same time, some pass-through like on the specialty side with annual contracts are absolutely happening in this year.

So as we come to every anniversary cycle, there is a bit of a catch-up, and therefore, we think that some of that leftover inflation that you don't see getting passed through in some of these waterfalls that you're seeing here will happen with a bit of a lag. So these are some of the things to keep in mind when it comes to how pass-through operate.

**Amit Murarka:**

This is Amit Murarka from Axis Capital. Just a couple of questions on capex and capital allocation. So last year, you had given a five-year capex guidance of about \$8 billion FY '24 -- I mean, '23, we have, I believe, cut down a bit from our initial guidance. So firstly, does that \$8 billion still hold in terms of the guidance over a five-year?

**Satish Pai:**

Sorry, your question is related to - so the overall capex in broad terms, what we have tried to show you today is on the Novelis side, there is \$3.3 billion of committed capex that we are going through with and the rest of the projects that were on the list from last year, we will do it when the cash flows are suitable for us.

So that's the change from last year to this year's Novelis capex guidance. So we had announced I think about \$4.7 billion, I think, last year. So \$3.3 billion is the committed capex under these three buckets that Steve just mentioned and the timing of the further will depend on the cash flows as we see them going forward. Because we are committed not to increase the leverage and take debt on to the capex, and the same holds for India as well.

**Amit Murarka:**

And also in terms of capital allocation, you had mentioned like 75% on capex, 15% debt repayment and 10% dividend in terms of the capital allocation. So those numbers also remain the same as it was last year?

**Satish Pai:**

So that's why when I summarized, I said last time, we had certain amount for deleveraging as well. So, what we showed you with the deleveraging thing is we are largely comfortable with our net debt to EBITDA. So the majority of the cash flow is now going into organic capex and we will maintain the 8% to 10% for the shareholder return.

**Amit Murarka:**

So deleveraging on pause in that sense right now then?

**Satish Pai:**

So no, we are not going to be allocating any more of our cash flows to deleveraging in the next few years.

**Sakshi:** Sakshi from Soham Capital Advisors. Just a quick clarification I required. So there, you mentioned that because of energy inflation, there has been need of about \$25 million per quarter. So that would approximately translate to \$25 EBITDA per ton, right?

**Satish Pai:** Right.

**Sakshi:** But so you mean to say the more than \$100, \$125 decline, which we've seen can be attributable to scrap or debottlenecking? So if energy, we can pass-through, debottlenecking will come back. But then scrap spreads would be a combination of aluminum prices and a lot of other things, which are not under our control. So then how will we recoup such a big loss, which we have seen so far?

**Dev Ahuja:** Right. So just keep one thing in mind that one of the biggest short-term head wind right now that we are seeing is the destocking that is happening on the Can side, right? So that is a big contributor. We also told you at the time of the third quarter earnings release that the reason why we came a little lower than even the guidance was because the level of destocking was a lot more than we had earlier anticipated.

So really speaking, the bounce back is going to happen because we can see down the road that this destocking is going to end and the normal Can growth will take over, right? Underlying growth will take over, number one.

Number two, keep in mind that the building and construction business and specialties in general are kind of at the moment, a bit muted because of the high interest rate. Now as Steve explained that this is fundamentally undersupplied market. Building and construction is really an undersupplied market. There's a housing deficit. But today, people are not in a hurry to buy houses. They will wait for a couple of quarters, when the interest rate cycle reverses.

So when I'm pointing to first, fourth quarter of fiscal year '24, what I'm telling you is that we expect that the destocking is going to end down the road, number one. Number two, that if everything goes as we think next two quarters, we will see some interest rate sort of hikes. And then after that, we see a reversal.

And once that happens, building and construction demand is just waiting to come back. So really, these are the factors that will really sort of mitigate the 75 to 125. The 25 is energy, you're right, but then with PPI pass-through, a good part of that should also get mitigated over time. So just keep these three factors in mind on the return. Now -- go ahead. You're asking something.

**Steve Fisher:** So let me just make sure, when we are running at the capacity levels we run at and we lose those last \$10, \$20, \$30, \$40, it's not coming at our traditional EBITDA per ton. It's coming at a much higher contribution margin that comes out of our business because the fixed cost doesn't go anywhere.

So this building and construction is very, very profitable, when we're maxing out same as the Can as we lose those volumes from the destocking and the pullback, it is probably more significant than you're getting it credit for.

**Dev Ahuja:** Exactly. And your point about, what seems to be on your mind is that scrap spreads is a big contributor. I'm telling you that scrap spreads, particularly South America, it is now reverting back to normal levels just before COVID. It's reverting back to a stable normal level. Supply is opening up as the destocking is happening, it opens a supply, we will say. You can imagine that when there are a lot of inventories out there in the market that means the UBCs are stuck on the shelf with all the beverages built inside them, right?

So basically, all those are starting to come back and we will see a normalization happening. We are already seeing it happening. So that's not really something that is really bothering us as much as you imagine it to be. It is the other factors which we mentioned, which we think will normalize. Okay?

**Sumangal Nevatia:** This is Sumangal from Kotak. Sir, my first question is to Mr. Pai, again, on the big picture on the capex. Now we've got our capex by roughly around 30% and the headwinds are largely coming from Novelis and which we are very confident that by the end of fourth quarter, we'll return to a sustainable level of \$525 per ton of EBITDA.

So it is suggesting a confidence level on the cash flows reduced, especially when we are saying that the long-term business outlook is quite robust. So how should we read this, the big cut in capex over the next few years?

**Satish Pai:** Sumangal, the first thing I want to correct is we have not cut the capex. So I think the wording that we have used is that the current projects, because we have a very large \$2.5 billion project going on. In the next two years, the cash flow is going to come largely from getting that project done. So, the other projects that we had in the pipeline that we saw and if you go to the appendix, there is a list of them. They will come in as; we see the cash flows that we are ready to absorb it.

Because we have a commitment that we have made to you guys on net debt to EBITDA, already Novelis is going to reach about 2.6x to 2.7x. So we just want to make sure that during this uncertainty time, we're not going to start another project. We are going to focus on the ones that we have ongoing and then wait till the market and our EBITDA per ton comes back and then we will. So we have not cut any capex. We are going to, let's say, pace the capex along with the cash flow. So that we meet our net debt-to-EBITDA commitments.

**Sumangal Nevatia:** That helps. Sir, second question on this US \$2.5 billion project. Have we contracted fully because last time the update was we are still at around 50% contracted volumes? In the opening remarks, we did, I think, mentioned fully contracted. So if you can clarify that?

**Steve Fisher:** We're nearly fully contracted for the portion of the plant that will serve beverage packaging, which we said is 400 Kt through the end of the year with attractive prices that support the return. That's in line with what we said, maybe ahead of what we thought as far as how quickly we'd get that done. And we see a strong order book for order to fill the remainder of the plant that is paced as to our expectations.

**Sumangal Nevatia:** You said we are looking at a million ton of shortage in North America, given the imports of can sheets and also the future growth. And we did realize these, that last two years, there was a lot

of stocking up because of the near-term demand tailwinds. So is there a risk that we are overestimating the shortage in the next five years, six years, and there is an oversupply situation, which will reduce the returns in the medium term for these projects?

**Steve Fisher:**

No. I think we're very -- as you can see by our market position, we're very, very close to our customers. We've already got the contracts in hand. So that tells you something. So we don't feel that there is a risk of that. We are going to be, I think, a preferred supplier. So I think we're in a very, very good position here. And ultimately, the short -- we hear from all of our customers about bringing the supply to each of the regions.

There's so much risk in the supply chains. There's so much carbon that's wasted in these supply chains, geopolitical risk that we talked about, they all want to have these regionalized, and that's even part of our longer-term transformational organic growth plans as well in other regions. So we're confident that they do really want to bring that to the region, and we're confident in the growth based on the trends we talked about.

**Sumangal Nevatia:**

Just one last question on the coal situation. We've taken out Meenakshi from the list, so...?

**Satish Pai:**

It's there in the -- we just didn't put it under execution because we are waiting for the allocation to happen.

**Sumangal :**

And I mean, near term, we're not seeing any approvals come through. So I just want to understand what -- for the entire country, where is these things getting stuck? And in the near -- recent auction also of linkage, we saw massive premiums. So how do you see the coal situation both near term and medium term shaping up Mr. Pai?

**Satish Pai:**

So I think that one thing to say is that we are going into the summer season this year in a much better situation than we were last year for various factors. A, I think that Coal India production has quite healthily come up. A lot of the private mines have gone into production, so they have eased up a bit. And so far, the summer doesn't look extremely hot. If you remember last year in March, we were already in the 40s in terms of temperature.

So I think as a combination of all these three, we remain cautiously optimistic that this year, as a combination of linkage, e-auction premiums being -- they will be high, but much less than what they were last year. We should be in much better shape compared to last year.

**Ritesh Shah:**

This is Ritesh from Investec. Sir, just one question. We have spoken about Novelis, like, you have done a wonderful job. If one has heard you over the last couple of years, you have emphasized Novelis to be a converter model. But time and again, we have to actually rely on the management for incremental guidance.

Given all the wonderful stuff that you have done on both recycling as well as on the product side, is it possible for us to split up this magical \$525 number, get into different type of alloys, battery enclosures, etcetera,.? But there is an element called premium.

Honestly, we understand the mechanical engineering part, but to quantify it's very difficult. Second is recycling spreads, right? Over the last decade, the company has done a wonderful job. But honestly, there's no sensitivity around that particular number.

And third is we have time and again heard about the company getting into hedges, both on the energy side as well as on the commodity side. But it fluctuates and honestly, surprises many a times. So if you could provide some detail on the three aspects: one is premium, second is the hedging strategy, and third is LME scrap spurts?

**Steve Fisher:**

So maybe I'll take the first, you take the spreads. And I'm not sure on the hedging piece of what the question is, but we'll come back to that in a minute. Listen, we've always been very open that the recycling business is a good business both for the environment and for us. But it is part and partial supporting the returns that we talk about on a combined basis.

And so we don't have a lot of interest in breaking this out into sub compartments going forward. It is an important aspect to our customers because they want to have higher proper recycled content. And as very well, we're the world's leader in this, and we'll continue on this journey. Do you want to talk about spreads?

**Dev Ahuja:**

Yes. So I think what you were alluding to is can we disaggregate the \$525 is where you seem to be kind of asking. Well, the answer is, to be very honest, no, we will not disaggregate that number simply because it is not a data that should or can go in public space. It's one of the most sensitive margin data. So we will not do that.

What I want to tell you is the following that. Scrap spreads except when some very special things happen like what happened in South America and with all these destocking alloy and scrap spreads are pretty stable. So it is not such a big factor of volatility as some of you may imagine. Yes, the ups and downs of metal prices can impact scrap spreads, but you have to look at it over eight quarters.

And like metal prices can go up, they can come down and over a period, these balance out, but spreads themselves, we are able to preserve and keep them pretty stable. Our supply chains are very well developed stable, the best in the industry. Any competitor who comes in the market will take a long time to replicate these things and get the kind of efficiencies that we are getting. So, what I can tell you is that we feel good about being able to manage and preserve our spreads. Metals up and down can happen. And over time, that averages out, and that's what you should just believe.

**Satish Pai:**

Let me just finish because the point you keep asking about spreads but the metal benefit is the spread into the LME price plus the premium. So that information is available to you. You can see the LME going from \$2,600 to \$2,200. You can see the Midwest going from \$600 to 300. That has an impact on the absolute scrap benefit. The scrap spreads, as he said, are not widely varying. So that's first thing.

And second thing is on the hedging. Novelis is offset hedged to beat the take the effect of LME out. The only people that do, in some ways, a forward hedge is Hindalco. And we are very transparent in every analyst call, I give out, how much we have hedged.

- Ritesh Shah:** Sir, just to circle back the same question, I'll just put it in a different way. Sir, over time, you have alluded that it's a converter, right? So when we say it's a converter, you will have a certain number in mind when it comes to either dollar per ton or a better way to put it as cross cycle, post-tax ROIC. I'm referring to Novelis, is that some number that we have in mind, when we say Novelis has always been a converter model? So that's a question. There has to be some number to it. I'm just trying to probe that.
- Dev Ahuja:** So I don't know when we said that we are a converter, I don't agree. We are pass-through is correct, but we're not converter.
- Satish Pai:** No, no. What he means that the business model is a converter model.
- Dev Ahuja:** So are you saying that do we have a certain margin in mind as a converter and all of that? I mean is that what you're trying to ask?
- Ritesh Shah:** Yes. You procure LME, you add value to something, you charge a premium and then you sell something. So there has to be an element of spread, you can say a converter or a pass-through. But there has to be a particular number, \$500, \$600, \$700, which effectively translates to a post-tax or a pre-tax ROIC. What is that number that we are looking at? And I'm talking about five-year -10-year horizon. I'm not asking about a quarter or two?
- Dev Ahuja:** So I think that we are telling you that the \$525 sustainable EBITDA per ton is really in sort of representing the answer to all the things that you're asking, right? And so that's about what we can tell you. The \$525 represents everything that we are talking about in terms of the margin, sustainable margin.
- So I'm really trying to understand what more. I mean you were saying sort of is there a return on capital, but all that we can say is that we have a very, very healthy spread between the cost of capital and return of capital, return on capital. And when we look at capital projects, we are fairly conservative when it comes to getting a project past the line for approval, so we keep very very good spreads in the mid to high teens. I mean debottlenecking would be very much in the high teens. I would say Greenfield can be in the mid-teens. So that's the way we evaluate.
- Ritesh Shah:** Let me put it other way. I'll convert that long-term question to a short-term question. What gives us confidence to go from \$375 to \$525? What are the variables which will change gives us the confidence that \$525 is something which is given on Q4?
- Dev Ahuja:** So \$375, we told you that was a low point. That is not in question anymore. We told you that third quarter is a low point. And we will not go back to that. We told you that until the time of these headwinds like destocking as an example, besides specialty and the interest rate environment last versus our sustainable guidance of \$525, we will be in a range of \$75 to \$125 below. And we are going to be well inside that range from now onwards. So the \$375, I don't think you should even bring that number and we told you that's an outlier, and that will not happen again.

**Ritesh Shah:** I think destocking is a function of operating leverage. I don't bind to the argument that \$375 to \$525 will entirely be a function of operating leverage. So there has to be certain other variables, which uses us confidence to take us to \$525. Or I can take it offline as well?

**Satish Pai:** Yes, I think we'll take it offline because we are going round and round here to say that you want a waterfall that gives you from \$375 to \$525. We have -- whatever we can publicly disclose, we have done that in the presentation.

**Vishnu Kumar:** This is Vishnu from Spark Capital. So my question is regarding scrap availability three years out when we -- all the three plants are going to come, which our plant, SDI and also Magma is talking about adding the plant. So everybody has got a high scrap usage. So do we see challenges in terms of scrap availability? Is it internally built into our mid-teens margins that if scrap becomes very tight, is it kind of built in some form? Or we irrespective of scrap margins we are seeing the mid-teen and is there anything that is again done in the country to increase the availability over the next couple of years?

**Steve Fisher:** So, we certainly recognize what's going to occur in the marketplace if there's not structural changes and I'm speaking about the US market right now. Our beverage package goes out with 80 percent to 85 percent recycled content in it. If only 48 percent of beverage used beverage Cans come back, there will be a squeeze in the market.

So, we have to work in multiple areas. We have to work within the communities, within local governments to ensure that we can keep more infinitely recyclable aluminium landfills, we do project that there will be an increase in recycle rates in the US over the next five years to eight years, I believe, reaching closer to 60 percent. It takes a lot of initiatives, it takes a lot of partnerships, it takes a lot of coming together as a coalition, as an industry to get there.

We also have to optimize better the supply chain as well. We are the leader in the marketplace, but there's absolutely more ways that we could go further downstream to find ways to bring in value. What I can say is we have factored this in as we made the investment decision and we are still confident that the mid-teens return that we've talked about.

**Vishnu Kumar:** SDA owns OmniSource. Do we see a challenge of sourcing material because they obviously have their own scrap collection, entire setup in the US. So will that be a problem for us as in material will not be available to us when they start?

**Steve Fisher:** I don't know a lot about OmniSource as it relates to their UBC Used Beverage Can collection. I don't think it's very significant. It's a different type of scrap. I don't know if they intend to use that to make a Can body or other products. I can't speak for them, but I feel very-very confident in our capabilities in the US market.

**Vishnu Kumar:** On the energy cost, just a quick question here. What would be the power or gas cost that we are spending today and what would be a comfortable number where if it comes down to x that's the number that we'll be comfortable at We take the other arguments on the other. Others are fine. It's subjective, but at least on energy cost, if you could just give us what is the power cost or cap?

**Dev Ahuja:**

So I think that we have told you as much as we can tell you that from the pre-war times, we have an impact, a continuing impact of 25 million. That impact can go up because in that impact we had gained from some of the pre-war times hedges. So as those have gone off, we will have a little more impact until the time a combination of pass-through and the settling down of the market will take care of this headwind.

So I mean I don't think that we can talk about a particular energy level that we would like. I mean that just becomes theoretical. We don't control that. We just keep doing the right thing in terms of making sure that our pricing model takes care of inflationary increases, sometimes with a lag, but we are really focused on that.

So whatever be the energy level, it will be about continuing to be on the strong pricing path because of the overall markets being favorable. We have the ability to price our products. We have the ability to negotiate inflation and pass through that and we think that some of the energy headwinds will eventually settle down. That's what we can share.

**Indrajit Agarwal:** Indrajit here from CLSA. Again, going back to the mid-teen IRR guidance on the Bay Minette facility are the new contracts that we are signing for our existing capacity that similar pricing as to what we had signed for Bay Minette? So our back of the envelope calculation suggests a mid-teen IRR implies about \$700 per ton to \$900 per ton kind of EBITDA. So other than costs, are there any other factors that would stop the erstwhile or existing facilities going to a similar profitability structure? I understand cost levels would be different.

**Dev Ahuja:**

So let me kind of make a slight modification. When we, when Bay Minette is operative, all the volumes from that time onwards, including, sort of historical volume, not just the volume of Can coming out of Bay Minette, will enjoy the new pricing is what we are trying to tell.

Now in the interim, before Bay Minette comes, as we renew contracts, they are coming at better pricing levels, which includes part inflation mitigation, but just the structure of the market, which is favorable to take the pricing up because of the implicit demand supply gap. So that is what we are telling you.

Are there factors, that could come in the way of our getting to a mid-teens IRR? I think that really on the pricing front, we are confident these are all signed contracts. So there is no going back on, so that is one of the biggest factors.

We will need to keep working on developing more metal sources, scrap sources, going back to the previous question to make sure, that we open up, that we open up the supply chain and make sure, that we are able to get scrap at competitive prices. That would be one of the things, but really speaking, we are very, very highly confident that this mid-teens IRR number is based on very robust assumptions, which we can tell you.

**Steve Fisher:**

And on the cost side that you mentioned, this will be the most cost-efficient facility in our system. With all the technology and automation that we can put into this brand-new facility, we do believe there will be a significant lower labour cost versus our other facilities, somewhere in the range of about 30%.

- Indrajit Agarwal:** My second question is on the power hedges. Just to understand the current hedges in Novelis, are they below the spot power prices or are they above So the way to ask is, are we making losses on those power hedges right now at spot prices or are they still in the money?
- Dev Ahuja:** No, we are not making losses on the hedges. We have been able to hedge them at very decent levels. If you ask me, lately, our spot prices are a little higher than the hedge prices. So basically, the short answer is not at all. We are not losing money on those hedges. Those hedges are actually very decent hedges. They are at levels which are higher than the pre-war levels and that is why we have the continuing headwinds as we are talking about to the point versus spot, we are not losing money.
- Other Analyst:** Sir, will you be interested in Hindustan Copper disinvestment considering that Adani and Agarwal may not bid for it?
- Satish Pai:** Any opportunity that comes, we will give it due consideration for sure. Thank you. Are there any online questions?
- Kirtan Mehta:** This is Kirtan Mehta from BOB Capital Markets. One question on the Indian value-added markets where we are trying to increase the share from 400 Kt to 600 Kt. You have indicated that the aluminium demand in the country is going to double to nine million ton. So what would be the share of the value-added market in ten years in India. What proportion of the market share that we are trying to reach by then?
- Satish Pai:** So look, currently, the Indian downstream market is not very well developed. And our downstream products are nearly 40 percent to 50 percent market share as we stand today. So what we are trying to do is not just a market share game. If you look at many of the things that Praveen described, we are trying to create new markets. Because the Indian value-added market was very much in the common alloy and at the very low end.
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- So whether its battery enclosures, whether it's trucks and trailers, whether it's getting into doors and windows, we are actually increasing the size of the pie. And hence, being the first, we intend to sort of get a high market share. But it's not an existing market that we are trying to get a share. We are actually working to develop a bigger aluminium market, which is why the per capita aluminium consumption in India is so low at 2.6 kgs/capita. So a large part of our efforts is actually to increase the aluminium usage in the country.
- Kirtan Mehta:** I do understand that my question was more from a perspective that if at all we are looking at sort of a nine million ton and market size, and we are looking at 900 Kt as a sort of a market share in a longer run. Is there sort of more that we can do to develop projects to accelerate sort of capturing a better portion of market share?
- Satish Pai:** See, you can, I think you can always say we can do more. But the one part that I wanted to maybe take this opportunity to say is that it's very easy for any one of our competitors to put up a smelter. But it's very difficult for them to put up a rolling mill and come up to that level of quality that is required for the end product. I don't know if you're getting this.

So you can get a coal mine, you have a lot of money, you can put in a smelter, you can buy the technology. But like Steve was saying whether it's Bay Minette if you want to get into a rolling product or an exclusion and reach that quality and get the customer thing to the quality it's needed, it takes a long time. So I think the advantage for Hindalco, especially with some of the backing we have from Novelis on FRP and we are developing our own on extrusions, we will be quite differentiated from a people technology.

And it's not easy for anyone to come in and there's nothing to buy left in India. So you can't grow into that downstream market very easily. Which is why our strategy is so heavily focused on the downstream. There's no online questions. Has anybody checked?

**Ashish Jain:**

Hi, sir. This is Ashish from Macquarie. Sir, I had two questions. One on the domestic upstream capex. So you are working on the pumped hydro. But is there anything else that you're working on parallelly from an energy security point of view? Given you spoke of India's demand doubling over the next 10 years, I'm sure Hindalco would want to participate in that from upstream route as well.

**Satish Pai:**

So I think that we are also saying that as the demand grows, rather than just for primary, it's going to be largely in rolled products, extrusions, oils, which is why we are growing that downstream. But on the upstream side, just so that today, India produces four million tons of primary. India can exports two million of it.

So there is a oversupply in the primary market today. So when we say that the demand is going to grow from 4.5MT to 9 MT, we are largely focusing on the value-added side, where the growth is going to come. And on the upstream side, there is a lot of players who are going to already spoken about putting capacity. But we remain convinced that the end market is going to demand more and more a low carbon solution, especially if you want to export, which is why we are so focused on trying to get the pumped hydro to work before we do an upstream expansion.

Now, the second part, if you look at the first project here, we have said that we are going to look at an alumina expansion. And we are very much working trying to get that bauxite mine or bauxite supply to be crystallized, so that we can do an alumina expansion.

**Ashish Jain:**

So should we think that pumped hydro or any other form of alternate energy is an absolute necessary condition for us to go upstream?

**Satish Pai:**

So, no, it's not an absolute condition, but it depends on what your strategy is with respect to low carbon price. So if you produce with more and more capacity with coal, as long as your end market where you will sell it is clear to you, then it's okay. But today, there's a carbon border tax going to come up in Europe. People are talking about a carbon tax elsewhere. So that's why you have to be very careful if you keep expanding upstream with high carbon energy source.

**Ashish Jain:**

Sir. So my second question is on Novelis, like, in terms of the destocking, which seems to be, one of the main reasons for why our EBITDA per ton has, come off the way it has. What are we seeing as we speak in terms of destocking? Is it still continuing or we have seen it stabilizing? And what confidence do we have is like, four Q or 24 EBITDA per ton normalization. Do we have some visibility of that or is it more like a hope or a wish list at this point of time?

**Steve Fisher:**

No, we have visibility into the channel. It's different in each region, but we do believe there's more inventory that needs to be taken out of the supply chain. And that will continue to occur over the next one to two quarters. Some even stocked further in some regions in this past quarter in anticipation of strong summer demand or World Cup. And that now needs to come out in this quarter coming up.

So it depends on each region. But we think this is, we've already said this, it's transitory. It's going to get back to the right levels. And we think it's one to two quarters.

**Ashish Jain:**

So, Steve, sorry, I'll just hop on it. Like, the reason I said hope is because what we are calling is destocking. I'm sure at some level it is linked to end consumer demand as well. So for, because your clients are destocking because end consumer demand is moderating, they would have prepared for a higher level of demand and hence the destocking.

So in effect, in my view, what we're calling as destocking is actually a slower consumer demand. And hence, the normalization as well, I think, will depend upon consumer demand bouncing back or stabilizing at some point of time, correct me. Is that the way to think about it?

**Steve Fisher:**

I mean, I think what you need to think about is overall consumer demand for liquids in the share of stump is not changing, not materially. What is changing is where consumers are consuming those. And of course, during the pandemic, off premise, we were very advantages, people would take home 12 packs in cases of their favorite beverages, right?

And what shot quickly back and actually overshot pre-pandemic levels was the on-premise consumption, which is, we are not as favored as a substrate inside of restaurants, bars, cruise ships, and etc. So that overshot was not anticipated. That is starting to moderate back into about pre-COVID levels of on-off premise. And so we believe that, that shock went through the system. And obviously with tight supply chains, with everything else we've talked about, that's what built up the inventory that now needs to be taken out.

But we don't think it's the ultimate consumer saying, I'm not going to consume right now. It's about where they're consuming and what they're consuming and what substrates winning in that mix. And it's moderating back.

**Satish Pai:**

I think the one important proof point for me is that if the, because we sell to ultimately a Coke, Pepsi or a Crown or Ball, if they were worried about the demand, how come our Bay Minette 400 Kt is all signed up and people are still wanting to get more capacity? I just leave that thought to you.

**Gopal Nawandhar:**

This is Gopal from SBI Life. This \$25 million energy impact we have been seeing for the last couple of quarters, despite has just been there. And in the last quarter, we talked about, new contracts coming into effect from January, some contracts from January, some from April. So despite that, this \$25 million will continue or this will keep on reducing every quarter?

**Devinder Ahuja:**

Yes. So once again, to clarify that the \$25 million impact got created because there was a big flare up. There were hedges from earlier times as those hedges start wearing off and the new hedges happen, while they are at very, at very decent levels. They are not pre-war levels. So

versus the pre-war levels, the hedges are also happening at more elevated levels and that is what is creating this impact.

Now, from a mitigation perspective on the pass-through, you said that there have been PPI pass-through. Yes. PPI pass-through happen on an average inflation basket, right? Energy has been surging up above average. And so there is that layer, that extra layer of energy inflation that does not get passed on completely as yet right? That, except in some segments, like where we have annual contracts, specialty, that's 1/3 of the business.

And in markets like Europe, it's a decent chunk of the business. There we have been able to completely pass it. So, depending upon which business you're talking about, in the Can business, the PPI contract help us to pass the average inflation. There is some leftover because of the higher surge in energy costs.

With every anniversary, our ability to keep passing on goes up in any case with better pricing in the market, we have a mitigation to the higher energy costs. And eventually at some stage, we know that energy will settle. So all in all, bottom line, what I'm telling you is that we have taken the uncertainty away by, sort of being hedged for more than 70%.

Whatever guidance we are giving to you now is with a very, very decent hedge levels, considering where the spot prices are or where they could go, we have taken all that into account and we are giving you this guidance and we have a high confidence that we'll be able to stay within the range of this guidance.

**Gopal Nawandhar:** And sir, would you like to give any color on the volume growth for Novelis for next year?

**Satish Pai:** No, I think that for that, it's better you wait till the Q4 call comes.

**Moderator:** So, we don't have any questions. The participants left the queue from the online questions. Over to the on-site team.

**Satish Pai:** I know. Okay. All right. So, maybe, we'll just wrap it up. And of course, we'll have some time to have some discussions over some food and drink as well. But I think we thought that it is important that every year we come back and have these sessions and very transparently tell you what we are up against and what we are doing.

So, I think that we remain very confident about the overall long-term prospects of the business. We're quite aware that we are facing, especially on the Novelis side, certain short-term headwinds. But I wanted to assure you that we have internally also discussed these numbers in quite detail, and we haven't plugged them out of the air.

And we are, what we tell you, we are conscious that you have long memories. And every quarter on every call, you're going to remind us of this. So, we're quite conscious of that. So, anyway, thank you very much for your attention. And really appreciate that today being a holiday, you guys still made the effort to come here. Thank you.