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Corteva, Inc. (CTVA)

Investor Day

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MANAGEMENT DISCUSSION SECTION

Kimberly Booth

Vice President-Investor Relations, Corteva, Inc.

Good morning and thank you for joining us. I'm Kim Booth, Head of Investor Relations for Corteva. It's great to have you here with us today. We have prepared presentation slides to supplement our remarks during this call, which are posted on the Investor Relations section of the Corteva website and through the link to our webcast.

We'll open up this morning hearing from Chuck Magro, Chief Executive Officer; Tim Glenn, Executive Vice President, Seed Business Unit; Robert King, Executive Vice President, Crop Protection Business Unit; Sam Eathington Executive Vice President, Chief Technology and Digital Officer; and Dave Anderson, Executive Vice President and Chief Financial Officer. We'll then proceed to a joint Q&A session with these leaders. For those of you in the room, we will wrap up the day with an R&D showcase.

During this call, we will make forward-looking statements including, but not limited to, our expectations about future financial and growth targets, product development pipelines, and our strategic and capital allocation plans and strategy. These statements regarding our expectations about the future are based on current assumptions and expectations that are subject to various risks and uncertainties. Our actual results could materially differ from these statements due to these risks and uncertainties, including, but not limited to, those discussed at this event and in the risk factors section of our reports filed with the SEC. We do not undertake any duty to update any forward-looking statement.

Please note in today's presentation, we'll be making references to certain non-GAAP financial measures. Reconciliations of the non-GAAP measures can be found at the end of this presentation, along with our supplemental financial summary slide deck, available on our Investor Relations website.

After a short video, Chuck will take the stage to kick off the day's events. Welcome to Corteva's 2022 Investor Day.

[Video Presentation] (00:01:57-00:03:37)

Charles V. Magro

Chief Executive Officer & Director, Corteva, Inc.

Good morning, everyone. It's nice to see so many familiar faces. Thanks for being with us today and welcome to Johnston. You probably all know that this is the home of our global Seed business. Since I started with Corteva about 10 months ago, our company has been focused on getting us to this point. So, we're pretty excited to share with you what we're thinking.

I think we've got a great plan. We've got a great strategy and I'm more excited than when I started. Today, we're going to share with you what's new and what we plan to focus on to accelerate our performance and growth potential of the company. But first, let me just take a minute to remind you of the historical relevance of where you are today. Almost a century ago, just not far from here, a young farmer named Henry Wallace founded Pioneer Hi-Bred. This was the first hybrid seed company in the world. Since then, farmers have experienced a sevenfold increase in yield. And for those that are going to join the field today, you're actually going to see that increase in just a couple hundred feet. It's pretty remarkable. Hybrid seed is one of the reasons why we can feed 7 billion people on the planet today. And this innovation and farmer focus is what makes up Corteva today.

As you all know, Corteva came together in 2019. We have a very strong purpose and set of core values, and we're proud to be an integrated ag tech company, and we now have a clear strategic focus. We've delivered a lot of value since then. The leadership team will walk you through some of the financial performance. I hope you would agree it's quite impressive. I quickly just want to cover a few comments on the leadership team. We believe that we've assembled a very diverse, strong, experienced leadership team. Many of us are operators or functional experts, and we're all passionate about creating long-term value and shaping the future of ag.

I have three key messages for you today. These messages will resonate for the entire morning. First, we have refined our company strategy, our operating model and our culture, all designed to meet the global challenges of global food security, climate change and the energy transition, but also driving greater value for farmers and allowing Corteva to reach its full potential. Second, we have developed a new financial framework for value creation that is largely in our control and will accelerate earnings and margin performance. And third, we have a very attractive long-term growth profile, fueled by our innovation engine that is unique and different from others in the industry. Many of you know me, I've been in the ag industry for quite a long time now, and I believe that these three characteristics are what make Corteva a very special.

Before I dive into the Corteva strategy, let me just take a couple minutes to talk about the ag fundamentals the way we see them. Most observers don't consider agriculture to be a growth industry, but ag demand has grown annually over the last 50 years at an average of 1% to 3% per year. So while it's modest growth, it is remarkably consistent. This trend is expected to continue, which you can see on the chart. In fact, we expect growth rates for sustainable products and biological products to grow much faster than the traditional ag products. In fact, by 2035, we are expecting biologicals to make up 25% of the total CP market, largely driven by their favorable environmental profile, and of course, the flexibility that they offer farmers.

The top right is what Corteva brings to agriculture, in one word, yield. Global yields have increased by more than 30% in the last 20 years, allowing us to produce more with less. The bottom right is an example. It shows the additional area that's needed if we were to hold yields at 2002 levels. The yield increase over the last 20 years has prevented approximately 240 million hectares from being used. That's equivalent to the average harvested area in the entire Western Hemisphere or more than 140 billion metric tons of CO2 equivalent a year not emitted because of production in yield. This shows the significance of ag technology and innovation, and to me, this is the mission of Corteva.

The short-term outlook is also very positive. We believe the next one to two years should support robust ag fundamentals, given the things we've talked about before, tight stocks to use ratios, average – above average price levels and the strong financial position of farmers. The current market expectation is that global grain and oilseeds markets need two consecutive normal crop years to stabilize global supplies. And the current corn yield forecast this season is expected to be below trend yields in North America and in Europe, not allowing 2022 to be a year of restocking. That is why we are still expecting that these attractive market fundamentals will be with us for a while.

Given that market backdrop, let's now talk about Corteva. Let's talk about the decisions that we are making and the priorities that we are setting to create long-term value for our stakeholders. We have refined our strategy to five choices. We plan to do business in 110 countries. That's a reduction of about 35 geographies. We will only focus on markets where there is strong support for differentiated technology. About 20 of these countries, we believe, are what we consider must win. They will have the full resources and support from Corteva, but there are some other countries in that 110 that we will only sell our technology and have virtually no Corteva infrastructure present. So, this represents a much more focused global geographic footprint for our company.

We also plan to narrow our product focus to crops that are relevant, large and have differentiated technology behind them. So in Seed, that includes corn, soybeans, canola or winter oilseed rape, sunflower, cotton and sorghum. We will also invest and focus on growing certain routes to market, including licensing and our new and rapidly growing Brevant channel.

In CP, the markets will be fruits and vegetables, corn, soybean, cereal and rice. And here, we will focus on sustainable ag chemistries, where we have differentiated or unique solutions for either the crop or the country. So when we looked at our total AI portfolio, we are expecting to reduce our AI portfolio by about 20% as we deprioritize several CP commodity products. So, Corteva will look much different. It will be a much more streamlined and simplified company.

What does this mean for R&D? Well, first of all, we believe today we have the most productive R&D results in the industry, and we intend to keep it that way. In addition to investing in our core sets of products and technologies, we will also make investments in what we call frontier opportunities to ensure we maintain a leadership position as the ag markets evolve.

So, we've set a target to invest approximately 8% of sales in R&D and innovation. That is an increase from today's levels. These refinements, we believe, will accelerate our performance and our growth. It will also allow us to simplify our overall company structure and reduce cost. So today, we are setting a new financial objective of delivering, on average, 100 to 150 basis points of margin expansion per year over the next three years.

How are we going to deliver this? Well, we are going to focus on four value catalysts going forward. First, portfolio simplification, which I've described, focus on core markets and crops where we have a unique or differentiated offering; royalty neutrality, starting with significant reduction in royalties driven by Enlist, but over time, becoming a significant licensor of technology; product mix improvement, growing our portfolio of differentiated products, including our Spinosyns and naturally inspired fungicide franchises; and finally, operational improvements across the company, driving price and productivity actions, we now expect to deliver approximately $400 million in savings between 2023 and 2025.

Now, Dave will cover the numbers in more detail, but this is expected to result in low-double digit annual compounded EBITDA growth. And that would take us to somewhere between 21% and 23% EBITDA margins by 2025. This is a significant increase from where we started just a few years ago.

Let's talk a little bit about R&D. Sam's going to provide a deep dive into our innovation and technology pipeline. But what I'd say right now is we believe our pipeline is worth approximately $24 billion at peak. And if you assume a 45% accretion rate, which is consistent with what we've seen in our existing portfolio over time, that would suggest very significant growth for Corteva well past the 2025 timeline. This makes Corteva an interesting investment thesis. We are both a value company with strong growth profile right through the next decade.

If you look at our pipeline, we evaluate over 3,000 R&D projects annually and only a handful get sanctioned. And the pipeline generates industry-leading return on R&D investment dollars. Let me highlight just a few examples which you'll be hearing more about today. In corn, we have an 8 bushel per acre yield advantage in the US, and our germplasm currently has a world record for corn yield at more than 600 bushels an acre. But our focus goes well beyond yield to include nutrition, and of course, sustainability. In soybeans, Enlist is quickly becoming the market leader in North America, and we expect to take that success to Brazil in the second half of the decade.

And in CP, we are focused on operating and creating sustainable differentiated products, and we plan to launch 10 new AIs by 2035.

And in addition to focusing on our traditional seed and CP markets, we see tremendous growth opportunities in what we're calling our frontier markets, including biologicals, bio-based fuels, and specialty protein and oils. Biologicals are expected to be the fastest growing CP segment in the industry. Now, they will not replace synthetic chemistry, which remain important tools for farmers to produce crops. However, biologicals have a growing place in the market as complementary, sustainably advantaged options for farmers.

Bio-based fuels are another growth market. We are expecting renewable oils in the US to grow by more than tenfold in the next decade, really driven by diesel and the aviation market adjustments. But bio-based fuels are really a global phenomenon as governments move to transition their energy products to sustainable sources. This could be another very exciting future market for Corteva.

And finally, specialty protein and oils are anticipated to increase consumer preference as consumer preferences evolve and change. Simply put, people want healthy, nutritious, sustainable food choices, and we believe gene editing technologies provide the potential to accelerate much needed advancements in this area, and we're excited about those prospects.

These three frontier markets represent future multibillion-dollar opportunities, but science and technology will be needed to unlock that potential. So, we plan to redirect and invest R&D investment and explore strategic partnerships in all three of these areas, and I would expect over time, generate significant value creation as a result.

Shifting gears a little bit just to talk about sustainability. First, we believe that our strategy is underpinned by four strategic pillars where we have looked at and we believe we can take a leadership role, and of course, make a difference. First, we're committed to sustainable innovation. Our R&D processes and systems have been modified and enhanced to ensure that sustainable products have a priority through our development process. In fact, nearly 90% of our new products that were launched since 2017 meet our sustainability criteria. We also have more than 1 million acres now enrolled in our carbon program, which we believe is one of the largest and most comprehensive ag carbon initiatives in the industry. We make it simple for farmers to sequester and abate carbon while growing their crops, and we are helping them get paid for their investment in sustainable agriculture.

We also believe that preserving and growing biodiversity is one of the most important focus areas for agriculture today. We accomplish this by focusing on yield. Producing more with less is the key to a healthy bio system. The perfect example of this is our Enlist herbicide. It was the first product to comply with the EPA's new Endangered Species Act approach, setting a new standard and providing farmers the tools they need to produce crops while reducing the risks to wildlife and habitats.

When it comes to greenhouse gas emissions, we have seen an improvement in Scope 1 and Scope 2 emissions. We obviously have more work to do in that area. And as an example, in Eschbach, Germany, we're finalizing the construction of a new energy efficient research center, which is allowing state-of-the-art crop protection innovation while providing minimal impact on the environment.

From an ID&E perspective, let me just say right up front, our people are the most important differentiator we have at Corteva. And we're focused on building a culture of belonging, increased representation and having a positive external impact. We've now set some targets for representation and we will report on those regularly going forward.

Let me circle back where I started. Why Corteva and why now? We have a very unique position in the marketplace. We're a leader in ag technology and are investing to succeed in both our traditional and our frontier markets. We've built a value creation framework, which is mostly in our control, to generate meaningful value over the next three years, and impressive growth over the next decade or possibly even more. And we have a significant financial strength and flexibility, which Dave will cover.

I would like to mention that the new $2 billion share repurchase program we just announced today, this is on top of the $1.5 billion plan we announced last year. I hope that that shows the board and the management team's confidence in our plan.

So, thank you very much. I'll be back to answer questions after the rest of the speakers. Let me turn it over to Tim now to talk about our global Seed business.

Timothy P. Glenn

Executive Vice President-Seed Business Unit, Corteva, Inc.

All right. Good morning again, and once again, welcome to Johnston, Iowa. I'm excited to share the story of our Seed business. Seed remains the highest involvement purchase for most farmers. And farmers have strong preferences for brands and for channels. And we have a strong track record of building advantaged customer relationships. We have leading technology positions. We have innovations that our customers value. And we look to build on these two things. And finally, we have an excellent opportunity to grow our Seed business while continuing to build upon and accelerate our margins.

So quick snapshot of our Seed business [ph] side as (00:21:25) we started the year, with roughly $8.5 billion of revenue, we have strong positions in the most important highest value markets, with North America continuing to be a point of strength. We continue to see significant opportunities to grow our business in both EMEA and Latin America regions. Our business is strongly driven by technology and our ability to work closely with customers and capture value for innovations. And we have a clear pathway to royalty neutrality by the end of this decade.

Now, let's take a look at the global seed market and how we define the addressable market for Corteva. The total seed market is roughly $54 billion, with a low-single digit long-term growth rate. Of the $54 billion, we've defined our addressable market at $30 billion. We get here by taking the crops we choose to invest in and overlay that with the countries where we're active. Corn is the only global crop, and essentially, we lead with corn in every seed market or every market where we sell seed. So, corn is really the driver.

For the rest of the portfolio, we're very strategic. And in fact, for – we only sell most other crops in a small handful of countries. The drivers for selection are the size of the opportunity, our ability to innovate and create value, our ability to capture value for those innovations and generate strong margins, plus factors such as the economic stability of the market and the ability to protect our intellectual property, all those things being important. With just over 25% of the value of the addressable market, we do have significant room for continuing to grow our Seed business.

As you are – as you look at our business in the four regions, you can see that corn is the driver of our Seed business in all the regions. But we also have important crops like soybeans in North America or sunflowers in Europe that support our position in corn and are very important to our customers. We strive to be first or a strong second in every market we choose to participate, and in the most important markets, we've achieved that position. It's important to emphasize, our focus remains on capturing a leadership position in the most valuable market segments, and we're highly selective in the markets where we're present.

So, let's take a step back on the Seed journey since 2019. We've been able to deliver a solid 5% top line and 14% EBITDA average growth since 2019 from a financial standpoint. From an operational standpoint, we completed a global brand rationalization. In the US alone, we retired 11 seed brands and we were able to capture share gains in key markets around the world. And we've made significant progress on reinforcing our leadership position in germplasm. We've also had very successful trade launches like Qrome corn in North America, Enlist E3 soybeans in North America and PowerCore ULTRA in Latin America.

When you look at margin expansion, we have established an internal capability and culture for capturing value on the innovations that we deliver to the market. And we streamlined our seed operations, capturing about $200 million of productivity through operational excellence and rationalizing our footprint, as we close 27 seed production locations around the world while we continue to support our growth with remaining footprint. All of this sets the stage for high-teens operating EBITDA growth through 2025.

And we've – as we've completed our strategic review, we're going to continue to intensify our focus on the most important markets. Corn and soybeans are identified as core crops, and we're narrowing the focus of our remaining seed crops to the most important markets. This will allow our research and commercial efforts to be further concentrated on those opportunities where we can capture disproportionate high share value and deliver the best technical solutions and best value to our customers.

While some things change, our ability to deliver innovation remains as a foundation of our Seed business. It has for nearly a century, and it remains what all customers expect when they commit to plant a Corteva seed brand or purchase seed that contains a Corteva trait technology. It starts with the best germplasm and the ability to create and evaluate over 100,000 new hybrids of varieties every year, knowing that less than 0.0001% of those new product candidates will ever be commercialized. We then layer on proprietary trait solutions that protect and enable the seed to reach full potential. And finally, the ability to position those products on a field-by-field basis, and to provide agronomic and crop management advice to our customers ultimately helps farmers achieve their production goals. All these factors come together to create value for our customers and a winning formula for Corteva.

As I said at the beginning of the talk, seed remains the most involved, and arguably, most important decision a farmer makes every season. Farmers have strong preferences for how they purchase seed. We customize how we do business based off of local market needs and conditions. And how we go to market is one of the most important business decisions that we make. The Pioneer brand is present in every country we sell seed, and we support that with the Brevant brand, a global brand that's focused on full service retail. And in a handful of countries, we have other brands that are focused on very specific markets or customer segments.

For farmers who choose not to purchase a Corteva seed or owned brand, our germplasm and trait technologies are available through other seed brands, further supporting our market position, so very strategic and very intentional brand deployment that ensures that we can achieve our business goals from a financial and operational standpoint and allows us to reach our full potential in every market.

The iconic Pioneer brand has been a leader for nearly 100 years and it continues to evolve to meet farmer needs today and in the future. At the heart of the Pioneer brand experience is product excellence, along with technical expertise and personalized service that enables the farmer to drive productivity and profitability in their operation. A local representative and agronomist work with the farmer to understand his or her unique needs. Together, they create a personalized plan on a field-by-field basis for the overall operation. The spills off our longstanding right product, right acreage approach. It also leads to very strong, loyal – brand loyalty by farmers, and sometimes, generate – generational relationships with customers. Our ability to stay close to customers gives us a unique perspective on how markets are changing and on understanding future needs in the marketplace.

And while the Pioneer brand has nearly a century of history, the introduction of the Brevant seed brand in 2018 is one of our most important actions since the formation of Corteva. Initially, the launch supported our position in Latin America, where we already had two strong established brands. And in Brazil and Argentina, both Pioneer and Brevant brands are now well-established as premium brands, and this has contributed to our strong share growth over the past several seasons. And we now have years of experience in Latin America to know that we can grow two premium brands in the market with minimal cannibalization or internal competition.

Brevant was launched in the US in 2020 for the 2021 planting season, and since, we've successfully gained a foothold in the US retail segment, which makes up roughly one-third of all corn and soybean seed purchases in the US. Since the launch in the US, we built credibility with our channel partners and leveraged the strong relationships that we have with them on the Crop Protection side. We have a very competitive product line offering that has performed well and satisfied our farmer customers. After two seasons in the US market, we're meeting our internal volume and profitability goals for Brevant, and Brevant will be a major driver of North America corn volume growth in the next three years, and it has attractive margins that are comparable to the Pioneer brand.

On the operations side, we have optimized our footprint with in-house capacity that's located close to the market and able to deliver reliable, high-quality supply to support our growth. Aligned with that, we have strategic relationships with third-party seed producers that support our internal capability in an efficient and flexible way. As you can see, the bulk of our seed production costs are incurred in the field. And while we'll continue to drive improvement in plant efficiencies, driving field productivity is key to supporting margin expansion. So we continue to drive using technology and agronomic and management practices that support increasing the number of saleable units from each production acre. We'll continue to have a very strong collaboration between research, seed operations and the commercial teams to ensure a disciplined lifecycle management process, management of SKU or product counts and balanced inventory levels that support market needs and working capital targets.

A significant lever to expand margins for the seed business is the path to royalty neutrality. We have a clear path to drive approximately $600 million of EBITDA growth over the next decade through a combination of decreases in royalty expenses and increases in royalty revenues. Enlist E3 as a significant driver initially as we transition to the trait technology and now as we move to our proprietary genetics with the E3 trait. And successive generations of trait introductions this decade plus patent expiry for some of our licensed traits will also contribute to this on this journey to neutrality.

Brazil's become the largest and fastest growing soybean market in the world with well over 40 million hectares in production and no sign of market – the market growth slowing. It also represents the largest gap in our seed business portfolio with Corteva having a low-single-digit share of this large and attractive market. It's one of the most high-tech seed markets in the world with over 80% of the market with traits for insect protection and herbicide tolerance and sophisticated growers who are focused on high-yielding varieties. Corteva's launch [indiscernible] (00:32:29) the E3 soybeans in Brazil with both insect control and herbicide tolerance that provides growers with another choice with outstanding performance. This technology is a key part of our strategy to expand our soybean seed share from the very low base and the Pioneer and Brevant brands and it opens the door for licensing opportunities through collaboration with other breeding companies and seed multipliers. Our objective is to capture about one-third of the market by the end of the decade. And by building this base of business, we're well-positioned to continue to expand our market share for both traits and germplasm well beyond that in the next decade.

The Enlist E3 system has been the most impactful trait seed technology of this decade, having captured over 45% of the US market since launch in 2019. And most important, over 80% of E3 acres are being treated with Enlist herbicide, ensuring that farmers are receiving full value for their investment in the system. Also, it is important to note that the adoption has been highest in the heart of the US Corn Belt with the Eastern Corn Belt region that's circled in green crossing 50% market adoption in 2022 and in the Central and Northern Corn Belt region that's circled in gray expected across 50% adoption in the upcoming 2023 season.

From a Corteva standpoint, approximately half of our branded seed volume this year was Enlist E3, and we're on a path to around 90% conversion by 2025. And we're seeing a rapid acceleration of proprietary Corteva germplasm with the E3 trait being commercialized. With our branded sales moving from approximately 25% Corteva-bred varieties this year to around 95% in 2025 and the impact on profitability is meaningful. As we transition from the Roundup Ready 2 Xtend trait in a Corteva brand to a Corteva-bred E3 variety, we see a tripling of our soybean margins.

And finally, many factors will impact the peak adoption of Enlist E3 soybean technology in the US. But given the current market and regulatory environment, we believe the technology will reach approximately 60% market adoption by 2025, up from prior estimates of around 50% peak adoption.

Finally, just to reinforce what the seed business priorities are as I close. First, it's about focused growth especially in our core products and in high-value markets. Second, it's about continued product excellence. It creates value for our farmer customers and gives us the opportunity for attractive margins. We're going to continue to pursue a differentiated customer experience whether through the Pioneer or Brevant brand as service is key to success in seed. And finally, we're going to maintain a relentless drive to deliver margin expansion through proprietary technology, efficient operations and being able to create and capture value from our [ph] cost (00:35:36), from our innovations across all points in the ag cycle. Thank you. I look forward to your questions.

And with that, I'm going to turn it over to Robert.

Robert King

Executive Vice President-Crop Protection Business Unit, Corteva, Inc.

Good morning. I'm delighted to be here with you today. As Chuck laid out, we have an exciting future ahead of us to become the best ag technology company in the industry. For crop protection, that means delivering a sustainable, advantaged and differentiated solutions to the grower. But before we get further into the strategy, let's stop and talk about the market a little bit and the business. In 2021, we delivered about $7.3 billion in revenue and 16.5% margin. And as you know, we spread across all four regions with North America being the largest. But this year in 2022, we'll talk about a little bit more in a minute that we've made a significant step change forward as a company.

And we'll finish up this year with Latin America being about the same size as North America from a region standpoint. The core strengths of the business thus far have been around a couple of things. One, we've talked about quite a bit at our new product portfolio. These new launches have delivered $1.5 billion in 2021. We'll be near $2 billion this year as we finish out 2022. And the second thing is around this differentiated sales where we make up 50% of our total portfolio as differentiated. So the way to think about differentiated is products that are clearly advantaged in the marketplace in terms of their performance, their value creation, and their sustainability profile.

Looking at the market, the global crop protection market is about $65 billion. So quick math, $7.3 billion in the top right hand corner there, we're about 11% of market share. The sales by crop, looking again at the top right, matches very closely to the market split which gives us a good, diversified position in the market. Today, the herbicides makes up a little over half of the total sales. And a key driver in this segment is Enlist. And Tim talked about the platform. We're seeing a really strong demand for the overall system. And for crop protection, about 80% of the Enlist bean acres are getting Enlist herbicide over the top.

So, let's talk a little bit about the big grow crops. Or while we do talk a little bit a lot about the big grow crops and rightly so corn, soybean, it's a big part of our business. But it's also important to realize that the largest gross profit and the largest gross margin crop in crop protection is fruits and vegetables. And it's shown there in the dark gray. For us, it makes about 9% of the total market share. And these are with the higher margin products that we sell. With the balance of this crop portfolio, we're well-positioned to grow at or above the market for the foreseeable future.

So, since 2019, the story of what have you done for me lately. Our business has grown by 11% CAGR with EBITDA growing slightly above that. But this year, like I talked about, we accelerated our execution and in forward. Revenue growth would be in the mid-teens this year and EBITDA will be about 2x of that. So the areas of our strategy that's providing this accelerated growth includes a few things. First, our ability to introduce new products and technologies. As we've said in earnings calls and different discussions, these new technologies are being pulled by the grower. They're being pulled because they're helping growers solve problems that continue to face them today. It's tough being a grower nowadays, and these things are helping make their life easier.

So other areas that includes us, our strategy of price for value coupled with productivity. These two things have helped us continue to fend off the headwinds that are coming from around the world in the market. And finally, our supply chain organization has performed tremendously well. First half of this year, delivered about 16% more volume on a year-over-year basis in the face of headwinds that we all know has been difficult over the last 12, 18 months for sure. So if we build off successes of the past plus we put the changes that we're going to talk about more in place, we believe we have a great future for value creation and growth that will deliver meaningful EBITDA margin results into 2025.

So as Chuck talked about earlier, simplification, focus and acceleration, three things that we have to get right. We inherited a lot of complexity from our parent companies and this caused distractions as well as a lot of non-value-added work. So much like when we grow up, just because your parents did things a certain way it doesn't mean that you always have to do on them in the same way. Well, that applies to us as well. So simplification across the board is an opportunity that we intend to capitalize on. To become the best crop protection company, we've got to accelerate our ability to deliver differentiated and sustainably advantaged solutions. We've already taken steps in our organization this year to align by business units. Talked to a few of you about that before we even started today. This provides good role and responsibility clarity as well as it's driving accountabilities, people know what they need to do to help deliver the overall aspiration.

For Tim and I, it is crystal clear what we're responsible for and accountable to. Chuck tells us often. But also, it's clear of the importance of us working together closely because without that, we wouldn't be able to maximize the value creation across Corteva.

Our focus in crop protection will be in three years of execution. We'll focus and simplify the resources to be on 5 core crops and 20 countries. Historically, we've tried to be everything, everywhere. So we'll narrow down where we're working. We'll deliver a competitive advantage with our supply chain because we're going to shift the overall strategy to be more flexible, capital light and we'll lower operating costs to be more competitive. And third, we're going to balance the portfolio with new products coming out of the pipeline and filling the gaps with strategic partnerships in biologicals and seed-applied technologies that will accelerate these two segments in our portfolio.

Part of the shift is going to come from ramping up the innovation engine where we'll allocate more money into R&D to drive that differentiated portfolio. And it will also come from rationalizing lower performing products. We're going to exit about 12 active ingredients over the near term and about 400 formulations during that same time. For example, you would have recently heard a decision to exit the methomyl outside of Brazil and the resulting sale. There'll be more like this as we continue to execute these strategies in the near future.

The portfolio shift starts with ramping up our innovation engine and focusing on these five core crops. Over the past few years, we've had a solid track record of launching new products. And these products are covering a wide range of crops. But by 2024, we'll have 10 new products in the hands of growers. They'll help them be able to form and meet the challenges that they're facing. And 9 out of 10 of these will be sustainable innovation -- will meet the sustainable innovation criteria that you will have seen in our sustainability report.

So these new products are obviously growing faster than the market. We've talked about them and you'll see there about 38%, so call it 40% CAGR. These are the ones we talk about will finish up about $2 billion this year in total revenue, well ahead of the curve that we started out with this on, so we're doing well from that standpoint.

When we take these new products and we spread them across the five core crops, plus our ability to leverage them into other crops when it makes sense and when it's easy, this puts us in a great position with the momentum to be able to move our portfolio to more differentiated over the next few years. So we can talk about portfolio transformation. This is a key part to our value creation. In about 2025, we expect it to be about two-thirds of the total portfolio and this is primarily due to the AI shifts that I talked about and this continued demand of this new technology, again, that's giving the growers a different choice and an advantage in the field. With this demand growth and the differentiated technologies, we're in a very good position to continue our journey to become the best. So you will have seen on the past slide the balanced pipeline that's going to further build out the segments, okay?

But let me drill down one second on the segment a little bit more. Specifically, I want to talk about the global insecticide portfolio. I believe the story on this is not well-understood including the competitiveness of this – of the strength of this portfolio. It's all underpinned by the global [ph] Spinosyn (00:46:05) franchise. Since 2018, this insecticide portfolio has transformed and delivered significantly more margin expansion. The proprietary technology of this naturally derived insecticide that we call spinosyns has helped build a strong, differentiated portfolio in the segment. The demand of these products continues to increase and push the shift of the overall portfolio more towards differentiation.

To help enable this move, recall that we just completed a major capital project. We expanded spinosyn capacity by about 50%. By next year, spinosyn will be a first molecule that will reach $1 billion in total sales. And by 2025, we expect this added capacity to be fully utilized. So it's products like these that we continue to innovate, improve even after launch that allows us to continue to add value well into the lifecycle of the product.

Another part of this journey is around biologicals. As I mentioned before, we need to build out a balanced portfolio which includes Biologicals that need to be a significant part of this balance. So today, Biologicals market makes about $9 billion total in the world. We expect that to grow by more than 3x about $30 billion by 2035. More importantly though, this is going to make up about 20% to 25% of the total crop protection market by 2035. And we hope that this this split is reflected in our portfolio as well. Biologicals is an area that we need to play in and we need to win if we're ever going to be the best. So additionally, it also fits well with our strengths in crop as well as in seed R&D. So it allows us to use that across [ph] both (00:48:06). And our existing portfolio of synthetics makes really good formulations that help the growers in new and unique ways. In parallel, we're also going to build out our internal capability of Biologicals discovery and development, capability in R&D.

So the final part of this transformation puzzle iss deliver a more competitive cost position in operations. Today, we have 7 synthesis plants around the world, 10 formulation packing plants that are positioned regionally near customers. Historically, our parent companies were built on strong internal manufacturing expertise. Think of Dow and DuPont and what that means in the manufacturing industry and what they brought. But to be competitive in today's ag chem world, we've got to pivot and improve our external manufacturing partnerships as well.

And our transformation journey is going to deliver a capital-light, lower cost alternative than today. It's going to include external manufacturing partners that'll give us a better balance of internal and external manufacturing. Today, we're about 25% internal manufactured only. So in other words, 25% of our products are only made in our own plants. We'll shift that to about 10%. But what that means is we're going to be more dual-sourced which is going to give us better flexibility around the world to deliver this new model. But to do this, we've got to build up and have a robust IP strategy that will allow us to have more partners in the space. And we'll also capitalize on this regional alignment with our customers to provide better reliability, responsiveness and flexibility in our supply chain.

When you think about this end-to-end supply chain, we're going to make a structural shift away from being transactional and centralized. This shift is going to deliver strategic partnerships from early stage discovery to suppliers and customers. In short, we're going to partner with those that will grow with us. The shift also will deliver an enhanced regional operations hubs where we have the expertise and capability to flex for new product launches. An example of that is Adavelt which is one of the new products that will be launched in Q1 of 2023. This is going to be manufactured in Spain and Europe is the largest market for Adavelt. And the shift also will help us be even more fiscal disciplined in how we approach cost control and [ph] agile (00:50:49) productivity. Productivity as a way of life will help us continue to offset the increases and it's going to drive this continuous improvement mindset throughout the organization.

So let's wrap things up and I'll share with you just the four priorities that will deliver in crop protection. We will deliver value creation at the farm gate. We'll transform how we work. We'll build the competitive advantage from operations and we will accelerate this continuous improvement mindset to protect the bottom line. So like I said at the beginning and Chuck shared, it's an exciting time to be part of Corteva. The team is engaged, they're ready to take the next steps further to be the best crop protection player. I hope you too look forward to taking the journey with us and thank you for your time and listening today.

And now, it's my pleasure to introduce Sam.

[Video Presentation] (51:50-52:39)

Sam Eathington

Executive Vice President & Chief Technology and Digital Officer, Corteva, Inc.

Well, good morning, everybody, and let me also say welcome to Corteva. I apologize I was unable to be there, but safety is first and foremost. I'm extremely excited to share with you our R&D pipeline. We're going to see a little bit of our products here today. And those of you that are in-person will get a chance to see a lot of these out in our field demos. I grew up on a farm, and one of the things I know is farmers really need improved products to solve farm level and field level-specific challenges, all while helping improve the overall sustainability of agriculture. Here at Corteva, we're meeting this challenge. Today, I'm going to share with you how the R&D program enables us to win in our seed and crop protection business and show you some real products from our leading pipeline of innovation that are improving agriculture and bringing a return on our investment. So let's go ahead and jump in.

As Chuck mentioned, we have a very clear strategy about where to play and how to win. Our R&D program is aligned with the business strategy you just heard from Tim and Robert. Now, as Chuck said, we're increasing our R&D investment really to maintain leadership in core areas like plant breeding and crop protection while building on our strengths in proprietary and differentiated products and investing for future growth. M&A opportunities and partnerships [indiscernible] (00:54:17) part of that strategy.

So to win in the seed, this really comes down to three basic concepts, to increase yield per acre that delivers more value to our customers and the $30 billion addressable seed market while minimizing the footprint of agriculture. We have to do this by developing and launching our proprietary traits and transition away from biotech trait royalties by the end of the decade, improving EBITDA by about $600 million. There's been a lot of questions about our ability to develop and deliver biotech traits in our past. I'm here to say as Corteva, we can develop and deliver biotech traits and when we do that, we get a significant return on this investment. As a proof point, today, our company has created traits throughout about 45% of the North America soybean acres and over 60% of the North America corn acres.

And finally, we're accelerating our investment in new breeding techniques that unlock additional value in our germplasm, our traits, and new frontier business opportunities. And we win in crop protection again with three simple concepts, right, increasing the yield protection per acre. It delivers more value to our customers and the $65 billion addressable crop protection market.

We do this by increasing our differentiated and patented products in our portfolio. And finally, we're accelerating our journey to more sustainable crop protection concepts that positions our pipeline to deal with global regulatory pressure. This includes adding enhanced biological products [indiscernible] (00:56:07) problems and has a market approaching $30 billion by 2035.

So now, let's take a look at our pipeline investment and the value we create. We have a leading industry R&D pipeline, a return on our investment. We invest about $1.2 billion in 2022. It's all focused on a pipeline of portfolio products that have up to $24 billion at peak net trade revenue out to 2035. We see significant opportunities for the company growth and are investing in a discovery program with both internal and external focus that continues to identify new opportunities. Along of this, we see higher margin opportunities as we bring proprietary biotech traits, differentiated crop protection products to the market.

As I mentioned, our R&D spend is aligned with our business opportunities. And every year we go through a rigorous process where we evaluate roughly 3,000 projects, and we allocate resources to the highest priority projects, and we stop projects that are not meeting milestones. In 2001, our program had a very strong progress in both our seed and crop protection pipelines, along with tremendous success in our regulatory program. And 2022 is on track for another strong year.

Now, sustainable innovation is really the key enabler of our business. We've set the goal that all of our new products will have at least one area of improvement and sustainable criteria by 2035. Today, about 90% of our crop protection pipeline meets our improved sustainability criteria. And our seed pipeline is in a similar shape. These products solve farmer problems. They work, but they're also improving the sustainability of agriculture. So let's dig into a little bit more detail starting with our seed pipeline. That's what happens when you have to be isolated. Our plant breeding program, right, that really is the premier plant breeding program in the world. I was trained as a plant breeder. And I'm proud to be part of the history of this company. And the history we have, right, Corteva has the longest history of commercial hybrid corn breeding in the world. In fact, when you go to the fields a little later today to look at the demos, you'll be walking on the same fields where the global hybrid corn industry started. In these fields of innovation, you will see more of the future of agriculture.

The global farmers really want to plant the very best seed. They know their maximum yield potential really starts with the selection of seed. And our team of global plant breeders utilizing technology, scale and speed has created the world's most characterized and evolved corn germplasm tool in the history of humanity. This has resulted in Pioneer being the number one seed brand globally in this $30 billion addressable market. But every year, we release a new class of products. These products have improved performance to sustain the yield advantage expected in Pioneer, our regional brands and now Brevant seed. Our yield potential is confirmed in farmer fields with the significant yield advantage and the only germplasm pool to create products that produce over 600 bushels per acre in multiple years in multiple fields.

What is yield potential of over 600 bushels per acre in a national corn yield record of about 177? You can see we have a lot of value creation opportunities ahead of us. And we apply our expertise to all the crops and geographies we participate in. For example, that is what our team has done in Europe in the silage corn market, which is about 40% of the corn market today. M3 silage corn is really changing the European silage corn market, right? These products have more silage yield, resulting in more energy and more milk production, all while decreasing CO2 equivalent emissions compared to equivalent products. This is a win for food production, energy production and the environment.

Another example of how we're leveraging our plant breeding program is in the renewable oil space. Renewable oil is projected to grow at about 8 billion gallons here in North America and about 17 billion gallons globally by 2030. For the last couple of years, we've been leveraging the power of our plant breeding program, working with a number of external partners to really create a new and novel double [ph] cropping (01:01:33) system. The system is the planting of winter oilseed rape in the fall, followed by a double crop of soybeans which enables farmers to significantly increase the amount of plant-based oil on the same land.

Testing we've done the last couple of years is demonstrated that both crops can mature, we can achieve our target yields and the agronomics for characteristics like how to manage weeds, control insects, fertilization rates are well-established for both crops. The oil from this system has almost a 2x price premium, and the winner oilseed rape crop is eligible for cover crop carbon credits. So strategically, we'll be collaborating with downstream seed processors to unlock the full value. And this system creates value, more value for our farmers, our seed processors and producers while generating more oil on the same agriculture footprint, helping to solve our need for greener energy.

New breeding techniques are really a new chapter in the story of plant genetics. I believe this technology is going to be as transformative as biotechnology has been to the seed industry. And we have a leading position in new breeding techniques based on the strength of our lead germplasm, our genomic knowledge, our intellectual property and gene editing and the reduction of practice over the last decade we've been doing. We have used gene editing technology to create a wide range of changes in plants from simple plant architecture adjustments like reduced-stature corn to complex phenotypes like grain yield. We can modify major genes that enhance or reduce stature corn concept which gives farmers new options to manage plant density and crop agronomics. And we can also modify genetic pathways that creates new genetic variations that our plant breeders can utilize in their selection programs. The power of these changes really allow us to capitalize the value on this technology through either major changes or through genetic variation that we can use to improve yield rate of genetic gain. You'll get a chance to see these products out in the field a little later.

Another example of this is what we're doing with disease control. And globally, plant diseases can reduce yields by about 16%, resulting in billions of dollars of lost plant production. Just in North America alone last year, farmers lost about $1 billion of farm gate value to a handful of plant diseases. And climate change, unfortunately, is making the problem worse as we see the spread of new pathogens like tar spot in corn and development of new bio types and races. So, we're trying to change that situation by applying new breeding techniques that enhance disease-resistance using the natural genes that already exist in plants. Gene editing techniques allow us to optimize the genome structure for plant resistance by consolidating many genes into one genomic location that simplifies the plant breeding program so more of our products to have broad, robust disease-resistance faster. And our plant breeders can spend more of their programs selecting for increased yield improvements. We validated this concept in corn where we've redesigned the native genes into what we call a disease super locus that currently controls the number of major US corn diseases.

While we've utilized gene editing, we've also had transgenic solutions. So out in the field demo, you'll see where we're using transgenic solutions to control Asian Soybean Rust, one of the more difficult diseases out in the field. At Corteva, we've also delivered a number of value added oil and protein products across soybean, canola and sunflower. And we expect this consumer-driven space to continue to grow in size and the scope of product concepts.

To give one advantage of our new breeding techniques platform is the ability to make changes in oil and protein characteristics, go ahead and collaborate and create closed loop integrated systems that enables us to sharing more of the downstream value while bringing products quicker to the marketplace. We're working on a range of concepts from Animal Feed segment where we've been changing the protein profiles in soybeans to also concepts for a direct human consumption. An example of this is how we've expanded the expression of the native soybean, legume, hemoglobin protein to now expressing the seed, making it easier to produce this protein at scale. We see a lot of opportunity in this frontier space going forward.

[indiscernible] (01:07:00) control as a global farmer problem and corn rootworm is $1 billion problem. We've optimized both insect control and product performance, giving farmers the best outcome that they possibly can get. We're on track to deliver a decade-plus of corn rootworm control with improved yield performance, all while reducing our trait royalty requirements resulting in a double-digit gross margin improvement. Today, Qrome provides corn rootworm control and has a broad acre yield advantage versus our competitor products. Our next-generation product, Vorceed, is bringing the advantage of the Enlist weed control management system and some additional corn rootworm control on top of the Qrome yield advantage we have today.

As we move to the next decade, we will launch our third generation below ground insect control genes that are non-BT sources, that are providing new modes of action that are not present in the market today, thus creating another decade of optimal corn rootworm control. These new modes of actions will expand the spectrum and extend the durability controlling corn rootworm.

While I'm not showing it today, our story is the same for above ground insect control. We have multiple new genes providing new modes of action and you'll get a chance to see these products out in the field. Together, this gives us new and differentiated insect control products that will solve farmer problems and can expand our outlicensing and stacking options.

And our biotech trait transition story continues with insect management and soybeans in South America. Last year, we launched our Conkesta Enlist E3 platform in South America, giving farmers a new choice for insect and over-the-top weed control options. I can say we're very pleased with our launch results. Farmers had excellent insect control, had superior weed control options with Enlist, and industry yield performance in these initial varieties.

We're ramping up our transition into proprietary genetics, expect to be on about a third of the market by the end of the decade. Now, just behind this is our second generation lep control product which is advancing through our pipeline and similar to our situation in corn insect control, it has multiple new modes of action, some of which again are non-BT sources. This will bring growers additional insect control options and durability. And with our insect and weed control traits combined with our plant breeding capabilities, we are now on track to build a sustained soybean business in South America.

And we see a lot of opportunity to enhance the performance of our products with optimized agronomic recommendations. And Granular Insights platform really enables this enhancement. We are well-positioned to combine on-farm information with our internal information, along with our deep genomic knowledge to create better yield performance for Corteva farmers. Using data at scale with these advanced algorithms, combined with our unmatched route to market, we can improve where to place our hybrids and how to best grow them. Our early algorithm show us a step-up of four to five additional bushels per acre, which is really equivalent to a few additional years of plant breeding. And this is just the beginning in this journey of realizing more of the full yield potential that is in our products. And we now are getting more productivity per acre improves our farmers return on their investment, and continues to improve the agricultural footprint by reducing new land requirements.

Let's switch over to our crop protection pipeline, starting with an industry changing story that combines proprietary biotech traits, elite genetics, and a superior chemistry formulation. The Enlist E3 platform is the fastest-growing soybean trait herbicide system, is on track to become a billion-dollar platform. This system gives farmers weed control choice and represents a win for biodiversity and farmer flexibility as the new standard and compliance with the Endangered Species Act. We now have the premier soybean weed control platform on 45% of the acres in the US and about 80% of those acres use are Enlist herbicides. We expect the acres to grow to about 60% in the next few years.

Now building on this Enlist E3 platform at the Farm Progress Show just a few weeks ago, we announced our collaboration with BASF to bring additional weed control options to farmers. Our next generation soybean herbicide tolerant product combines four modes of action and will work with BASF new PPO chemistry. This continues to expand the weed control options while building out our leading soybean weed control platform.

We continue to bring additional innovation in the challenge of controlling weeds. Rinskor, which we just launched, is a great example of that. This novel broad-spectrum weed control product brings new weed control options, say to rice, with the challenging problems like barnyard grass and sedge. And Rinskor controls these challenging weeds with the minuscule amount of active ingredient compared to other products resulting in a significant lower environmental loading.

Over the next five years, Rinskor is expected to generate over $1.5 billion of revenue while at the same time avoiding the release of about 1.5 billion kilograms of CO_2 equivalent emissions. This product represents the profile of future crop protection products that solve farmer problems and society challenges. You got to see it in the field demo along with some additional new herbicides in our pipeline.

Though nematodes can reduce global yields by about 12%, again costing billions of dollars of lost production. We just launched Reklemel, which is a new mode of action nematocide as r novel activity and very favorable environmental profiles. We see excellent nematode control across a range of crops, from almond trees to carrots. It's compatible with soil health management programs. And again, with this low use rate, it reduces environmental loading and avoids releasing CO2 equivalent emissions compared to other products on the market. Again in the field demo, you'll get to see some additional new pipeline insecticides.

And just as we're creating differentiated and sustainable chemistry to solve weed and insect control problems, our story continues with disease control. We have a product family of naturally inspired and differentiated fungicides that will come $1 billion product family. We are launching Inatreq which has a new mode of action for major disease control in cereals. We've already created Adavelt that expands the scope of crops and diseases being controlled.

By later this decade, we will have a visa that targets Asian soybean rust in South America that would nicely complement our Conkesta Enlist E3 insect and weed control system. Those family of fungicides is the new mode of action and has numerous favorable sustainability benefits.

In fact, Inatreq has such a low environmental persistence that we had to develop a new testing protocol in Germany just to figure out how to evaluate the product. Inatreq is also a great example of how we also innovate in the formulation of these actives. iQ-4 technology enhances retention and spreading of the product, improving the efficacy and reducing the required rates. This is a generation of new innovation for food production and sustainability.

Just as I showed how digital tools bring additional value to our seed products, the same concept holds true for crop protection products. The crop disease severity is dependent on the complex interaction of plant genetics, the environment, and the pathogen. This can make it difficult for farmers to know what fields to spray in a given year and the optimal time to spray a field.

Data in our proprietary algorithms bring insights to decision and can maximize disease control while also making sure farmers get the best possible return on their investment. We validated our tools with on farm studies that help farmers determine which fields to spray and the optimal spray timing to maximize the yield response. Combining this type of technology with reduced statured corn or new fungicides, some of our drone application research really creates new opportunities for growers to control disease problems.

So let me wrap up by saying Corteva is positioned to really improve agriculture production and deliver value to growers, society, and our shareholders. Our products help increase yield per acre and help farmers protect that yield. We are a complete sustainable solution ag company that is helping farmers produce a reliable food supply in a more sustainable way.

Finally, our R&D investment will deliver future growth in our core areas and our new frontiers. And later today, you're going to get a chance to see a number of these products in the field. So thank you. And it's my pleasure to turn it over to Dave.

David John Anderson

Chief Financial Officer & Executive Vice President, Corteva, Inc.

Good morning. Let me also express appreciation, all of you, for being part of the Corteva program today. It's really, really exciting to be here. I'm really excited to be part of this leadership team. I want to start by going through the financial framework to 2025. I'm going to give you some of the highlights and additional insights of what we've developed. As Chuck said, it's really been a pretty intense process, months of, review a lot of data, a lot of discussion among the management team.

I'm going to cover each element on this checklist, including revenue growth, our cost actions, earnings growth, capital deployment and also just touch base briefly on inorganic growth and including acquisitions and the opportunity that we think we have there to supplement what you're seeing today.

And finally, I'm going to come back then and just summarize quickly on all of that before turning it back to Chuck for his closing remarks. So the starting point as you know, and you know that coming in today, but it's really reinforced by what Tim, Robert and Sam have reviewed with us in some depth. And that's the strength of our broad-based market positions in both seed and crop protection. The highlights on this slide are from 2021 and they include our seed and crop protection sales by segment. And then also you'll see the diversity that we have in terms of our global geographic footprint.

Importantly, given the strength of our growth in 2022, we anticipate ending with about a 50/50 sales split between seed and crop. And with the growing addressable market and the synergy benefits that we derived from being a global ag technology company, the other thing I think that's really a standout for us is the sheer technology that provides growers with choices to solve their problems using seed and chemistry. The strength of our go-to-market strategies and our commercial excellence and the scale, and that will become even more pronounced as we go through the data, the scale of our cash flow that translates into a strong balance sheet and significant capital firepower. So, those are really the combination benefits, if you will, that represent the company.

It's important I think to get some frame of reference before we talk about the numbers and the financial framework out to 2025 to get a frame of reference around where we've been, some pretty impressive numbers. You can see that since 2019, and [ph] here in all the (01:21:03) numbers for 2022, I'm just using the midpoint of our latest guide. But since 2019, revenues have increased by $3.6 billion, which represents an 8% compound average growth rate over that period.

EBITDA, impressively, is up 50%, $1 billion, from $2 billion in 2019 to midpoint of guide, $3 billion, for this year, a 15% compound average growth rate. And by the way, it translates into 300 basis points of EBITDA margin expansion over that period. And finally, EPS up more than 75% from $1.43 in 2019 to $2.53 or 21% compound average growth rate That's impressive performance any way you look at it.

Key contributors shown on the right-hand side of the slide include the launch, of course, of Enlist and also Brevant. The approximately $4.5 billion, as Robert said, of sales from differentiated Crop Protection products expected in 2022. Our focus on cost and productivity, which is very, very important to that 50% EBITDA dollar increase. And importantly, we've returned, by the end of this year given our guide, will have returned more than $3.6 billion of cash to shareholders, including more than $2 billion in share repurchases during that period.

Now, we're going to be accelerating our financial performance 2022 to 2025. So, let's go through the highlights for sales, EBITDA, and EPS, focus on the attractive growth outlook that we see. Starting with sales, we anticipate broad organic growth partially offset by portfolio exits. Those will drive sales. The combination of all that will drive sales to approximately $20 billion at the midpoint in 2025. Now, sales growth, coupled with significant reduction in net royalty expense, and the execution on our cost and our productivity programs are expected to translate into EBITDA of approximately $4.4 billion at the midpoint in 2025. That's a 13% compound average growth rate with more than 400 basis points of improvement over 2022. The increased earnings and the lower share count, driven by continued share repurchases, – I'm going to talk about that in a little bit when I get to the capital structure and capital deployment -partially offset by the assumption of marginally effective tax rate. And that's really related to the latest regulations around foreign tax credits as well as R&D credits, translates into operating EPS of approximately $4 at the midpoint. So, a 17% compound average growth at the midpoint. Again, an impressive forecast, one that we have confidence in terms of our ability to execute.

Talk a little bit more, just go a little bit deeper on the revenue growth and I've shown the walk here out to 2025 from 2021 to 2022, and then that starting point of – midpoint of guidance of $17.4 billion for 2022. So, as you can see, we're estimating about 4% to 5% revenue growth. And in the absence of product and geographic exits, geography exits, that growth would actually be about 6.5%. So, the actions that we're taking in terms of portfolio simplification, that Chuck referenced and we've discussed, translates to about a 0.5% in terms of the CAGR over the period.

So, if you go deeper into the drivers, you can see that on the right-hand side of the chart, that product exit impact, that represents, again, about 5% of revenue at the starting point of 2022. And let's take a look then at some of the key growth drivers over on the left.

First, of course and very importantly, is the continuous improvements in yield-advantaged technology in seed that's going to drive pricing gains over the period. And the other key component of course is the growth in differentiated Crop Protection products, including in-flight Spinosyns capacity expansion, which will drive volume growth during the planned period.

Now, before we walk down the income statement, I want to first give you a little more context for the analysis that we've gone through and some of the decisions behind our portfolio decisions and also our value capture. We spent the last several months, as I've said, refining the strategy and evaluating a range of options. Historically and previously, we really focused on a much broader participation both in geographies and crops. And while targeting core markets in crops, we're now going to be able to be more focused in terms of our investments, more differentiated and sustainably advantaged. We're also going to be able to decrease our reliance on third-party traits while building our capabilities to expand out-licensing of our own proprietary technology and reducing net royalty expense, again, by more than $250 million in that reduction of net royalty expense by 2025 and more than $600 million by the end of the decade.

We're going to continue to right-size our manufacturing footprint, our supply chain structure to improve efficiencies and align with our portfolio decisions. We're going to increase the percentage of differentiated products to more than 60% of the Crop Protection portfolio. That's going to position us well to meet increasing demand for these products and, again, also drive earnings growth. And by focusing on economic profit and continuing our investment in innovation, we're going to be able to achieve operating margin in the range of 21% to 23% by 2025.

Now, you've heard a lot about our new where to play and how to win strategy. I just want to discuss a little bit the process that we went into determining, which products and which markets for investment. This comprehensive analysis was really enabled by recent system advances and also upgrades that we've made to some of our analytical tools. The results of that or the segmentation that we've been able to do in terms of products and geographies based both on competitive and comparative advantage in the market, as well as our financial performance. And among the questions we asked ourselves and reviewed and analyze is whether we bring sufficiently differentiated offerings, whether there are go-to-market alternatives for improvement, and whether we're achieving an adequate return on investment. Now, the decisions that we've made will allow us to focus, again, focus our investments and accelerate our progress in terms of our margin expansion path.

Now, the cost actions are also essential, an essential component will continue to be a very important part of Corteva. We're going to continue to identify and track opportunities, both businesses, and drive efficiencies in operations. As Robert said, it's really part of our DNA. And from 2021 to 2022, we will achieve $450 million of cost savings for productivity initiatives with a bulk of those in covering over those two years.

And, as you know, in August, during the second quarter earnings release, we also spoke about a restructuring action to support our portfolio decisions. And specifically, we estimated $400 million of restructuring accrual through the second quarter of 2023. And you recall, we took $68 million, approximately $70 million of that restructuring in the second quarter of 2022.

Now, approximately $200 million of that $400 million will be cash costs, including significantly head count reduction, in some facilities reduction. We're estimating over 5% roughly of our global workforce will be impacted by those decisions. Now, we're going to deliver $200 million of run rate savings from those actions by 2025.

Other costs action programs are being enabled by our ERP deployments, which are ongoing, and also our enhanced data analytic capabilities. We're creating a common data architecture across the organization that's going to enhance our ability to both drive commercial and the operational excellence. The improvements in SG&A, as a percent of sales, each year, 2023 to 2025, will translate to approximately 200 basis points of improvement from 2022 levels, very, very important. And this will support strategically the increased investment that we're making in R&D. And together these actions will contribute more than $400 million in savings, 2023 to 2025.

To summarize the drivers of earnings growth, we have solid revenue growth, a reduction of net royalty expense, portfolio decisions and simplification, and focused cost actions. And, again, forecasting, as a result of that, EBITDA, $4.4 billion by 2025. Now, demand for yield-advantaged technology is driving gains in seed on top with more than $250 million reduction in royalty expense. And increased revenue in differentiated Crop Protection products will be also very key.

Now, price and volume gains of both seed and crop will more than offset the impact from our decision to exit nonstrategic geographies as well as the input cost headwinds that we've assumed for the period. And now, we anticipate the cost headwinds in both segments through 2025 driven by commodity and raw materials. Although the plan assumes moderation in inflation by the end of 2023, in the math that we've developed, roughly 60% of that inflation impact or inflation headwind over that three-year period, 2023 to 2025, will be felt in 2023.

As you've heard from both Chuck and Sam, again, we're increasing our R&D investment to roughly 8% of sales, prioritizing investments in sustainably-advantaged chemistries and technologies. And combined, all of this translates into operating EBITDA margin, again, of 21% to 23%, putting us very much in line to achieve competitor and peer margin performance.

Want to just transition now, talk a little bit about cash flow and our cash flow outlook. The forecast for 2022 free cash flow to EBITDA conversion of 40% is lower than our recent average driven by working capital, and you've heard us reference this. With higher [ph] AR (01:33:08) balances, supporting higher sales, as well as replenishing inventory balances, which were well below target rates. And by the way, despite that lower cash to EBITDA conversion ratio this year, as you know, we're doing very, very well and are actually improving on all working capital metrics, including DSO and day sales inventory.

Now, our forecast for 2023 to 2025 free cash flow to EBITDA conversion is approximately 65%. On an operating earnings basis, in other words, if you used operating earnings instead of EBITDA to the relationship, if you will, the numerator for our operating EPS calculation, using that operating earnings as a denominator for cash flow conversion, the conversion rate would be 90%. So, that's another relevant metric as you think of us against our peer group and across industry.

That cash flow together with our investment grade balance sheet provides us flexibility in how we deploy capital. The pension liability, as you know, is well managed. We have got greater than 90% funded status at the end of August. We're still fine-tuning those numbers. You recall, at the end of July, we were approximately 93%. We think we're tracking there, just don't have that fine-tune on that data. The strategies are in place to continue to mitigate any potential claim on our cash or a meaningful claim on our cash from pension or pension liability. And we've got is, as we've said and as you know, an impressive track record of returning cash to shareholders. Since 2019, we've raised the dividend a total of 15%, will have returned more than $2 billion by the end of this year in share repurchases, and for a total of $3.6 billion in cash back to shareholders.

Now, our balanced capital allocation, our capital deployment allocation strategy, it's relatively straightforward. It's a disciplined balance of investing for growth while returning cash to shareholders. And here are our four priorities starting with obviously with growth. For capital expenditures, we will fund projects with high ROI. And by the way, I'm very impressed, we continue to be impressed with the quality of both growth as well as productivity ROI-producing projects. We expect that that CapEx will be roughly 4% of revenue, which is consistent with our current level of capital spend. Now, think of that as about $650 million for 2022. Second is a dividend that will grow with earnings. And as we've said before, the dividend doesn't define us, but it's an attractive element, foundational element for our valuation.

Moving to the targeted priorities, we have M&A and share buyback. Let me talk a little bit about buybacks. As Chuck said earlier, our board has approved a new $2 billion share authorization. It's confirming our commitment, again, to returning cash to shareholders. And as a reminder, in 2021, we completed our initial $1 billion share repurchase program, and we got a new $1.5 billion in the second half of 2021. And we expect to complete the majority of that $1.5 billion authorization by the end of this year.

And then finally, a couple comments on M&A. It's obviously becoming more important focus area for us, saw references to that in the earlier presentations. And particularly, it's focused around our technology roadmap and our speed to market. And how do we accelerate those? Let me just spend a second just talking about that just for a few minutes. Here are a few words on how we're thinking about M&A to supplement organic growth.

Now, the management team has collectively a fair amount of acquisition experience. We're disciplined, obviously very cautious, very focused, very disciplined when we talk about our inorganic model. We're building, of course, on our core capabilities. We intend to complement this with product and technology strengths and also enhance our strong brand and customer loyalty. Now, it's critical to our strategy that any target fit also with our financial criteria, which would include above market growth, the ability to operate at or above our targeted EBITDA margin, and an internal rate of return obviously that exceeds our internal hurdle rate.

The important thing, too, to note is the new alignment that we have of our incentive programs with our strategic direction and our interest in terms of driving continued shareholder value. Our short-term incentive program has been updated for 2022 to now include operating EBITDA margin as well as working capital turns in addition to the absolute dollars of operating EBITDA. The margin metric allows more comparability with peers, it incentivizes our strategy to innovate price for the value of our technology while also exercising disciplined cost management.

The net working capital returns metric encourages working capital management that effectively translates earnings to cash, which can be used for investing for growth as well as cash to shareholders. Now, we've initiated education programs across the company about the new construct. And these new pay-for-performance measures, that's powerful because it really ties to the operational instincts and capabilities of the organization and really aligns the full organization around our strategic goals. Also, for 2022, something new is the incorporation of ESG modifier into the short-term incentive programs for this executive leadership team. We're focused on incremental progress towards Corteva's long-term ID&E goals as well as increased sales from sustainable solutions. And it reflects our commitment to promote value-driven leadership and sustainable innovation.

So, before I hand it over to Chuck, just want to come back to the checklist that I started with in terms of the financial framework and just summarize. We've got significant growth opportunities driving both top line and margin expansion potential. The strategic decisions that we're making about where to play and how to win, along with focused and disciplined cost actions, including continuing to right-size operations and our supply chain footprints, and our ongoing reduction of net royalty expense, this translates into meaningful margin improvement potential per year through 2025.

And finally, the strong cash flow, our balanced capital allocation strategy, including disciplined M&A criteria will drive shareholder value not only through this planned period up to 2025, but we should be sustaining, well sustaining beyond that.

Again, I'm excited to be part of this team, really appreciate the opportunity to be with you today. Thank you. And, Chuck, back over to you.

Charles V. Magro

Chief Executive Officer & Director, Corteva, Inc.

Thanks, Dave.

So, look, that concludes our prepared remarks today. We hope that you're excited as we are about what you heard this morning. You could probably feel it in the room. We're very confident that we have a plan that will deliver shareholder value at the same time help Corteva achieve its winning aspiration. But I think most importantly, the world needs companies like Corteva to address these most pressing global challenges such as food security, climate change, and the energy transition.

I believe we have assembled a world-class leadership team. It's diverse, it's strong, it has the experience, and it's well-positioned to successfully execute against this plan.

So, with that, we're going to take a short break and then we'll come back for some Q&A. Thank you.

[Break] (01:41:54-01:43:23)

Kimberly Booth

Vice President-Investor Relations, Corteva, Inc.

Okay, everyone, thanks for coming back. We will head into our Q&A panel now, which will run for 45 minutes. As a reminder, if you're in the room, you'll have the opportunity to ask questions live. So, just raise your hand or use the QR code that was provided this morning. If you're on the webcast, virtual attendees can submit a question by clicking on the Ask a Question tab in the upper-right corner of your video player. So, we'll kick off the session with a question in the room.

QUESTION AND ANSWER SECTION

Vincent Stephen Andrews
Analyst, Morgan Stanley & Co. LLC

Q

Hi. Thank you. Vincent Andrews from Morgan Stanley. Chuck and Dave, maybe just to start off. Chuck, you've been around ag for a long time. Dave, you've been a CFO for a long time. You guys just put targets out to an out-year in a really interesting world that we live in where all sorts of stuff is happening on a daily basis. And then you got all the ag volatility as well.

So, what maybe conservatism or what confidence do you have that those numbers are really going to be viable and aren't subject to sort of revision a year or two from now when something unforeseen comes around the corner?

Charles V. Magro
Chief Executive Officer & Director, Corteva, Inc.

A

Yeah. I'll start and then Dave can certainly – Dave built the numbers behind the plan, but the strategy, the entire leadership team was involved. And when I mean entire leadership team, it's not just the folks up here. We probably had 200 to 250 employees working on this for almost the 10 months that I've been here. So, it was, as we like to say inside of the company, it was a top-down and a bottom-up approach.

So, when we think about it, we obviously have to build a plan in the context of the macro environment. You've heard our view today on the macro environment. Certainly, we believe, at least for the next couple of years, we're in very robust ag market conditions for all the things that we've talked about. So, that is one of the considerations. From a bottom-up perspective, we had a very good look with the data system that we built around where we make our money and where we have competitive, unique product offerings.

So, what gives us confidence I think, Vincent, just to be quite transparent on a couple of the things. Some of the decisions are already very well down the path, right? So, the portfolio decisions, for example, in progress. But we have made the decisions, we're working through the exit plans, and we know where we made money and where we didn't with those products. So, you think about that as we're starting a journey but we're well down the path.

Then if you look at the concept that we outlined today on royalty neutrality, again, assuming that we were able to see the continued growth in the Enlist platform, our genetics are going to go into more of those bags, and that path and that profile is more or less the one we're on today. So, we're feeling very good about those two elements.

And then, the product slate, and if you look at our mix, I call it high grading, going to differentiated unique technology. When I got here, there were already nine new products entering the marketplace. So, now this is taking those AIs along with what we've outlined that's already in our pipeline and bringing them into the market. And Robert indicated today the new Spinosyns technology, the capacity is built to work. We're operating the new capacity today. So, that will be market-driven of course. But we're feeling very good that the journey we're on from upgrading our product slate and our mix. We're well down that path.

So, then it comes down to that last bucket, operational excellence or however you want to describe it. We outlined today approximately $400 million. That's literally hundreds of projects optimizing every corner of our company. But we have I think a good measurement system around that. We've got leadership that's all hands on deck to execute against that element. So, when I look at it, I feel quite confident that the plan that we outlined for you today, which has some growth in it, you can just see it and it would be a significant improvement from where we've been in the early days of the company. But we're feeling pretty confident given the macroeconomic background, the ag fundamentals, and then just the work that we've done and what is already currently in flight. So, then when you put it all together, I'll pitch it over to my friend, Dave, to kind of wrap it up.

David John Anderson
Chief Financial Officer & Executive Vice President, Corteva, Inc.
A

Yeah. When Chuck talks about the significant growth, he's really talking about obviously the continued acceleration in terms of our EBITDA growth and EBITDA expansion, margin expansion. But., Vincent, I think the important thing and for the group, I think the important thing is that we think that top line, it starts with the top line, is quite achievable. In other words, the revenue numbers that we've assumed, that's obviously a very, very key starting point here. It factors in the differentiated products. It factors in what Tim is going to be able to deliver in terms of yield-advantaged technology for seed. It starts there. We feel very good about those numbers.

The other thing, maybe just to add what Chuck said, as part of that, if you will, relationship between revenue and EBITDA is on the expense side is the $200 million of restructuring, cash restructuring, $400 million of P&L restructuring that we're taking that will deliver that $200 million of run rate savings. That's a really key thing that we've stepped up to this year on top of the final thing I would just say is the performance that we've delivered this year and the confidence that gives us on the go-forward plan as well.

Vincent Stephen Andrews
Analyst, Morgan Stanley & Co. LLC
Q

Thank you.

Kimberly Booth
Vice President-Investor Relations, Corteva, Inc.
A

Great. Next question.

Christopher Parkinson
Analyst, Mizuho Securities USA LLC
Q

Chris Parkinson, Mizuho. Thanks for hosting. When we think about the intermediate to long-term [ph] CPC (01:49:38) margin targets, could you just hit a little bit more and dive into – it seems like there are three moving parts, the growth of the new products and the Spinosyns, which presumably are all higher margin, the shedding of older presumably lower margin products, and also cost cuts. So, if you could hit on those three buckets and also hit on any potential areas of upside, specifically on the new product [indiscernible] (01:49:58) side of it, that would be incredibly helpful. Thank you.

David John Anderson
Chief Financial Officer & Executive Vice President, Corteva, Inc.
A

Yeah. I can do those for you, Chris.

Charles V. Magro
Chief Executive Officer & Director, Corteva, Inc.
A

And Robert. Robert.

David John Anderson
Chief Financial Officer & Executive Vice President, Corteva, Inc.
A

Yeah. And then, Robert, you want to add to it. So, I think, Chris, the three things you talked about was differentiated products that, if you will, the streamlining of the portfolio, some of the product exits that we're making, and then the cost side of it as well. So, all three of those are really important. When you look at the P&L in terms of sort of at the high level out to 2025, what we're really doing is benefiting at the gross margin level significantly as a result of what Robert referenced as well as what's built into Tim's plan. Obviously, what's driving that is the strength of what Sam [ph] reviewed (01:50:44) in terms of technology and the operational efficiencies that we're going to continue to derive in both of the businesses. So, that's really the driving force.

If you look below the gross margin line – and, by the way, the product simplification contributes to that as well. But the significant – that's more of a reset, but then that continue to climb out to 2025. It's really key is what I just mentioned.

The second thing to think about in terms of the math is that the increased spend in R&D basically is being enabled, when you think about it in terms of margin rate, is being enabled, is by managing our overhead costs. And that's one of the things that's so important here, and that's part of what the restructuring is helping us do.

Key component of that is related to those overheads, if you will, the SG&A spend. So, that SG&A spend, by coming down as a percent of sales over the planned period, that's basically enabling us, from a dollars as well as from a percent of margin standpoint, to be able to it reinvest, in fact grow the investment, increase the percent of R&D spend over the plant. So, hopefully, that's helpful. It's really coming out of that gross margin. There's a 2023 and to some degree 2024 benefit as a result of the product simplification and product and geo exits. But, more importantly, it's just the growth you're seeing from the fundamentals of the two businesses, which is translating into higher operating leverage, if you will, margin to dollars of EBITDA, to sales relationship coming about as a result of managing, and they'll call it the below the gross margin line expenses. Hopefully, that's helpful.

Christopher Parkinson
Analyst, Mizuho Securities USA LLC
Q

[ph] Got it (01:52:34).

David John Anderson
Chief Financial Officer & Executive Vice President, Corteva, Inc.
A

Yeah.

Kimberly Booth
Vice President-Investor Relations, Corteva, Inc.
A

Next question.

P.J. Juvekar
Analyst, Citigroup Global Markets, Inc.
Q

Yes. Hi, P.J. Juvekar from Citi. I got two questions. The first one is maybe it's for Sam, if you can hear me, but it's on the reduced stature of corn. Can you talk a little bit about that? Does that compete with competitors short stack corn and are you behind in that technology, where do you stand in development of that particular product?

Sam Eathington
Executive Vice President & Chief Technology and Digital Officer, Corteva, Inc.
A

Hey, P.J. So, let's kind of put a few things in perspective. So, we've been working on our reduced [indiscernible] (01:53:13) corn from our breeding program for about a decade now. We've done a lot of testing, a lot of evaluation. We've looked at it across different farming practices like plant density, locations, germplasm, you name it. And we're really ready to position to go ahead sort of as we said mid this decade launch that product out in the marketplace, and we see it having a great fit on quite a few acres where farmers want to use it to manage – driving up plant densities, how they want to manage their in-season crop access, reducing risk on standability, etcetera. We've also complemented that with a number of gene-editing technologies to go ahead and recreate that phenotype and also enhance it in our sort of next platform going forward. So, we feel very good about it and you'll get a chance to see the products out in the field today.

P.J. Juvekar
Analyst, Citigroup Global Markets, Inc.
Q

Thank you.

Kimberly Booth
Vice President-Investor Relations, Corteva, Inc.
A

Thanks, Sam. Next question.

David Begleiter
Analyst, Deutsche Bank Securities, Inc.
Q

Thank you. Dave Begleiter, Deutsche Bank. Tim, can you discuss seed pricing for next year? It looks like you're expecting about double-digit-plus pricing perhaps in both seed, in both corn and beans?

Timothy P. Glenn
Executive Vice President-Seed Business Unit, Corteva, Inc.
A

Yeah. So, we've introduced price in the US here last month, and our other markets in the Northern Hemisphere will continue to launch over the coming weeks. And so, clearly, we continue to be in a favorable ag environment. You look at the marketplace and it continues to be constructive. We're in a position where we've got a really outstanding value proposition, so products that customers want and value. And so, we're out there pricing our product. We continue to price our products for value. I can't describe exactly what that is. I mean each farmer is going to have a different experience in terms of the mix of products that they price. But we will get paid for value and we will be accretive to margins as we come into this next year. Obviously, it's a competitive marketplace, and no question, farmers have a range of opportunities out there. Where I describe this as the early stage in the marketplace, we're comfortable with the offer we have in the marketplace in the US and finalizing that in the other markets in the Northern Hemisphere. But over the coming weeks, certainly we'll be in combines, we'll be out there with our customers and beginning to have that conversation and create those orders and obviously, the next 90 days are critical for us. And on seed in the US, we'll be essentially we'll have our orders in place by the end of December. So next 90 days are critical but we're comfortable where we're at and we have no doubt that we'll continue to be accretive to margins and we think that our customers will be receptive of the prices we put in the market.

Charles V. Magro
Chief Executive Officer & Director, Corteva, Inc.
A

Dave, maybe just one comment on sort of the overall sentiment we're seeing at the farm. So the behavior we've seen for the basically the entire year, farmers are quite profitable. They're facing inflationary pressures just like everyone else and the best way that they can manage that is to invest in their crop and drive yield. So we're seeing it across our business platforms, whether it's seed or the CP, they're prioritizing yield, they're investing in their crops and they're doing exactly what we figured they would do right now, which I think is helpful for them and it's obviously helpful for us.

Kimberly Booth
Vice President-Investor Relations, Corteva, Inc.

A

Great. We'll take another one in the room.

Joel Jackson
Analyst, BMO Capital Markets Corp. (Canada)

Q

Hi. It's Joel Jackson from BMO. So you're projecting $1.4 billion of EBITDA growth over three years through 2025. Can you talk about will that growth be linear over three years? What years will be more of an impact in terms of earnings growth? And then when we think of the ag cycle, what are your underlying assumptions for the ag cycle over the three years? We know where we are right now, do you assume a bit of contraction in crop prices? So how would you describe the ag cycle? Do you want to give that in a corn price or some other [ph] not sure (01:57:17) how would you talk about it? That's in your base case? Thank you.

Charles V. Magro
Chief Executive Officer & Director, Corteva, Inc.

A

Hey Joel. We'll have Dave maybe talk about the $1.4 billion and then I can come back and answer your question on the fundamentals.

David John Anderson
Chief Financial Officer & Executive Vice President, Corteva, Inc.

A

Joel, it's relatively linear. Obviously, 2023 is going to be a very key year for us. Maybe talk a little bit about 2023 and obviously we'll get into more specifics on that as the year progresses and then we get into actually into the year in terms of a formal guide. But we'd anticipate as I mentioned continued inflationary pressures in 2023. We don't think that's abating. It's going to be at a lesser rate, we think, than 2022, but it's going to be significant. So that's going to be a very, very important year for us to continue to drive the whole formula of price/costs in terms of our value-based pricing equation while also managing our cost structure. But generally I would say it's relatively ratable over the time period.

Charles V. Magro
Chief Executive Officer & Director, Corteva, Inc.

A

And then the way we're thinking about the next three years from an ag market perspective, look, things are good right now and when you're pushing them up north of $6.50 corn and yesterday over $14 soybeans. So we're not expecting that continues through the three year period. There will be a normalization. But we do expect, as we said in the prepared remarks, we need two consecutive growing seasons to really rebalance the stocks. And we don't think that this fall will be one of them, certainly when you look at North America and Tim and Robert can give you the specifics and Europe, we think we're below trend yields. So what we think will happen is 2023, I think is going to be another elevated year. It's going to be, I think, a very good year for us. I think farmer margins are going to be very healthy and you'll see the same behavior I just described in terms of investing in the crops. Then when we get to 2024 and 2025, the plan, I don't want to give you specific numbers, but the plan has some normalization of crop pricing because we do realize that where we are this year and most likely next year, there needs to be a reset eventually.

Kimberly Booth
Vice President-Investor Relations, Corteva, Inc.
A

Thank you. Next question.

Kevin W. McCarthy
Analyst, Vertical Research Partners LLC
Q

Hi. Kevin McCarthy, Vertical Research. It seems to me that one of the themes of your discussion was simplification. You talked about streamlining the number of countries crop focus, product lines, manufacturing plants, headcounts, and so forth. So can you elaborate on the process that you used to make these decisions, number one? And number two, which of them do you think will be most important financially? And then just maybe provide a little bit of color on flow through in 2023, 2024 and beyond?

Charles V. Magro
Chief Executive Officer & Director, Corteva, Inc.
A

Go ahead, Dave.

David John Anderson
Chief Financial Officer & Executive Vice President, Corteva, Inc.
A

So Kevin, I would probably just go back and cite some of the material that I've referenced during the general forum, which is really around the detailed analysis, literally hundreds, as I may have mentioned, hundred of scatter plots across the matrix that I show that add margin in revenue. And really understanding, if you will, our performance and our competitive positioning in our outlook to 2025 for all of those intercepts. So that's very, very all of those intercepts. So that's very, very foundational. At the same time that we were doing that, call out the portfolio simplification portion of the equation. At the same time we were doing that, we're also looking at our cost structure and analyzing every element of that and its behavior, if you will, as well as its competitiveness. So benchmarking on all every functional costs, every element of our cost structure, looking at that.

And the result that's come together is exactly what we've shared with you today, which is again the decision, and Chuck referenced it around 35 countries in terms of exit roughly, let's call it $800 million of revenue, about 5% of revenue in terms of our decision in terms of portfolio exits, product exits. And from a cost standpoint, what we talked about is on the SG&A, as a result of all of that, by the way, embedded in that, again, is the restructuring that we've taken, because that's a big enabler in terms of some of the simplification, as well as call it rightsizing or fit for purpose in terms of that cost structure against this new portfolio and the revenue and growth outlook that we talked about. So it's really all of that and it sets up for 2023. I mean 2023 will benefit significantly from all of those actions. We won't be 100% complete with all of the elements in terms of the product, geographic decisions. But we're going to be significantly into it. Robert, you can speak a little more to that. We're going to be significantly into it.

And on the cost side, what we're going to do is make major progress in 2023 that will set up then the run rates for 2024 and 2025. So it all fits together on a continuum, each piece of the puzzle kind of back to the P&L. And the P&L highlights that I covered with you this morning contain that detailed review, the outcome of that detailed analysis. Robert, do you want to talk a little bit maybe about crop protection because that's got a lot of the $800 million.

Robert King
Executive Vice President-Crop Protection Business Unit, Corteva, Inc.

A

Yeah. So in crop protection, I'll just start with alignment of the organization to start with. By aligning with the BU structures like we have, it brings a whole lot of clarity to the organization of how we function together and run as a business team, okay. So then when you begin to look at the complexity below that, about 20% of our AIs we're going to exit. And when you say, well, how do you figure that out, et cetera? Well, it's the lower margin ones that aren't moving the needle and we don't see a way to get them up to the level that we need to be. And so when you begin to take out active ingredients and associated formulations, think about everything that has to go in to keeping our products registered, maintained, et cetera. That's a lot of complexity that begin to come out when you're talking about 20% of your AIs that aren't moving the needle. So there's, there's things like that within crop protection that we're taking work out so that it's very clear of where we do need to work to begin to make the impacts we're talking about.

Kimberly Booth
Vice President-Investor Relations, Corteva, Inc.

A

And Robert, you had mentioned methomyl during your presentation. We got a question online as to whether or not we could be more specific with regard to what the product exits are at this time?

Robert King
Executive Vice President-Crop Protection Business Unit, Corteva, Inc.

A

Yeah, I'd love to, but we still need to talk to customers and do this in a way that, does not hurt them, okay. So they have time to react and get the alternative products, et cetera. So we'll be able to tell you more as we get further into this execution strategy. But methomyl was one. You've seen that one where we said we need to exit that and you see that we did the sale for outside of Brazil. We're still running in Brazil. And so, we'll make these clear as time goes on in the near term. But right now [ph] we'd be able to (02:04:51) help the customers be able to transition with us, okay.

Kimberly Booth
Vice President-Investor Relations, Corteva, Inc.

A

Thank you. We'll take another one in the room.

Q

Robert, can you talk about what fraction of your active ingredients are sourced in China. And as you move away from this 20% that you're going to exit. And you reduce the percent that are solely produced within Corteva from, whatever it was 25%. But then is that reliance on China going to go up? And just one quick one on one of your products. Utrisha, it's a nitrogen-fixing foliar spray. What kind of nitrogen [ph] pounds breaker (02:05:44) can that product produce?

Robert King
Executive Vice President-Crop Protection Business Unit, Corteva, Inc.

A

Okay. So, I'll take the first part of that. And then Sam, maybe I'll let you comment a little bit more on nutrition. So in relation to China, today we have about $2 billion of our total revenue coming out of China for active ingredients. So quick math there, 25%. Of those, 80% of them are dual sourced in other regions. So, our reliance on China while we have products there, we're balanced across all of our regions when it comes to where our AIs made in with external manufacturing partners as well. As we begin to move forward, this isn't just a cost decision. It's a risk decision as well. So, we will only go to China as an example if it makes sense overall because it's not just cost. We're managing the risk and the resiliency of our supply chain as we move forward.

So to shift then to second part of your question around 25% internally today and moving to 10%. What that indicates is we're going to have more dual sourcing than we have today, okay. The 10% that we're talking about are ones that we say, hey, they have to stay inside because we have to protect the IP and if we don't, then it doesn't work. Spinosyn is a great one. Spinosyn has been internal to us, since I believe it was launched mid-1990s, if I remember right and it's a trade secret. And so, we keep that internal. Others would love to have it. But that's one as an example that we will always have inside. So we'll balance the risk, we'll balance the intellectual property management of it, to be able to make those decisions. But the indication there is more dual sourcing is really what we're trying to help you understand.

Kimberly Booth
Vice President-Investor Relations, Corteva, Inc.

A

Thanks, Robert.

Charles V. Magro
Chief Executive Officer & Director, Corteva, Inc.

A

Sam, you want to cover Utrisha, maybe give the background on it, too.

Kimberly Booth
Vice President-Investor Relations, Corteva, Inc.

A

Go ahead, Sam.

Sam Eathington
Executive Vice President & Chief Technology and Digital Officer, Corteva, Inc.

A

Yeah. [ph] I thought I was talking over (02:07:53). Sorry. So on Utrisha again, it's a product we're quite excited about. So for background, for people, it's a bacterium that we can spray on plants. It colonizes those plants and then it forms the function of taking nitrogen from the air and converting it into a form that plants can use. And what's neat about the system is it responds to what the plant needs. So if the plant has lots of nitrogen available to it, then it really doesn't need much from the system. And so the amount of nitrogen that the organism would produce would be quite small or as the plant transitions into needing more and more nitrogen then the amount that the organism can produce for the plant increases.

And so it responds to what the plant system needs. That's important when you think about environments where farmers may not be able to get enough fertility on their crop. Or also important, where we have regulation coming into play, where we're getting reductions in how much nitrogen a farmer can actually apply to their crops. So in those markets, we would see the product being able to supplement quite a bit of the nitrogen that a crop needs.

Kimberly Booth
Vice President-Investor Relations, Corteva, Inc.

A

Thanks, Sam. Next question.

Jeffrey J. Zekauskas
Analyst, JPMorgan Securities LLC

Q

Thanks very much. Jeff Zekauskas from JPMorgan. First, Dave asked a question about seed pricing, and I think he said, he asked is seed pricing up double digits, 10% or more. And I forget whether you said yes or no. So if you could just...

Charles V. Magro
Chief Executive Officer & Director, Corteva, Inc.

A

I did not give you a specific [indiscernible] (02:09:42).

Jeffrey J. Zekauskas
Analyst, JPMorgan Securities LLC

Q

Okay. Okay, good. Thank you for the clarification.

Robert King
Executive Vice President-Crop Protection Business Unit, Corteva, Inc.

A

You heard it correctly, Jeff.

Jeffrey J. Zekauskas
Analyst, JPMorgan Securities LLC

Q

Okay. And second, if you look at corn and soybean yields since 2016, and compare them to today, they're lower. They're lower on average for seven years. And they're lower from point-to-point. In corn, they're in the low one 170s and in beans they're in the low-50s. What do you make of that? Because I know in your graph you've got yields going up to the right. But the last seven years, there's been a downward movement. Is it just bad weather? Is it bad luck? How do you see that and how do you see your value proposition as you go to the farmer and they get no yield benefit?

Timothy P. Glenn
Executive Vice President-Seed Business Unit, Corteva, Inc.

A

Yeah. Maybe I'll start and then let Sam talk about it from an R&D standpoint and I'll talk about it from marketplace standpoint. So I mean clearly, there's a year to year element to it, Jeff. And the year like this where we've got much more variable weather across the marketplace, we've all seen the reports that are coming out from different analysts that are in the field and USDA had their WASDE yesterday and took yields down and it happens to be a year where we're off-trend yields. It just happens to be one of those years. And do I believe that we've exhausted the potential to deliver value, me, absolutely not. Sam can give you the scientific element. Our customers still are experiencing opportunities that they haven't. And whether it's absolute yield or whether it's consistency in really harsh years – and I'll use last year as an example – we had many farmers who experienced yields that they could not have imagined given the year that we had the ability for that crop to handle the stresses that are thrown at it in any one year.

And I think – we know that there's weather variability, no two years are alike. And it just so happened that we've had a handful of weather events starting in 2019 with the flood, in the late planting. And going from there, we've had a series of challenges that have been thrown at us. But you still look that long-term trend yield is holding. And whether it's corner beans, we're pushing it forward. And certainly when we get to the field today, we'll talk about that and we'll actually talk specifically about that question, Jeff.

But from a customer standpoint, customers still believe that there's more potential out there. They're striving to continue to drive yield. I certainly don't believe we flattened it out. And from a technology standpoint, we continue to strengthen the products we put in the market and actually – and give them more potential to drive higher yields.

A

Sam?

Sam Eathington
Executive Vice President & Chief Technology and Digital Officer, Corteva, Inc.

A

Yeah. I'd just add to it that, look, all the internal data and testing and evaluation we know we're still continuing to drive the productivity of this crop of corn and soybeans higher year-over-year. I think Tim said it well that you get large weather events that put downward pressure on it. And clearly we're seeing a little bit of the climate shift coming into play on some of this. But what I think is important to remember is if you took today's crop and compared it to a crop, say, 20 years ago and subjected them to the same environmental conditions, you'd see substantially more yield in today's crop in those same environmental conditions.

So while aggregate yield might be not on trend line, we know we're still producing a lot more [indiscernible] (02:13:26) a little bit older or didn't have as much technology. So we continue to see the value being created and it's important that we do that as we continue to push against some of this climate change that we're up against.

Kimberly Booth
Vice President-Investor Relations, Corteva, Inc.

A

Thanks, Sam. Next question?

Joshua Spector
Analyst, UBS Securities LLC

Q

All right. Thanks, Josh Spector with UBS. Just a question longer term on Enlist and the US soy strategy. So you've benefited the past few years from market share gain. How does the strategy shift as it becomes more holding on to market share? What are the things that you do to make sure you continue to grow earnings pricing in that type of business when it's more of a perhaps defensive positioning versus offensive? Thanks.

Timothy P. Glenn
Executive Vice President-Seed Business Unit, Corteva, Inc.

A

Well, I think, first is, as I talked today, we've been able to grow the penetration and exceeded 45% of the acres this year with the expectation that we're going to continue to drive that over the next several years. What the next big lever from an earning standpoint is, is clearly going to be continued penetration with our proprietary germplasm. And so, we've been able to do this, as I said, with about 25% of our sales today would be Corteva bred E3 varieties. That is rapidly transitioning and we'll be about 95% by 2025. So it's a huge lever in terms of driving profitability. And then, when you look at successive generations, we made an announcement here in the last few weeks. Sam referred to it in his talk with BASF. And we kind of gave you successive generations of technology. So how do we not just establish E3 as the leader in the marketplace, but continue to improve on it.

So we've got really three series of agreements with BASF that'll continue to enhance it. So first one will be first product to come out will be a nematode-resistant gene that will stack into the E3 system, followed by proprietary PPO mode of action. And then, there's a successive new mode of action that'll be stacked further down the road. So, that really gives it long life. E3 becomes that foundation, and then we can continue to build off of that as we go forward.

So certainly, we don't have an entitlement to a monopoly position in the market. We know that there will be competition. But what's going to allow us to continue to add value and continue to enhance the utility of that E3 foundation is to build off of it with successive generations of product concepts.

Kimberly Booth
Vice President-Investor Relations, Corteva, Inc.

A

Great. Maybe we'll jump to one question online. Please provide some more details on crop protection strategy regarding fruits and vegetables. What's profitability versus other crops? What's the growth profile and how large can we think this segment might become overall? Will new products be developed internally or will acquisitions be part of the strategy?

Robert King
Executive Vice President-Crop Protection Business Unit, Corteva, Inc.

A

Sure. Thanks for the question. So it's good to see people are listening. So fruit and vegetables is a big piece of our portfolio in crop protection. How big can it get? Today we're about, what do we say, 9% of the total market share today and when you begin to look at the slides, you get back here in a little while but has the new products on it, look at the ones that are going into fruits and vegetables and there's quite a few especially in insecticides and fungicide market and those are key areas for us as we go into those fruits and vegetables around the world.

Some of the biologicals going in are also big in the fruits and vegetables and so as we get more into that space, you'll see that benefiting us as well and helping us grow there and putting new products into the market.

And then finally your question about around margin, I'll say it is favorable to our normal margin you see within our crop protection portfolio and so it's a good space for us all the way around, not only from the new products that are coming, the position that we're in and the crops that we're on around the world and the outlook – the future looks good from that standpoint.

Kimberly Booth
Vice President-Investor Relations, Corteva, Inc.

A

Thanks, Robert. Next question?

Daniel Rizzo
Analyst, Jefferies LLC

Q

Thank you. Dan Rizzo from Jefferies. You mentioned $1 billion franchises in natural and naturally inspired fungicides and insecticides. Does that mean $1 billion in natural and $1 billion in naturally inspired or $1 billion in insecticides and $1 billion in fungicides? Just a clarification on the language.

Robert King
Executive Vice President-Crop Protection Business Unit, Corteva, Inc.

A

Yeah. So I'll jump but I'm not sure where you – we've mentioned it two different places, if it's mine or Sam so I can talk about the spinosyn franchise.

Daniel Rizzo
Analyst, Jefferies LLC

Q

Okay.

Robert King
Executive Vice President-Crop Protection Business Unit, Corteva, Inc.

A

The spinosyn franchise will be $1 billion in sales by next year on an annual basis. And so that's the Jemvelva, Qalcova products that you might be familiar with. And that's the one that we just completed the expansion of 50% that we said would about 2025 we expect to have that fully utilized.

Charles V. Magro
Chief Executive Officer & Director, Corteva, Inc.

A

Yeah. And maybe Sam can comment, so the way we're thinking about this is so the Enlist platform will be $1 billion business then Robert's just mentioned the spinosyn franchise, single AI, multiple products $1 billion of revenue. And then we lumped the three naturally inspired fungicides that are in the market now and will come into the market in the next three to five years and then at the end of the decade. So you put that together, we believe that that portfolio of fungicides sustainably-advantaged, leading edge technology that will become $1 billion franchise. So we'll move from on the cusp of having [ph] one $2 billion (02:19:39) or $2 billion franchises for those two to a third platform of being $1 billion business. That was the message we were delivering today.

Daniel Rizzo
Analyst, Jefferies LLC

Q

Thank you.

Kimberly Booth
Vice President-Investor Relations, Corteva, Inc.

A

Thank you. Next question?

Adam Samuelson
Analyst, Goldman Sachs & Co. LLC

Q

Thanks. Adam Samuelson with Goldman Sachs. Just question on precision ag and digital broadly, it's something that maybe didn't get as much focus in the presentation today as it may have been in the past. I'm just trying to get a sense how the company feels, its investment that is in that realm. Do you think you have enough right to play? Do you have enough access to the farmer data to actually be able to get them the yield-based outcomes and evidence-based outcomes that they need? And is that something from an M&A perspective that you might feel a need to add on to the portfolio?

Charles V. Magro
Chief Executive Officer & Director, Corteva, Inc.

A

Yeah, Adam. I'll have Sam comment on what we're working on, but let me kind of highlight our shift in thinking on our digital approach. So in the early days, the entire industry – Corteva was involved in this, but the entire industry thought that there would be a huge value to unlock by selling software as a service. And many companies went into that space. I think we've all realized that, that's very difficult.

So from a Corteva perspective, one of the decisions – we didn't really highlight it too much today, but one of the decisions we've made is, is we're rethinking our digital strategy, and we're going to move away from selling software as a service. And we really want our digital tools to be well integrated into our seed and CP platforms, helping growers make informed decisions, unlocking yield, which will be key, and like you mentioned, the data. What can we bring to growers that will drive value? So Sam can now take it from there and kind of give you his perspective on what that next level of thinking will be for us from a digital strategy perspective. So go ahead, Sam.

Sam Eathington
Executive Vice President & Chief Technology and Digital Officer, Corteva, Inc.
A

Yeah, Adam, great question. And Chuck said it well that we've shifted our thinking internally. So an example on the seed platform where the advantage we have is our internal knowledge about how products perform genetic information. The ability to get farmer data, really, there is a number of platforms out there that are making it fairly simple to assemble and bring data together once you have that permission from the farmers to access that data. And that's where, especially in the Pioneer brand, that connection, that trusted advisor that we have with our agents really lets us have that touch with the farmers and be able to access and get that information. And so we've been able to pull that together and demonstrated that, look, when you apply logic and analysis and algorithms to that data at scale, you actually see a bump-up in your product performance because you do a better job of placing those products and a better job in helping farmers on how to grow those products. So it very much is part of our strategy. Digital and data insights are very critical to us for both our seed and crop protection system going forward.

Kimberly Booth
Vice President-Investor Relations, Corteva, Inc.
A

Thanks, Sam. Another one online looks like Latin America offers a nice growth opportunity. Can you please add further details on how the trajectory will play out over the next three years? Is it linear or may we see a step change?

Charles V. Magro
Chief Executive Officer & Director, Corteva, Inc.
A

You want to just hit seed and CP?

Timothy P. Glenn
Executive Vice President-Seed Business Unit, Corteva, Inc.
A

Sure. So I'll start on the seed side. So we've had nice steady growth, I'd say strong growth in seed in Latin America for the last several years. On the seed side, it's one of the few areas in the world where you continue to see an increase in the number of planted hectares every year. Most markets are fairly mature in the sense of a certain amount of land is available for cultivation and we still see an expansion there. We still see an expansion in terms of the value on a per hectare basis as well, farmers, they're very technology savvy, but they continue to really push and adopt more and more technology as they strive to drive productivity on their farm gate. So we're very optimistic about it.

Certainly our portfolio with the introduction of Conkesta E3 opens the door for us to participate on a very valuable market that we've had limited participation. And I would say we're going to see strong, steady growth is how would I describe it. It's going to be some volume. It's going to be some pricing. It's certainly our ability to go out there and access some new area that didn't exist before. So I'd say steady on the seed side.

Kimberly Booth
Vice President-Investor Relations, Corteva, Inc.
A

Thanks, Tim.

Robert King
Executive Vice President-Crop Protection Business Unit, Corteva, Inc.
A

Yeah, from a crop protection standpoint, very similar from a steady increase. We think the crop protection down there is two pieces. Yes, we're growing the top line. And you've seen the tremendous growth rates we've reported in the first half and, and what's going on down there. Second piece of it is, is the margin as well as continued to increase as well. And that has to do with getting new products and the new product introductions, the mix, had opportunity to sit with several growers while I was down there. And they have significant challenges just like everywhere else in the world. But the new technology is one that they're extremely interested in. And so as we continue to move the differentiation more and more in that market as well, I think you'll continue to see a general increase over the next several years because demand is strong and that market is continuing to grow.

Kimberly Booth
Vice President-Investor Relations, Corteva, Inc.
A

Thanks, Robert. Any more questions in the room?

P.J. Juvekar
Analyst, Citigroup Global Markets, Inc.
Q

Hi P.J. Juvekar, I'll get one more. John Deere in particular is working on this mechanical system where they can identify with a camera, whether it's a weed or a crop, and they can zap the weed with some herbicide and they claim that they can reduce herbicide application by as much as two thirds. I don't know the data behind it, whether it's true or not, but when a company like that is promoting that technology, does that worry you about sort of the volumes going forward?

Charles V. Magro
Chief Executive Officer & Director, Corteva, Inc.
A

Yeah. So, P.J., let me address that. I think when – certainly we would agree that any time we can try to do more with less, we're all over that as an organization. The Deere See & Spray technology is pretty interesting. It's also quite expensive. I think from our perspective, what we're trying to do with our chemistry and biology products now is just to drive that as low use rate as we possibly can get. So Sam, hit the highlights on some of our new products like Reklemel for example, you need one [ph] sugar pack (02:26:45) on an acre and you can use standard technology, so standard application technology. So I think there's going to be multiple solutions and options. And we want to give growers a scientific answer, not maybe a mechanical answer. And if we can drive those chemistry use rates down really low and still accomplish the efficacy levels that they need, but using standard equipment, I think that's another very good option I think for farmers to assess as they work through driving their farming operations to be profitable and sustainable.

Kimberly Booth
Vice President-Investor Relations, Corteva, Inc.
A

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

Vincent Stephen Andrews
Analyst, Morgan Stanley & Co. LLC
Q

Thank you. Vincent Andrews from Morgan Stanley again. Just thinking about the balance sheet. Chuck, I remember when you started I remember one of the calls you said the board is going to start looking at the balance sheet. And then I think you got on this sort of cost odyssey that we've now completed and we have out there, which is great. So maybe Chuck and Dave, could you just address, you've got the large cash balance. You don't have that much actual notional dollar denominated debt. Where should the balance sheet go over the next couple of years? I mean, if you look at the peer set both today and historically, they tend to carry, 1.5, 2 times, debt-to-EBITDA. Where do you think this business ultimately should wind up and when do you think the board will get to determining that?

Charles V. Magro
Chief Executive Officer & Director, Corteva, Inc.

A

Let me give you my perspective on where we are in our thinking and then Dave can answer the specific balance sheet question, of course. So first, you deal with strategy and the operating model. We set up the incentive program, the culture, all the things we've just talked about today, and we're feeling really good about those decisions. And now we're turning our attention with our Board of Directors on, if you look at our plan, obviously we're going to have a lot of financial horsepower, tons of flexibility. And the allocation of that capital is going to be put to work, and it's going to be put to work to drive long-term shareholder value. We don't think that we have to make a lot of tough choices. We think we're going to have the strength to do everything we want to do. And a big element has been returning capital to shareholders. We just announced a $2 billion buyback today.

So now if you think about that framework, we're going to spend a lot of time with our board in the next few quarters addressing that now that we've kind of passed the strategic decisions and choices that we have. The balance sheet I consider to be a strategic asset for the company. I said it many times, I was really impressed when I came here how strong the balance sheet was. And now I'm going to turn it over to Dave to talk about the specifics.

David John Anderson
Chief Financial Officer & Executive Vice President, Corteva, Inc.

A

Yeah. So that's a very, very good question. And Chuck, I appreciate the perspective in terms of where we are in the planning and the work we're doing going forward. The starting point is obviously is maintaining our investment-grade rating. I think that's just fundamental for the company. And given the seasonality of the business and the seasonality of the cash flow, but that gives us a lot of flexibility. And as we go forward, we'll be providing more details around what does that mean. We gave you the broader framework today, which is really a little more color, I think, than we've given you in the past, but we'll provide more of that as we go forward.

Kimberly Booth
Vice President-Investor Relations, Corteva, Inc.

Great. Well, that concludes the executive presentation portion of our event today. So thank you for your participation, and for the virtual attendees, thank you for sticking with us here. Thanks again to Sam for joining us online and appreciate your interest in Corteva.