

# Conference Call transcript

9 December 2022

## INVESTOR DAY ANALYST CALL

### Operator

Good day ladies and gentlemen, and welcome to Anglo American Platinum's investor day analyst call. All attendees will be in listen only mode. There will be an opportunity to ask questions when prompted. If you need assistance during the call, please signal an operator by pressing \* and then 0. Please note that this event is being recorded. I would now like to hand the conference over to Emma Chapman. Please go ahead, ma'am.

### Emma Chapman

Thank you so much. And good afternoon and potentially good morning, everybody. Thank you very much for joining us on this call today. In light of the SENS announcement and update to our 2022 guidance and outlook, we thought that it would be appropriate to give you an opportunity to listen to Natascha talk through the key points and then open up for Q&A. And with that, I will now hand over to our CEO, Natascha Viljoen.

### Natascha Viljoen

Thank you, Emma, and good afternoon, everybody. So, the aim would be to give you a little bit of colour around the 2022 expected performance and then also our outlook over the next couple of years. So, I think I want to start off with just recognising that the past three years were unprecedented. We steered through uncharted waters of a double pandemic, geopolitical, national and social upheaval. And it is important that we recognise the learning side of that and incorporate that in the way that we take the business forward. And we have steered through this period of time and continue to build in the learnings whilst we remain steadfast on delivering on all of the aspects of our strategy and continue to build the resilience of our business. And I think it's important so that we can ensure that we manage through the complexity of our operating environment, of which we're certain this complexity will remain. We also recognise that we're not alone in dealing with these issues. And we've witnessed similar issues across multiple sectors across the globe.

But let's quickly start off by looking at 2022. Now, sadly, and tragically, we lost two of our colleagues due to workplace related injuries this year, Julian Sesinyi, who passed away after an accident that happened in November last year as a matter of fact at our ACP operations, passed away earlier this year due to the nature of his injuries. And then we've lost random Rheina Malatji, who was fatally injured at an incident that our non-managed operation at Modikwa. Now, this is a journey that is close to my heart, and we will not rest until we can ensure that it is impossible for people to get hurt in our operations. We've seen with Julian's incident that all injuries could be fatal injuries, and that will remain a big focus for us.

As in the previous two years, in 2022 we've also managed our business through multiple headwinds. We've previously discussed the impact of Eskom load shedding, as well as rainfall and lower grade at Mogalakwena. Now, as we moved into the final quarter of the year, we needed to mitigate even higher levels of load shedding, as we've seen over the last couple of weeks. And then we've seen even higher levels of rainfall, particularly at Mogalakwena. This kind of rainfall is clearly the impact of climate change, as we see that these are much higher than what we normally would see. And the impact on our production creates new risk for us to mitigate and manage.

I feel quite pleased that despite these challenges, we maintained a stable operational performance overall, particularly at Mototolo and Unki that delivered strong production following the successful completion of the debottlenecking projects. And you will remember that we had slight hiccups to get these projects up and running, but they are all well up and running and stable. Amandelbult and Mogalakwena have been slightly more challenging. But even in these operations, we have made significant progress. We continued to improve our modernised mining at Amandelbult, and we've used the learnings of the previous years to set us up for success. And we've built that into the performance that we will discuss in terms of our outlook for the next couple of years.

One significant example of a success from the work is certainly the elimination of fatalities work as it relates to rockfall incidents. As part of our climate change resilience work and management at Mogalakwena, we've learned from the challenges we had earlier in the year, and we've doubled our pumping capacity. And that's put us in a way better position to respond to the recent high rainfall events. At Mogalakwena we matured our cultural heritage work. And that is even as a much cleaner run and understanding on the impact of that in the following years. And we're currently running the largest drilling programme in the world. And that all aims improve our understanding of the Mogalakwena ore body, and it's all linked to the commitment that we have on the long term development of this asset. And as the short to medium term understanding improves, we've built that into our mine planning. And you've also seen some of that coming through in our prediction on having slightly lower grades in this past year and in the coming two years.

But we should still end the year with an MNC production of around 4 million PGM ounces, which is well within our guidance. In addition to operations, we continue our asset integrity and reliability programme. And we've been focused on our capital reinvestment into the processing assets, as you were very familiar with. I think what it has done between the asset integrity work and the challenges we've had with our smelter rebuild that I will touch a little bit more on in a minute, it started to create a far better understanding of what the future of project execution would look like. And it's certainly very clear to us that with the overhang of COVID, the challenge or the high requirement for resource development going forward to respond to the energy transition, that there is going to be significant capital competition for human and capital resources to build out all of this additional capacity that's needed for the energy transition.

These issues were evident as I said during the Polokwane smelter rebuild that started in Q3. And you will know that we've experienced the quality challenges on the on the refractories. Despite the setbacks with the substandard materials and supply chain constraints, we've resolved all of these issues and we've now completed the smelter rebuild. The reheat will start this weekend with the first matter expected in early January. I'm really pleased that our quality control systems picked up on these issues when it did. With our strong procurement team, it enabled us to respond quickly and allowing us to complete the work required to ensure the integrity of our smelter. Load shedding and the delay of our Polokwane smelter rebuild we've built up work in progress inventory to about 350,000 PGM ounces. As a result of this, our refined production is expected to come in around 3.8 million PGM ounces, and again, still within our guidance. The build-up in work in progress inventory should largely be refined in 2023 with about 100,000 PGM ounces that will be refined in 2024. And this equates to a total of R7 billion of EBITDA over the next two years at current spot prices and exchange rates.

From a cost perspective, there was absolutely no relief with a disruption to supply chains due to COVID-19, import logistic constraints, the impact of load shedding on local suppliers, the ongoing Russian invasion of Ukraine all contributing to high levels of inflation. In 2022, we've seen mining input inflation of over 12%, largely on the back of fuel, explosives, and chemical cost increases. But we've had a very strong internal focus on cost mitigation and containment, and this will continue going into 2023. We have been looking at our central costs,

continuing targeted P101 initiatives to drive operational performance, enabling value levers such as PGM and copper recovery upgrades, and also then efficiency savings on electricity on fuel consumption. We're excited about our renewable energy projects in conjunction with Envusa Energy. And that should enable us to generate energy cost savings from 2024 onwards as we guarantee lower cost self-generated renewable energy. Despite all of the significant effort though, we could not fully offset the inflation and volume impacts, and as a result, our unit cost guidance for 2022 will now come to around R15,300 or about \$950.

We want to also look forward to what the next couple of years bring from 2023 to 2025. Now, we've spoken before about the work we're doing to map out the full path to value for all of our assets. And we've done this for all of our assets, and we will deliver against these full paths to value by ruthlessly prioritising the safe delivery of our plans by delivering safe, stable and capable operations. And we will continue the work we are doing in strengthening the building blocks to sustain our operations. Some of these building blocks include the maturity of our operating model, the increase in drilling worker in the northern limb, as I've touched on earlier, leveraging the benefits from the technologies that we are deploying, and ensuring our commitment to ESG to just name a few.

It is important for me that we deliver on our commitments, and therefore, this work of the building blocks and the inputs as we've seen a higher confidence level, we've built that into our future plans to make sure that we build reliability into our performance. So, we have revised our medium-term outlook to reflect this work. And in the next two years, 2023 to 2024, we've seen a reduction in metal in concentrate production due to a couple of reasons. The first one is lower grades at Mogalakwena. We've touched on the increased exploration drilling work at Mogalakwena that increases the confidence in our mineral resource. And it has reflected to us a reduction in the higher grade ore volumes that we see in the areas that we will be mining in the next two years. And overall impact of the weighted average grade in this period has reduced.

At Amandelbult we've seen the infrastructure closures. We've seen challenging geological ground conditions at Dishaba specifically. And we've also seen the current open cast coming to the end of life, all resulting in lower volumes at Amandelbult. Now, as we work on replacing these ounces going forward, we've decided in the meantime to close out our ageing Merensky concentrator. And we will have an opportunity in these two years whilst we're rebuilding our ounce profile from mining to work on our U1 and U2 concentrator plants to debottleneck those. And they will in the meantime be able to process all of the mine production, but driving better efficiencies, lower costs and then reduce ongoing capital expenditure on the Merensky plant. The total cost benefit in closing the plant will come to about R200 million per annum.

We also continue the work on the mechanised section at Amandelbult. And some of the reduction that we see in the next year is the fact that we re-baselined the ounces coming from this area to allow this team to develop the mechanised section fully. And we've given ourselves only another 12 more months to conclude the way forward on the mechanised mining methods. I am quite encouraged though with this new mining equipment that we're using, and the systems efficiencies that we're working on, that there's a good chance for us to succeed. And then lastly, the expectation is that we will continue to receive lower purchase of concentrate volumes than what we previously anticipated.

So, when we then look at our Kroondal joint operation, which is 50% own mined and 50% purchase of concentrate material, this asset is coming to the end of its life of mine. And they will also see Siyanda purchase of concentrate agreement will both switch to tolling agreements in 2024 and 2025 respectively. And this will result in lower MNC production volumes, and it reflects the change in commercial terms. MNC production will then be between 3.6 million and 4 million PGM ounces for the next two years, with the impact of the move to

higher proportions of tolling material in 2025 moving MNC production guidance to 3.5 million to 3.9 million PGM ounces.

With our Polokwane smelter back online, we will continue to refine the metal we produce as well as release all of the built up work in progress inventory. Now, when we incorporate normalised recovery losses, we expect refined production then from MNC production, excluding tolling, in 2023 and 2024 to be between 3.6 million and 4 million PGM ounces. And for 2025, to be between 3.3 million and 3.7 million PGM ounces. Our expectation for 2023 is that unit cost guidance will increase to between R16,800 and R17,800, or in dollar terms \$990 to \$1,050 per PGM ounce as we expect to see a continuation of high energy, chemical, explosives, diesel and other imported input costs, as well as lower production that we've just touched on.

Capital inflation was equally impactful in the last year with high increases coming through in copper, structural and stainless steel, diesel and freight. The delay and difficulty in securing skilled labour and materials of the quality that we require, just reflecting again on the refractories, as well as impacts to supply chain such as businesses going into business rescue has led to further pressures on project capital. Our SIB capital guidance for 2023 will be between R10 billion and R11 billion, mainly focused on heavy mining equipment replacement and maintenance and further enhancements to tailings dam stability, safety, SO<sub>2</sub> abatement early works and the continuation of capital maintenance across our operations to ensure safe, stable and capable assets. That is part of our strategy as I mentioned right at the beginning of the call.

I'm sure that everybody's got the future of Mogalakwena in mind, so I want to close out on the future of Mogalakwena. We continue to progress the six work streams to optimise the long life and value creation at Mogalakwena, as we know that this is a phenomenal resource, and it needs careful sequencing of the next investment decisions. And that's why we are investing in all of the aspects right from drilling through to the end of the value chain for Mogalakwena. Now, we've communicated previously that the most value accretive option includes the continuation with the current configuration of the open pit, and then to drive to a fast tracked transition to an underground, which has seen us investing in the two exploration declines to give us faster access to the underground ore body. And we will use these declines to drill the ore body not only from surface, but also from underground.

The other portion is the concentrator, and then also the successful relocation of Skimming Leruleng communities. Now, work on optimising the open pit, developing sound and collaborative community relationships, and progressing the underground exploration work is all continuing as planned. And we've made the capital commitments to those, whilst activities to reduce carbon emissions through our renewable energy plants at the mine are all advancing. We've made significant progress on the relocation of graves at Mothlotlo in Q4, which builds confidence in the work that Yvonne and her team have been doing on resetting the relationships and building the relationship with our communities. And it has also opened up space for dumping, reducing the haulage distances and resulting in cost benefits in the near term for the for the assets.

At the same time, we've made significant progress on the options for the third concentrator. But as mentioned before, the earliest we need the third concentrator is 2026 and the latest 2028. Now, with the learnings and the insights from the capital execution that we've seen over the last while and our commitment to disciplined capital allocation, subject to approvals, we are likely to commence building our concentrator in the next 18 to 24 months. And the reason why we've built on the learnings is to now use this time to do a couple of things around the concentrator. We will further optimise the specifications and configuration of the new concentrator to ensure that we get maximum returns. We will fully incorporate the value from our infield learnings from the technologies like CPR into the capital costs and the benefits. And we know that over and above the financial benefits is significant energy and water efficiency as well as tailings reduction benefits.

And lastly with what we believe is going to become a more and more difficult environment to deliver projects in, just considering the higher requirement for projects as the energy transition transpires, we want to ensure that the executability of this project can be perfect, both in terms of ensuring that we've got the right resources, and early commitments to all of the materials that we need, according to specification. Now, we believe that is directly aligned with our disciplined capital allocation and to make sure that we deliver the highest value option. And as I said, this additional time will allow us to get perfect in terms of execution.

Now, there's a small impact on NPV with pushing it out to the outer end of these two years that we have flexibility, considering the optimal value. But as we push this out, we will also then push this out to a time that we will start to see underground material. If all things happen according to plan, we get to convert our exploration permits that's related to the declines to mining permits, we will get higher grade material from underground to feed into the concentrate, and it offsets the decision to push the concentrator out with basically a year and a half to two years. So, I'm going to stop at that point and I'm going to hand over to Emma to take questions for us.

**Emma Chapman**

Thank you, Natasha. Judith, can I please go across to you and could you please facilitate the first question?

**Operator**

Thank you. Ladies and gentlemen, if you would like to ask a question, you're welcome to press \* then 1 on your telephone keypad or the keypad on your screen. You may press \* 2 to exit the question queue. Just a reminder, if you would like to ask a question, you're welcome to press \* and then 1. The first question comes from Catherine Cunningham of JP Morgan.

**Catherine Cunningham**

Hi, guys. Thanks for the presentation. I hope you can hear me over the sound of my generator. But my first question, and I have two, is just going into 2023. Could you give us some colour on the current demand landscape that you're seeing and what your expectations are for the next 12 months? And then the second question is just on the low grades from Mogalakwena. Can you perhaps give us more detail on where you see grade evolving over the next few years? Just for modelling purposes, so we know what to expect. Thanks very much.

**Natascha Viljoen**

Thank you, Catherine. I missed your first portion of your question.

**Craig Miller**

Yeah, I think Catherine was asking what our outlook for demand is, I presume for PGMs going into 2023.

**Natascha Viljoen**

Okay. Do you, Craig, want to kick off with that, and I'll take the low grade. Thank you.

**Craig Miller**

Okay, perfect. Hi Catherine. Yes, I think we're still seeing relatively solid prices for PGMs. The Rand basket price has remained relatively constant in the second half of the year. And we know that that's on the back of quite robust demand for the PGMs, particularly for both platinum, palladium and rhodium. And so, we still continue to see high demand or motor vehicle demand being relatively robust. Even despite some of the global economic challenges and the rising interest rates, I think OEMs are still restocking their inventory levels. And as a

consequence of that, we'll still continue to see demand for PGMs going into 2023. And we do obviously continue to see some form of substitution taking place of platinum for palladium. And we think that that's starting to reflect in some of the pricing that you've seen for platinum. And as a consequence of that, we are still anticipating platinum moving into a deficit in the next few years, rhodium going into a deficit in 2023, and then obviously palladium switching out to some extent later on in the next few years. That is all dependent on what your assumptions are around the penetration.

**Natascha Viljoen**

Thank you, Craig. Catherine, and then as far as the grades are concerned, we are seeing a 7% reduction in grade in the next two years. We don't see that persist though. So, it is in the areas that we're mining in the next few years. And that has been incorporated in the outlook that we've just given, the guidance that we've just given you. So, you can work with a 7% drop on the built up head grades.

**Catherine Cunningham**

That's clear. Thank you so much.

**Natascha Viljoen**

Thanks, Catherine.

**Operator**

The next question comes from Adrian Hammond of SBG Securities.

**Adrian Hammond**

Good afternoon, everyone. Natasha, I just want to clear my understanding a bit more on Mogalakwena and the outlook. So, are you able to give us a bit more clarity on what's the new steady state for Mogalakwena, the next five year outlook for this mine? And just on your third concentrator, should we see this as an expansion or is Mogalakwena going to be steady as she goes, even with a third concentrator? And are you able to give us some indication on the size that you're leaning towards? And then just your guidance, I'm still scratching my head on sales versus production. You've got an inventory unwind for next year, but your production matches your sales. So, if you can reconcile that for us. And then just on capex, you've given us SIB for next year. Your last capex guidance was R20.5 billion for FY23. Are you able to update on that total figure please?

**Natascha Viljoen**

Hi Adrian. I will touch on the Mogalakwena outlook. Can I just double check? I've got your capex. I'm going to ask Craig to do the capex. But the second question I didn't really get. I apologise. The line is not very clear.

**Adrian Hammond**

Sure. I just want to see what should we consider the new steady state for Mogalakwena with the grade impact? And is this an interim in grade, or is there a recovery? And if there is the recovery, is it going to be driven from a volume perspective? And then longer term once the underground is ramped up with the third concentrator, is Mogalakwena growing production or is it staying where it is?

**Natascha Viljoen**

Okay, I'll take the first two and I'll ask Craig to just talk about the capex forecast. Okay, I'm getting the thumbs up. So, Adrian, what is incorporated in the forecast at the moment from a PGM point of view, we've seen in order of 1.2 million ounces in 2021. We've dropped that to just over 1 million PGM ounces. And you'll see that that will slowly go back to 1.1 million ounces over the next two to three years and then further picking up to higher levels as we start to see the third concentrator coming in. So, in the next two years related to the 7%



recovery, we can assume that we will see the current rate picking up because it is just a matter of where we are mining at the moment in the next few years. And that work is clearly indicating that that will come back in the outer years. So, we'll see grade recovery and because the third concentrator is targeted towards expansion, we'll start to see that comes through.

The one other thing I wanted to pick up on, I've touched on the very large drilling programme that we have also targeted towards the underground development. We see confirmation of good grades going forward from that underground work as well. So, there's nothing in any of the work that would indicate that this near term impact is longer term. None of our drilling work would even get close to suggesting that. As far as the concentrator is concerned, assuming we stop the south concentrator, we're targeting 12 million ton per annum concentrator, and it will be expansion. It is still in line with the between 300,000 and 600,000 ounces towards the end of the decade that we've guided before. So, it's still well within those parameters.

**Adrian Hammond**

Great. Just to clarify that, this concentrator, you are bringing it in 2028. Is that how I read it?

**Natascha Viljoen**

Yeah. So, the target is the earliest we need it is 2026. The latest is 2028. So, 18 to 24 months delay would give us to the middle to end of 2028, yes.

**Adrian Hammond**

And then I assume you'll be stockpiling underground ore from 2026.

**Natascha Viljoen**

It will come in slowly. So, the underground we will build up. We expect to start to see some of the very early underground mining starting to come through by end of 2024 going into 2025 and build up to full capacity by the end of the decade. So, you will see the ramp up running in parallel for a period of time.

**Craig Miller**

And then, Adrian, I think you asked a question around sales and refined production. Certainly, our expectation is that what we're able to refine we'll be able to sell.

**Adrian Hammond**

Sorry, I meant refined and MNC, so just the mismatch given inventory that you're going to release.

**Craig Miller**

Yes, certainly. So, you'll be familiar with if you produce 4 million ounces, you have obviously refined recovery losses. And that equates to roughly about 200,000 ounces for next year. So, once you take that off, and then you process the 200,000 ounces of work in progress that we have roughly, that takes you back to your 4 million of refined production ounces in 2023.

**Natascha Viljoen**

So yes, it's a recovery impact through the processing facilities that makes up the difference, Adrian.

**Adrian Hammond**

Okay, understood.

**Craig Miller**

In terms of capex, Adrian, next year, as we've pointed out, we'll spend between R10 billion and R11 billion on SIB. And then what we are also seeing are slight increases in waste stripping as a result of the higher diesel prices coming through. So, that'll add another R500 million. And then also on our life extension capex we'll see about R1 billion of that. That's just a shift in terms of activities predominantly at the BMR and also Mototolo. So, capex next year between R22.5 billion and R24 billion, excluding the investment that we make through... Yeah, so between R22 billion and R24 billion next year.

**Adrian Hammond**

Got you. That's clear. Thanks.

**Operator**

Thank you. The next question comes from Chris Nicholson of RMB Morgan Stanley.

**Chris Nicholson**

Hi. Good afternoon, Craig, Natascha, and Emma. Thanks for the call. Maybe two questions from me. Just to continue the theme on Mogalakwena, could I understand whether the option of not doing a third concentrator is still on the table? So, basically, you just don't do it and you stick with existing north and south concentrator. And what the signposts would be. Would it be your market demand outlook, or drilling results, or if you get sufficient grade from underground? I think that would be interesting.

And then I don't think people have touched on Amandelbult on this call. So, I asked you on that. I know, Natascha, previously when we talked, I think in August, you said don't expect production growth at Amandelbult. My understanding previously is that you were targeting some growth from underground tonnes to offset what you lose through open cast. So hence keeping it flat. Your new guidance today, is that still right? Are total tonnes going to be flat, or do they actually fall? And I guess linked to that, what is the capacity of your two UG2 concentrators? I would assume it's going to give you the same answer really. So, it's those two. Thank you.

**Natascha Viljoen**

Yes. Okay. So, Chris, on not doing the third concentrator, there are two things that's happening at Mogalakwena. The one is you know that we've got the Baobab plant that we're leasing from Sibanye. That contract comes to an end. And even though the contract could potentially be extended, there is a tailings dam that comes to the end of life as well. So, for us to continue to use that capacity, we will have to build a new tailings dam. And considering the capital on a new tailings dam, it is one of the considerations. Is that the best place to spend our capital? So, we need to replace that capacity, firstly.

Secondly, if you go and look at the age of the south concentrator, the recovery differential between south and north, and the cost to run that operation, with considering the additional volume that we need to replace Baobab, it becomes lucrative and meaningful to look at the size of replacement capacity and doing it in a way that you don't only replace Baobab capacity, but also south with an uplift of recoveries and reduction in cost. So, those are the kinds of drivers that we're looking at. And those are obviously all important to continue to keep Mogalakwena at the bottom end of the cost curve.

So, those are the kinds of guidelines. When we look at markets, Chris, it doesn't matter how we look at the market. There is going to be a transitioning period for us in the market, no doubt. But in any transitional period, we remain bullish for all of our metals. And with Mogalakwena being at the lowest end of the cost curve, it absolutely makes sense to spend the right capital on that asset to develop it to full potential. So, that's as far as that third concentrator. Now, I think it's important, the work that we're going to do now with a little bit more time is to really become frugal in terms of the amount of capital that we spend on that plant. And then to make



sure that we get ready for perfect execution, all aligned with getting the maximum value for the minimum amount of capital. And that is the work that we do. But we always continue to review the market. Our market price assumptions are always conservative, as you know. And only if it makes financial sense, we'll do it. So, all of that will remain in the mix.

**Chris Nicholson**

That's some good news.

**Natascha Viljoen**

Okay, so then as far as Amandelbult is concerned, the comments that I've made before on the current rates that we're looking at is aligned with where we are now with infrastructure closures, open cast, the current open pit coming to an end, and then the transition into new areas with finding additional capacity to replace those ounces. So, in the next period that we are looking at, certainly in the next two years, we are looking at about 700,000 to 780,000 ounces out of Amandelbult, and they slowly building up to in order of 800,000 ounces in this period 2023 to 2027. And that equates to in the order of 6 million tonnes that U1 and U2 can adequately mill. We then have Middellaagte coming in.

Now, there's a couple of things that happened in the last couple of years. The future expansion for Amandelbult lies firstly in Dishaba Lower, 15 east dropdown, 1 sub shaft and Middellaagte. 1 sub shaft we've seen the development delay in 1 sub shaft, and that was an overhang of COVID. But that is now firmly on the agenda of capital being allocated and that development is happening. Dishaba Lower and Dishaba Upper, the work that we're doing there, we've touched on that before around the modernised mining. And the biggest learning for us there was from cycle mining, which will give us the additional efficiencies for that mine being constrained due to the different conditions. And just to touch on that for a quick minute. Cycle mining gives you a number of panels per team to make sure that teams are always at their best possible efficiency. With the difficult ground conditions in Dishaba, we saw that he couldn't keep ahead with the development required to give the teams all of the panels that they need. We've reviewed that. We are using new technology in terms of ground support called blast on mesh to help us with stabilisation of that ground condition and preventing losses of some of our faces. But in the meantime, we've also pulled some additional crews back into those areas.

15 East dropdown is the area that we're currently developing the mechanised mining. We currently had it in at reduced rates for the entire period we're talking about. And by the end of the year, we will make a call on whether we continue because then we can go back and look at alternative mining methods. Or if things develop in the way that I still feel convinced it will, we will bring that in as mechanised. And Middellaagte is the next and last area. Middellaagte there were commercial processes and legal processes that we needed to conclude to get access to those areas. Those are now all completed, and we will start to see an open pit at Middellaagte coming in at Q4 next year. And then it will convert ultimately in an underground mine. And that will all work towards taking us back to a 7 million ton per annum. That will require a debottlenecking of U1 and U2. But with the age of the concentrator, it is the right place to spend our capital. I hope that make sense.

**Chris Nicholson**

Yeah, it makes sense to me. I might have to go back to listen to the replay to catch up on all the finer points. But thank you for your time. That's great. Thank you, Natascha.

**Operator**

Thank you. The next question comes from Arnold van Graan of Nedbank.

**Arnold van Graan**

Yes, good afternoon, Natascha. I just want to go back to Mogalakwena and the lower grades. So, am I right in saying you didn't fully expect this drop in the grade over the next few years? So, that's the first point. The second one that goes with it is you talk about this very big drilling programme that you're running. So, I'm trying to understand, is this a consequence of what happened in terms of the lower grade, and you're doing this to make sure that you don't run into a similar situation going forward? Or is the bulk of this drilling related to the future expansion or the future of the mine? I'm just trying to get some comfort that we don't end up in the same situation a few years from now. And you did say you do now have comfort that this grade drop isn't consistent. But I need some comfort that we're not going to be in the same position two years from now, or when you go underground and you say, from underground we actually expected higher grades, but it's not there. Hopefully you understand where I'm coming from. Thanks.

**Natascha Viljoen**

Absolutely. And I think it's a very valid question. And I think it is both. So firstly, through COVID again, we did fall behind on some of our drilling. We normally update our block model more or less every two to three years. And in the last 12 to 18 months, we've done significant drilling in and around the pit to update the block model. And that's in normal course of business. You will do medium to longer term drilling to confirm your reserves. And then you will do shorter term drilling to confirm your mine planning in your budgets. And that is the block model that we've worked on and the drilling that we did for that. And that is normal course of business. There is nothing funny about it. It's good practice. So, in that we did fall behind a little bit. We caught up and we redid our block model. And the block model with the mine plan... Now, I think that's the other thing that's important to just comment on for Mogalakwena.

When we look at our mine plan, you know that we've spoken quite a bit about the cultural heritage work that we've done around the mine. Because of that work, we've identified areas that were targeted for waste rock dumping that had a number of graves. And that immediately became not available to us in the short term. So, in the beginning of this year, we had to do quite a bit of replanning around where we can mine and where we should dump whilst we resolved the cultural heritage findings. Now we know where all of the graves are. And we are making significant progress through all of the right processes to move those graves. But in the meantime, we did change the areas and the sequencing in which we mined to offset and give us time to deal with the cultural heritage work.

So, all of that went back into the into the block model, where we were mining, additional RC drilling, and the block model then gave us looking forward new mine plan, new sequencing, that drop in grade. So, that is the one portion of it. The other portion, then, is to fast track the ore body understanding for the future of Mogalakwena. And again, we didn't do enough drilling in the past. We've increased our drilling. Last year, we did 60 kilometres of drilling. This year, we've done 120 kilometres of drilling. And it's truly the biggest RC drilling campaign globally at the moment. And our geological team is working very much with a global partner, global teams. So, the one portion is just doing the right work, the basics, as I've said originally. And the second portion is mapping out the future for Mogalakwena.

**Arnold van Graan**

Thank you very much, Natascha. That's perfect.

**Natascha Viljoen**

I hope that answers your question.

**Arnold van Graan**

Yeah, no, absolutely it does. Thank you. Thanks for that. That's all for me. Cheers.

**Operator**

Thank you. The next question comes from Nkateko Mathonsi of Investec.

**Nkateko Mathonsi**

Good afternoon and thank you for the update. I want to stick with Mogalakwena as well. And I just want to have a better understanding of this drop in grade. What is the actual average grade that you think you will be mining in the next two years? And I also want to know, what are the cost implications as you mine and grind increased waste as a result of the lower grade? And then my second question is on the bulk ore sorting project. And what is the expected contribution during these two years where you are mining lower grade ore? And I also wanted to ask on Siyanda resources that going to change into a toll contract in 2024, 2025? If you can just give us maybe remind us in terms of that contract, at what stage would they have the flexibility to terminate the contract if they so wish? Those are my three questions.

**Natascha Viljoen**

Okay, Nkateko. Hi. Good afternoon. I'll take the grade question. I'll ask Craig to come in on the cost and the Siyanda question. So, when we look at the look at the grades, we've seen this year running around 2.93. So, we'll see that drop to about 2.8 for the next two years, and then coming back to the 3g per ton that we normally saw.

**Nkateko Mathonsi**

And the cost implication? Okay, that will be great. Thank you.

**Craig Miller**

Hi Nkateko. In terms of the cost, obviously what we are anticipating is an increase in the total mined volume, and that is therefore driving some of that increase in our unit cost next year. So that unit cost increase of roughly 10% to 16% we that we flagged, around about two thirds of that is actual cost inflation that we see coming through as a result of the items that Natascha mentioned, the electricity and the consumables, and about 25% is related to the production. So, that is part of that the increase in our unit cost next year. In terms of your question with regards to Siyanda, Siyanda as part of the agreement when we sold Union mine is able to transition to a tolling arrangement, and then that tolling arrangement is in place I believe from 2026 onwards.

**Nkateko Mathonsi**

Is it an evergreen contract? I think that's what I was asking.

**Craig Miller**

Let me come back to exactly on the terms, Nkateko. But our assumption is that we would move to the tolling arrangement with them as per what has been articulated in the disposal agreement.

**Nkateko Mathonsi**

Okay, that is fine. Thank you.

**Operator**

Nkateko, does that conclude your questions?

**Nkateko Mathonsi**

Yes.

**Operator**

Thank you. The next question comes from Shilan Modi of HSBC.

**Shilan Modi**

Good afternoon team, and thanks for taking my questions. Apologies if some of these are repeated. The line is not 100% clear. Firstly, on the on the third concentrator that you're looking at building at Mogalakwena, should we be thinking of this as a replacement concentrator or a potential precursor to the Mogalakwena expansion? Or is it to deal with potentially future lower grade material, so you're not just processing more material? Second question, with Polokwane smelter rebuild and ramp up, do you have the electricity allocation to ramp up the smelter when we're at stage five, stage six load shedding? And third question. Your guidance going to 2025 or 2026. You've cut volumes throughout the period. Are you accounting for lower electricity availability in the new guidance versus prior? I believe previously, you didn't make any allowances for load shedding. Thank you.

**Natascha Viljoen**

Some really good questions there. Firstly, the concentrator, why are we building the concentrator? A couple of things. The Baobab plant that we are currently leasing from Sibanye, we are getting to the end of that contract, and it would not be available for us into the future due to tailings dam constraints. So, we need to replace that capacity. We've got the south concentrator. It will require quite a bit of SIB to keep it going for an extended period of time. And it also comes at much higher operational costs and lower recoveries. So, whilst we need to replace Baobab and you start to think about size of concentrator, it made sense to replace south and offset significant SIB capital on south as well, and then getting the benefit of lower costs and higher recoveries. And then if you then look at the replacement of those two, with the optimised mine plans, it then also becomes an expansion opportunity. And we have previously guided that the expansion that we see at Mogalakwena is between 300,000 and 600,000 PGM ounces in the next decade. And it all plays into that ultimate expansion, lower cost, higher efficiency and an impact on water and tailings dams. So, that's the concentrator question. Can I just double check if that's okay.

**Shilan Modi**

That's perfect, thank you.

**Natascha Viljoen**

Then from a Polokwane smelter point of view, yes, we do have the allocation to start up the smelter. As an intensive user we are working very closely with the intensive user group and Eskom as we start up the smelter and for any load shedding requirements. And load shedding doesn't always directly relate to the curtailment requirements that we see as an industry because there isn't an understanding that keeping the industry going from an economic point of view for the country is important. So, those two things aren't necessarily always aligned. So that is as far as Polokwane smelter is concerned. And then can I ask Craig, just the question around the question of on 2025 production, if you can pick up on that please.

**Craig Miller**

Yes, certainly. I think it was related to what we assume from a load shedding perspective. So, we've had built into our production plans and a factor of load shedding. Given what's happening at the moment, it's a bit variable in terms of exactly how much we put in. But I think that's effectively why we tried to give you a production range, just so that we can sort of manage some of those changes, the impact of some of the load shedding specifically. And so, yes, there is an element that's included in our production forecast. And then obviously, we try to take it into account from a range perspective as well. And back to Nkateko, your question around the POC arrangement with Siyanda. And we move into the tolling arrangement, and the tolling arrangement is in effect for the duration of the life of the Union mine.

**Operator**

Thank you. The next is a follow up question from Adrian Hammond of SBG Securities.

**Adrian Hammond**

Thanks very much. Yeah, just want to get a sense of the impact on production from Eskom this year. And how are you managing it today currently?

**Natascha Viljoen**

Adrian, the impact has been mixed with slightly less impact at the beginning of the year than what we currently see. So far, we've seen from a platinum ounces point of view about 50,000 ounces impact. It is just important to note that the ounces that are truly lost ounces are ultimately mining ounces, while some of the ounces that I've just referred to is with ounces that ends up in work in progress. And to your question on how we manage it, and a little bit back to the question around capacity to start up Polokwane smelter. When we are required to curtail, we curtail from the last 24 hours load. So, with Polokwane smelter getting back up and running, we will have more flexibility around how we curtail. We've got a hierarchy of control on how we start to curtail, looking at protecting mining ounces, because genuinely if you lose a mining ounce, you don't make it up, aligned with where we have a little bit of additional capacity through the value chain. And the last one is to protect the reliability of our assets. So, you don't want to stop and start smelters. But you can reduce load on a smelter as an example, but you want to keep the temperature.

So, from that point of view, we've been able to manage fairly okay, until the recent curtailments that we've seen where we had to shut down Mogalakwena as an example. And there just at Mogalakwena you're talking in order for about 3,200 ounces a day that you lose. And we ultimately had to shut down Mogalakwena and Amandelbult. And those are lost ounces. You will not like that up. There's two places that you won't make it up. The one is when we have to stop the mine. And the other one is where we have recovery losses due to either instability in the system or where one of the options for us is to turn off our iso mills [?], which gives us a fine grind and gives us an additional recovery. Now, those ounces are lost. You won't make that up.

**Adrian Hammond**

Yes. So, of that 50,000 mined, what was lost?

**Natascha Viljoen**

So far for this year, there is probably about 15,000 of that that's totally lost. No, sorry. I have to add the last two days. Sorry, Adrian. It's quite recent if I just consider what's happened over the last couple of days. We were on 11,000 ounces just from an iso mill point of view. So, you can add another... we are probably already at 25,000 ounces lost for the year to date. And if we look at the rate, it's doubled basically in the last two weeks.

**Adrian Hammond**

Yeah. Sure. I mean, it's something I think the market certainly is looking at, given what the outlook for Eskom is. Thanks. That's very clear. Thank you so much.

**Operator**

Thank you. The next question comes from Wade Napier of Avior Capital Markets.

**Wade Napier**

Hi guys. Thanks for thanks for the call and opportunity to ask questions. Just in terms of the production downgrades for the next couple of years, you've downgraded production by roughly 400,000 ounces. And you've identified three key issues. So, I got that sort of Mogalakwena accounts for around 100,000 ounces of

that downward revision. Could you just give us an indication what Amandelbult and then the lower POC volumes would be within that 400,000 guidance? And then just in terms of the transition from POC volumes to tolling for Kroondal and Siyanda, can you just give us some sort of guidance what the different margins you would make on between POC and tolling? That would be helpful. Thanks very much.

**Natascha Viljoen**

Craig, do you want to take this set of questions, please?

**Craig Miller**

Yes, certainly. Natascha, do you want me to take the second question or the set of questions?

**Natascha Viljoen**

If you don't mind taking both whilst you're online, please.

**Craig Miller**

Okay. So, with regards to the downgrade, I think 200,000 ounces of the downgrade is Mogalakwena, predominantly as a result of the relationship to the grade. You've got another 130,000 ounces really coming through at Amandelbult because of the challenges that Natascha outlined. And then also lower third party receipts of POC. What we have seen this year, our POC supplies have been going through a challenging time. So, we've downgraded the anticipated production from them as a consequence of what we've seen and what they've communicated. So, that's really the contributor for the 400,000 ounces of part of a downgrade to our production profile.

And in terms of the margins on POC versus tolling, they are quite different. And clearly, the relation with POC is really associated with the price at which we purchase the metal, as opposed to the tolling arrangements, where we receive a fee based on the cost of tolling that metal, and in addition to that, a return on capital employed. And so, it is quite different. So, when you look at the actual margin on tolling, it's significantly higher, but it's off a lower revenue base. So, it certainly is beneficial for us around the tolling because it is a recovery of costs, in addition to a bit of a margin on top of those cost recoveries, and also return on the capital investment. So yes, it's still a meaningful contributor to the EBITDA.

**Wade Napier**

Alrighty. Thanks, Craig.

**Operator**

Thank you. The final question comes from Ian Rossouw of Barclays.

**Ian Rossouw**

Thank you. I just had two questions. Firstly, on this nuGen agreement. I think Craig, you started saying investment in. I presume maybe you were going to talk about that. Is that being invested at the Anglo Platinum level? And just give us a sense of the timing on that. And maybe as part of that, if you could give us an update on the hydrogen truck? How's that going? And the hydrogen electrolyser and plant you're building there. And then secondly, just on the recovery losses you talked about, I guess 200,000 ounces on 4 million ounces, that's 10% loss. That seems a lot higher than what you've previously had. Is this something going on specifically with the smelters, or is that normal? Thank you.

**Natascha Viljoen**



Craig, do you want to take the first investment question on nuGen, and I'm assuming we're talking Invusa [?] as well, and then I'll take the truck question and the recovery question please.

**Craig Miller**

Okay, perfect. Hi Ian. Ian, the nuGen arrangement is being largely driven by Anglo American, and we're clearly a recipient of the work that they're doing. And as they will look to roll out that opportunity, then we would look in terms of how we then retrofit it in Anglo Platinum is specifically at Mogalakwena. And so, I think that's where that is. That's where that arrangement sits between Anglo and the third party. As it relates Invusa, that's also an arrangement that Anglo American have entered into together with EDFR. We would then enter into an offtake arrangement for green electricity or green energy that we will hopefully one day be able to utilise in the deployment of the hydrogen truck. I hope I answered your question. And I just want to double check my math. I think 200,000 on 4 million is 5% and not 10%.

**Ian Rossouw**

Sorry, I was thinking of something else.

**Craig Miller**

Okay. 5% is normal. Yeah.

**Ian Rossouw**

Okay. Thank you.

**Natascha Viljoen**

It's not all recovery losses. A portion of that is the actual reduction in head growth. And then your recovery is directly related to grade. So, when you see a drop off in grade, you generally see a drop off in recovery through your plant as well. So, it's a combination of the two. It's not only one.

**Ian Rossouw**

So, is that your concentrator plant, or you mean your smelter and precious metal and base metal refinery?

**Natascha Viljoen**

The concentrator plant. The recoveries through the smelter and refining plants are pretty high. You're getting in the high 90s through your smelter. And by the time you've retreated all of your tailings streams through the refineries, you get very close to 100% recovery of that metal. It comes through in different time periods and some of it might only come back a number of months, but the bulk of the recovery losses are within your concentrator.

**Ian Rossouw**

Okay, thanks. But that doesn't show up in that 95 because obviously, that's between production and refining.

**Craig Miller**

Yeah, that's correct.

**Ian Rossouw**

Perfect. Thank you. Thanks. That's all from me.

**Natascha Viljoen**

Okay, so we've had the truck question, how the truck is going. The truck is going well. The truck is in the pit at the moment. So, they are running it in the normal cycles. They've already made some improvements on the truck as it stands, and specifically around moving from hydrogen in gas to liquid hydrogen, which comes with a number of benefits of less refuelling cycles, smaller hydrogen tanks, and the specification around the hydrogen tanks are much simpler as well because of the fact that you've got liquid hydrogen and the challenges around gas. So, the truck is running well. I guess that's the long and the short of it.

**Ian Rossouw**

Great, thank you very much.

**Natascha Viljoen**

Have we answered all your questions now, Ian?

**Ian Rossouw**

Yes, thank you.

**Natascha Viljoen**

Okay. Brilliant.

**Operator**

Thank you. Ian was a final person in the question queue. I will now hand over for closing remarks.

**Emma Chapman**

Just to say thank you to everyone for joining the call. Please, if you have any follow up questions, please do send them through to me. We will absolutely answer all of your questions if there is anything else that you need to ask. And we will make sure to make this transcript available. There's also replay details which are available so you can re-listen. And with that, I just want to say thank you and we'll chat soon.

**Natascha Viljoen**

Thank you, everybody.

**Operator**

Thank you. Ladies and gentlemen, that concludes today's event. Thank you for joining us. You may now disconnect your lines.

END OF TRANSCRIPT