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MANAGEMENT DISCUSSION SECTION

Operator: Good morning, and welcome to the Deere & Company Third Quarter Earnings Conference Call. Your lines have been placed on listen only until the question-and-answer session of today's conference.

I would now like to turn the call over to Mr. Josh Jepsen, Director of Investor Relations. Thank you. You may begin.

Joshua Jepsen

Director-Investor Relations, Deere & Co.

Hello. Good morning. Also, on the call today are Ryan Campbell, Chief Financial Officer; John Stone, President of Construction and Forestry; Jahmy Hindman, Chief Technology Officer; and Brent Norwood, Manager, Investor Relations. We'll take a closer look today at our third quarter earnings, then spend some time talking about our markets and our current outlook for fiscal 2021. After that, we'll respond to your questions.

Please note that slides are available to complement this call. They can be accessed on our website at johndeere.com/earnings.

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Participants in the call, including the Q&A session, agree to their likeness and remarks in all medium may be stored and used as part of the earnings call. This call includes forward-looking comments concerning the company's plans and projections for the future that are subject to important risks and uncertainties. Additional information concerning factors that could cause actual results to differ materially is contained in the company's most recent Form 8-K and periodic reports filed with the Securities and Exchange Commission.

This call may include financial measures that are not in conformance with accounting principles generally accepted in the United States of America, or GAAP. Additional information concerning these measures, including reconciliations to comparable GAAP measures, is included in the release and posted on our website at johndeere.com/earnings under Quarterly Earnings & Events.

I'll now turn the call over to Brent Norwood.

Brent Norwood

Investor Relations, Deere & Co.

John Deere demonstrated strong execution in the third quarter, resulting in an 18.7% margin for the Equipment Operations. Ag fundamentals continue to be solid year-to-date and results from our 2022 early order programs indicate demand to remain strong heading into the next fiscal year. Meanwhile, robust fundamentals for our Construction and Forestry equipment continued into the third quarter, leading to improved levels of profitability and a heightened outlook for the rest of this year.

Slide 3 shows the results for the third quarter. Net sales and revenue were up 29% to \$11.5 billion, while net sales for the Equipment Operations were up 32% to \$10.4 billion. Net income attributable to Deere & Company was \$1.667 billion or \$5.32 per diluted share.

Now, let's turn to a review of our Production and Precision Ag business starting on slide 4. Net sales of \$4.25 billion were up 29% compared to the third quarter last year, primarily due to higher shipment volumes and price realization. Price realization in the quarter was positive by about 8 points, while currency translation was positive by about 4 points. Operating profit was \$906 million, resulting in a 21% operating margin for the segment compared to an 18% margin for the same period last year. The year-over-year increase was driven by higher shipment volumes, sales mix and price realization, partially offset by higher production costs.

With respect to the price realization, the above average results for the quarter were primarily driven by a few different factors. The primary driver came from price adjustments made to offset unfavorable currency movements, which resulted in low double-digit price realization for markets outside North America. North American list prices were up slightly above average and benefited from lower incentive spending.

Shifting focus to Small Ag and Turf on slide 5. Net sales were up 32%, totaling \$3.147 billion in the third quarter. The increase was driven primarily by higher shipment volumes and price realization. Price realization in the quarter was positive by just over 3 points, while currency translation was positive by about 3.5 points. For the quarter, operating profit was \$582 million, resulting in an 18.5% operating margin for the segment compared to a 14% margin for the same period last year. The year-over-year increase was due to higher shipment volumes, sales mix and price realization, partially offset by higher production costs. Results for the current period were affected by a \$27 million one-time gain, while the prior period included \$37 million of one-time losses.

Slide 6 shows our industry outlook for Ag and Turf markets globally. In the US and Canada, we expect industry sales of large Ag equipment to be up about 25% for the year, reflecting improved fundamentals in the Ag sector. At this point, we anticipate producing in line with retail demand for the year, keeping inventory levels relatively tight heading into fiscal year 2022. As it relates to Small Ag and Turf, we expect industry sales in the US and Canada to be up about 10%. While our shipment schedules imply production roughly in line with retail demand, our net sales for Small Ag and Turf products are up higher than the year-over-year change in retail sales as activity recovers from significant under-production in 2020.

Moving on to Europe. The industry forecast is – the industry is forecast to be up about or between 10% to 15% as higher commodity prices strengthen business conditions in the Arable segment and dairy prices remain resilient even as margins show some pressure from rising input costs. At this time, we have opened our Mannheim tractor order book through the second quarter of 2022, filling all production slots through that time period.

In South America, we expect industry sales of tractors and combines to increase about 20%. The combination of higher commodity prices, strong production and a favorable currency environment have boosted profitability – boosted the profitability of farmers, driving orders through the remainder of the year and into the first quarter of fiscal year 2022, which is as far as we've allowed the order book to grow. Despite limited government sponsored financing programs, private financing is more widely available this year supporting continued strength in equipment demand.

Industry sales in Asia are forecast to be up significantly, driven primarily by a strong recovery in the Indian tractor market.

Moving on to our segment forecasts beginning on slide 7. For Production and Precision Ag, net sales are forecast to be up between 25% to 30% in fiscal year 2021. The forecast includes a currency tailwind of about 2 points and expectations of nearly 8 points of positive price realization for the full year. For the segment's operating margin, our full-year forecast is ranged between 20% and 21% and contemplates consistently solid financial performance across the various geographical regions.

Slide 8 shows our forecast for the Small Ag and Turf segment. Net sales in fiscal year 2021 are forecast to be up about 25%. The guidance includes expectations for nearly 5 points of positive price realization and a favorable currency impact of about 3 points. The segment's operating margin is forecast to be ranged between 17% and 18%.

Before moving on to the results for our Construction and Forestry division, Jahmy Hindman, our Chief Technology Officer, will offer some thoughts around our recent acquisition of Bear Flag Robotics. Jahmy?

Jahmy J. Hindman

Chief Technology Officer, Deere & Co.

Thanks, Brent. As many of you are aware, John Deere has a long history of investing in increasing levels of automation in our equipment. These investments have distinctly positioned us to be a leading provider of autonomous solutions for our industry. We're now at a stage of maturity in that journey to make additional bold investments in autonomy consistent with the tech stack strategy that I shared with you last November.

Accordingly, earlier this month we added another exciting capability to our tech stack with our acquisition of Bear Flag Robotics, a technology start-up based in Silicon Valley. Today I'd like to give you a little more perspective on how this acquisition will accelerate our autonomous capabilities and serve as an important addition to our overall investment in autonomy.

Bear Flag develops autonomous solutions compatible with existing machines, which means greater tech adoption, increased productivity and improved profitability for our customers. It offers a set of technologies such as LiDAR, cameras and radar that complements our own initiatives and goals to provide customers with solutions that address the individual needs on the farm and the job site. The acquisition underscores our smart industrial strategy to deliver smarter machines with advanced technology. It addresses the challenge of scaling food production with fewer available resources, especially that of skilled labor.

Increasingly, farm labor shortages are constraining the timing for agronomic jobs or, in some cases, the ability to do that job at all, which has a significant impact on farming outcomes. Through autonomy, customers can run their operation more predictably, efficiently, sustainably and profitably from anywhere, ensuring that jobs get done within optimal timing windows, which has a substantial economic impact. It also represents an important leap forward in our retrofit capabilities across the install base. We call those performance upgrades, and they'll aid in the evolution of our business model for recurring revenue.

More important, the combination of John Deere, Blue River and Bear Flag positions autonomy as a key opportunity for differentiated value creation for our customers and our company. We started working with Bear Flag in 2019 as part of Deere's Startup Collaborator program, an initiative focused on enhancing work with start-up companies whose technology could add value for our customers. It's also an important point of access to some of the leading talent and innovations in our industry.

Since then, Bear Flag has successfully fielded its autonomous solutions on several farms in the United States. As I mentioned, its primary focus has been on its retrofit first strategy. However, its technical architecture scales

quickly with new implements and new tractor models, enabling fast compatibility with a large universe of equipment. This pairs nicely with Deere's comprehensive suite of products across our production systems, and while it's too early to commit to a business model for Bear Flag's products, we're encouraged by their customers' early acceptance of a per acre approach. This positions autonomy as a service, and we feel that may reduce the barriers to accelerate adoption of the technology.

This innovative approach and capability are a real testament to the foresight and talent of the Bear Flag team and I'm confident they will make a strong addition to our current expertise in automation and autonomy.

Let me wrap up by providing a brief perspective on our thoughts regarding technology investment. Over the last 20 years, we've invested in the building blocks for autonomy, starting with foundational tools like our GPS guidance known as AutoTrac. We have increased the automation in those foundational technologies with the introduction of Turn Automation and AutoPath being our most recent examples.

We have also begun automating the quality of the job being done as seen with Combine Advisor. These are core building blocks that set the foundation for autonomy. We have also made strategic investments in companies like Blue River, which has significantly accelerated our timeline for both automation and autonomy. Bear Flag Robotics will add new capabilities that help us on this journey as both companies will play a vital role in delivering a full range of autonomous solutions built from a technology foundation that was intentionally crafted over decades for this very moment.

It's important to note that the breadth and diversity of these use cases introduces significant complexity. This highlights the ongoing need to expand our tech stack through the acquisition of new technologies, while further developing our existing capabilities, which as you know are already significant.

Looking ahead, we see an enormous opportunity to create even greater customer value through autonomy and are committed to the continued investment in technologies that address the broad array of use cases across agriculture, road building and construction.

At this time, I'll turn the call over to John Stone to discuss our Construction and Forestry division. John?

John H. Stone

President, Worldwide Construction & Forestry Division and Power Systems, Deere & Co.

Thanks, Jahmy. So, let's look at slide 11 and talk about Construction and Forestry's results for the quarter. C&F sales of just over \$3 billion were up 38%, primarily due to higher shipment volumes and price realization. Operating profit moved higher year-over-year to \$463 million, resulting in a 15.4% operating margin due to higher shipment volumes and a favorable sales mix and price realization partially offset by higher production cost.

Turning to slide 12 and take a look at our industry outlook. North American construction equipment industry sales are forecast to be up between 15% and 20%. Sales of compact construction equipment expected to be up 20% to 25%. In addition, forestry equipment, driven by strong lumber demand, is expected to be up 15%.

To date, end markets for earth moving and compact equipment have benefited from a strong housing market, and while this growth rate has slowed a bit, we are beginning to see positive indicators for non-residential investment; and order activity from independent rental companies remains exceptionally strong heading into the fourth quarter. Demand for earth moving and compact construction equipment will exceed our production for the year, resulting in low inventory levels as we exit the fiscal year.

Moving to the C&F segment outlook on slide 13. We expect our sales to be up around 30%. Our net sales guidance for the year includes expectations of 5 points of positive price realization and a favorable currency tailwind of about 2 points. Our operating margin is expected to be between 13% and 14% for the year, benefiting from price, volume and nonrecurring expenses from 2020.

Moving on to slide 14, I'd like to take a few minutes and talk through our Construction and Forestry strategy and also address how the recent excavator announcement you saw yesterday aligns with our overall smart industrial journey. The first thing I'd call your attention to on the slide is our mission, and our mission, why we exist, is to answer the fundamental need for smarter, safer and more sustainable construction so our customers can shape tomorrow's world. And as a result of the strategy we initiated last year, C&F division is focused on three main priorities: margin improvement, differentiation with precision technology, and a new excavator strategy that will better position Deere and its customers for the future. I'll talk a little bit about each of these priorities.

In the area of margin improvement, we've made considerable progress this year and our guidance implies a line of sight to the highest operating margin in the division's history. We're committed to further improvements that will give C&F the ability to generate 15% margins at mid-cycle volumes. To improve our current margin profile, we accomplished three main objectives over the past year and a half. First, we reorganized our division around our customers' production systems to mirror the way they do business. This enables us to deliver greater customer value by helping them become more productive, more profitable and while performing their jobs in a more sustainable way.

Next, we made significant progress optimizing our cost structure while at the same time maintaining pricing discipline for our products and fixing or exiting unprofitable business segments.

Finally, we adjusted our investment priorities to ensure a greater degree of focus on the products and solutions that are the most differentiated and unlock the highest value for our customers. Notably leading the way has been the Wirtgen Group whose performance has substantiated our original deal thesis as a high-performing business that demonstrates higher growth with less cyclicality than our legacy businesses. We've made significant improvements in the cost structure and worldwide distribution network for the Wirtgen Group, and I expect the group to generate greater than 15% operating margin this year inclusive of deal amortization and impairments, which is a structural improvement relative to the 10.7% margin we produced during our first full year of ownership. No doubt, Wirtgen's best days are still ahead.

Moving to differentiating technology and coming over to C&F from ISG just over a year ago was really eye opening to see the size of the opportunity in front of us for differentiating technology on the job site and on the roads. Productivity in the construction industry has lagged for years and machine automation, coordination and access to data can address a sizable portion of this productivity gap. Our strategy and technology stack is enabling us to move beyond historical enterprise synergies to leveraging technology like computer vision, advanced control systems, sensors, software, back-end cloud and machine learning training infrastructure to innovate faster.

Let me give you a few examples on how this technology will make our products smarter, safer and more sustainable. The next generation of Deere's construction equipment will feature a higher degree of our proprietary technology stack inclusive of grade control, vision systems and remote monitoring. Roads are going digital, and we are positioned well to lead this. We see today's state where no individual machine is used to its full capacity, and this inefficiency is coming from a lack of data, a lack of communication and coordination between machines in different steps of the production system. Our analysis indicates cost savings in the range of 15% to 30% is

possible versus today's traditional methods of road building and road rehabilitation. And when a three-mile road rehabilitation project can cost \$1 million to \$1.5 million, this is a big opportunity.

These technologies will also serve to make job sites considerably safer, which is a top priority for our customers, and while we use much of the same hardware and software you would encounter on a Blue River See & Spray machine, a construction site is different of course. It's busy, it's crowded, but a lot of the base technology is just the same. But we'll collect different data and train our neural networks on different data sets and use different onboard software for machine control.

Lastly, we feel we are uniquely positioned to help further the use of recycled and renewable building materials, and for many reasons, construction equipment is likely to lead the way on full electric machines and we look forward to providing further updates on that in the future.

Moving on to our new excavator strategy. On slide 15 is a summary of the transaction highlights which you also saw in our press release and our 8-K. As noted in the press release, we've entered into definitive agreements with Hitachi Construction Machinery to purchase the Deere-Hitachi joint venture businesses, including three factories and a license agreement for the intellectual property for continued manufacturing of the current lineup. We will continue to source components from Hitachi and manufacture the current products at our existing locations for the near term.

For those of you who may not be familiar with our long-standing relationship with Hitachi, let me provide a little context. Deere has produced excavators through a joint venture agreement with Hitachi for the last 30 years. Our jointly owned factories have produced Hitachi designed machines, which were distributed under both the Deere and Hitachi brands through the Deere channel in the Americas. This joint venture has been successful and served us well over the years. Our new strategy will allow us to leverage our own technology and designs specifically focused on the markets that matter most to us, furthering the value unlock for our customers with Deere-on-Deere machines while accelerating our innovation and response time to customer and dealer feedback on products.

To that end, we've been investing in our own proprietary excavator designs for well over a decade serving markets outside of the Americas and we have plans to introduce our next generation of excavators in the Americas in a timeline that complements our supply agreement with Hitachi. Finally, I would highlight we do expect this transaction to be accretive to earnings in year one.

At this point, I'll turn the call back over to Brent.

Brent Norwood

Investor Relations, Deere & Co.

Let's move now to our Financial Services operations on slide 17. Worldwide Financial Services net income attributable to Deere & Company in the third quarter was \$227 million, benefiting from an improvement in operating lease residual values as well as income earned on a higher average portfolio, a lower provision for credit losses and more favorable financing spreads. For fiscal year 2021, the net income forecast is now \$850 million as the segment continues to benefit from the same factors realized during the quarter.

Slide 18 outlines our guidance for net income, our effective tax rate and operating cash flow. For fiscal year 2021, our full year outlook for net income is now forecast to be between \$5.7 billion and \$5.9 billion. The full year forecast reflects the impact from higher raw material prices and logistics costs, which we estimate to have added an additional \$1.5 billion in expense experienced mostly in the back half of the year. The guidance incorporates

an effective tax rate projected to be between 22% and 24%. Lastly, cash flow from the equipment operations is expected to be in a range of \$5.8 billion to \$6 billion.

I will now turn the call over to Ryan Campbell for closing comments. Ryan?

Ryan D. Campbell

Chief Financial Officer & Senior Vice President, Deere & Co.

Thanks, Brent. Before we respond to your questions, I'd like to offer a few thoughts on our financial results and the current demand environment, as well as provide some commentary on the execution of our strategy. The company continued to demonstrate strong performance in the third quarter while challenges in the supply base persisted, and in some cases, became more complicated. We owe this solid execution to the extraordinary efforts made by our workforce for getting our products to the field and to our dealer channel for best-in-class customer support.

At this time, we expect many of these challenges to persist through the end of this year and into next. Our guidance reflects a continuation of these challenges but does not contemplate a significant shutdown of operations. Despite the challenging production environment, end market demand remains robust with order activity providing excellent visibility for our large Ag production throughout much of fiscal year 2022. Results from our Planter and Sprayer early order programs indicate robust demand will continue well into next year. In fact, we were able to fill our available production slots for fiscal year 2022 early in the first phase of the program.

At this time, we expect production rates for our Crop Care products to be up strong double digits on a percentage basis in fiscal year 2022 compared to fiscal year 2021. Even more encouraging is the take rates for our advanced precision features, which were up significantly from last year reaching all-time highs. Our large tractor order book in the US extends through the second quarter of fiscal year 2022 and we have not yet opened it up for orders in the second half of the year. Encouragingly, take rates for our premium and automation activations also reached all-time highs. While we manage the strong demand environment, we are also laser-focused on executing our strategy that will unlock significant new economic headroom for our customers while driving higher levels of sustainability in their operations.

As we reflect on what we have built to date and the possibilities we see in the future, we will aggressively make investments that promote deeper customer engagement in our digital platforms and software-driven solutions. As we speak, our production systems teams are analyzing each step in our customer's processes and designing or concepting solutions that will increase output, while reducing the inputs required. As these types of solutions gain traction, we see the potential for a future less dependent on sales of new equipment units each year and instead a future tied more closely to the jobs our customers do year in and year out enabled by the technology that makes them more profitable, productive and sustainable.

Over the next year, we'll talk a bit more about how this transformation will impact the company's goals and ambitions beyond our current set of goals slated for 2022. Ultimately, our next generation of goals will align to the activities and investments required to unlock the total addressable market of new value creation for our customers, which we believe is significant.

Lastly, the third quarter provided a good representation of our use of cash priorities. Last quarter I noted that our heightened cash flow levels would enable us to invest more in our technology stack, as well as increased cash return to shareholders. And as we indicated, we made investments that will support our smart industrial strategy and will deliver long-term value for shareholders. Beyond that, we raised our dividend by 18% in the second quarter and in the third quarter repurchased over \$700 million in shares, our highest amount in six years.

In summary, despite some of the near-term operational challenges, we expect to continue delivering on our financial goals while at the same time accelerating our investments in technology and sustainability. Although still early, we are convinced that our strategy will drive differentiated outcomes for our customers and all stakeholders. We look forward to updating you on our progress over the next few quarters.

Joshua Jepsen

Director-Investor Relations, Deere & Co.

Now we're ready to begin Q&A. The operator will instruct you on polling procedures. In consideration of others and our hope to allow more of you to participate in the call, please limit yourself to one question. If you have additional questions, we ask that you rejoin the queue. Ted?

QUESTION AND ANSWER SECTION

Operator: Yes. The phone lines are now open for questions. [Operator Instructions] The first question in the queue is from Adam Uhlman with Cleveland Research. Your line is now open.

Adam Uhlman

Analyst, Cleveland Research Co. LLC

Q

Hey, guys. Good morning. Congrats on the strong quarter. I had a question on the early order programs, if you could. Any chance you could expand the production capacity to capture more of the demand upside? And related to that, could you just about what the pricing was looking like on the early order programs?

Joshua Jepsen

Director-Investor Relations, Deere & Co.

A

Thanks, Adam. So, the early order programs, one of the things that we see when we look at what the demand picture there is it appears demand is going to be above the industry's ability to supply given the supply constraints that we're facing. So, I think that's one of the challenges that we see there. As we looked at the early order program, the Crop Care, so planters and sprayers that opened up, we essentially filled the full year production in the first phase of the program. So, we'll not run additional phases there.

And when you think of combines, so for combines we recently opened that up. We're doing that a little bit differently this year in that we've allowed orders to begin. But we are taking time, pausing to be able to manage price cost dynamics there so we can make those adjustments. And then from a price point of view for the PPA products, for Production Precision Ag products, that we have out either on early order or that we've taken orders on have carried a roughly 8% price increase for 2022.

Thanks, Adam. We'll go ahead and go to our next question.

Operator: The next question is from Rob Wertheimer with Melius Research. Your line is now open.

Rob Wertheimer

Analyst, Melius Research LLC

Q

Hi. Good morning, everyone, and thanks for the discussion on the strategy and technologies, and how they're intersecting. Jahmy, I don't – you gave a pretty good overview of Bear Flag. I'm a little bit curious if you can

expand on maybe why Deere didn't do more of this internally. Maybe you kind of did because you had the relationship and I'm sure you were working with them in the accelerator. I wonder if you can just talk a little bit about internal versus external decisions, start-up versus internal innovation and the advantages and disadvantages and I'll stop there. Thank you.

Jahmy J. Hindman

Chief Technology Officer, Deere & Co.

A

Yeah. Thanks, Rob, for the question. We have done a tremendous amount of work internally as well. I think, the autonomy problem is hard, and it takes I think a multifaceted approach and multi-sensor approach in order to solve it. And so, don't read into the Bear Flag acquisition that we haven't done work internally on it. Our investments have been significant internally as well. Bear Flag is just a recognition that the problem is hard across the full production system, and we thought that the talent, technical skills and sensing capability that they brought to the equation was part of us helping to solve the complete puzzle.

Ryan D. Campbell

Chief Financial Officer & Senior Vice President, Deere & Co.

A

Hey, Rob, it's Ryan. Just maybe to add on to that, the opportunity is big in this space and it's moving fast. So, some of this is a function of the speed to the extent that we can acquire and accelerate what we're doing internally. That's something that we think about a lot and we're focused on.

Rob Wertheimer

Analyst, Melius Research LLC

Q

Thank you, Ryan.

Joshua Jepsen

Director-Investor Relations, Deere & Co.

A

Yeah. Thanks, Rob. We'll go ahead and go to our next question.

Operator: Next question is from Stephen Volkmann with Jefferies. Your line is now open.

Stephen Volkmann

Analyst, Jefferies LLC

Q

Hey. Good morning, guys. Maybe to go back to price cost, I'm curious – you must have pretty good visibility I would assume on both price and costs in the first half of next year as far as you have your order books open, I guess. So, how should we think about the price cost dynamic that's in your backlog now?

Joshua Jepsen

Director-Investor Relations, Deere & Co.

A

Sure, Steve. So, maybe just backing up, 2021 we are price cost positive for the full year. We do see that become more challenged in the fourth quarter as we talked about. Brent mentioned \$1.5 billion of material and freight cost now this year. Almost 45% of that is in the fourth quarter. Importantly, as we think about going forward to next year, as mentioned, we are on the PPA side of the business, we have about 8 points of price on the products that are out there right now. And both in combines as I mentioned earlier, as well as, our tractors adjusting a little bit of how we're managing order activity to better try to control the price cost dynamics. So, we fully intend and expect that we'll be price-cost positive in 2022 as well.

Joshua Jepsen

Director-Investor Relations, Deere & Co.

A

Thanks, Steve. We'll go ahead and go to our next question.

Operator: Next question is from Jerry Revich with Goldman Sachs. Your line is now open.

Jerry Revich

Analyst, Goldman Sachs & Co. LLC

Q

Yes. Hi. Good morning, everyone. Ryan, I'm wondering if you could just expand on your comments regarding TAM and take rates. The productivity improvement on fertilizers, seeds, et cetera, feels like a 50-plus-billion-dollar TAM for you folks. I'm wondering if you might be willing to comment on that at this point and if you could just touch on the exact take rates for ExactEmerge and some of the other key products if you can.

Joshua Jepsen

Director-Investor Relations, Deere & Co.

A

Thanks, Jerry. This is Josh. I'll start maybe just on – talking a little bit on the take rate side. So, we – as noted, we saw significant steps up in planting on ExactEmerge as well as ExactApply on sprayers. So, ExactEmerge is around 55% and that's about a 10-point jump from where we were a year ago. And just above 55% on ExactApply on the sprayer side. So, we have seen those move up.

One other thing as you think about technology and adoption, we saw a pretty significant increase as well in engaged acres. So now over 290 million engaged acres. So when you think about the ability to grow engagement there both through the use of technology and then the data side in terms of what that can do from a decision-making perspective for customers and the value we can add, we think that's a really significant opportunity for us to continue to see expanding.

Ryan D. Campbell

Chief Financial Officer & Senior Vice President, Deere & Co.

A

Yeah, Jerry, on TAM, I mean, you'll hear us talk more about and start to quantify TAM over the next few quarters, but what I would say is how we think about it is we look at all the inputs that our customers are using and we think there's a good portion of those inputs, See & Spray being the best example, that we can turn into software at a benefit to our customers and a benefit to us from a margin perspective. So, as we think about it, there's an opportunity on inputs that our customers are using. There's an opportunity on yield improvements based on the solutions that we'll develop, and as I indicated, that opportunity is significant. But more to come and more specifics to come over the next couple quarters.

Jahmy J. Hindman

Chief Technology Officer, Deere & Co.

A

Yeah, Jerry, this is Jahmy. I'd just add that we also think about one of those inputs as labor and tying back to the automation autonomy story that we shared. US census data released last week would indicate the flight from rural to urban is continuing to accelerate and that that pressure point from an ag labor perspective is only going to get worse. So, we view that as part of the equation as well.

Joshua Jepsen

Director-Investor Relations, Deere & Co.

A

Thanks, Jerry. We'll go ahead and go to our next question.

Operator: Next question is from Steven Fisher with UBS. Your line is now open.

Steven Fisher

Analyst, UBS Securities LLC

Q

Thanks. Good morning. Wonder if you could just talk a little bit more about the supply chain. I think, you mentioned that some aspects have gotten a little more complex. I'm wondering overall to what extent you're seeing any signs anywhere of that easing and when you think we might see the – kind of the peak pain points in that process and seeing it get a little bit better?

Joshua Jepsen

Director-Investor Relations, Deere & Co.

A

As we expected, a quarter ago, we noted we thought the back half of the year would be more challenging. That's exactly what we saw. We saw more disruptions, more impacts to production where we were losing days of production at different facilities at different times throughout the quarter. And we think that continues. We don't see that easing up as we get into the fourth quarter and into 2022. So, we think that continues.

One of the challenges is that it's a pretty wide variety of issues. It's not one select issue from materials to labor to logistics across the supply chain, which makes it a little more challenging and also pretty diverse from a geographic perspective. So, continuing to manage through it, teams are doing a really good job of producing and being as productive as possible given the challenges; dealers working really hard taking care of customers, making sure we're getting those products to them, but we don't see that easing up here in the near term.

Thanks, Steve.

Steven Fisher

Analyst, UBS Securities LLC

Q

Thank you.

Joshua Jepsen

Director-Investor Relations, Deere & Co.

A

We'll go ahead and go to our next question.

Operator: Next question is from Jamie Cook with Credit Suisse. Your line is now open.

Jamie Cook

Analyst, Credit Suisse Securities (USA) LLC

Q

Hi. Good morning. I guess, if you could just – I was interested by the Hitachi announcement. I'm just trying to understand, one, I think your market share in excavators is about 40%. If you can help me understand – correct me if that's right, and I'm assuming this is a higher margin product line for you, so I'm trying to understand how – I know it will be accretive to margins and EPS, but if you could give us any more color there, and then sort of new geographies that this announcement opens you up to. Thank you.

John H. Stone

President, Worldwide Construction & Forestry Division and Power Systems, Deere & Co.

A

Yeah. Jamie, this is John Stone. Thanks very much for the question. I would say excavators is obviously a very important machine form for construction, and if you look unit volume, it's typically 35%, 40% of any given market. Our share would not be the numbers you said. Probably in the range of half that in fact. And so, when we look at our other core earth moving product lines, we do see an opportunity to improve that share quite a bit.

The margin story is a little bit different, if you think about a 50/50 joint venture structure, where Hitachi did the design. We jointly did the manufacture and then Deere was responsible for the distribution. There is a margin sharing aspect of that relationship, and obviously as we move to a more traditional supply agreement with Hitachi, that margin sharing goes away. So, it's really a mechanical adjustment to that part of the business that will improve the margins. And then as we're able to introduce Deere designs, Deere technology in the future, we see that really as further upside to both margin and share in a really important segment. We'll maintain a near-term focus on just working through this change in the Americas and talk with you about other geographies probably in future calls.

Joshua Jepsen

Director-Investor Relations, Deere & Co.

A

Thanks, Jamie.

Jamie Cook

Analyst, Credit Suisse Securities (USA) LLC

Q

Okay. Thank you.

Joshua Jepsen

Director-Investor Relations, Deere & Co.

A

We'll go ahead and go to our next question.

Operator: The next question is from David Raso with Evercore ISI. Your line is now open.

David Raso

Analyst, Evercore ISI

Q

Hi. Thank you. Just trying to think about margins. If you pull out the fourth quarter a year ago, where you had a lot of one-time costs there, but were you're implying about the negative price cost for the fourth quarter, we kind of get back to like a core incremental of about 24%, 25%. It sounds like the first half of the year next year still struggles with price cost and you're going to open the order books for the back half when you get a little more comfort with how much price do we need to get the margins a little bit stronger on an incremental. When do you think you'll open those order books for 2022 and should we think about the way you're trying to manage the business, is that sort of trying to get core incrementals around 25%?

Joshua Jepsen

Director-Investor Relations, Deere & Co.

A

David, I would say when we think about the price cost dynamics, as we flip the model to fiscal year, price will reset there. So, I would not expect that we're necessarily seeing those price cost dynamics be particularly negative as we go forward. And then the full year of 2022 at this point we would expect those to be positive from a price cost point of view. I think maybe importantly is fourth quarter is probably not a good read through in terms of what we would expect from a margin perspective in the fiscal year or in the early part of 2022.

Ryan D. Campbell

Chief Financial Officer & Senior Vice President, Deere & Co.

A

Yeah, David, it's Ryan. Implied in fourth quarter is mid to high 20s incrementals. As you indicated, we had some specials last year. If you take those out, you're in the teens. But then if you look at some of the heavy inflation that's hitting in the fourth quarter and adjust for that, you're back to about 40% incrementals, which is what we've been running for, running with this year-to-date. Certainly, as we move forward as Josh indicated, we'll be resetting price as we turn the calendar in a lot of different products and so we would expect healthy incrementals over the next year in a range that we've been able to execute against in the past.

Joshua Jepsen

Director-Investor Relations, Deere & Co.

A

Yeah, and on the order book, I think, product to product that will vary in terms of how we work through when we open those. In some places like South America, Brazil, it's been on a month-to-month basis, so it will vary, but that's a shift for us to try to be a little more dynamic in terms of how we're managing those price cost impacts.

Thanks, David. We'll go ahead and go to our next question.

Operator: The next question is from Kristen Owen with Oppenheimer. Your line is now open.

Kristen Owen

Analyst, Oppenheimer & Co., Inc.

Q

Hey. Thanks. Good morning. Thank you for taking the question. I wanted to follow-up on some of the TAM and take rates in Precision Ag, and you noted during the quarter that you made some changes to the John Deere Link business model. Just wondering if you can discuss some of the thought process behind that shift. And Jahmy, I know, it's too early to commit to a single autonomy business model, but maybe give us a broader sense of the foundation of recurring revenue that you have today and how we should think about that evolving across the portfolio. Thank you.

Jahmy J. Hindman

Chief Technology Officer, Deere & Co.

A

Yeah, Kristen, business model question first. I think the reality is in the technology space in autonomy in particular that the tech is going to spin faster than the base machine. So, we have to be able to provide a business model that allows us and allows customers to take advantage of that latest tech on existing machines and relatively new machines in the fleet, not just brand new whole goods coming out of the factory. So that's one of the factors that we're taking into account from a business model perspective. Just given the rates of change, the disparity in change from a technology perspective on the base machine versus the tech that enables autonomy.

Your first question was, Kristen?

Kristen Owen

Analyst, Oppenheimer & Co., Inc.

Q

Related to the shift in business model on the JDLink?

Jahmy J. Hindman

Chief Technology Officer, Deere & Co.

A

Got it. Yeah. So, that fundamentally is about just trying to reduce the friction for customers to collect their data and get their data in a useable format, right? That's about us trying to minimize the amount of inertia that they have to overcome in order to collect that data. It removes one more hurdle for our customer to take that data and put it in a useful place and to start extracting insights from it.

Joshua Jepsen

Director-Investor Relations, Deere & Co.

A

Thanks, Kristen. We'll go ahead and go to our next question.

Operator: The next question is from Chad Dillard with Bernstein. Your line is now open.

Chad Dillard

Analyst, Sanford C. Bernstein & Co. LLC

Q

Yeah, hi. Good morning, everyone.

Joshua Jepsen

Director-Investor Relations, Deere & Co.

A

Hi, Chad.

Chad Dillard

Analyst, Sanford C. Bernstein & Co. LLC

Q

So, can you talk about the ability to expand autonomy into construction? Perhaps you can weave in what sort of opportunities the acquisition of Bear Flag presents, what workflows will be first in line and how should we think about the particular product categories while you do this?

Jahmy J. Hindman

Chief Technology Officer, Deere & Co.

A

Yeah, this is Jahmy. Thanks for the question. It's a great question. I think, John mentioned some of the transference of technology from Ag to Construction. Already talked about the ability to take technology, for example, that we're developing for See & Spray, and apply it in the Construction space. We see similar opportunities on the autonomy side. It's the perception problem from a technical perspective is different in environment that we're operating in, but the core technologies required to execute it from Ag to Construction or to road building are remarkably similar. So, we see a really good opportunity to leverage the work that's been happening in Ag into that Construction or road building space as well.

Joshua Jepsen

Director-Investor Relations, Deere & Co.

A

Thanks, Chad. We'll go ahead and go to our next call.

Operator: The next question is from Mig Dobre with Baird. Your line is now open.

Micrea Dobre

Analyst, Robert W. Baird & Co., Inc.

Q

Yeah, good morning. Thank you. Another question on Bear Flag from me as well. It's pretty clear that those guys' business model is really gearing towards retrofitting existing equipment, but I guess I'm wondering as you're

looking at this technology is there a timeline that we should keep in mind in terms of your ability to integrate this technology in your machines from a new model standpoint? And is there a timeline that we should keep in mind in tractors versus harvesters, sprayers, other types of equipment? Thank you.

Jahmy J. Hindman

Chief Technology Officer, Deere & Co.

A

That's great question. That's the crystal ball question. Yeah, I would tell you that the technology is maturing at a very rapid pace, and the capabilities are improving day by day. We fully plan on developing a fully autonomous production system all the way through the agriculture production systems stack and leverage the technology from one machine form to the other. So, for example, from tractors into sprayers into combines, et cetera. That leveraging capability gives us the ability to move quickly once we start to introduce it into the market on to other machine forms.

Joshua Jepsen

Director-Investor Relations, Deere & Co.

A

Well, thanks, Mig. We'll go ahead and go to our next question.

Operator: Next question is from Ann Duignan with JPMorgan. Your line is now open.

Ann Duignan

Analyst, JPMorgan Securities LLC

Q

Yeah, I'd like to focus on the finco business if you don't mind. If you could talk a little bit about how much you have realized in gains on sales of operating leases returning and your outlook for this going forward. Do you anticipate that used equipment prices will dissipate as new equipment becomes more available? Or are you really just seeing a reversion to normal where most farmers never buy new equipment anyway because of the price of new equipment? So I'm just curious as to your outlook on the used pricing as we go into 2022 and new products become more readily available.

John H. Stone

President, Worldwide Construction & Forestry Division and Power Systems, Deere & Co.

A

When we think about the operating lease book, it's performed very well this year. I think more importantly than just the sheer gains and losses are some of the changes we made in terms of how we interact, how we work with our dealers to drive the right behavior and what we've seen from a return rate perspective is we've seen very, very solid improvements, really to the levels we haven't seen for well over six, seven years. So that's been particularly positive.

As you noted, we've seen gains on the lease book the last few quarters which has been positive and really demonstrates the underlying demand for used equipment. The upward price pressure we're seeing really across all categories of used equipment from ag to construction & forestry. The current environment with inventories of used quite low and new inventory very low, our expectation would be that that continues. We wouldn't see a significant shift there.

As you look at channel inventories, whether it's small ag, production and precision ag or construction & forestry, we're at near historic low levels across all categories. So we think there's probably a multiyear recovery to rebuild those channel inventories. So I wouldn't expect new inventory to put any pressure on used at this point.

Thanks, Ann. We'll go ahead and jump to our next question.

Operator: Next question is from Tim Thein with Citigroup. Your line is now open.

Tim W. Thein

Analyst, Citigroup Global Markets, Inc.

Q

Yeah, thanks. Good morning. And, Josh, I just want to come back and make sure I was clear on the – or how to interpret the point about pricing within the large ag business in terms of that 8 points. So that's obviously on some of what's included there, some of the Waterloo products and as you mentioned the spring EOP but of course that's not every product within the large ag group. So can you maybe help us – so you've got that component in terms of the list price increase, but then you mentioned earlier some of the volatility in FX markets has led you to be more dynamic in terms of pricing and it's difficult to tell whether that repeats or not. So maybe just clarify a little bit more in terms – so we don't just come away thinking, okay, 8 points of price that's what we heard that may not tell the whole story in terms of pricing into 2022. Thank you.

Joshua Jepsen

Director-Investor Relations, Deere & Co.

A

The production and precision ag in North America where we've got order activity going for 2022, so planters, sprayers, combines, large tractors, they're all carrying about 8% of price. So that's a decently fair representation for North America and PPA. As Brent noted, overseas markets where we have seen volatility, we've been – in 2021 we've seen low double-digits price realization and that's been very favorable for us as we've tried to be a little bit more dynamic in responding to those changes. So I would not expect that we would change the process or methodology that we've used over the last year there.

Thanks, Tim. We'll go ahead and go to our next question.

Operator: Next question is from Ross Gilardi with Bank of America. Your line is now open.

Ross Gilardi

Analyst, Bank of America Merrill Lynch

Q

Yeah, thanks, guys. Good morning. Another technology question. I mean, you guys are making a bigger commitment to autonomy with Bear Flag. Just what about electrification and what kind of role will electrification have across your various product categories? Should we expect Deere to have some announcements relatively soon on just like how you'll electrify maybe your smaller ag and just your compact construction equipment at least and are you already in the process of doing that? Thanks.

Jahmy J. Hindman

Chief Technology Officer, Deere & Co.

A

Yeah, thanks for the question. Absolutely, electrification, battery electric in particular is going to play a role in powering machines in the future. And certainly we view that sort of starting at low horsepowers, low power equipment first and as the technology matures and it becomes more power-dense, moving up into the product lines over time. And many of our products are ready for that. The reality is that the technology is mature enough to start to build that into product, and those are active products in our roadmap.

Joshua Jepsen

Director-Investor Relations, Deere & Co.

A

Ross, one thing I'd add maybe to consider there too is, as we think about this journey, the ability to electrify components, to hybridize machines, particularly at higher horsepowers will be things that happen – are happening

today, we've had in the lineup in some cases in construction for a number of years that'll continue to drive more efficiency there.

And then as you think about things like renewable biodiesel, there are other opportunities for alternative fuels, those sorts of things that can significantly pull down emissions. But also be generated from crops that our customers grow which provide a pretty virtuous circle there.

Ross Gilardi

Analyst, Bank of America Merrill Lynch

Q

Thank you.

Joshua Jepsen

Director-Investor Relations, Deere & Co.

A

Thanks, Ross. We'll go ahead and go to our next question.

Operator: Next question is from Joel Tiss with BMO. Your line is now open.

Joel Tiss

Analyst, BMO Capital Markets Corp.

Q

Hey, guys. How's it going?

Joshua Jepsen

Director-Investor Relations, Deere & Co.

A

Hey, Joel.

Joel Tiss

Analyst, BMO Capital Markets Corp.

Q

I wonder if you can talk a little bit about getting paid on the construction side. I think just for the industry that's been a little bit more of a difficult endeavor. And any characterization you can give us on how far construction is behind precision ag, just to give us an idea like how much work has to be done in order to get paid for that? Thank you.

John H. Stone

President, Worldwide Construction & Forestry Division and Power Systems, Deere & Co.

A

Yeah, Joel, this is John Stone. Really good question. I think certainly, construction as an industry has probably lagged what you see in terms of technology advancements in precision ag. But like we talked, we stand to benefit a lot from moving from just these historical enterprise synergies you've heard Deere talk about to being able to leverage common hardware components, common base software, common sensors and just a different application and different use of those technologies.

And they can solve a lot of the same problems in construction. Labor availability is tough to find for construction companies. So making machines more automated, it's easier to train a new operator and get them up to speed quickly.

When you look at an average job site, estimates would tell you that 30% of the cost of that job site is due to waste and rework, and automation like SmartGrade technology that we have introduced into the market that controls the

blade tip, controls the bucket, allows you to do a very precise job down to just over one inch precision on the grade, get to grade right, get it fast, do it right the first time and eliminate that 30% waste. We've got customer testimonials. It's real.

Take rates are on I'd say the early part of the adoption curve and it starts to get steep. We're in the mid-double-digits and growing. So I think there's a great opportunity and leveraging Jahmy's organization, leveraging technology developed for ag, we can certainly go a lot faster and at a fraction of the investment that we'd incur if we try to do it all by ourselves.

Ryan D. Campbell

Chief Financial Officer & Senior Vice President, Deere & Co.

A

Yeah. This is Ryan. Features like SmartGrade obviously as John talked about, it's profitable for our customers, it's also profitable for us.

Joshua Jepsen

Director-Investor Relations, Deere & Co.

A

Thanks, Joel. We'll go ahead and go to our next question.

Operator: Next question is from Courtney Yakavonis from Morgan Stanley. Your line is now open.

Courtney Yakavonis

Analyst, Morgan Stanley & Co. LLC

Q

Hi. Good morning, guys. Thanks for the question. Maybe just first just wanted to follow up on the take rates for ExactApply. I think you're also rolling out See & Spray this year. Does that include See & Spray or can you give us any detail on how that program is unfolding?

And then my question just on the supply constraints that you're experiencing and obviously you increased to the \$1.5 billion for the year in terms of costs, is that primarily relates to freight versus material costs and other than kind of restricting your capacity in your order book for next year? Can you just talk to us a little bit about what you're doing on the procurement side to make sure that you have a consistent supply chain through next year? And I think you mentioned your guidance does not contemplate a shutdown but what you're doing to make sure that there are no significant shutdowns.

Joshua Jepsen

Director-Investor Relations, Deere & Co.

A

The \$1.5 billion that we mentioned is about two-thirds material and a third freight. So there's a combination of things going. Some of the increases are the ability to get material as we had supply challenges. You also see more expedited freight so needing to use air freight to get things to factories and more just in time. In addition to just freight rates in general being higher given high levels of demand.

So we're continuing to work really closely with the supply base. Working through what our challenges, capacity constraints as we look forward and we provided more visibility to the supply base than we historically have in order to try to work through those challenges and get out ahead of them. But it certainly has been a challenging environment and that very likely continues.

From a See & Spray select point of view, that is not in the ExactApply take rate that I mentioned. We had limited availability in this early order program. It's a relatively small number that – excuse me, green on brown solution is

a little bit more of a niche operation. But we did fill up the allocation of machines that we had planned for this year. So that's positive and we'll be working on See & Spray ultimate as well as we get limited production machines out later in calendar 2022 as well.

Joshua Jepsen

Director-Investor Relations, Deere & Co.

A

Thanks, Courtney. Go ahead and go to our next question.

Operator: Next question is from Larry De Maria with William Blair. Your line is now open.

Lawrence T. De Maria

Analyst, William Blair & Co. LLC

Q

Hey. Thanks. Good morning, everybody. As we think about looking into next year and we think about what's going on this year, is there anywhere we're or material are we under-producing anywhere now? Because if I understand your comments you're producing to retail demand essentially everywhere and you had the swing in the small ag.

So as we think about next year, dealers obviously may want to add some inventory but there should be no major swings from over or under-production. Is that correct? Just trying to understand the potential of production swings next year.

Joshua Jepsen

Director-Investor Relations, Deere & Co.

A

For production precision ag, small ag and turf, we're producing more or less in line with retail this year. On the construction equipment side and the compact construction equipment side, that's where we see under-production this year, and more significantly on the compact construction side. That's a combination of very strong demand, some of the supply constraints, but we've also been growing share. We've talked about introducing dual distribution with ag dealers as well over the last few years. So we've seen really solid and positive results there. So that's just put more pressure on the ability to get more and more inventory out. So that's probably the place where we see the need to build inventory as well as small tractors where both small tractors and compact construction are similar in that.

They're probably in the high teens inventory to sales, and typically those are probably in the 40% range or so. So to your point, probably a long multiyear recovery to get those back up to the inventory sales levels that we think are best. Thanks, Larry.

Lawrence T. De Maria

Analyst, William Blair & Co. LLC

Q

Yep. Thanks.

Joshua Jepsen

Director-Investor Relations, Deere & Co.

A

I think we've got time for one more question.

Operator: Okay. The next question is from Nicole DeBlase with Deutsche Bank. Your line is now open.

Nicole DeBlase

Analyst, Deutsche Bank Securities, Inc.



Yeah, thanks, guys. I appreciate you squeezing me in here. Can we just talk a little bit about your expectations for R&D and CapEx into 2022? I know that you just – you've tweaked your expectations for 2021 down the tiniest bit. But just curious if those two numbers need to come up next year.

Joshua Jepsen

Director-Investor Relations, Deere & Co.



I wouldn't – not necessarily significant changes. This year we've been down a little bit. Some of that has been large projects that rolled off from an R&D point of view, so things like the X9 combine and a few other things that were relatively significant. So that has driven some of the decrease.

So we probably over time next year and going forward probably expect a little more R&D as we look to accelerate some of the opportunities that we see that both Jahmy and John talked about here today. So I think from a CapEx perspective I would say not significant changes in where we're at.

Joshua Jepsen

Director-Investor Relations, Deere & Co.

Thanks, Nicole. Well, with that, we'll wrap up the call. Thanks, everyone, for the interest and we'll chat with you soon. Take care.

Operator: This concludes today's call. Thank you for your participation. You may disconnect at this time.

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