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MINExpo Fireside Chat with Denise Johnson

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Caterpillar: Confidential Green

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PRESENTATION

Nicole DeBlase

A very warm welcome to everyone joining us for today's discussion. I'm Nicole DeBlase, Deutsche Bank's machinery and multi-industry analyst. Before we kick things off, I'm first going to turn it over to Rob Rengel, from Cat Investor Relations to read the Safe Harbor statement.

Rob Rengel

Thanks, Nicole, and thanks to everyone on the line for your interest in Caterpillar. I've got a couple of quick items to cover and then we can let the fun begin. First off, we may make forward-looking statements today. They are subject to risk and uncertainties. For a full list of the risks and uncertainties that could cause our actual results to vary materially from any forward-looking statements we make today, please refer to our most recent SEC filings, our 10K for 2020, and our 10Q for the second quarter.

Next, we posted slides online at investors.caterpillar.com. So, go check them out. We'll also post a transcript there as soon as it's available. With that, I'll turn it back to Nicole.

Nicole DeBlase

Thanks, Rob. So, I'm sitting in a conference room at the Las Vegas Convention Center, as we speak, with Denise Johnson, Group President of Caterpillar's Resource Industries business. Denise has been with Cat since 2011 and has led Resource Industries since April 2016. We're also joined by Don Hall, the Group CFO of Resource Industries. We're here in Las Vegas for MINExpo which is the premier mining equipment trade show that only happens once every four years. It's my personal favorite trade show, and it's definitely an experience to walk around the floor.

Denise is going to start with a 10 minute or so presentation to kick things off, and then we'll move to the fireside chat portion of the call, which I will moderate. We aren't going to host a formal Q&A session today, but if you have questions for Denise, please feel free to email them to me at nicole.deblase@db.com and I'll do my best to monitor my email and include in our dialog.

Denise, over to you.

Denise Johnson

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Okay. Well, we've attached some slides to go through for this presentation, so feel free to pull those up.

First of all, it's very great to be here with you today, and we're excited to be at MINExpo. Of course, MINExpo was supposed to be in September of 2020, and so it was delayed a year, but the show actually has had quite a bit of attendance, and as you can imagine over the last year, the theme has shifted a bit for MINExpo over time and I would say the biggest theme of the entire conference is around sustainability. So, as all of the mining companies are establishing very firm greenhouse gas targets, they're looking to OEMs and suppliers and all of us to be able to meet the needs of those timelines.

The theme of the show for us is together we're winning better, and we are really committed to building a better world around sustainability. So, a lot of discussion around carbon footprint and the technologies that we're deploying to help our customers meet their commitments.

If you move to the second slide, I want to talk a little bit about some of the recent announcements we've made, because over the last few months we've made some pretty interesting announcements and partnerships with both mining companies, as well as our energy and transportation side developing technologies which really help us to meet those targets in a way that's sustainable.

Starting with Nouveau Monde Graphite, NMG, that was a partnership to develop an all-electric mine in Canada; that is something where the Company's going to be starting with traditional mining and construction equipment and will be bringing in zero-emissions machines by 2028. So, in addition to that, we are also supporting all of their infrastructure on site, and so this is going to be an end-to-end solution set that Caterpillar will be providing to NMG. Really exciting new development.

More recently, we also shared an agreement that we've made with BHP, who is obviously one of the world's largest miners. In that case, we're developing and deploying zero-emissions trucks at BHP sites. As part of that, they're going to get early learners. And I think one of the ways that we're developing products in this new environment is we're beginning to deploy the machines faster than we would normally. Normally you'd go through a full NPI cycle and then introduce the equipment. We're actually getting some early prototypes and early learning units out with them so that they can test not only the machines but also the environment which the machines will be working in.

The framework for that agreement is around that. In addition, they're going to be providing us feedback on how we design the machine itself. They're really looking for the requirements for operators that can be served by a broader range of the workforce, a lot more female technicians and such. They want our input so that we can allow those to be serviced in a way that provides that broader workforce to be able to work on them.

We're really pleased with that collaboration.

Then yesterday, Rio Tinto announced that we signed an agreement with them for 35 new 793 zero-emissions trucks which will also be autonomous. I think one of the themes of the conference that comes out and one of the things that we're doing is recognizing that autonomy in addition to electrification are going to be linked very heavily. So, there's a lot of interest in automation, but when you have an electrical architecture to be able to maintain, being able to combine the two of those allow you a lot more ability to be able to manage the site effectively and the power requirements for the site effectively.

So, really exciting to be partnering with Rio Tinto on that project and moving forward.

On the energy and transportation side, we've had a lot of collaborations over the last few weeks that we've mentioned. I won't go through all of them. Certainly with Microsoft, the data center, which basically has the ability to operate with synthetic diesel fuel and also renewable materials. We have hydrogen generators that we're partnering with which allow them to be operated with 100% hydrogen, which is really exciting and demonstrating that on our standby gensets as well as Solar serving gas entrants. And

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then certainly hydrogen collaboration with Chevron as an alternative fuel for locomotive, and that project is really exciting. And then the Certarus MOU, which is on really carbon capture.

All of those things, I think, collectively show our demonstrated commitment to hitting our customers' energy needs for the future and doing it in a way that allows us to partner early in the development process.

If you go to the next slide, just quickly, I guess, reinforcing that our focus is on moving our cycles of NPIs faster than we ever have before and doing it in a way that allows our customers to be able to experience our products sooner as well. So, we talk about innovating and integrating, but one of the advantages, I think, we have over the competitors is that our solutions are more integrated. So it's not just delivering a machine, it's a machine plus the technology plus the site infrastructure to help make the customers successful.

There's a few examples of some of the products that we're showing at MINExpo. Certainly, the Cat R1700 is, the XE, is a battery electric loader, and the MEC500, which is a mobile equipment charger, that's a brand new piece of equipment. We have these in mine sites. As we speak, currently being tested. They will be available commercially beginning mid-next year. But really exciting area to be certainly a focus on difficult environments with being able to hit production requirements but leverages zero emissions to really allow our customers to be successful.

Another example of that is in the second to last slide here, is on autonomous water carts. Autonomy has been something we've been doing for quite some time, focusing on more than the haul trucks, but expanding that beyond to all of the equipment on site. Certainly, most recently, water carts, which you think is maybe a more pure example, but it's really not, because the water cart really interfaces with the equipment and you can waste a lot of time and money putting water on the road when you really don't need it. So, calling that water cart out at the right time, not letting it interfere with the flow of the machine through the mine site becomes really important.

That’s another example of how we're pulling in automation to make our customers more successful.

To wrap up, I mean, certainly it is more than just pieces of equipment. Caterpillar is really becoming a full-service solution provider from cradle to grave all the way through the mine, for mining companies, all the way up and downstream. So, as we look at technology and how we can leverage that to a larger degree, we're really excited to be a part of that future and see the ability to be able to take us to the next level as a result of that.

That’s a short overview of what we talked about this last week at MINExpo. Certainly, we have quite a few customers in. I'll just open it up to general questions that you may have.

Nicole DeBlase

Thanks, Denise. That was a great presentation and prompted a lot of different questions that I have. I guess maybe starting with sustainability, it’s clearly the key theme for Caterpillar at MINExpo this time around. Maybe starting with the different types of sustainable solutions that are out there. You mentioned hydrogen, you mentioned battery electric. What is the right application for different types of mines? How does the miner decide hydrogen is the answer for me, or battery electric is the answer for me, or perhaps there's even other answers out there?

Denise Johnson

Yes. It's a great question. I would say it definitely isn't one size fits all. What we've been doing as we're meeting with customers is really looking at it on a site-by-site basis, because in a region of the world, depending on where you are, how much access you have to renewable energy, what kind of renewable

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energy you have, what kind of mine needs to be developed, is it a long haul that's relatively flat, is it a deep pit mine; all of those are going to probably have different applications that will be appropriate for them. So, it's really planning that out with them, understanding that and then deciding on what technology meets their needs the best.

That's kind of how we're approaching it, and actually it's been pretty eye opening to see the variety of different solution sets that make sense for customers.

Nicole DeBlase

Got it. And I guess when you think about the conversations that you've been having with customers at this show and outside of the show, do you feel that there is a tipping between electric and hydrogen, like which is becoming the more popular solution, or is it really just both are viable options?

Denise Johnson

Yes. I think early adoption certainly, as demonstrated with the underground loader, favors battery electric. However, hydrogen fuel cells are right in there, and the ability to potentially even burn hydrogen alone on some, especially for standby power and stationary power, is definitely something that may be using combinations.

It depends on the application. There's certain pieces of equipment that make more sense that aren't very mobile to be recharged, but maybe a fuel cell makes sense even though the haul truck may have a battery electric solution. So, you may have a combination hybrid within a mine site itself, especially for loading tools which don't move very often; they could be tethered, so you actually have an electric cord coming out of them, like you plug in, or potentially they would have a fuel cell.

So, we're looking at a lot of different—it won't be the whole mine type necessarily going in one direction, it will depend on the application and the equipment as well.

Nicole DeBlase

Okay, got it. And then I guess what are the biggest challenges to adoption? So, when you think about the equipment that you're offering, whether it's hydrogen or battery electric, as customers are thinking about making that transition, what are the biggest challenges that they're trying to solve for?

Denise Johnson

I think, first of all, they're trying to figure out what the infrastructure is going to be at their site itself. So, as I indicated, to go to—some of their aggressive goals, they're starting with haul trucks, but then it gets back to are you just going to pull off from the grid, are you going to add in renewables, how is that mine site going to be set up, and then how do you move the infrastructure that's going to be required to keep that mine running viable? And so how does that work? Let me give you an example.

Right now, we fill a diesel truck once every 24 hours with diesel fuel. It runs 24 hours in that mode. You think about now we're going to have a battery electric or even a fuel cell, and you're going to have to recharge that after a few hours. How do you do that? Where are you going to do that? Where do you put the charging systems? Do you want to use a stationary charger? Do you want to use a dynamic charger? All of these questions go to how that mine is set up and where those chargers are located and/or where the ability to be able to get that energy on the machine during the cycle and still then make production, because you don't want to interrupt production. You certainly can't have every truck being recharged at the same time.

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It just adds a layer of complexity for the mine. So, think about things that they never have had to worry about before.

Nicole DeBlase

Right.

Denise Johnson

Those are the kinds of things that I think are the biggest challenges. It's really going to have to be a holistic design versus I've got a mine design and I've got to go buy mobile equipment for it, and what size should it be, it's much more of an integrated decision that has to be made.

Nicole DeBlase

Got it. And does that potentially create a scenario where you would actually need more units of equipment on the mine so that you can be cycling through the units that are charging versus not charging, or is it let's approach the problem with battery swapping?

Denise Johnson

I think those are all on the table and we're trying to be open to say that we want to be able to do either/or, whatever the customers are going to need that we don't want to drive a certain adoption of. We're only going to do a rapid charge, for instance, or we're only going to do battery swap that we may need to have multiple solutions to be able to meet those needs.

We're very open to that. I think without a doubt though, I think everyone's experimenting right now with what's going to work and so, we'll see some maturing of the thought process as we get more units on site and we start to really get some hours on them.

Nicole DeBlase

Got it. Okay. And then what about the cost of the equipment, is that something that's precluding people from, customers from investing in 'let's go battery electric' or 'let's go hydrogen,' or is the cost comparable and it's more about solving those infrastructure problems?

Denise Johnson

It's a really good question, because we aren't even giving pricing yet. I mean, it's worth a little bit further upstream of trying to understand what—even battery technology between now and the end of this decade is probably going to change quite a bit. So, what's the cost of that? Is it going to come down naturally or not? How many batteries do you need per machine? How many machines do you need? And what's the optimal economic answer? We're still working through that.

I would say we're still a bit immature in that space, but we'll be rapidly developing that. We're, right now, focused on getting units in our proving grounds and then at customer sites in a very quick timeline so that we can learn what are the costs going to be, how long is the technology going to last, and then what it should be commercially priced at, and how do we do that.

Don Hall

Sorry, I was just going to add, Denise. I think that the complexities that you mentioned is that we've really got to start having more and more conversations about total levelized cost of energy, total cost of ownership. So, as you mentioned, it's quite a complex and integrated solution. So, we have to kind of

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change some of our paradigms in terms of how we think about how much does the machine cost, how much does each individual component cost, because it's really going to be about the cost of the total system.

Nicole DeBlase

Got it. Okay. Great point. And then I know it's probably early days, and you're still testing a lot of this with customers, but what about the difference in the parts and service opportunity, if there is one, for a battery electric or a hydrogen piece of equipment relative to diesel?

Denise Johnson

Yes. Well, we're still working through that as well. I would say we certainly have experience with electrical components, and they can be rebuilt. I would say the cycle for when you rebuild them may be a little later in the lifetime of a piece of equipment than they would be for a mechanical piece. But even with a fully electrified unit, you still have a lot of components that will wear, right, with time. So, it's going to be a combination.

I think you definitely will have service intervals that may be adjusted based on that, but we expect overall that that ability to be able to rebuild equipment will remain with time. A lot of our equipment lasts 18, 20 years for the larger equipment. So, we want to make sure we're still providing value over time and have a value prop that makes sense for customers.

Nicole DeBlase

Okay. Okay, understood. And then I guess when you think about the solution that you offer, MineStar Edge, MineStar Command, first maybe you could talk a little bit about you mentioned how all of this kind of goes hand in hand with the upgrade of equipment. What is the adoption like for battery electric, hydrogen, newer types of equipment relative to what you used to see? And then secondly, if you could just talk about MineStar Edge and Command and what differentiates what you do versus your competitors?

Denise Johnson

Sure. Let me start with the second part, because I feel like the automation piece tied with adoption rate really becomes super important as you move towards electrification. MineStar Edge allows us to do more cloud-based computing. At the same time, we recognize that we want to do more onboard as well so that we can leverage faster computing times and be able to—and we do a lot on onboard as well.

From an overall Command perspective, I think one of the things that we recognize that differentiates us is the ability to scale it. So, we don't have a limit to how many trucks we can add to our Command suite, and that allows us to really move anything from a very small mine to a very large mine. The ability to leverage the technology such that we can run the trucks faster than you can run a truck with a manned person in it, is another advantage. And then I think the other thing is the ability to be able to really allow the flow through the system itself, the mine site itself, to be optimized to maximize productivity is another advantage that we have.

It’s not just moving a truck from one place to the other, it's orchestrating the entire site in a way that allows that productivity to be enhanced. I think if you look at other autonomous solutions, while they aren't running as fast potentially, they aren't necessarily orchestrating that increased productivity in quite the way that our solution does. You don't necessarily hear the competition with the same kind of outcomes that we're able to get with our customers, and we're really proud of that.

Nicole DeBlase

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Okay, great. I guess, how do you think about how Cat monetizes those offerings? I think that there's a lot of questions about that among investors.

Denise Johnson

Yes. We really look at automation not entirely as its own P&L, although it does obviously have a return that is involved with it but looking at it as a holistic package that we're providing to customers. And so, certainly, there is a hardware cost to autonomy, there's a cost for the software, and then there's a reoccurring license fee. Some of the fees that go into autonomy pay for the people that we place on site that actually help run the incidents. So, we're there 24/7. It's not like we're selling them a software solution and then saying, "See you later. Let us know if you have any questions". So we're there. It's all about continually reducing cycle time and improving the outcome. So, when you think about it from that perspective, yes, it's definitely monetized in a way that provides value to us, but we feel like the value to the customer is even more because of the value that the solution brings.

In addition to that though, I would say as we start to look at especially greenfields or going into mine sites, it's how do you package it such that you're providing the equipment plus the technology in an integrated way that makes it just easy for them to implement.

I was with a customer last night having dinner. Greenfield mine that we had won the award for, they're just launching the first 11 autonomous trucks, and they said, "We had our first perfect day in the mine". He said, "We have never had a perfect day in any of our mines that are non autonomous". They were so proud of the fact that that was only after about a few months of implementation of the solution.

So, it's things like that that really tell you you're on the right track, and it's making a difference for customers.

Nicole DeBlase

That's a really great story. And I guess, when autonomous first kicked off, I mean we're talking about this for the first time many years ago, it seems that only the biggest mines were focused on autonomous, and it made sense for them. Are you seeing this now kind of trickle down to smaller mines and is there a world where the majority of sizable mines are autonomous?

Denise Johnson

Yes. I think one of the reasons why it really hasn't been cost effective for mines that have below 20 or 25 trucks is the infrastructure that's required to start it up. So, a combination of that and really deploying the technology. We are working on solutions that are lower cost and a little lighter in touch, because we do want to scale. We want to scale all the way down to heavy construction types where maybe you only have five pieces of equipment. That equipment may only run one shift a day. Think about it. You've got to—then it's got to have a value prop that's very different than when you're trying to sell it in a mine that's going to run 24/7 with 80 trucks. So, it’s a combination of changing the hardware and the software to make it that scalable in that way. Absolutely, we are moving in that direction.

Nicole DeBlase

Okay, understood. And you mentioned that a big part of being successful is accelerating NPI? How is Cat going about doing that?

Denise Johnson

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Yes. So, I would say, interestingly, we have an approach that we're making—we're looking at developing components that can scale. So, you're looking at, especially with electronics, you have an ability to be able to do this with an electrical architecture more than you can with different sizes of equipment that have specific parts, so modularity, commonality. So, if they're common in design concept but they scale, and so as you get bigger in your machine size it's basically the same component but scaled. So, if you leverage that and you have a refined component strategy that allows you to then scale that across all of your platforms, you're able to move much faster, right? So if you have a validation in a smaller instance, it's more easy to validate it as it grows and gets larger.

That's kind of our approach. That in addition to ensuring that we are thinking holistically about what products we move and go NPI first. There's a prioritization that we've made to ensure that the ones that are going to be the biggest value for customers are the ones that we're converting first; but we're thinking holistically that the whole portfolio eventually has to change. So that's how we're moving faster in the end, which will allow us then to not wait and say, which products did we—or which particular models did we not convert that later we have to design that for? They'll already be designed from the get-go; it's just introducing them, that new model, maybe at a later date.

Nicole DeBlase

Got it. Okay, very clear. And I guess maybe let's shift to the replacement cycle. How does Cat product development around sustainability and what's going on with customer interest on that front, does that change at all the way that they're thinking about the cadence of replacement and maybe meaning that they're a little bit more anxious to replace in the near term than they would have been otherwise?

Denise Johnson

Yes, it's been really interesting. I think the whole sustainability push in some ways has created a reflection on when do we want to replace. You have these hard targets for reducing greenhouse gas. A lot of that focus means large mining trucks are their focus for reducing that. And so, many of them are coming up on, okay, we need to buy some more equipment. How long—if you buy equipment now, the last 10 or 15 years, where does that put me for what I'm trying to do with sustainability, and are there bridging strategies, if more sustainable models are available, how do I deal with that? Can I place those maybe traditional units at a different site where I'm going to then turn this mine into my zero-emissions site?

So, there's interplay. It's not just, okay, we need to replace the fleet, let's just go buy some trucks. They're thinking about it and engaging us in that discussion...

Nicole DeBlase

Okay.

Denise Johnson

...which I think has created—it doesn't mean that that cycle won't happen. It's definitely happening, and they're just being more thoughtful about it and more insightful about when and how.

Nicole DeBlase

Okay.

Don Hall

But I think there's a couple of things, Denise, and I'll kind of prompt you and you can fill in what I miss here.

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Certainly, a lot of the larger miners have very aggressive goals out there and public goals, but it won't all happen at the same time, it won't happen for all miners, and that's going to depend on are you a contract miner or are you a junior minor. Where are you at in the world and what are the regulatory or social pressures that you're facing? But the other key thing too is there are things that can be done today to help move them towards their goals. So, it's not a situation where they invest nothing for the next seven to ten years and all of a sudden one day, they buy a whole new fleet of battery trucks, right? So, there's ways to make progress even now.

Denise Johnson

It's a really great point and I think Don really makes it well because as we're talking to mining companies, this transition is going to be a longer transition. It's not going to happen overnight. We have certain areas of the world where just the infrastructure itself is not going to allow zero-emissions solutions to be the solution of choice. So, we are seeing definitely this dual path where we're going to have traditional equipment maybe with some additional enhanced reductions with emissions, as well as zero-emissions fleets coming out at the same time.

We're going to have to—it won't be like the auto industry where after this date we won't build any more of these. We're definitely going to be in this situation where we're going to have both alternatives available for a long period of time.

Nicole DeBlase

Okay. That makes sense. I guess maybe that prompts a question. What is the timeline for—are the goals over 10 years, or are they over 20 years? What kind of sustainability goals are you hearing from your customers?

Denise Johnson

Yes, it depends. I mean, we're hearing some that are as aggressive as 2030, and then others that certainly are ranging out to 2050. I mean, that's a huge range, right, for hitting targets, which tells you it will be an evolution. I think you're going to see a lot of sites that are just going to be—a lot of mine sites that are going to be taking the wait and see. They want to see how is this going to evolve. They don't want to be a first mover. They want to be a later mover.

That's what makes it really interesting, because you have to have both sets of solutions available depending on who wants what.

Nicole DeBlase

Right. Don, you brought up an interesting point about a step-by-step process to get to the goals. Can you or Denise give some examples of what can be done today that can start moving them towards their sustainability goals?

Denise Johnson

Yes. I mean, certainly, as you look at emissions, and greenhouse gas emissions in particular, we still have a lot of customers that buy equipment and diesel equipment with emissions that are Tier 1 or Tier 2, and don't even get the highest level of what can already be done with a diesel engine on the highest level of emissions reduction.

That's one example. In addition to that though, we have a lot of alternative tools that are available, which have lower emissions. So, you've got liquefied natural gas. So, you could do dual gas blending. We

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certainly could blend hydrogen today. There's a lot of biofuels that can be leveraged today. There also are a number of solutions that are available with trolley. Like the trolley where you can actually turn the engine off and for a certain part of the cycle you drive it electrically and you turn it off.

There's those kinds of things that can be done today that can be leveraged. Certainly, we have some examples where electric drivetrains can be introduced. So, we have a D11XE that we're showing at the show, 25% reduction in emissions as a result of being able to put that electric drivetrain in. So, there's a lot of technology that can be introduced today to help.

Nicole DeBlase

Okay. Okay, great examples. Maybe another side of sustainability that I've had a lot of questions on recently is just the whole lithium mining aspect. Maybe you could talk, Denise, a little bit about to what extent Cat Resource Industries already participates in lithium mining today and if that's an area that you see for growth.

Denise Johnson

Yes. Well, it's interesting, if you look into lithium mining there's a lot of different mining methods that are used to mine that. So, there's certainly a brine or a water method that doesn't use a lot of traditional Cat equipment to mine that lithium. So, it's more of kind of a slurry that they extract then the lithium from.

In addition to that, there's more traditional mining methods, where they actually will mine the clay, if you will, and then extract the lithium from it. That's where we do have customers in Australia, in South America, even some in the U.S. that are lithium miners where we're using more of the smaller end, I would say, of the mining equipment, but certainly we do see it as an area for growth for us for the future. It's interesting because we talk a lot about copper and gold and iron ore, but we have these rare earth metals, so we have lithium and others that are certainly going to play a big role in the future, and we intend to be the provider of choice for mining those minerals.

Nicole DeBlase

Got it. Okay, understood. I do want to dig into some of the short-term issues that I've had a lot of inbound questions on before we wrap up today. But before we get to that, Denise, maybe you could talk a little bit more about all of the exciting new product launches that Cat has at the show today. I guess, what does it look like with respect to receiving firm orders, is that something that typically happens at MINExpo, and maybe just a level of interest in the new products that you mentioned at the show?

Denise Johnson

Yes. We are showcasing a lot of products as I indicated around sustainability, certainly the underground loader, as I talked about, the D11XE, the autonomous water truck. As we have talked to customers, I wouldn't say that MINExpo's used to actually place orders. That's not really where it's done. It's to talk about what we have as offerings. It's to get a lot of our deep experts from both the machine world to the component world, to the technology and automation end of things, and then of course now with our Energy and Transportation segment as well, to have dialogue. So, we have had just multiple meetings, a lot of interest in what we have to offer for the future, and that's really the value of MINExpo.

I think it's also interesting, as you look at there's a bunch of suppliers here at the show as well, so really looking to see what's up and coming in that space. So, a lot of technology companies out there, versus the traditional equipment suppliers. So, yes, there's a lot of really interesting technologies that's available and everyone's here to see it.

Nicole DeBlase

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Got it. Okay. And then just circling back to replacement demand, I just want to make sure we finish that set of questions. Do you think that green shoots are finally emerging? We've been waiting for this replacement cycle for what seems like forever. So maybe talk about your level of optimism about mining Capex, particularly the replacement side of mining Capex over the next several years.

Denise Johnson

As you know, mining Capex is up, and we are seeing that in orders. As we talked in the second quarter earnings call, we are really optimistic, not only with quoting activity, but also with what we're actually seeing in placed orders. I talked a little bit about this whole sustainability and how that's creating more of a dialogue, but that hasn't stopped orders from coming in. Clearly, there is a need for equipment, especially as commodity prices are high, and actually you start to look at the age of equipment; and it's getting up there. It's at all-time highs for mining truck fleets. So, we are seeing that pull through.

We don't see it though as a huge, when I say—I mean, it's nice and improved, but it's not that huge spike from the past where people are just in a frenzy to put orders in. So that is also nice. It's just a very strong demand, but nothing crazy and out of control.

Nicole DeBlase

Probably better that way.

(Multiple speakers)

Rob Rengel

One thing to note there, sorry. So as far as an update, we're not providing an update or reaffirming anything since the second quarter at this point. We kind of have general idea there.

Nicole DeBlase

Yes, absolutely. Thanks, Rob.

Okay. And then I guess—so let's maybe dig into some of these supply chain challenges. It's clearly been the number one focus of the inbound questions I've received. Maybe Denise, Jim was out talking a little bit about this yesterday, and it's been an issue all year. Maybe you could talk a little bit about how Resource Industries has been dealing with or has dealt with the supply chain challenges that you face, and not just supply chain, but also labor availability.

Denise Johnson

Yes.

Rob Rengel

Related to your same type of update, we're not going to be giving a current update; but absolutely the process I think is definitely something you can expand upon.

Denise Johnson

Yes. So, I think we all recognize the current realities of supply constraints, and we talked about it in our second quarter earnings call. Internally within RI, and it actually is the same within Construction Industries and Energy and Transportation, we're leveraging a lot of processes to make sure that we're working as

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closely with suppliers as well as with our customers and dealers to ensure the end-to-end S&OP process, if you will, is as robust as possible.

We're really looking for visibility in demand and making sure that we're working that all the way back through to the supplier. We are really—and we had put buffers in place ahead of the upturn, if you will, in the 2020 timeframe. So, we were well positioned as a result of that as well for increasing demand. We're putting a lot of time going to the supply base, looking at their capacity, understanding their bottlenecks and their constraints, and in some cases helping them alleviate those so that we can have that flow of material.

We're doing that. In addition, there's a lot of work happening on the transportation side and planning how we're transporting our equipment and our components to ensure that we're able to satisfy customer demand. So, it's a really busy time as a result of all of the activity, but we have a really great team of dealers as well as suppliers that we're working with to optimize it to the best of our ability.

Nicole DeBlase

Okay. Okay, great answer. That's really helpful. And the other big area of focus right now among the investment community is price and cost. I guess, maybe on that question, when you launch new products, would you say that that's your best ability or the key driver to getting pricing in this business and it's harder to kind of go back apples-to-apples and raise price on existing pieces of equipment?

Denise Johnson

Yes. I think we really try to provide value for the customer, and certainly if you're going to price something uncompetitively and/or if it doesn't provide the value, you're not going to get the sale and you're certainly not going to get a satisfied customer. So, we're trying to balance that always. Certainly, looking at that value prop key to pricing and certainly NPI when you can add new features that can provide differentiated performance, price will be taken where it makes sense to be taken.

We have rising input cost as everyone does. Inflation is impacting us. So, trying to be more efficient in our factories, trying to make sure our cost structure is as low as possible, is the other area of focus. So that it's not all about just raising prices. When those input costs come up, we have to be more efficient in our factories and through our entire supply chain in order to be able to pull through that margin that's required.

So, that's been really our focus. Don, I don't know if you have anything else, you'd add to my comments.

Don Hall

Yes. I think that two things that maybe I'd add to it is that generally speaking, inflation and commodity prices overall are good for Caterpillar. The other thing too, pricing discussions are always a challenge, of course, but I think the one thing that RI has going for us, I guess you'd say, is that many of our customers are also benefitting on the revenue side of their businesses, right, because it's the steel, it's copper, I mean, that's a lot of what's driving our input cost. So at least there's some relief for them on the revenue side as well.

Nicole DeBlase

Sure.

Rob Rengel

You have a few minutes left.

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Nicole DeBlase

Thank you, Rob. So, I guess maybe spending a couple of minutes, what we have left, on the profitability of Resource Industries. You guys embarked on a pretty impressive long restructuring program after the last mining peak. One question I have had from investors is, you've done so much restructuring and it's really helped your margins. With that restructuring in mind, do you have the capacity to handle the increase in demand that we're hoping for over the next several years?

Denise Johnson

We definitely have focused on ensuring that as we've restructured that we protected our ability to be able to produce units and we do expect demand to continue to increase. I think as we look at how much capacity have we reserved, we don't see volumes necessarily going back to the peak of the supercycle, but we do see a lot of upside growth. So, we're protected in from both a component manufacturing as well as the prime product manufacturing perspective to ensure that takes place, and that's using lean principles in the factories. We have a lot of lines that can run multiple models down the same line. We do a lot with really the designs of how we're catering to the factories to make sure we're getting the throughput, and then ensure we have the right labor force to be able to produce it as well. And so, we feel very comfortable that we're fine from a capacity perspective.

Nicole DeBlase

That's great news. And then maybe the final question I'll wrap up on is just, Cat has well telegraphed margin goals over a multiyear period. I guess maybe what are your thoughts on Resource Industries' medium-term margin potential? And maybe the right way to ask it is, what is the right level of incremental margins for us to be using if we assume continued growth in mining Capex and your revenue?

Rob Rengel

So, you know we don't talk about incrementals, but we can give you some color around the edges, maybe there.

Denise Johnson

So, Don, do you want to...

Don Hall

Yes. I mean, and we don't give segment-specific margins guidance anymore, right? But certainly, as we think about all the restructuring that Resource Industries' has undergone over the last five years, I mean, that's certainly improved margins, as we've kind of seen in the results. And that restructuring is kind of an ongoing thing. When you think about say compared to CI, the relative lower volumes and high complexities, the ability for us to be nimble and respond is key. So, like I said, I think we've got some huge restructuring behind us, which benefited us, but it's something that we'll always be looking at and continuing to push on.

Nicole DeBlase

Okay. Got it. Well, I think we'll go ahead and wrap it up there. Thanks so much, Denise and Don and Rob, for your time. Really appreciated the opportunity to lead this discussion. Thank you to everyone on the line who dialed in today. Have a great day.

Rob Rengel

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Just one follow-up. We will be sending out a survey after the discussion today, so we appreciate any comments you have. It will help us improve future events. Thanks a lot, everybody.

Denise Johnson

Thank you. Have a great day.

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