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**Sub: Transcript of Analysts' Call held on 28<sup>th</sup> October, 2024.**

Dear Sir / Madam,

Please find enclosed Transcript of Analysts' Call of Praj Industries Ltd. held on 28<sup>th</sup> October, 2024 regarding Un-audited Financial Results (Standalone and Consolidated) for second quarter and half year ended 30<sup>th</sup> September, 2024.

This information is given pursuant to Regulation 30 of SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015, as amended from time to time.

Thanking you.

Yours faithfully,  
**FOR PRAJ INDUSTRIES LIMITED**

**ANANT BAVARE**  
**COMPANY SECRETARY &**  
**COMPLIANCE OFFICER**  
**(M. NO. 21405)**

Encl.: as above

**Praj Industries Limited**  
**Q2 and H1 FY25 Earnings Conference Call**  
**October 28, 2024**

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**Moderator:** Welcome to the Praj Industries Limited Q2 and H1 FY25 Earnings Conference Call.

As a reminder, all participant lines will be in the listen-only mode and there will be an opportunity for you to ask questions after the presentation concludes. Should you need assistance during the conference call please signal an operator by pressing “\*” then “0” on your touchtone phone. Please note that this conference is being recorded.

I now hand the conference over to Mr. Anuj Sonpal from Valorem Advisors. Thank you, and over to you, sir.

**Anuj Sonpal:** Thank you. Good afternoon, everyone, and a very warm welcome to you all. My name is Anuj Sonpal from Valorem Advisors. We represent the investor relations for Praj Industries Limited. On behalf of the company, I would like to thank you all for participating in the company's earnings conference call for the second quarter and half year ended, first half ended September 30th, 2024.

Before we begin, let me mention a cautionary statement. Some of the statements made in today's earnings conference call may be forward looking in nature. Such forward-looking statements are subject to risks and uncertainties, which could cause actual results to differ from those anticipated. Such statements are based on management's beliefs as well as assumptions made by and information currently available to management. Audiences are cautioned not to place any undue reliance on these forward-looking statements in making any investment decisions. The purpose of today's earnings conference call is purely to educate and bring awareness about the company's fundamental business and financial quarter under review.

Now, let me introduce you to the Management participating with us in today's earnings call and give it over to them for opening remarks.

We firstly have with us Mr. Shishir Joshipura - CEO & Managing Director and Mr. Sachin Raole – Chief Financial Officer & and Director of Resources. Without any further delay, I request Mr. Shishir Joshipura to start with his opening remarks. Thank you, and over to you, sir.

**Shishir Joshipura:**

Thank you, Anuj. Good day, everyone. I welcome you to Praj Industries' earnings call for Quarter 2 and H1 of FY '25. Trust all of you had the opportunity to go through our results for the quarter ended 30th September, 2024.

Let me start today's call with an important development in biopolymer space. Earlier this month, Praj's first-of-its-kind demo facility, also India's first for biopolymers, was inaugurated by Honorable Union Minister – Dr. Jitendra Singh, Minister of Science and Technology. This facility showcases our capability in renewable chemicals and material space. This facility will demonstrate Praj's indigenously developed solutions in the RCM space.

This integrated facility houses fermentation, chemical synthesis, separation and purification sections along with other supporting sections and is spread over 3 acres. This facility showcases production capacities of 100 tons per annum for Lactic Acid, 60 tons per annum for Lactide, which is equal to 55 tons per annum of PLA.

Recent announcement of government approval to the BioE3 policy for fostering high performance bio manufacturing is a very, very progressive step in this direction. The BioE3 policy will give boost to innovation driven R&D and manufacturing as well as commercialization of technology.

Our demo plant is an important global breakthrough as it opens a completely new dimension in form of renewable chemicals and material segment.

The global economy is witnessing continued challenges arising from unstable geopolitical situations, a relatively tight liquidity, uncertain and volatile energy prices and changing climate. While some of these events have created a short-term challenge, they have also enhanced the need for accelerating the push for sustainable and renewable energy. Increasingly, governments are realizing and committing themselves to enhance the share of biofuels in their respective economies.

Coming to business performance, along with Bioenergy segment that continues to develop positively, our business is growing in multiple dimensions, with healthy order and inquiry inflows from bioenergy, energy transition, services and engineering verticals from both domestic and international markets in the first half of the year. With several positive developments in the ecosystem and the market, it augurs well for continued growth journey as we move forward.

On the domestic bioenergy business front, in a much-awaited development, the government lifted restrictions on use of cane juice, cane syrup and B-heavy molasses for Ethanol production. This has not yet resulted in any significant movement in the market. Sugar plants are expecting a long-term visibility for the policy to take further investment decisions for setting up Ethanol plant based on these feedstocks.

The ethanol producers are also awaiting price revisions for ethanol. The grain-based distilleries are now allowed to purchase up to 2.3 million metric tons of rice from FCI exclusively for ethanol production. However, the indicative grain price is very high, posing a big challenge on project viability. Several projects are now opting for maize or corn as feedstock of choice, and the government has also highlighted its additional focus on enhancing feedstock availability by increasing corn production in the country.

Capacity built up in this quarter was completely dominated by starchy feedstock, with 100% share of our order book being from starchy feedstocks for this segment. With a target of 20% ethanol blending with petrol on track, the Food Ministry has approached the NITI Aayog to prepare a roadmap for 25% blending. This is an encouraging development, which can further drive ethanol demand and translate into a significant business opportunity for us.

On international bioenergy front, we are witnessing strong inflow of enquiries from Brazil, Argentina and Paraguay for Corn Ethanol. There are many positive developments from the policy point of view. Brazil has legislated Fuel of the Future law that will increase the default blending to 30% up from 27% currently. This is expected to create a demand for an additional 4 billion liters of Ethanol. And we expect starchy feedstock to have a majority share of this additional demand given the feedstock dynamics in the country.

Argentina, Panama and Paraguay are discussing increased blending mandates, which will result in business opportunity for us. Africa has announced ethanol for clean cooking initiative that will likely drive ethanol capacity creation in Africa.

The world awaits the outcome of the U.S. election where the market is awaiting clarity on 45(Z) of the Inflation Reduction Act. We are witnessing increased traction on SAF related projects on ATJ Pathway and expect positive developments in low carbon ethanol demand as well as these as we move forward.

India is now the official headquarter of the Global Biofuel Alliance and we expect significant activities to get underway during COP29 event in Baku scheduled early next month. Praj is invited to be part of this event as a leading technology partner. Praj is also invited by the Brazil government to be a part of a dialogue sponsored by them at COP29. These developments are indicative of Praj's growing technology progress on the global front.

Our continuous endeavor to help enhance value for our customers and help them win is leading to increased focus on co-product creation from existing feedstocks. With a view to help starchy feedstock-based projects, we have commissioned a demo plant for production of corn oil at one of our customers' installations. Corn oil is one of the by-products at the corn-based ethanol plants. This plant can produce 4 tons per day of corn oil. It is mainly used as a feed for biodiesel and has applications in the paint and poultry industry. Corn oil modules will help enhance the financial viability of all corn-based ethanol plants.

A couple of years ago, we spoke about a String of Pearls approach for Praj's growth strategy. Enhancing the service business portfolio, which offers solutions across a broad spectrum, was one such perk. Our service business is now seeing a healthy growth in order book and revenue from both domestic as well as international markets. Biogenic CO2 capture, fermentation process management, operation and maintenance services are increasingly finding higher interest with a healthy inquiry pipeline. Our order book for H1 of FY '25 is 40% higher than our order book for the entire last year for this segment.

On 2G front, IOCL plant recommissioning progress is as per plan. We are working closely with the IOCL team to ensure ramping up of the plant capacity in gradual manner.

On the CBG front, the developments are gradual and in positive direction. Several elements of ecosystem are aligning for driving future growth in this industry. We have received our first order for a plant exclusively based on Napier grass, as also our first international order for biogas Desulfurization from Philippines. The inquiry pipeline is developing positively, and we expect it to translate into firm business in the second half of FY '25.

Moving on to engineering business:

On the energy transition and climate action front, the process of Mangalore facility approval by our clients and building up the team is going as planned. We have already received the approvals from four of the leading global EPC companies. As the process of approval and then discussing new orders itself is long, we have not seen any major order booking for Praj GenX, though the inquiries are building up meaningfully.

Our dialogues with leading solution providers in the ETCA space for modularized solutions have progressed well and we expect them to lead to positive results in the near future. The current exposure is for building the infrastructure and the revenue is expected to follow in due course.

Our Zero Liquid Discharge business is also gaining momentum with increasing acceptance of our modularization solution. First of our modularized ZLD plant was installed in a record time of less than a week. Please compare this to the typical time taken at site which is of the order of six months.

Our PHS business is witnessing a very healthy buildup of projects pipeline, which we expect will translate into orders as we move through the second half of the year. Overall, we see a positive development for all our business lines.

With this, I will now hand over to Sachin for his comments on the financial performance. Thank you.

**Sachin Raole:**

Thank you, Shishir. Good day, everyone. Let me take you through the financial highlights for the quarter and half year ended September 30, '24.

The consolidated income from operations stood at Rs. 8.16 billion in Q2 FY '25 as compared to Rs. 8.82 billion in Q2 of FY '24. PBT stood at 744 million in Q2 of FY '25 as compared to 848 million in Q2 of last year. Similarly, profit after tax stood at Rs. 538 million in Q2 of FY '25 as compared to 623 million in Q2 of FY '24.

For H1 FY 25, income from operations was 15.15 billion as against 16.19 billion in H1 FY '24. PBT before exceptional items stood at 1.53 billion in H1 FY '25 as against 1.62 billion in H1 FY '24. PBT after exceptional items stood at Rs. 1.81 billion, PAT of Rs. 1.38 billion in H1 FY '25 as against Rs. 1.21 billion in H1 FY '24.

Though the order book is healthy, in Bioenergy segment, lower pace of execution has impacted the top line in this quarter. Improved contribution margin is on account of softening of raw material prices and shareable sales mix.

Export revenue accounted for 27% of Q2 FY '25. Of the total revenue, 68% is from bioenergy, 24% from engineering and 8% is from the PHS business. The order intake during the quarter was 9.21 billion with 94% from the domestic market. Of the total order intake, 88% came from bioenergy, 6% from engineering and balance 6% from PHS business. The order backlog as of September '24 is at 41.5 billion comprising of 72% of domestic orders.

Let me now explain some of the variances in the numbers. Increase in the employee cost is because of addition of resources in our subsidiary called Praj GenX, and services business and normal annual increments.

Mark-to-market of forward contracts resulted in a loss in H1 FY '25 against the profit for H1 FY '24. Higher finance cost and depreciation, amortization cost is on account of investment in new facility at Mangalore of Praj GenX.

Cash in hand as on 30th September '24 is 7.51 billion.

I now conclude my remarks, and I would like to thank you all for joining us on this call. We would now be happy to discuss any questions, comments, or suggestions you may have.

**Moderator:**

Thank you. We will now begin the question-and-answer session. The first question is from the line of Mohit Kumar from ICICI Securities. Please go ahead.

**Mohit Kumar:**

My first question is on the P&L and balance sheet items. Can you please help us with the CAPEX at GenX, which you have capitalized in the first half, and the MTM losses you have booked in Q2 FY '25?

**Sachin Raole:** So, let me just give an answer for your second question related to MTM loss on FOREX. In the last year, H1 '24, we were having the FOREX gain versus in this quarter, we are having FOREX loss. It is mainly the mark-to-market of the forward contracts, and it is not the cash losses which we have booked. It is the situation of when you are doing mark-to-market of forward contract as on the reporting date. The forward contracts have shown because of the adverse movement of euro specifically, not even dollar, it is mainly on account of euro movement which has happened in the last week of September. Let me just clarify actually, this is only a book loss, it is not a cash loss, one. And two, the movement of euro has actually reversed again in the first week of October. But for the date of 30th September, it has resulted into loss on our book.

Your first question was related to the CAPEX which we have done on the Praj GenX. Yes, the facility which we are building up in Mangalore, the facility is actually taken on a lease as per the accounting standard Ind AS. You have to consider the entire lease rentals which are getting paid out on this facility has to be capitalized and to be provided in the form of depreciation and interest.

The line item on the depreciation and interest is on account of that. If you look at for last six months, our depreciation was in a range of 18 crores, but if you look at for the half year, it has translated into 40 crores, so almost 22 crores increase on account of that depreciation which is mainly coming up because of this GenX facility which we have put up.

**Mohit Kumar:** Is it possible to quantify the MTM losses you have booked in Q2 FY '25?

**Sachin Raole:** Oh, yes, the total quantum on this MTM losses was 10 crores.

**Mohit Kumar:** 10 crores. Thank you, sir. My last question is, sir, good to see improvement in QoQ order inflow in ethanol business in domestic. But sir, our engineering order has declined sequentially. I think you alluded to the fact that GenX is getting ready.

**Moderator:** As the current participant is not answering, we will move to the next question. The next question is from the line of Aditya Mongia from Kotak Securities. Please go ahead.

**Aditya Mongia:** I wanted to get your clarity on first things first. So, I will go ahead with my question. The question that I had was more on this. A recent judgment has been passed which gives powers to the states to kind of put taxes on top of industrial alcohol. I wanted to clarify whether there is clarity, whether the blending ethanol also is involved inside this judgment or not?

**Shishir Joshipura:** No, that is specifically as it relates to industrial alcohol and is more a question as to who has authority between the state and the centre and has no impact at all.

**Aditya Mongia:** Right, so Ethanol for Blending is not classified as Industrial alcohol, right? Is that what you are also trying to say?

**Shishir Joshipura:** No, it is differently treated, yes.

**Aditya Mongia:** And that is good to get clarity on. The second thing I wanted to get a sense from you is, on a 1H basis, how much has been the Y-o-Y movement in your ordering from 1G Ethanol, and how to think through this number over the next 12 months or so?

**Shishir Joshipura:** What is the question you said? Movement on what?

**Sachin Raole:** 1G.

**Aditya Mongia:** Movement on 1G Ethanol and the related ordering for the first half of this fiscal, and how to think through this over the next 12 to 18 months.

**Shishir Joshipura:** Compared to, and you want it in relation to what?

**Aditya Mongia:** Yeah, essentially the Y-o-Y growth trend is what I am trying to focus on, of the past and the future.

**Sachin Raole:** So, September 24th to September.

**Shishir Joshipura:** You want June to September or you want September to September? I am just trying to understand if we answer in the right way.

**Moderator:** As there is no response from Mr. Aditya, we will move on to the next question. The next question is from the line of Mohit Kumar from ICICI Securities. Please go ahead. As there is no response from the participant, we will move on to the next question. The next question is from the line of Amit Anwani from PL Capital. Please go ahead.

**Amit Anwani:** First question, sir, you highlighted on the international opportunities in Paraguay, Africa, Brazil. Wanted to understand are we looking for starchy plants only in these areas, in this geography? And second, wanted to understand if you could substantiate on the pipeline, whether value or volume in these geographies which we are looking, and how is the competition, any competing company globally where we are competing and we have advantage to get orders in these geographies?

**Shishir Joshipura:** So, thank you for the question. Yes, so these opportunities are not necessarily all of them are starchy. I think Africa can be a mix between the two, where it's starchy and sugary. The opportunities in Latin America currently is based on starchy feedstock. Two, because of the way the whole business has evolved in that part of the world, the starchy feedstock has a clear play for people and companies with experience on handling starchy feedstock. Obviously, Praj has got tons of it. So, we are able to create a very clear value proposition in those markets around starchy feedstock. As you are aware, we have already commissioned a plant, we are



engineering for three more, and I am sure that as we go forward, we will probably hear about further developments in these markets as well.

The second thing that is happening is that the governments in these markets are pushing for higher blending percentages. As I mentioned, Brazil has passed a law, which now makes it mandatory for, just as we have E20, they will now have E30. Up from E27, 27 to 30 for them is almost 4 billion liters of annual production. Most of it is likely to come from starchy feedstock, but not all of it. And that puts us in a good position because our starchy feedstock solutions are finding good traction in this markets.

**Amit Anwani:** Sir, any addressable, are we expecting five, seven plants together from these geographies? Anything on what are the expectations?

**Shishir Joshipura:** As I mentioned, we are already engineering three projects, and as we go through the timeline over the next six months, you will hear more about it.

**Amit Anwani:** And on service, if I heard it right, you said H1 is 40% higher than full of last year.

**Shishir Joshipura:** That is correct.

**Amit Anwani:** So any sense, what was the absolute number for H1? And going forward, what are the expectations with respect to service revenue contribution? And second, from where exactly this is coming? Are we focusing, have started focusing this area now, or is there any opportunity which has gathered pace and we have started getting good volumes in service?

**Sachin Raole:** So, Amit, we just don't give the segmental kind of a number, but let me tell you the services business when we talk about has two elements. One on the performance enhancers, which go for our ethanol business, and the O&M. We have seen the traction happening on both the sides. And performance enhancers, if I may say that, it has a component of domestic and international both. And the uptick which we are seeing is actually happening in all the segments. Going forward, your question is related to what is going to happen in future. We see that this momentum for services business is going to continue. Rather, other businesses will also start contributing to the services business, especially now as the CBG is coming to a maturity level. In the sense, the plants are coming up for finality, the O&M is starting. Our performance enhancers for pressmud is also going to be a part of this entire services basket. So, going forward, we see that the momentum for services business to continue.

**Shishir Joshipura:** Additionally, we are also seeing a big move happening globally on capture of biogenic CO<sub>2</sub>. There is a CO<sub>2</sub> that gets released in the fermentation process. And we expect that this could become a significant product line as we move forward. We already have a few installations that we built, but they were far and few in between, but we now see a very concentrated movement

happening. So, as we move through the timeline, you will see this opportunity also as a part of our services business opportunity.

**Amit Anwani:** So, lastly on gross margins, this quarter and last quarter we did, I think 50% last quarter, this quarter we did 47%, and I am assuming services business might have better gross margin. And then ETCA coming in. So, would you like to answer on sustainability of gross margin at this level or it will settle down to some lower sustainable level? Any thoughts on gross margins post ETCA revenue also coming in next year?

**Sachin Raole:** I think the quarter 2 margins should keep on continuing on a sustainable basis. Of course, on a quarter on a quarter basis, you will see some kind of a variation happening for the reason to what extent we are executing the engineering services order, which are not the services business segment which we are mentioning. And second one is the sales mix mainly on the domestic and international. So, to some extent, there will be some variation, but yes, the range is going to be more or less same what is getting reported in this quarter.

**Moderator:** The next question is from the line of Dipesh Agrawal from UTI AMC. Please go ahead.

**Dipesh Agrawal:** Sir, my first question is on CBG. Was there any order inflow for CBG in the first half?

**Shishir Joshipura:** Was there any?

**Dipesh Agrawal:** Order inflow for CBG in the first half?

**Shishir Joshipura:** As I mentioned that we have signed the deal, already in the order book, there is a first project based entirely on Napier grass. So, we are building projects where Napier grass is one of the feedstocks, but now this is exclusively on Napier grass. There is some development, which is still premature to talk about, but there are companies in the market or interested developers in the market who are thinking in terms of growing their own feedstock and then put up the CBG project and Napier grass is likely to be what I would call as a feedstock of choice. So, this is a very important one. We get a project to build where the promoter has his own feedstock growing area and connected that to the plant. And this is the likely model. We think that that could become a decent model as we move forward. We have to see how these things develop and that is why I mentioned that that's an important breakthrough for us.

**Dipesh Agrawal:** And sir, how has been the progress on the execution of the CBG plants which we took last year, the 5 CBG plants?

**Shishir Joshipura:** So, they are progressing well and actually we will start to see them come off on the noticeable level of, you know, in sales and invoicing as we go through the second half of the year.

**Dipesh Agrawal:** Sir, if I look at your order inflow during the quarter, I think exports has been quite weak while last quarter they were quite strong, but if I look on a trend line basis, your exports this quarter

has been quite weakening. Comments, is it something happened during this quarter in the export market?

**Shishir Joshipura:** Yeah, no, it's just a timeline issue. You know, these are very large contracts, especially engineering dominated as well as the bioenergy. And both of them, it's just the timing issue. We just couldn't manage to close them out during the quarter, but as I was mentioning, the pipeline is extremely strong, our dialogues are very strong. So, we aren't, what I said, we aren't unduly worried. At the end of nine months, we expect it to be back to normal.

**Dipesh Agrawal:** And sir, lastly, off late, there has been a lot of articles suggesting government may look at diesel blending; while timing we may not be able to come in, but any thoughts where are we in terms of technology for diesel blending?

**Shishir Joshipura:** Yes, so there is as you probably estimate that we don't have to discover the molecule is already there. The alcohol molecule is already there. Now, we just need to see how the engines behave and what the emissions are and the other dimensions on vehicle performance. So, there is a structured program that is currently underway, and I think we will be able to talk about it. We are right now bound by some clauses in the agreement, but we will be able to talk about it once the tests are done. It is progressing positively is the only comment that I can make at this stage.

**Moderator:** Thank you. The next question is from the line of Sani Vishe from Axis Securities. Please go ahead.

**Sani Vishe:** So, I think my first question is on similar lines. So, we can see the order intake for bioenergy has been really very strong this quarter, but on the other side, engineering has been, I think, one of the weakest quarters in maybe last two years. So, what are expectations on the next two quarters? Do we see engineering orders improving and we see the bioenergy momentum to continue?

**Shishir Joshipura:** So, as I was mentioning in the earlier question, it's been just a timing issue for a few contracts on engineering. There are very strong dialogues that are underway. We expect things to be normal within the second half. So, on the engineering side of business, absolutely no concern there at all. We are also expecting bioenergy to continue to grow, and both in domestic and international markets, we expect very strong performances to come. One of the big movements that we will start to see as we move forward is the development of the SAF market, which is something that we haven't talked about much yet, but probably as we go forward through the second half of the year, we will start talking about it. And it clearly has two elements. There is the engineering business there. There is the technology business there. And we will see how, on the low carbon ethanol side, so we will see how both of them combine together, and that's why that gives us the confidence to speak that as we see our inquiry pipeline, our dialog with customers, our interaction, we are very, very confident that second

half of the year will sort of iron out the increases that have developed temporarily for this quarter.

**Sani Vishe:** And just one small question. So, on the MTM losses, so if I understand correctly, it would be in inverse proportion to EBITDA, right? Because you would be hedging some of your exposure. So, does it mean that going ahead, if the MTM losses come down, or if there is a gain, then the EBITDA will be on slightly lower side?

**Sachin Raole:** See, if you look at from the MTM point of view, it gets evened out over a period of time, and the impact of MTM on EBITDA, I don't think should be a significant one, because this is the element which is coming up every quarter for us, sometimes it is positive, sometimes it's negative. Yes, this quarter it is negative by 7 crores, not necessarily it will continue in that way, but your point is whether it will have an EBITDA impact, I don't think it will have a significant impact on my EBITDA.

**Moderator:** Thank you. The next question is from the line of Nirav Vasa from ASK Portfolio Managers. Please go ahead.

**Nirav Vasa:** Sir, my question is pertaining to the proposed ethanol blending in diesel. So, if I look at the petrol and diesel consumption statistics, diesel consumption is almost around 2.5 to 2.7x the petrol consumption in India. So, if the diesel blending has to be done in India, and based on your assessment, is there enough feedstock in India to feed this kind of massive demand? Because as I understand, we are around, the petrol blending is around 14%-15%, which we intend to increase to 20% in a couple of years. So, there is an organic demand coming from the petrol side and the demand boost, if it comes from diesel, is going to be magnanimous. So, wanted to understand your thoughts on the ecosystem as a whole and what kind of CAPEX can happen industry-wide if this starts?

**Shishir Joshipura:** So, yeah, I think great question. From the perspective of feedstock, I think, as you know, there are three broad categories of feedstock. The sugary feedstock on which as we mentioned earlier in my opening remarks as well that the new policy now permits juice and Molasses B conversion and syrup conversion directly to ethanol. That's a boost. That's number one. Government is focusing very strongly on maize, which is the starchy feedstock. That's another boost. They have released rice. That's another boost. What's more important is that there is a completely untouched area of cellulosic feedstocks, which is not even, I would say, we are not even started to exploit it yet. And that is why my comment on IOCL commissioning is very important that as we go through the second half of the year, we will see that project commissioned and demonstrate that it is possible to use cellulosic feedstocks and convert them to ethanol and that could become a further big boost. So, from the perspective of feedstock I think right now we are pretty okay. That's number one.

Number two, we are also working, as an organization, we are working from the leading institutes in the country to see what can be done because I think we have to understand that this is not only about ethanol production. It is also about welding the agri community and finding an overall sustainable solution.

We are working very closely with VSI to create an intercropping model that will allow us to get the benefit of not only having a healthy feedstock pipeline, but it will also help us address in time to come and we will talk about it maybe a little down the line, the carbon intensity questions on the feedstock, because if it's intercropping model, then you get huge advantages on the carbon side of the equation, and that is something that will become very very mandatory for SAF and even for other fuels. So, currently I don't see a problem for feedstock availability. As you are aware, the DFPD has already recommended to NITI Aayog that we can very easily go to E25 in the country without any concerns about the feedstock. So, that would put to rest any concern that we may have on feedstock at least in the visible term.

**Nirav Vasa:**

Sir, but as a part of developing the entire ecosystem to even, you know, as we are talking of integrating ethanol in the diesel ecosystem as well, so my understanding is that the agri-waste or the cellulosic waste which was there, that has to be there, that is needed at much larger quantities. But today, as we talk, there is already an alternative use of this bio of all this agri-waste which is there at local level. So, if all of a sudden there is a huge demand boost, then the prices of these agri-waste can also boost up and that can impact the, what I can say, overall project viability as well. So, any thoughts are you able to see on it, like ease of availability of biostock and what kind of CAPEX, according to you, can it lead to assuming it happens?

**Shishir Joshipura:**

So, I think, great question. You are right that, A, there is a whole host and this is now running into millions of tons of estimate on the biomass or the cellulosic waste that is not being put to any use in the country right now. Farmers just torch it. So, from the perspective of availability, I think we are not even scratching the surface today. So, it is easily possible for me to meet almost up to 20% of the country's demand of energy through cellulosic feedstock processing. So, I am not worried about that part. What is of importance is that we establish the correct supply chain for this and that needs to get organized. I think that is one area where we definitely need to work on that we need to organize ourselves as an industry. When I say ourselves, I am talking about the country. And we create a supply chain mechanism that allows this agriculture waste to reach from farm to factories, and I think that is a very important step that needs to be taken forward. But that is not the only one. I think there is also a very important biomass, which is likely to be increasingly more available, and that is Bagasse with the sugar mills. As the renewable power equation in the country settles to a dimension which is dominated by solar and wind, we expect a lot more Bagasse to become freely available and that could become an excellent feedstock, 2G feedstock for production of ethanol. And we do expect that as we move through, let us say next calendar year, we will be able to see some constructive development on that dimension as well.

**Nirav Vasa:** Sir, Bagasse is already used by the existing sugar companies for the co-gen, right?

**Shishir Joshipura:** Yes, but they have, as you know, sugar mills run for 4 months, 5 months in a year. And Bagasse, there is excess quantity of Bagasse that is increasingly projected to be made available, and then we have to find a good use of it. And we believe that on two counts, one, availability of feedstock, all the supply chain related issues already solved. Bagasse is a very good feedstock for 2G as well. And more important, it will also help meet the lower carbon intensity targets that we will have as we move in the future. So, it's a feedstock that ticks on multiple boxes. So, we expect that that could become one. Two, on the rice straw, I think, as I was mentioning to you, we are not even beginning to organize our entire value chain, supply chain in a very, very constructive manner. There are initial efforts right now underway. And as I see it, it's moving forward very constructively. There are platforms that are getting created. There is a growing awareness saying, oh, this is possible as a business. So farmers today burn it. From there, they start to get a value for it. So, I think that's a big travel. And I am sure that we will see emergence of a cellulosic feedstock supply chain also emerge as we move forward.

**Nirav Vasa:** My final question, sir. Like in FY '24, our diesel consumption was almost 8,950 crore liters. So, assuming if I want to add 1% ethanol into it, my incremental demand for ethanol can be almost 89 to 90 crore liters. So, if 90 crore liters of ethanol has to be additionally fed into the system, what kind of CAPEX would it need?

**Shishir Joshipura:** I have drawn my calculator for that. Because I don't know the feedstock, so there is not a ready rock steady answer for you. But we will get back to you on that one. Yeah.

**Nirav Vasa:** Broadly, any number can you give, like, for example, for 1 crore liters of ethanol, what can be approximate CAPEX? And what can be the Praj's scope of work in that?

**Sachin Raole:** Nirav, if you look at from a ballpark number point of view, and if you are saying, let's assume 100 crores to be added as a capacity for ethanol, and if we are looking at 100 KLPD kind of a plant, standard size of plant, of course the standard size has gone up now, then we are looking at least 30 to 35 plants to come up. Every plant will cost, depending on the feedstock, may be 100 to 125 crores. So, what you are looking at, at least 3,000 to 4,000 crore kind of an investment. If you are looking at only the process plant to be taken care of by Praj, maybe 40% to 50% of that. So, around 1,800 crores to 2,000 crores.

**Sachin Raole:** Every percentage increase in blend.

**Nirav Vasa:** I will get back with more questions. I am wishing everyone a very Happy Diwali.

**Moderator:** The next question is from the line of Shailesh Kanani from Centrum Broking. Please go ahead.

**Shailesh Kanani:** Sir, in your opening remarks, you said after the cap removal on feedstock, the traction on the ground was not very strong, but still in the quarter, we have seen a good momentum on the bioenergy front in terms of order inflow. And you touched upon CBG as one Napier grass order received in CBG. So, what other molecule has kind of picked up the order inflow, has helped the order inflow for bioenergy in this quarter?

**Shishir Joshipura:** So, Shailesh, what I was mentioning was that the sugary feedstock-based release that happened, the restrictions on use of syrup, juice and Molasses B went away. However, obviously, you will know this is too close to the season. So, maybe for the next year, people will start thinking what putting capacity based on these feedstocks.

So, this year was just too short a time for anyone to do anything. So, those who have the plants will be able to operate them, but those who don't have the new plant cannot be built in such short time. So, maybe if we start building now, it will be probably ready for next season. In terms of order intake, as I mentioned, 100% of our order booking is on starchy feedstock. So, maize has become a big focus for everyone, all the elements in the value chain and I think that's what we are seeing as well. We see a big push forward on maize.

**Shailesh Kanani:** And sir, the second question with respect to Napier grass CBG plant vis-a-vis, can you throw some light about the IRR that project would generate vis-a-vis other feedstocks like Pressmud or rice straw, any numbers or anything you can help on with respect to yields of that feedstock and also availability of Napier grass per se?

**Shishir Joshipura:** As I was mentioning, the Napier grass is a very, very interesting crop. Actually, you can take five crops in a year. Very interesting. You can take almost five, yeah, five crops in a year, if you can manage your plantation well. Very direct from field to factory kind of a feedstock. Very portent. Easy to, not too many, there are some complexities with it, but technology can very easily address them. So, that's not a problem. So, Napier grass is a good feedstock to have. As I was mentioning, we are seeing, we are just seeing initial trends where people are saying, okay, I will grow my own Napier grass and I will put up the feed. So, that's the first such project that came along and that's the one that we are building where everybody will be able to grow and then take it or some will grow and some will supply. So, that's time will tell how the whole ecosystem develops, but it's a good feedstock to have. It's very remunerative for the agriculture, for the agri ecosystem, and if we can think of a plant located in the middle of a Napier grass plantation, then that is a very good one to have, because then all the nutrients that come back from the process in terms of liquid and solid bio-fertilizers can all go back to the same field, so it becomes very, very, I mean, a completely closed loop, so no water required, no, the water that comes goes back. The nutrients that come go back. The soil remains rich and fertile. So, there are many dimensions on the agri side which are very positive, and we expect that maybe this looks like, from the dialogue that we are having, that this could be a model that could develop further.

**Shailesh Kanani:** And just a follow-up on that, is this the same private conglomerate which gave us the five CBG orders, this Napier grass?

**Shishir Joshipura:** No, different. Those projects have Napier grass as a feedstock, but that's not exclusively on Napier grass. This one is different.

**Shailesh Kanani:** So, can we throw some light? I mean, is it private or a government company? Can we show some light on the client side?

**Shishir Joshipura:** Private sector. Entirely private sector.

**Moderator:** The next question is from the line of Sagar Dhawan from Valuequest. Please go ahead.

**Sagar Dhawan:** Sir, just on the execution side during the quarter, just wanted to get a bit more color on the execution. So, we saw a declining execution on a Y-o-Y basis. So, just wanted to get some color on the domestic bioenergy side. Can you talk about what is sort of ailing the execution over here by, you know, basically in terms of the feedstock sugar versus starchy, where does the problem lie actually in terms of execution?

**Shishir Joshipura:** So, Sagar, if you really think about it, no, just a year back the ban came, right, on the feedstock, one on rice and then on sugar, sugary feedstock. So, the project that was in pipeline at that time, which would have actually come for execution now in first two quarters, did not go through, right? And that's why I said that it got notified a bit too late in the year. Even if I start constructing some projects now, I won't be able to catch the season because it will take four, five months, six months to move forward. By that time, the season will be over. So, I think some recasting of the plan has to be done for those kinds of contracts, which, I would say, are ready to execute, but get stuck. So, now they will start again, the bankers have to take a view, etc, etc. So those will move forward. In terms of execution of a starch-based, starchy feedstock, this plant, I think they are in general moving fairly okay. There are some issues around bank funding, etc., but nothing, no sort of clarification required on the policy side or the ecosystem side of the dialog.

**Sagar Dhawan:** So, basically, can you provide the mix of your order book in terms of sugar versus starchy, domestic bioenergy?

**Shishir Joshipura:** I said that 100% of the order book is starchy. Most of the contract did not get finalized during the quarter. None. Not only for us, the market didn't finalize anything.

**Sagar Dhawan:** Sir, that's on the intake. Sir, I actually wanted to get a sense on the current order book, order backlog. What is the mix on the order backlog, sugar versus starchy?

**Shishir Joshipura:** Even in the order book, if you will see the sugary feedstock will be a miniscule number right now, maybe one, because last three, four quarters we are running, except for one order that I



know of personally, we don't have a sugary feedstock-based order. Most of them are starchy feedstock based.

**Sagar Dhawan:** So, my second question was on the SAF opportunity. In the last quarter, we had announced an order win for a Greenfield SAF plant in the U.S. Just trying to understand what percentage of the CAPEX do we cater to from this particular order of that customer on the CAPEX side to get a sense of the addressable opportunity for us.

**Shishir Joshipura:** Sorry, could you just repeat your question? I couldn't catch what you are wanting to know.

**Sagar Dhawan:** So, basically on the SAF side, in the U.S., we have received an order from U.S. in the last quarter for ATJ Pathway SAF plant. So, just wanted to understand what percentage of CAPEX is Praj able to address in the overall CAPEX of the Greenfield SAF plant?

**Shishir Joshipura:** Almost, it depends on the scope, of course, of what we can address, what we can, there are other dimensions as well, but between 40% to 50%.

**Sagar Dhawan:** And just to clarify, there are two parts to it, basically the ethanol plant and the isobutanol conversion to SAF. So, does Praj address both these or only the first step, which is the making the ethanol from...?

**Shishir Joshipura:** So Sagar, that's not the way to go. So, an ATJ plant is alcohol-to-jet plant. Currently, all alcohol-to-jet projects that are being announced are ethanol to jet. So, alcohol equals ethanol in these projects. So, they are only setting up these alcohols. They will buy, in most of the cases, these customers are saying, we will buy ethanol from the market, okay? Number one.

Number two, if they set up their own, then, of course, what feedstock, what carbon intensity, etc., those questions will come into play. So, there are projects which are also contemplating to set up their own ethanol plants. There are projects, they are saying, I already have an ethanol plant, and now I want to forward integrate into SAF. And then, for those cases, the carbon intensity becomes the question. So, they have to see what solutions are required by them to be addressed, whether in terms of process integration, whether in terms of process optimization, how do you go about reducing the carbon intensity, carbon sequestration about overall score because SAF, if it is in America in United States, then we need to go score which is 50% below the existing number for the SAF and that means that the ethanol has to be at a score of about 35, 30 in that range. So, by the way, the current ethanol production is at a number of about 68. So, how do you go from 68 to 38? That is the first step, and then you integrate that into the SAF project. So there are multiple loops that need to get answered depending on where the developer is today. An existing ethanol producer, he wants to put up new ethanol or he just wants to put up SAF project and buy ethanol. So, there are different dimensions for that.

**Sagar Dhawan:** Just a follow-up on the ATJ side, on the ATJ plant setup. What is the addressable opportunity in the U.S. that you see over here?

**Shishir Joshipura:** Sorry, what is the addressable opportunity we see in United States?

**Sagar Dhawan:** In the United States for ATJ plant, ATJ setup?

**Shishir Joshipura:** For a given one ATJ plant or all the ATJ projects?

**Shishir Joshipura:** No, no. For all the ATJ projects. For all in the U.S. Overall opportunity.

**Shishir Joshipura:** So, we are going to calculate it again. This is actually pretty large. So, let me tell you. So, United States has said that the target is to put 3 billion gallons capacity for SAF, okay. Roughly, I am just putting for ease of calculation now, 2 billion, 1.6 to 2 billion will come through the HEFA route. And after that everything will likely to come through, at least in the near future likely to come through the ATJ route. So, let us take up to 2030, it is a billion gallons of ethanol to be produced. Sorry, a billion gallons of SAF, so that means it will need 2 billion gallons of ethanol, okay. So, 1 billion gallons of SAF equals 2 billion gallons of ethanol. Now, if I look at a project size of typically 100 million gallons per year of ethanol, which will result into 50 million gallons per year of SAF. So, 50 million gallons into a billion, that is 20 plants. Right? So, 20 projects have to come up between now and 2030 to address this. And I am not talking only the SAF opportunities, the ATJ part of it. Each of this is a \$400 million potential for us. But again, there are many dimensions to this. There are technology, who is the technology supplier? Who is the EPC? What's our risk appetite? What kind of guarantees we can provide? So, there are multiple dimensions. But from the market perspective, this is a very attractive opportunity that will unfold as we move forward.

**Moderator:** Thank you. The next question is from the line of Shyam Maheshwari from Aditya Birla Mutual Fund. Please go ahead.

**Shyam Maheshwari:** Sir, just wanted to inquire on the status of our Mangalore facility. So, have you already started churning revenues out of that or is it still under approval stage? What is the ramp up going to be like? So, if you could just maybe touch base on that.

**Sachin Raole:** So, we started this GenX facility in the month of February, March of last year. We are actually executing one order right now. The execution right now definitely on the lower side because we have spent last six months in getting the customers' approval. We got almost four approvals already from the customer, but getting it converted into order is going to take time. One of the orders which we have already received and executing in GenX facility is from the earlier customer who had approved this facility in the month of September-October of the last year. So, that execution is going on. So, revenue contribution at this point of time from GenX is very, very minuscule. It's not meaningful in the H1 of this year, the numbers which you are seeing

currently. But as the facility is already capitalized, the cost on that has already started ticking in. And that's what I was referring earlier in our opening remarks, that the depreciation element of that is getting factored in in this H1 number, but not the corresponding revenue, which we are believing that based on the order booking which should happen now, the revenue will start kicking in, in a meaningful way maybe from quarter 4 to some extent, but from the next year definitely.

**Shyam Maheshwari:** And considering there is a sufficient headroom here now in order to grow our engineering side of business, and while I understand this quarter there were some slippages in terms of our order inflow, but before that for the past three or four quarters we have been averaging around 200 to 250 crore kind of inflow in the engineering segment. With this additional facility, with these approvals now in place, should inflows now start meaningfully, start showing an uptick even from this 200 to 250 numbers? Is that what you expect going ahead?

**Sachin Raole:** Oh, that's right. That's what we are saying, that the order booking in a meaningful will start getting built up for the engineering going forward. From second half onwards, definitely yes.

**Moderator:** Thank you. The next question is from the line of Ankita Shah from Elara Capital. Please go ahead.

**Ankita Shah:** Hi, this is Ankita here. Sir, on the India bioenergy segment, given that now we have some clarity on the feedstock, we know what is the kind of ordering which is pending for achieving a 20% blending and incremental how much can come if we extend this blending to 25%. So, what could be the opportunity of capacity that can be developed to achieve that target?

**Shishir Joshipura:** So, roughly 3 billion liters would be the capacity addition that will be required to meet this 3, 3.5 billion.

**Ankita Shah:** Sorry, sir, come again.

**Shishir Joshipura:** Roughly 3 to 3.5 billion liters annual capacity would be required to be built to meet this additional 5%.

**Ankita Shah:** This is annual for the next 5 years?

**Shishir Joshipura:** Well, we will have to see. Of course, the capacity we have to get adjusted as we move forward to the increase of basic energy consumption in the economy, but I am saying today if I have to meet it, then that's the numbers.

**Ankita Shah:** No, so this is the total number or is this annual number?

**Shishir Joshipura:** Additional. Additional number.

**Ankita Shah:** Incremental number.

**Shishir Joshipura:** Capacity that needs to be build.

**Ankita Shah:** And sir, this includes the pending pipelines to achieve the 20% blending, that is also included in this?

**Shishir Joshipura:** Yeah, 20 is different. I am just saying if 5% has to get added from 20, then that's the number.

**Ankita Shah:** And sir, how much was the R&D spent for the first half of the year?

**Sachin Raole:** So, R&D spent has two elements, Ankita. One is on the CAPEX side, another one is on the OpEx side. On the OpEx side, we might have spent almost 15 crores in the first half, and on the CAPEX side, we have just capitalized one of the assets, that is this lactic acid plant, almost around 50-55 crores kind of a number. The second half we will see some more spent happening on the CAPEX side, because this multipurpose facility is going to get a couple of more product line getting attached to that. So, there will be some CAPEX happening on that. But on an average, the OpEx for every year is somewhere around 25 to 28 crores kind of a number.

**Ankita Shah:** And CAPEX could be how much for the full year?

**Sachin Raole:** By the end of this year, we should have CAPEX of almost on the R&D side itself around 65 to 70 crores.

**Moderator:** The next question is from the line of Vikram Suryavanshi from PhillipCapital. Please go ahead.

**Vikram Suryavanshi:** I just wanted to know, we have now started a demo facility for PLA. How would that business model will evolve for us and what are the different raw materials we tried for that PLA?

**Shishir Joshipura:** So, Vikram, the facility that we built, the first product that we are able to demonstrate out of that is PLA. There will be multiple products. It's a biopolymer facility. So, it will be able to demonstrate multiple product lines as we move forward. That's number one. Number two, we just commissioned. So, give us a bit of a time to actually be able to answer a question in full integrity. We have just commissioned. We have demonstrated. We know the process works. There are lots of customers, both from India and abroad, who have shown interest. Some have visited as well. So, it's developing very positively, but probably it's too early for me to answer anything specifically. But, broadly speaking, multi-product facility, commissioned now, multiple customer interest, both from India and abroad, and a few visits have taken place. That's the update I can give you today.

**Vikram Suryavanshi:** And just to extension of that, along with PLA, are there also opportunities for us to like bioplastic, which is like a PAT or any other verticals within plastic, apart from PLA, where we can extend our focus will be primarily to capitalize PLA first?

**Shishir Joshipura:** Yes, Vikram, as I mentioned, this is not a PLA facility. This is a biopolymer facility. So, we will be able to demonstrate multiple molecules. PHA, PHP, they are all lined up. Our R&D guys are pushing us to approve their expenses so that they can start demonstrating other molecules. So, that's the dialogue that we will have, of course, in consultation with our Board and Chairman, and then we move forward.

**Moderator:** Mr. Vikram, does that answer your question?

**Vikram Suryavanshi:** Yes.

**Moderator:** We move on to the next question. The next question is from the line of Sai Siddhardha Pasupuleti from Kotak Securities . Please go ahead.

**Sai Siddhardha Pasupuleti:** So, I just wanted to ask about there is this recent IPO listing company coming in the bioenergy space and this particular company is kind of saying that it has a 30% market share in the 1G ethanol capacities that have been deployed so far in the last three years. And if I kind of read through into that DRHP, they don't have a mention of any R&D expense as such anywhere. So, in a space like this, is there any imminent risk that is there for Praj, wherein it has a 60% less market kind of a market share in the ethanol capacities that have been deployed so far?

**Shishir Joshipura:** So, Sai, I would not comment on what others are saying. That's not fair for me. However, what I would say is this. We are not limited to domestic market. We are a business which is globally present. As we have already shared with you, our effort is to actually diversify our offerings across the geographies, across the molecules as well and not get limited only to ethanol.

So, for us, R&D has a very, very different meaning and purpose. Each organization can have their own philosophy for doing their business model in a particular fashion, and good luck to everybody based on their business model. We believe that R&D is the way forward because there are different molecules, different feedstocks, different geographies, different operating practices, different codes and standards.

So, that's how we approach our business, and that's we continue to believe that we need to continue to invest into these so that we are able to provide the full justice to what is possible. In our opinion, we are trying to solve a much bigger problem that the humanity is facing, and that's the view that we have.

**Moderator:** The next question is from the line of Manish Goyal from Thinqwise Wealth Managers. Please go ahead.

**Manish Goyal:** I have couple of questions. First on the corn oil as a by-product which can be blended with diesel as a biodiesel, sorry, just wanted to get a perspective like, because I believe in the current season nearly 50% of the ethanol offered was based on the maize as a feedstock, so in that

context when we have already so much installed capacity, then to have a by-product, how much of the production one can get as a by-product which can get blended with diesel? Just want to get a perspective like, if we probably have 100 tons of corn being used, how much ethanol can be produced and how much of corn oil can be produced and what is the CAPEX, additional CAPEX for bolt-on required, bolt-on CAPEX required for implementing this?

**Shishir Joshipura:** So, Manish, as I was mentioning, the challenge going forward, for multiple reasons, for producers of ethanol, is going to be how do they maximize the value of their operational life. And we believe that one way in which they can maximize the value is by focusing on co-products that could be extracted as they process the feedstock without compromising the end product. In the sense that if I put up 100 KLPD or 200 KLPD, say, let's say, 100 for argument sake, 100 KLPD corn to ethanol plant, I must get 100 KLPD ethanol first. That's the first requirement. I must get the DDGS that I want, 300 tons per day or whatever, that I get out of this without any 300 TPD, without any compromises whatsoever. Those are two established streams. I need them. Then I go to the next co-product. Without compromising these two, you can go and get corn oil as well. So, the idea of a co-product is that it does not compromise what's already existing, but it only allows you to extract more from the other streams that come out of the project.

**Manish Goyal:** Sorry, sir, I missed the second part. You said 100 KLPD of ethanol production as first priority. Second was what?

**Shishir Joshipura:** The second is the DDGS which comes out as a by-product today. I cannot tell. I have to protect that revenue as well for the customer because we are locking up, enhancing the value for them. So, after protecting these two, what can I do with the balanced raw material that is available without changing the feedstock quantity and input and without compromising these two outputs, what can I do to enhance the value, and that is a co-product development strategy, and corn oil is one such product. There will be many more to come as we move forward, but corn oil is one of them.

**Manish Goyal:** No, so that is what I was trying to understand, that if you put a...

**Shishir Joshipura:** Corn oil is one of the feedstocks for production of biodiesel. It's not biodiesel by itself.

**Manish Goyal:** Yeah, so I was just trying to understand, if you put a 100 KLPD plant, if one able to get whatever required production of ethanol and DDGS, then how much of the corn oil production can we get out? Just trying to get a perspective that because you already have facilities in place, and then if it gets leveraged for biodiesel, then how can it be?

**Shishir Joshipura:** Yes, Manish, for reasons of competitive advantages, I am not willing to give you the exact numbers on this one at this call, yeah.

**Moderator:** Thank you. The next question is from the line of Faisal Hawa from H. G. Hawa & Co. Please go ahead.

**Faisal Hawa:** Sir, how is the maize opportunity looking, because maize is also something which is produced in a large quantity, and It is not utilized as much for consumption? And do you feel that a lot of people like Gujarat Ambuja Exports or somebody would also come into production for the same? And secondly, sir, are you now also looking at very large ticket orders as a policy to really raise the turnover much faster rather than keeping on taking on all kinds of ticket sizes orders?

**Shishir Joshipura:** So, Faisal, to answer the second question first, I think what's important is to get the right scale because if you have the right scale, then obviously the right economies of scale which the producers want because the guy, the person or the entity that is putting up the project would want to have returns on capital that they employ. So, there is a minimum size that any project lends itself to. And those sizes are going up as we go forward. That's what is happening world over as well. So, no surprises there that capacities of the plants are moving up because obviously as the cost goes up, as inflation goes up, people are trying to leverage maximum to the extent they can to leverage their fixed cost to the best possible extent. So, that's one dimension. What was your first question?

**Faisal Hawa:** My first question was about maize opportunities. This could be a very large one because India produces a lot of maize and not all is consumed by the population.

**Shishir Joshipura:** Sorry, are you saying, this is a question of maize opportunities, is that what you are saying?

**Faisal Hawa:** A lot of plants will come up for conversion of maize to ethanol or maize to biofuels.

**Shishir Joshipura:** Yes.

**Faisal Hawa:** Do you concur with that kind of a statement?

**Shishir Joshipura:** Of course, as I mentioned, 100% of our order book this quarter is based on starchy feedstock. Maize is the predominantly starchy feedstock.

**Faisal Hawa:** And we do stand by our statement of doubling revenue in 3 years from today.

**Shishir Joshipura:** Sorry, we stand by our statement of what?

**Faisal Hawa:** Of doubling revenue in 3 years from today?

**Shishir Joshipura:** Yes.

**Moderator:** Thank you. The next question is from the line of Shaisha Vohra who is an individual investor. Please go ahead.

**Shaisha Vohra:** Sir, my question was on this starch matrix. I believe that we were developing biodegradable plastics. So, what are the status on that, sir?

**Shishir Joshipura:** So, Vohra, as I was mentioning, we have commissioned this multipurpose biopolymer facility for demonstration of our capability. The first molecule that we demonstrated is lactic acid followed with lactide and then PLA. And this facility will also be able to demonstrate many other molecules as time goes forward. And I was mentioning earlier that this has generated a lot of interest. We are seeing interest in both international and domestic future project proponents. Very early days. We just probably have three weeks since this was demonstrated and dedicated to the country. So, please give us some time, but very positive interest that's developing in that technology.

**Shaisha Vohra:** And so one last question about the Hi-Purity water. I think we have got one customer from the semiconductor industry last year. So, any further development on that?

**Shishir Joshipura:** So, the job that we had executed was actually for a battery and an intermediate system. So, that we have executed. The further developments you will come to know as the industry develops, because as you can see these are extremely large-sized projects. And we are trying to understand what is the play for us. Is there a play for Indian technology to Indian companies to play in that? Or is everything imported? We are trying to have that dialogue with several customers who have announced the projects for setting up semiconductor facilities.

**Moderator:** Thank you. Ladies and gentlemen, that was the last question for today. I now hand the conference over to the management from Praj Industries for closing comments.

**Sandip Bhadkamkar:** So, thank you everyone for your time today. In case you have any more questions, feel free to write us at [info@praj.net](mailto:info@praj.net). We wish you and your family members a very Happy Diwali and see you in the next quarter. Thank you.

**Moderator:** Thank you. On behalf of Praj Industries Limited, that concludes this conference. Thank you for joining us, and you may now disconnect your lines.