Alcoa Corporation

Goldman Sachs Global Metals & Mining Conference 2021

Wednesday, November 17, 2021, 10:00 AM Eastern

CORPORATE PARTICIPANT

William Oplinger - *Executive Vice President and Chief Financial Officer*

OTHER PARTICIPANT

Emily Chieng - *Analyst, Goldman Sachs & Co. LLC (U.S.) (Research)*

Alcoa Corporation

November 17, 2021

10:00 AM EST

Emily Chieng Good morning, everyone, and welcome back to the GS Metals & Mining Conference. I'd like to welcome you all to our first fireside discussion today with Alcoa. Joining us is Bill Oplinger, Executive Vice President and CFO of Alcoa.

But before we dive into the Q&A, I'd like to open it up to Bill for some opening remarks before going through some prepared questions. From the audience, please feel free to submit any questions you may have in the question box below, and we can certainly answer them throughout the course of the session today. So, with that, Bill, over to you.

William Oplinger Thanks, Emily, and appreciate you having us here for the virtual conference. Hopefully, we'll be able to get back together next year and in a physical conference. A couple of key things that I just wanted to open with, we recently did an Investor Day. Any investor that is interested in the company should look at those presentations. I'll highlight a couple of key messages that came out of those presentations.

Tim Reyes, our Chief Commercial Officer, gave a market outlook that if I were to summarize, it is favorable in the near-term and in the longer-term. There's a few market dynamics that are converging in the aluminum market that we believe make for better dynamics in the long-term. For instance, the Chinese supply is – the Chinese have become much more focused around electric intensity and carbon production, and that limits Chinese supply in our view and general decarbonization trends across the industry will result in steeper cost curves, which steeper cost curves should be positive for the industry and really a drive for green products. So, Tim does a good job of reviewing that.

We also have a section there on how well we've been operating over the last few years and just the overall operating discipline that we have within the system that's provided by our Chief Operating Officer. But probably most importantly, out of all, our Innovation Officer discussed three technologies that we're working on. The first is the ELYSIS™ technology, which is the joint venture with Rio Tinto. It's a zero-carbon process for generating – for making aluminum, and we have a discussion there.

We also talked for the first time ever about ASTRAEA™. ASTRAEA is a process that we are developing that takes scrap and converts it into ultra-high purity aluminum. And then, thirdly, we discuss what we call the Refinery of the Future, which is a suite of process improvements that decarbonize the alumina refining business. So, it uses mechanical vapor compression, which we've announced already, and potential electrical calcination, which takes a portfolio of refineries that we have. That's the lowest carbon-producing portfolio in the industry and we'll make it even lower-carbon.

And the important thing to know out of all those things is that the company is in a significantly different position today than it has been over the last five years. Some of the issues that our company started with five years ago have been largely solved. The portfolios in better shape. We announced a portfolio review back in 2019, and we've executed consistently on that portfolio review.

In addition, the balance sheet is in much better shape than it ever has been. Proportional net debt is below our target range. We announced returns to shareholders in the third quarter earnings release. So, we've initiated a dividend. We have two active stock buyback programs. So, the company is really positioned for success over the next few years as we develop these new technologies.

So, Emily, that's what I had for opening comments.

Emily Chieng Great. Thanks, Bill, and I think in my earlier remarks this morning, I did say that, you know, Alcoa today is unrecognizable and, you know, definitely not the Alcoa that we've seen in the past. So, it's been an incredible journey and it's fascinating to see how both the macro and the micro is certainly shaping up in your favor.

William Oplinger Thank you.

Emily Chieng Of course. Maybe with that sort of backdrop, let's start big picture, actually. Let's talk about, you know, the aluminum markets. It's been fairly volatile over the last couple of months, but maybe start through – on the demand side of the equation. You know, aluminum is clearly very important for the green transition and in the light weighting of vehicles. How do you guys think about, you know, what you're seeing for demand, both nearer term and long term? Are there any impacts from, you know, the Chinese property markets potentially slowing next year? What are the sort of puts and takes in the Alcoa equation?

William Oplinger Lots of puts and takes. So, if we think about near term, near term demand has been very good in 2021, double digit demand growth globally. Every major market, every major industry, we're seeing some level of demand growth in 2021. Demand in our industry has never really been much of a problem. It's been, to some extent, the supply side of the equation.

Well, let me stay on the demand side. If you step back and consider that aluminum is a big part of the solution of decarbonizing the world, aluminum is used where you need strength or you need lightweight applications, and so aluminum is a big part of the solution going forward. Some of the places that you see that very, very specifically is in automotive applications. We think that in electric vehicles, whether they're battery electric vehicles or hybrid electric vehicles per use application is about 100 kilograms of more aluminum used in an electric vehicle versus an internal combustion engine vehicle. So, we see demand growth in the automotive space continuing.

In the near term, there has been some issues in demand in automotive. We've been able to get through that because we've been able to transfer some of those products into continuing high margin products and other parts of the industry. So, as we – as you then consider the long term, we continue to see, as I said, demand growth in automotive, the property and construction industries, continued strong demand growth over the long term and packaging has been a great part of the business also. So, we really see this confluence of factors that in the near term are generating strong demand coming out of the pandemic but also longer term as we see the decarbonization of the world, we think that demand will be strong for aluminum.

Emily Chieng That's helpful. And then maybe switching gears to the supply side, you know, a part of the reason why the aluminum markets have been in such a great position historically is because they've been – there has been a very great oversupply of aluminum in the world. Maybe talk a little bit about how that is changing. There's clearly been some capacity constraints in China that we've seen recently that has put pressure on pricing. And then maybe talk about a little bit about sort of the restart that Alcoa has recently announced and, you know, is there a potential that we see more of that happening ex-China?

William Oplinger So, the recent dynamics in the market, there's as I said on the supply side, there's really been a number of factors that have driven supply constraint and we're seeing a lot of that in China for instance. And in China, there's two primary factors that we believe will drive constraints on future production. The first is the focus around electric generation and the use of electricity, the generation of carbon. So, we believe that that focus, the decarbonization of China will drive them towards reducing increased supply. And in the near term, what we're seeing is the dual control system on electricity usage and intensity and consumption has driven them to constrain – constrain supply. So, it's the combination of the long-term carbon – decarbonization in China and the near term focus on electricity usage. Something like 80 percent of their capacity is coal fired. That's just not sustainable in a decarbonized world.

Another recent phenomenon, very recent phenomenon. Just a month ago, we put out our view of capacity underwater with metal prices at $3,000 a ton. Back on October 15, we said that globally, with the exception of the Spain smelter in our portfolio there is no capacity that's cash negative. Just fast forward a month with metal prices having come down. Our view is that around a third of the Chinese smelting capacity is currently cash negative at today's prices. So, even with what is historically fairly strong aluminum pricing with high input costs, high electricity costs in China, a third of that capacity we believe is cash negative.

Now let me transition to some of the restarts that we've announced. Two restarts that we've announced. The first is down in Brazil. It's a great facility. It's a facility that's good. Good technology, has a great workforce in place because it's co-located with the refinery. The U.S. dollar is very strong. But the real key to us restarting that facility down in Brazil, the Alumar facility, is that we were able to get a midterm power contract 100 percent renewable. So, it's a renewable energy contract that is very competitive. Positions that facility to be able to run for a long time and generate good returns. It'll take us about a year to restart it. I think we put out an estimate of around $100 million of restart costs. But it's a great facility. And as I said, it's co-located with a refinery. So, very low transportation costs. And then lastly, we have some VAT credits that we're able to monetize. And it's just kind of the icing on the cake to restart that facility from a cash perspective.

In the case of the Portland restart. Those are pots that are in addition to the facility, you know, in the facility that have been curtailed for quite a while. Given the current market economics and the fact that we were also able to get a short-term power contract that solves for the restart of those pots, we went ahead and decided to go ahead and restart this.

Globally, you know, when producers like us are considering restarts, you have to consider it takes time generally to restart a line. It takes up to a year to restart a line successfully. And it takes money, and you've seen from our ABI restart, the Portland restart in 2017, the Warrick restart and now the Alumar restart. They generally cost about $100 million. So as suppliers are considering future restarts, that's what's being baked into their analysis, I believe.

Emily Chieng Great, and then maybe shifting gears to alumina. I think a lot of our investors are aware that you're an aluminum producer, but alumina can be a little forgotten. We've also seen a fairly meaningful rally, but a little bit of a pullback in alumina pricing. What do you think has driven that and how should we think about the alumina markets over the next 12 months?

William Oplinger You bring up a good point. Investors should understand, and as you get to know us better, we're long in bauxite, we're long in alumina, and we're long in aluminum. Bauxite and alumina, we are part of a joint venture with Alumina

Limited, but we're still long in all three products. So, we like that long position as we go forward.

What's going on in the alumina market? In the near-term, we saw in the September, October timeframe, and this is not unusual for the alumina market, the dynamics of the alumina market are such that inventories can't be effectively kept. Alumina doesn't store well. So, when you see – sorry about that – when you see a near term supply issue in alumina, you can see very quick run-ups in alumina pricing.

So, what were we seeing in the September and October timeframe? In the Atlantic region, there was a couple of supply constraints that occurred. First of all, the Jamalco facility had a fire at their powerhouse that took about one million metric tons offline. We had an issue down in Alumar where our unloader had a failure, so we're in the process of remedying that. And then another supplier had an issue due to a hurricane. So, the Atlantic was short.

In the meantime, the Pacific, we saw some curtailments in China. That drove a period where prices were very high. And some of those constraints in the near-term have been resolved. We're back up and running in Alumar where we've got full capacity up and running at our Alumar facility, so that's taking a little bit of pressure off the Atlantic region. Prices have come back down to about $400 a ton.

Emily Chieng Great. Maybe coming back to, you know, the company itself, and I think capital allocation is a bucket that – is a topic that we do want to talk about where you've made significant process. Let's start with the balance sheet. I think over the last 12 months, the balance sheet has changed very significantly, helped by a strong ali pricing. You've made some pension, additional pension contributions. You were successful with your asset sales program.

I believe previously you did have a cash target for the balance sheet. I think that was about one billion dollars. You had a net debt target of two [billion] to two and a half billion dollars. Maybe talk us through how you're thinking about those pieces, and then we'll touch on your announcement from earlier this morning and what you've been doing with the pensions as well.

William Oplinger You're not allowed these multipart questions...

Emily Chieng I'll come back and remind you if you forget.

William Oplinger ...I had to take a note on that. I could talk all day about the balance sheet, and I'm just super proud of the progress that our company has made on our balance sheet.

While I could talk all day about our balance sheet, I think we're going to stop talking about our balance sheet in the future. Because our balance sheet is largely fixed. At one point, our company had roughly three point seven billion dollars of proportional net debt. When we think about proportional net debt, that's the sum of funded debt, pension, OPEB, netted out against cash, all of which is our share. We back out the impact from Alumina Limited on those pieces. So, we had a high of three point seven billion dollars. Our proportional net debt ended up at one point seven billion dollars at the end of the third quarter. Given current market conditions, it is improving upon on that.

So, the balance sheet of the company is in great shape, funded debt of what, roughly one point billion dollars, pension and OPEB has come down sharply. We've been laser-focused since really November 2nd of 2016 on trying to fix the pension. And we could talk for hours about how we work to fix the pension. But as of today, our U.S. pensions are greater than 95 percent funded. Our qualified plans are in great shape and you saw the announcement today of a further annuitization. I'll get to that in a second.

When it comes to the broader question around capital allocation, we've cleared the runway over the next four or five years of major spend on pension and to a lesser extent on OPEB. So, not a lot of big contributions in the pension like we've made over the last five years. We don't need to make those over the next five years.

In addition, we don't have maturities – debt maturities until 2027. So, between now and 2027, no large debt maturities that are coming due. So, that allows us to start to, essentially, we've changed our capital allocation program. We said, hey, we want to maintain a strong balance sheet. The balance sheet today is strong. And it allows us to focus on the last three parts of capital allocation; first is returning cash to shareholders. Again, these are not in any particular order. Second is repositioning the portfolio. Repositioning the portfolio does cost money from time to time. We've been able to fund that over the last five years with asset sales. But that is a second capital allocation priority. And the third is positioning the company for growth. In the Investor Day, we laid out a series of technologies, the three technologies that will position our company to really succeed in the future. And we want to position ourselves to be able to capture that growth in the out years.

Now, let me come back to the announcement that we made today. We announced another billion dollars of annuitization out of our US pensions. The thinking there is that we still have a fairly large gross liability. Our net liability has gotten very small on the pension side because our pensions are largely funded. But with having that gross liability, there's still risk associated with that gross

liability and we're de-risking the plan. So, [one] billion dollars goes to Athene and they will manage that pension liability going forward.

In the rest of the asset portfolio, we are transitioning our asset portfolio to be more focused on hedging the interest rate risk and therefore inoculating the rest of the asset portfolio and taking further risk out of the gross liabilities. So, it's been a relentless focus. It's great to get another billion dollars off the balance sheet. And the annuity market's been very competitive, so the pricing was very good, very happy with it.

Emily Chieng Maybe as a quick follow-up before we move on to the other three buckets of capital allocation. With the annuitization, I know you mentioned a P&L impact in the press release, but anything as it relates to cash flows that we should be thinking about?

William Oplinger No. You know, we have over a billion dollars of prefunding balance that's included in those numbers that we gave you as far as a 95 percent funded ratio in the U.S. plans. And we're using a little bit of prefunding balance as part of that annuitization, but we will have, after this is done, still over [one] billion dollars of prefunding balance built into the plan. So, we have a tremendous amount of flexibility built into the pension assets today.

Emily Chieng Great. And then moving on to capital returns, you know, this is something that people had been very excited to hear at the third quarter results last month. Maybe talk through, you know, how we should be thinking about, you know, the decision to do both the dividend and the buyback program. From an internal perspective, any thoughts around a target yield or payout ratio that can help frame out how investors should think about the execution of that buyback program?

William Oplinger A lot of thought went into it, as you can imagine. And let me give you the background of the thinking. We're in a cyclical commodity business and right now, prices and cash flows are strong. We wanted to send a signal with the capital allocation, with the capital returns that we announced. The first signal that we wanted to send is that by having a dividend, we are trying to tell investors that we are committed to returning money to investors through the cycle. And we believe that our portfolio is stronger today than it was five years ago and that our balance sheet is significantly stronger than it was over the last five years. Having a dividend says to the market that we think we can pay that dividend through the cycle. We wouldn't have announced it if we didn't feel confident that we could pay it through the cycle.

The buyback is – gives us the flexibility to return cash to shareholders over time as we see cash flows come in, and we can return that to shareholders via the buyback system. And we had $150 million remaining on the first authorization

we've authorized. We've received authorization from the board for an additional $500 million and we will execute that as the market allows us.

Emily Chieng Great. That's very helpful. We do have a question from the audience just related to the balance sheet for now, so I might take that. Can you speak about your conversations with the ratings agencies so far? Do you have a path or a target to achieve investment grade?

William Oplinger Yeah. Let me explain how I think about rating or the ratings and investment grade. I've been pretty consistent about this over the last five years. We target an optimal WACC. We look at what the – what we believe is an optimal WACC. And we, therefore, target an overall indebtedness level to minimize that WACC. That changes over time because the industry changes. But we're very focused on reducing our cost of capital simply because we think that maximizes firm value.

If that results in us being investment grade, that's great. We would be happy if that was the case. If it results that we're a BB+ where we are today, that's fine, too. We're not overly focused on becoming investment grade.

I think our balance sheet today, I think our market fundamentals, I believe, the way we've positioned this company should make it an investment grade company but that's not for me to say, that's for Moody's and S&P. And we target running the company with the lowest cost of capital and if they say we're investment grade, that's great if not, that's fine, too.

Emily Chieng Fantastic. Shifting gears to growth, I think, you know, at the Investor Day a couple of weeks ago, it was interesting to hear some of the new opportunities that your new balance sheet is now afforded you to take a look at. So, I think you've got growth spend that's currently baked into your estimates reverting to about $75 million to $100 million per year. And you've also outlined your sustaining Capex plans as well for the next three years. I think some investor comments from some of our investor conversations, however, I think you've also discussed those five new innovation projects, you know, ELYSIS, your MVR, your refinery electric calcination, ASTRAEA and HPA.

And then I think some of the concerns that we've been receiving from investors is how should we really think about the sequencing and the cadence of all that spend. Is 2024 the start of a new Capex cycle? Do all of these projects hit at the one time? How is Alcoa thinking about the capital outlay not just in the next three years but over the five to 10 years?

William Oplinger Wow. That's a lot of questions. All baked into a single question. The – we put out an estimate of return seeking capital that'll be between $75 million and $100 million depending on what year it is. Those projects – and just I'm gonna clarify

one word you used. And those are not necessarily specifically growth projects. They're return-seeking projects.

So, when we look at those return-seeking projects, they can be cost savings. They can be incremental creep production. So, it's potentially both of those. These are fairly small projects. They are fairly high returning projects. Typically, you see an IRR greater than 20 percent on these projects. And so, we will continue to invest in those.

We'll continue to invest in creep opportunities in plants that are very well positioned on the cost curve. So, you've seen us talk about potentially creeping parts of Quebec. We invested in a furnace, a recycle furnace at Mosjøen up in Norway. So, in plants that are low on the cost curve, we will continue to invest in high returning projects on creep.

You hit on the five technology programs that we have. And I would classify them slightly differently. But let me talk about each one. We have ELYSIS. It's the – it's the partnership with Rio Tinto, zero-carbon technology progressing towards a 2024 timeframe where we will have a commercialized package. We have ELYSIS cells operating today in Quebec and they're operating effectively. And so, we will be ramping up the size of those cells over time with a target of having a 2024 commercial package.

We announced ASTRAEA. ASTRAEA is a huge technology change that will revolutionize the post-consumer scrap industry, when it works. And the view on ASTRAEA is that we're able to take Zorba which is dirty scrap and convert it into ultra-high purity aluminum. And so, that's a project that we'll be working on over the next few years.

In addition to that, we've announced the Refinery of the Future. The Refinery of the Future has a couple of projects underneath it. The first is electric calcination and the second is mechanical vapor recompression. Mechanical vapor compression, we're a little bit farther along on that technology. It's a proven technology outside of the alumina refining industry. And it allows us to decarbonize the refining process.

Same situation in electrical calcination. It's a little bit farther off into the future. We have the lowest carbon alumina product out there, lowest carbon emitting alumina products because we're largely gas based. We're looking to take that and actually take the carbon intensity down through those two processes.

And lastly, you alluded to our investment in a high purity alumina venture. We see high purity alumina as a very fast growing, higher margin market that is a natural adjacency to what we do in our refining process.

I would say as we consider those five, four or five, technologies and projects, each have very well-defined stage gates, and each will be seeking financial returns. We're not necessarily doing these just to lower our carbon footprint. We think we can generate strong financial returns on all of those projects. And then the culmination question you asked is, does it mean 2024 is a new Capex cycle for us. We'll see. You know, if all of these processes work, if all of these technologies work, I think our investors will be thrilled for us to spend money on them because they'll have great financial returns.

Emily Chieng Great. So, I think just to summarize, at this point in time, the return-seeking Capex is the $75 million to $100 million. And then as we – as you proceed through different parts of commercialization and things make financial sense at that point in time, you know those are the additional investments may be made.

William Oplinger And just to put a fine point on it. Very disciplined stage gates on all of those projects. Dispassionate financial review of stage gates of those projects and we'll make the right decision.

Emily Chieng Fantastic. Maybe shifting into portfolio repositioning. I know you mentioned you're still about halfway through both the alumina and the aluminum side of the portfolio repositioning there. But if you're able to discuss, you know, the San Ciprián smelter I think that's a process that is underway. Any sort of update that you'd be able to provide as to how the San Ciprián smelter decision-making process is tracking and any rough timeline in place to reach a resolution there?

William Oplinger Let me take the San Ciprián question first and then go back to the review. San Ciprián. The situation in the San Ciprián smelter is that the energy situation in Spain just fundamentally makes it unviable to smelt aluminum in Spain. That plan is unviable today with the energy where it's at and we need to have a solution for curtailing that facility. We've been working toward that solution, but we don't have a solution yet for getting that facility curtailed. And when I say the facility, I'm specifically meaning the smelter in this case and we put out an estimate that the fourth quarter would be about $100 million impact from the higher energy costs in Spain. So, just fundamentally that that facility is – the smelter is unviable, and we need resolution of that. We continue to work on that and there is no timeframe, Emily, for us to have it resolved. So, we'll update you with more information as it becomes available.

We then go back up to the review question. We announced a four million metric ton refining review, a one point five million metric ton smelting review back in 2019. We've consistently executed on that. We curtailed the Intalco smelter. We repowered the Portland smelter, and so we continue to take action there.

Want to make sure it's clear to you and to everyone who's listening, a lot of times when people talk or companies talk about a portfolio review, it automatically

means closure or curtailment; that's not the case. In our case, it can be fix, close, or sell. And we've shown the ability to do all three. You know, we announced, as part of the review, we announced the restart of Alumar, the Alumar smelter. So, that was one where it was curtailed. We viewed it financially viable to run the smelter, now that we have an energy contract that is low cost and low carbon. So, we'll continue with that review over time. And more actions, more announcements in the future.

Emily Chieng Great. And then last one we have on capital allocation. It's just around M&A. I know you've got a fairly attractive organic pipeline announced, but anything that you would be considering from an inorganic growth perspective?

William Oplinger We consider everything that is out there. We'll look at opportunities to create value for our shareholders. We've not been very busy on the acquisition side over the last five years. We've done a divestiture or two over the last five years, but wouldn't rule it out, Emily, but very focused on the three things that are in our capital allocation model, right? So, returning cash to shareholders, repositioning the portfolio, and positioning the company for growth. Doesn't rule out M&A but focused on doing those three things.

Emily Chieng Great. Now shifting to something more exciting, and that's I guess, ESG. Alcoa does sit very favorably on the carbon intensity curve for – relative to the global average aluminum smelter. Maybe talk us through your positioning there. What gives you such a great position in that curve? And then I'll come back with follow-up questions.

William Oplinger The ESG story is a lot of fun to talk about for Alcoa because we're just really naturally well-positioned and we could talk for a long time, you know, a lot of times people focus on the E part of ESG, but the S and the G part of the process is just as strong. When you consider the E part of the ESG, well-positioned from a carbon perspective and refining, and we've laid out a pathway to get better positioned, pretty well-positioned from a smelting perspective.

In the near term, we're looking to go from 78 percent renewable energy to 85 percent renewable energy. We get there by doing things like the Alumar restart which is 100 percent renewable energy. Wind contracts in Norway. So, we repowered the Norwegian facility up in the northern part of Norway using wind contracts, so, well-positioned.

It culminates on the E side with an announcement of an ambition towards a net zero by 2050. We really, really discussed internally that commitment and that ambition, and really feel that we're the company in the aluminum space that has the opportunity to get there and can lead the industry towards a significantly decarbonized world. Why do I say that? We've got the technologies on the refining side of the electric calcination, mechanical vapor recompression. We

have the ELYSIS joint venture. That will be a zero-carbon process when that works. We've announced ASTRAEA. ASTRAEA uses scrap and should make high-purity aluminum. So really well-positioned to meet our 2050 ambition for zero, net zero in 2050.

We then go on the S and the G side. Our industry over the last five years has seen a real focus around the social aspects of the industry. Our industry is really on the spear point of all ESG-type issues. So, impoundments, you know, we've invested in impoundments and I believe that we manage our impoundments very effectively.

Community relations. So, we've invested in the community relations side. You can never do that well enough, but we're very focused over there. And then if we get to the G piece, governance – the governance of our company, when we started back in 2016, we had had a tremendous focus on setting the company up for strong corporate governance, separated the Chairman and the CEO, that was important to us. That model has worked great. We have a non-staggered board. We had proxy access from the very start. So, the governance angle is really strong. So, from my perspective, the convergence of the fact that the world is more focused on ESG issues, and we do that really well, is going to add – it gives us an opportunity to succeed in the future.

Emily Chieng That's great. Bill, I do want to touch on your Sustana™ line of products out there. They are a lot more lower carbon than your already lower carbon portfolio, but maybe talk us through the three different products you've got there. Have you seen an increase in demand for these green or lower carbon value-added products in the North Americas, in Europe? And any sort of interest that you're seeing emerging from specific end market bases, whether that's the OEMs, auto OEMs, packaging, other consumer industries that do seek this kind of a product?

William Oplinger So we are the – we have the broadest suite of low-carbon products in the industry. Nobody can match the suite of products that we have. We've got EcoLum™, EcoDura™, and EcoSource™. EcoDura is a scrap-based product, so we have a scrap content there. EcoLum is the product that comes out of low-carbon electricity, so renewable electricity in the smelters. And EcoSource is our brand for our alumina that is low carbon. When a smelter is considering how they can become lower carbon, one easy solution is for them to buy our alumina. Because our alumina is the lowest carbon emitting out of any of the major producers. So, I think we're well positioned there on the products.

As far as demand goes, we are seeing the demand for green aluminum grow rapidly but it's from a very small base. There are many providers of green aluminum out there. So, they're in the western world. There are many, many people who can meet a green aluminum spec. We're starting to see that growth coming from in places for instance, like the automotive sector. High end

automobile is very focused on the carbon footprint. So, we're seeing that demand. We've seen it from the electronics industry. The Apples of the world who are looking for a low carbon aluminum. So, that's where we're starting to see the demand growth.

Emily Chieng Great. And then as a follow-up, any kind of price premium that you're able to see from these products?

William Oplinger Price premiums today are small but as you start to see the demand grow, you know, we're trying to position the company to get a premium on those products. They are clearly a premium product. They provide benefits to our customers that they can't get through normal aluminum or normal alumina. So, we believe we should be able to drive a premium for those.

Emily Chieng And one question from the audience is just around what are you seeing in terms of demand for products that use more scrap? I know you obviously announced the ASTRAEA project at the analyst day. Was that part of the decision-making process to pursue a route that includes more recycled material in what you're selling?

William Oplinger As we look out into the future, there will be strong demand growth for both primary aluminum, but also for secondary aluminum. We're not large players in the secondary aluminum process or industry at this point. We do process some secondary aluminum in some of our smelters that the casthouses are configured to be able to take secondary aluminum. But the ASTRAEA technology is a complete game-changer that would allow us to take very low-level scrap, very dirty scrap, called Zorba and process it into high purity aluminum.

So yes, it was part of the process for us to announce that that as we look forward, secondary scrap will become more important. In the case of ASTRAEA, what differentiates it from just a secondary remelt is that it can use post-consumer scrap, which is a lot harder to process than post-industrial scrap. Right now, the scrap loops for post-industrial scrap out of an automotive stamping plant or an engine plant is pretty well-defined and pretty well-positioned. But in the case of post-consumer scrap, it's an opportunity for us to be able to solve the issues there and generate a return.

Emily Chieng Fantastic. Well, I'm not seeing any more questions from the audience, Bill. I'll turn it back to you for any closing remarks.

William Oplinger I think we hit on most of them, Emily. I mean, I would just remind folks to take a look at the Investor Day presentations. We're a significantly different company than we were, as you said, over the last five years.

The balance sheet is in better position. The portfolio is in a better position. The market dynamics are very strong from both the near-team and our view for the long-term. So, the company's positioned for success as we go forward.

I appreciate Goldman inviting us to the conference and giving us an opportunity to talk.

Emily Chieng Fantastic. Well, thanks again, Bill, for joining us today.