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# Green Plains Inc. NasdaqGS:GPRE

*Earnings Call*

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CALL PARTICIPANTS 2

PRESENTATION 3

QUESTION AND ANSWER 9

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# Presentation

**Operator**

Good morning and welcome to the Green Plains, Inc. and Green Plains Partners Second Quarter 2023 Earnings Conference Call. [Operator Instructions]

I will now turn the call over to your host, Phil Boggs, Executive Vice President, Investor Relations. Mr. Boggs, please go ahead.

**Phil Boggs**
*Executive Vice President of Investor Relations*

Thank you and good morning, everyone. Welcome to Green Plains, Inc. and Green Plains Partners second quarter 2023 earnings call. Participants on today's call are Todd Becker, President and Chief Executive Officer; Jim Stark, Chief Financial Officer; and Leslie van der Meulen, EVP, Product Marketing & Innovation. There is a slide presentation available, and you can find it on the Investor page under the Events and Presentations link on both corporate websites.

During this call, we will be making forward-looking statements which are predictions, projections, or other statements about future events. These statements are based on current expectations and assumptions that are subject to risks and uncertainties. Actual results could materially differ because of factors discussed in today's press releases, in the comments made during this conference call, and in the risk factors section of our Form 10-K, Form 10-Q, and other reports and filings with the Securities and Exchange Commission. We do not undertake any duty to update any forward-looking statement.

Now, I'd like to turn the call over to Todd Becker.

**Todd A. Becker**
*President, CEO & Director*

Thanks, Phil, and good morning, everyone, and thanks for joining our call today. So during the quarter, we were challenged by several events that held us back a quarter from showing you the results of the transformation as we experienced several significant events that negatively impacted what would have been a good quarter. The first was our Wood River incident, which took 1 of our largest locations down for most of the quarter. This impact to the company was over $18 million in total, and we expect some recovery from insurance in the last half of the year, so some of this will be coming back.

In addition, during Q2 our platform was in need of significant upgrades to prepare for 2024 and beyond. And while we had some planned downtime, we also experienced a high level of unplanned downtime in Gen 1, which also had an impact on Gen 2 production volumes and sales and hedges that we had in place already to lock the quarter in. The challenges at our other plants came later in the quarter and really was a June event in the highest margin environment, which we were unable to take advantage of. With that said, we had put Q2 hedges on to lock in over $0.20 a gallon in results and unfortunate timing of these events took most of that away. On the last call, we indicated $0.12 to $0.17 a gallon opportunity on paper, and we were tracking accordingly and better through the end of May, but did not get Wood River released back to us and up and running until weeks later than expected, in addition to unplanned outages.

With this downtime behind us, we are now operating at near full rate for both ethanol and ultra-high protein operations, and even more important, Wood River is making new production records as the team has done a great job getting the plant back to service. But more importantly, the state of the team there is good after the tragedy they experienced. Because of these events, our operations team diligently completed extended spring shutdowns at many of our locations, resulting in an 81.5% utilization rate for the quarter. Our operations leadership team implemented process control improvements to improve reliability and increase ultra-high protein production. All in, this downtime positions our assets to operate reliably during the third and fourth quarter with solid margins on paper today, and at least half of our locations are now capable of foregoing their typical fall shutdowns, enabling additional production during these higher margin periods we are seeing in corn oil, protein, and solid ethanol fundamentals.

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Now on to the quarter, which Jim will cover more in depth later. Our consolidated crush margin was $0.01 per gallon, but again, we are prepared for a solid last half. Between Wood River, negative absorption, repairs, and lost opportunity in both protein and ethanol, there was a $0.15 to $0.20 impact on the overall consolidated crush minimum. Our financial position remains very strong with significant liquidity. And with the last half opportunity in margins, we don't see a significant change to this strength as we return to free cash flow generation during the last half, which will help pay for the large part of the capital needed for our buildout for the rest of the year.

In addition, we entered into a sales contract to divest our 55 million gallon Atkinson, Nebraska, facility as it does not meet our parameters to justify making investments for our technology improvements. For where we are going with Green Plains, this asset did not fit our long-term vision. And once it closes, we believe this transaction will be accretive. We expect to close in the next few weeks and bring the capital back on the balance sheet, and further increasing our financial strength as we optimize our asset base. We expect to replace these volumes with either an expansion at 1 of our large locations where our technologies are running, which is very accretive, or look for an acquisition opportunity where we can immediately add technologies, therefore not expanding fuel supplies in the market.

I will take you through a detailed recap of our transformation progress later in the call and walk you through how we are thinking about the last half of the year. But for now, I want to reiterate that the fundamentals across each area of our strategy are strong and improving. Core ethanol demand continues to look solid and is tracking higher than prior year. With 94 million acres of corn versus 84 million acres of soybeans, the price spreads remain in favor for both protein and corn oil, and timely rains this summer have improved the USDA's estimates for crop conditions in the west, finally, giving an opportunity again to source our inputs a little bit easier than in the past several years. In fact, we have seen continued pressure on the western corn bases just recently, especially new crop, in 2024.

Our ultra-high protein production is once again achieving rates of 800 to 1,000 tons per day. After the extensive downtime taken in the second quarter, we are seeing production rates as designed and have hit over 1,000 tons per day on multiple days. We are planning to dedicate 1 of our sites to 60% protein production later this quarter and begin to build supply chain for delivering 60 Pro to the market during the fourth quarter. I will get more into this exciting development later as well. One really interesting datapoint is our investments were made on a 3 to 3.5 pounds per bushel yield of protein, and we have now achieved as high as 5 pounds with the MSC technology from Fluid Quip. And in fact, since Wood River has returned to full rate, they have averaged well over 4 pounds, which over time increases our capability to produce higher volumes and have better capital efficiencies. No other technology in the world can achieve these rates. The future of our platform is within sight, and with our clean sugar facility on track to start up in early 2024, we are fast approaching being able to demonstrate the true potential of our full vision at 1 of our refineries.

And now I hand the call over to Jim to provide an update on the overall financial results.

**James E. Stark**
*CFO & Principal Accounting Officer*

Thank you, Todd, and good morning, everyone. Green Plains consolidated revenues for the second quarter were $857.6 million, $154.8 million or approximately 15% lower than the same period a year ago. The lower revenues correlate to the lower production gallons of approximately 16% year over year for the second quarter. Our plant utilization rate was 81.5% during the quarter comparing to the 96.9% run rate reported in the same period last year.

As Todd mentioned earlier in the call, we anticipate our plants to perform much better in the second half of 2023, targeting utilization rates in the low-to-mid 90 percentage range of our stated capacity with all plants now operating. For the quarter, we reported net loss attributable to Green Plains of $52.6 million, or an $0.89 loss per diluted share. That compares to a net income of $46.4 million, or $0.73 per diluted share, for the same period in 2022.

Adjusted EBITDA for the quarter was a negative $14.9 million compared to the $56.7 million in the prior year as well as 2022. Depreciation and amortization expense was higher by $3.7 million versus a year ago

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due to the addition of the [ MC ] technology builds, all [ online ] and operating at the end of last year. We realized a $0.01 per gallon consolidated crush for Q2 of '23. That compares to $0.28 per gallon crush in the prior year. On a sequential quarter-to-quarter basis, we saw the consolidated crush margin per gallon strengthen $0.08 when compared to the first quarter of this year.

Our ag and energy segment recorded $2.9 million in EBITDA. That's about $7.9 million lower than the prior year. This decline was driven by lack of opportunities on our merchant businesses, which ebbs and flows with each year quarter to quarter. For the second quarter, our SG&A costs for all segments was $33.3 million compared to $30.1 million for Q2 of 2022. This increase was driven by increased legal fees associated with the GPP buy-in and increased personnel costs, including severance costs. I'd like to remind our callers, we do consolidate GPP and Green Plains in these SG&A costs, so that would be legal fees on both sides for both entities.

Interest expense of $9.7 million for the quarter includes the impact of debt amortization and capitalized interest, which was higher than the $7.8 million reported for the second quarter of last year due to reduced capital interest as certain projects [ had ] been completed. I would like to note, though, our interest income was approximately $2 million higher in the second quarter '23 when compared to the same period a year ago.

The income tax benefit for the quarter was right at $1 million compared to a tax expense of $2.9 million for the period in 2022. At the end of the quarter, the net loss carryforwards available to the company were $140 million, which may be carried forward indefinitely. We continue to anticipate that our normalized tax rate for Green Plains Inc., excluding minority interest, should be around 21%. Our liquidity position remains solid and at the end of the quarter we had $359.8 million in cash, cash equivalents, and restricted cash, along with approximately $128 million available under working capital revolver. We are focused on executing the next steps of transformation and have the capital and liquidity to do so.

For the second quarter, we allocated $17 million of capital across platform, which included $10 million to our clean sugar field in Shenandoah and MSC protein initiatives. About 4 million was also allocated to other growth initiatives and approximately $3 million toward maintenance, safety, and regulatory capital. For the remainder of '23, we anticipate CapEx will be in the range of $60 million to $90 million as we continue to work through the timing of permitting for MSC technology deployments at a couple of our larger plants.

Green Plains Partners reported net income of $9.3 million and an adjusted EBITDA of $12.7 million for the Q2 of 2023, which was in line with the $12.9 million reported for the same period a year ago. The minimum volume commitment supported the partnership's steady financials during the quarter, while plant utilization rates at Green Plains were lower than the prior year. The partnership declared a quarterly distribution of $0.455 per unit, with a 0.99x coverage ratio for the quarter. The partnership also reported distributable cash flow of $10.7 million for the quarter, slightly lower than the $11.3 million for the same quarter of 2022.

Over the last 12 months, the partnership produced adjusted EBITDA of $50.9 million, distributable cash flow of $43.5 million, and declared distributions of $43.2 million, resulting in a 1.01x coverage ratio, excluding any adjustment for the principal payments made in the past year. As a reminder, on May 3, 2023, the company submitted a nonbinding preliminary proposal to the Board of Directors of Green Plains Holdings LLC, the general partner of Green Plains Partners LP, to acquire all the publicly held common units of the partnership not already owned by Green Plains. The Conflicts Committee of the Board of Directors of the general partner have been delegated the authority to evaluate and is currently evaluating the possible terms of a proposed transaction.

Now I'd like to turn the call back over to Todd.

**Todd A. Becker**
*President, CEO & Director*

Thanks, Jim. So there's a lot to talk about, and I know we have limited time, and while Q2 was challenging, the last half of '23 and '24 look solid, and our path forward is gaining traction and looking

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better. For a couple years now, we have been talking about the transformation to a 2.0 ag tech sustainable producer of high-value ingredients, focused on the 4 pillars of protein, renewable corn oil, clean sugar, and decarbonization, and the future is now.

Quickly, on decarbonization, which is a bit out of our normal order, but probably underappreciated. This is 1 of the several reasons we are gaining tractions in our clean sugar technology products and protein. Carbon scores do matter. We are now less than 2 years away from what we believe is a significant financial opportunity when we decarbonize a majority of our platform, but the incentive structures are firmly in place. Don't underestimate or discount our carbon and pipeline strategy as we believe all roads will lead to alcohol to jet sustainable aviation fuel production.

Importantly though, the CI, carbon intensity, of all of our ingredients will be reduced even further, which is a key selling point for our ultra-high protein today and our clean sugar technology dextrose in the future. We literally received our latest protein lifecycle carbon intensity score yesterday, which shows a 46% lower score for our high-protein products comparing to corn gluten meal globally, aligning this data with PEF, ISO and ISCC PLUS rules. This is very important to pet food and aquaculture producers globally. In addition, our [ CST ] carbon intensity cannot be matched by current products in the market today, which is why we are on significant negotiations with more demand than we can supply over the next several years. More later on this as well. Our decarbonization opportunities with that now should at least add $120 million to $180 million annualized economic opportunities starting in the last half of 2025. We have also executed a few different new contracts around our carbon strategy that give us the confidence to use this number, and we have more to go.

Our protein initiatives remain on track and our commercial success has continued to see strong results even with our reduced rates in Q2, which was a short-term impact. Our turnkey JV with Tharaldson in North Dakota is anticipated to begin operations in the first quarter of 2024 with our Madison and Fairmont locations on deck next, pending permitting from Illinois and Minnesota. Completing those 3 facilities would increase our annual marketing capacity by 250,000 tons, bringing our total annual run rate to 580,000 tons of ultra-high protein production, including full turnkey rates, which is very close to what we had laid out for our 2025 volumes. We believe this number grows as our yields at each site get much better and match Wood River.

The 2025 economic uplift remains in the $150 million to $210 million range that we have pointed out for the last couple of years. Protein margins have gotten stronger for 2 main reasons: first, our reorder rate remains high, and even more important, our prices continue to increase in relation to our input costs; second, while during the ramp up over the first few years, the corn-soy relationship narrowed, this has now normalized, and we are seeing initial margins on new sales in the range of $0.15 to $0.17 per gallon uplift for that site, which is why our ability to run Gen 1 platform full out is important and that hurt us in the second quarter, as we indicated.

We continue to see great success in the marketing of the ingredient and are in significant late-stage discussions with commercial counterparties for our 60% protein products. We expect our first commercial shipments beginning in the fourth quarter, and we continue to believe that 20% to 30% of our platform could be 60% protein sales during 2024. Our ultra-high protein has a higher protein concentration than soybean meal, and it does without the antinutritional factors. And importantly our fermented yeast product for petfood application, gives a further nutritional advantage versus soybean meal and other high-protein offerings. Now, depending on the customer, we can tailor biological recipes now to suit their needs for protein and yeast and our partnership with Novozymes allows this to happen as we are now beginning to see the fruits of those labors as well. We don't believe anyone in the world can do what our companies are doing together. We have been pointing to these opportunities for some time now and the future is now.

Two other quick points; first, we are now producing for the first time ever non-GMO ultra-high protein. We will ship to customers for initial analysis and trials over the next several months. The cost will be high, but the returns will be higher. Second, post this production run being completed next week, we expect to dedicate 1 of our MSC locations as a 60 Pro facility to produce commercial quantities to ship in Q4 and 2024 and hope to keep that location on this program for the majority of its production. Renewable corn oil

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prices have seen a recent resurgence in strength as renewable diesel capacity continues to come online. We are seeing renewable corn oil pricing consistently achieve premiums to soybean oil due to the lower carbon intensity of our product. As a result, we are once again seeing corn oil pricing in the $0.65 to $0.75 a pound range. And remember, under the 45Z clean fuel production credit, our low CI renewable oil is further advantaged to soybean oil starting in 2025, and I think that is also underappreciated.

For our clean sugar initiative, our engineering teams and construction crews at Shenandoah continue to make great progress on construction, and the project continues to be on track for mechanical completion in late 2023 and startup in early 2024. We are doing something that has never been done at a dry grind facility, creating a truly revolutionary biorefinery and using that to create a lower carbon intensity dextrose than what is available today in the market. Customer interest remains very high, and we are confident we will have a majority of the first year's capacity spoken for prior to startup and expect to have announceable commercial sales commitments before the end of the year.

The last half of 2023, obviously, looks completely different from the first half for us as we are operating and positioned to deliver stronger utilization numbers due to the shutdowns we took in the second quarter, and we are well positioned to hit the targeted run rates for our protein and oil businesses that we have laid out. At today's pricing, renewable corn oil alone could contribute $70 million to $80 million for the second half of 2023, on pace for the annualized run rate we have discussed in the past. The uplift from our protein business is back on pace for the run rates we have discussed previously and believe there is upside to that number depending on the level of 60% protein sales we have in 2024. But all-in, adding in ag and energy and net of corporate overhead, we are setting up for a strong finish for nonethanol contributions during the back half of the year as we have previously guided to. The current outlook for our Gen 1 platform is materially stronger than the recent past, favorable corn market drivers and an anticipated larger carryout, coupled with improved year-over-year driving demand has led to an expansion in the ethanol margin setting the back half of 2023 to be stronger across all of our areas of our business.

Finally, I want to provide a brief technology update. As we indicated on our last call, we are working towards some exciting technology news for Fluid Quip technologies. The first, which was fulfilled in our Shell Fiber Conversion Technology, or SFCT, announcement about our collaboration with Equilon, a subsidiary of Shell, 1 of the world's largest energy companies, should not be discounted as well because we have been working with them since early 2021 to develop a process to combine fermentation, precision mechanical separation, and processing and fiber conversion into 1 platform. They are building a very large pilot SFCT facility adjacent to our York Innovation Center where we are adding the MSC process side by side. Recruiting for this venture is well underway and getting into the public sphere helps these efforts.

So what is it that we are doing in this collaboration? Combining MSC with SFCT represents an innovative technology for agricultural processing and allows us to break down a kernel of corn into its high-value products leaving nothing behind. In addition to the fermentation and precision separation technology that we have been using at Green Plains and Fluid Quip, this collaboration adds a chemical breakdown step of the fiber portion of what has already been separated through the biological and mechanical means, which is significantly different than anything you've seen in the past, increasing the amount of protein that can be recovered, capturing all remaining renewable corn oil and producing cellulosic sugars, which expands the ability to make low-carbon ethanol, which we believe could be a key component feedstock for SAF and for other low-carbon ethanol markets like Canada.

Said another way, this process will convert our lowest-value coal product, DDGS, or dry distillers grains, into 3 high-value products: renewable corn oil, ultra-high protein, and cellulosic ethanol. It's really just the next step in decarbonizing our platform and maximizing the value-added products from our biorefining process. We anticipate to start up in 2024, which is not far away, and we will look to commercialize this technology at 1 of our MSC facilities that we have already built, which is lower capital intensity for us upon achievement of key milestones.

In addition, Fluid Quip had its first MSC technology sale into Europe. The opportunity not only further validates Fluid Quip's MSC as being the leading precision separation technology globally, but it also demonstrates feedstock flexibility and efficiency as the application will be for wheat as its primary feedstock. MSC can work with corn, wheat, and sorghum blends, which opens the door to additional

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markets around the world. In addition, Fluid Quip's patent suite just got stronger as we were issued 4 new patents this quarter, 2 related to clean sugar, 1 related to protein -- which includes oil recovery, and 1 focused on enzyme recycling of converting pulp cellulose-based material into sugars. We also expect more broad patent coverage globally for clean sugar technologies to be issued very shortly as we have been informed by several countries they are coming.

The value of Fluid Quip's IP portfolio is a key differentiator for Green Plains, and while often underappreciated, these latest announcements begin to demonstrate the value of the investment in Fluid Quip we made in 2021. We truly have a revolutionary technology company whose IP we are deploying to reinvent our platform into Green Plains 2.0. We have been pointing to this future for some time now. And although we have seen some setbacks with the success we are seeing across all of our pillars, the opportunities we are executing on are just ahead of us, and we believe the future is finally upon us and is now.
And with that, I'll leave it there. Thanks for joining our call today. And let's start the question-and-answer session.

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# Question and Answer

**Operator**

[Operator Instructions] Your first question comes from Craig Irwin from ROTH Capital.

**Craig Irwin**
*ROTH MKM Partners, LLC, Research Division*

Todd, so HiPro down 900 a day. Line of sight on 60 Pro. You did exactly what you said you would do, right? There's been a lot of learning there, and it's been -- nothing ever goes in a straight line, right? And most investors these days are now starting to look forward to clean sugar. Can you maybe just describe for us some of the things that you learned from the rollout of HiPro that translate into clean sugar? Obviously, you're starting in a different place, given the own Fluid Quip here, but I'm sure there's some important things you can share with us to help us understand what clean sugar looks like from an execution standpoint, with all the learnings you've had in the last couple years.

**Todd A. Becker**
*President, CEO & Director*

Yes, I think our ramp up for sugar will be significantly different from the learnings we had in our ramp up from protein. We underappreciated the difficulty at times to put a new technology in place, but I think as we rolled out more and more of our sites, we learned every day and then we saw better results in terms of how we build them and how we run them. And we're even seeing today just as we optimize our protein technologies, when we built these assets, we thought we'd have a 3 to 3.5 pound per bushel yield. And we now know, based on our partnership with Novozymes as well as things we can do mechanically, we will be able to achieve 5 pounds per bushel consistently, which allows us not only to hit our laid-out numbers that we put out there in terms of volumes for 2025, but exceed them as well as we continue to get more and more out of these systems and debottleneck them. Took a little bit longer than I think we appreciate it, but we're going to take those learnings, apply them to sugar.

Sugar is a 200 million to 300 million pound system that we're building right now. And the difference as well is that we went out and hired what we believe are experts in wet milling and making dextrose, going off, quite frankly, to crystallize dextrose as well. And so we have set up very, very differently so that it's not Gen 1 dry grind management running these assets. It's actually a wet milling team that we hired from several of the largest in the world that wanted to come work for us on this revolutionary technology implementation because we believe this is really the future of our company.

And so on top of that then, we wanted to get ahead of marketing the product. In terms of -- this takes a product longer to market all the way through food, but industrial use of dextrose remains high. And so 1 key differentiator for us was to get on our carbon scores very early because this product is a significant reduction in carbon intensity, which is a big deal for both industrial and food products. So when we start up, we're focused on hopefully selling out to industrial markets, and then ultimately, it should take us about 4 to 6 months to get food grade certified, and we are already food-grade certified in the process at our York facility. We'll get food grade certified at a better facility in Shenandoah and then start to hit the food market later in 2024 and start to look at where do we go next. Do we increase Shenandoah capacity, which is fully expandable? That's how we designed it. Or do we move to other locations where we have interest in geographic demand that they want us to build closer to their sites? Or they want to collocate on our properties.

And we just approached it very differently, but this product is so much more valuable in total to what our bottom line impact can be versus protein, which is why this technology, we believe, is just such a gamechanger for us. But this 1, we're going to roll out very carefully and make sure that, #1, we don't overload the market. But #2, we come online and think about all the things long before we start these up that can take away some of the length that it takes to start up technologies.

**Craig Irwin**

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*ROTH MKM Partners, LLC, Research Division*

So the other big question out there right now is with the MLP not too many weeks away from being consolidated, right? Let's hope for a small number. This opens up the field for you to much more easily execute on M&A. And in the past, you've been very active and even had some interesting situations where 1 of the chunky portfolios you had an opportunity to offer a vastly superior proposal to 1 of the sellers, I think, because of a tax advantage structure for them. Can you maybe update us on how active you've been over the last couple years as far as evaluating assets and whether or not your appetite is likely to be for single plants or possibly portfolios? And what are the complications these days as far as actually executing acquisitions in the broader ethanol plant market?

**Todd A. Becker**
*President, CEO & Director*

Well, that's a lot to unpack there, but let me just focus on a couple things. We continue to negotiate with the Conflicts Committee and really can't talk much more than that on bringing the MLP in. And we talked about in the past, some of the reasons why we want to do that. And we'll just leave it at that just because of where we're at in the process.

Secondly, from an acquisition standpoint, we've been on the sidelines a bit. Ethanol plants, in general, are harder to buy in the size, scope, and scale that we want to apply our technologies to them. And as you saw, we divested a small plant. For us, it's just locationally, geographically, and also the way that the logistics work out there just won't fit our long-term strategy around protein oil, sugar, and decarbonization. But it fits somebody else's, which is good. But it was a smaller subscale plant to what we want to operate in the future.

Acquisitions are hard, they're expensive, the value of our assets have gone up. If you want to build one today, replacement value for an ethanol plant in the Midwest is $2.25 to $2.50 a bushel minimum -- gallon, sorry, $2.25 to $2.50 a gallon minimum, and that's before you add on any of our technologies as well. So M&A is pretty difficult. We absolutely want to begin to re-expand our platform over the next several years and look for opportunities, but everything got more expensive, which replacement cost is meaningful in this industry. And why is it meaningful? Because before you even take a look at ethanol margins have somewhat recovered, blends are going up, we believe our technologies can be applied, but more importantly, if you're sitting on 1 of the pipelines or Summit, for example, which can get built as quick as -- probably quicker than most, you're in an advantaged position. And there's going to be the haves and the have nots in the next couple of years of who gets up and running first, and that's why we chose Summit as 1 of our partners is because we think that will be the haves, and that will get built first, and you could have a multiyear advantage over those that are not on a pipeline that is operating yet.

So that's why people -- when you look at acquisitions, you have to value very different this industry in the past. And if we get to jet fuel, which you've already seen projects being announced, the value of an asset to produce low-carbon alcohol and low-carbon feedstocks is just going to continue to go up, notwithstanding some of the volatility we face. So we absolutely would love to expand our platform. We don't really want to build a bunch more fuel capacity, and we have some sites we can expand a little bit, so we can take advantage of being on a pipeline. But also if you take a look at a place like Shenandoah where we're going to take capacity out of the market as we build up our clean sugar, that will give us an opportunity as well. So they're out there, but it's getting much harder and much more expensive to do M&A in this industry. It's not like it was a few years ago, no matter what the margin is in any given quarter, by the way.

**Operator**

Next question comes from Adam Samuelson from Goldman Sachs.

**Adam Samuelson**
*Goldman Sachs Group, Inc., Research Division*

So I guess the first question just maybe making sure we're clear on the quarter and how you're framing the second half. I think in the prepared remarks, Todd, you talked to the Wood River issue and the other

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unplanned and planned downtime potentially leaving up to $0.20 a gallon of margin on the table. As we look forward with the network now operating at higher rates, less downtime in the second half of the year, and where the forward curves are at your mix of HiPro and corn oil, is that margin level or that margin level plus the right way to think about second half EBITDA?

**Todd A. Becker**
*President, CEO & Director*

Yes. It's ebbing and flowing. We saw a nice expansion back yesterday. But yes, I think you're not far from those ranges today; if not, potentially even better. And look, part of our Q2 was also the fact when you don't run and the market expands and the prices go up, you can't execute on high-priced contracts, which then becomes a bit of a double whammy having to buy those in or having to cancel them and to the advantage of the person on the other side. So for us, we were tracking really well. And unfortunately, all of our big sites hit at the same time. And while we had planned downtimes at several of them, they turned into unplanned downtimes as well.

And so it wasn't just really just missing the margin. It was actually having to buy-in hedges and also buy-in sales, high-priced protein sales as well, that hurt us. So, going forward, if we get clean -- as we're clean right now, that's when we have the real opportunity to achieve those type of margins and more. And we saw them higher even since then, but they've come down a little bit. As that corn rally went up very fast and now it's come down, I think ethanol numbers are improving again. We saw a couple of weeks of builds. So I think we're setting up for a pretty good fundamental outlook for just the base fuel in the last half.

And then protein, as we indicated, when you have the corn soy spread doing what it's doing and corn sitting around $5 and soy sitting around -- our soymeal sitting over at $440, obviously inverted into next year, it's really in the favor of our strategy again. And while we got a lot of questions from our shareholders about 1.5 years ago when that spread narrowed, I think this ebbs and flows, but it's really favorable for not just last half but 2024 as well. And we're seeing a good pickup in demand as our product continues to get better and better inclusion rates in rations across all the animal sectors, including pet food and aquaculture.

**Adam Samuelson**
*Goldman Sachs Group, Inc., Research Division*

Okay. No, that's really helpful. And if I could just ask a follow-up on HiPro commercialization. You talked about 60% sales that you're working on and getting those sales done in the fourth quarter. Can you help us frame where the premium versus regular soymeal or regular UHP would be, just as we think about the incremental contribution from getting meaningful portions of your production to the 60% level? And what will take to push a higher proportion of your HiPro production up into that 60% range?

**Todd A. Becker**
*President, CEO & Director*

Yes. Our first step is just to start competing really as a replacement for corn gluten meal and soy protein concentrates. And that's really where our replacement is. As we've seen soymeal increase and the corn and soy spread go in our favor for 50 Pro, when you're competing against a corn gluten meal, the spread between corn gluten and soymeal have narrowed a bit. So while we'll deal with that a little bit, what we can see today is at least on paper, a $0.14 to $0.17 uplift again is how we're thinking about almost double the margin again.

Now that's a starting point, and we want to get involved in these rations. But the demand that we're seeing at least nearby is coming from outside of the United States in terms of aquaculture for 60 Pro. And then we're working on significant demand within the United States next year in 2024 for aquaculture and pet and other areas and really in the early stages of swine. So we are just starting to -- we have been working significantly hard on the program over the last 6 to 12 months and getting into different rations and getting through a lot of the evaluation stages, and we're at the end of those with very, very good high marks. But again, the spread narrowed between some of the higher protein products and soybean meal just because of the front-end soybean meal curve. But overall, if we had to look at it on paper, we look at

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the base margin in 50 Pro, somewhere between $0.15 and $0.18 a gallon today, the base margin in 60 Pro starting at $0.30 to $0.40 a gallon uplift today, and really just some of it depends on market, some of it depends on where we're going to go in the world, some of it depends on freight. But overall, we see a significant uplift to that and overall great acceptance of the product.

What's really unique and differentiates Green Plains from anybody else is with our new plant JV coming on in early '24, our redundancy is a key and critical component, and our volume is a key and critical component that we can now sell you 50,000 tons, 100,000 tons, 150,000 tons. Really there's not a limit there relative to an inclusion rate and that's a gamechanger when you talk to a customer and instead of having to sell them 4,000 or 5,000 tons. So redundancy really matters, and it will matter even more in 60 Pro markets.

**Operator**

Next question from Kristen Owen from Oppenheimer.

**Kristen Owen**
*Oppenheimer & Co. Inc., Research Division*

Just dovetailing on that last response. Todd, you mentioned in the prepared remarks that you're planning to move a single facility or about 20% dedicated capacity to 60 Pro. So can you just talk us through what you're hearing in the market that's giving you the confidence that you can allocate that capacity to that higher level protein?

**Todd A. Becker**
*President, CEO & Director*

What we're hearing is really preparing for shipments hopefully in September to satisfy Q4 demand that we're working on today in late-stage negotiations. So we can't just turn it on overnight. It takes about a week or 2 just to start to get the plant fully switched over from 50 to 60 Pro. We got to make sure that we work with our biology partners to make sure we have the adequate inputs that we need in fermentation. That just takes time. So a little bit as you have to anticipate what stages you are in discussions. And when we look at the size of the discussions we have to convert 1 of our plants fully to 60 Pro is going to be the best outcome so we can satisfy. It's a bit of a chicken and the egg. When they want it, you better have it. And I think we learned that in our 50 Pro is that we built inventories on 50 Pro and it took a little time to work through those inventories. But because we had those inventories, we were able to really start to get traction in the 50 Pro market.

We're going to have to do the same thing in 60 Pro, start to build inventories later this quarter so that we can satisfy what we believe is demand. And we're not just seeing demand from a standpoint of ship me a truck or ship me a tote or even a container. We're actually starting to see enough volume that we're potentially starting to ship pieces of vessels as well around the world. So there's enough -- it gives us enough confidence that it's time to make a switch to 1 of our plants and have the product available in the market.

**Kristen Owen**
*Oppenheimer & Co. Inc., Research Division*

And just a clarifying question on that. We're talking multiple customers in multiple end markets or just a little bit more color that you can provide on the customer standpoint.

**Todd A. Becker**
*President, CEO & Director*

Multiple customers, multiple end markets, multiple geographies, some as big as vessel holds, and that's vessel quant not a full vessel, and even down to 1 truck at a time, and we just want to be prepared to ship and be ready to go. We've been in significant trials, evaluations, you can go on and on, tests, labeling, all the things that are really important to our customers. We've been working on that for well over a year as we had been indicating to everybody. It's a long process to get here. We thought it would take us 3 to 5 years, and as we said, it took 3 to 5 months to make it. Now it takes about another year to get through all

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of the evaluations, because once we made it, it's been in the supply chain, it's been in evaluation. And so far, we haven't really seen any market that has come back to us to say, hey, that didn't work for us. And so our opportunity and what we can propose to customers around everything from performance, taste, as well as carbon intensity is extremely beneficial.

**Kristen Owen**
*Oppenheimer & Co. Inc., Research Division*

That all sounds very positive. One follow-up question unrelated. Just given some of the discussion around rerating of the asset footprint and replacement cost, any indication that you can give us on the transaction value for Atkinson, what we should anticipate in terms of cash on the balance sheet from that?

**Todd A. Becker**
*President, CEO & Director*

Yes, we're in confidentiality with both sides of this transaction, and it was a smaller site, and it didn't have rail. There's a lot of things on this site that didn't match what we wanted. So relatively speaking, it's not really a material transaction, but it's definitely enough cash for our balance sheet. That makes a difference as well. But we were in really great financial strength without this as well. That's just 1 more step. As I indicated, our free cash flow generation, at least based on current markets, should pretty much cover a lot of our CapEx in terms of our growth initiatives, which really leaves us in a very similar financial position at the end of the year going to 2024 with potentially Madison or Fairmont getting their permit later this year, especially Madison. Fairmont will take a little bit longer than that. So we just want to make sure we were positioned from the standpoint of being able to execute on where we can really make the money and be accretive, and that's why we executed on this transaction. But we would not have put any of our technology at this site, so it really didn't match our long-term needs.

**Operator**

Next question from Manav Gupta, UBS.

**Manav Gupta**
*UBS Investment Bank, Research Division*

I wanted to understand a little bit better. We are seeing a rebound in corn oil prices, but we're also seeing rebound in animal tallows, soyabean oil. So it appears pretty much all RD feedstocks are on an uptrend. Help us understand what's driving it? Is it a function of the plants running a lot more reliably now, ramp, or does it have to do something with the supply side also, Argentina just not being able to supply enough soybean oil, so the whole market is tight? If you could just talk about the dynamics of the RD feedstock market.

**Todd A. Becker**
*President, CEO & Director*

Yes. It's interesting when the market was in the 40s and 50s, we were selling -- we are still selling our oil at 5 to 12 over that market. So that was the market for corn oil, as we call it renewable corn oil. Now that the soybean meal market has rallied on the front end a little bit, those sales, obviously, from the standpoint of doing basis sales are beneficial to us. But beyond that, we are still selling at a premium to that.

I think there's just multiple factors. I think there's not -- I don't know that the supply is the issue. I think demand is just becoming so robust that we're starting to see really good uptakes of oils into renewable diesel. More importantly, though, when you look at some recovery in LCFS, when you look at the value of CI points, for what we produce and even tallows when you look at the low CI feedstocks, we have not really seen anywhere where those will trade anywhere to discount to soybean oil anymore. And in fact, as we move towards 2025, which is just not that far away, we have a benefit to the end users because of the IRA to use more corn oil. So we're really in a really good position.

What we didn't mention, Manav, as well, is that Fluid Quip continues to see in their technology expanded yields, before we even get to SFCT technology. So we are implementing 1 of their new technologies in

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Wood River over the next several months, which we believe has the capability to increase our yields at an MSC facility to 1.3, 1.4, and they've already seen those results at an earlier application at a non-Green Plains plant that they had a different system running already. They upgraded it. So now we're going to take those findings and apply it. So we're very confident in our ability to produce oil, but I think it's really just demand that's finally showing up. And I think supply has not really grown quite frankly. We're not making any more oils in the industry. Soybean oil -- there's not a bunch of new plants that started up in soy crushing that's coming. So the supply hasn't really expanded while demand is finally exceeding it again.

**Manav Gupta**
*UBS Investment Bank, Research Division*

Okay. And a quick follow-up here is the Wood River outage hit you multiple ways. It hit your ethanol production, corn oil, also your ultra-high pro. Help us understand a little bit better, during the OSHA investigation or otherwise, what are some of the lessons learned here? And what can be done to make sure something like this does not happen again?

**Todd A. Becker**
*President, CEO & Director*

Well, we don't ever want it to happen. I think it was an unfortunate event. It was during the shutdown. We can't really get into a lot of the details. OSHA has released the plant back to us, and we're already preparing during the end of that to bring that plant up as fast as we could. Took a little while to get protein and oil running. We just want to make sure the team was good and stable. But look, these are incidents that we never want to happen. So we learn from every incident like this. It's unfortunate. It is hard on the team. It's hard on the company overall. It's not just the Wood River facility. We are certainly cognizant of what it can do to our employees. And I think it just had multiple effects across the company. But there is -- as we move on, we'll just take our learnings. But I think overall, we are running that plant full out again, and the team is in good shape, and OSHA has released the plant back to us. So we'll move on and learn from that.

**Operator**

Next question comes from Salvator Tiano, Bank of America.

**Salvator Tiano**
*BofA Securities, Research Division*

I actually want to get a little bit more color on the rest of the asset. So firstly, if I understood correctly, given that $0.15 to $0.20 impact that you said on consolidated margins, it seems to us that it's probably another $10 million to $20 million impact that you saw in other facilities besides Wood River. And does this make sense? And also, what type of outages were they did you uncover essentially things during planned turnaround that needed to be repaired? Or simply things broke down throughout the quarter?

**Todd A. Becker**
*President, CEO & Director*

Yes. I think it was a little bit of everything you're talking about. And on top of that, you have the domino effect of having good hedges on in an expanding market, having good sales on of high protein in a decreasing market, which then you lose those and you have to exit some of those opportunities. And so it was -- yes, it was a combination of the fact that we were in shutdowns. That took significantly longer to bring back up as we found more areas that we needed to repair. And then overall, we had some significant unplanned downtimes of things that just happened during the quarter. It was a bit of a perfect storm. We weren't expecting it. But what we were able to do then is during those -- our operations team, again, we brought in a new Head of Operations. He's built a team around him. They got their head around it. We are highly skilled and highly confident across that team. We brought in people across industries from refining all the way into wet milling, all the way into dry milling and built a really new team as we had turned that team over. And they had hit it hard and set us up so that during that time, at least we were able to quickly mobilize, take advantage, and get through some of the things we would have done in the last half at our

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normal shutdowns -- fall shutdowns, and we're not going to have to do some of those now, which is going to be helpful.

So it was just a bit of a perfect storm that hit us. Unfortunately, we had ourselves set up for a pretty good quarter. And then between Wood River, the spiral effect of locking things in, and then having unplanned downtimes just hit us hard, and we'll move on from that and just run full out as best we can during the last half and show everybody what this is capable of because we could have shown it in the second quarter. It just was not able to execute because of those couple of reasons.

**Salvator Tiano**
*BofA Securities, Research Division*

Perfect. And as a follow-up, you mentioned you were in the final stage of negotiations for the 60 Pro volumes in Q4. I personally at least was under the impression things were more firm in terms of sales there. So is there any risk that negotiations may not yield the outcome that you would like and you may actually not sell 60 Pro volumes here. And it's been a while since you announced obviously the [ accretional ] partnership with Riverence. So how are things progressing there as well.

**Todd A. Becker**
*President, CEO & Director*

Yes. So I don't think we gave anybody a certainty of sale. But what we did say is we're negotiating in the fourth quarter. We feel like now we're in such late stages that we're even negotiating destinations, price, all those type of things. So we know we'll make it into some rations into the fourth quarter, and that's why we're now starting to ramp up. It will take us a good 30 days to get into full production rate, even though we can start to hit it within a few days, but just to get consistent and make sure that the plant's lined out and running well. But that's why our confidence has gone up relative to starting up 1 of our 60 Pro plants even earlier than probably we thought we were going to do. Our Riverence partnership remains strong. We are already in 1 of the rations through 1 of their third-party suppliers. We know that for a fact. We're working on getting into another ration of theirs. We know that our product is very valuable. Our partnership has remained strong. We're looking at their volumes going forward and what we can do together and where we should really place our asset. It's a long game when you think about the feeding cycles for what they do and what the other salmon producers do around the world. This is a 2-year cycle almost from the time you start until the time you harvest an end product.

And so we have plenty of time, but the partnership remains strong. The asset base is starting to be thought of. There is an asset in the middle of that already, and we hopefully will start to see the full benefit of that partnership over the next year or 2. But it's a long game when you think about the feeding cycle of these companies and the growth cycle of these companies, and not many better than Riverence in the world, and I can only assure you that our partnership is strong, in place, and looking for where we're going to continue to expand it.

**Operator**

Next question comes from Laurence Alexander, Jefferies.

**Daniel Rizzo**
*Jefferies LLC, Research Division*

This is Dan Rizzo on for Laurence. Just a quick question. Are there any lingering costs associated with the combination with GPP that's going to occur later in the next couple months?

**Todd A. Becker**
*President, CEO & Director*

Yes, I would say there's -- depending on where we get to in the transaction, there's still absolute merger costs that could happen. We need shareholder votes. There's lawyers, there's several things in terms of filing. So, Dan, I would say there's deal fees, all those type of things have to happen. But overall, we could break those out, and they're all one-timers, but I think the overall benefit of bringing them in would greatly exceed that if we can get this deal done.

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**Daniel Rizzo**
*Jefferies LLC, Research Division*

And I'm sorry if I forgot this, but have you quantified what the synergies are with doing this, the cost savings are?

**Todd A. Becker**
*President, CEO & Director*

Yes. What we said is, #1, by bringing the partnership back in, obviously, we don't send some of our money out the door in terms of fees. We get that back in, but we're paying for that, some savings in SG&A, overall interest savings as well potentially as we will see what we do with a piece of that. But we're still negotiating with the Conflicts Committee, and we should have more on that during the quarter.

**Operator**

Next question comes from Jordan Levy, Truist Securities.

**Jordan Levy**
*Truist Securities, Inc., Research Division*

Appreciate all the commentary and the improved outlook you talked to in the back half of the year. Maybe if we could just unpack that a little bit more and help frame up how we should be thinking about what run rate EBITDA might look like given the levels you're running at on protein right now and what you're seeing in crush and DCO.

**Todd A. Becker**
*President, CEO & Director*

Yes. I think when you look at it, it's on paper similar or better to the margins we locked in during Q2 overall. And depending on where we see ethanol perform, we've got to watch the corn market closely. Bombing a Black Sea port from the Ukraine to Russia doesn't help our crush, but overall, the crush expanded, the numbers came back in line, run rates were overly stated in our opinion last week at [ $10.90 ]. It's probably not possible. Just doesn't stay there very long. And I think we'll get some better EIA data going forward. I think we're below last year's stock levels.

Blending continues to increase. RIN values have not broken since the updated RVOs at all. So if you look at retailers, they're making plenty of money blending ethanol. We're seeing more and more E15-type 88-octane sales happen to the consumer. We've even seen uptick in E85 sales, which we didn't know how much traction that will continue to maintain over the years. But when you look at corn oil alone relative to the first half, just take prices where they're at today, that alone is in that $75 million to $80 million range, just contribution where the first half was more of a -- because of prices and the volatility is more in that $50 million to $60 million range in the first half.

So that alone gets us back. We got the question once, how did you come up with $0.60 or $0.70 a pound in your long-term view of oil, and I think it's taking shape nicely. And so protein as well, we've got to deliver on some of these 60 Pro sales. But overall, we should start to really see a nice protein uplift. And we are looking forward to the day, which is going to come soon, where we're able to really break out last half protein numbers for you, but I can tell you that it's on pace with what we had previously indicated. On top of that, Fluid Quip will start to gain some traction on some of the sales that they start to make.

Remember, when we make a sale in Fluid Quip, it actually increases EBITDA at Green Plains. There is a margin on technology, and they're working on incredible technology opportunities well outside of protein and what they do. And so they have a much bigger engineering and construction and technology business as well. So we're looking forward to their contributions. And we'll just have to wait and see where ethanol comes in. And even the last half on ag and energy is usually stronger than the first half because third and fourth quarter is really we start to kick in on in that as well. So overall, when you look at it, on paper, it's greater than what we were logging in, in the second quarter, and we'll have to see where it goes from there. And fundamentals are good in everything we're doing.

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**Jordan Levy**
*Truist Securities, Inc., Research Division*

That's promising. Maybe just shifting gears over to the regulatory front. Looks like the administration is working through how to think about ethanol as a feedstock for SAF. Just curious what your thoughts are there and how they might look to approach that and what implications that might have?

**Todd A. Becker**
*President, CEO & Director*

So I have Devin here with us who you guys met on our IRA Teach-in, except to say, and I'll just lead in and I'll let Devin give you a little more color. We're very focused on making sure that the regulations are in place that give ethanol as good of a shot as anything else and alcohol. First step is to decarbonize, which is why we're very happy with the choices we've made around our decarbonization strategy and being up what we believe will be earlier than a large part of the industry because of the choices we made. But overall, it looks like we're getting good bipartisan support for making sure that the modeling is thought of correctly, and I'll let Devin comment on that a little bit.

**Devin Mogler**
*SVP of Government Relations, Sustainability & Communications*

So like we said on the IRA Teach-in, we want to see the Department of Energy's Argonne GREET model used that allows for decarbonized ethanol to serve as primary feedstock for alcohol to Jet SAF. We saw some encouraging comments from the President just last week in Maine where he said that farmers have a vital role to play in producing SAF, so that was encouraging. We expect to see regulations put out by Treasury as early as next month, September, on the current 40B SAF Tax Credit and then shortly thereafter for 45Z. And there's a lot of discussion, but as Todd mentioned, tremendous amount of bipartisan support from both the House and the Senate to continue to encourage the administration to allow for decarbonized ethanol to service the feedstock and help to meet the SAF Grand Challenge goal of 3 billion gallons by 2030, which we don't believe is possible unless you use these agriculture [ row-based ] feedstocks.

**Operator**

Next question comes from Eric Stine, Craig-Hallum.

**Eric Stine**
*Craig-Hallum Capital Group LLC, Research Division*

Just going back to 60 Pro. Is this a matter more of just the market or your place in the market developing? Is there any reason as we think long term that your entire platform is in 60 Pro? And just to confirm, I believe you said that in the near term, you're hoping 20% to 30% would be 60 Pro.

**Todd A. Becker**
*President, CEO & Director*

That's why we built them, Eric. We didn't build our systems to run 50 Pro. We built them because we knew with our partnership with Fluid Quip and our investment there that we've made, and the amazing technology they have, and the consistency of their product and the way it flows and the way it looks and the color of it, it's very different than anything else available in the market, the way we dry it, the way we process it. It's just consistent. We have no problem consistently making 50, 52 anything we want to make on demand, and gaining large yield increases, which is why we did it as well.

But we bought Fluid Quip, and we invested in Fluid Quip with our partners to make 60% protein and more and greater. And so our whole platform and our whole marketing efforts getting into '24 and '25 have been to maximize our market penetration in 60% protein. And that's where we believe we're heading. When we look at a new plant and where we want to build the next 1, we basically have to say if we push yield and we push protein, we also know that what is our fiber product going to look like as well because we are creating new products. We are creating yeast products, we're creating fiber products when we make 60 Pro. It's a very different outcome. But yes, our intent and our plan is to go as far, as fast, and as quickly

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as we can in the highest amount of volumes to move to a 60 Pro market, and we are focused on doing that.

It will take a while because it has to be a global outcome. And so now we're working with partners globally as well for distribution and talking with potential partners and distribution as well because you're going to have to -- this is a global product, and we think that's where the best place is to really get max penetration against products, everything from corn gluten meal to soy protein concentrates all the way to what we're doing on our biological opportunities in terms of taste and texture and profiles to even start to think about things like fish meal replacement as well. And that's the ultimate Pandora's Box that we continue to try to solve for every day.

**Eric Stine**
*Craig-Hallum Capital Group LLC, Research Division*

Got you. And then not to totally try to pin you down, but in terms of timing, you said it will take a while. Is that 2, 3 years out? Or is that -- it's going to take 5-plus years?

**Todd A. Becker**
*President, CEO & Director*

No, it's not 5 years. I can assure you. I mean, I can almost assure you of that. Every time I say I can assure you, it's probably not the best thing to say. But it's not 5 years out. Our program has fully been designed and the people we brought in to help market this product and sell it, all have experience at the higher protein levels and customer base. So it's just time. In our view, it's not a matter of if. Can we do the whole thing? We should be able to. There's 10 million tons of demand globally, if not greater than that, just for things like corn gluten meal and more for soy protein isolates and soy protein concentrates and those type of things. And we brought a new leader to the team that came out of Cargill, that spent his time globally in different protein and aquaculture businesses, and he's now running our protein marketing as well. And so we're attracting that type of talent to this company, so that when they show up at the door, they have great customer relationships, but also a lot of credibility from where they came from to where we're going.

And we've built teams around all of our products, clean sugar and protein. Corn oil is a little easier. They just call and they buy it. But in those products, we want to make sure that we staff those with deep technical and marketing experience and this really didn't exist in the Gen 1 industry. So we're tapping that from all of our larger counterparts in agriculture and energy.

**Operator**

Our last question comes from Andrew Strelzik from BMO Capital Markets.

**Benjamin Thomas Mayhew**
*BMO Capital Markets Equity Research*

This is Ben on for Andrew. Just 1 quick 1 on the ultra-high protein EBITDA build. Todd, I think you alluded to this earlier, but you guys seem to still be on track for $150 million run rate by the end of 2024. If you could just briefly walk us through the path as to how that looks. Obviously, we've heard a bunch on 60 Pro at the beginning of the year. Just trying to bridge that gap into '25.

**Todd A. Becker**
*President, CEO & Director*

Yes. So when we look at it, basically, when we think about it, today, we have 560 million gallons converted. And we're going to have half the Tharaldson JV, half of our turnkey. So that adds about 85 million gallons converted. And then when you add at least 1 of the 2 Fairmont or Madison, that's 760 million gallons converted. When you look at how much corn we grind there in terms of a yield and then you take that times what we believe will be -- by the time we get there, 4.5 to 5 pounds a bushel, and then you're hitting higher target volumetrically than what we had outlined. And then when we look at 2024 and as we leave '24 with 20% to 30% of our capacity in 60 Pro and to '25, when you put all of that into the calculator, and we'll be very happy to do that, I can't do that right now on this call, it meets or

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exceeds those targets relative to $0.15 to $0.18 a gallon uplift on 50 Pro, $0.30 to $0.40 a gallon uplift on 60 Pro, not including all the other opportunities that our innovation team works on to increase value of our products even further in terms of that product suite and things like dry yeast and 60 Pro yeast, those type of things. And when we put that all in, we are even more confident today with the things that we're seeing, driven by yield, driven by protein, driven by price spreads, driven by innovation that we can hit that $150 million to $200 million mark that we laid out, and then build from there.

**Operator**

I will now turn the call back over to Mr. Becker, CEO, for closing remarks.

**Todd A. Becker**
*President, CEO & Director*

Yes. Hey, thanks, everybody, for being on the call. Lot of questions, lot of great questions. We really appreciate it. As you can see, we're making great progress across our product suite. Challenging second quarter. We appreciate that. We've come out of it better than where we were in it. Plants are running better. Protein is running great. Sugar is on track. Oil markets have recovered significantly from the quarter lows where we were down into the 40s, now we're up into the 70s, again, and high 60s. So overall, we think we're in a good place to show what the opportunity is in the last half and deliver a few quarters and make sure you're confident that we can deliver on '24 and '25, and our takeaways from '23 going to '24, and our exit run rate in '24 goes into '25. And that's why we're extremely confident between decarbonization, which those numbers have only gotten better, to hit those '25 numbers that we laid out and begin to hit those in '24 as well. So we appreciate your support, and we'll talk to you next quarter.

**Operator**
Ladies and gentlemen, that concludes today's call. Thank you all for joining, and you may now disconnect.

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