

**Praj Industries Limited**  
**Praj Industries Limited Q1 FY24 Earnings Conference Call**  
**July 27, 2023**

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**Moderator:** Ladies and gentlemen, good day and welcome to Praj Industries Limited Q1 FY24 Earnings Conference Call.

As a reminder all participants' 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.

I now hand the conference over to Mr. Anup Sonpal from Valorem Advisor. Thank you and over to you sir.

**Anup Sonpal:** Good afternoon, everyone and a very warm welcome to you all. My name is Anup Sonpal from Valorem Advisors. We represent the Investor relations of Praj Industries Limited. On behalf of the company, I would like to thank you all for participating in the Company's Earnings Call for the 1st Quarter of the financial year ending 2024.

Before we begin, let me mention a short cautionary statement. Some of the statements made in today's earnings 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 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 Call is purely to educate and bring awareness about the company's fundamental business and financial quarter under review. Let me now introduce you to the management participating with us in today's earnings call and hand it over to them for opening remarks.

First we have with us Mr. Shishir Joshipura – CEO and Managing Director and Mr Sachin Raole – Chief Financial Officer and Director of Resources. Now without any further delay, I request Mr. Joshipura to start with his opening remarks. Thank you, and over to you, sir.

**Shishir Joshipura:** Thank you, Anuj. Good morning everybody. I welcome you to Praj Industries' Earning Call for Q1 & FY24. Trust all of you had the opportunity to go through our results for the quarter ended 30th June 2023. Last week, Praj participated in the 14th Clean Energy Ministerial and the 8th Mission Innovation Dialogue on the margins of the G20 Energy Transition Ministerial meeting.

Deliberations during the conference were also extended to discuss the formation of a global biofuel alliance for worldwide development and deployment of sustainable biofuels, several national governments, agencies, industries and other stakeholders will be the part of this alliance. I am happy to share that our ongoing partnership with Indian Oil to accelerate India's energy transition towards the greener future stands further reinforced. In October 2021 we had entered into an MOU with Indian Oil to form a 50/50 joint venture for production of various variety of biofuels. Based on approvals from both the boards we are now signed a term sheet for the joint venture formation. Coming to business performance, we started the FY24 on a positive note with robust order intake and improvement in profitability. This quarter, we saw an increase in share of international order reaching 35% of the total order book, which is definitely a positive development. We started this year with the healthy order book and it continued to build during the quarter as well, owing to differentiated delivery cycles of the order book that we had, the 1st Quarter revenue is not reflecting the annual growth potential of the revenue cycle.

Our domestic bioenergy business capacities are continued to be built around both starchy and sugary feedstocks. Food Corporation of India has top issue of rice to ethanol distilleries till further notice. However, the said distilleries can procure rice from the open market. We are evaluating the impact of this decision and watching the developments closely since the government has clarified that the EBP 20 Program continues as per the original timelines. Domestic inquiry pipeline continues to be strong. On the International front, low carbon ethanol opportunity in the United States continues to develop positively. Currently, we are competing FEL studies for several projects that will translate into firm business opportunities in near future. Argentina has advanced the ethanol blending from 10% to 15%, while Mexico and several countries in Africa are also coming with specific mandates. Indonesia has another opponent arising the announcement of 5% EBP mandate for premium gasoline. Our services business is receiving good traction in both domestic and international markets, especially Brazil. We are building a strong distributor network in different markets to offer an entire suite of solutions comprising of enzymes, yeast and performance enhancers.

On 2G front, we have established successful demonstration of our 2G process at IOCL plant in Panipat. Owing to availability of different spec feedstock, our team is now working with Indian Oil to define necessary modification in feedstock supply system for the process plant.

As for CBG, we are beginning to witness constructive movement in the market. Indian Oil has sought EOI to set up 30 CBG plants in the country. We have received business confirmation for setting up five projects from a leading business conglomerate to be set up over the next 15 to 18 months within options of five more plants. The execution of the first project has already begun. The business landscape is developing very favorably for our engineering business basket as well.

On the CPS front, we have received significant orders from leading CEPC companies focused on oil and gas and fertilizer segments. We are taking special efforts to improve the productivity at our Kandla unit to deal higher loads starting from H2 of this year.

On Praj Gen. X, we have finalized the location for the managed plant which will be set up near Bangalore. A strong inquiry pipeline is building up for the EPCA segment to be served by this facility. Our PHS business has built a very healthy order book for the year 23-24, high capacity fermenters are witnessing strong traction. With semiconductor space rapidly evolving in India, it will also open up increasing opportunities for our ultra-high purity water solutions. I am happy to share that the PHS team has received a bio spectrum award for the most promising company for Engineering Solutions services for pharma, biopharma and nutraceutical industry. Overall, the business outlook is very positive for our bioenergy engineering and high purity business. Before closing, it gives me immense pleasure to inform you that Dr. Pramod Chaudhary has been appointed as the Chairman of the Board of Governors of the College of Engineering, Pune Technical University. Dr. Chaudhary will lead the first ever full board of Governance formed after COEP became autonomous and got the status of a Technical University. With this, I will now hand over to Sachin for his comments on the financial performance.

**Sachin Raole:**

Thank you Shishir. The consolidated income from operations stood at Rs. 7.36 billion in Q1 FY24 as compared to 7.31 billion in Q1 of last year. PBT for the quarter stood 777.03 million as compared to 542 million in the corresponding period of the last year showing the growth of 43%. Profit After Tax stood at 586.72 million as compared to 412.63 million in quarter 1 of last year. Export revenues accounted for 17.2% of the quarter. Of the total revenue, 79.7% is from bioenergy 13.6% from engineering and 6.7% from PHS business. The order intake during the quarter was 11 billion with 64.7% from domestic market of the total order intake 60% came from bioenergy, 31% from engineering and balance 9% from PHS business.

The order backlog as of 30th June 2023 stood at 37.78 billion comprising 78.1% of the domestic orders. Cash in hand as on June 30 is Rs 8.13 billion. I now conclude my remarks and I would like to thank all of you for joining us on this call and would now be happy to discuss any questions, comments or suggestions you may have. Thank you.

**Moderator:**

Thank you very much. We will now begin the question-and-answer session. Ladies and gentlemen, we will wait for a moment while the question queue assembles. The first question comes from the line of Prathamesh Sawant from Axis Securities. Please go ahead sir.

**Prathamesh Sawant:**

Thank you for the opportunity, Sir so quickly one question, Sir, I wanted to understand the export book. So, what are the kind of customers do we have? What is the average order book size that we get and what are the kind of margins compared to the domestic orders.

**Shishir Joshipura:** So, Prathamesh if you look at our international business, essentially I would put in two categories. One is business that we get for our bioenergy segment and the second is for our engineering segment. Within the bioenergy segment, the customers are obviously those who are putting up ethanol facilities or upgrading the ethanol facilities or putting up any of the new facilities around you. As of today, it is restricted to ethanol. On the other hand, if equal to engineering, then we work very selectively with some very large technology and EPC companies, which are global leaders in their field, especially in field of oil and gas, fertilizer, natural gas, etc. So, they are setting up facilities for their customers, so we are not actually serving the end customer. We are serving in between the technology in EPC companies. So, there are two segments that we serve.

**Prathamesh Sawant:** Okay and the average order size for the ethanol segment would be higher and the margin.

**Shishir Joshipura:** So, that depends. I mean in terms of what is the size of the value. So, if I do an FEL study, it probably would be running to a million dollars- two million dollars like that. It is just the study part. If I go ahead and supply the whole Winfield project, then of course it could run into closer to 150 crores kind of level. Remember that in export markets, we don't do any side activities at all. We just supply the critical equipment, technology and engineering. Now on the other hand, if you go to the engineering side of business, there again the order size can vary between five million dollar on the lower end to on the upper end it can even go to as high as maybe 20 million dollars, 20-30 million dollars per contract.

**Prathamesh Sawant:** Okay and Sir on the CBG front again so we are seeing we are gaining traction and we have just got the order for five projects. So, what is the average order size in this segment and how do we play it? Are we just the technology partners or we are in EPC construction and setup of this project as well?

**Shishir Joshipura:** So, the CBG project in India, the model that is emerging in India, is that the customers are looking to companies to set up the full project for them. Some other customers may have a different requirement, but this particular customer had this requirement that we do the whole thing for them. So, for them the project size is of the order of 100 crores per project.\

**Prathamesh Sawant:** Okay and then finally just one last question from my side. So, in the current quarter, we saw a slightly lower run rate on order execution. So, is it because of the cyclicity or was there some other reason?

**Shishir Joshipura:** No, there is no other reason. It is just that the way our order book that line lined up and you know the project nature of the business. So, given the site preparedness project triggered the customers end and the progress of the project in its entirety is just that the execution cycle got so defined that in this quarter, we could not there is no other reason at all.

**Prathamesh Sawant:** Okay. Thank you, sir. That's it from my side. I will get back in the queue.

**Moderator:** Thank you ladies and gentlemen. Please limit your questions to two questions per participant and one follow up question. Thank you. We shall move to the next questioner. The next question comes from the line of Levin Shah from Motilal Oswal Asset Management. Please go ahead.

**Levin Shah:** Yeah. Thanks for the opportunity, Sir, Sir, very encouraging to see this order inflow from the international side. So, we have around 35%, which is close to 385 crores coming from international business and this has come. So, this does not include anything on the ETCA, right, so how we are seeing this ETCA pipeline now developing. How far are we from getting that our breakthrough order which we have been talking for some time and second on this if you can throw some light on this oil and gas and fertilizer segments is what we have highlighted, what is the nature of this order and do you see more such orders from this same industry or there are other industries where we are in the free for more orders from the international market?

**Shishir Joshipura:** So, Levin when it comes to ETCA orders, which will be served by the GenX facility, as you would appreciate, there we have a sort of synchronization act to do to ensure that the order intake and the absolute preparedness and start of production at the facility are completely synchronized. There are also steps involved in terms of approval of facilities from customers as we are going through those steps. So, we expect that in the second half of the year we start seeing the ETCA order book build up. So, then that can get start to get executed from the GenX facility because once contract comes we do the engineering. We expect this facility to be ready for the fourth quarter of this year, but obviously the order book has to start at least a quarter before that. In terms of the orders from oil, gas and fertilizer, I think these are the orders where these are segments from these orders come, but orders are again for what I would call as when they are for example one of the projects is there in which this is a LNG terminal being set up in United States or there is another one in which the technology is available for improving the recovery from the bottom of the cracker units for existing oil refinery. So, there are different applications that are coming through. Again, all of them are largely aimed at ensuring that there is better recovery of the end product. There is sustainability angle or **(Inaudible) 15.15** angle the sustainable fuel so that goes without saying we will make more of these applications as move forward

**Levin Shah:** Sure. So, Sir, even within this industry, the orders that we would be getting would be for basically carbon capture or getting the emissions in check, right?

**Shishir Joshipura:** No, these contracts are plants and depends I can share these many details with you on the phone because it is difficult for me to explain, but fundamentally these could be equipments which are heat exchangers, pressure vessels or skids as the case may be or a combination of these special purpose vessels which then go on to be part of the overall process of the plant, which is then put together for either better recovery or a different kind of catalyst manufacturing. It could be different applications depending on what the technology is all about. Essentially, these are all focused on clean technology. As I was mentioning to earlier, all

these solutions from our customers are focused on enhancing recovery on reducing the footprint of energy or of carbon and there are different steps, right? Biofuel is one step. These are different steps within the existing setup without changing the feedstock and refinery, what can they do and these kind of solutions are offered there. So, there could be opportunities for many more such solutions.

**Levin Shah:** Sure, Sir and my second question was on CBG front. So, finally, now we have seen some order inflow after a long wait and we have been working on this for some time. So, these five plant, the order that we have got is it already in the order book or it is yet to be booked in the order?

**Shishir Joshipura:** It is not in the order book that we reported.

**Levin Shah:** Okay and also you mentioned in your opening remarks that IOCL has indicated that they would be looking at setting up 30 plants. So, is there any MOU that we have signed with them or any timeline and all these 30 plants will flow to us or is it that this is their mission statement in the sense that they would want to put up 30 plants.

**Shishir Joshipura:** So, Levin right now they have come up with an EOI. You know, it's a public sector, so it has to be open to everybody. So, they have come up with an EOI for setting up 30 plants in 30 locations in India and after the expression of interest, they have specified a criteria for selection of technology and partners. So, I think we have to go through those steps to see how this develop, but the key point which I actually wanted to indicate was the fact that there is now a definitive movement happening in the CBG market as you mentioned that for last almost 18 to 24 months, we have been talking about possibility of development and now we can clearly see this is a step in that direction as we see that.

**Levin Shah:** Sure, sure. Thanks, Sir. I will come back in the queue. Thank you.

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

**Shailesh Kanani:** Good afternoon, everyone. Congratulations, Sir. It seems that we have been working on margin accretive orders for some time and we have been successful this quarter around. I hope this momentum continues. Sir, my question is with respect to CBG only. So, can you share some more details like what kind of margins you will be getting? Are they margin accretive to the current order book what we have and is there any pending thing with respect to why we have not booked it in the current order book.

**Shishir Joshipura:** So, Shailesh, I will answer the in the reverse order. So, we have a very strict rule about how we book a contract. So, if I do not get it till 30th of June in a certain advances and contract time we don't, even though we may have agreement with the customer, we will not reflect that into our order book. We have very strict policy on that. So, that is how it is now moving as I speak

with you we have spent three weeks from 30th June. So, now the movement is there, so I am happy to share this with you. In terms of obviously these we expect that when we build these programs and these projects there will be value accretive to the company goes without saying. How much? I am not at liberty to say.

**Shailesh Kanani:** Fair enough Sir. Thanks a lot that was useful. So, my second question with respect to our tie up with IOCL. So, after some duration we have been able to sign the term sheets. So, can you share some further details like what kind of key capital would be allocated or when this tie up will start specifying in terms of order in flows probably FY24-FY25, you can shed some more light on this term sheet.

**Shishir Joshipura:** Okay. So, this term sheet is signed for the umbrella JV, the idea is that under this umbrella JV, we can take up the projects for different bioenergy products, It may be it CBG or be it ethanol for that matter. So, it is an umbrella JV. The term sheet is right now fine. Actual formation of this JV will take somewhere between five months to six months because there are multiple formalities which we need to take care of and at the same time we will utilize this period to figure it out what will be the first project which can be taken up under this JV. As I said, it is a umbrella JV and the structure which we are working out will be will be having an element of product by product of bioenergy. different SPVs coming this JV so right now the capital outlays are not yet finalized. It is going to be dependent on which first project we are going to take up under this JV but umbrella JV is going to be 50:50 between Praj and IOCL.

**Shailesh Kanani:** So, is it safe to assume that this will fructify in say FY25 most likely?

**Shishir Joshipura:** Project actually execution will take that kind of a period.

**Shailesh Kanani:** Okay sir if I can squeeze in last question sir on benefit on margins, how long do we expect this margins, benefit of commodity price to continue for us since we have fixed price contracts if you can shed some light on that. Thanks a lot.

**Shishir Joshipura:** So, on the raw material side, we have started this muddling of the prices and if it is continuing for at least last two quarters and we were saying that our old orders are getting executed now rather we have completed all our old orders which we are having this impact of raw material, almost all the orders got executed now. Now the new orders are coming up with the new pricing formula and new margin formula. So, till the raw material prices are not going to behave the way in which they behave we do not see any impact coming up on account of raw material going forward, negative impact I am saying. So, margins should start smoothing on account of raw material going forward. That's not the only reason why you see this margin up, there is also a concentrated effort we took to ensure that we improve our order book and our execution efficiencies etc, which all get reflected our supply chain. We have taken many steps to ensure that we are able to improve these margins, smoothening of raw material prices, definitely helps.

**Shailesh Kanani:** Yes sir. Thanks a lot, Sir. Thank you.

**Moderator:** Thank you. The next question comes from the line of Dhananjai Bagrodia from ASK Investment Managers Private Limited. Please go ahead.

**Dhananjai Bagrodia:** So, congratulations for good set of numbers, just this might be a little longer term broader question. After ethanol is there any one like particular segment like how we have cracked in ethanol where we see a very long term opportunity where we can have the same scale up as we have seen in ethanol. So, that where we are excited.

**Shishir Joshipura:** So, Dhananjai you probably recall my opening statement where I mentioned about this conference in Goa and the Global Virtual Alliance and the delegations that were being held there. I came back extremely excited about the future of biofuels in general and yeah, so there were more than 18 senior level ministers from different governments, countries, bilateral institutions and the deliberations were very, very rich and one thing was very clear that biofuels are here to stay and grow and grow in a very, very definitive manner. Having said that I think molecule of ethanol obviously has and by itself ethanol has multiple pathways still opening out for it in terms of the E27 Program, the flex fuel vehicle, advance the biodiesel and the ethanol based chemical. So, there are multiple fuels and then getting very specific to question that you asked in a longer term that you asked, one of the biggest applications that we see globally for ethanol, is it its conversion to sustainable aviation fuel because that is a very clear understanding across all agencies that alcohol ATJ that is the pathway on which you convert ethanol to SAF is the pathway here to stay with its maximum potential. So, that there is going to be one Big application. CBG or RNG also is developing very-very positively, not only in India but also outside India. So, we will see this and many other iteration comes then the third iteration that would come through would be around what happens on the different side of the equation and that is the renewable chemicals and materials, because what we have talked about so far is only on the energy side of or the bio mobility side of the equation. So, bio mobility will be here and the next platform that that we call as Bio Prism which is the renewable chemical material that also will expand and where ethanol and ethylene both will have a very, very long-term role to play in terms of what happens with conversion efficiency etc. So, I personally believe that we will see an expanding canvas which will continue to expand into these different dimensions of bio mobility as well as on Bio Prism or renewal chemical?

**Dhananjai Bagrodia:** Sure sir fantastic and sir where would we be placed, let's say, and obviously ethanol, we have managed to crack, but let us say in the size of, let's say bio mobility or the other programs, where would we be in the segment? Have we proof of concept has been done or how would that be looking?

**Shishir Joshipura:** So, Dhananjai we have obviously it puts a great responsibility on our shoulders that if you are leaders in ethanol then ethanol starts to branch out to different application and different molecules we do not give up our leadership position easily, right, so we are very focused on



working on that to ensure that we also have our place in the front when it comes to the other solutions that I mentioned about, so we have no intention to give up actually, we are working both at our R&D center metrics and with our teams and our customers to ensure that we continue to build on the position.

**Dhananjai Bagrodia:** Okay, sure and would there be like be or is the opportunities so big that is not able to quantify well or is it too early to even get into all of that?

**Shishir Joshipura:** It is a little early for me to quantify because we do not know, but just to give you some idea just to give an idea and this is I am probably trying to think on the run now as you ask this question, let us say 1% blend happens for SAF and I am using 1% blend. So that will create opportunity for about 14 crores liters of SAF in India I am talking not globally, just in India and when it comes to aviation markets, India is growing market fast growing market we are not a big market yet. So, SAF 1% blending will need 14 crores liters of SAF that would need 28 crores liters of ethanol. Okay so that is the equation for every 1% in India. In United States already a program is announced for 3 billion gallons, which is 1200 crore liters over the next five years. So, we will see a very vastly expanding landscape for SAF which is by far the largest application is going to be even bigger than Ethanol itself because it is two-step process if you need ethanol and you also need conversion of ethanol to SAF.

**Dhananjai Bagrodia:** Okay. Perfect, Sir. Thank you so much.

**Moderator:** Thank you. The next question comes from the line of Lokesh Maru from Nippon India Mutual funds. Please go ahead.

**Lokesh Maru:** Thank you for the opportunity and congratulations sir for the excellent set of numbers that you posted again. Sir just one thing we wanted to let you answer on in our previous con-calls, you had highlighted that since our base is quite heavy, right because of the EBP20 waves that we have seen in the last two years. This year it would be kind of flattish on order intake, but we are seeing growth yet again and you have also highlighted 5 CBG projects which could come up to 500 crores confirmation already to be in our next order include for the quarter, right? We are also seeing traction. We are basically seeing traction across all our segments, be it CPS or could be by end of year 1G ethanol in US. So, is it fair to assume or understand that we might out do our own expectations and rather post 4000 plus crores of order inflow for the year? Is it safe to assume that or how would you portray the picture going forward since everything is falling in place for us again within adjacent segments of 1G itself for the year?

**Shishir Joshipura:** So, Lokesh, thank you. As we have been talking that the horizon and the canvas is expanding from a single piece stock single product to multiple feedstock, multiple product horizon and we talked about different molecules, ethanol, we talked about CBG, we have talked about SAF, we talk about renewable chemicals and materials, the applications that they expand so both in India as well as international market, the ETCA segment that we talked about. The cleantech

segment that we have mentioned even this quarter, the order book, the gone quarter order book is reflective of that. So, we have seen that we are no longer restricting ourselves just to 1 segment or one market, but we are actually expanding our what was our offerings and our solutions to a much wider market with wider product range, wider solutions range with wider feedstocks. So, it is a multiplier effect. So, you are right that so we do not want to be the EBP20 is of course a very important program to which we are very proud participant but at the same time, we are also ensuring that as we start to grow forward, we are also able to build alternate avenues which will then take us even further ahead and that's the game plan that we have and that is what we are working on because we strongly believe and that is why I am telling that here as well that there will be. expanding applications of ethanol, which will create multiple opportunities for us both here as well as outside India.

**Lokesh Maru:** So, it is safe to assume the recurring 1000 crores or plus order improved for the year subsequent contacts.

**Shishir Joshipura:** Sorry I couldn't get your question.

**Lokesh Maru:** So, sir fair to assume 4000 crores order improved for the year?

**Shishir Joshipura:** So, that is our aim, that is our target, but we cannot commit whether that is the number which you like to consider from your point of view. But yes, we are not looking for feed book we are looking for growth and we are looking for higher numbers.

**Lokesh Maru:** Got that, Sir. Thank you so much.

**Shishir Joshipura:** Okay, Lokesh.

**Moderator:** Thank you. The next question comes on the line of Amit Anwani from Prabhudas Lilladher. Please go ahead.

**Amit Anwani:** So, thanks for taking my question. My first question is I just would like to understand what is the current status on when we get to be tendered out in core literacy if you could throw some color on that and second thing is SCI ban and I assume now I think the yet to be tendered out plant would be more focused on grain based. So, can we expect the near term at least quarter one impact will be there for the domestic bioenergy?

**Shishir Joshipura:** So, you know when the EBP20 program was started then obviously as the program started to roll out, two factors happened. One of course, as you are aware that feedstocks were utilized to add not only molasses, but the sugar cane-based feedstocks were expanded as to molasses, the juice etcetera, but also starchy feedstocks and cellulosic feedstock. So, the feedstock got expanded on one hand, and when we went to the first phase, the government is now evaluating as to where are these capacities coming up in which states of India, what kind of fuel and

ethanol requirement are there and then we know that we mentioned last time that they realized that in nine states of India there is still going to be deficit capacity production because not enough capacity is being built on those nine States and other 400 crore liters came from there. As we move forward, I think the next stage is what capacities that got ordered out are actually getting built on the ground and that will be the next test that will be put through and I think from there it will start to move forward because it is also our understanding that not everything that got ordered out may get built or may perform at its design plant capacity level. I would like to believe that starch plants will work at the same capacity level that would be different factors that could lead to that from a customer operations perspective. So, I think that will further drive capacity creation. There is another dialogue that we have not talked about yet, but it will start to become material in time to come and that is the carbon intensity of this ethanol that is getting produced as I was mentioning that we will need ethanol as a feedstock for gas production and there the carbon intensity of the ethanol being produced will become a very, very important step, and that itself could create another set of opportunities for low carbon ethanol production in the country. So, while I do not have a number, but I think this is a rolling ball and right now we do not see as I was mentioning in my opening remark as well that we are not seeing any slowdown in the enquiry pipeline given the fact that there is a temporary blip right now because of the FCI decision on rice, but we believe that that would not be the supply chains will to realign themselves for our customers and that is what they will do in a short period of time and that is how we will move forward in the country.

**Amit Anwani:**

That is yet to be tendered out if you would like to throw some color there.

**Shishir Joshipura:**

So, there is no tendering of the projects Amit. What the government does is they look for supply confirmations from the producers. The confirmations that these oil companies get then they map and see in which state this deficiency or they are going to get it? So, it is a very what I would call it, it is a very on the ground reality check kind of process. So, once that check happens then we will know what is the deficit in which state or in which part of the country and where is the capacity and then it gets sort of readjusted again.

**Amit Anwani:**

Yeah. Sir just actually was trying to understand to meet EBP20 how much crore liters is pending for to be tendered out if you have any sense.

**Shishir Joshipura:**

So, as I mentioned, so this is what I am going to explain. There is no tendering out when we right now we are EBP10 right as a country just between 10 and 12. Now when that starts to move forward from 10 and 12 up to 20, so there is stepwise process through which it will go. So, the first aim of the government is to actually make sure that EBP10 is available across the country and at all the outlets. So, there is the first step. So, depending on this volume development across the country and availability, they will decide how much they want. So, this is not a fixed number right now we are at right now the current production capacity is able to meet EBP10 our target is to go to EBP20.

**Amit Anwani:** All right. Sir my second question on CBG already, you highlighted that there will be 5 plants in pipeline and 100 crore each. Wanted to understand more with respect to viability of CBG plants and second thing on our market share, any competition there what is addressable market out of 100 crore each plant and what are the capacities in each plant?

**Shishir Joshipura:** So, Amit, there are very different factors right now. So, as we were mentioning earlier for over the last one and after two years we have been talking about how the CBG market will come into being, given the fact that whole ecosystem needs to co- develop and some of it has to happen before some of it happened along with the plants, etc. So, we are seeing that movement happen now because obviously some of the very important players have started as I mentioned, Indian Oil is already taking taken out an EOI for 30 plants. So, that ecosystem will start to roll out in a structured sort of fashion and that is what would lead to creation of this capacity. The five plants that we have talked about, as I mentioned earlier, each plant for us is of sort of 100 crores and we will build these 5 over the next 12 to 18 months.

**Amit Anwani:** Right and this essay for fortunately, are we expecting any orders in next 12 to 18 months, 24 months? Any color on that?

**Shishir Joshipura:** Yeah, well, I thought I should also answer one more question that you asked. So, yes, there is competition in CBG space. There are good companies, there are multinationals, there are India headquarter companies that are competing with in the field. So, that is how it is progressing. What was the question on SAF?

**Amit Anwani:** Is there any visibility in the next 24 months to get some orders on SAF?

**Shishir Joshipura:** So, I think there I do not know. Yes, there will have to be a capacity build because there is none right now. So, if we have to go and blend SAF. In 2027, first January onwards there is a compulsion across the world for airlines to start blending. You will start using blended fuel so that is for sure and we can work that backwards. So, within next 12 months surely, we should see some kind of yeah, what I would call as a traction on the market, we have talked about the Indian Oil JV. Sachin was mentioning about it being an umbrella JV that covers biofuel set is one of them and we will work with them to see how country needs can be fulfilled under that Umbrella JV.

**Amit Anwani:** Alright, so one last question, if I can squeeze in this quarter the order and flow of 1100 crore, I can see The engineering business at 340 crore, which is much higher than the previous 5-6 quarter averages and even the closer to the full year last year. So, are we expecting this trend to continue as you highlighted the opportunities in the export markets in the coming quarters?

**Shishir Joshipura:** So, I think what is important to notice is that engineering business will become a significant portion. We have been working on that. I have talked about it, the ETCA opportunity that I talked about in second half of the year will definitely unfold under the engineering umbrella.

So, we are confident that our engineering businesses will also continue to grow, they are more internationally orientated businesses. So, we will see there is export businesses which is good for the company. So, we are confident that as the phenomena of energy transition and climate action starts to unfold and as I mentioned in second half of the year onwards, we will start seeing a very constructive movement for order booking for our engineering portfolio as well.

**Amit Anwani:** Thank you, sir and all the best.

**Moderator:** Thank you. The next question comes from the line of Vikram Suryavanshi from Phillip Capital. Please go ahead.

**Vikram Suryavanshi:** Good afternoon, Sir. So, I was just looking at our execution number, we have been able to maintain an YoY basis, but what I was really looking at a slightly better execution given the kind of strong growth in order book as well as now we are reducing seasonality of our execution, so was there any disturbance in execution or how do we should look at the execution pickup going forward?

**Sachin Raole:** So, Vikram, the way in which these orders got executed during this quarter and I think in the opening remarks, Shishir was mentioning the same thing. The execution requirement from the customer was of a different nature and that is the reason how it resulted into our revenue. We strictly followed the timeline or the ask from the customer for the delivery from our side. So, what was required to be delivered that was delivered in this quarter one and two, the timing of order intake is also very important to decide how the execution happens. So, we have seen some kind of higher order book coming up in the March month even though we looked at from the quarter point of view. So, naturally the initial phase of engineering was going on and not on the delivery that we had done anything for those projects, I think those projects will start coming up in a bigger way from H2 side. So, we will see execution far bigger or far more than the H1 as compared to what we are seeing currently. Vikram, I must also add that monsoon is one more factor which plays an important role in the civil activity and civil activity is generally in the scope of the customers of ours till they are not ready, we just cannot put up our plant over there. So, we have to wait for that activity to get over. So, that's one more element which generally plays its important role in the 1st Quarter.

**Vikram Suryavanshi:** Right. So, I was actually more keen that was that very significant because we also have manufacturing in Gujarat and all so probably unseasonal rain and other disturbance are there also.

**Sachin Raole:** So, and one more thing, which I must tell you Vikram, the readiness from our side for execution or capability building which we had to do on our side, we are ready to take higher loads also and which were proven in the March quarter. So, there is no problem on our side to get projects executed. It was only the way in which the order booking had happened, the requirement from

the customer side and the last one which I mentioned on the monsoon, those were the factors which predict role in this quarter.

**Vikram Suryavanshi:** Yeah, understood, Sir and the second question on the CBG projects, we have already discussed a lot, but just to get a sense of the feedstock, what kind of feedstock these projects are on and particularly this will be pushed into CBG networks through pipeline or basically these are the standalone project where consumption will be nearby? So, if you can give some idea about feedstock and the distribution side of this project.

**Shishir Joshipura:** So, the projects which we just talked about under the LOI those projects are going to be based on agri-waste. So, they are agri-waste based projects.

**Sachin Raole:** And the second part of your question was related to whether it is going to get connected to CBG. We would like to see whether they are going to be a part of CBG network or they are going to be part of the the OMC network from the distribution point of view.

**Shishir Joshipura:** It could be mix of both Vikram, actually, depending on how the CBG network develops customers. An ideal situation is to push this into the CBG network, but it depends on where the plants are and where the CBG networks are so that is the question that is still, it is not a become a determining factor for customers to set up the plant, but obviously it is CBG network it will definitely help.

**Vikram Suryavanshi:** Okay and the gas output would be how much in terms of tons or something like that, if you can give some range in terms of output side of capacity for each project.

**Shishir Joshipura:** Each of these plants will be 20 tons per day.

**Vikram Suryavanshi:** Okay, got it. Yeah, that's alright. Thank you very much Sir.

**Moderator:** Thank you. The next question comes from the line of Naushad Chaudhary from Aditya Birla. Please go ahead.

**Naushad Chaudhary:** Thanks for the opportunity. Some clarifications sir. Firstly, on the CBG and other future projects in terms of overall business economics, especially on the margin and working capital side. Would it be similar to our existing model or there would be changes in terms of, especially on the working capital and advance from the customer side?

**Shishir Joshipura:** So, on because of this CBG or because of this new order inflow which we are looking at, I don't see any significant change in the working capital cycle. The payment terms, the advances and all that are more or less in line with what we are currently doing. So, I don't see a big change happening on the working capital because of this new order intake, which is going to happen.

**Naushad Chaudhary:** Okay and second on the CBG order size, you indicated 30 projects, Indian Oil is planning and five we have got. Does that mean 25 has gone to other players or is it yet to be announced/

**Shishir Joshipura:** Naushad both these items or both these statements of ours are independent of each other. Thirty plants of IOCL is what has been just this. What I can say announced by them they have floated the EOI. They are not talking about IOCL related these 5 CBG plants we are talking about very different state of customer for these five plants for which we have received the one. Let me just clarify on this CBG. We are talking about it for a reason because the question was always used to be asked to us. That what is happening on CBG front. Is there any development or not? Technically we are for the first time announcing even the LOI on a call. Generally, we don't talk about LOI, we do not put a number for our enquiry basket. But for the first time, we wanted to give you a flavor of what is happening in the market, how the market is expanding, what the market is thinking, what we are doing on this one. But let me clarify, these five plants which we are talking about are not state of 30 plants announced by IOCL but I would say they are independent of these five plants.

**Naushad Chaudhary:** Right and in terms of the size of the plant, if I am not wrong, initially it was expected to be, I think a lower Rs. 100 crore CAPEXs per plant. Is this something at the higher end of the CapEx or future project be of similar size or should be of lower size?

**Shishir Joshipura:** So, it depends what is the capacity going to be for a plant and that's what it is going to decide the CAPEX. As earlier mentioned, the capacity is going to be in the range of 20 tons per day, so naturally CAPEX is going to be on the higher side. Earlier we used to talk about 10 tons plant, 15 tons plant. So, those were a little smaller as compared to what we are talking right now. So, the CAPEX will completely depend on what is the capacity of the plant.

**Naushad Chaudhary:** And our existing order book does not reflect the CBG orders, right?

**Shishir Joshipura:** Some portion not of this five which we have mentioned because this five again, I am clarifying these are LOI these are not orders, they are not forming part of our order book.

**Naushad Chaudhary:** Okay and lastly, last year we were talking about some bio fermentation plant. We had cracked some US based pharma customers and also some of the project we were working on in the Brazil and we were expecting it in FY24. So, anything you want to touch upon these two?

**Shishir Joshipura:** You are referring to our international order or other international project which we executed for Pharma grade approval.

**Naushad Chaudhary:** Yes.

**Shishir Joshipura:** Okay. That was during the COVID period. So, naturally the requirement of pharma grade was at its peak and that is the project which we had executed. Currently there is no big requirement

coming up on a pharma side. So, we are not executing any pharma grade alcohol plant right now.

**Naushad Chaudhary:** Okay. Yeah, that's it from my side.

**Moderator:** Thank you. Ladies and gentlemen, in order to ensure that the management is able to address questions from all participants in the conference, please limit your questions to one or two per participant. Should you have a follow up question, we request you to rejoin the queue. The next question comes from the line of Ash Shah from Elara Capital. Please go.

**Ash Shah:** Good afternoon, Sir. So, I just had one question though. The IOC JV will be functional by the end of FY24. So, henceforth whichever CBG plant that IOC puts up will it be via this JV or will it be open to the outside market competition as well?

**Shishir Joshipura:** The CBG project that gets decided to be put under the JV structure will obviously go through that Sachin was mentioning, the JV is an umbrella JV. So, there is special purpose vehicles below the Umbrella JV that will actually be set up to put up these projects to be very specific on the answer, there is no restriction for IOCL not to put up the project outside of this JV or for us to set up the project outside the JV. This is in that sense it is not binding to each other.

**Ash Shah:** Okay and is it the same case for all the other biofuels as well, like, say, biodiesel and all the other ones?

**Shishir Joshipura:** Yes.

**Ash Shah:** Okay, that's all from my side. Thank you.

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

**Ankita Shah:** Thank you for the opportunity. Sir wanted to understand the margins we have seen good improvement in EBITDA margins and I just wanted to understand the same. So, what are the margins we need in the CBG segment and export orders will be in what range.

**Sachin Raole:** Ankita your voice was cracking, but if I understood your question related to EBITDA margin for CBG. Margins more or less for all the bioenergy projects are going to be in some kind of a range and it is a niche area where we are just putting up now new plant. So, it will take some time to discover what will be the right EBITDA levels for CBG project. Yes, our export projects definitely carry a higher margin as compared to our domestic projects that much I can tell you.

**Ankita Shah:** Exports will be in what range?

**Sachin Raole:** Exports will be definitely at least 500 basis points will be higher than the domestic project.



**Ankita Shah:** And why is it so?

**Sachin Raole:** For a reason, because in the domestic projects we execute even, we execute the project. I mean we do the project activity which carries comparatively lower margin as compared to the engineering activity and manufacturing activity. In the international market we only do engineering, we do supply of equipment, but we do not carry out project activity there.

**Shishir Joshipura:** There is no site activity.

**Sachin Raole:** No site activity, so that's the reason why these margins are little different as compared to domestic and international.

**Ankita Shah:** Got it and also Sir, I take cognizance of the improvement in the export orders that has happened. But if I look at the segment-wise, bioenergy has gone down and also in on attribute terms order inflow on a YoY basis has kind of remain stable, so is the you know understanding the market opportunity for you know bioenergy segment is slowing down or we are slowing down here or any impact on market share. So, just wanted to understand order inflows from the bioenergy segment.

**Shishir Joshipura:** I think one quarter numbers would be very wrong for us to make any assumptions. All the what you are saying is very valid observation. As I was mentioning to you earlier that the nature of or the pie the overall pie shape and size and characteristic is set to change for us. We talked in terms of both domestic versus international. So, we are seeing more international relatively speaking more international. That is what I mean relatively more that is not less domestic, but then the percentage term, obviously the international business starts to grow. It will occupy a larger pie, a larger slice of the pie, so domestic business will also grow at different and as we mentioned, we are not seeing any let up on the bioenergy pipeline as well on the 1G ethanol pipeline as well but if we come to a ethanol is a segment there again domestic plus, what we will see on the bioenergy side for the export side as well, We mentioned about the US opportunity and you and I are both aware that right now this market are a little slow on the decision making on owing to the interest rate hikes that are taking place there. But I know from the activity level and our engagement dialogue and what we are doing on the ground in terms of the engineering efforts that I mentioned about the FEL studies that we are doing for several of our customers, for the low carbon ethanol, I think that will just start to there may be a quarter mismatch that they won't exactly be matching but nothing other than that. So, I think we are equally bullish both on bioenergy segment and engineering, domestic and export.

**Ankita Shah:** Okay and just one last on the EBP side, you said we have already reached 10 to 12% of lending, so how much awarding is still left to reach 20% lending and how much (Inaudible) 0:56:22.8?

**Sachin Raole:** So, Ankita at country level it is between 10 and 12 now and we need to go to 20. So, that means that means the availability of ethanol as to almost double from the current levels, if not more

and then there are other factors that will come into play that was the regional state wise availability. So, we may have some imbalances to be corrected out there. There may be another balance or imbalance situation arising out of the fact of feedstock availability. There may be another one out of the operations efficiencies of the installed plants and their capacities and their seasonality, the monsoon rains maybe in some state, it happens. So, those factors will also start to play in, I think we have not gone through one full grain cycle yet, so I think the first time that we will go through a grain cycle in this October when we will start to understand what kind of offtake, what kind of stock level, what kind of supply chain that needs to get established. So, maybe a little early for me to comment, but just to tell you that we are still at half way of our journey on EBP20.

- Moderator:** The next question comes on the line of Sagar Kapadia from Anvil. Please go ahead.
- Sagar Kapadia:** Can you please give me the breakup of the international orders they're into which segment, energy, bioenergy or engineering?
- Sachin Raole:** Sorry, Sagar, will you please repeat your question because your voice is not clear.
- Sagar Kapadia:** Sir, this international orders we have got 385 crore this quarter. Can you split it, break them up into the bioenergy segment or engineering segment this figure?
- Sachin Raole:** May be a small segment in this quarter from the bioenergy, but the large component of this is from the engineering business.
- Sagar Kapadia:** And sir from which geography USA, EU or Brazil.
- Sachin Raole:** For the engineering business. Yes, it's the USA.
- Sagar Kapadia:** Okay Sir, that is what I want to and sir one more thing the 100 crore CAPEX you are going to put in GenX. So, what is the asset turnover which you have kept for this CAPEX?
- Sachin Raole:** So, the first leg of investment we are looking at of around 100 crores and on the full capacity utilization of this facility, it will be somewhere above 1500 crores.
- Sagar Kapadia:** 1500 crores. Okay sir. Thank you.
- Moderator:** Thank you. The next question comes on the line of Jay Shah from Capital PMS. Please go ahead.
- Jay Shah:** Congratulations sir for a good head of numbers, Sir. I just want to know one thing that you know, there is so much bullishness in order book about ethanol but the byproduct of ethanol, at least in the sugar industry, the spent wash and are we also working on any technology where we can treat the spent wash because disposing the spent wash is the big issue right?
- Shishir Joshipura:** So, what's the question?

**Jay Shah:** So, are we working on technologies that can help also these distilleries to treat the spent wash?

**Shishir Joshipura:** Yes of course. We already have several solutions in that space and as you know, all distilleries are now. 0 liquid discharge. So, we have definitive solutions in that space of zero liquid discharge and depending on what the so if somebody can opt for CBG production out of spent wash, somebody can opt for power generation out of spent wash and if that and I am taking that when we use the word spent wash is more around the sugar based distilleries but there are also grain based distilleries that will also produce their own equivalent of spent wash and that is very fine use in terms of the animal feed DDGS yes it is called and so there are several solutions and all of them are available from our end all of them.

**Jay Shah:** So, we have, you are saying we have we already have used cases where distilleries are using our solutions to treat their spent wash.

**Shishir Joshipura:** Yes.

**Jay Shah:** Okay.

**Shishir Joshipura:** We have are already 45 plants in the country that use spent wash for production of bio gas, and those plants have been supplied by for many years now.

**Jay Shah:** Okay sir. Thank you so much. That was my question. All the best for the future quarters.

**Shishir Joshipura:** Thank you, Jay.

**Moderator:** Thank you. The next question comes from the line of Manish Goyal from Thinkwise Wealth Managers. Please go ahead.

**Manish Goyal:** Yeah. Thank you so much, sir. My question is related to in terms of our evolving new technology on 2G for advanced biofuels as probably the challenge would be there on generating the incremental requirement from non-food-based feedstock. So, just like to know how is our technology partnership with Sekab and Gevo evolving for our foreign into international markets and I believe Sekab has already done a pilot plant with the forest material residues. So, any sense on how is it how the technology is evolving and how is Praj relationship building up with these two partners and then related question in terms of our own independent technology, which we have implemented as IOCL, how is the yield competitiveness improving in terms of how much are we near to the commercial viability as compared to the traditional ethanol? How has it progressed maybe in the last 2-3 years and where do we see it going forward? And also, we were expecting some breakthrough for 2G technology from the Europe market some of the customer visit. Is there any progress on that and sorry for the longish question, but also related is that is Praj dependent on both these partners, Sekab and Gevo for the international market orders.

**Shishir Joshipura:**

So, Manish thank you. Great question. So, first of all, we enjoy a great relationship with both Sekab and the Gevo so just to clarify on the 2G ethanol technology where you specific question was. We have our own technology when it comes to like we have a technology for both. But when it comes to treatment of agri residue like rice straw, wheat straw, etc, then we call it Enfinity and that is 100% Praj. When it comes to forest residue treatment for ethanol, the technology is jointly owned between Sekab and us. Yes, you are right. Sekab has a pilot plant in Sweden that they operated for many years. But we actually partner with them to help them take the technology development to commercialization level and we are now ready with it and the technology is jointly owned between us and Sekab and we have the responsibility to take this forward in the market, which is what we are doing now. So, we are in dialogue with several customers in Europe for both Enfinity and Celluniti as we call the technology that we have on the forest residue to treat and even with the relationship is different with them the relationship is about the entire pathway of the SAF story that we talked about of saying and what we talked to convert the feedstock into an intermediate alcohol and then convert that into SAF. That is where we are working with Gevo. With both we will work with them when they put up their own projects and we will also be front ending the technologies when it comes to Celluniti because that is the role that we have and executing the job as well.

**Manish Goyal:**

So, any like maybe if you can give a sense as to globally how this technologies are evolving and how would Praj be probably positioned in that and also maybe on the?

**Sachin Raole:**

So, for second generation ethanol, we have said this in the past as well that. The most likely first market for this technology is going to be Europe because of the Red 3 mandates that have been tabled there and approved and passed into law. So, we expect that there will be a positive movement on the war through every everything into a bit of a turmoil, but now as things settle down we are beginning to see reopening the dialogue and I am sure that once the European summer is over and people are back to their workplaces, we will start to see traction in that as well, so very clearly, Europe is a big market where this will happen and we are into dialogue with several customers to set up these facilities for them as we go through the year, we will keep you updated. There are, as you very correctly surmised the world is watching on the Indian Oil project, which we are just commissioned and as I was mentioning earlier, there is a recalibration required on the on the supply chain of the of the feedstock right now we are not able to get the feedstock to our pre-shipment system because of the different lead tech availability. So, that is being corrected now and as soon as that is corrected, we will be able to keep you informed on what what's next, but once that is established then we will be able to take it to the world.

**Manish Goyal:**

Okay, but in terms of yield improvement or maybe commercial viability side, what do you expect, sir? Where are we in terms of?

**Sachin Raole:**

So, Manish as we see it, the yields are fairly okay right now and we can keep changing the yields, but then there is also an operating cost question that comes into being at what cost you

want to improve the yield, but the good development for both these Celluniti and Enfinity space second to ethanol space is the development of core products. So, I think that is the important dimension there as to what can we do because when you start treating a straw or a first residue several streams come out the non-ethanol streams as we call them and these streams have to be then further process to create higher value-added products. So, for example we can create bio bitumen we can create renewable natural gas or CBG as we call it in India. We can produce fertilizer, we can produce ligno sulfonate. There are different streams that one could take up for valorization and I think that is important how the coproduct developed. You will be happy to note that we have already developed the bio bitumen stream. We already developed the technology for ligno sulfonate. We have already developed technology for RNG, so we have been working here constantly to ensure how can we improve the viability of these projects and these plans. There are other questions as well as to what price. The second-generation ethanol gets price there. Because it is very low carbon intensity ethanol, so obviously it is very different from the other ethanol if you have a very important role to play when the SAF market starts to develop. So, we will see this development, this is slightly long term but this is what we will see in this space. I hope I answered the question.

**Manish Goyal:** Yes, Sir and Sir, when do we expect the two more 2G plants? It is mentioned in annual report is that HPCL and BPCL?

**Shishir Jshipura:** They are, yeah, they are progressing well. We have supplied all the equipments from our end that we are supposed to do. The projects are now on the construction stage and we expect that during next year they will start to the second half of next year is when they will go up for commissioning.

**Manish Goyal:** And Sir, last question on the our pilot plant, which we are probably setting up a polylactic acid and probably food grade as well. So, when do when does that plant start, Sir?

**Shishir Jshipura:** And that would start at the end of this year.

**Manish Goyal:** Okay. Thank you sir.

**Manish Goyal:** Thank you. I now hand the conference over to the management from Praj Industries Limited for closing comments.

**Shishir Jshipura:** So, thank you everyone for your time today. In case you have any more questions, please feel free to write us at [info@praj.net](mailto:info@praj.net) and we look forward to meeting you again in next analyst call. Thanks again and have a nice day.

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