Alcoa Corporation

Fourth Quarter 2021 Earnings Presentation and Conference Call

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CORPORATE PARTICIPANTS

Roy Harvey - *President, Chief Executive Officer*

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

Jim Dwyer - *Vice President, Investor Relations*

PRESENTATION

Operator

Good afternoon and welcome to the Alcoa Corporation Fourth Quarter 2021 Earnings Presentation and Conference Call. All participants will be in listen-only mode. Should you need assistance, please signal a conference specialist by pressing the star key followed by zero.

After today's presentation there will be an opportunity to ask questions. To ask a question, you may press star, then one on your touch-tone phone. To withdraw your question, please press star, then two. Please note this event is being recorded.

I would now like to turn the conference over to James Dwyer, Vice President of Investor Relations. Please go ahead.

James Dwyer

Thank you, and good day everyone. I'm joined today by Roy Harvey, Alcoa Corporation President and Chief Executive Officer, and William Oplinger, Executive Vice President and Chief Financial Officer. We will take your questions after comments by Roy and Bill.

As a reminder, today's discussion will contain forward looking statements relating to future events and expectations that are subject to various assumptions and caveats. Factors that may cause the Company's actual results to differ materially from these statements are included in today's presentation and in our SEC filings.

In addition, we have included some non-GAAP financial measures in this presentation. Reconciliations to the most directly comparable GAAP financial measures can be found in the appendix to today's presentation. Any reference in our discussion today to EBITDA means Adjusted EBITDA.

Finally, as previously announced, the earnings release and slide presentation are available on our website.

With that, here's Roy.

Roy Harvey

Thank you, Jim, and thanks to everyone for joining our call.

2021 was truly a transformative year for Alcoa. Due to the work and dedication of employees across the globe, we're now in our best financial shape ever. Our accomplishments, which span across our business, will help propel us forward with our vision to reinvent the aluminum industry for a sustainable future.

Before Bill covers our results in detail, I want to quickly highlight a few items. First, our most important focus is always on safety, which is embedded in our Alcoa Values to: Act with Integrity, Operate with Excellence, Care for People and Lead with Courage. And every one of those values has an application that helps to support and improve our safety. Importantly, we will never put production or profit ahead of human life.

Last year, we had no fatalities, but we did experience some serious injuries. We recognize that our systems and processes must be consistently applied and regularly reviewed to prevent injuries. We never rest comfortably when it comes to safety – we must, and will, remain vigilant.

Next, turning to some of our results – we had a quarterly net loss due to restructuring charges that Bill will detail. Meanwhile, our quarterly adjusted net income increased 21 percent from the prior quarter, setting a quarterly record for our Company at $475 million. Adjusted EBITDA excluding special items was $896 million.

In the fourth quarter, we also paid $19 million in cash dividends, our first as Alcoa Corporation. This action, too, made 2021 an important year, as the initiation of our dividend program indicates the strength of our Company and our view of future performance through the cycle. In the fourth quarter, we authorized an additional stock buyback program and repurchased 3.2 million shares.

We generated nearly a billion dollars from the sale of noncore assets in 2021, including $240 million from the Rockdale, Texas site in the fourth quarter. We've also continued to make good progress on the review of our operating portfolio – we've now addressed roughly 75 percent of the 1.5 million metric tonnes of global smelting capacity that we said we'd evaluate for significant improvement, curtailment, closure or divestiture.

Importantly, we have significantly reduced our debt position during the year. Our adjusted proportional net debt was $1.1 billion on December 31, 2021, an improvement from $3.4 billion from year end 2020. And on pensions, our remaining U.S. qualified pension plans are fully funded. We annuitized additional portions of our U.S. plans, de-risking our balance sheet while ensuring that pensioners and beneficiaries receive their payments from highly rated insurance companies.

We are now well positioned for the future, where aluminum will become an even more important material. Aluminum has always been the sustainable choice in metals, and we're ready to make it even more attractive to a greening world with technology advancements that will help us realize our vision, progress toward our net zero ambition, and create an even more sustainable aluminum company and industry.

Finally, we're excited to see it all come together with many positive fundamentals in our markets. We expect the aluminum market to be stronger, and for longer.

Now, let me ask Bill to go through our Q4 and full-year results.

William Oplinger

Thanks, Roy. Our fourth quarter income statement reflects both solid underlying earnings and a very busy set of strategic actions. We recorded a net loss attributable to Alcoa Corporation of $392 million, but excluding special items, we recorded quarterly adjusted net income attributable to Alcoa Corporation of $475 million, our highest since becoming a standalone company and an increase of $84 million from the prior quarter.

Positive market fundamentals are reflected in our revenues and Adjusted EBITDA excluding special items. At $3.3 billion, revenues were up $231 million, or seven percent sequentially, on higher aluminum and alumina prices. Revenues were up $948 million, or 40 percent, from the same period last year. Adjusted EBITDA was up $168 million to $896 million, sequentially, and up $535 million, or 148 percent, compared to last year.

On a full year basis, revenues were up 31 percent to $12.15 billion, net income attributable to Alcoa changed from a net loss of $170 million to net income of $429 million, and Adjusted EBITDA increased 140 percent, from $1.15 billion to $2.76 billion.

To provide a little more detail about the quarter, the bottom of the page shows a bridge from fourth quarter GAAP net loss to adjusted net income. Special items netted to negative $867 million and included non cash charges for pension annuitizations, the Wenatchee smelter closure, the San Ciprián smelter curtailment, as well as the positive impacts of non core asset sales (primarily the Rockdale site sale).

Now let's review Adjusted EBITDA in more detail…

Higher alumina and metal prices, as well as increased aluminum shipments drove the $168 million increase in Adjusted EBITDA excluding special items, while partial offsets came from higher energy and raw material prices. In Other impacts, increased costs at San Ciprián, primarily energy-related were partially offset by one time VAT credits recognized in Brazil.

Looking at the segments:

Bauxite segment Adjusted EBITDA more than doubled to $49 million on lower production costs, favorable shipments and the annual true-up of mine lease royalties.

Alumina segment EBITDA jumped 240 percent to $503 million on higher index pricing and lower production costs, with partial offsets from the mix of customer shipments and higher caustic and energy costs. Lower production costs almost completely offset higher caustic costs.

Aluminum was the most profitable segment again this quarter. Though still at a high level, EBITDA declined to $523 million as higher metal prices were more than offset by higher costs of alumina, energy, raw materials and production costs. Highlights included higher shipments in Quebec and Fjarðaál as well as increased product premiums and shipments shifting to regions with higher premiums. The sequential Aluminum segment impact of the San Ciprián situation, was $62 million, in Other, and was partially offset by Brazilian VAT credits.

Below the segments line, higher alumina prices caused increased Intersegment eliminations, creating a negative $120 million impact.

Now let's look at impacts in our cash flows.

The left side of the slide shows the drivers of the sequential increase in cash on the balance sheet, which increased from $1.46 billion to $1.92 billion, including the $110 million of restricted cash primarily related to the San Ciprián curtailment. The roughly half billion dollar cash increase came from strong EBITDA as well as non-core asset sales, partially offset by capital returns to stockholders, capital expenditures, and increased working capital.

On the right side of the slide, on a full year basis, sources of cash were $4.2 billion and uses $3.9 billion. The largest cash source was Adjusted EBITDA excluding special items of $2.8 billion while non-core asset sales generated $966 million. The combination of debt offering proceeds and debt redemptions was a net reduction of $801 million. Other major cash uses were increased working capital of $699 million, $611 million for pension and OPEB funding (which includes a $500 million discretionary pension contribution in the second quarter), capital expenditures of $390 million, and capital returns to our stockholders of $169 million.

Looking at other key metrics…

Return on equity increased to 33.4 percent for fiscal 2021. Full year 2021 Free cash flow less net noncontrolling interest distributions was $336 million and includes the second quarter's $500 million pension funding. Free cash flow less NCI was positive $387 million in the fourth quarter.

Days working capital was flat sequentially at 29 days. We did have approximately three days unfavorable impact from San Ciprián inventory build but this was offset by other reductions in days of inventory on hand and favorable receivables collections. On a year over year basis, days working capital is up nine days as higher sales disproportionately decreased days payable.

Both 2021 and 2020 year-end working capital amounts include the impact of the workers' strikes at San Ciprián, which blocked over 50,000 metric tonnes of metal shipments, and represents approximately three days working capital. We expect to work through the San Ciprián inventory build over the next eight months.

With unrestricted cash at $1.8 billion, our key leverage metric, proportional adjusted net debt, is $1.1 billion and net debt is now net cash of $12 million.

As a final comment on the quarter, here is a deeper dive on key pension actions we took in November and December…

In November and December, Alcoa transferred two groups of U.S. pension liabilities totaling $1.5 billion to Athene Annuity and Life Company. Pricing was very competitive; we used a portion of our prefunding balance to meet contribution requirements, so no cash contribution was required. Alcoa booked a non-cash charge of $848 million to recognize deferred losses that would have been realized over the term of those transferred obligations.

Our U.S. pension liabilities have changed substantially in the last year. In 2021, the gross U.S. pension liability decreased from $4.5 billion to $2.6 billion, and the number of annuitants decreased from 29 thousand to 14 thousand, lowering Alcoa's pension-related risk. The U.S. qualified pensions are now fully funded.

That's enough looking in the rear view mirror, now let's look forward to 2022.

Our 2022 outlook includes modest year-over-year increases expected in bauxite and alumina shipments. In aluminum shipments, the slight decrease projected reflects the impact of the 2021 Warrick rolling mill sale, and the net impact of the 2022 restarts at Alumar and Portland as well as the curtailment at San Ciprián.

In EBITDA impacts outside the segments, Transformation spending is expected to be approximately $75 million on increased project spending and Other corporate expense is expected to decline to $140 million.

Below the EBITDA line, Depreciation and Interest expense are both expected to decline, and Non-operating pension and OPEB expense will increase due to the impact of the 2021 annuitizations; the net impact of the three line items is favorable $37 million.

Looking at cash flows, required pension and OPEB funding is expected to decline $62 million to approximately $75 million. Return-seeking capital expenditures are expected to increase to approximately $75 million; sustaining capital is expected to increase to approximately $450 million on spending for the Juruti mine move, as well as impoundments and residue filtration spending, primarily in Brazil.

A significant change from 2021 is expected in the payment of approximately $325 million of prior year income taxes, a result of higher 2021 taxable earnings in Canada and Australia.

Finally, Environmental and ARO spending is expected to increase $42 million to approximately $160 million, as spending occurs to remediate closed locations.

For the first quarter of 2022, as outlined in the appendix, at current price levels we expect Adjusted EBITDA and Adjusted net income to be similar to the fourth quarter of 2021. Expected metal index price benefits will roughly offset the raw materials and energy challenges, and improvement from portfolio actions and sales contract pricing are expected to mitigate other seasonal changes and headwinds.

Now, let me turn it back to Roy.

Roy Harvey

As Bill noted, the Aluminum segment has a significant role in our overall profitability. In 2021, the average LME aluminum price surged to its highest level in more than a decade, and pricing today is higher than the average levels we experienced in 2021.

On the supply side, important fundamentals have taken shape in China, which is the world's largest producer of aluminum. In 2021, the country curtailed more than two million tonnes of annualized capacity due to both power shortages and the enforcement of policies related to energy and the environment. These supply dynamics are not only occurring in China; increases in market power prices in Europe have led to a series of smelter cuts there that I will discuss in more detail on the next slide.

On the demand side, we expect annual global demand for primary aluminum to increase this year between two and three percent, relative to 2021. Demand in 2021 had already eclipsed the pre-pandemic levels of 2019.

We continue to see positive GDP and industrial production across most of the world's leading economies, which supports continued, annualized growth in aluminum demand across all major end-use sectors.

Aluminum prices have been supported by supply constraints, low inventory levels and high transportation costs.

From a commercial perspective, the shortages of some specific alloying materials key to our value-add products have also eased somewhat from the tightest points in the fourth quarter.

On sales, much of our volume for value-add aluminum products is sold in annual contracts, and negotiations with customers resulted in favorable pricing. We expect higher premiums relative to 2021 and continued demand for any remaining open volume.

We continue to benefit from our position as a domestic supplier to the deficit markets in North America and Europe, where regional premiums remain high.

On overall market dynamics, the factors supporting higher aluminum prices represent fundamental, structural changes that we believe will remain in place over the next decade, supported by a drive towards more sustainable solutions.

The global push to reduce carbon emissions is a boon for aluminum demand at a time when supply constraints are becoming more prevalent,

particularly in China. With policy goals that target reductions in total carbon emissions and a focus on energy efficiency, China has made a commitment to cap their primary aluminum smelting capacity at 45 million metric tonnes of annualized capacity, which leaves little room for any net production growth. We expect China will remain a net importer of primary aluminum.

In the alumina market, pricing remains higher relative to 2021's average, but supply constraints in primary aluminum production have reduced demand. Also, some of the disruptions in supply at ex-China refineries in 2021 have either recovered or are in the process of being resolved.

Our position in the alumina market remains strong and advantaged. We are the world's largest producer of third-party smelter grade alumina outside of China, and our refining system uses less caustic soda per tonne of alumina produced, and it is optimized for an integrated bauxite supply.

We are also proud to have a global refining system with the industry's lowest carbon intensity, and we're the only refiner to sell EcoSource™, a low-carbon alumina brand that allows an aluminum smelter to reduce its carbon emissions simply by switching to this product. In our view, our refining system and our unique product offering provides a sustainable advantage in a rapidly evolving world.

Next, I'd like to take a deeper look at the aluminum market. The average view from analysts is that 2021 ended with close to a one million metric tonne global deficit, and another deficit of approximately 1.4 million metric tonnes is expected in 2022.

All of this is happening at a time when inventories are at their lowest level in a decade. Looking at inventory levels from a days of consumption perspective, inventories returned to a low point of 52 days of consumption at the end of 2021. If the deficit projection for 2022 holds, we expect inventories could sink to a new low of 44 days of consumption by the end of 2022.

Despite deficit market conditions and inventories at low levels, we are continuing to see supply constraints due to challenges related to power and the emphasis on sustainable production. An interesting case study lies in the latest market dynamics in Europe.

In this important aluminum market, average spot power rates increased between 200 and 400 percent between January and December of 2021, driving cuts in smelting capacity across Europe. This chart shows in dark blue the countries where smelting capacity has been reduced due to power issues. We estimate these cuts have impacted between 600 and 700

thousand tonnes of annualized capacity, which represents around 15 percent of Europe's operating capacity.

This demonstrates the pressure that aluminum smelters will increasingly face during the transition from fossil fuels to more renewables. And, as I mentioned earlier, the structural changes driven by decarbonization should give low-carbon operators like Alcoa, a sustained competitive advantage in the future.

However, we weren't without our own challenges as it relates to power prices in Spain, and I'd like to next recap the news we issued at the end of 2021 related to the San Ciprián smelter.

As we've discussed previously on these earnings calls, we've been working to find a solution to the unfavorable energy prices for our San Ciprián smelter. Even with the positive shifts we've seen in aluminum pricing, the smelter has continued to lose money primarily because of the exorbitant energy prices in Spain.

The price of electricity there hit an all-time high late last year, averaging approximately 240 Euros per megawatt hour in the month of December.

On December 29, 2021, we signed an agreement with the workers' representatives at San Ciprián to temporarily curtail the smelter for two years to control our losses. We will use that time to find an energy solution, via long-term power purchase agreements. We've committed to restart the smelter in January of 2024.

We started the curtailment process earlier this month and expect all molten metal production from the smelter will cease by the end of this month.

With the agreement, we expect annual net losses between $20 [million] to $25 million both this year and in 2023. While this situation is not ideal, it was important for everyone to have clarity on the losses and, importantly, to have a clear timeline to resolve the issues and define a date to restart with new power arrangements.

We will continue to operate the casthouse during the smelter's curtailment, using accumulated inventory that could not be shipped during the strike action. The agreement with the workers' representatives ended the strike, which also had negative effects on our refinery.

There is certainly much to be done during this two-year period, but we look forward to working toward a more successful San Ciprián smelter.

Next, as I mentioned at the beginning of our call – our achievements across 2021 truly showcase our efforts toward becoming a more streamlined,

efficient, and high-performing commodity-focused company. For the past five years, we have worked on improving our foundation – financially, operationally, and strategically. Now, we are ready for the future: we are embracing opportunities to reinvent how we operate, innovating for long-term impact, and challenging the status quo.

These accomplishments reflect our company's overarching purpose – to Turn Raw Potential into Real Progress. This purpose, combined with our Alcoa Values, serves as our foundation. It helps guide every goal we set, decision we make, action we take and the strategy we implement.

I'd like to highlight only a few of the many accomplishments listed on this slide:

From a commercial standpoint, we have the industry's most comprehensive suite of low-carbon products in our Sustana™ family. Last year, we sold our first commercial shipments of EcoSource alumina – the industry's only low-carbon smelter grade alumina.

Also, we sold our low-carbon EcoLum™ aluminum for the wheels on the Audi e-Tron GT electric sportscar. The wheels use both EcoLum aluminum and metal from our ELYSIS™ joint venture, a revolutionary technology that eliminates all direct greenhouse gas emissions from the smelting process.

In our operations, we continue to make important advancements, and I'd like to recognize just a few. In Australia, our Huntly bauxite mine had a very strong year and nearly matched its 2019 record for dry metric tonnes. In alumina, our Kwinana refinery in Australia had its best ever annual production in 2021. In Norway, we had record molten production at Mosjoen and record billet production at Lista.

In Canada, all three of the operations in Quebec are now certified to the Aluminium Stewardship Initiative, and set annual molten production records.

Finally, in Brazil, the Alumar refinery recovered from the bauxite ship unloader damage and set a quarterly production record in the fourth quarter.

On our portfolio, we've made very good progress in addressing our production capacities to create a set of cost competitive and sustainable operating assets.

Our vision to reinvent the aluminum industry for a sustainable future really helps to define our next challenge – to innovate and create low-carbon solutions that our world needs and to solve some of our industry's most pressing challenges. That's included here in our future-oriented research

and development projects, which have the potential to not only transform the industry but drive important value for our investors in a carbon-constrained world.

We are addressing these challenges with cost-competitiveness in mind. We need to solve for low-carbon, but also for low cost and low capital.

And, finally on this slide, we had numerous financial accomplishments in the year, which provide a much stronger foundation for Alcoa's future.

But to be successful, we must build on the positive momentum. So, next, I'll discuss a few of the items on our list for this new year.

In 2022, we will focus on safely completing the full smelter restart at Alumar in Brazil and the restart of some modest additional capacity at the Portland smelter in Australia. As I mentioned, we are also actively working on the energy situation at San Ciprián.

In Brazil, we will be implementing some important capital projects, which includes a mine move for Juruti's bauxite crusher. For Pocos de Caldas, we are working on the installation of press filtration for bauxite residue, bringing technology to Brazil that we first adapted at two Western Australian refineries.

Finally, we will continue to investigate additional pension annuitization actions to reduce risk, as market conditions allow.

At the same time, we are focused on new technologies. We shared this information at our Investor Day in November – if you've not had the chance to view that material, we've kept it archived on the investors' section of our web site. I would like to briefly revisit some of this today, due to its importance and how it aligns with our purpose and vision.

We are at a time when the world needs more sustainable solutions, and Alcoa is well positioned to make a positive difference and drive value. We are addressing these challenges with a commodity, cost-conscious mindset, supported by operational and technical experience.

The technology roadmap, which includes ELYSIS, ASTRAEA™ technology and the Refinery of the Future provide a path to help reach our net zero ambition, which we announced last October. The projects also have the potential to further differentiate Alcoa and drive stockholder value.

Our Refinery of the Future redesign and our ELYSIS zero carbon smelting technology are research and development projects that not only aim to reduce costs and improve efficiency, but also target complete reduction of greenhouse gas generation from their respective production processes.

This year, our ELYSIS joint venture will begin detailed planning for its supply chain, including the production of the proprietary anode-cathode materials that are critical to the carbon-free smelting process that was first developed at the Alcoa Technical Center. Also, work is underway for additional commercial sized testing next year at 450 kiloamperes. With the current development pathway, the JV aims to have technology available for installation from 2024, allowing potential adopters to produce carbon-free aluminum approximately two years later.

Another exciting R&D project is our ASTRAEA process. We are working to ramp up this innovation, which can purify aluminum scrap to levels that far exceed the commercial-grade quality of metal produced from a smelter. As the world needs more aluminum, the technology can leverage the vast quantities of low-value automotive scrap. We can use this material as a feed source to create high-purity aluminum that can be converted for premium, end-use applications such as aerospace. The technology is currently working at bench scale, and we plan to develop a pilot demonstration facility next year, with engineering and design work taking place this year.

Next, our Refinery of the Future project bundles numerous technologies and process improvements to eliminate emissions while also developing beneficial applications for bauxite residue. From an emissions standpoint, the Refinery of the Future will involve two primary innovations we're working to develop – mechanical vapor recompression, which has financial support from the Australian government, and electric calcination.

Adapting mechanical vapor recompression to refining could replace all fossil-fuel energy consumed in our boilers, allowing refineries to operate from renewable electricity.

Calcination is the final stage in the refining process, where alumina hydrate crystals are heated to remove water molecules. Converting that process to renewable energy, rather than fossil fuels, would allow all of the steam generated by the calciners to be captured and reused, which would also significantly reduce water use.

Next, we announced last year the beginning of a joint development project related to the market for high-purity alumina, or HPA. A non-metallurgical alumina, HPA is used for items like lithium-ion batteries and energy-efficient LED lighting applications and other sapphire glass products. It's a market expected to grow due to the need for low-carbon solutions in transportation and other sectors. The first pilot trials have so far produced average purity levels that align with what is expected in the HPA market.

Finally, you'll see on the far right of this slide our estimates for future capital to support these projects. Importantly, there are several stage gates for each of them, which are still in the R&D phase, and full project funding is not yet approved. To be implemented, each one must provide expected stockholder returns.

Next, with so much financial progress, I want to revisit the capital allocation framework, which we simplified late last year. You'll notice there are some important similarities from our prior framework. We will continue, for example, to focus on a strong balance sheet through the cycle, which includes both our cash and our net debt position.

Next, we will continue to allocate capital dollars to both sustain and improve our operations. This year, we've increased our sustaining capital to $450 million, up from $356 million the prior year. This change is driven mostly by the planned mine move at Juruti and improvements to some impoundments.

Below the line on the chart, for value creation, we have three elements, listed in no specific order of priority: returning cash to stockholders, transforming the portfolio, and positioning for growth.

On returning cash to stockholders, we initiated our first cash dividend in the fourth quarter totaling $19 million at 10 cents per share. We also closed out in Q4 a prior, $200 million buyback authorization, repurchasing 3.2 million shares. We currently have an unused, $500 million buyback program available.

Next, on strengthening the portfolio through our transformation process, it's important to emphasize again that we have options to mitigate closure costs. The sales of non-core assets, for example, in 2021 helped to offset costs associated with closure actions. On the portfolio transformation, as noted earlier, we've now addressed roughly 75 percent of our 1.5 million metric tonnes of smelting capacity, as we're just now past the two-year mark on the five-year program, which we first announced in October of 2019. The tally includes the two-year curtailment and future repowering at San Ciprián, the curtailment of Intalco and permanent closure of Wenatchee, both in the United States, the full restart now underway at Alumar in Brazil, and the repowering at Portland Aluminium in Australia, including restarting a bit more capacity.

Finally, on this slide: Our capital allocation includes positioning our Company for growth with a key timeframe in 2024, as we develop and implement technology innovations after progressing through appropriate stage gates.

To summarize, 2021 provided an opportunity to demonstrate the work we've been doing across our business and our segments. Alcoa employees across the globe have made a difference. We've focused on the fundamentals as a commodity-based company, strengthening our foundation for a brighter future.

In 2021, it all came together. We made our highest ever adjusted net income. We also saw strong profitability from our Aluminum segment with robust market pricing. We expect stronger markets to continue due to positive changes in the aluminum industry, including meaningful supply constraints in China.

Next, we've positioned Alcoa to have strength through the market cycles, which supported our decision to provide the capital returns we announced for the fourth quarter.

Finally, after the challenges the industry has faced over the prior decade, it's a very good time to be in the upstream aluminum business. We are the right company, at the right time, one where the industry's fundamentals are changing. The importance of excellence in environmental, social and governance standards are coming to the forefront. This is a change that benefits our Company now and in the future.

Thank you, once again, for your trust in our company, as we work to drive value for the future.

And with that, Bill and I are eager to take your questions. Operator – who do we have on the line?

QUESTION AND ANSWER

Operator We will now begin the question-and-answer session.

To ask a question you may press star then one on your touch-tone phone. If you are using a speaker phone, please pick up your handset before pressing the keys. To withdraw your question please press star then two. When called upon, please limit yourself to two questions.

Our first question today comes from Sathish Kasinathan with Deustche Bank.

Sathish Kasinathan Yeah. Hi. Good morning. Thanks for − good evening. Thanks for taking my questions. My first question is on the aluminum shipment guidance for 2022. The 2.5 [million] to 2.6 million ton guidance appears to be a little bit light. Can you provide some more color given the various moving parts? Understand that there will be lower volumes from San Ciprián but they should be offset by the restart of Alumar smelter and the higher volumes from Portland. Warrick volumes should be lower but it should just be one

quarter impact given it was divested in April of last year. So, any color you can provide, please. Thank you.

William Oplinger Sathish, I think you hit on all the major moving parts; we had Warrick in the first quarter of last year. We will get the San Ciprián smelter curtailed after within the next week or so, so we won't have 11 months of shipment there. And then we are ramping up some small amount of production at Portland, and that starts in the third quarter and goes into the fourth quarter and then some production in Alumar. But I think you've hit on all the major items.

Sathish Kasinathan So just to be clear, the 400,000 to 500,000 decline in the annual volumes, does it include any lower third-party purchases for the year? Is that the reason for the larger than expected decline?

William Oplinger Well, there may be some smaller amounts of buy resell, but that's not the major driver.

Sathish Kasinathan Okay. Okay. Thank you. And my second question is on the overall guidance for the first quarter of 2022. So, I just want to clarify if the guidance takes into consideration the potential reversal in intersegment eliminations which was $120 million headwind in fourth quarter.

William Oplinger It does take that into account. So, it takes in the two things related to alumina pricing. We have lower alumina pricing currently than what we had in the fourth quarter. But we will have a reversal of that intersegment loss in this case, so we will have that reversal also.

Sathish Kasinathan That's all. Thanks for the clarification.

Roy Harvey Thanks, Sathish.

Operator Our next question comes from Timna Tanners with Wolfe Research.

Timna Tanners Yeah. Hey. Happy New Year and thanks for all the great detail.

Roy Harvey Hi, Timna.

William Oplinger Hi, Timna.

Timna Tanners Wanted to ask – hey, there. Wanted to ask, first off, high level, looking across your portfolios, we just heard and looking at what's remaining, I know you said you're still doing evaluation of the footprint. You still have a number of U.S. assets that are shut. And I was just wondering if you're inclined to believe that after Alumar and Portland, you're happy with your footprint or is it still possible to revisit Warrick and Massena West? That's my first question.

Roy Harvey Yeah. I'll handle that one, Timna. We're always looking at what we choose to operate. And so, we look at what's happening in the current environment, we project that out as well. And so, both from a restart side and we do have some curtailed capacity, but also from the capacity for potential

curtailments or divestitures etc. It's an active process and it also connects over, Timna, and we've talked about this before, it connects with trying to repower these facilities to look for ways in order to invest, to strengthen them, to build up partnerships. So, I think the straight answer to your question is that, yeah, we're always looking at our portfolio to try and decide how we can drive towards the first quartile, number one. And then number two, make sure that we're meeting our decarbonization targets and driving towards net zero in 2050 which, obviously, is a good portion away, but we need to be actively working on that now.

Timna Tanners Got you. The second question is really broader about San Ciprián in particular. So first off, you had said it would be about $100 million hit in the fourth quarter. I was wondering if that materialized. There's some discussion of a wind power option for San Ciprián that I've seen in the media that you've tentatively agreed to, wondering if that's a viable option, if you can discuss that. And the local media also had some reports of about $100 million CapEx investment that's been committed to. So just trying to get a little more color on the ramifications of San Ciprián and how to think about it going forward.

William Oplinger So, Timna, let me take the first and the third, and then Roy can address the wind power question. We had projected, I believe, around $85 million of sequential EBITDA impact from San Ciprián. We saw around $75 million of sequential negative impact from San Ciprián. That's around $65 million in the smelter and approximately $12 million – so, I guess that's $77 million – in the refinery from the strike there.

So, we did see essentially what we thought. As far as the cash situation goes, we had projected around $100 million of capital that would be held up in working capital. And given the fact that we had around 50,000 metric tonnes of shipments that didn't go, it was at least $100 million of working capital that's tied up at the end of the year.

As far as the $100 million of CapEx, we have committed to $103 million of restricted cash and that breaks down that we've committed to around $68 million of capital spend at the facility over the next couple of years, and $35 million of restart costs. So, you'll see that on our balance sheet. That's actually held as restricted cash because we've committed to spend that over the next couple of years as we prepare for a restart.

Roy, do you want to take the wind power question?

Roy Harvey Yeah. And so just stepping back and looking at the deal that we have in San Ciprián, I think it's a good outcome because it gives us some clarity through what is a pretty incredible dislocation in energy prices in Europe and very specifically in Spain. And so, our sort of the most important next step was to reach this curtailment because it cuts off those losses, which is what Bill described very well. So now, we're already starting to mobilize and look towards this capital spend that we've committed to. But more importantly, for that committed restart January 1, 2024, we're looking for energy contracts that can stretch out for longer and can take away the

energy price risk. And those, of course, tend to be linked to potential renewables projects and in this case that you had mentioned wind power, those are pre agreements or MOUs. So, they're the first step in this process.

They are indicative of moving in the right direction. And so, I think it – we need to have policy and the regional government, the Xunta, connected with the national government policy on how they build those renewable power opportunities and then connect it to San Ciprián which is what allows us to have this step-change improvement in energy price that we could entertain in January 1, 2024. So, the important thing is that we're reaching curtailment, which means we're no longer consuming what is incredibly high-priced energy and at the same time working to make San Ciprián as competitive as we possibly can for that restart January 1, 2024.

Timna Tanners Okay. Thank you.

Roy Harvey Thanks, Timna.

Operator Our next question comes from Carlos de Alba with Morgan Stanley.

Carlos F. de Alba Yeah. Thank you very much. Happy New Year, guys. So, first question, just to remain in San Ciprián, is for how long do you expect to use the stocks – primary metal stocks that you currently have there? And what is the – how are you going to run the casthouse, how are you going to feedstock it after you run down those inventories?

William Oplinger So we anticipate using that inventory over the next eight to nine months, Carlos. And then after that, we will bring in cold metal.

Carlos F. de Alba And if I may ask, Bill, would you be buying this from third parties or would you be bringing it from other European smelters or across European smelters?

William Oplinger I think we'll do whatever logistically makes the most sense, Carlos. I don't necessarily have an answer for where we'll be getting that metal after the 10 months, but we will continue to run the casthouse

Carlos F. de Alba All right. Understood. And maybe, Roy, if you could comment – is there any other comments that you can add to the VAP increase that you expect to benefit the profitability of the primary metals of the smelting or, yeah, smelting operations this year?

Roy Harvey Yeah. I can give you some qualitative comments. I think when we look at the markets and these markets tend to be driven in North America particularly on an annual basis, so we've moved through that annual contracting period. In Europe, they tend to be redefined on a quarterly basis. And so, you do see some changes as the year progresses. And then our – the available capacity that we have or capacity that we can build and add to our portfolio over the course of the year then we can take advantage of what are typically very good spot prices.

And so, for us, it is – when we have sort of that annual contract period in North America, particularly, we were seeing a lot of strength and continue to see a lot of strength, it is a deficit market in North America right now. There is a clear demand upsurge across all of our different products. And so, it was a very good time to be going out there for those annual contracts. And I would argue it's the same in Europe as well and will likely become even tighter given all of the different European curtailments that we're seeing. So, just on a qualitative basis, I think it is – there is a definite move upwards on value-add premiums in general, and we're striving and driving to make sure that we can produce as much as we possibly can of these value-add products.

Carlos F. de Alba Well, and then in terms when do we see that hitting your P&L, is this mostly in the first quarter? I mean, the contracts reset in January or it's throughout the year or throughout the first half of the year?

Roy Harvey Yeah. Typically, they reset in January. And again, you see sort of the North American reset in January and then you'll see the European that will have the quarterly-driven changes in pricing that'll happen on – for each quarter. So, it's not as simple as one impact and then doesn't change. And it also could change depending on what the product mix looks like itself. I don't know, Bill, if you want to add to that?

William Oplinger The only thing I'd add, Carlos, in the guidance that we've provided, we've included the fact that there is a pricing reset in the first quarter and we will see two pricing benefits in the first quarter. The first is the higher value-add premium across the Aluminum segment. And the second is the non-recurrence of the negative pricing that you see in the Alumina segment in the fourth quarter. As alumina prices came down in the fourth quarter, we have some block pricing that gets repriced and that was a negative in the fourth quarter and so that won't recur in the first.

Carlos F. de Alba Alright. Excellent. Thank you very much, Roy and Bill. All the best.

Roy Harvey Thanks, Carlos.

Operator Our next question comes from Emily Chieng with Goldman Sachs.

Emily Chieng Good evening, Roy and Bill. And congratulations on the progress with your portfolio review strategy there. My first question is just around the CapEx outlines but not yet mentions the HPA project in 2022 and 2023. I guess at what point during the year should we expect to see an update on when this conditional spend will be deployed? In other words, how close are we to reaching those different stage gates?

Roy Harvey Yeah. From an HPA perspective, Emily, and I appreciate the question. This is an active research and development project. And in fact, there's probably a lot more information that you're getting because of the joint venture partner because how important this is to their ongoing business. And so over the course of 2022, we'll see advancements in what is right now a

relatively small-scale application to make sure that it actually works. And then coming into the end of this year is when we'll be actually starting to design and consider whether we move forward with that larger project. And so, I think there will be more information coming out as 2022 continues forward.

And I would just reiterate the fact that for projects like this that aren't in the R&D phase and it's no different for ASTRAEA and, to a certain extent, ELYSIS, although ELYSIS is further along, we go through these stage gates to make sure that when we choose to invest capital, we're doing it in a project that will be very – that will be successful, that we've been able to eliminate the technological risk but at the same time also have very good shareholder returns. So, we need both the market side, but more importantly the cost side to come in where we want it to.

Emily Chieng Thanks, Roy. That's really clear. My second question is just around the capital allocation piece. So, net leverage is well below your prior target, cash balance is well above the previous $1 billion target you've talked about in the past. How should we think about what the right level of cash is on the balance sheet, and perhaps, what that could mean for how capital returns could look throughout 2022?

William Oplinger Let me – I'll take that one, Roy. Emily, as you alluded to, you've seen over the last five years that our cash balances have fluctuated. There's been times where we've been below the $1 billion target, and as of today, we're clearly above the $1 billion target. With that in mind, we initiated the dividend in the fourth quarter. We bought back roughly $150 million of shares in the fourth quarter. We have a further $500 million authorization that we can execute in 2022.

And so, as we look at all of that information, we've developed the revised capital allocation framework. It'll be focused on three things: returning cash to shareholders, repositioning the portfolio, and positioning for growth in the future. You've seen that the repositioning of the portfolio actually does cost us some money. So, we – in the San Ciprián situation, we've committed $103 million of capital to restart that facility. But the – so, we have that. We've got the Alumar restart that will cost us some. So, that's what's going into the thinking behind the capital allocation program.

Emily Chieng Got it. Thank you.

Roy Harvey Thanks, Emily.

Operator Our next question comes from Michael Glick with JPMorgan.

Michael Glick Yeah. Maybe just a follow-up there on the buyback, you did $150 million in 4Q. How should we think about the pace of buybacks moving through 2022, and then, just generally, your thoughts on dividend increases versus buyback?

William Oplinger Yeah. We really don't have any guidance, Michael, on how quickly we'll execute upon the future buyback. It will be based on as we see cash coming in and the market situation. As we consider the question around dividends versus buybacks, the dividend was set as an initial dividend, and I should – before we rush to talk about potentially increasing the dividend, we just paid our first dividend in the fourth quarter after five years of being an independent company. So, we set that dividend at a level that we thought we could be comfortable through the cycle. So, as we consider the future use of excess free cash flow, we'll be balancing the dividend versus additional buybacks.

Michael Glick Got it. That's helpful. And as it relates to the cost side, could you maybe go into some of the key items on the raw materials side and how you see the trajectory of cost moving through the year?

William Oplinger I'll address the first quarter specifically. The cost situation on raw materials is very fluid. So, we haven't provided a full-year guidance of the raw materials situation. Two big cost drivers on raw materials, the first is caustic and the second is carbon products. Those are adding up to be about $50 million of sequential quarter negative impact. So, that's what – that's included in the guidance that we've provided, but $50 million combined between caustic and carbon products.

Michael Glick Thank you very much.

Roy Harvey Thanks, Michael.

Operator Our next question comes from John Tumazos with John Tumazos Very Independent Research.

John Tumazos Thank you very much for the last 20 pages of the slides. They're very helpful, especially slide 31 and 34. It's very helpful. My question involves your two [percent] to three percent demand growth estimate for the year. World auto sales might grow two or three times or four times that, depending on chip availability. EV sales, typically are all aluminum, grew 50 [percent] to 100 percent in different markets. The bev can is growing with displacement of PET bottles and different capacity expansions by can makers like Ball. World GDP in most regions might grow by more than two [percent] to three percent. Which markets do you expect aluminum to be cannibalized or priced out of? Building construction, electrical uses, internal combustion engines, other markets? Clearly, there's many segments that are going to grow more than two [percent] to three percent.

Roy Harvey Yeah, John. Let me try and provide a little extra information that might be helpful. And I'm not sure I would talk too much about cannibalization simply because while we are enjoying positive aluminum prices, and certainly, like it when it's above $3,000, we're seeing a lot of that same type of commodity price inflation across some of the competing metals as well. And so, I'm not sure if it's so much cannibalization as some weakness that we see in the markets as they're sitting today.

And so, let me take one quick example in transport – or construction growth inside of China. As you watch some of the fiscal measures that they've taken in the tightening of some of the credit, that's something that tends to drive a flatter construction market, and that's how we were looking at this up until this point. Now, that fiscal policy can change. We can see more money going into construction. And so, that could drive a much more vibrant market. So, from the Chinese standpoint, it really is around the construction side and the availability of credit. So, if we see that turning around, I think you could start to argue, which is I think where you're going with this, that demand could be stronger.

From the rest of the world standpoint, you had a very strong 2021, this very sharp rebound. I think we continue to see good strength going forward and we're seeing strength across all the different markets. And again, I think transportation is the place where we have seen those positives. You've got the chip shortage, which sort of comes in and puts a little bit of uncertainty around how much that actually will be driven forward, but in the end, I think we had a really strong 2021. We're going to continue to build on that strength and we're going to continue to see that aluminum is used across the board pretty much in all of these separate markets.

John Tumazos Thank you.

Roy Harvey Thanks, John.

Operator Our next question comes from Lucas Pipes with B. Riley Securities.

Lucas Pipes Hey. Good evening. Congratulations on a great year and thanks for taking my question. I wanted to circle back on your smelting footprint for my first question, maybe put a different twist on it. Looking at global power markets, you'd think the US smelters have become relatively more competitive, but that's also where outside of San Ciprián, your idle capacity is still located. How do you think about these assets and could it make sense to restart some of that capacity?

Roy Harvey Lucas, so it's a really good question and it's also a pretty complex answer, because energy is, first and foremost, one of the most important decisions when you come to a restart or come into a brownfield or greenfield someday down the road. And it's absolutely true that in the U.S., you have access to power.

The second question that naturally comes is when you have access to well-priced power, what is the power source? Is it renewable versus is it a fossil fuel? While these are relatively recent developments, we are certainly and absolutely moving towards renewable simply because it takes away some of that carbon risk. And with our commitments to go to net zero by 2050, we need to have a clear pathway for how to decarbonize our portfolio. So, decarbonization and power source is sort of the second consideration.

The other piece, though, and perhaps, this is the one that affects the U.S. more is the technology itself. And so, when you look at some of the newer

smelters that we happen to be operating, and Ma'aden is a great example of what is our most recent investment, Fjarðaál as well, when you compare it with some of the idled facilities that we have in the U.S. and you can look at Intalco in the Pacific Northwest or Wenatchee, the fact is that technologies really don't compare. They tend to be significantly more, less efficient, and much more requiring of hands-on labor and difficult jobs to do and very difficult jobs to actually find people that want to work there and that can be there long enough to really become very good, very proficient operators. And so, we look across all those different dimensions as we think about any kind of restart potential. Energy, very important, but then, we have to look at the technologies and how that would then fit against all of our environmental goals.

Lucas Pipes Thank you very much for that perspective. And I unfortunately want to take it to, for my second question, to geopolitics for a second. If tensions increase between Russia and Ukraine, what could the implications for the global aluminum and alumina markets be? Thank you very much for your perspective on that.

Roy Harvey My goodness, Lucas. That's a big question. I think the – how I would limit my comments is to say that those types of tensions can have very broad impacts. They can have broad impacts on supply and this very much depends on if there were to be some kind of aggression, how are the different European countries, how are the different global countries going to react to that. And so, you can – because of where some of the supply comes from aluminum, that can very quickly impact the supply that's coming.

It also has an impact on the supply side because of the energy prices inside of Europe and because so much of that power and what happens in natural gas particularly is going to impact what's happening in Europe. We're already seeing this broad curtailment because where energy prices are today, imagine if the tensions increase. If you start to see less availability of natural gas, those prices could go up even further and you could start to see even more of a supply impact happening in Europe and potentially elsewhere because of knock on impacts.

And then, just more generally, the potential for disruption for conflict could, in the end, impact the demand that you're seeing as well. And this is more of an indirect impact but could be something that could be an outcome. Again, really projecting forward and just thinking through what some of the risks could be.

Lucas Pipes I very much appreciate your perspective. Best of luck and hope you have a great 2022.

Roy Harvey Thanks, Lucas.

Operator Our final question today comes from David Gagliano with BMO Capital Markets.

David Gagliano All right. Great. Thanks for fitting me in here. I just have a couple of quick clarification questions at this point. I was wondering if you just quantify the year-over-year EBITDA benefit in that value-add contract – in those value-add contracts for 2022 and if those flow through basically on a quarterly basis, pro-rated equally each quarter does that change as the year progresses. That's my first question.

William Oplinger You can't quantify – we haven't quantified the year-over-year yet, David, but I can give you an idea of the sequential quarter benefit. The sequential quarter benefit between the higher value-add premiums and the block pricing in the Alumina business that won't recur is around $75 million. And you can see that the pricing in alumina was around $30 million negative in the fourth quarter. So, that would put the value-add piece at around $40 million, $45 million on a sequential quarter basis, so significant.

David Gagliano Okay. That's helpful. Thanks for that. And then, just step back for a second and I think I missed this, but can you speak a little bit more about the details behind that $325 million catch-up tax payment from prior years?

William Oplinger Yes. It's very simple. You've been following us long enough to know that in the case of Australia, you typically pay tax – cash taxes, the following year based on earnings from the prior year. So, out of that $320 million, approximately 35 [percent], 40 percent of that is in Australia. The other piece of that is in Canada, in that the earnings in the Canadian smelters grew significantly towards the end of last year, specifically in the fourth quarter. So, that falls over into the first quarter. And then, there's a piece of that's in Europe for the exact same reason. So, cash taxes in the smelting system typically have a little bit of a lag from when you make the earnings to when you actually pay the cash out. And given the fact that we made very strong earnings in the fourth quarter in both Canada and in some of the European countries, we pay that out this year.

David Gagliano Okay. Great. Appreciate the extra details. Thanks a lot. Thanks.

Roy Harvey Thanks, David.

Operator This concludes our question-and-answer session. I'd like to turn the call back over to Roy Harvey for any closing remarks.

Roy Harvey Thank you, Eilee, and thank you to everyone who joined the call today. We always enjoy answering your questions, and of course, discussing Alcoa's performance in the road ahead for our company. I'd also like to thank all of our employees once again for their excellent performance in 2021. I look forward to talking to everyone again at our first quarter earnings call in April. In the meantime, please be safe, stay healthy and have a good evening. Thank you.

Operator The conference has now concluded. Thank you for attending today's presentation. You may now disconnect.