Praj Industries Limited Q4 & FY24 Earnings Conference Call May 31, 2024

Moderator: Ladies and gentlemen good day and welcome to the Praj Industries Limited Q4 and 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. Anuj Sonpal from Valorem Advisors. Thank you and over to you sir.

Anuj Sonpal:Thank you. Good morning, everyone and a very warm welcome to you all. Sorry it's 12 'O' clock,
so good afternoon, everyone. My name is Anuj 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 fourth quarter and financial
year ended 2024.

Before we begin let 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 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 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 hand it over to them for opening remarks. We firstly have with us Mr. Shishir Joshipura –CEO and Managing Director and Mr. Sachin Raole – CFO 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:Good day everyone. I welcome you to Praj Industries' Earning Call for Q4 & FY24. Trust all of you
had the opportunity to go through our results for the quarter ended 31st March 2024.
I would like to start today with two exciting developments in the quarter.
Firstly, Praj has been Ranked Global No. 1 in the 'Hottest Top 50 Companies in Advanced
Bioeconomy' by the US based Biofuels Digest. This makes Praj the first Asian and Indian company
to bag this honour. From Global Rank #34 in 2018 to Global Rank #8 in 2019 and finally propelling
to Global Rank #1 in 2024, it has been a very eventful journey.

Secondly, we are very proud to announce successful commissioning of commercial scale CBG plants based on press mud and rice straw as also achieving of benchmark results for yield. These plants deploy Praj's state of the art proprietary PMStab & BMSolve bio-solutions to achieve reliable performance. With this Praj now has proven commercial scale CBG projects operating on three key feedstocks namely- spent wash, press mud and rice straw. This establishes Praj's RenGas technology as a definitive solution for complex agriculture feedstocks.

Coming to the business performance,

Our performance for the quarter and whole year reflects the business development across different dimensions of our portfolio and our ability to create, deliver and capture value to an increasing base of diverse customers. We are on a path to transform our business with increasing focus on emerging segments of CBG, SAF and ETCA in near to midterm future while expanding the share of international business in the overall pie.

Our domestic bioenergy business, the quarter continued to see development of starch based ethanol plants in the country with over 90% of our domestic order book coming from starch based plants. The mandated realignment of sugarcane-based feedstock on product mix slowed down order execution and finalization for ethanol projects based on sugary feedstock. We are in discussions with several customers on converting their existing single feedstock plants to multifeedstock. With favourable revised estimates on sugar production in the country, we are confident that delayed projects will soon get back on the track.

On International front, as you all know, Brazil is sugar and ethanol capital of the world and so far, the ethanol production in the country has been from the sugary feedstock. Brazil is now moving to starch based ethanol production also. I am happy to share that we have successfully handed over our first grain-based ethanol project in Brazil. We have already signed up one more contract for grain to ethanol plant with BE8, a global renewable energy company. The engineering activity for the plant will commence in this quarter followed by construction activities in next quarter.

I am happy to share that a French Group has awarded us a new contract to set up 60KLPD Green Field ENA plant in Ivory Coast, Africa. This is the second project from the same group. We are in process of completing the first project that is being set up in Congo.

The low carbon ethanol opportunity in the USA is expected to get momentum post notification of 45(Z) under IRA act. We have initiated dialogues with several countries who have become part of the Global biofuels alliance.

On the services business that saw healthy 2X growth in FY 24, we are eying significant growth in both domestic as well as international markets in FY25. Biogenic CO₂ capture is increasingly gaining traction at the back of sequestration activities picking up and we have started to provide solutions for capture of Biogenic CO2. Our solution for enhancing sugar yield and quality is gaining traction in the Brazil market.

On 2G front, IOCL plant recommissioning is underway. I am happy to share that the plant has produced over 1 million liters of ethanol till date. Being first of its kind plant, there are unique situations that need resolutions across the eco system and the project. We are working closely with IOCL team to resolve them and ramp up production in a gradual manner.

As for CBG, I have already shared the important development. We are further working on establishing foolproof solution for other feedstocks. The enquiry pipeline for CBG plants is developing in a healthy way and we expect it to translate in firm business as we progress in the year.

Our modularized solution offering is finding strong traction in international market and has witnessed around 2X growth in order book over previous year. Praj is chosen to build state of the art modules for one of the largest Blue Hydrogen projects in Europe. We also booked and executed engineering project for modularization of ATJ project in USA. We have commenced commercial production at our new GenX facility in Mangalore in February. All customer audits held for approval of facility are successfully completed.

Our PHS business has delivered strong growth over last year with healthy order book and has seen increasing traction for our high-capacity fermenters offerings. We completed three state-of-the-art Blood Plasma projects in this fiscal year with one major customer achieving 100% capacity for the planned Blood Plasma products.

Zero Liquid Discharge our modularized solutions are finding increasing acceptance from our customers. We are leveraging our core competence in Industrial biotechnology and microbiology to develop specialized microbes for processing difficult to treat industrial effluent.

The Brewery & Beverages business, enquiry is now building up on the back of normalcy in the market demand. We are expecting some capex investments in coming financial year. Overall, the business outlook continues to be positive for our business.

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

Sachin Raole: The consolidated income from operations stood at Rs. 10,185.65 million in Q4FY24 as compared to 10,039.85 million in Q4FY23. PBT for the quarter stood at Rs. 1,230.24 million as compared to Rs. 1,128.13 million in the corresponding period last year. Profit after tax stood at Rs. 919.36 million in Q4FY24 as compared to Rs. 881.15 in Q4FY23

For the full year ended March 31st 2024, Income from Operations stood Rs. 34,662.78 million as against Rs. 35,280.38 million in FY23. PBT stood at Rs. 3,774.61 million in FY24 as against Rs. 3,187.25 million in FY23. PAT for FY24 came in at Rs. 2,833.91 million as against Rs. 2,398.18 million in FY23.

Export revenues accounted for 20% of FY24. Of the total revenue, 74% is from Bio-energy, 18% from engineering and 8% is from PHS business.

The order intake during the quarter was Rs. Rs.9,240 million, with 61% from domestic market. Of the total order intake, 65% came from Bio-energy, 30% from engineering and balance 5% from PHS business.

The order backlog as of March 2024 is at Rs. 38,550 million comprising 71% of domestic orders with 76% from Bio-energy, 19% from engineering and balance 5% from PHS business.

Cash in hand as on March 31st, 2024 is Rs. 7 billion

The Board of Directors proposed a final dividend of Rs 6 per equity share @300% of the face value of Rs 2 per equity share, for the financial year ended 31 March 2024, which is subject to the approval of shareholders at the forthcoming Annual General Meeting.

With this, I will conclude my remarks. Thank you all for joining. We would now be happy to discuss any questions, comments, or suggestions you may have.

 Moderator:
 Thank you very much. We will now begin the question-and-answer session. The first question is from the line of Mohit Kumar from ICICI Securities Limited.

Mohit Kumar:My first question is on the order inflow. So, you've done very well on the revenue and margin
front. But the order inflow has been subdued, especially if you look at last couple of or H2, we
haven't seen the bump up from ethanol or any other project. How do you think about the order
inflow for FY25?

Shishir Joshipura: Thank you, Mohit. As you pointed out and correctly surmised, the government's notification around alternate use of feedstocks which as you are aware that there was a realignment required for the feedstocks on the sugary side specially where the notification came which said that syrup and molasses feed cannot be used for production of ethanol and that meant that there was a clear halt of sorts on execution side as well as on the order booking side from this particular sector. And this is a very important part of our overall customer segmentation. So, from that perspective that was one. Two, as you have seen that we have also built different business lines over a period of time because EBP 20 is a definite positive wind in our sails. But that has a definitive benchmark and we need to then see how do we move forward from there. So therefore, a lot of effort has gone into creating alternative business avenues and as you also saw the starchy based feedstock has started to pick up in a big way with nearly 90% order book coming from starchy feed stock. We have also seen CBG build very positively in the last half of the year. We are seeing ETCA opportunity building in a very positive and constructive way as I mentioned in my opening remarks as well. So, these are the vectors which are now also started to contribute in a very positive way. And that is why although the sugary part of the business

came to a virtual halt, it still did not impact the overall order book and we were still able to meet nearly the same numbers in the last two quarters of the year.

- Mohit Kumar:How do you think about FY25? I understood your issue with order inflow for FY24. How do youthink about FY25 order inflow?
- Shishir Joshipura: Exactly. So, as I said there is strong traction on CBG, there is strong traction on modularization. We also expect that at the back of a strong sugar season that country has witnessed, we will see restoration of feedstock permission for using sugary feedstock for ethanol production. So, we see that the canvas will start to change. It already begins, to change in couple of businesses and in the sugary feed stock price as well as we move forward to the year. So that will augur positively for our business as we move through the year.
- Mohit Kumar:My second question is on the execution in the current CBG order book. How is the traction?Also, the related question is that we are hitting a number of CBG tenders out from larger
industry players, do you expect a number of....
- So right now, if you really look at it the two or three vectors, I was mentioning to you, CBG in India, ETCA and the international business especially I mentioned about the Blue Hydrogen project and that's just an indicator. We have talked about Brazil as a very important market for us where we clearly begin to see buildup of a very good traction. So, the LCE opportunity in the United States. So, we are beginning to see what we have been talking about as an opportunity to be developed, coming now potential getting translated to order book. And we believe that this will continue to be so as we go through the year.
- Moderator: The next question is from the line of Shailesh Kanani from Centrum Broking.
- Shailesh Kanani:
 I had a few questions, first on the engineering side. So, when I see the order inflow for FY24, we have doubled. But on the revenue booking front it has been tepid. So, can you give some color what is happening over there?
- Shishir Joshipura:All I can say is that there is a cycle that we need to go through, the order execution cycle. So,
what you see now getting displayed as order book will obviously start translating itself to
revenue as we go through the year.
- Shailesh Kanani:I am saying, just to put it the other way around given the order book traction what we have
seen in FY24, engineering division is expected to do a very good performance in FY25, more
than 50%-60% in terms of revenue booking. Is it a fair assumption?
- Sachin Raole:Yes, fair assumption. Majorly it is coming from ETCA that's why you will see a major change
happening on the order booking because our new facility as Shishir was mentioning is already
approved by the customers. We will first see the buildup of OB happening in that engineering

segment in the next two quarters and then the revenue will start flowing in because the facility is now up and running.

- Shishir Joshipura:Only thing is that given the way the order books will move so, as Sachin mentioned it will be
order book that will get built up over the next 6 months and then the execution cycle will take
place.
- Shailesh Kanani:Another point is on gross margins. We have done excellently well in FY24 on gross margins
term. And coupled with that this is after nearly 5 years we are having an order backlog where
nearly 30% is going to come from international market. So how do we see gross margin shaping
in FY25 and '26?
- Sachin Raole: 2-3 things, one the domestic and international ratio what we always said that is going to change over a period of time, it has already started showing first to some extent in the revenue going forward in the order book. That is that is definitely going to help us on building up our margin. The other elements which actually created some kind of issue mainly on the commodity prices in the last couple of years has also smoothened. We believe that is also going to help us on the gross margin going forward. Our first target was to achieve the two- digit kind of a margin on the EBITDA side on the buildup of the higher gross margin which has already started showing the results since last two quarters. We think that this momentum is going to continue. With what that number is going to be unfortunately I will not be able to give that kind of a number as a guidance. But yes, our efforts on building upon the improvement on gross margin, on the EBITDA is anyway going to continue.
- Shailesh Kanani:I wanted to understand on the order inflow mix going ahead, there has been a drop in the
bioenergy space and for obvious reasons beyond our control. So how do we see shaping say in
FY25-26 on order inflow mix?
- Shishir Joshipura: When you say bioenergy, then we will have to see it from a different perspective because there is the molecule is changing, number one. Number two, the segments may change in terms of geographically whether it's India or outside India. I mentioned Brazil, I mentioned United States. We also mentioned two quick orders from African region. What's going to happen at the, So maybe the construction of the bioenergy order book will change because of change in molecules, because of change in geography, change in application. But overall, we expect this to grow. We are not expecting it to status quo or shrink. Not at all. We are actually expecting it to grow. Also, we expect the engineering order business to grow as we already answered to you. We expect both our major business segments to actually continue to grow from where they are, maybe with a different element at elemental level different construction. But overall, the book will continue to grow.

Sachin Raole:And Shailesh just to add, we had mentioned that our 2030 target is 3X of revenue. And in that
built up of revenue all the businesses are going to equally contribute. So even in the bioenergy

piece, if you look at maybe within bioenergy, we will see some kind of shifts happening between let's say CBG and SAF and biofuel. But all these things are going to contribute in the overall picture of our three times of revenue going forward.

Moderator: The next question is from the line of Manish Goyal from Thinqwise Wealth Managers LLP.

Manish Goyal:I have few questions. First on the services business. If you can probably provide more insights
on different kind of services we offer and what are the revenue potential? Probably one is
performance enhancers which is probably like a consumable and then you had earlier spoke
about opportunities in US for low carbon intensity refurbishments of plants. So that is first
question on services and how much does it currently contribute in terms of overall revenue?
That was one. And second, if you can also give us a perspective like you just mentioned on gross
margins. So, one is definitely you mentioned international revenue share improving. But any
other change in revenue mix with say engineering share improving or high purity improving.
So, does that also support your gross margins improvement? That was second question. Third
question is on any update on US front in terms of inflation reduction act incentives under IRS
if you can provide that. Maybe if you allow, I'll probably have a couple of more later on.

Shishir Joshipura: I think all the questions you have asked in one bit. So, let's first try to answer those questions and then we will see. On the IRA front the 45Z notification is still awaited, we do not have that. But as I mentioned to you, some of the customers are already beginning to move in the direction. Because the fact remains that if SAF has to come through on ATJ pathway and that is considered to be the most viable pathway right now outside HEFA, the low carbon ethanol has to become a reality and we expect that will happen. So, the first project is already under construction now by us. So, we'll see how that develops, and we are expecting 45Z to be clarified soon. In terms of margin that you said that what's going to the order of mix or mix of businesses. Let me tell you that we are very clear in our strategy in what we see in front of us also future unfolding. Each and every one of our businesses will grow from here onwards. So, we're not expecting any business to shrink. There may be slightly different construction at the elemental level but other than that we do not expect any other change. And all of these are favorable if I can use that word on the marketing side of the story. So that's what we expect will happen as we go forward as each and every business of ours will grow. Some of the new stuff we already talked about, CBG, ETCA and in time to come SAF will also start to grow very constructively as we move forward through the year.

Manish Goyal:We have seen a very strong traction international order inflows in the current year and that is
across the segments. How is the pipeline and do we see this momentum continuing going
forward? And probably you missed on my first question on the services business?

So are you asking me questions and we don't need to....

Manish Goyal: So maybe you can answer on services. I'll come back on that.

Shishir Joshipura: The services, low carbon ethanol opportunity in United States that you mentioned is not a service offering, it's a full-fledged technology offering from our end. So that's not part of the services but the performance enhancers I mentioned about a new traction we are finding in another product that we introduce on the sugar side of the industry, not ethanol. This actually helps improve sugars, qualities and color etc. So that's finding very good traction and services then other stuff, lease license what we offer to our customers for managing their plants remotely for part services, O&M services. So, these are all different packages of services that we offer to our customers. They obviously need set of enzymes and performance enhancer and yeast etc. So that gets sort of bundled together and moves forward. So, services is a different construction of business that moves forward. Anything else that I left out?

Manish Goyal: Like what could be the current contribution of services roughly and how do you see it growing?

- Sachin Raole: The contribution from services business currently is in the range of 4% to 5%. And we expect that pie to go up going forward because on a continuous basis we are increasing our offering under services umbrella. Just to give an example, today when the CBG plants are coming up now, for the maintenance or for the maintaining the quality of the feedstock there is a biological solution which we are providing under our services umbrella. So that is supposedly to also contribute in a big way. We have introduced providing our solutions in the Brazilian market in a big way now which has also started picking up now. So, the services pie supposedly to grow up going forward.
- Shishir Joshipura: There's another important element to the service business and that I mentioned is about capture of biogenic CO2. And that's increasingly finding a big traction because CO2 capture is becoming a significant activity for several of our customers and organizations across the world. And that's where we are beginning to offer our services and solutions for capturing of the CO2 as it is generated. That's also part of our services portfolio. And the best part is our captive customer base is also increasing which is also going to contribute in the services platform. And from all fermentation processes will create biogenic CO2. So that becomes almost a capital customer for us.
- Manish Goyal:
 I'll just squeeze in one more question on high purity, again this segment has seen a very strong order inflow as well as execution front. So, are we also started getting enquiries for from semiconductor and electronic plants which are being set up in India and can it be a large opportunity for us?
- Shishir Joshipura: If the semiconductor chip manufacturing needs water which is of the same level of quality and purity that is required for pharma application, so from that perspective from a capability perspective we already have the capability. As and when the projects are announced and these are large outlay of projects, obviously this will take some time to get off the ground. But as and when they come up, we'll surely be hearing about it and we'll speak to you. As of today, we do

not see any project actually going to a stage of ordering out equipments and discussing and all that. So, I think we are still little away from that.

Moderator: The next question is from the line of Sagar Kapadia from Prabhudas Lilladher.

Sagar Kapadia: I just wanted to split in the bio energy you have said, there's an order intake in the fourth quarter worth around 600 crores. So, what is the split between the CBG and the ethanol orders?

Sachin Raole: Sagar we have not yet started splitting our segments into what I can say mini segments right now. But yes, there is a order book built up happening on the CBG side and on the ethanol starchy feedstock which Shishir had mentioned earlier. But we have not started doing this further split.

Sagar Kapadia:Last quarter you had given that information, you had received certain four orders from CBGworth 400 or 300 crores. You give it that information in the conference call.

Sachin Raole:We had mentioned because that was the beginning of CBG order picking up. But we are not
giving the split of all the verticals.

Sagar Kapadia:So, you are still not giving that split. But can you give me a split broadly, out of this 600 crores
how much is for the exports?

Sachin Raole: That's possible. Just give me a minute. If you are having a second question you can put that second question and I will give you split of 600.

Sagar Kapadia: No, I don't have any other question. This is the one only. How much is contributed by the exports?

Sachin Raole: So out of that almost 150 crores will be exports and 450 crores will be domestic.

Moderator: The next question is from the line of Nihal Shah from Prudent Broking.

Nihal Shah:My question was on the line of engineering segment as we are seeing good traction coming
from there, about 20% of our revenues also came from that segment and order book also looks
strong. So, going ahead how do we see our margins improving from around 11% to 13%-15%
in the next 2 to 3 years?

Sachin Raole: I will not be able to exactly give you how the percentages are going to move. As I mentioned in my earlier comment that our first endeavor was to get into double digit margin and then build on that margin. We have to keep in mind couple of things because we are talking about expanding the business offering in the form of CBG is supposedly to catch up now, services business is supposed to go up, SAF business has start kicking in. But at the same time there is a lot which is happening on the developmental side also for preparing ourselves for the next wave of growth. So, we are investing in R&D in a big way. Our PLA plant is supposedly to start its operation from this year, the second quarter we will start the operation of our PLA. We will get into more R&D related activity. For CBG we are working on multiple feedstock testing in our demo plan. So, there is a lot which is happening on the developmental side also. And whatever happens in our research side it gets actually debited to P&L. So, we don't capitalize our research expenses. So, depending on how these activities are going to get built up, the margins are supposedly to move. But as I said, our efforts are to build upon what already has been achieved in the margin side.

- Nihal Shah:And another question was on the front of the sustainable aviation fuel. So, are we seeing orders
starting to come up from that segment? Because I guess there was a 1% target that the
government had set till 2025, so how is that segment moving?
- Sachin Raole:So, Nihal SAF what we did was we demonstrated last year that it's possible to make SAF in India
on global feedstock. That was the proof. There is no legislation in place as yet. The only
agreement that is in place globally comes into being. It makes mandatory for airlines to blend
1% starting 1st of January 2027. These are still early days for SAF but as we go through the year
maybe towards the end of the year, we'll start to see some announcements around set
capacities being set up etc. So, we'll see how that develops in terms of what mandates come.
What's the new policy that comes in for the domestic aircraft. International part of the business
as I said is already in the 1st January '27.
- Nihal Shah:
 Just follow up on the previous question like is the execution cycle on the engineering front

 slower than that in the bioenergy front or it takes around the same time?
- Sachin Raole:No, it's actually in some cases it is even longer than the bioenergy side depending on the
complexity of the project.

 Moderator:
 The next question is from the line of Vikram Vilas Suryavanshi from PhilipCapital (India) Private

 Limited.
 Limited.

- Vikram Suryavanshi: I just missed few comments so pardon me in case I'm repeating this question. In case of a bio plastic our demo plant will be ready. So how is there any inquiry pipeline or how you plan to monetize it? That is my first question and second on Brazil opportunity, you highlighted to some extent already, but would it be possible to give what will be the scope of our services there and any business development strategy over Brazil? And I think I guess it will be mostly on maize side. So, if you can answer these two questions.
- Shishir Joshipura:Let me take the second question first, Vikram thank you. So, in Brazil as we have known, Brazil
is obviously known for its sugar-based ethanol production. But as the country is moving to
enhance the use of ethanol, they are also findings very similar challenges to what we did that

sugarcane is not present in all the part of the country, so they need to transport ethanol long distance which is not a good thing, not a positive thing from environmental perspective. So, they have also started to look for alternative feedstock and starchy feedstock is a natural candidate in line for that. That's number one. So, they are beginning to look at alternative feedstocks in terms of what kind of starchy feedstock in different parts of Brazil that can be put to use. We commissioned our first project based on corn. The second project that I mentioned to you about is based on wheat. So different feedstocks in different part of the country that will be put to use. And from our inquiry pipeline from the dialogues that we are having with customers, we clearly see this to be the new growth area as far as Brazil is concerned in terms of capacity that will come up as it travels through the year. There are already significant amount of activity increasing in that space as far as Brazil is concerned. On the PLA we obviously need to first, it is a demonstration plant that we are now building and it will start commissioning in this quarter. And once that is commissioned and the process established, obviously we have to invite the interested customers to the plant for them to witness the process and its efficacy and then only we'll be able to build it. So, we are not building any PLA based revenue or book in this year's estimate of ours but as we probably travel through the future, we will be able to see that build.

- Vikram Suryavanshi: Just a related extension of what you have said about, if you look at the Brazil which is very competitive in sugar side, so is there any government support for this grain based or starchbased feedstock which is picking up now because we have seen very strong growth in grain side of story in terms of production for Brazil also. So just in case of competitiveness or if you can just share your experience from that point.
- Shishir Joshipura: So what we are seeing is two or three things Vikram. One that our technology is absolutely able to deliver a benchmark performance on different dimensions that are important to a owner of a ethanol facility based on starchy feedstocks. That's number one. Two, we have a very extensive experience globally on—for example I mentioned about the—wheat project. We built a wheat-based project as the largest project in UK almost a decade ago. So that when they came and saw that we have that kind of experience available on our side, they obviously were impressed that we've been running that size and that kind in a very advanced nation for a very long period of time. So that comes in handy as well. There are incentives that the government is making available in Brazil at local level. But that's not to us that's more to the producers or the promoters of the project. So, in terms of what incentives are required. State governments are getting very active because they clearly see some of the states in Brazil, see this as a clear activity to drive employment and create more opportunities for the local population. So obviously that's another one that's going up and we are seeing positive traction develop all across.

Moderator:

The next question is from the line of Arnab Deb, an individual investor.

- Arnab Deb: I had few questions. One is that I heard that by like FY30 we want to make the contributions from all the three segments equal. However, if you look at the CAGR of last few years order books still bioenergy dominates and the growth of all the order book segments have been broadly in line with the overall growth. So like if we want to let's say increase the share of the other two segments like engineering and high-purity we have to make substantial your increase in the order book number. So, any thought on like going ahead with any kind of areas which are not currently in our domain or like let's say substantial increase, how it will come if you can just throw some light?
- Shishir Joshipura: So, Arnab first of all we have said that we want every segment of our business to grow. It's not that we are saying that everything will be equally split at the end of 6 years. What we have said is between the domestic and international if you were to take a cut, our aim is to go 50-50, so that is half of our business in 2030 should come from domestic business and another half will come from international business. So, from that perspective we have split it evenly. But as far as business segments are concerned, we are saying every business must grow to its potential. And we are not limiting anybody to say oh you need to be one third. There is no such lock on any business and that's the second one. Third, you mentioned that the engineering and PHS business, obviously they're starting out on a smaller base compared to our bioenergy business. So, in that sense there is a different base on which they are operating. But as I mentioned to you the opportunities opening up on CBG side, opening on the ETCA business, on the modulization opportunity for ours. We are clearly seeing a pipeline of our inquiry building very healthy. And therefore, we are saying that our business, so some businesses in rate percentage terms may grow faster because they start from a smaller base. But in overall terms we see bioenergy growing. We see engineering business growing at the back of modulization, we also see PHS growing, each at their own potential rate that's possible in the market.
- Arnab Deb:
 Another question is that in terms of bioplastics or PLA, when we think like revenues will kick in?
- Shishir Joshipura: So, as I mentioned to you we are right now in the process of commissioning our demonstration plant and then obviously we have to invite interested customer. That interest of customers is already building up on the PLA side of the equation. And then so we don't expect any revenue order book to happen literally this year. But maybe in the following years we'll be able to talk about it. Bio family is a very large field so we have to start creating different molecules out of that plant.
- Arnab Deb: Any sort of numbers that we are targeting from that segment?
- Shishir Joshipura:No, as I mentioned to you we will not be able to give a specific number for that yet. In due
course of time surely, we will talk about it.
- Moderator: The next question is from the line of Dhaval Shah from Infinite.

 Dhaval Shah:
 While though the environment was challenging, there were equal opportunities and Reliance

 Adani everyone is announcing big plants in CBG. So how are we positioned to capture that

 segment? And do we see CBG overtaking bioethanol in terms of revenue mix in our bioenergy

 segment?

Shishir Joshipura: So, Dhaval, yes. What good news is that large private corporate houses energy companies are saying that they want to develop this as a segment. So that I think that actually goes to say that there's a definitive potential that is likely to unfold as we travel through this. Obviously, these corporates have very ambitious plans. We are also working with them. We have commissioned projects for them. I also mentioned the beginning of the call that we are very proud that we now have three feedstocks on which we have got absolute benchmark yields established at commercial scale. I made this specific mention because that's been a pain point for the industry so far that there was always ifs and buts around what works and what does not work. But now we have established this beyond any doubt that on three important feedstocks, namely spent wash, press mud and rice straw, we are able to deliver absolutely benchmark performance as far as yields are concerned and on a reliable and consistent basis. This was second one because people were finding that plants were not running on a continuous basis. So, a lot of people have said there are challenges but that's something that we have solved. So, technology wise we are there. Sachin also mentioned that we are developing further on newer feedstocks because we are not the only feedstock that we work. Maybe in the first lot this is the most important feedstock. But we already know people are talking of cotton stalk, napier grass many other second crop residues, slurries from municipal wastes. So, there are many dimensions which are now emerging in terms of poultry litter. So, we are now in the process of establishing the correct performance parameters on these alternative feedstocks as well so that we are able to offer to our customers a wide array of feedstocks on which they can run their plant. We are working very closely with the companies that you mentioned and also some others in the field. And we are very confident that we will start to see a significant change in the complexion of this business. Whether it will go bigger than bioethanol, I think we are not having that race. We are very clear in our head; each business must grow to its potential whatever is the potential and if it has to create potential it has to create new openings. That's what we will drive. I mentioned that ethanol SAF becomes a big application, in the ethanol-based chemicals become a big application. We will talk about it, diesel blending of alcohol. There are many things that will go as we move forward will start to change and the feedstock itself will undergo change in our opinion once we fully stabilize the IOCL plant and maybe a year down the line we will be talking some very different dimensions of the business emerging both in India and abroad in terms of what can happen to cellulosic feedstocks. So, we are not going to limit ourselves to say one should grow bigger than others. For us each business should grow to its potential.

- Dhaval Shah:
 But since CBG seems to have more potential and even there is more competition as well,

 Thermax is also doing taking big orders. So, I was just worried can we position ourselves better and capture the larger pie of the market?
- Shishir Joshipura: We are very focused on CBG. CBG for us is a very important business. I'm reiterating that it's a very important business for us, not only in India but even outside India. And as we go through the year you will hear more about it. The important question to be resolved there was the fact that markets, competition, customers everybody was worried about reliable yields coming out of the plants. And that's something that we have proven. Right now, at the commercial scale, we are the only proven technology in the country. So absolutely focused on ensuring that we completely go around encashing this potential..

 Dhaval Shah:
 I just asked what is the update on the IOC JV? Is there any movement on that? Where are we heading there?

- Shishir Joshipura:Right now, no. In the sense that we are still awaiting the final approval. As soon as we hear that
and it is in the pipeline so we will hear it soon. Along with many other news in June, the month
of June.
- So, we are waiting formal approval for the formation of JV but we have already started groundwork. What should happen under this JV, what businesses should start shaping up in that, what is required from our side, how the structure should look like? So, the groundwork is already happening. On that front only the formal approval is awaited. After that we will be in a position to talk about the business plan for the JV in a greater detail.

Moderator: The next question is from the line of Shailesh Kanani from Centrum broking.

- Shailesh Kanani:Just one question with respect to our engineering division and bioenergy and PHS. If you can
just talk about the tenor of average order book. By what time we can expect the orderbook to
get converted into revenues for all three segments?
- Sachin Raole:Average Shailesh is you can safely consider as nine 9 to 12 months for both the businesses. But
in engineering business what Shishir earlier was mentioning, there is a possibility that if some
orders are such that the execution time is little on a longish cycle. So, it can go from 12 months
to even for that matter 18 months. Because the entire modularized. If we are supposed to do
the equipment and the modularization both together then the timeline can be going beyond
12 months also. But on an average, you can consider between 9 months to 12 months.
- Shailesh Kanani:even for the biology segment because I was under the impression that the biology would be
little bit longer for 12 to 15 months.

- Sachin Raole:No, it is not. Beyond 12 months project will not go. If it is of a very large capacity and if our
scope is absolutely like an LSTK then there is a possibility. But otherwise, it will run in a period
of twelve months even for that matter CBG also between 10 months to 12 months is what I can
say a period for execution.
- Shailesh Kanani: And just a follow up on CBG. We are doing the whole EPC turnkey projects in CBG projects, right?

Shishir Joshipura: Not necessarily, if the customer so demand.

- Shailesh Kanani: Otherwise, what would be the addressable market in a CBG project if EPC is not completely done?
- Sachin Raole: Every customer has a different model. Some will say 'okay you know what' you just do your technical piece and we'll do the rest. Some will say no l'll give you a piece of land and please build everything. Some will say no civil we'll manage, you manage others. Every customer has their own. There are no fixed models for this unfortunately. What remains common is that the technology piece, the critical part that is done by us.
- Shailesh Kanani: So that would be what percentage if I say what percentage that would be of Rs. 100?
- Sachin Raole: So, let's assume if the LSTK project is going to cost us 100, our scope can go from 30 to 100 on a scale of 30 to 100. And additionally, you also need to keep in mind whether it is press-mud based or agri-waste based plant, the solutions which we provide for maintaining the performance of that plant is like a recurring business for us under our services umbrella.
- Moderator: The next question is from the line of Rohan Mehta from Ficom Family Office.
- Rohan Mehta:I just wanted to get your thoughts on CBG. So how do you compare CBG plants right now versus
ethanol when it comes to payback period and the unit economics, how viable are the CBG
plants right now?
- Sachin Raole: Sorry your last portion, we were not able to hear because your voice is little low.
- Rohan Mehta:What I was saying is where do you see the viability in the CBG plants right now? How viable do
you think are CBG projects at the moment?
- Sachin Raole:If you are looking from the viability of CBG projects it is still what I can say, to some extent it is
work in progress. But projects are viable, they are having IRR ranging from 14% to 18%
depending on what is the feedstock, what is the size and how they are selling apart from CBG
the solid manure or taking care of liquid manure. So, it's a range.
- **Moderator:** The next question is from the line of Godwill, an individual investor.

- Godwill:I was referring to the latest NITI Aayog reports, that mentioned that by 2030 around 30 cities
in India will go waterless or thing. So, we are having an active participation in water treatment
plant. So, can you shed some light on our business prospects into this segment? Wastewater
treatment and other things.
- Shishir Joshipura: So, our water treatment is in two parts. One is our PHS business which is serving ultra-high purity water to pharmaceutical segment. And then we have Zero Liquid Discharge system for some targeted industry streets which have this which have mandate not to discharge any liquid out of their premises like metals and mining, pharmaceuticals, fertilizers, chemicals. So we offer Zero Liquid Discharge solution to those organizations. And. Sorry we didn't get your name. Can you please let your name know please?
- Goodwill: Godwill. Can I ask one more question? And congrats on securing your first order for this Blue Hydrogen participation. So, can you kindly let me know the prospects of this industry and how can we go forward with this particular segment?
- So hydrogen as is going through a transition and transformation both, where traditionally only the grey hydrogen was being produced and then it goes to blue and green and then of course there's a pink hydrogen as well depending on what the process at the customer end is. So right now, the our belief is that hydrogen is something that will become fuel of the future but that's on a long-term horizon. And obviously a lot of effort is going on by the leading corporates, oil refineries, oil energy majors to start cutting down their own CO2 emissions from their operations. And this is a very clear step in the direction. So, we will see development acting on as well.
- Moderator:
 Thank you. Ladies and gentlemen, we'll take this as the last question. I'll hand the conference over to the management from Praj Industries Limited for closing comments.
- Management:So, thanks everyone for your time today. If you have any more questions, please feel free to
write us at info@praj.net. I once again thank you for your time and have a nice day.

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. Thank you.