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Freeport-McMoRan, Inc. (FCX) CEO Richard Adkerson on Q3 2019 Results - Earnings Call Transcript

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Q3: 10-23-19 Earnings Summary

Press Release SEC *10-Q* *Slides*

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Freeport-McMoRan, Inc. (NYSE:FCX) Q3 2019 Earnings Conference Call October 23, 2019 10:00 AM ET

Company Participants

Kathleen Quirk - EVP & CFO

Richard Adkerson - Vice Chairman, President & CEO

Mark Johnson - President & COO, Indonesia

Red Conger - President & COO, Americas

Mike Kendrick - President, Climax Molybdenum

Conference Call Participants

Chris Terry - Deutsche Bank

Alex Hacking - Citi

Lucas Pipes - B. Riley FBR

Chris LaFemina - Jefferies

Matthew Murphy - Barclays

Orest Wowkodaw - Scotiabank

John Tumazos - Very Independent Research

Timna Tanners - Bank of America Merrill Lynch

Jatinder Goel - Exane BNP Paribas

Oscar Cabrera - CIBC

Michael Dudas - Vertical Research

Operator

Ladies and gentlemen, thank you for standing by. Welcome to the Freeport-McMoRan Third Quarter Conference Call. [Operator Instructions] Later we will conduct a question-and-answer session.

I would now like to turn the conference over to Ms. Kathleen Quirk, Executive Vice President and Chief Financial Officer. Please go ahead, ma'am.

Kathleen Quirk

Thank you, and good morning, everyone. Welcome to the Freeport-McMoRan Third Quarter 2019 Earnings Conference Call. Our results were released earlier this morning and a copy of the press release and slides for today's call are available on our website at fcx.com. Our conference call today is being broadcast live on the Internet and anyone may listen to the call by accessing our website homepage and clicking on the link for the conference call. In addition to analysts and investors, the financial press has been invited to listen to today's call and a replay of the webcast will be available on our website later today.

Before we begin our comments, we'd like to remind everyone that today's press release and certain of our comments on this call include forward-looking statements and actual results may differ materially. We like to refer everyone to the cautionary language included in our press release and presentation materials and to the Risk Factors described in our 2018 Form 10-K.

On the call today, are Richard Adkerson, Red Conger, Mark Johnson, who is dialing in from Indonesia and Mike Kendrick and Mike runs our molybdenum business. I'll start by briefly summarizing the financial results and then turn the call over to Richard who will be referring to our prepared slide presentations. As usual, after our remarks, we'll open up the call for questions.

Today, FCX reported net losses attributable to common stock of $131 million or $0.09 per share in the third quarter of 2019. After adjusting for net charges of $123 million or $0.08 per share, the adjusted net loss attributable to common stock in the third quarter totaled $8 million or $0.01 per share. Details of the non-recurring items are located on page Roman numeral 7 of our press release.

Adjusted earnings before interest, taxes, depreciation and amortization for the third quarter totaled $564 million. We've got a reconciliation of our EBITDA available on page 28 of our slide deck. The third quarter 2019 copper sales of 795 million pounds were about 4% below the July 2019 estimates of 830 million pounds of copper, primarily because of lower production from Cerro Verde and also the timing of shipments at quarter-end. This was partly offset by higher production and sales from North America.

In the third quarter of 2019, our gold sales of 243,000 ounces were about 6% higher than the July 2019 estimate of 230,000 ounces. The copper and gold production exceeded sales by 59 million pounds and 90,000 ounces [ph] in the third quarter. These volumes were an inventory at September 30th and are expected to be sold in the fourth quarter.

Our average realized copper price was $2.62 per pound, that was below the year-ago average of $2.80 per pound. And the third quarter average -- 2019 average realized gold price of $14.87 per ounce was above the year -ago quarterly average of $11.91 per ounce.

Our net unit cash costs on a consolidated basis, net of by-product credits, averaged $1.59 per pound of copper in the third quarter. That was slightly improved from the July 2019 estimate of $1.53 per pound. As anticipated, our average unit net cash costs were higher in the third quarter of 2019 compared to the year-ago average of $0.93 per pound. That reflects lower sales volume as PT-FI transitions mining from the open pit to underground. We expect that our net unit cash costs will trend lower as this ramp-up is completed.

In the third quarter of 2019, we generated $224 million in operating cash flows and that was net of $146 million in working capital uses. Capital expenditures totaled $666 million in the quarter, which included investments in our underground projects and the new mine in Arizona that will be commissioned next year. We ended the quarter with consolidated cash of $2.2 billion and consolidated debt of $9.9 billion at no borrowings and $3.5 billion available under our revolving credit facility.

I'd now like to turn the call over to Richard, who will be referring to our slide materials that you've been provided with.

Richard Adkerson

Good morning, everyone and thanks for participating in today's call. I want to share with you the enthusiasm that I personally feel about all we are accomplishing at the current time. Two week ago, I made a trip to Indonesia and went to job site to visit operations there. It was my first trip to job site in three years, as we've been focused on our work with the government. And I was truly impressed by the progress we're making underground and the morale and attitude of our team.

I traveled to Jakarta, and while in Indonesia, met with the senior Ministers that we've been dealing with, with the CEO of our partner, Inalum and spent an hour with President Joko Widodo to fully review our operations. And I was gratified by the warmness of the conversations that we have and how positive everyone is about the arrangement we struck last December and how it's working to-date. And that was good. But I really want to talk to you about what's going on at Grasberg.

This is one of three major initiatives of our Company right now that we're really focused on. The Grasberg underground ramp up is the most important of those and one that's really key to our future. The ramp-up is advancing on schedule. My own personal confidence in achieving success with this transition was enhanced. This will achieve low-cost long-lived production from our underground ore bodies and it will be a source of significant cash flows for the next 20 years plus.

The significant mine development and infrastructure development is really impressive, as I said. Much of this is already completed and I met in detail with our team and observed their strength and the technical competencies, the experience and motivation to execute the plan. And you will see that we have had very positive initial results as we are reporting today in the third quarter and the year-to-date. All of this gives us strong confidence on our -- accomplishing our ramp-up schedule.

The designs of the two minerals zones, the Grasberg Block Cave and the Deep MLZ are set to world-class standards. We are applying our Company's experience over the past 35 years in block caving in the underground and using new technology to enhance the infrastructure techniques, undercut blasting and cave management. And I'll talk some more about that later.

Second of our three initiatives is the commissioning of the Lone Star project in Arizona. The current project to develop and mine oxide ores within our budget and on schedule for copper production is expected next year. The development is two-thirds complete and there are expansion opportunities that we've already identified in the oxide ore.

The current project envisions using available capacity at the nearby Safford mine. But the need to oxide ore is a resource that is growing as we do exploration drilling and has the likelihood of being a major keystone asset for our Company in the future.

The third initiative is something that's really exciting, and congratulate Red and his team for what they're doing in this innovation-driven productivity improvements. This is a program in which we are using technology tools, machine learning or artificial intelligence, and a coordinated operating structure that's bringing together different capabilities within our Company and applying it to basic operations to create value.

We tested this at our Bagdad mine in Arizona and had remarkable success, and what was so encouraging for me is the enthusiastic way that our team has embraced this technology, which is a kind of a quantum jump from the basic work of mining to using new technology techniques to improve efficiency. What it's allowing us to do is to increase production, decrease cost without making major capital investments.

We are now expanding this to Morenci and our other mines in the Americas, and we have not yet incorporated these in our numbers. We'll do that next year, but we have set an aspirational goal of adding 200 million pounds of copper from these initiatives with very little capital investment. And that would be a major accomplishment for us.

Slide 4 addresses our strategy. And I want to emphasize that our strategy, at this point in time, is well-defined and focused. It is focused on growing our sales profile, being efficient driving cost down, and improving cash flow generation. And we're going to do this with the three initiatives that I spoke of earlier, driven principally by the Grasberg underground conversion.

Success in these would result in a 30% increase in copper, 70% increase in gold, approximately 25% reduction in unit cost and a 100% doubling of our cash flow generation. This is all within our grasp. It's up to us to execute, but that's what our strategy is.

And during this period of time that's built around the Grasberg transition, we are not looking to make major new capital investments, although we have great opportunities for the future. We're not pursuing M&A transactions, but building this, because this will have such a major impact on our Company.

Much of the capital needed to achieve the results have -- has already been spent. These are long-lived assets, and it gives us a strong base for cash flows for the future. I personally believe there is a potential for higher [ph] current prices exist within the time frame of this transition. So if you look at a growing production profile at a time when copper markets may be improving, Freeport would have a very bright future in the near term.

Slide 5 shows -- I'll talk about the Grasberg. Now we are at the final stages of mining the Grasberg open pit. I will tell you, it was almost a spiritual experience for me to be there and see the that you're seeing on the left. I was there more than 30 years ago and took my own picture with the Polaroid camera of the Grasberg exploration shack where the second portable drill hole was -- had just been drilled. There were no mine or anything there.

Then to the -- on the edge of this -- and see what this picture shows. Here we are, after mining over 5 billion tons of material produced at the district, 33 billion pounds of copper and 53 million ounces gold, with a -- roughly a $100 billion of gross revenues and 80% of that's from the pit and then seeing this pit going three kilometers across -- a kilometer quarter deep, as I said, thinking about all of our history was something. But you know, that history, interesting for me, great story, but the future is in the underground and that is equally exciting. This is where our future production is coming from.

Our company is an industry leader in block cave mining with decades of experience as I mentioned earlier. The Grasberg Block Cave represents about 50% of our underground reserves. It's the same ore body that we've been mining from the surface for the past almost 30 years. In block caving, the ore that's there, rather than being stripped and mined from the surface, collapses in the caves under gravity.

So there is no stripping or mine waste. We will only have to mine about a third of the material that we've historically mined and produce more copper than we have in these -- all these years from the surface. Mining 1.1 billion tons of ore will be done without incurring the cost of mining 5.2 billion tons of ore and waste.

The gross revenues from our reserves at the two mineralization areas that we will be mining at $3 copper and $1,500 gold will approximate $150 billion over the long run, and approximately 50% more than what we've already earned from the pit over the past 30 years. We only pull reserves through 2041 because that's when our rights extend to under our arrangements with the government, but resources indicate production will go well beyond 2041.

This is developing these underground resources is not a new project. We have been undertaking underground investment since 2003. Over two-thirds of the underground development meters have already been achieved. We've invested in underground infrastructure, these enormous access to ventilations, large-scale crushers pushing rail transport and a state-of-the-art autonomous underground rail system. Most of the capital cost of the Grasberg Block Cave and Deep MLZ are behind us.

On slide 6, we list our key performance indicators. I'll refer you first to the chart at the bottom right, the ore extraction. And you can see that we averaged over 20,000 tons from the GBC and Deep MLZ combined in the third quarter. And this exceeded our forecast. The Grasberg Block Cave has met, and in many cases, exceeded expectations, and the cave propagation in its mine advancements is going very well.

The Deep MLZ is where two years ago, we experienced the seismicity issues because of incompetency of the rock. And we have developed systems to monitor that, micro systems that are placed throughout the ore body and that there are procedures to help us understand where these events may be happening.

Earlier in the third quarter, we used this system to temporary suspend some advancement of drawbells and caving in one of the production blocks. But using the hydraulic fracking approach, that's working successfully for us now, we achieved the desired shape of the cave and we resumed undercutting in September.

Now going forward in mining always, but in underground mining, there'll be pluses and minus simply the nature of mining and the planning. But we are now confident that based on our results today, that we have met the challenges this rock situation, the Deep MLZ. Spent a lot of time with our team talking about the hydraulic fracking operations at the Deep MLZ. I observed the operations and equipment that was being used, and I was extremely pleased with the results.

At our wrap-up meeting, I ask our team, could I say that we can now state that we've effectively managed seismic activity going forward, and there was a resounding yes to that question. So this has been an exciting development for us.

The Grasberg Block Cave will be our largest contributor production following the ramp-up. It has reserves of over 1 billion pounds of high-grade copper and gold -- 1 billion tons. The Grasberg Block Cave will have a very large footprint 80 acres at full rate and 180 acres over the life of the mine.

The size of the ore body and the different headings that we will have will give us the ability to produce simultaneously from five production blocks giving a scale flexibility and assurance of continuous and predictable production. It's important to note that when we talk about this underground operation and we talk about these two mineralization zones at Grasberg Block Cave and Deep MLZ. We actually have multiple mines within these zones and these mines share the same infrastructure.

Our teams know the rock types from mining the same ore in the open pit for 30 years, mining the ore mineralization that's in the Deep MLZ for 25 years and we've done extensive drilling in the underground to understand ground conditions. We are assessing ore at the Deep MLZ only 300 meters below the surface of the open pit of the Grasberg.\

As we continue undercutting and adding draw points our expansion is estimated to accelerate to ramp up to 130,000 tons per day in 2023. As I mentioned at Deep MLZ the ongoing hydraulic fracturing operations with continued undercutting and drawbell openings in two active production blocks are expected to enable us to achieve our ramp-up schedule for that mineralized area. We have a large inventory of drawbells already in place in Deep MLZ to support this ramp-up.

At full rates the production from these two ore bodies is projected to average 1.3 billion pounds of copper and 1.3 million ounces of gold per year. Higher ore grades from these deposits will enhance production in the early years. Average net unit costs are expected to average at current cost levels, $0.30 a pound in the first five years of full rate. This is notable and rare for large-scale operations in this industry. And we have the opportunity to deal with cost effectively through technology innovations in the underground as we go forward.

The key to the future is to clean your undercutting to expand the caves, to open up new drawbells to accumulate the ore. We expect to accelerate drawbell construction in 2020 as the cave expands. We are comfortable we are mitigating the inherent risk in underground mine.

Turning to slide 7 and Lone Star. Lone Star is located adjacent to our existing Safford mine which began production at time of the Phelps Dodge deal around 2007 and is -- in the ore that is being depleted, although there is future potential sulfide development at depth there.

But we have available facilities that are allowing us to have a low-risk development with good financial returns at the adjacent Lone Star wholly-owned ore body only 8 miles away from Safford, also 18 miles away across the mountains from Morenci. This is a $850 million initial project, two-thirds complete, estimated annual production of 200 million pounds and will be producing copper next year.

It's oxide ore with low capital intensity with opportunities with low capital -- expansion opportunities with low capital intensive available to us in the oxide. And then our drilling at depth is really exciting, because of the sulfide resource that continues to expand and will be a big part of Freeport's future.

Then to go back to this productivity project that we have been pursuing aggressively in recent months. This is on Slide 8. It's a development project without significant capital. The results of this as we've seen at our Bagdad mine increase production, improves its efficiency simply by doing things better and we do things better by measuring activities, by analyzing them quickly, using artificial intelligent type methods which involves involvement with broad areas of our team, getting data back and changing operations really efficiently. It's working well and it unlocks bottlenecks throughout the operations.

We literally identify through data the best operations can do and instantaneously know when we're not achieving that and make adjustments to get back to the best it can do. And I can't tell you how excited our team is about it and what it's like for me to watch that enthusiasm and how it's spreading through our organization.

Copper markets today are clearly affected by the trade war economic situation. But in my view, they are simply not sustainable. And the reason I say that is that even with the economic effects we're seeing, the demand for copper remains relatively strong throughout the world in China, in the US and elsewhere. Copper inventories are low.

The future is bright because of the fundamental uses and the growing uses for copper in alternative energy generation and the future for our electric vehicles and just the general use of electronics throughout the world. When you hear a mining company talking about measuring things electronically, think about how other businesses are affected by this.

So structurally the copper market remains very supported. It's essential to the global economy and then it's significantly supported by the scarcity of supply. Wood Mackenzie says it takes $3.30 to incentivize significant copper production, economic activity is going to affect demand in the near term. But we remain very positive about the outlook for copper and are prepared to deal with whatever price we have to do in the short term, but believe this is -- that we're in a great industry with great assets.

So I'll close, before turning over to Kathleen, just by looking at the reason there is I started out saying I'm so enthusiastic about our Company. We've got a strategy that our Board, our management team has bowed [ph] into, on our shoulders to execute that. To do that we have a portfolio of high-quality assets.

We look at our track record and our commitment to communities, environmental responsibility our technical capabilities that we've proven with our development project and the way we operate, we are the leader in our industry in terms of size, scale and durability. We operate all the mines that we have interest in.

So we're able to share supply chains, technology, people, resources, we're going to have very significant growing production and cash flow profile within our site to doubling of our cash flow generation. Copper fundamentally is positive and increasingly so and then we have this innovation driving value creation that's going to spread throughout our organization.

So beyond financial results which are affected by this transition issue that we have this has been a great quarter for Freeport. Kathleen?

Kathleen Quirk

Thank you, Richard. I'm going to start on Slide 12 where we summarize the production and sales data for the third quarter by region. And starting at the top North America did better than our forecast and was up about 12% compared with last year's third quarter.

We're seeing improved production performance from our leach stockpiles at Morenci, following initiatives that we've put in place to reduce the particle size of the material placed on leach pads. And we've also had some favorable changes in the chemistry of the ore.

At Bagdad, as Richard was talking about, we're seeing -- we're continuing to see real benefits from the innovation and debottlenecking initiatives and Bagdad has become a real model for this initiative as we drive it across the portfolio. In South America, Cerro Verde as well as other mines in the region were impacted by restricted access to transportation outlets and that was associated with protests regarding the non-affiliated third-party development project.

Our team at Cerro Verde did an outstanding job in managing the situation safely and efficiently in- the circumstances, but production was below the year-ago level and about 10% below our forecast. Because of lower mining rates and changes in mine sequencing we processed a greater portion of stockpile ore which impacted grades and recoveries. The lower mining rate in the third quarter will also impact the fourth quarter, metal production, but this has been offset by better performance in the US than our prior forecast.

We want to note that despite the disruptions, the Cerro Verde concentrator averaged over 380,000 tons per day during the third quarter. That's above nameplate capacity of 360,000 tons per day and the team is optimistic that the AI and innovation initiative will drive further increases in the future.

For Indonesia our sales in the third quarter were generally in line with our guidance. We did a little better on gold and have increased our estimates slightly for the year. We're continuing to mine a small amount of high-grade material from the surface. Our current forecast assumes we will continue this through November. But we also ended September with a higher level of concentrate inventory and we'll be working this down in the fourth quarter.

We show a table at the bottom of Slide 12 which presents our consolidated production for the quarter and that exceeded our sales by 69 million pounds of copper and 90,000 ounces and this relates to timing of shipments of concentrate from Cerro Verde and also from Indonesia where we built some inventory in the quarter. This is simply a timing matter and we expect to sell this inventory in the fourth quarter and get back to normal levels of inventory by year-end.

On slide 13 we're summarizing our consolidated sales outlook for the periods 2019 through 2021. The projections are in line and broadly consistent with our previous estimates. Our copper sales are expected to grow by roughly 200 million pounds in 2020 and 900 million pounds in 2021 compared to 2019. This includes a scheduled ramp-up of production that Richard referred to earlier at Grasberg, and the commissioning of our Lone Star mine next year.

In 2021, about two-thirds of this copper production will be produced from the Americas and the balance from Indonesia. This outlook does not include the opportunities being pursued with technology and innovation that Richard discussed earlier and we're targeting the potential to add 200 million pounds of copper per annum through these initiatives.

We also expect our gold volumes to rise over this period with high grades available to us in Indonesia and recall the district has high grades of both copper and gold in the same ore which makes Grasberg a low-cost valuable operation. Our molybdenum sales are generally flat over this period, but we have significant optionality in our portfolio and can adjust production rates from our primary mines if market conditions warrant.

We refer you to page 14 where we've modeled our EBITDA and cash flows at various prices to give you a range of the cash earnings and cash flow generating capacity of the Company. You will note the significant positive leverage we have to improving market conditions on the slide. At $2.60 copper for 2019 we are in the $2.4 billion range for EBITDA for reference. This is a trough year for us and as you'll see from the mild result we would generate approximately $3.5 billion to over $5 billion in EBITDA in 2020 at prices ranging from $2.75 to $3.25. And this grows to $6.5 billion to $8.5 billion in EBITDA for 2021 and 2022 average.

So you see that our EBITDA is moving from $3.5 billion to $5 billion next year to $6.5 billion to $8.5 billion depending on prices. These added volumes that we're bringing in are expected to come at a low incremental cost and that provides us with solid margin expansion even at low prices, and as we've been emphasizing it's about execution and over the next few quarters achieving our key milestones will continue to derisk the plan. The story is the same for operating cash flows where we're expanding operating cash flow over the next few years and that's net of our cash taxes and interest costs presented on the slide.

Our cash flows grow from less than $2 billion this year in 2019 and would range from $2.5 billion to $3.7 billion in 2020 as we continue the transition. Of the average of 2021 and 2022 looking at $3 copper, it would range from over $5 billion to $6 billion at $3.25 copper for the average of 2021 and 2022.

We show our capital expenditures in -- on slide 15 and these are broadly in line with our prior guidance. It includes sustaining capital of roughly $1 billion per year and then we've got the projects underway, including the underground at Grasberg and Lone Star that average about $1.6 billion per year in 2019 and 2020. As Richard mentioned, we're continuing to manage capital carefully and thoughtfully.

The investments we're making now or at an advanced stage will strengthen our margins at low prices, enhance our long-term asset base and provide leverage to improve markets over time. These amounts do not include the new smelter in Indonesia in which FCX will share 49% of the economics. As indicated in the press release, we're completing engineering studies and we also have -- we're expecting to have the engineered estimates and project schedules in the first part of next year.

We've been working with a group of banks on debt financing for the smelter. We expect to debt finance the capital cost of the smelter at the PT Freeport Indonesia level, and that is expected to be non-recourse to FCX. We are advancing the discussions with the banks and hope to have a facility in place to fund the cash outlays for the smelter.

Currently, we do not expect the dividends out of PT-FI. We will be burdened by smelter development capital as a result during the construction period, and particularly, during the period prior to 2023, when FCX receives 81% of the dividends from PT-FI.

Turning to slide 16, we show the debt maturity profile for our senior notes, which totaled $9 billion over this period of time. During the third quarter, we issued $1.2 billion in new eight and 10-year notes and those are shown in yellow on the graph. And we use the proceeds to redeem debt with near-term maturities and we also redeemed the higher coupon notes.

We were able to extend our average maturity by a year. You can see here on the table where our weighted average maturity is roughly 10 years now, and we reduced our average coupon during this process. Our balance sheet's in good shape and we don't have significant maturities until 2022 and have a strong liquidity position.

In closing, on slide 17, you see our road map to our growth in cash flows to drive shareholder value. Each of these initiatives is advancing well. The momentum that we have in each of these projects is real and we're very focused as a management team on executing these plans effectively and have a clear path in front of us to substantial growth in revenues, margins and free cash flow.

Thanks for your attention, and Regina, we'll now open the call up for your questions.

Question-and-Answer Session

Operator

Ladies and gentlemen, we will now begin the question-and-answer session. [Operator Instructions] Your first question comes from the line of Chris Terry with Deutsche Bank.

Chris Terry

Hi, Richard and Kathleen. Thanks for taking my questions. The first one just relates to the grade reconciliation. So I was wondering if you could just talk firstly, on the gold for the full year? You've increased that. Is that just a timing issue or are you getting better reconciliation? And then, for the underground, you talked a lot about the development, but how is the grade -- how are the grades reconciling in copper and gold on the underground development? Thanks.

Kathleen Quirk

With respect to the first question, the increase in gold for 2019 principally relates to the open-pit ore. We've extended the mining of open pit through November, and we're doing this on a limited basis, but it does have high grades. And so, it does impact us. There is a potential that we could extend the pit longer, but our real focus is on getting the underground ramp-up, which is going well.

And we have not had any issues with respect to the grades. We've got good grades, higher than reserve grade coming from Deep MLZ in the early years, and that's part of what drives the metal production. But -- and Mark's on the line. Mark, I don't know if you have anything to add about the grades, but we believe we're in good shape on that front.

Mark Johnson

Yeah, for all of the new major underground mines, Big Gossan, GBC and Deep MLZ, the grades that we've gotten are very much consistent with the reserves. In GBC and Deep MLZ, we're just really starting to touch the bottom of the columns and sampling through some of the drawbell period and some of the initial primary fragmentation is a bit challenging.

We get a lot of big material, but everything we've seen so far is consistent with what we would expect. The ore bodies are very well drilled, like Richard had mentioned earlier. These are not new ore bodies. They are extension of ore bodies that we've been mining for years. So we haven't seen any issues there.

Richard Adkerson

And for those of you who follow the Grasberg open pit for years, you will remember that we always had this high-grade core of gold. That's the way the mine was designed to access that, and that's why we're doing the surgical mining. When I was there, there was only two shovels working at the bottom of this pit.

We mined out the haul road, so it's single-lane haul roads going down and coming up. But the reasons for doing that and trying to extend this is the ore, we are getting such high-grade gold. I mean it's extraordinary grade. And so that's the whole reason we're continuing to do it. We'll do it as long as we can, until the development of the Grasberg Block Cave pit.

Eventually, well geotechnically, require us to get out and we've got procedures to get out very quickly, and we're monitoring with due diligence. But as long as we can get down to that high-grade gold, we're going to do it. And that's what you're seeing, Chris.

Chris Terry

Okay, thanks -- thanks for the color on that. Second question, just on slide 17, when you are stepping through the future of the Company, I just wondered if you could comment, once you get through the ramp-up period of Grasberg and then have more decisions about future projects versus potential capital returns, can you just rank those? Are you trying to do both, is it one over the other? I just wondered if you could talk through what the priorities are for the medium-term investor? Thanks.

Richard Adkerson

I can't wait till we face that. So here's what I think will unfold and it's going to depend on what the economics of the world are and so forth. But we will be generating cash and we will use that cash to manage our debt level on our balance sheet initially and return -- our balance sheet, we're comfortable with it. It's not a question of having to do things, but it will be sort of the situation we were in years past. We will be increasing returns to shareholders. Shareholders will have been patient, they deserve to be rewarded for that, and so we will be focused on the shareholder returns.

With that, we've had a traditional emphasis on dividends, but we will be looking at share price and deciding about share buybacks and dividends. We will also be looking if markets warrant disciplined investments in some of these undeveloped resources of Freeport, which I think is a great asset for our Company. But in any event, if we pursue those and it will be disciplined, those in our industry are investments that are undertaken over time. It's not one-time investments.

We have lots of people we'd like to be partners with us, and we'll make assessments of about that. So, my own view of how this will end up for all is success with the transition in these initiatives that we have, confident of that. I believe copper markets will be better, because I don't think today's price is sustainable and I think the world is geared for a brighter future. That will mean a lot of cash. We will use some of that probably to pay down some debt, shareholder returns and longer-term investments.

Chris Terry

Okay. Thanks, Richard. The last one from me, maybe for Kathleen. Just on the timing of the sales versus the production, do you expect most of that to be caught up in 4Q or will you still have any imbalance that will head into 2020, if so, i.e. can we expect a really big catch-up in this quarter? Thanks.

Kathleen Quirk

Yes. We are expecting that our inventories will be at normal levels. We do usually have some inventories at site, but generally, our production matches our sales. And in the fourth quarter, we expect to sell more than our production and get inventories back to normal. You always have from time-to-time some shipping, weather type things, but we're not expecting anything out of the ordinary and except most of that to be and it's reflected in our guidance, most of that to be sold in the fourth quarter.

Chris Terry

Okay. Thanks. That's it from me.

Kathleen Quirk

Thanks, Chris.

Operator

Your next question comes from the line of Alex Hacking with Citi.

Alex Hacking

Good morning, Richard and Kathleen. I just have one question. You mentioned in the slides there have been some seismic activity at DMLZ, that it's slowed some of the undercutting rates and so on. Obviously, underground mining is not necessarily as linear as open-pit mining and there are issues that crop up from time-to-time.

So I guess, my question is, are you comfortable that there is enough production blocks, all at draw points, effectively sort of latency and optionality in that's been engineered into the DMLZ, so that if these geo -- as these geotechnical issues crop up over time, that you won't have significant impacts on production? Thanks.

Richard Adkerson

Yeah. So, I've spent a lot of time talking with Mark and the team about this and asking that very question. And the more I get into it -- and I try to emphasize the point that this is multiple mines that we are developing in these mineralization areas with multiple headings. And I was making the comparison with open pit where when we first started open pit, we had a lot of access available because this pit was in high grade ore.

But as we went further down in the pit, the pit widened and we had less options for dealing with changes in open-pit mining. And so in comparison, where we are at the underground, and Mark you jump in on this, but I'll give you my interpretation of meeting with you and your team.

With these different mine headings that we have, is really going to give us a comfort that if we do have -- and it's not necessarily mining into seismic events, but you are going to have wet muck and other things that you encounter.

We're dealing with that with remote mining activities and so forth. But because of these number of accesses that we have, we're going to be able to have confidence in being able to operate regularly and to deal with relatively predictable production now. You make a point there's risk in underground, that's true.

But I want to make the point that we're not just talking about a single underground mine like we have with our smaller Big Gossan mine where an event could affect that. It is not material to overall operations, although it's a great profit generator. But with all these -- the large-scale of the ore bodies, the access to those ore bodies at multiple points, will give us the chance to avoid having the kind of risk that you would have if it was a single mine.

Kathleen Quirk

And Alex, just to clarify, the slowing of the undercutting in one of the production blocks of Deep MLZ during the quarter was not -- was designed to achieve a desired cave shape. We're managing the seismicity issue. It wasn't related to that. It was simply to get the cave shape in a manner that we thought was the right shape and Mark can comment further on that. I just wanted to clarify that it wasn't a seismicity-driven issue.

Mark Johnson

No, what was encouraging about this situation is that, that our team was able to detect a buildup of stored energy before we had any significant seismic event. They were able to determine what was -- what the cause of that was. We had a relatively flat cave angle. We focused on the mucking in this in the cave front area, and within a month we had the cave shape back where we'd like it.

And then we were able to see that some of these indicators were back in line. And we had a process where we got back to the undercutting. So that to me was -- was all very encouraging. It was a very proactive way of looking at the data and adjusting the mining.

Another -- just to comment on your concern about the underground mining. What we do in the underground mine plants that we have now, we use a central estimate where there is upside to the estimate. We also look at the downside events that could cause that. But what we try to do is to develop an estimate for our forecast that has 5% to 10% upside.

And some of the advantages we're going to see in the underground, for instance, in the GBC where we have the manless automated train system is that we feel there may be some upside to our ability to maximize the use of our ore flow system that we haven't been able to do in the previous systems that were based on manned truck systems.

This system will be able to run through shift changes, it will be much more of a continuous operation and also our mills will see a very consistent ore blend day to day. That's not necessarily been the case in the Grasberg Block Cave.

We can confer the Grasberg pit. We can get into a very high-grade phase and then we can get into a low-grade phase and all those swings cause minor disruptions in the processing. I believe, once we get into a very steady state on the ore types and the feed grades, that there will be further enhancements to our ability to more efficiently process the material.

Alex Hacking

Thank you. Thanks everyone. Very, very helpful.

Operator

Your next question comes from the line of Lucas Pipes with B Riley FBR.

Lucas Pipes

Hey, good morning everyone.

Kathleen Quirk

Good morning.

Lucas Pipes

I also wanted to -- I know this has come up a few times, but I also wanted to follow up on the DMLZ. And specifically, what I looked at was the number of drawbells by year-end 2019 and then also year-end 2020. Any long-term conclusions that can be drawn from this slight reduction? Just would appreciate that clarification. Thank you.

Kathleen Quirk

Mark, you want to take that?

Mark Johnson

Yeah, we -- we had about three less drawbells than we planned for the quarter, which is around 3% of our total drawbells. We don't see that as significant, it didn't impact our ramp up. The amount of material that we pull from each draw point in the Deep MLZ is very conservative.

When we had 80 drawbells in the DOZ, for instance, we were producing 30,000 tons a day. So we've been able to pull more per draw points. We continue to see that, that's an upside to where we are right now in our production ramp-up. We have not yet pulled any of the material that has been affected by the hydrofracking, that's just slightly above where we're pulling.

So we're optimistic that, that hydrofracking will also affect the fragmentation as it starts to make its way to the draw point. So it didn't have any impact. It's a relatively minor change. We feel that our production schedules or tons per draw point are very much in line, in fact, well below what we experienced in the DOZ.

Lucas Pipes

That's very helpful, I appreciate that. And then two quick follow-up questions. The first -- the 200 million pounds kind of efficiency-related output potential, when could that be coming through? I would appreciate a sense for the timing on that.

And then secondly, you have a large portfolio of undeveloped assets. Could you speak to the extent those might be candidates for monetization would appreciate your thoughts. Thank you.

Kathleen Quirk

We're just getting rolling out new plants in the first half of next year. With all of our teams are going through now new mine plans to incorporate the debottlenecking in the findings that we're experiencing through this program that Richard was talking about. And so our expectation is that beginning next year we will incorporate those plans and hope to have it in the first part of the year.

In terms of the non-core asset sales, we'll continue to test the market and have dialog where we can add some cash proceeds to our Company at a time during this transition. We have a couple of assets that aren't producing cash flows that we may sell and that's just something we'll consider as we look at what the alternatives are. But that is something that we are -- that we do have. It's not in our plan. We do have a plan announced agreement to sell our refining -- part of the cobalt refining business in Kokkola and we expect that transaction to close in the fourth quarter.

Richard Adkerson

And I'll just say we have substantial interest in the Serbian in the DRC asset, people and we're just assessing -- we understand the values and if we can get to those values we're likely to proceed with those, but there is interest in them.

Lucas Pipes

That's very helpful. I appreciate all the color and continued best of luck.

Richard Adkerson

Thanks. Appreciate it.

Operator

Your next question comes from the line of Chris LaFemina with Jefferies.

Chris LaFemina

Hi, thank you. Hi, Richard. Hi, Kathleen. Thank you for taking my questions. I have two different questions first relating to Grasberg and second, relating to the Americas. Actually I'd start with North America. So I think one thing that maybe gets a little bit lost in the mix with Freeport, because we're also focused on Indonesia, is very consistent and predictable operational track record in the Americas. In fact, especially in North America and third quarter was no exception, obviously you had very strong production there.

I guess the question around that is unit costs in North America. I mean obviously not paying taxes, that's very helpful, but unit cost despite strong production in the quarter, creeped a little bit higher versus second quarter. How should we think about the cost progression in both North America and South America over a multiyear horizon?

I mean obviously you have the innovation plans, which could lead to some cost reductions. But is the cost creep really just a function of grades? I mean it's -- or is there something else going on that you could -- that could make a material change lower over time? That's the first question.

Kathleen Quirk

That's one of the real benefits of this program that Red is leading is over time, we've done a lot with low grade assets to maintain a competitive cost structure and these are new tools that are going to allow us to improve productivity and that will drop the unit cost. But one thing just to point out, we did have an increase year-over-year with North America. The biggest driver of that was at Morenci where the cash costs were higher year-over-year from an accounting standpoint.

But when you look at the underlying cash, the amount of cash we spent to produce those pounds at Morenci in the quarter, it was actually the same as last year. But we had costs with these stockpiles that were inventoried on our balance sheet and because we drew, I mentioned we're getting better recoveries out of the leach pads we actually had some of those costs that were in inventory on our balance sheet come through the income statement and that's included in our, we call it, cash costs, but that's using the income statement.

So really from a cash standpoint the way we also manage it is to exclude those prior period costs and when you look at it, the net cash costs were around -- were similar to the year-ago period. So -- but the real benefit as we are all talking is to drive those costs lower through productivity and not only do you have a lower unit cost, but that expands the reserve position because these North American assets are limited by economics, we use 250 to do our reserves. But if we can bring down the cash costs that's more reserves that could be brought in to the portfolio. So our focus is to keep stable and drive down the cost in the Americas.

Richard Adkerson

And let me add one other fact that's been kind of part of our situation last couple of years. When we were so focused on debt reduction three years ago in 2016 and that was the time when copper prices were very low, we deferred some things and we've had to catch up with mine rates and that added some volume type cost to our business, which mostly is behind this now.

I think one of the points we're making is we're not seeing significant increases in input cost. Energy costs are what they are, but our energy sources are diversified. The things that are keeping copper prices low are keeping some of our input costs low. So what you're seeing is some of these accounting type issues that Kathleen referred to, some degree of catch-up in employment, mine rates and so forth, but the fundamental cost structure of our business is not changing.

We had the unusual -- you mentioned North America, South America this year had the unusual situation of having these disruptions of protests not related to Cerro Verde but related to other mines, but roads were blocked, we couldn't get equipment in, we had some delays in shipments, we had to take some steps to counter these disruptions that cost some money and that's just part of things that happen.

The good news is the community continued to support our operations. So that's going to be normal variations. But every quarter right before this earnings call we sit down, we go through input cost with our supply team for all of our operations and I'm struck by just how well we are managing that suppliers or are being very responsive to us. Caterpillar is a big supplier of ours and we work well with them to reduce costs. So all of this is -- I guess the point I want to make is, there is not fundamental changes in the cost structure that are driving.

Chris LaFemina

Thanks for that. And then quickly on Grasberg. There's a lot of focus amongst mining investors and our investors in general about ESG issues. Can you just kind of discuss the changes in the environmental impact at Grasberg as you move into the underground? We are moving less material, obviously making less waste. How do we think about the environmental impact from the operations going forward?

Richard Adkerson

I should have mentioned this. I am so glad you asked this question. Besides being thrilled with what I saw with what we're doing with our underground transition, I spent a day taking helicopter tour over our tailings deposition area and then we got into buses and trucks and actually went down on the ground.

There's two aspects to what you just said about waste management. One is the waste material we mined from the pit in placed around the mine. I went to this area called the Wannigen which is one of our major waste dumps where we've literally spent over the years $0.75 billion managing waste at that site.

And again, I was there when it started and to see how effective that is in this way and mixing the waste rock with limestone to control the acid run-off, I mean it's remarkable, the numbers how they decreased. Then you get down the tailings area and this is a point I'm making with the government, I made with the President. This tailing system that we settled down in the mid-1990s was very controversial at the time, because we used a natural river to transport tailings and it was contained within a dike a levy system, within this designated deposition area.

Today in that deposition area, we have a demonstration project of where we're actually growing crops, raising fish, raising cattle, and that's good. But what's more remarkable to me is, throughout this deposition area when the tailings -- when the tailings river moves away from the area, it dries up.

A natural slime develops, natural grasses and trees are growing. And so in the tailings area, you can see over a majority of the area, natural re-vegetation occurring without any assistance from us. And our team estimates that at the conclusion of the mining decades from now, this whole area will return to a natural state and we will only have to do any kind of remediation for like 20% of the area. It's a visual verification of the decision that we and the government made 20 years ago, and that is that this was not only a cost-efficient way, but the proper way of disposing of these tailings, so that they can be restored.

It was impossible to store tailings in the mountains, because of the severity of the terrain, the wetness of the climate and the -- although if not a higher earthquake area, the possibility of earthquakes. And so, we chose this system. And now 20 years later, with all that's going on, we can look back on it and say, this is working as designed and it was the right system. We're not defensive about it and the government is now agreeing with us.

Chris LaFemina

Thank you for that. It's great.

Richard Adkerson

And then you talked about ESG. We learned early on at Grasberg, for us to be successful, we had to work with the local people to be successful because of sensitivities between the province and the central government. Now under President Joko Widodo, there is more sensitivity about the central government improving the situation in Papua. And more of our taxes and royalties that we paid to central government are coming back to Papua.

There will always be an issue with social situation there, but we are working hand-in-hand now. Now that our interest with the government are aligned, we are working hand-in-hand on improving the lives of local community. Freeport can't -- can't succeed unless Papua succeeds. We can't succeed unless Indonesia succeeds.

The government now has a 70% ownership interest in the economics of this project. We have the same 30% we had going into all of these negotiations. But we are working cooperatively on security issues, community issues. There is an ongoing effort. But we are all working together now, and I met with local leaders when I was there and made the same commitment to them to keep working really 40% of our workforce today, our top ones whereas in 1996, it was just a handful.

And one of the most exciting things, I have this picture of Kathleen standing with a group of women underground miners at the surface, operating remote control mining equipment underground at -- from the surface. And to see Papuan women, who came from the backgrounds that they came to, operating the largest underground mining operations ever in the history of this industry and not having to have big, strong men in harm's way underground with using equipment that looks like Game Boy, chairs and things and all the smiles and things, and seeing that, it's just -- it's really gratifying to see.

Chris LaFemina

Great, thank you.

Operator

Your next question comes from the line of Matthew Murphy with Barclays.

Matthew Murphy

Hi. I had a few on just small changes on guidance on Grasberg, one being the CapEx. There is a mention in the release about the four-year period 2019 through 2022, where it looks like CapEx hiked a little bit. And then on slide 15 of the presentation, it doesn't look like Grasberg CapEx is up. So should we assume that 2021 and 2022 CapEx has gone up a bit, and if so, what's driving that?

Kathleen Quirk

When we did the average in last quarter, it rounded. I mean this is a rounding thing, it rounded to $920 million something, and now it is $950 million round. So it's not -- it looks like a difference, but it's not a difference like what you would expect.

But we did have some increases in 2021 and 2022 that were modest related to some mill improvements that we're reporting in. We had some revised engineering estimates on a new SAG that was included in some other minor changes. But they weren't -- the changes weren't significant.

Matthew Murphy

Okay, and then just on 2021 gold, guidance came down a little bit. I get it's a small change. But I think you guys started the year at 1.6 million ounces and it's now 1.45 million ounces. I'm just wondering what -- do we expect to see that in 2022 and it's just a timing thing or is that ore body understanding or what?

Richard Adkerson

Let me just say, these are Kathleen questions and she is going to answer them, but we at Freeport, we don't have an annual planning process. We update our plans every quarter. We step back and we meet and we come out with our best estimate.

So there are going to be changes of this nature plus and minus, there are every quarter. But rather than like in my experience watching other companies, they give kind of constant guidance through the quarter and then they all have this big announcement how their plan and all these things come through.

So those things you're seeing of this nature just reflect a bunch of hard work that goes in. And as you get closer to things, you get more specific planning done and the number change a bit. But...

Kathleen Quirk

Yeah. And now just as Richard said, we do update the mine plans every quarter and we had a 25 million -- a 25,000 ounce change in gold in 2021, which could be grades or modest, small changes and that rounded the number differently. So as Richard said, we just -- we keep this update, and we don't want to have any big surprises to keep it updated each quarter.

Matthew Murphy

Yeah, and I appreciate the disclosure. Thanks.

Operator

Your next question comes from the line of Orest Wowkodaw with Scotiabank.

Orest Wowkodaw

Hi, good morning. Just a follow-up on unit costs. Obviously, they bounce around quite a bit at Grasberg, depending on the volume, but if we looked at site delivery costs at Grasberg on a dollar basis, it seems to me that they've been trending up this year, averaging about $500 million a quarter or about $2 billion per annum.

Is that a good guide for a run rate moving forward, because that's certainly up from what we've seen in the last couple of years that were more like $1.7 billion to $1.8 billion on for site delivery costs? I'm just curious if there is something going on this year with the transition that's driving that up and it will come back down or whether that's a good run rate from a dollar basis? Thank you.

Kathleen Quirk

Yeah. No, actually our costs at Grasberg, when you look at it on the basis that you're looking at, is lower this year and that reflects the lower mill rates than what we've had in recent years. But -- and then next year, we're not projecting any significant changes in the cost from this year.

As you'll recall, a lot of it is fixed and then we do have some variable costs associated with the mill rate. But we've got basically a core team that manages the operation. We don't have -- we're not having significant changes in the costs and actually they are actually down from prior year.

So we've been -- one of the things Mark's team is leading out there during this period of time of transition is really trying to drive efficiencies. Grasberg has always had high production and so costs have been less of a focus but his team out there is really focused on dropping aggregate costs and looking at cost and capital together. So we will be happy, Dave and I can call you and review exactly what your question was. But we see that Grasberg costs have been trending lower this year versus previous year.

Orest Wowkodaw

Okay. I'm not sure I actually got, but...

Richard Adkerson

On that issue when we're out there but Orest maybe you've got some elements of cost that you're raising the question about rather than the total cost.

Orest Wowkodaw

Okay. Yeah, I just looking at your total site delivery cost of $1.5 billion year-to-date versus $1.4 billion last year at Grasberg.

Kathleen Quirk

Yeah, last year total cost, cash production cost at PT-FI was $1.9 billion and we're less than $1.8 billion this year.

Orest Wowkodaw

Okay. Maybe we will take it offline. Thank you.

Kathleen Quirk

Okay.

Richard Adkerson

Yeah.

Operator

Your next question comes from the line of John Tumazos with John Tumazos Very Independent Research.

John Tumazos

Thank you. Well, the 40 million pounds decline at Cerro Verde in the third quarter, we caught up and would there be 40 million extra pounds delivered in the fourth quarter with blockade of another party being over or were there a few other operational items that might have gotten mixed in and contributed to the decline in addition?

And separately could you give us a flavor of the day-to-day productivity and cost issues you manage? My sense is that you're going to do your best to have a net profit for the year rather than a small loss. And could you talk about whether it's day to day cost per ton, day to day recovery rates, travel expense, exploration expense, bypassing some low-grade areas, maintenance schedules, some stripping that you can postpone, the different things you're trying to do, it's impressive, if you can stay out of the red as the price falls.

Richard Adkerson

So I'm going to ask Red to talk about situation at Cerro Verde. I mean, practically we try to operate all out, and that's our plan. So there is not really capability of makeup, although there was some inventory that's in our numbers that we will make up. But John, we certainly aim to maximize cash flows. That's what we're doing, but we are not driven, I talked about the strategy of our Company and the major initiatives that we are on and that's what we're focused on.

We are not -- we're trying to be efficient every day and cut out unnecessary cost. But in terms of trying to do things that would otherwise be beneficial in deferring them, just so we can affect near term accounting profits is not what we're back up and the bigger picture is this thing is irrelevant to the future of our Company.

Now, I don't want you to think we're not being hard nose on expenses and efficiencies that we are. But to defer some maintenance that could have longer-term consequences just to achieve some near-term results, we're not going to do that. Red, why don't you talk about the Cerro Verde situation?

Red Conger

Yeah, John just quickly going from the issues that Kathleen discussed in the third quarter that we faced. There is going to be some carryover effect from that into the fourth quarter. Our mining lines did not get advanced to the areas that we thought we would in the fourth quarter. So we're going to have to use some additional low grade stockpile material to offset that timing of ore. That ore material is there. It's not lost and will be mined next year. So we've got a small effect in the fourth quarter from that.

Kathleen Quirk

But both production and sales for Cerro Verde are expected to be higher compared to the third quarter for the fourth quarter.

Red Conger

Yeah. I was just referring to our forecast.

Kathleen Quirk

Yeah. But compared -- as Red said, compared to the prior forecast we did adjust some Cerro Verde for the current mining situation there. But on a quarter-to-quarter basis sequentially production and sales we're expecting to be higher than the third quarter at Cerro Verde.

Richard Adkerson

And in along the lines of what you talking about. John, one of the things we talked about with Mark and his team who is out there is as we are ramping down mining from the open pit, there is going to be a lot of dismantling of facilities, transfers of equipment we're transferring trucks from Indonesia to North America and the Cerro Verde and so we talked about having a focused team on how to -- and as we are -- the focus of the overall organization is on this underground transitions to put together team of how we can do things like that as efficiently and saving cost in doing some of the less significant, less visible items in an economical way.

But you look back at our, for example, our G&A cost, we've made substantial reduction of G&A costs in recent years on the order of 30%-plus percent, right, Kathleen? And so we are continually going through our organization and challenging personnel cost, travel cost and the things of that nature.

John Tumazos

Thank you.

Operator

Your next question comes from the line of Timna Tanners with Bank of America Merrill Lynch.

Timna Tanners

Hey guys, good morning. Just one question from me that I didn't hear anyone asking and I really wanted to get your high-level thoughts on. It seems like there is an uptick in disruptions in Chile lately and some maybe project specific issues in Peru. I just wanted to get your thoughts on is this isolated incident, is this something broader that we should be worried about is country risk picking up in those Latin American regions? Thanks.

Richard Adkerson

So Peru has been a country of where there's been this dichotomy between the government through several presidential administrations since I've been involved there over the past 12 years. There has been consistent recognition by the government for the way for Peru to improve is encourage mining investment and the Central Government has done that directly with us and other miners.

They have seen the historical success in Chile and they made a lot of progress. The challenge in Peru has been and this is not new, but it's been all along, the conflict between local communities and nearby mine developments, often centered around access to water.

But also disruptions in communities and so forth. And this has been a feature of business in Peru, which still and even though the country has made tremendous progress, still has a large income disparity within the country.

And so it's something that we recognized at Cerro Verde early on and I was just with the President of Peru. I've been with other Presidents and they all acknowledge that we've been a shining star of success with community relations in our region with the city of Arequipa where we provided fresh water system as a community support, we developed this innovative use of a wastewater treatment center to get water for our expansion rather than building new dam, improve the river, improve the farmer situation.

But there is ongoing issues related to other mining projects in Peru and it's sort of this inherent conflict between communities and mines and that's been a feature and is likely to continue to be a feature going forward. Although the current President, as I discussed with him, is very committed to encouraging mine development and wanting to do things to help it, but it's an ongoing social problem.

Chile is a country that over the years has had a stable situation. There are labor issues that come about with labor negotiations that cause disruptions from time-to-time. And there've been, in certain parts of the country, weather events and earthquake events, but typically, the civil situation has been relatively stable.

On occasion there gets to be a debate between the use of revenues generated by mining for different purposes within government. And that's one back -- current situation, we have one or two that you talked about what we're seeing.

Red Conger

Yeah. Part of the reason that's such a surprise to the world is that Chile has been our country steeped in rule of law. Things work very well there and are very reliable. And over time, there has been this concern about incoming quality and how people can better themselves, can they grow the economy fast enough to create jobs for all of the well-educated people.

So, just a recent event of changing the prices of the metro fare by a relatively small amount, had sparked this current unrest. President Pinera has pulled everybody together, gave a great talk last night to the country about how they recognize these issues and are going to redouble their efforts to address it.

So it sounds like they are resolving this current unrest and everybody that we've talked to this morning, feels very positive about the efforts being made going forward.

Richard Adkerson

But, Timna as I reflect on your question, let me step back and look at a -- the global situation. You're raising issues about country risk, and I think unquestionably, that's a feature in today's world and recent history. And it's something that ultimately is very supportive of copper prices and supply development. And you just go around the world and look at what situations have occurred.

The situation in Alaska with a new mine that's been proposed there. The situation in Mongolia, our situation in Indonesia. We talked about, Peru, Chile has been really a stable situation. Situation in Africa where we were, and in 2008, our contract was challenged and now the new mining law has being revised, but that's beyond the DRC into Zambia and other places.

Even here in Arizona, where we have just remarkably positive relationships with the government, the communities where we operate and that's taken years of work, we have -- I tip my hat to Red and his team for the positive relationships we have with the native American groups where we need to have positive relationship for water access, but we are providing training and employment opportunities for their people. But there mines here in Arizona that are very controversial right now.

I won't go out and say specific mines, because I don't like to talk about other countries, but you're fully aware of the challenges that people face. And so mining is challenging, because it has such a major impact on communities where mines are located. There's issues about sustainability of mining, the resource curse question, the issue of environmental impacts, the competition for water, it's just in here. We are working on those issues through ICMM. But the reality is, is that's a major constraint on future mine development in an industry where the economic resource is scarce.

Copper is not like iron ore or coal, it's not everywhere. And the easy copper deposits have been found over the years, modern deposits at the surface are much lower grades. Like our Cerro Verde mine, it requires tremendous investments in infrastructure mining.

Processing, we have the largest mill facilities in the world at Cerro Verde. Enormous tailing dams are required, because you process so much material. And increasingly, mines are underground where costs are greater. So all of that is reality. Everybody is working to try to deal with it, but it is ultimately a very positive impact for future copper prices.

Timna Tanners

Okay. I appreciate that overview. Thanks a lot.

Operator

Your next question comes from the line of Jatinder Goel with Exane BNP Paribas.

Jatinder Goel

Hi, good afternoon. Just a couple of small questions. I understand these are not material numbers, but just curious on -- your treatment charges for Indonesia have gone up by $0.02 on 2019 guidance. Is there a change in concentrate grade or is there any interim revision in the terms similar rise in royalty and export duties? I understand gold price and volumes are higher, but at the same time, the copper price is lower. Is it just the mix or something else is changing there as well? Thank you.

Kathleen Quirk

Right. It is the mix and we are exporting more than what we had in our previous plan, but it's really just a mix issue and not something more than that.

Jatinder Goel

Okay. Very clear.

Richard Adkerson

We get -- we pay global TCs and RCs. I mean, it's market based with the world's largest marketer of copper concentrate and the concentrate price that we pay is the globally negotiated rates.

Jatinder Goel

Sure, thank you.

Richard Adkerson

We agree on a royalty stream with the government and that's what we pay.

Jatinder Goel

Okay, very clear. Thanks.

Operator

Your next question comes from the line of Oscar Cabrera with CIBC.

Oscar Cabrera

Thank you, operator and good morning, everyone. Everyone there, first of all, congratulations on the strong development of Grasberg. We look forward to see how that transition will excel. Just getting back to South America and Cerro Verde, are you assuming that the blockades won't be there for your budget in the fourth quarter and into next year?

Kathleen Quirk

With -- Repeat that after...

Richard Adkerson

He's saying of the blockades with -- they are down now, right Red?

Red Conger

Yeah and we're assuming that things run as…

Richard Adkerson

No, now some of the issues that led to the blockade are still unresolved. And so, you know if something else happens it happens, but we don't predict that. We -- our plans are based on having normal access to our port for delivering concentrate, normal access for bringing goods into the -- to the operation and for our people to be able to come to work. So...

Kathleen Quirk

And that's the case today.

Richard Adkerson

And that is the case as we speak.

Oscar Cabrera

Okay. Yeah, now that was the question. Thanks very much. Then secondly,

Richard Adkerson

And I will say this -- I will say this Oscar. Not all of the disruptions that you read about affect us, okay. This one did, but there have been other disruptions for other mines that did not affect us, but this one was particularly well organized and it was directed to disrupt us as a protest against other operations -- as well as the other operations.

Oscar Cabrera

Yeah, no, I think that is well understood by the market, which is the unfortunate position of just having to use the same route to get your product back to market.

Then secondly, on Chile, there was -- can you just please remind me, one other large mining company cut back their projection for copper production because of the drought that they're experiencing in the South. But can you please remind me your situation in as far as water and power in El Abra?

Red Conger

Yeah. So the water at El Abra comes from well fields up near the border with Bolivia. So it -- those well fields are well managed, that are sustainable and no issues for us.

Kathleen Quirk

And this is a leach operation, not the -- not a mill. When we are talking about a potential there -- El Abra expansion, we would address water there with a desalinization. But the current operation doesn't require that.

Richard Adkerson

And you know, somebody asked earlier about future development projects. El Abra is a very attractive project that -- where we're partners with Codelco. It would be a mill expansion. It would require, as Kathleen said, desal and it would be subject to Chilean taxes.

We have a number of projects in the US that we're considering as an expansion at our Bagdad mine in Arizona. That is not as large scale, but we own 100% of the mine, we own the land at fee. We have no income taxes to pay in the US. We have expansion opportunities at a number of our other US mines, including Morenci. We have a potential expansion opportunity in New Mexico.

So we have a number of alternatives. What we're doing right now as we speak is, we are doing studies of these. We are advancing our understanding of the projects, the ore bodies with challenging capital. We're trying to come up to see which ones are most economic and we are ranking them so that when we do get to the promised land of strong cash flows, and pay and returns to shareholders, we will be able to evaluate which of these to pursue on a disciplined basis but -- I failed to answer your other question, I just wanted to make this comment.

Oscar Cabrera

No. We appreciate that, Rich. And we look forward to not turnaround in a couple markets, and then congratulations again on the Grasberg success.

Kathleen Quirk

Thank you, Oscar.

Operator

Your final question will come from the line of Michael Dudas with Vertical Research.

Michael Dudas

Thanks everybody for squeezing me in. Richard, what do you and your team expect to see when you get to LME Week?

Richard Adkerson

Man, I'd say that's -- we're there next week as you know, Mike, and every year it's a good barometer for what's going on in the industry. My guess is, we'll hear a lot of complaining about US government's trade policy. We will hear talk about China's efforts to bolster its economy through fiscal means and through economic stimulus, and spending on infrastructure and Belt and Road Initiatives.

I'm sure we'll hear a lot of talk about Timna's question about government relations and dealing with governments with -- actually meeting will be focused on dealing with tailing down management, which is an issue we have long recognized as important for Freeport.

At the time of the Phelps Dodge deal, we put immense focus on it and we've invested a lot in it, continue to and our -- the situations that evolve around the world are matters everyone is studying and working with others in the industry to review our practices. But we are confident we're doing the right thing and we'll always do the right thing.

So, that's kind of an overview of what I expect. It's -- as you know like it's mood swing to come over LME and sometimes it's positive, sometimes it's hopeful and sometimes it's negative. And it's not always predictable in advance.

Michael Dudas

Well, you'll be running into the Brexit issue over there, so good luck when that happens. Thanks, Richard.

Richard Adkerson

Yeah. I don't even know what to say about that, and so I won't say anything.

Operator

I will now turn the conference back over to management for any closing remarks.

Kathleen Quirk

Well, thanks everyone for your participation and we look forward to ongoing reporting of our progress. If you have any follow-ups, feel free to call David Joint. Thanks so much. Bye-bye.

Operator

Ladies and gentlemen that concludes our call for today. Thank you all for joining. You may now disconnect.