

Nutrien

2022 Q2 Earnings Conference Call

August 4, 2022

10:00 AM ET

Operator: Greetings, and welcome to Nutrien's 2022 second-quarter earnings call. At this time, all participants are in a listen-only mode. A question-and-answer session will follow the formal presentation. As a reminder, this conference is being recorded.

I would now like to turn the conference over to Mr. Jeff Holzman, VP of Investor Relations. Please go ahead, sir.

Jeff Holzman: Thank you, operator. Good morning, and welcome to Nutrien's second quarter 2022 conference call. As we conduct this call, various statements that we make about future expectations, plans, and prospects contain forward-looking information. Certain material assumptions were applied in making these conclusions and forecasts; therefore, actual results could differ materially from those contained in our forward-looking information.

Additional information about these factors and assumptions are contained in our current quarterly report to shareholders as well as our most recent annual report, MD&A, and annual

information form filed with Canadian and U.S. Securities Commissions.

I will now turn the call over to Ken Seitz, Interim President, and CEO; and Pedro Farah, our CFO, for opening comments before we take your questions.

Ken Seitz: Good morning and I will also welcome you to Nutrien's second-quarter earnings call. Before we get into the discussion of our results and outlook for the remainder of 2022, I would like to highlight three key messages.

First, we believe structural changes to global energy, agriculture, and fertilizer markets will provide a supportive environment for Nutrien well beyond 2022. Second, we are accelerating strategic growth initiatives that leverage the unique advantages of our integrated business, generate excellent returns on invested capital, and enhance our ability to provide sustainable solutions to help feed a growing world.

And third, we are committed to a balanced approach to capital allocation that supports growth and the sustainability of our business while also returning meaningful capital to shareholders. In 2022, we expect to invest around \$3 billion on sustaining and growth initiatives and distribute approximately \$6 billion in capital to shareholders. Pedro will walk through our plans in more detail later on in this call.

Now turning to our results and outlook, Nutrien delivered record first-half earnings driven by the strength of market fundamentals, the advantaged position of our global production assets, and the excellent performance of retail. We continued to progress our sustainability priorities and had excellent safety performance across the company, including a strong engagement in our serious injury and fatality prevention efforts, which is the most important work we do.

Nutrien Ag Solutions had a record first half with adjusted EBITDA of nearly \$1.7 billion, up 38% from the prior year. The retail team delivered higher margins across nearly all products and geographies supported by the strength of our global supply chain and expanded offering of high-value products and services to growers.

Crop nutrients and crop protection margins were very strong due to strategic procurement in a rising price environment and growth in our proprietary nutritional products. North American fertilizer volumes were down in the first half due to a combination of a very strong fall season in 2021, some crop mix shifts, and a condensed application window this spring. Fertilizer sales volumes outside of North America were up from the prior year, reflecting growth in our Brazilian retail network.

Potash adjusted EBITDA increased to \$3.4 billion in the first half, supported by higher realized prices and record offshore sales volumes. Potash production increased by more than 5% compared to the first half of 2021, and controllable cash costs were relatively flat.

The increase in production reduced our per ton fixed costs and largely offset the impacts of inflation. Spot prices in Brazil and Southeast Asia were up significantly compared to the previous year, and Canpotex continued to prioritize its available volumes to these higher netback offshore markets.

In nitrogen, adjusted EBITDA in the first half increased to \$2.2 billion as higher realized prices more than offset lower sales volumes and higher natural gas prices. The delayed start to the North American spring season impacted sales volumes, in particular, ammonia and UAN, and was a major contributor to the decline in nitrogen benchmark prices that occurred in the second quarter.

We had record phosphate adjusted EBITDA of \$423 million in the first half as higher realized prices more than offset the large increase in ammonia and sulfur input costs. In the second quarter, we recognized a non-cash impairment reversal of \$450 million, which was driven by improved market fundamentals and a more favorable view of phosphate margins.

Turning to the outlook. Global grain and oilseed inventories remain historically low. The recent deal to reopen Ukrainian exports through the Black Sea would be a positive development for global food security if there is a sustained increase to shipments.

However, analysts believe volumes will continue to be challenged by labor and logistical constraints in addition to ongoing military strikes in the region. Ukraine's grain production and export levels are projected to be down dramatically compared to 2021, leaving little buffer for any supply issues in other regions this growing season.

U.S. growing conditions were generally favorable however, high temperatures in July likely capped yield potential, and record high temperatures in Europe have reduced summer crop yields. Crop commodity prices have been impacted over the past month by broader market volatility but are still 25% to 35% above the 10-year average, and futures are trading at elevated levels on a multiyear basis.

In North America, we expect strong grower demand in the third quarter for top dress nitrogen, specialty nutritional products, and crop protection products. The crop was planted late but is maturing rapidly with the recent hot weather, and we are planning for a normal application window this fall.

In Brazil, grower margins are strong, and soybean planted area is expected to increase by 2% to 4%. Fertilizer inventories have been slow to move from core to inland positions as buyers look to purchase on a just-in-time basis but we anticipate strong movements over the next two months to ensure product is available for the upcoming planting season.

In potash, much of the focus remains on supply challenges in Eastern Europe. Shipments from Russia and Belarus were down an estimated 25% and 50%, respectively, in the first half of 2022. Russian potash is not currently sanctioned but has been impacted by restrictions on financing activities that facilitate exports.

The impact of sanctions on Belarus supply has been more significant due to the loss of access to Tidewater through Lithuania. Belarus is reportedly shipping small volumes via container, which for a bulk commodity is a more costly and logistically challenging option. We narrowed our global potash shipment forecast to between 61 million and 64 million tons in 2022 and expect shipments to be constrained by restrictions on exports from Russia and Belarus.

Beyond the existing supply challenges, we see the potential for delays in the development of new potash capacity from this region, which was projected to be the source of approximately 60% of new potash supply, excluding Nutrien, over the next five

years. We expect nitrogen prices to strengthen in the second half, supported by high European gas prices as well as restricted Chinese urea and Russian ammonia exports.

European gas prices averaged close to \$50 per MMBtu in July, which equates to an ammonia cash production cost of over \$1,700 per ton; more than 20% of Europe's ammonia production is estimated to be curtailed, and there are concerns over gas pricing and availability through the winter in Europe. Many buyers have delayed purchases given recent market volatility, and we (inaudible) seasonal resurgence of then in the second half that could further tighten supply.

I will now turn it over to Pedro to review our financial guidance and capital allocation plans.

Pedro Farah: Thanks, Ken. First, a few comments on our guidance. We expect a strong second half and the projected adjusted EBITDA in the region of \$14 billion to \$15.5 billion and adjusted EPS in the range of \$15.8 to \$17.8 per share. The midpoint of our adjusted EPS guidance represents a nearly threefold increase compared to 2021, reflecting both the increase in total earnings and the reduction in our weighted average shares outstanding.

Retail had a very strong first half, and we are now guiding to adjusted EBITDA between \$2.1 billion and \$2.2 billion in 2022, which represents a 12% annual growth rate over the past

five years. We expect a more normal fall application season in North America and anticipate per ton crop nutrient margins below the historically strong levels we achieved in the second half last year.

In potash, we narrowed our adjusted EBITDA guidance range and expect record volumes driven by strong demand in offshore markets. Potash prices have been the most stable amongst the three primary nutrients, and we anticipate that will continue through the second half. Our revised nitrogen earnings guidance range reflects the impact of low North American benchmark pricing and higher than previously forecast domestic natural gas prices.

Despite this change, we maintain our constructive outlook for nitrogen markets through the second half of the year and into 2023. We project cash from operating activities of approximately \$9.5 billion, assuming a cash conversion ratio of 65% at the midpoint of our adjusted EBITDA guidance.

This ratio is lower than previously forecast due to a change in timing of working capital requirements; however, we expect this to result in a more favorable impact to our operating cash flow in 2023. As Ken mentioned earlier, we have a balanced approach to capital allocation and intend on allocating approximately one-third of our operating cash flow to growth in sustaining projects.

The remaining two-thirds we plan on returning to shareholders through dividends and share repurchases, reinvesting 1.3 to 1.4 in sustaining projects to ensure we maintain a safe and reliable operations, as well as support our expanding production capability. This is slightly higher than our previous guidance and reflects inflationary pressures on labor and equipment. We believe that inflation and equipment, in particular, may be transitory. We are allocating approximately \$1.7 billion to advance high-return strategic initiatives across our business that we expect will drive earnings growth through the cycle.

Retail accounts for nearly 60% of the growth capital, with acquisitions and investments, focused on expanding our network in core geographies, enhancing our digital capabilities, and growing our proprietary products portfolio. We have completed or announced ten acquisitions so far this year in Brazil, the U.S., and Australia, for a total investment of approximately \$450 million.

Following completion of the two recent announced acquisitions in Brazil, we expect to surpass our stated target of \$100 million of adjusted EBITDA by 2023. Our portfolio of Brazilian acquisitions are performing very well, exceeding our hurdle rate for this market. In potash, the majority of investment is related to underground mine development and

additional mining equipment to support the accelerated ramp of our production capability to 18 million tons by 2025.

This is flexible, low-cost production capability that is unmatched in the industry, and based on what we are seeing in the market, is production that will be needed to meet global demand. We estimate a capital cost at \$150 to \$200 per ton, providing a very short payback period or, in other words, a low regret(sp) cost based on projected margins.

We continue to advance our low-cost Phase II nitrogen brownfield expansion projects. And in May, we announced our intention to build a 1.2 million ton clean ammonia facility at our existing site in Geismar, Louisiana. This project provides an opportunity to leverage existing infrastructure and access to tidewater. We believe this project can achieve attractive returns at mid-cycle ammonia prices, allow Nutrien to participate in the current and emerging end-use markets for merchant ammonia, and play a key role in achieving our 2030 emissions reduction goals.

To be clear, we are not relying on additional volume or a price premium that may come with the development of a larger clean ammonia market. This will be an upside. Finally, we intend on returning \$6 billion in capital to shareholders in 2022, which equates to 13% of our current market cap; around \$1

billion of this is our dividend, which was increased by 4.4% back in February.

Given the confidence in our operating cash flow, we announced yesterday our intent to complete our existing 10% NCIB in 2022. Completing the NCIB could lower our common shares outstanding to around 500 million by year-end; we plan on factoring in the significant reduction in share count in the decision criteria as we target sustainable and growing dividends over time.

And now I'll pass it back to Ken.

Ken Seitz: Thanks, Pedro. I would just make a few final comments. The fundamentals for our business remain very strong, and the challenge of feeding a growing world has never been more apparent. Nutrien is uniquely positioned to safely and sustainably respond to this challenge through our close connection with the grower, our extensive global supply chain, and our top-tier production assets.

I'm confident we can deliver due to the efforts of our talented people across the organization, who I would like to thank for their hard work and dedication to helping Nutrien feed the future. I'm joined today by members of our leadership team, and we would be happy to take your questions.

Operator: Ladies and gentlemen, we will now begin the question-and-answer session. If you would like to ask a question

please press "*" "1" on your telephone keypad. If you would like to withdraw your question please press "*" "2". Participants are asked to limit themselves to one question.

Your first question comes from Andrew Wong of RBC Capital Markets. Please go ahead.

Andrew Wong: Good morning and thanks for taking my question. So just regarding the nitrogen guidance, obviously, the market was a bit weaker into midyear than we all expected, but also, like you have mentioned in the prepared remarks, supply is very constrained with the high nat gas situation that we're seeing in Europe. And we just saw urea move up about \$100 last week, and things can move pretty quickly in nitrogen.

So just kind of curious what your assumptions are in the upper and the lower end of the guidance range. And are you maybe being a little bit conservative here just because of what we're seeing today? Thanks.

Ken Seitz: Great. Thank you for the question, Andrew. And yes, I think it's true that we had a fall application season, a strong fall application season in 2021 and of course, the late start to the spring, which led to some mix and shifts in crop mix and some prevent plant area, which led to lower application rates and therefore some carryover from the spring season.

So yes, we've seen some seasonal volatility here, and yet it is a supply-constrained market. I will hand it over to first

Raef to provide some additional color just on how that volatility and how we've (inaudible) for the year.

Raef Sully: Yes. Thanks, Ken, and thanks, Andrew. Look, as you noted, the volatility was much higher in the first half than we had thought and that impacted our results but as Ken mentioned, we had really good application rates last fall.

We had the delayed start to the season. This year we've had some supply constraints. That said, looking forward, the fundamentals remain really strong here; global demand continues to outstrip global production increases.

As you mentioned, the EU gas pricing remains high, leading to challenges there and what you've got to keep an eye on is the conversion cost of ammonia into--sorry, natural gas into ammonia and also ammonium nitrate. And you can see that current pricing capacity starts to get shut in, in Europe.

Chinese export restrictions remain in place. I think they only exported about 750,000 tons in the first half. Our outlook is probably going to be around 2 million, 2.5 million for the full year. That's quite a lot down from normal levels of 3 million to 5 million tons.

In addition, we're excited about the potential we see in the growth of low carbon. So I think despite the volatility you saw in the first half, we think we see a really good outlook for

the second half and beyond. But Jeff, I don't know if you wanted to add anything?

Jason Newton: Andrew, I guess specifically, when talking about the outlook on benchmark prices. As you say, we've seen significant volatility in the last couple of weeks, with both global ammonia and urea prices and even in urea prices coming up in North America. I think if we look towards the fourth quarter of the year, we have sort of typical seasonal improvement in prices in the forecast as is normally the case, and we expect a constrained and tightened market.

That said, relative to the current market conditions, that seasonal increase will be relatively modest. And we certainly don't have included in the forecast a return to prices as they were in the first half of the year. But if you look at where natural gas prices are today in Europe and the impact that's having on production shutting down, certainly, marginal cost is even above where prices peaked at the first part of the year.

Operator: Your next question comes from Jacob Bout of CIBC. Please go ahead.

Jacob Bout: Good morning. My question is on potash demand. You're guiding down slightly for potash volumes in 2022. How much of this is a reflection of farmers pushing back to higher prices versus a compressed spring? Maybe you can comment a bit on the U.S. summer fill program. And then what are your

expectations for the second half for Brazil, given the rising inventory levels there? Or is the expectation to export more into the lower-priced markets like China and India?

Ken Seitz: Great. Well, thank you, Jacob, for the question. Yes, maybe what we'll do is just sort of go around the world, as it relates to inventories that we're seeing and how we're expecting the balance of the year to unfold here. So it is true, yes, that we had, as just mentioned, that strong fall application season in 2021. And then the compressed spring and again, some shift in crop makes, some prevent plant area, which led to lower application rates.

So coming out of the spring, it is true that we had some carryover volumes on potash in North America. And so therefore, Nutrien down some volumes in that region. Now we just are closing our summer fill program and filling up our Q3 order book at the moment. But we don't expect those North American volumes. We expect a strong fall application season, and the backdrop with the ag fundamentals is strong in North America. But at the same time, we don't expect a recovery of those volumes in North America.

That said, when we say it's 61 million to 64 million tons, we believe it's a supply-constrained world. And again, with the backdrop of the fundamentals, growers in all parts of the world

still incentivize to maximize yield and lay down the appropriate agronomic level of crop nutrients.

As you say, in Brazil, imports were up in that part of the world for the first half, and it's really related to first of all, the conflict in Ukraine didn't start impacting things until, obviously, after February. So and shipments into Brazil were up 37% year-over-year, and we're seeing high port inventories. As they prepare for their planting season, we know that those port inventories will be moving inland and are moving in the land. And we also know that with those port inventories at the moment, they still only have about 50% coverage for their planting season. So we know that the Brazilians will be back in the market buying for their big planting season.

If we go to China, we know that inventories are significantly down. Their imports were down 11% year-over-year in the first half, and we put port inventories at sort of 1.8 million tons. So those are five-year lows for port inventories, and it's really related to the fact that as the lowest priced market in the world, China not getting the volumes that it needs. And the same is true for India, which, again, shipments down about 37% in the first half compared to last year. And inventories in that country are 550,000, 600,000 tons. They're very, very low, and again, just not getting the volume given where pricing is at.

And then finally, I'd just say in Southeast Asia, those prices migrated up. We've seen the first half strong (inaudible) prices. And so we saw actually convergence of price for standard grade similar to what granular product was selling for in Brazil. So, in other words, strong demand, but we don't believe that Southeast Asia will get the volume they need either this year just due to supply constraints.

The last thing I'll say, Jacob, is one of the things we are seeing is for those places that have inventory like North America, albeit due to the delayed spring, like Brazil with port inventories at the moment. We see growers just sort of waiting at these price levels to just-in-time purchasing or last-minute purchasing. Yet again, we know with the strong backdrop of ag fundamentals, we fully expect that they'll be compelled to lay down crop nutrients, but that it will be a supply-constrained market.

Operator: Your next question comes from Joel Jackson of BMO Capital Markets. Please go ahead.

Joel Jackson: Hi, good morning. Staying on potash, if I look at where you think pricing is going to play out and what your book looks like, we've seen some other competitors talk about some expecting a price decrease in the third quarter from realized perspective as you play around with what is (inaudible) spot prices in the midstream in China, India and other things.

What do you expect for pricing in the third quarter into the fourth quarter for what you have booked? Thanks.

Ken Seitz: Yes, good morning, Joel, and thank you for the question. Yes, what I would say is potash among crop nutrients, and certainly compared to nitrogen, has been a little bit more stable in terms of pricing. We have seen some slight softening, again just some seasonal softening here as a place like Brazil, prepares for its season, and you know we are in this window where we're heading in the Northern Hemisphere into a fall application season, which we expect to be a wide-open season and all these things.

So as we head into Q3 and Q4, we're looking at pricing in all these markets and saying that's probably there's some stability there at the moment and sort of forecasting that prices will remain in and around these levels into the balance of 2022.

I mean, of course that's not true necessarily for India and China. With those very low in-country inventories, will it be compelled to negotiate a contract sooner rather than later in 2022, that could be possible but for the spot markets, like I say, we're sort of forecasting in and around these levels for the balance of the year.

Operator: Your next question comes from Steve Byrne of Bank of America. Please go ahead.

Steve Byrne: Yes. Thank you. I'm interested in what level of fertilizer buying your retail business has made for this next crop year. Clearly, the wholesale side of your business is pretty bold up about pricing for nitrogen and potash in the fall. Is the retail side of your business in agreement and loading up and aggressively buying to capture that margin this fall and next spring? It seems like there was some of that captured in the first half of this year and maybe a similar comment on crop chemicals. You clearly on the retail side of the business, clearly captured margin on crop chems. Was that because of purchasing well in advance of the inflationary run earlier in the year?

Ken Seitz: Right. Well, thank you, Steve, for the question. And yes, our retail group has been successful strategically procuring in this rising price environment and as you say, reflected in our first half results in our retail business.

Now heading into the second half, we see perhaps some moderation on that, as you say, Steve, just given some leveling off of crop nutrient prices. But at the same time, retail business procuring for what we see is an open window for a fall application season.

It's also true that we very strategically secured some crop chemistry in the fall of last year, and that's part of the

success in the first half of 2022 as well. But I'll hand it over to Jeff Tarsi to provide--he has more color on that. So Jeff, over to you.

Jeff Tarsi: Good morning, Steve. And yes, I'll take it into two categories. Maybe we'll start with fertilizer purchasing, and you know, with the late start that we got to the spring, one of the fears I had was we're going to have a really tight window for fall application this fall. But with the weather developments we've seen over the last month, this crop is really progressing really nicely, and we're seeing the maturity dates move up quite a bit.

So I'm much more encouraged that we could have a lot more open window for fall application than I had anticipated when we got this crop planted for this year. As you know, we move a significant volume of nutrients throughout the year, and we're always layering product in; we're starting to fill our sheds now for anticipation of the fall. And we think that growers are-- number one, land prices remain very high so balance sheets are extremely strong right now.

We think that cash margins are going to be good again in what yield points out to and these growers are really adapted now to want to get a real head start on their nutrient applications. And most of them don't want to put it off to the spring if they can help it.

So if we get a good open fall, I'm going to anticipate that we're going to have a lot of movement as it relates to NPNK. And our indications today are, and I don't put a lot of weight on crop acreage intentions today, but everything points that we could see another 2 billion to 3 billion acres of corn next year. And that's going to put more emphasis on, I think, wanting to get some fall nutrients applied.

As it relates to the crop protection side of the business, as you mentioned, we had a tremendous first half with our crop protection business. Our revenues were up 16.5%. Our gross margins were remarkable at up 43%. And a lot of that, Steve, and we were very public about that in our past calls, that we started layering product in last year, really just as quick as we got out of the crop chem summer season. Anticipate a lot of supply chain constraints.

And I think you'll see us do something fairly similar to that this fall as well because as we're talking to our strategic suppliers, there's going to be a number of products that are going to be constrained again going into the '23 season. So, we've got as you know, we've got an excellent supply chain asset base. We're able to move product in quickly and back out, but we'll use some of those same strategies that we had last year in getting ourselves positioned to be able to service our growers going into the '23 season.

And again, the same way around our proprietary side of our business. We had an extremely strong proprietary plant first half. We got a lot of momentum going with that side of the business. And I can't even tell you how many supply chain constraints we hit during this past year in keeping our manufacturing plants going and such. But we feel like we're going to position ourselves nicely for the upcoming season as well.

Operator: Your next question comes from Adam Samuelson of Goldman Sachs. Please go ahead.

Adam Samuelson: Yes, thanks. Good morning, everyone. I was hoping to maybe keep going on the discussion on application rates and demand. And I guess just looking at your retail crop nutrient business in North America, the first half your volumes were down 21% year-over-year. If we do kind of LTM, they're down 14%.

So I guess I'm just trying to get a sense of how much do you think applications, especially on PNK but even on maybe nitrogen in some cases because of the way the spring played out, were below normal? Do you think that's a pretty accurate representation of the market kind of over the last 12 months?

And I guess, along those lines as well, we've been in a rising price environment for the last year that those price increases have kind of abated for now. How should we think about

kind of the per ton margins on crop nutrients in the back half and into next year if we maybe have a little bit more stability on the pricing side?

Ken Seitz: Well, good morning, Adam, and thank you for the question. Yes. So we would characterize the first half more as just the compressed season and, again, a strong fall in 2021 in terms of application rates. And again, this compressed spring, which we just didn't see as many crop nutrients go to ground and therefore, some carryover. And that's really the story of the spring in North America.

I think I'll just hand it over to Jeff. Jeff, if you can just carry on with the discussion we just had as it relates to application rates and then heading into the balance of the year here as it relates to certainly perhaps some moderation in margins on crop nutrients, but I mean, we haven't grown organically as well, and you can see that reflected certainly in retail's results as it relates to our supply chain, as it relates to expansion of sales to our digital channel and, certainly, our proprietary products. But Jeff, over to you to provide some more color.

Jeff Tarsi: Yes, Adam, thanks. And look, actually, I think the story when you start looking at tonnage and rates and things like that, I think the story actually goes further back than just a strong fall of '21. You have to remember that we had two

record falls from an application rate standpoint, both '20 and '21.

I know in my career in this business, I've never seen two falls as strong as those two back to back. And so, when you look at coming into--, and we have an ability in North America, we don't have the same ability in Latin America, Australia. But you have an ability to bank some nutrients with the soil types that we have here in North America.

And so when you look at coming into the '22 planning season, and I think we said and we even forecasted our tonnage will be back in the spring of '22 but when you look to the fact that you got into a late planting season, and a lot of these growers had their crops forward contracted. And you got to a point where they said you know what, I've had heavy, heavy applications, particularly from a PNK standpoint the last two falls.

We do soil testing on all this soil, so we kind of know what's available there for the crop. They got an urgency, and most of them had an urgency to want to get in and get that crop planted. And then we take it once we had in crop and we've seen our full-year nutritional rates increase this spring quite a bit because of that. So that's one factor as you look at it.

The other factor is, is when you look at crop shifts, and when I look at crop shifts, I look specifically geographically

where those crop shifts take place. And so, if you look at corn, where we lost corn to soybeans, we lost that in a big percentage basis in the South, and we have a tremendous retail network in that and a tremendous retail presence in that area.

And so you when shift a couple of million acres of corn to soybeans, from a nutritional demand standpoint, that changes significantly. And we came into this season thinking we would plant somewhere between 92 million and 93 million acres of corn; if I go by what USDA has today, we're more around 89 million acres of planted corn and stuff.

So we've listed the factors, but there are multiple factors that were involved. And then once you get in season, with it, I'm sure there were some growers that cut some rates back but they cut the rates back because they felt like they had carryover in soil.

One thing I always point out with growers today is, look, just on the seed, if we take corn, they have \$150 an acre investment in the seed and seed treatment. That doesn't include in what they have in (inaudible). There are no growers out there that's going to make that kind of commitment to cost on a per acre basis and then come in and say, well, I am going to greatly reduce my NPNK levels, knowing that's going to affect yield at the end of the day.

So our growers much more sophisticated in that manner. Again, we do a lot of soil testing. It's a pretty much our applications to-date are based on science. I think you also asked a question around margins, and look, we did have tremendous--while tonnage was down, I think our gross margins on a per ton basis were up by \$68 year-over-year, which was amazing.

And when I look even deeper into that, and I look at the nutritional contribution that our proprietary nutritionals made, they were \$38 of our margin this year in the fertilizer shift versus \$39 versus \$28 a year ago. So again, we had a tremendous step-up with our proprietary nutritionals, that's in the face of the fact that they went ahead and put the planters in the field. They decided they would treat crop more in season than maybe in the past.

So I feel good about where the nutrients went out at. I feel good about how growers are making decisions based on that. And every one of them out there in a high commodity price environment are shooting for the top ends of yields.

Operator: Your next question comes from Steve Hansen of Raymond James. Please go ahead.

Steve Hansen: Yes, good morning. Thank you for the question. I just wanted to follow up on some of the remarks earlier around potential contract discussions through the back

half of the year here. Do you want to perhaps elaborate a little bit more on sort of the timing and expectations around contract discussions with China and/or India and maybe perhaps the timing of those and just any general sense you can on pricing; I know that's a harder one.

Ken Seitz: Yes. Well, thank you, Steven. And yes, we're just I think as everyone is watching inventories in those parts of the world, and it is true that certainly in a place like India we're seeing demand rationing, where potash is simply not going to ground based on availability. So it's not sort of traditional potash application rates dwindling the inventories in country.

So that said, in a place like India, as I mentioned earlier, it's only 550,000 tons sitting on the ground in that country. So very close to zero. So it's hard to say exactly when India will be back in the market but if we say that there will be some reasonable nutrients going to ground, and we provided those ranges in the deck that we provided for this call, well, then, you would expect that sometime this fall and maybe later fall, India would be back talking about a new contract.

And then similarly with China, where again, port inventories, it's sort of a five-year low. And when we say 1.7 (inaudible) million tons sitting at port, recall that 1.5 million of that is the so-called strategic reserve. So very low

inventories in China, and we do expect that China will lay down some volumes as well in this fall season.

So like, India, again, we expect it's a 2022 event where they'll have to come have some discussions about new volumes at a new price. What that price will be in those contract markets? It's a great question, Steve.

If we go around the world and we see where are standard grade markets trading today, we've seen Southeast Asia trading at up to \$1,000 a ton; now that's moderated somewhat, but standard grade, those are some of the biggest standard grade markets in the world trading at those levels. I expect, therefore, that the China and Indian contracts will have to come up significantly.

Operator: Your next question comes from P.J. Juvekar of Citigroup. Please go ahead.

P.J. Juvekar: Yes, hi. Good morning. I have a question on seeds. Despite what was strong ag conditions this spring, seed sales were up only 4%. Can you break that down between price and volume because I think expectation was that price would be up mid-single digits? And then looking forward, what are your pricing expectations for next year given the higher input cost for seeds?

Ken Seitz: Great. Well, thank you for the question, P.J. And I'll pass that one over to Jeff Tarsi.

Jeff Tarsi: Yes, P.J. And look, when you look at it from a revenue basis and again when you have crop shifts, so if you look at corn, an acre, again, I said anywhere from \$125 to \$150 an acre when you sell in corn seed. And if you shift that to soybeans, you're shifting it from \$50 to \$60. So basically, you're cutting the revenue half in two when you make those shifts with it.

If I look at our seed portfolio, we're very happy where we are through the first half on the seed side of the business. I might add, this past year, there was very little price increase on seed going into the '22 planning season with it. But look, our proprietary business was very strong through the first half. We grew our seed margins by 30% on our proprietary business.

We were up on revenue and margins really across all regions as it relates to the seed portfolio and we've got an awful lot of momentum going in. Believe it or not, we've started our fall seed campaign here in the last week. And so we've got a lot of momentum going into that.

Now you talked about seed pricing going forward, and I think that we'll see most of our seed suppliers maybe missed that window last year to raise prices. I think we'll see something significantly different going into the '23 season. I think canola was probably likely going to be up 5% to 10%, corn

could be up as high as 10% pricing going into '23, an indication that soybeans will be up from 8% to 10% going into '23.

So we're going to see a rise in seed costs going into this new crop year. We were particularly strong on our Dyna-Gro across our cotton, soybean, and rice portfolio. And rice, this was our introductory year of our Dyna-Gro 263, which we've had a tremendous amount of success in getting that in as well. So we think when this is done, and the numbers aren't done for the year, but we think we'll see a market share increase across our seed portfolio this year.

Operator: Your next question comes from Christopher Parkinson of Mizuho. Please go ahead.

Christopher Parkinson: Great. Thanks for taking my question. Just kind of a corollary of a bunch of these questions on potash, but it seems as though the Russians have figured out how to utilize their port systems and get some product out there, perhaps a little bit better than expected but prices are still basically holding in.

It seems that Belarusians are kind of at the lower end of that in terms of normalized export rates. In terms of everybody trying to evaluate this over the next two to three years in terms of how tight the SD will actually be, what's your updated detailed assessment of that shortfall into next year, into 2023? I mean, how much can both countries really ultimately figure out

to get more tons '23 versus '22? And just perhaps your major considerations? Thank you.

Ken Seitz: Yes. Well, thanks, Chris, for the question. And yes, there's certainly a lot of moving parts, and we're all seeing reports of various forms of shipment were not coming out of Russian and Belarus.

Our estimate is that for the first half of 2022, Russian exports are down about 25%. So that's a pretty significant number. And then, with Belarus still not having access to tidewater via Lithuania, we estimate that their first half shipments are down 50%.

So, really quite significant out of that part of the world. And again, recalling that shipments out of Russia at least weren't constrained in the first two months of this year. As we look forward, for the balance of 2022 and into 2023, what might that look like? And, you know, for 2022, again, we expect the Russian shipments could be constrained by up as much as that 25% full year.

And then similarly, with Belarus for 2022, we expect exports could be constrained by 50% to 65% compared to 2021 level. So again, really quite significant. Our assumptions for 2023 show that out of Russia, at least, we'll see more volume coming, and some channels will be developed.

After all, Russian potash is not sanctioned. It's just that financing activities and those things are making it somewhat difficult at the moment. But for 2023, coming out of Russia, we think that production might be down in the range of, say, 5% to 20% from 2021 levels.

And then out of Belarus, again, much more significant because of these challenges getting to port and so out of Belarus, our assumption for 2023 is maybe 30% to 50% of production down from 2021 levels. So that's what's in our assumptions, in our numbers.

I know that Chris, we see reports, for example, of Belarus looking at shipping volumes via containers through the ports of St. Petersburg and (inaudible), you know I can tell you, I have experience of that from Canpotex, that's a real challenge.

They're only talking about 2 million to 3 million tons. So actually, the volumes are relatively small, but even for 2 million tons, that's 80,000 containers of potash. And at the load port those you need to tip up a container and stuff them full of potash, and even more challenging at the discharge port, they need to be equipped to tip those containers and empty them.

So I think it remains to be seen how successful that will be. But even if they're fully successful, it's only 2 million to 3 million tons, which, by the way, they have to do in order to meet at the bottom end of our range. So that's at least how, at

the moment, we're seeing things unfold and, hence, our view that the fundamentals for potash are going to remain strong right through 2022, right through 2023, and then it's going to be a supply-constrained market.

Operator: Your next question comes from Vincent Andrews of Morgan Stanley. Please go ahead.

Vincent Andrews: Hi. Thank you, and good morning, everyone. Wondering if you can just give us an update on sort of how your digital strategy in retail is progressing. Any new initiatives or just sort of some benchmarks as well as maybe what you're seeing competitively if your larger competitors are advancing these strategies as well?

Ken Seitz: Great. Thank you, Vincent and yes, here we are, and it's just past the middle of 2022, and we have pretty much surpassed (inaudible) that we put through our digital platform in 2021. So just over \$2 billion, and we're on track to meet our target of \$3 billion of sales through digital. And a lot of that has to do with all the work we're doing on digital agronomy, and success out in the field. But I'll hand it over to Jeff Tarsi to give you a little more detail and color.

Jeff Tarsi: Yes, Vincent, thanks. And as Ken mentioned, we continue to make a lot of progress as it relates to our digital initiative, our digital platform. Our people in the field are really engaged in what we call a digitally enabled sales. As Ken

mentioned, we put over \$2 billion through that category year-to-date. And our people getting really comfortable with using these tools. What I'm excited about is this fall, we released our Echelon 2.0 as it relates to digital, and that's pretty much around our precision agriculture. And I think that's where the real value capture is for our business and our industry.

Our growers are getting more and more keen to using these digital tools, and our agronomists particularly this gives them a heck of an advantage in being able to look at our growers, look at it by on a by-field basis and make recommendations that just use a lot of data and a simulation to build the best crop solution going forward that allows our growers to maximize ROI and it also allows us an opportunity to capture margin as well with it.

And so it continues to be a work in progress, and I don't think we'll ever see it not be a work in progress. As new technology comes along we're really busy out trying to mop as many of our growers' fields as possible as it relates to that. And again, like I mentioned earlier, we've started our fall seed campaign and a big part of our fall seed campaign right now is being able to use our seed selector, which is embedded in our digital platform. This helps our agronomists make the best decisions going forward for our growers on what germplasm we want to place in which fields.

And again, to give our growers the best opportunity for ROI. Our digital platform is also core to our platform around sustainability in carbon, and it will play a very, very essential role in that. We had some great pilots last year related to carbon sustainability and we've been very public and committed that we're increasing those acreage by 3x this year.

And so that platform plays a significant role. And as you know, sustainability and carbonate will play an increasing role going forward in the future of agriculture, and I don't think that anybody out there is better positioned than Nutrien and Nutrien Ag Solutions is to capture that value going forward.

Operator: Your next question comes from Josh Spector of UBS. Please go ahead.

Josh Spector: Yes, hi. I was just wondering if you could share some thoughts on China. And specifically, anything you're seeing on production of nitrogen and phosphate. And I know we're in an export-constrained environment right now given the limitations there. But is there any signs of an inventory build or change in production strategy that could foreshadow any shift into next year?

Ken Seitz: Well, thank you for the question, Josh, and I'll pass that one over to Jason Newton.

Jason Newton: Good morning, Josh. Yes, we've seen, I think, to some extent, the industry in China, both from a

nitrogen production standpoint and phosphate, get surprised to some extent by the extended restrictions on exports that have taken place.

And so the second half of 2022, urea exports are really constrained and restricted by the government, and on phosphate export quotas have been put in place, which will reduce export volumes. Prior to that, in the year, urea production actually was up year-over-year. So, despite the fact that exports are down significantly, in the first half of the year, down from over 2 million tons last year to just over 700,000 tons this year, production rates were up, which in part points to higher domestic use, but I think to your point, also domestic inventory is rising.

And we've seen operating rates decline since those added restrictions have come into place. And domestic Chinese prices are declining so that the spread between the domestic Chinese price and the export price has widened as a result.

On the phosphate side, capacity utilization rates have definitely declined. They're estimated to be below 50% today. And that's one of the factors in phosphate that's produced global sulfur demand, and you've seen a dramatic decline in sulfur prices as a result in part of the reduced demand from China.

As we go into 2023, the big factor to watch will be how international prices perform versus the domestic market in China because the government in China appears to want to target lower prices for Chinese growers. And with constrained supplies globally, it certainly appears to be supportive of international prices. And so, we'd expect some form of restrictions to continue into 2023.

Operator: Your next question comes from Ben Isaacson of Scotiabank. Please go ahead.

Ben Isaacson: Thanks very much, and good morning. Your competitors increasingly taking advantage of nitrogen export opportunities and moving product outside of the U.S. Their system obviously is set up a little bit different than yours. As you look forward over the next five-plus years, and of course, you're building a new plant in the U.S. Gulf, do you see yourself able to take advantage of export opportunities for nitrogen, not just on the clean ammonia side, but really for overall nitrogen? Thanks.

Ken Seitz: (inaudible), Ben, and thank you for the question. I'll pass that one over to Raef Sully.

Raef Sully: Yes, Ben, the simple answer is yes. And what I'd point to is the fact that we've been exporting more UAN this year than we've done previously. We're also actively looking at opportunities for exporting more ammonia instead of urea and

UAN. And part of the work we're doing in brownfield expansions is to give us more flexibility to export as and when those activities or those opportunities occur. So the answer is yes, we're actually doing it now, and we're planning on expanding our capability of exporting in future.

Jeff Holzman: Operator, we have time for one more question.

Operator: Your next question comes from Michael Tupholme of TD Securities. Please go ahead.

Michael Tupholme: Great. Thanks for taking the question. My question relates to potash demand and the rationing we've seen this year. You narrowed your 2022 global potash shipment guidance, and you're still looking at a meaningful year-over-year decline in global potash demand this year due largely to the global supply constraints. I know you haven't given guidance for 2023, but I'm wondering if you can share any thoughts you might have on what the supply-driven pullback of potash demand this year likely means for potash demand as we look out to next year and then how that might feed into the pricing outlook?

Ken Seitz: Well, thank you for the question, Michael. And yes, there's a number of moving parts there. Obviously, some (inaudible) talked about as it relates to challenges in Russia and Belarus, but at the same time, we, ourselves, as you know, are increasing production. So, like I say, a number of moving

parts. But I will pass it over to Jason Newton just to provide a little more detail on our assumptions.

Jason Newton: Sure. Good morning, Michael. I think Ken touched on it a little bit earlier as well, as we look towards 2023, our expectation for Belarusian supplies would be pretty much in line with where the range is this year, just given the expectation of continued port restrictions there.

For Russia, also, I think just given that we have narrowed our range this year, if we look year-over-year, we expect them to be down 2 million to 4 million tons this year, would probably widen the range a little bit going into 2023, but in that same sort of range.

The one factor to watch for 2023 is that Nutrien will have additional volume to insert into the market. And so there is potentially increased supply available that will if you think what the range of shipments would increase that range of shipments next year, probably in the range of 1 million to 2 million tons versus this year's levels.

But we know that because of the demand rationing that's occurring this year, there's likely to be pent-up demand. And so any surprise to the upside from a supply perspective, we think will be absorbed, particularly as we look at agricultural fundamentals, and the strength in demand should continue into at least the first half of 2023.

Operator: There are no further questions at this time. I would like to turn the conference back to Jeff Holzman for closing remarks.

Jeff Holzman: Okay. Thank you for joining us today. The Investor Relations team is available for any follow-up questions. Have a great day.

Operator: Ladies and gentlemen, this concludes your conference call for this morning. We would like to thank everyone for participating and ask you to please disconnect your lines.