Company Name: Green Plains
Company Ticker: GPRE US
Date: 2021-05-03
Event Description: Q1 2021 Earnings Call

Market Cap: 1340.98250349
Current PX: 30.0300006866
YTD Change($): 16.8600006866
YTD Change(%): 128.018

Bloomberg Estimates - EPS
Current Quarter: -0.197
Current Year: -0.394
Bloomberg Estimates - Sales
Current Quarter: 642
Current Year: 2449.75

Q1 2021 Earnings Call

Company Participants

- Phil Boggs, Senior Vice President, Finance and Treasurer
- Todd Becker, President, Chief Executive Officer and Director
- Patrich Simpkins, Chief Financial Officer

Other Participants

- Kenneth Zaslow, Analyst
- Laurence Alexander, Analyst
- Adam Samuelson, Analyst
- Craig Irwin, Analyst
- Jordan Levy, Analyst
- Ben Bienvenu, Analyst
- Manav Gupta, Analyst
- Selman Akyol, Analyst
- Eric Stine, Analyst

Presentation

Operator

Good morning and welcome to the Green Plains, Inc and Green Plains Partners First Quarter Earnings Conference Call. Following the company's prepared remarks, instructions will be provided for Q&A. At this time, all participants are in a listen-only mode. I will now turn the conference call over to your host, Phil Boggs, Senior Vice President, Investor Relations. Mr. Boggs, please go ahead.

Phil Boggs, Senior Vice President, Finance and Treasurer

All right, thank you and welcome everyone to Green Plains, Inc and Green Plains Partners First Quarter 2021 Earnings Call. Participants on today's call are Todd Becker, President and Chief Executive Officer and Patrich Simpkins, Chief Financial Officer. There is a slide presentation available, and you can find it on the investor page under the Events and Presentations link on both the corporate websites. During this call, we won't 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 and 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 Becker, President, Chief Executive Officer and Director

Thanks, Phil and good morning, everyone, and thanks for joining our call today. The first quarter of 2021 has been truly transformative for our Company, as we executed across every phase of our transformation plan accelerating our path toward becoming a sustainable, agricultural technology company, producing high value proteins, veg oils and clean sugars combined with carbon capture and sequestration technology, which lowers the carbon intensity of our products.

We highlighted the key events in our release earlier today, but the most important item is that we fully funded our Total Transformation Plan during the quarter. We have laid out several key verticals during the quarter and I will come back to each later on the call.

Turning to the financial results. We reported a net loss of $6.5 million or $0.17 of diluted share in the quarter inclusive of a $36.9 million gain related to the sale of the Ord facility and a $22 million charge related to the extinguishment of convertible notes in conjunction with our capital raise.

Consolidated crush margins during the quarter averaged $0.11 per gallon, up significantly from the prior year, outperforming the daily average market. Adjusted EBITDA was $15.4 million, excluding the $36.9 million gain, achieving results that exceeded the daily spot margin generally available during the quarter, underscores our ability to flexibly adapt to the changing market around us in our Green Plains 1.0 businesses.

The second quarter could exceed these results but market volatility is something we remain prepared to contend with. Production gallons during the quarter were lower due to the polar vortex that hit much of the US during February. What is really important here is that we -- as we transition to Green Plains 2.0, a strong 1.0 platform is beneficial as we execute our plan.

Our Ag and energy segment also performed well during the quarter, resulting in improved operating results year-over-year driven by market volatility in our merchant trading and distribution businesses in our fuel racks, natural gas storage and corn-oil distribution platform. Our Ultra-High Protein business continue to exceed expectations at Shenandoah consistently delivering higher protein yields and increased corn-oil yields, which gives us ever increasing confidence as we deploy this technology at Wood River and the further locations across our portfolio.

During the quarter, we produced a 58% protein product in full scale production and delivered it to our pet food partners. Early indications are very positive and how this product can be used. Achieving this was a highlight for us and has resulted in substantial feedback with end customers including pet, aqua, dairy, poultry and swine regarding ration and development. We are excited to contribute a high value solution that meets the growing need for sustainable ultra high protein feed ingredients. I am pleased to announce that during the period, we also had several sub lots in the low 60% protein purities as well, and we'll get back to you on more on that later.

In recent weeks, we have seen protein yields of 4 pounds per bushel, and have seen corn-oil yields consistently above 1.01 pounds per bushel approaching the 1.2 pounds we expect to achieve with the Fluid Quip MSC system. Even more exciting that our remaining post MFC distillers is in great demand, pricing at a slight premium to traditional distillers grains.

The variability of this product has been significantly reduced and can be applied to rations in a different way than in the past, yet another positive consequence of our transformation into the biorefinery platform of the future. Construction at Wood River is progressing nicely and we anticipate its start-up during the third quarter.

Our balance sheet is in excellent shape, and we are well positioned to continue accelerating our transformation. We ended the quarter with $654 million in cash as well as $45 million remaining on our delayed-draw term loan with MetLife.

All in all, we closed on over $600 million in transactions, including the concurrent equity raise and convert transactions, raised capital through our financing with BlackRock and monetized our Ord facility for $64 million while retiring over $170 million in debt. Successfully execute on each of these transactions was a highlight of the quarter and has set us up well to achieve the goals and objectives we have laid out.

Again our capital structure has fully funded the protein transformation that we have communicated to our shareholders. Our Project 24 initiative is nearing the finish line as Mount Vernon started up recently and construction at Madison is on track to be completed in the third quarter. We continue to evaluate our plans to complete the GNS upgrade at York. We have already started to contract 2022 USP volumes as the York production is used at a -- as a special quality in the market.

No final decision has been made. Our main focus going forward is around accelerating our protein technology deployment across our platform, which also benefits corn-oil yields. Lastly, our upcoming carbon sequestration initiative offers great promise. During the quarter, we produced 178 million gallons of ethanol, which equates to a 71% utilization rate, while production was slightly lower, our quarter did financially benefit from our risk management position and strategic actions we took in response to winter storm, Yuri.

The macro industry data has continued to be structurally favorable as ethanol stocks have fallen below 20 million barrels, which is the lowest level coming into summer driving season since 2014. Gasoline demand continues to improve as the country opens up and wider vaccine distribution enables people to feel more comfortable traveling, led primarily by surface transportation. Green Plains Partners recorded another stable quarter as its cash flows are protected by long-term minimum volume commitments.

During the quarter, we delivered on our strategy to reduce debt and repaid an additional $37.5 million of debt including $27 million from the Ord transaction. Now, I'd like to turn the call over to Patrich to review both Green Plains, Inc and Green Plains Partners financial performance. I'll come back later on the call to talk more specifically about our ongoing initiatives and how each vertical fits into our transformation plan. Patrich?

Patrich Simpkins, Chief Financial Officer

Thank you, Todd. And good morning, everyone. Consolidated revenues were $553.6 million in the first quarter, down $79.2 million or 12.5% from the same period a year ago, with the change being driven by both lower production run rates as well as lower export volumes in our Ag and Energy segment. For the quarter, our run rates were 71.1% of capacity compared to 85.9% run rate for the same period last year. In the first quarter, Green Plains realized a net loss of $6.5 million or $0.17 per share, inclusive of a $36.9 million gain related to sale of our Ord facility and a charge of $22.1 million related to the partial extinguishment of our 2022 convertible notes.

Adjusted EBITDA, which excludes the gain on sale of assets was $15.4 million for the quarter significantly improved from our adjusted EBITDA of $2.7 million for the same period in 2020. This change in performance was driven primarily by improvements in the consolidated crush margin in Ag and energy contributions in 2021 compared to the prior year.

For the quarter, our SG&A costs for all segments was $23.5 million compared to $21.6 million reported in Q1 of 2020, with the change attributable to the inclusion of Fluid Quip this year and higher insurance expenses generally. Consolidated interest expense for the company was $31.7 million compared to $9.7 million in the prior year.

However, adjusting for the one-time charge of $22.1 million related to the convertible note transaction described earlier, interest expense was in line with the prior year. I also want to point out that our convertible debt -- with our convertible debt, we've adopted a new accounting guidance which now records our convertible debt at the notional value on the balance sheet and will no longer include a non-cash accretion expense running through interest.

On Slide 9 of our investor deck, we provide summary of our balance sheet highlights. We had $666 million of cash and working capital, net of working capital financing at the end of the first quarter compared to $252.1 million for the prior year quarter. Our liquidity position at the end of the quarter consisted of $654.4 million in cash, cash equivalents and restricted cash along with approximately $330.4 million available, primarily under our working capital revolvers and our delayed-draw term loan.

This amount also includes $4.7 million available under the credit facility partnership. CapEx for the first quarter was $31.8 million including approximately $2.8 million of maintenance CapEx with the balance of $29 million being allocated to growth capital, primarily related to our high protein and Project 24 initiatives.

For 2021, depending on construction timing, our CapEx is projected to be between $200 million and $225 million including the completion of high protein technology at Wood River. The start of projects at Obion and Mount Vernon as well as two additional sites. Maintenance capital for the year is expected to be about $20 million to $25 million with roughly 50% of that spending coming over the next two quarters and the balance expected in Q4.

For Green Plains Partners, we had 179 million gallons of throughput volume at our storage facility during the quarter, which was down 62.6 million gallons or 26% from the first quarter of 2020 as a result of lower production rates at Green Plains Plants as well as the sale of Hereford and Ord.

For the quarter, the partnership build trade group at the MVC level, which was amended to 217.7 million gallons of throughput after the sale of Ord. Accordingly the partnership reported an adjusted EBITDA of $13.8 million per quarter, up slightly from the $13.4 million reported in the first quarter of 2020 mainly due to a 6% increase in throughput rates charged by GPP offset slightly by other ancillary costs. For the partnership, distributable cash flow was $11.3 million for the quarter compared to $11.2 million for the same quarter of 2020. On a 12-month basis, adjusted EBITDA was $54.6 million, distributable cash flow was $45.7 million and declared distributions were $11.4 million resulting in a 4.13 times coverage ratio for the first quarter and a 4.02 times coverage ratio for the trailing 12 months.

Our coverage ratio excludes any adjustment for required principal payments amortized during the quarter. Now, I'd like to turn the call back over to Todd.

Todd Becker, President, Chief Executive Officer and Director

So thanks, Patrich. So as we look back at the accomplishments of the first quarter, we saw a true acceleration of our transformation towards Green Plains 2.0.

The technology required to execute was acquired higher protein purities and corn oils, corn oil yields were achieved and the development of our first clean sugar facility was started.

Additionally, we have partnered with Summit Carbon Solutions to develop the world's largest carbon capture and sequestration project to capture and sequester up to 10 million tons of CO2 annually. When we combine the potential of carbon capture with our initiatives in protein veg oils and sugar, we are excited about the future potential.

Our business is lining up with a number of verticals that are inter-related and they can each help us maximize the value we can achieve from a bushel of corn. We are deploying technology based around whole kernel solutions. I did want to spend a little time on Fluid Quip and the important role, it will play in our future as we expect it to be beneficial to Green Plains in a number of ways.

Besides our protein projects, they have a great technology platform and business model. They have 93 total patents and patent applications that are owned and license. In addition, in the first quarter of 2021, two new continuation patents were filed and more exciting is that they had three new patents issued during the quarter, one new patent for the MSC protein process, one in Brazil, supporting their market leading Flex Plant technology and one in Canada relating to corn oil recovery and wet fractionation.

Also during the fourth quarter of 2020, an additional patent was issued producing zein protein from the MSC protein product. Zein is used from everything from chewing gum to sealers for food. This is a high value, low value protein and is difficult to make from traditional corn gluten meal.

Although this is very early in development, we have it on our R&D roadmap for 2021 to do some base testing and more validation. Fluid Quip also had several third party projects underway with multiple FEL1 and 2 engineering studies in various stages for various technology deployments.

Finally, they are in several late stage discussions related to new sales and various deployments of their IP in wet and dry milling plants. My point here is that we believe, we have one of the global leading agricultural technology companies through the partnership with BlackRock, Ospraie, and Green Plains. Now, I'd like to walk through the vertical specifically protein oil carbon sugar and specialty alcohol, some of which were already covered that are important to our 2024 guidance.

In protein, our deployment of MSC technology is beginning to accelerate. Wood River construction continues to be on track and on budget and Obion and Mount Vernon should break ground very soon.

We are in final conversations to choose a general contractor, which we believe can speed our ability to complete these projects more quickly than if we were to build them ourselves and we are working quickly to wrap this up this important milestone up. Once we choose a partner, we plan to also announce the order and the schedule of our builds. Fluid Quip sales channel continues to show strong interest from others in the industry, that want to add protein technology to diversify their earning streams.

We have a proven technology deployed at five US plants and one in Brazil, with two more US plants starting up this year. Wood River and a previous Fluid Quip sale. No other ag tech company is achieving this speed to market and success in production.

Turning to corn-oil, the veg oil complex is continuing to accelerate prices higher. Our MSC technology helps deliver a structural advantage as we believe it can increase corn oil yields by 50% or more. We continue to refine the operating parameters at Shenandoah and believe, we will achieve 1.2 per pounds bushel consistently and we are getting very close.

Delivering an increasing supply of low carbon intensity feedstock for the renewable diesel industry, while prices continue to move higher, gives us a structural uplift to 1.0 margins, which is very helpful and is a critical piece of our long-term success.

In sugar, we believe that the clean sugar technology from Fluid Quip could be a true market disruptor. It enables a dry mill to produce dextrose for the growing bio chemical, synthetic biology and bioplastics industry while continuing to produce valuable corn proteins and renewable corn-oil.

The added flexibility this technology add to our platform, not only lessens our reliance on government biofuel policies but opens the doors to significant upside potential as we tap new markets once unavailable to the dry milling space. Clean sugar deployment is an opportunity unique to Green Plains and provides our bio refineries with value outside of biofuels production.

Our CST installation at our York Innovation Center is nearing completion. And we are preparing for our first commercial shipments. Our goal is to work with these end customers and to select one of our existing -- facilities for a full-scale deployment of this innovative technology in the near future.

We believe by expanding clean sugar production, we can develop strong, stable margin of cash flows, helping to maximize the value created from a bushel of corn. Importantly, this clean sugar process has a carbon intensity, which is much lower than the same products produced at a traditional wet mill.

One of the most exciting new verticals launched during the quarter is our growing focus on carbon capture and sequestration. In February, we announced our initial three locations to be included on a proposed carbon pipeline to sequester pure CO_2 into geologic formations.

As a founding partner of the development company, we believe, we will be able to benefit from the pipeline on top of the LCFS income generated at each of the connected biorefineries. We are excited to have announced last week that due to the success of the early rounds, the pipeline is being expanded into Southwest Iowa and Nebraska, allowing us to add five more of our bio refineries to the project.

Combined with nearly 70% of our capacity committed to this carbon pipeline, with the opportunity to improve the CI score or carbon intensity of each of these products, it is a great opportunity. In addition, our remaining three locations

Mount Vernon, Madison and Obin are each potential candidates for direct injection carbon sequestration due to their proximity to suitable geologic formations. More to come on this as well as we explore the potential of each, but I did want to mention this that we are exploring this path as well.

While we have gone through our 2024 EBITDA targets on the past couple of calls, I do think, it's worth revisiting them once again here. Our protein initiative is anticipated to deliver a baseline $0.15 to $0.20 per gallon of EBITDA contribution as the ultra protein is deployed over the next couple of years.

With 958 million gallons of capacity, this has the potential to add $140 million to $190 million in annual EBITDA. Renewable corn-oil has already seen significant improvement in pricing and every $0.10 per pound that corn oil pricing improves that adds nearly $40 million in incremental EBITDA and we have seen these prices improve more than that since the beginning of 2021 alone.

With 75 million gallons of specialty alcohol capacity, we believe this business will contribute up to $50 million over fuel grade economics depending on the results we are able to achieve as we go through full contracting cycles. There has been premium compression lately but we have already contracted some 2022 volumes and believe, this will be a long-term contributor.

In sugar, our clean technology -- clean sugar technology once in place could add a minimum of $0.67 per gallon of ethanol capacity or $37 million to $100 million of EBITDA if we convert 55 million to 150 million gallons of capacity in the coming years. Finally, if we only consider a conservative $0.30 a gallon uplift due to potential low carbon fuel standard premiums that we split 50-50 with our pipeline, our 658 million gallons of committed capacity contribute -- can contribute over $90 million of incremental EBITDA.

So when you combine these initiatives, we are on track to achieving over $300 million of annual run rate EBITDA by 2024 prior to considering traditional gross margins and moving up from there as the carbon sequestration opportunity comes online and as we move up the J-curve for protein and nutritional solutions. This puts us on track to a more predictable and more stable earnings and cash flows with double-digit gross margin percentages much improved from the low-single digit gross margin percentages as a commodity processor.

Added to all this, stable economics from our legacy 1.0 business are certainly enormously helpful as well. In conclusion, we have an impressive list of partners from Hayashikane to Novozymes to Optimal to Ospraie to Summit to Syngenta to our pet food partner and many more under late-stage development as we speak, all wanting to help our products get to high-value markets.

The value of our low carbon sustainable renewable and nutritious ingredients that matter platform is truly just getting started. We are quickly heading towards an inflection point in 2022 and Green Plains 2.0 is in sight. We are grateful for the support of our dedicated employees, as it is through their efforts that we will complete this transformation. As we look to delivering a whole kernel solutions for ingredients that matter, we remain focused on execution every day.

Thanks for joining the call today and we can start the Q&A session.

Questions And Answers

Operator

And thank you. (Operator Instructions) And our first question comes from Kenneth Zaslow from Bank of Montreal. Your line is now open.

Kenneth Zaslow, Analyst

Hey, good morning, guys.

Todd Becker, President, Chief Executive Officer and Director

Hi Ken.

Patrich Simpkins, Chief Financial Officer

Good morning.

Kenneth Zaslow, Analyst

Just couple of questions, one is, if I think about Shenandoah, can you break out what the margin structure was there and where that's going to go relative to the rest of the portfolio?

Todd Becker, President, Chief Executive Officer and Director

Yeah. So in general terms, we sold the initial Shenandoah volumes for the first two year, when we started off last year and then for the 2021 volumes as well at somewhere between a $50 and $100 premium over soybean meal pricing for the product based on the 50% to 52% protein. Every $100 over soybean meal is $0.06 a gallon, roughly.

And so, somewhere between $250 to $300 over lands at somewhere between $0.15 to $0.18 a gallon premium to current distillers' grains at a 50% protein product.

Kenneth Zaslow, Analyst

So if I put that relative to your $0.11 per gallon, you're saying, it's -- what is the gallon -- what is the profit in that facility?

Todd Becker, President, Chief Executive Officer and Director

Well, again what we said is that the initial sales were made at about $0.15 to $0.18 a gallon profit or EBITDA margin and that facility makes approximately 80 million gallons a year. (Multiple Speakers) Initially $12 million to $15 million.

Kenneth Zaslow, Analyst

Okay, then on top of that, and maybe I'm -- just don't understand the whole fluid equipment, but just, there is no revenue sharing or there is no -- anything that comes from that over the time. This is not something that you kind of bake into the model. Is it just -- is there a reason for that? Or I just don't understand the relationship, and that's fair too?

Todd Becker, President, Chief Executive Officer and Director

Yeah. So once produce, the plant earns their returns because they bought the package from Fluid Quip. The full technology package. Fluid Quip does have small ongoing revenue streams from each sale that they've made. But in general, Fluid Quip makes a margin on each sale that they make. And that's reported in the Fluid Quip business.

But now that we've purchased -- acquired Fluid Quip with our partners and obviously that will be for the benefit of the partnership.

Kenneth Zaslow, Analyst

Okay and then my last question is if ethanol margins were completely flat and nothing changed, they were zero. In 2022, what type of EBITDA would you be showing given what projects are done and what projects are going to be done. And can you just give us some context to how that would play out just assuming zero ethanol margins, I know nobody believes that, but let's just assume a zero margin, and I'll leave it there.

Todd Becker, President, Chief Executive Officer and Director

Yeah. We think in 2022 with four to five plants operating, which is where we think, we will have potentially six plants operating that will be about half of our platform or 400 million to 500 million gallons and then on top of that adding in alcohol, corn oil and then the traditional zero margin on the ethanol business if we just assume zero EBITDA that's a $100 million to $200 million model that we can put forward for 2022, but it's really just based on kind of completion dates and when the -- that's why we believe 2022 is really our inflection point, when we start to see four to six plants coming on and then obviously the rest in late '22 and in '23, come on, but we think inflection comes in mid '22 and if you just do the calculus on that in run rates basis $0.15 a gallon on average for -- when we turn it on at a baseline protein of 50%, 2022 with zero base ethanol is $100 million to $200 million.

Kenneth Zaslow, Analyst

That's great. Thank you.

Operator

And thank you. And our next question comes from Laurence Alexander from Jefferies. Your line is now open.

Laurence Alexander, Analyst

Good morning. Can you flesh out a little bit how you're thinking about the dextrose opportunity and partnerships and the bottlenecks there. And would you consider investing in fermentation capacity because that appears to be a bottleneck that some of the industry is sort of clearly facing?

Todd Becker, President, Chief Executive Officer and Director

Yeah. How we're thinking about as we've already been working with dozens of customers, potential customers that have either new technologies or technologies where they've been buying from traditional wet mills that want to be involved with our low carbon dextrose. And so -- and one of the constraints obviously is fermentation capacity and whether you look at lactic acid or PLA or something else like that obviously fermentation is very important.

And then our fermentation, it may be different than what some need, but our fermentation also is some -- what others need. So our goal is to first identify which customers want to potentially co-locate, which customers want to have a product that is shipped to them, where they're at in various stages of their development. We can't just -- we're not just going to work with all just development companies because we do want to be selling product commercially in the market as well.

And we've had conversations with customers and confectionery all the way to Biocam and so it could be a combination of shipping it to the customer as well as potential co-location opportunities at the sites where we deploy the clean sugar technology as well.

We also know obviously as you said that fermentation is often a bottleneck and it's very expensive. We have scale fermentation capability available especially at plants when you deploy the sugar technology, you will have less need for your fermentation capacity as well, so I think, there'll be some retrofitting there as well in the future, but right now, we're just working with customers at -- on various sizes in various times in their evolution to up -- access this product. And I think, that's going to be something that we will have a strategic manage them [ph] and mainly driven as well by our low carbon intensity of it.

Laurence Alexander, Analyst

And then with the CO2 pipeline, what's the timeframe if any -- considering doing -- taking a capital investment to increase your economics on that pipeline?

Todd Becker, President, Chief Executive Officer and Director

Yeah, I think, right now, the pipeline is in process of still signing up the final amount to achieve their 10 million tons of capacity. If they're not there already they're very close. We've had significant, they have had, Summit has had significant interest from everybody from ethanol producers to other emitters in the market. And I think once Summit decide or if gets to the point where they're basically full in terms of the capacity needed, then I think, they will ultimately look at then raising their next round of capital to continue this to get it to a shovel ready project through engineering and permitting and at that point, we will continue to make decisions on how far we want to invest in the project and then obviously shippers have other rights to invest and I think, it's going to be a very successful project mainly because Summit has done a great job in terms of capturing significant capacity from this industry to sign up.

Laurence Alexander, Analyst

Thank you.

Operator

Thank you. And our next question comes from Adam Samuelson from Goldman Sachs. Your line is now open.

Adam Samuelson, Analyst

Hi, thanks. Good morning, everyone.

Todd Becker, President, Chief Executive Officer and Director

Good morning, Adam.

Adam Samuelson, Analyst

Good morning. So Todd, I was hoping to maybe dig a little more on the commercialization of high protein and you gave some good, some helpful color in response to Ken's question on kind of how you sold the Shenandoah tons for 2020 and 2021. As we think about the higher protein kind of value -- protein content that you've been able to realize at Shenandoah and we think about replicating that at Wood River and Obion and Mount Vernon et cetera down the road.

How do we think about your ability to commercialize that incremental protein content? Do you -- timing of when you think, you could (inaudible) agreement? How much of the high pro would actually be able to be sold that those high values in those more premium markets? I'm just thinking about the kind of real value capture opportunity as you move up the J-curve.

Todd Becker, President, Chief Executive Officer and Director

We have a lot of confidence now that we can get to a point to produce higher proteins at a steady state. We made a lot of progress, obviously, since that announcement of 58 pro and we've learned a lot, we think both mechanically and biologically, we can move up the protein scale, some of it's going to come from mechanics of things that we've learned and some of it will come from biology and other things that are interesting.

We are working with customers in every one of those verticals on different levels of protein that we talked about whether it's pet, aqua, poultry, swine or dairy. And every -- and each of those customers have a different need. Our goal within 2022 and later in 2021 as Wood River comes up online is that we will probably end up increasing our protein purities for the customers that we have on the books today, who are now in kind of final stages of using the product that we sent them and figuring out ways to formulate around it, around the prices as well and we are in several discussions about higher protein with higher protein customers as well and using it in their ration.

So our goal is to move as quickly as possible up to higher protein purities and have the customer support to do that. I think, we're going to -- we're making very good progress as we speak. We're in, as I said, we're in several studies, several ration, several discussions and quite frankly, we are being guided from our pet and our aqua customers to go straight to 58 protein and don't stop and then let the market decide what -- where they want to -- how it's going to be priced in terms of just -- we need to produce it consistently. And so, we're kind of making that decision. We don't want to give away free protein but in order to get more expansive use on it, you have to make the protein as well.

So, but we are working with customers today on pricing when we come out of Wood River initial start-up and then where we want to take Shenandoah for the remainder of the year, but we have great confidence that we're going to be able to achieve steady state higher protein purities and we are being guided from our customers to go there as fast as we can.

Adam Samuelson, Analyst

All right. That's really helpful. And then just on the ethanol market and obviously Shenandoah helped contribute to your margin performance in the first quarter. The industry backdrop seems to have gotten better given the state of inventories, given kind of what we see broadly from industry crush margins. I'm just trying to think, but you sounded a little bit more guarded about volatile market conditions. I'm just trying to calibrate, how to think about the base business actually performing arguably better given that industry backdrop and kind of what it would take to get your operating rates up?

Todd Becker, President, Chief Executive Officer and Director

No, we're -- listen where every time a plant comes out of a shutdown or Project 24, obviously, we're still, we're just coming out of Wood River, or I'm sorry Mount Vernon Project 24, Madison is still shut down. And in general, we got rid of two other plants as well. So, but how we're looking at it right now is obviously, first quarter, we did well through our -- through the ability to manage through some of these storms and our risk management programs that we had put on place prior to the quarter.

But in Q2, Q3 and Q4, obviously, the one thing we are watching is the volatile movements in the agricultural markets. I think that's something has to be considered, while certainly on paper margins look as good or better than what we were able to achieve in the first quarter, obviously with corn moving up and ethanol moving -- not moving up quite as fast.

We're going to be patient in terms of this -- kind of going out on a limb and saying, it's all going to be way better than Q1 because we performed so well in Q1. So I think for us, we're watching market volatility closely, obviously ethanol hasn't moved up as fast as corn and we're trading at a premium to gasoline.

So the contribution from veg oils is very -- corn-oil is very good and very helpful. But I'm still going to remain somewhat guarded in terms of Q2 until we kind of get further through Q2. Thus far we started out okay. But we just got to watch this corn market a little bit and it's getting harder to buy physical corn as well. I think, that's something we're going have to watch through the end of the marketing year. The farmer, whatever the farmer has left is in tight hands, a lot of its moved to commercial almost at a record pace.

There is no incentive for anybody to carry corn through this inverse, all the way. So obviously, it's being held for increase in and physical basis gains.

So we're going to watch that closely as well. So I'm just going to be guarded at this point over kind of Q2, Q3, but in general, we definitely -- we're definitely in a better place than we were this time last year and going into summer driving season.

We're in a great, I would say, though, we are in a great fundamental situation with ethanol stocks under 20 million barrels coming into summer driving season. We haven't seen that for seven years and that's something, I think, we're all enthusiastic about, but obviously we have to watch how we price versus competing liquid fuels.

But in general, our octane is still very cheap and overall there is -- we're optimistic. Q4 obviously, we look out there. Those are the best margins of the year on paper today, it's interesting and we're excited about that. But again, we got to make sure we have our physical corn procured and that's one thing, we're working on.

Adam Samuelson, Analyst

Got it. That's really helpful color. I'll pass it on. Thanks.

Todd Becker, President, Chief Executive Officer and Director

Thanks.

Operator

And thank you. And our next question comes from Craig Irwin from Roth Capital.

Craig Irwin, Analyst

Hi, good morning. Thanks for taking my questions. So most of the things that were top of mind have already been addressed at this point but Todd maybe -- can you talk a little bit about the strategic opportunities for monetizing your corn-oil over the next couple of years. As high pro comes online, you're going to be one of the largest producers of what is the favored feedstock for LCFS credits into California.

We did see Philips dip into the market in support -- a soy crusher that was in construction. Is there an opportunity for you to do something strategic out there? Maybe grab a little bit more value from your own production than simply being exposed to spot, which does look like a very good thing at this point.

Todd Becker, President, Chief Executive Officer and Director

Yes, the spot corn, the spot veg oil market obviously is beneficial to this industry. And we are a strategic feedstock for what I think is the renewable diesel phenomenon that's taking place. Even more exciting is, how will the CI score of our product be changed when we sequester the carbon as well.

And I don't think they're taking that into consideration yet, and how the CI gets allocated. But as we roll Fluid Quip through our plants and through our customers that buy the Fluid Quip technology, they get an increase in corn-oil and an increase in volumes and obviously, that increases the overall margin for the plant, which is being taken into consideration.

We have had approaches in terms of how do we partner on supply agreements and those type of things at this point. We're being very patient in how we approach the market, I mean we're structurally still fundamentally friendly, and optimistic on veg oil pricing as we kind of move through 2021 and 2022.

The soy crush plant that was invested in by a energy company to us actually it was, I think it empowered our industry a bit to say that we're on the right track. We have much lower CI corn-oil or vegetable oil than what is soybean oil today. And so I think, we fit very well. It's great that they did it. But to us, I think it's actually more empowering for our industry to see that happen, it tells you that the story is intact. And that security of supply is needed. And if we find the right opportunity with the right partner for the right economics, we will absolutely be willing to commit our corn oil and we'll have to wait and see if that happens or not. But I think, you're on the right track. I think, there will be strategic opportunities to monetize these flows and provide some of these projects with security of supply. And that's what it's going to be all about because there will be times potentially with what's brewing in the soybean balance sheet and the tightness in the soybean balance sheet that you could end up making a call to somebody to buy your feedstock and there may not be any available.

And that's something we're going to have to watch out closely, which I think is very beneficial to our industry and to veg oils overall.

Craig Irwin, Analyst

Excellent, excellent. So I was hoping for an update on your relationship with Novozymes, what you're working on with them? And what we can expect over the next number of quarters from this very important relationship?

Todd Becker, President, Chief Executive Officer and Director

Yes, I mean we have a lot of relationships that are providing lots of opportunities for us that even as we move up the protein purity levels and start to think about more innovation around this product because oftentimes people forget, it's 75% protein and 25% yeast. And within that yeast, you can start to tailor that to specific nutritional characteristics or needs of the end user.

And that's really where we spend a lot of time with Novozymes is really looking at their library of technologies that can be applied not just protein purities. I mean that is something that's been going on for many, many -- Fluid Quip had been working with Novozymes many, many years ago, long before we got involved in early evolution of the Novozymes technology, and so that's something that's been around for a while more importantly for us is really looking at how this product, number one, we can increase purities but more so, we can increase nutritional characteristics and quality. So that when an end user comes in and says, hey I need more of this amino acid, can we tailor our product to express that or we need more of this nutritional characteristics. Can we tailor our product to express that nutritional characteristics?

That's the power of the relationship, it's partially protein purities, but really, the yeast library that exists between -- that exist and available to us is really incredible to what we can do to start to tailor this product. And I think that's really where a lot of value comes in and that's where we're working with each other, a lot. I would tell you, Fluid Quip on its own is working on increasing protein purities just mechanically.

We think, we can get -- we can make some progress there, but even more exciting now is to look at the post MFC distillers, so we would -- traditionally we would have our distillers grains, and now we're cutting off a piece of protein off of that and we would leave the rest of the distillers grains that are much more traditional.

What we're seeing now is our post-MFC distillers grains has reduced the variability of this product in the use of nutritionists and the ration and we're starting to get premiums for the Shenandoah post MFC distillers grains, which we thought was going to happen actually Walter initially thought that this product would bring great value and start to add in a whole another component to what Fluid Quips technology can do, but what's turning out is that this product is now become -- is much more uniform and has started -- starting to be respected again by nutritionist in the poultry space, in the dairy space and also in the swine space whether they want to go straight to Shenandoah and start thinking of even Wood River next and the post-MFC distillers grain, which I think is really, really a big opportunity for start getting a premium on millions of tons and that starts adding up very fast. And that was unexpected consequence that we're very excited about as well.

Craig Irwin, Analyst

Thanks for taking my questions.

Operator

And thank you, and our next question comes from Jordan Levy from Truist Securities. Your line is now open.

Jordan Levy, Analyst

Good morning, everyone.

Todd Becker, President, Chief Executive Officer and Director

Good morning.

Jordan Levy, Analyst

Just kind of following up on Craig's question to start out on corn-oil. It seem that given the need for low CI feedstocks and renewable diesel markets and elsewhere would make sense for pretty much any ethanol producer to look to increase their corn-oil yield.

So, kind of, as it relates to Fluid Quip's technology, just wanted to get your thoughts on the capacity utilizing that technology out and what that might look like and then alongside that, what the potential for that investment that you've made in Fluid Quip is over the next few years to start to flow through and create some upside value beyond what you guys have laid out?

Todd Becker, President, Chief Executive Officer and Director

Yes. So, in terms of corn oil, I mean besides the protein systems which liberates more of the oil, remember in a 56-pound bushel of corn there is somewhere between 1.8 and 1.9 pounds of oil and traditionally an ethanol plant would liberate in their corn oil systems 0.7 to 0.8 pounds maybe a little bit higher than that per bushel.

And so in the Fluid Quip process, we're able to now liberate up to another 50%, which gets us up, we believe will be very soon at 1.2 pounds per bushel just through the additional extraction and liberation once you put in the MSE technology. That still leaves 0.6 pounds per bushel, or another 50% from there.

And it starts to have a diminishing return at lower prices but an increasing return to higher prices. So, going after the rest of that oil, you don't want to change your final products in terms of that the post-MSC distillers grains too much because by taking oil, all the oil out, you may see some degrading value. But relative to where we're at veg oil prices between kind of $0.65 and $0.75, you want to go after all the oil you can because the remaining product still has enough value to justify that.

So, that's step one. Step two, obviously is going after that 0.6 pounds and how are you going to do that? And I think that's really kind of a bit of a Holy Grail but starting to make progress there. Fluid Quip is starting to work on that solution, I think others are as well -- is how to liberate more oil out of the corn kernel, but you have to be careful, if you get to a certain point, you could start to degrade the value of the other products too greatly.

So we're going to kind of in that sweet spot of 1.2 to kind of 1.5 pounds per bushel. It's kind of where we want to try to settle out. And we're -- continue to work on those solutions.

In terms of Fluid Quip, when you look at that platform, we very excited about it. Our partners. We are -- we think there is a lot of up there in terms of the true valuation of this technology company and the things that they're working on across multiple different platforms, it's not just, if you go on our website. It's not just a protein technology. They have oil technologies, they got fractionation technology, they've got fiber technology. They got a lot of different technologies that are applied and put in many other plant besides Green Plains plants to try and increase profitability throughout the ethanol plant, whether it's higher yields or higher purity.

So we think, we're just getting started there. We think our development continues and we think the value of that company is only going to get greater in the future overall for ourselves [ph] and for our partners.

Jordan Levy, Analyst

Great, that's helpful and then to change gears a bit, just wanted to touch on your most up-to-date views on GPP and potential there to -- there -- bring it back in-house or re-fi or whatever you think, how you're thinking about that entity?

Todd Becker, President, Chief Executive Officer and Director

Yeah so GPP right now is pretty well focused on paying down its debt like we outlined and making sure that we address the current maturity of this year, which we think only about 34 million will be remaining at the end of the year and to utilize the combination of operating cash, refinancings and maybe strategic actions to repay those debt obligations.

I think, we should have that out in place, hopefully in the next couple of months, maybe by the end of the third quarter and if we're unable to refinance, then we'll look at other opportunities, whether it's just restructuring the debt or other strategic actions we can take. We're very confident that we will achieve the goals that we have outlined for that platform.

And at this point, that's mainly what we are focused on today. Our Birmingham facility continues to perform well there, they have the MVC in place from Green Plains. And at this point, obviously, by repaying the debt and eliminating the amortization -- the heavy amortization, we think, overall at some point, notwithstanding whatever the new debt structure will look like. Hopefully, increasing back the distribution as well maybe sometime in 2022 depending on where we end up with our new lenders on the refinancing.

So at this point, that's what we're focusing on and as a stand-alone, it's doing just fine.

Jordan Levy, Analyst

Great. And nice results, guys, appreciate it.

Todd Becker, President, Chief Executive Officer and Director

Thank you very much.

Operator

And Thank you. And our next question comes from Ben Bienvenu from Stephens. Your line is now open.

Ben Bienvenu, Analyst

Hey, good morning, everybody.

Patrich Simpkins, Chief Financial Officer

Good morning.

Todd Becker, President, Chief Executive Officer and Director

Good morning.

Ben Bienvenu, Analyst

I want to ask about the carbon capture and sequestration project. I want to be just clear on the timing, I think you know, do you expect the project to be operational in 2024. Is that sooner than you had previously expected? Or is that still on the same timeline.? And then along those lines, do you have a sense yet of when you could start to work on applying for pathway for an updated CI score from the California LCFS program?

Todd Becker, President, Chief Executive Officer and Director

Yes. I mean, I think the Summit guys have outlined a 2024 start date for shipments, if they can get there -- there is some things that obviously we would want to try and accelerate, but that's kind of the goal. And I would say, starting in 2024 and obviously continuing to build out as they bring on different geographics in the pipeline.

In addition to that, we are working on three direct-inject sites that's Madison, Mount Vernon, and Obion, where we would realize all of the economics from the 45Q and the low carbon fuel standard credits if there are any, as well. So, we're excited about those as well, and we're just getting started there. We think, we're in great locations geographically for there as well.

And so both of those are very exciting, but obviously, lots to do in each of those parts. What was the second question?

Ben Bienvenu, Analyst

On a revised -- getting a revised CI score for your ethanol to be sold (Multiple Speakers)

Todd Becker, President, Chief Executive Officer and Director

Yes. So two -- we have the Summit Carbon guys, the management, the team there had done a lot of work on that prior to us signing up and becoming partners there as well. And they sent two plants, and two plants got scores from CARB in a manner that if they sequestered their carbon, what would happen to the carbon score?

In each of those plants, very similar to the plants that we have going on the pipeline and others have as well, not just ourselves but any shipper on the pipeline, there have been two plants that are basically the starting point that have got carbon scores cut in half. So, they went from the end of the 60s to into the 30s on CI.

And if you think about that, you start to look at CI scores of a vegetable oil-based or corn-oil based, renewable diesel and that's in the 30s as well. And obviously, soybean oil-based renewable diesel is in the 40s or the 50s. And then the other oil, some of the waste oils are even lower than that.

So that's what really gave us the confidence, which is when we saw the CARB scoring on two example plants after sequestering carbon getting cut in half, that really told us that we would be on the path to a low-carbon biofuel. And I think that's going to be more interesting in the future, which is how does ethanol play in a low carbon fuel tank or in a low carbon fuel pump and the need for more ethanol as the world demands lower carbon fuels. And so I think that's not being taken into consideration in terms of the future of where, how we fit into the fuel tank, but I think, it has to be taken into consideration because in quantity, we're going to be able to compete with the Brazilian imports. We're going to be able to compete with from a CI standpoint, we'll be able to compete from a CI standpoint with renewable diesel and as we expand LCFS across the United States to multiple states and potentially national standard.

And I think, we will be well prepared when this pipeline comes online, to have some of the lowest carbon biofuels that are made in the world.

Ben Bienvenu, Analyst

Understood. That's great. My second question is just revisiting kind of the core ethanol fundamentals as Adam noted in his Q&A. Those margins for the industry are much improved, the S&D looks pretty good for the next -- little while here with resurging demand for driving. I'm curious, Todd, I know you said you're a little bit more reticent or cautiously optimistic. Is there anything in that market where if it did turn south in the next year or to that it would -- that it would have an impact on your ability to self fund or fully fund this transformation that you're undergoing?

Todd Becker, President, Chief Executive Officer and Director

Yeah. And the other reason I am reticent is because of the last three years, obviously, cautiously optimistic, was the only way to be, but you saw what the last kind of two or three years and the challenges that oversupply faced and you have to always keep in mind that we're still not running at full capacity yet as an industry.

So we'll have to watch that closely in terms of how that impacts the forward margin structure overall, but I think even more than that, the price of -- the prices of feedstocks, we are going to watch those very carefully as well. So I'm -- while I'm optimistic and cautiously optimistic, we're in great fundamental shape as an industry, if the industry maintains its focus and its discipline to stay in that shape, but there's lot of offline capacity that we have to watch very closely.

And so we've been our own worst enemy in the last several years and obviously, we're all optimistic now. But I'm going to be a little bit more cautiously optimistic than maybe what is out there today. We have not seen -- we've seen a little bit come back on the export market, but we haven't seen a resurgence of China yet. We saw little bit of that earlier in the year. So, but I think we're in -- I think we're in a good place. I mean, I'd rather be here than the alternative, that's for sure. And this is really where it gets into is a strong or even a 1.0 platform that's just steady is just so beneficial to our 2.0 strategy.

We did everything based on zero contribution from ethanol EBITDA just a zero baseline. And our '23, '24 numbers are all zero baseline numbers. So a -- just a steady ethanol industry would be fine, a 1.0 would be fine with us. And right now, where we're sitting basis the historical even worst markets that we've ever been in.

It would be pretty hard to not have the funding capacity to get all the way to the finish line, especially when we have four or five coming on in 2022 within a year from now or so, and those just generating cash flows from day one. I mean, you turn on our protein production capacity on day one, they start to generate cash flow.

So, while even if ethanol took a turn at this point, I think we're in a place right now as a company, where our balance sheet is in such great shape with significant liquidity and additional liquidity available that it would be pretty tough for us to have anything get in our way at this point of executing successfully in 2.0.

And even the fact that we've already started to order four to five plants of long lead-time equipment. We've got most of our other equipment on stuff that we needed to even get in place locked in our pricing. Obviously, we're watching the steel market closely, but that's just a small component of what we build.

And I think, we're in pretty good shape. Could there be escalating cost a little bit? Sure, but the way that these projects are structured. We're trying to insulate it as best we can. So, it be pretty tough for something to get in the way of a successful completion of our 2.0 strategy at this point.

Ben Bienvenu, Analyst

Yes. Okay. Great. Congrats on everything you accomplished this quarter and good luck with the rest of the year.

Todd Becker, President, Chief Executive Officer and Director

Thank you.

Operator

Thank you. And our next question comes from Manav Gupta from Credit Suisse. Your line is now open.

Manav Gupta, Analyst

Hi guys. On the carbon capture, you indicated that the CI score drops from 60 to 30. That's almost $0.20 to $0.25 a gallon uplift. You're indicating about $0.15 on your slide deck. So, is there a transportation cost involved here? And second question is one of your competitors was doing a similar project is being very clear that the carbon credits solely belong to it along with LCFS credits. I'm trying to understand in this case with your agreement with Summit Carbon, is there a split on the IRS 45Q credits as this project takes off?

Todd Becker, President, Chief Executive Officer and Director

Yes. Basically, signing up on the pipeline as a shipper. If you just want to be a shipper at no capital cost to you, you're splitting the credits with Summit, which is how the pipeline gets built that in 45Q. So just being a shipper, the economics obviously, the return on the investment is very high, because you're not putting any investment in. And Summit takes the risk and obviously the plants that have signed up are great plants like ourselves and others that we all signed up for a very similar economics.

And I think that's where -- it's a different type of project, but we're also not asking like nobody asked me for a seven-year take-or-pay offtake in an open season. So we wouldn't, that's not going to be something we would have really wanted to get involved in. So that's why the opportunity to get involved ourselves in -- I would imagine all the other shippers on the pipeline is that we'll commit the volume, you go build the pipeline and we'll share the economics and we're all partners with each other. It's an incredible consortium that the Summit guys have put together with incredible partners to ship on that pipeline, it's just the starting point and then obviously, as you reduce the CI score from 60 to 30 or 65 to 35 or whatever you're going to reduce it, you take a look at that, and you're exactly right on the economics.

It's about $0.30 a gallon LCFS credit, but that doesn't even include obviously, where is the voluntary market going to go to? And where are other credits going to be involved in? And the shippers, some of the shippers get involved in those as well depending on their level of risk. And so, and then obviously, we'll see what other LCFS schemes come in place. So in general, I think it's -- from our standpoint, if all we wanted to do was be a shipper on the pipeline, we share in the economics, the great thing about Summit line is that everybody can invest as well and start to share in those economics as well.

So it's a pretty exciting opportunity for us.

Manav Gupta, Analyst

Okay. And one quick follow up here is some of your peers took a lot of hit on high natural gas prices in their ethanol facilities, somehow you completely dodged that bullet, if you can elaborate how was that -- how did you achieve that?

Todd Becker, President, Chief Executive Officer and Director

Well look at -- we have a great natural gas team that have been here for many years. They've seen many cold snaps and they anticipated the cold snap, and I think that was just something that we put protection in place for some -- remember it's winter and it gets cold, that's the one thing for certain.

So with -- and if you go back and look in the last five years, we probably had two or three of these, where you had your cold snaps and obviously, it's not -- it was -- go back to the big Polar Vortex that happened before that, we set ourselves up and protect ourselves against extreme polar vortexes every winter, and so that's really how we were able to achieve those results and we're very proud of the team that was in place to be able to do that. But much like we do whether it's in the corn markets, the ethanol markets whether it's in the crush, whether it's in natural gas yearly. The one thing for certain is it's going to get cold, and the other one, right thing for certain is we're going to get a corn crop planted. And if we don't get it planted, then we want to protect against that as well. So, I mean there's -- we are always looking at all of the risk that we have as a company and investing some insurance capital into those risks, whether it's in corn, whether it's in corn-oil, whether it's in natural gas, or whether it's in ethanol and that's always, who we have been and we set ourselves up for a cold snap in this winter and we were able to protect the downside of that.

Manav Gupta, Analyst

Thank you so much for taking my questions.

Todd Becker, President, Chief Executive Officer and Director

Thank you very much.

Operator

Thank you. And our next question comes from Selman Akyol from Stifel. Your line is now open.

Selman Akyol, Analyst

Thank you. Good morning. Very much appreciate your time.

Todd Becker, President, Chief Executive Officer and Director

Good morning.

Selman Akyol, Analyst

It's earlier on Green Plains. Just thinking about the carbon sequestration opportunity you have there, as you evaluate and think about things. Do you see a role for Green Plains Partners in that at all?

Todd Becker, President, Chief Executive Officer and Director

I think that's something that we've examined. Obviously, we don't, we're not the developer of the pipeline that Summit Carbon Solutions were involved in it as a shipper and as a potential investor as well. And as a partner. And so it's a very nice to have the Green Plains Partners. Don't know how that will apply yet to the carbon plan, but obviously, we were basically the last, one of the last MLPs ever to go public.

If I recall, I mean, I think there was one or two others maybe after us. So, there's a lot of optionality there. But at this point, carbon is still early in its development and how Partners will end up playing or not playing in that is yet to be determined, but certainly, there is optionality there as well.

Selman Akyol, Analyst

All right. Thank you very much.

Todd Becker, President, Chief Executive Officer and Director

Thank you very much.

Operator

And thank you. And our next question comes from Eric Stine from Craig-Hallum. Your line is now open.

Eric Stine, Analyst

Good morning, everyone.

Todd Becker, President, Chief Executive Officer and Director

Good morning.

Eric Stine, Analyst

Hey, just quickly, on the clean sugars. I think in the past, you've talked about conversation with 40 plus parties. There so just curious where that stands? And then secondly, I think in the past, you've talked about that by 2025, you're hoping to have one small plant and one big plant online using the clean sugars, I mean or producing that. Is that still the plan?

Todd Becker, President, Chief Executive Officer and Director

Yes. Everything we've seen out of York so far has been positive and has given us positive disposition to keep moving forward. You have to remember, this was already deployed commercially at a much bigger plant than what we're doing at York. We brought it back to York to re-engineer it for our sites and then obviously start to roll that out. So everything right now is on track for what we've talked about. We are working with customers today as we speak. We have customers that want to have all different types of uses including co-location opportunities, much like we've seen others that have dextrose with co-location opportunities right next to that supply in general, we think that what we're able to achieve at the price we're able to achieve it with the CI score that it has.

Is that we are out, we are absolutely on the right track. I think that, so far everything we've seen out of York-to-date gives us great confidence that this is going to be very exciting for Green Plains.

Eric Stine, Analyst

Okay, thank you.

Todd Becker, President, Chief Executive Officer and Director

Thank you very much.

Operator

And thank you. And I'm showing no further questions. I would now like to turn the call back over to Todd Becker for closing remarks.

Todd Becker, President, Chief Executive Officer and Director

Yeah, thanks, everybody, thanks for coming on the call. I think what's really exciting for us is our balance sheet is in great shape. We have fully funded our transformation. We are on a path that we outlined, the ability to roll out these construction projects is underway and I think, we're going to continue to be successful in innovating around protein purities and innovating around nutritional qualities, everything is telling us we're heading in the right direction.

The gains that we've made in terms of increasing our purities and getting higher yields of those purities and an increasing the value of the remaining projects just gives us more confidence that this is truly transformational for our Company on top of that a solid stable 1.0 platform is also very helpful.

I know that was a concern of others, but in general nothing, we don't believe there is a lot what can stop us right now from achieving our results and we're just going to continue down this path. So we appreciate your support and we'll talk to you guys next quarter. Thank you.

Operator

Thank you, this concludes today's conference call. Thank you for participating and you may now disconnect.