

Praj Industries Limited
Earnings Conference Call
August 06, 2022

Moderator: Good day, Ladies and gentlemen and a very warm welcome to the Praj Industries Limited Q1 FY23 Earnings Conference Call. As a reminder, all participant lines will be in the listen-only mode and there will be an opportunity for you to ask questions after the presentation concludes. Should you need assistance during the conference call, please signal an operator by pressing “*” then “0” on your touchtone phone. I now hand the conference over to Anuj Sonpal from Valorem Advisors. Thank you and over to you, Anuj.

Anuj Sonpal: Thank you Ali. Good afternoon everyone and a warm welcome to you all. 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 conference call for the first quarter of financial year 2023.

Before we begin, let me mention a short cautionary statement. Some of the statements made in today’s earnings call maybe 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 belief as well as assumptions made by an 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 I hand it over to them for opening remarks. We first we have with us Mr. Shishir Joshipura – CEO and Managing Director and we also have Mr. Sachin Raole – Chief Financial Officer and Director of Resources. Now 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 Q1 FY23. Trust all of you had the opportunity to go through our results presentation for the quarter ended 30th June 2022.

It is once again a pleasure to connect with all of you Let me now briefly take you all through the quarterly business highlights and industry developments. Following which, Sachin will take you through the financials.

We closed Q1 FY 23 on a strong note with a healthy growth in order book and delivery volumes despite challenges around volatile commodity prices, impact of war in Europe and rising global inflation. This quarter was a confirmation of our ability to scale up delivery capabilities - managing the uncertainties in supply chain while striking a fine balance between building inhouse capabilities and outsourcing. With stabilizing commodity prices & supply chains and increasing focus on sustainable Energy Transition, business environment is expected to be less volatile and predictive going forward.

Uncertainties in global energy market attributable to the war has brought to fore dire need for energy security. Record high temperature and heat waves across Europe and North America have come in as stark reminder of Climate change, redrawing focus on sustainable climate action in the form of Energy Transition. In response, nations and corporates around the world are taking definitive steps in harnessing renewable energy sources in their pursuit of Carbon Intensity (CI) reduction. There is increasing demand for low carbon energy sources and biofuels are gaining increasing acceptance as one of the most promising solutions. Globally accepted mechanism of carbon trading is poised for introduction in India which augers very well for the biofuels industry.

Capacity addition for production of ethanol in India at the back of advancement of E20 target to 2025-26 continued its momentum. The ethanol blending in petrol in India has crossed 10% mark in this quarter, five months ahead of the plan. Indian automotive manufacturers are gearing up to adapt their products to E20 and subsequently for flex fuel option. As for existing vehicles, tests and trial are underway to analyze compatibility of materials for gaskets to adopt E20.

Our bioenergy business continued its strong performance with a healthy order book of INR 845 crores in this quarter. Around 70% of these orders are for ethanol based on starchy feedstock. Unlike in the past, execution activities are in the top gear in the very first quarter of the fiscal at multiple project sites in different geographies.

On International front, our efforts in providing solutions for low carbon and low energy intensity ethanol are opening newer options and enquiries have started to build up. We have enhanced our reach in Europe, South & North American markets to address this emerging need. Our first project in Brazil is scheduled for commissioning at the end of this year. We have successfully demonstrated the effective impact of our Process Enhancers (PE) solution in Brazil. Both these events will definitely help improve our position as we move forward.

On the 2G front, commissioning of IOCL project is in final stages of commissioning and we expect it to start operations by end of this year. Although we continue to be in dialogue with potential developers of 2G projects in Europe, uncertainties owing to prolonged war have added nearly two to three quarters to the decision cycle time. In the mid to long term, with several nations pursuing energy security based on captive resources, advanced biofuels are

expected to find traction. In Europe, passing of RED III proposal will provide further boost to the demand for 2G ethanol.

SAF space is building up for exciting times in near future, on the back of rising environment awareness and climate actions by aviation players. Recently, Praj joined Mission Possible Partnership (MPP), International Alliance to Pursuit Net Zero Aviation. Praj has been working closely with MPP in helping formulate an energy transition strategy aimed at cleaner skies. Praj has actively contributed to the formulation a landmark report, "Making Net-Zero Aviation possible: An industry-backed, 1.5°C aligned Transition Strategy.

On the CBG front, revised CBG prices and better rates for organic manure, will help improve the attractiveness of the projects. Although little slower than expected, built up of ecosystem across the value chain is now taking shape. Major corporates have announced plans for significant investment in the CBG space. This quarter, we commissioned a CBG plant based on industrial effluent as feedstock. With this we now have CBG projects operating on different feedstocks namely press mud, industrial effluent in north, south and western India with rice straw-based system expected to be commissioned next quarter. With our unique capabilities and learnings from initial projects, we are in good position to cater to these opportunities.

As for Engineering and PHS businesses, we continue to see momentum by way of healthy order book and improving enquiry basket.

On the CPES front, energy Transition needs of global customers are creating significant opportunity. Energy giants are investing heavily in blue & green hydrogen projects to address the growing demand of this zero-carbon fuel. This is creating a significant opportunity for CPES business. Our capabilities to conceptualize, design and manufacture complex modules is finding increasing acceptance from leading customers across the globe. Modularization is emerging as the growth engine for business with significant growth in enquiry base. We have made operational additional capacity at Kandla to cater to this demand. Further capacity enhancement is being planned.

On the brewery front, the beer consumption levels are crossing the pre pandemic levels. The new capacity formation is expected to follow from next season.

Zero Liquid Discharge business continues to have strong business potential from focused segments in private sector such as metals, chemical, fertilizers etc

On PHS business front, as Indian pharma industry transits to global size capacity build in biopharma space, fermentation technologies are set to acquire center stage. Leveraging the parent's capabilities in fermentation space we have made a few initial breakthroughs in this application space for high-capacity fermenters.

RCM program at Praj Matrix is accelerated due to ban on identified Single Use Plastic Items from 1st July 2022 by Ministry of Environment, Forest and Climate Change. India's per capita waste generated from single-use plastic is 4 kg per annum. This ban will now lead to huge demand of compostable plastic as it mitigates pollution caused by littered Single Use Plastics. Continuous focus on developing innovative technology and ringfencing them with protection, has resulted in international and domestic patents tally now crossing formidable four hundred mark.

Before I end, I would like to share with you couple of awards we won recently.

- Last month, Praj was bestowed with the prestigious Golden Peacock Award in the Innovative Product and Service category for our ground-breaking product BIOSYRUP®.
- Praj was also rated top and conferred with Fortune India THE NEXT 500 in the Engineering sector. This award is a recognition of the remarkable growth and stellar performance among the most promising mid-sized companies in India.

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

Sachin Raole:

Thank you Shishir and good afternoon, all.

- The consolidated income from operations grew by 89% and stood at Rs. 729.87 crore in Q1FY23 as compared to Rs. 386.26 crore in Q1FY22. PBT for the quarter stood at Rs. 54.23 crore as compared to Rs. 29.8 crore in the corresponding period of the last year, growth of 82%. Profit after tax stood at Rs. 41.26 crore in Q1FY23 as compared to Rs. 22.20 crore in Q1FY22.
- Export revenues accounted for 16% of Q1FY23. Of the total revenue, 77% is from Bioenergy, 17.3% from engineering and 5.7% is from PHS business.
- The order intake during the quarter was Rs. 1094 crore, with 81 % from domestic market. Of the total order intake, 77.2 % came from Bioenergy, 17.3 % from engineering and balance 5.5% from PHS business.
- The order backlog as of 30th June 2022 is at Rs. 3241.7 crore comprising of 84.5% of domestic orders.
- Cash in hand as on June 30, 2022, is Rs. 652 Crs.
- I now conclude my remarks and I would like to thank you all for joining us on this call is to be would now be happy to discuss any questions, comments or suggestions you may have. Thank you.

Moderator: Thank you very much. Ladies and gentlemen, we will now begin the question-and-answer session. We move to the next question from the line of Saurabh from East Lane Capital. Please go ahead.

Saurabh: I have three questions the first one is on the 1G opportunity the total capacity needed for 20% blending was 1,500 crore liter when we started off like say in FY20 that time the existing capacity was about 700 liters and the incremental capacity needed was 800 crore liter, so based on last two year annual reports about 700 crore liters already happened so the remaining capacity to be ordered is 100 crore liter, is this Math correct sir and could you just clarify on the 1G opportunity which you see in India right now that is my first question?

Sachin Raole: As you correctly said we had said that roughly 1,000 crore liters of additional capacity needed to be created in the country when the program was announced and then further accelerated to 25 for the EB20 to be met and we expect another of the order of 400 to 500 crore liters capacity to be further build to be able to meet the EB20 targets by 2025.

Saurabh: So, 1,500 crore liter was the total required and 700 was the existing capacity, so the incremental is only 800 crore liters and your annual reports of last two years is mentioning 700 crore liter already happened and the last year itself 580 crore happened, so where is the incremental 400 crore, 500 crore liter if you could elaborate sir?

Sachin Raole: What happens is that the capacity of the plant because some of these they have a seasonal factor they do not run 365 days a year. So, the installed capacity maybe a little different than the operating capacity. So, typically we have seen that something in the range of 70% to 75% of the installed capacity that comes into play there could be some other because this is based on feedstock, plant operating issues. So, typically at about 70% of the installed capacity is what you get the output for then if you do that Math we are looking at something like 500 odd crore capacity to be created in a country as we move forward.

Saurabh: Okay over the next couple of years probably right once a year?

Sachin Raole: 2025 that is for meeting the EBP20 goals. Now let us say as we move forward and another see of measures let us say for example a flex fuels policy comes into play if that comes into play then that is an additional demand that will get created because then from against 20% of blending we will go to composition of 85% ethanol as the fuel. So, depending on how the overall the numbers that we have talked about are only as they relate to meeting the goals of the EBP20 program.

Saurabh: And sir also could you highlight the opportunity for once in Brazil and Latin America?

Sachin Raole: So, Brazil as you know is predominantly a sugarcane-based ethanol producing country, but they have also taken a decision because of the vast geography and what I will call as a large scale

movement that got involved in transferring the sugar base ethanol from one end of the country to the other. So, especially in the north west of the country, the central parts of the country where corn is available in abundant quantity. The government policy is now shifted to also create corn based ethanol and that is what is creating the 1G corn based ethanol opportunity in that market as of now and coupled with that Brazil also launched the RenovaBio program which is aimed at lowering the carbon intensity and making the country independent over a period of time from any imports of fossil fuels. So, if you look at the combined effects of this Brazil should create a capacity equal to almost 500 crore liters based on corn as feedstock over the next four to five years and that is where this significant opportunities is being created right now on corn based and as I had mentioned in my opening remarks we have already shipped the plant and its installation going on for our corn-based plant in the country.

In the rest of the Latin America different countries have different blending mandates and based on those blending mandates we are expecting some positive movement there as well. We are building a very significant scale plant in Paraguay already and that is under execution right now. So, depending on how and as I was mentioned in general the trend is to move to higher energy security and therefore higher bio fuels any country energy mix and we continues to the traction being built around these in Latin America. In North America the situation is slightly different. In North America the demand because of some very efficient market mechanism the carbon trading LCFS program in California for example the need and demand for low carbon intensity ethanol is high and that is something that is building up now at the back of also fact that US is also seeing a lot of traction being built around and creating capacities for SAF where ethanol becomes one of the technological path that are available uses ethanol as a feedstock for end product of SAF.

Given this intermixing of having the mechanisms, carbon trading mechanism, carbon pricing mechanisms, 1G ethanol already in place. There is a market that is now opening up for creating low carbon intensity ethanol and all the existing plants actually are candidate for creating that through integration intervention as well as defining some different set of energy solutions for them and that is what we see as a clearly emerging opportunity in United States.

Moderator: The next question is from the line of Levin Shah from ValueQuest investment Advisors. Please go ahead.

Levin Shah: My question is on order inflows for this quarter. So, if we look at the bioenergy order inflow, there has been a dip versus last quarter of around 15% and absolute number is close to Rs.840 crores versus Rs.1,000 crores last quarter. So, this is on account of lower orders that we have booked on the 1G side?

Shishir Joshipura: We don't see any dip in the order book or opportunity as they are showing now. As we follow pretty strict rule of what gets reported is order book, it's fairly at a same level, the overall order book is at Rs.1,094 crores this time. I think what was there in the last quarter order book that

we had reported, export order that was also booked under the bioenergy segment there. In this quarter, we do not have that, but as we move forward to the year we will see then happening as well. Also, there is a seasonality especially for the sugar-based ethanol front side, but it's not that in the volume that we are now reporting. All the projects are shifted to starchy projects. About 70%-odd is now starchy-based, 30% is shifted to the base. And since there is seasonality factor there, there may be minor variation on March quarter to the June quarter, but nothing is storied in that.

Levin Shah: Since we had in the base quarter our exports order, if we exclude that, then we would have probably done similar amount or better?

Shishir Joshipura: Yes, that is correct.

Levin Shah: On the engineering side also, we have seen good orders inflow during this quarter as compared to what we have seen last full year. Was there any exports order of any large orders that we have got under the engineering business?

Shishir Joshipura: Yes, as I was mentioning for our CPES business, the energy transition phenomena is creating significant opportunity, especially the green and the blue hydrogen space as well as all the activities that is now taking place around the LNG and the CNG space especially in Europe and America. So, that's creating a very positive traction and as I was also mentioning, our capability to conceptualize and design and manufacture a modular system for these plants is something that is standing us in good deed, and you actually see that being reflected in the growth of the engineering order book in the quarter. And all these contracts for CPES are meant for export.

Levin Shah: So this number that we have reported this quarter of around Rs.186 crores in engineering, so this should improve from here as we get more exports order on the CPES side?

Shishir Joshipura: More or less, yes, you are right.

Levin Shah: Last question on the other expenses. So, this quarter what we have seen is that YoY the other expenses have almost doubled. So, is there a component which is related to the execution and that has resulted in this kind of jump or is there any fixed costs which have gone up?

Shishir Joshipura: There is nothing extraordinary sitting in the other expenses. It is the direct function of the execution which we are doing. So if you look at the top line has also gone up by two times. So it is basically the variable expenses related to the project execution. There might be some element of extra transportation or freight costs, but that's a very minimal, it's nothing extraordinary.

Levin Shah: And this trend should continue, I mean, with the execution and other expenses should follow the trend?

Sachin Raole: That's right.

Moderator: The next question is from the line of Dhananjy Bagrodia from ASK Investment Advisors. Please go ahead.

Dhananjay Bagrodia: I also wanted to ask for CBG plant, what is the IRR, the asset owners are getting now?

Shishir Joshipura: I will not be able to put a number to you directly because there are so many variables, right, what's the cost of feedstock, what's the availability of utilities, at what cost they are available, are they co-located versus independently located. It would be hazardous to guess a single number for them. But let's just say that now the CBG products are in decent two digit IRR range where it is possible for them to be commercially attractive and be funded by banks.

Dhananjay Bagrodia: For our next leg of growth, CBG would be an important phase. Is any like particular asset owners are targeting because right now it's been only OMCs who have taken lead, to growth, they also have to see some decent IRRs.

Shishir Joshipura: Actually, plants that we have set at par with private segment. Only the public sector plant to be commissioned. So all the three plans that I mentioned to you are in private sector. And depending on the cost of capital, their access to funds, how their funding structure is, I think everyone has their own internal hurdle rate that needs to be overcome. And obviously, as we see it moving forward with these changes, which are positively impacting the IRR of the project, one should be in a position to see more number of corporates meeting their hurdle rates and therefore, stepping up into this arena.

Dhananjay Bagrodia: Will it be fair to assume that all of these players who have taken the lead would be someone who's using this as an ancillary segment vis-à-vis putting a new plant as a new asset, right?

Shishir Joshipura: Sorry, I have not understood your question.

Dhananjay Bagrodia: So they must be doing all these three parts which are there right now, must be players who are already in an ancillary business who are using that as a raw material to put up these projects, right?

Shishir Joshipura: That is correct.

Moderator: The next question is from the line of Naushad Choudhary from Aditya Birla Asset Management. Please go ahead.

Naushad Choudhary: Just a clarification on the margin side. You have been indicating that the pain was there till 1Q '23. The current quarter should we look at as a bottom and should there be any improvement sequentially on the margin side or is there any pain still left which should come in Q2?

Sachin Raole: Since last two quarters, we are maintaining that we will be seeing some kind of a pressure. Rather this pressure got a little bit build up during the first quarter when we saw a very erratic kind of a movement in the commodity prices happening in the month of February and March. The impact we said that will continue for not only this quarter, to some extent to the next quarter. So the H1 we will have some kind of pressure, but H2 should improve as compared to H1.

Shishir Joshipura: That assumes there will be no further negative movements on the commodity side.

Naushad Choudhary: But shouldn't be as bad as this quarter was in terms of gross margin. Should there be a sequential improvement?

Sachin Raole: Sequentially, we should see some improvement, because this quarter we had very low component of exports revenues getting booked also, which will get covered in the next quarter. So we will see some kind of relief on that account. But the pressure on the margin side because of the commodity price movement will continue at least for next one quarter.

Naushad Choudhary: And in two years' timeframe, what is the number one should look at in terms of your EBITDA margin?

Sachin Raole: No, sorry, we will not be able to give you that kind of guidance per se, but we will definitely see an improvement, because all these orders now are basically getting executed, and new orders are coming with the new pricing in any case, and of course, the stability, which we are seeing right now in the commodity prices should not disturb the margin side going forward. That's what I can tell you.

Naushad Choudhary: Lastly, on your HiPurity segment, what is the demand outlook here and what kind of growth you expect from this division?

Shishir Joshipura: So as I was mentioning, that we see a clear movement around creating fermentation-based capacity and the manufacturing side as well. That actually augurs well for the business. The other capacity creations, of course, will continue to serve the businesses as for water and process side systems are concerned. But now with the advent of this, we do expect that things will start to move even more positively in favor of the business so that we are able to leverage the competency that the parent company has on fermentation and then use that as a knowledge base, and combine that with the capability of the PHS business as they understand the pharmaceutical business very, very well. So we will be able to then combine their understanding of markets and customers and the parent's capability around fermentation and leverage this to good effect.

Naushad Choudhary: Actually, I just wanted to understand the scalability piece of this segment. So, last year, we did around Rs.200 crores of business on this segment. Is it really scalable, can we see a doubling of this segment in a couple of years or will it be near to 200, 250-odd numbers only?

Shishir Joshipura: So, one of the features of this business is that it serves a single segment, right. So in that sense makes it what I would call as a slave to how the growth in that industry take place. But what is important is within the same industry growth space, now, we see a space being created for fermentation technologies. And as I was mentioning we will definitely expand the market. Initially yet, so I may not be able to put a number out as you are saying, but definitely in the positive direction.

Moderator: The next question is from the line of Haresh Hinduja from SBS Securities. Please go ahead.

Haresh Hinduja: Sir, I have two questions. First is this week only, there's an article in the paper about Adani, Ambani entering into CBG. Your take on this?

Shishir Joshipura: So, as I mentioned in my remarks as well, that this augurs well, that when some very significant players in the energy segment decides to build this also as part of their business portfolio, it fundamentally means that the markets are becoming attractive, and that there is a definitive commitment as we move forward. I think this is very important development for the overall growth and health of the market.

Haresh Hinduja: No, but is it true?

Shishir Joshipura: I know. That's what I'm saying. So it's a good news. We know that there's a dialogue that we have with both of them and it's a good and positive development.

Haresh Hinduja: Last question is there will be excessive sugarcane this year in India, etc., Previously, there was always some argument between fuel versus food. So does this this means that there is a very good for the industry of ours, which has no issue as far as the feedstock is concerned? And why the sugarcane they're saying there will be an excess? Is it not diverting more to the ethanol?

Shishir Joshipura: I think this is an argument that will always have to be taken into consideration. And as you rightly said, feedstock will be a very major issue that we addressed in a constructive fashion. So that's the fact. Now, given this background, I think what we have to see is that what are the different resources, as we were also mentioning earlier, that we are clearly seeing a shift away. So earlier, three years ago, everything was on sugarcane-based feedstock. Then, now we are saying 70% of the order book that we have booked in this quarter has now moved to starchy-based. So that's already one transition that is taking place. I was mentioning about lignocellulosic or straw-based ethanol plant being commissioned towards the end of this year. So that's a completely untapped source of feedstocks that will come into play. Up to another 20%, 25% kind of capacity, maybe starchy feedstock will play out. But then further growth will

happen based on the 2G or the lignocellulosic feedstock, as we call it, the straws, etc., that will come into play. So as we travel through the journey of fuels and different mixes and demands in the economy, I'm sure that we will start to see a changing mix of feedstocks as we go forward.

Haresh Hinduja: But isn't good for us with excess sugarcane availability?

Shishir Joshipura: Yes. I will come to the other part. And then you mentioned why is there excess sugar and why that is not. Yes, you are correct. So, there is a sugar price dynamics also at play, because the other big producers of sugar in the world may have a different cycle, there may be drought, there may be less production or excessive production as the case may be. So, depending on that, obviously, the world sugar market prices will also fluctuate. So, the producers in India will have to think in terms of what is the product mix, ideally that they would like to have to strike a balance for their own balance sheets and demand and needs of their company to be able to address the demand of sugar as well as of ethanol. From all calculation, it is very clear that even if all the India's sugar demand is met by the sugar mills, will still be left with excessive sugar, which needs to be addressed. So one part is that you go and export the sugar and second is rather than producing the sugar, you convert it to energy, which is ethanol. And there has been several indicators, several initiatives from the government side to ask sugar mills to actually push the sugar to production of ethanol, which is what the country needs today. And I think it also enhances our energy security, etc., So I'm sure as we move forward, we will see a good balance being struck into it.

Haresh Hinduja: Isn't very good for the company to just save the juice with your new technology last year you introduced? So is it beneficial for them to export the sugar or to save as a juice and then produce ethanol?

Shishir Joshipura: That I was mentioning to you, depends on the price dynamics of sugar in the global market. What happens to the other sugar producers? As I was mentioning, if there's a drought in Brazil, it's a very different dynamic for the sugar prices in the world as compared to Brazil having normal sugar season. So we'll have to see how that plays out. But you are right. And as I said, everybody will finally try and see what is the most optimal mix for them and they will act accordingly.

Moderator: The next question is from the line of Levin Shah from ValueQuest Investment Advisors. Please go ahead.

Levin Shah: So have we received any fresh orders on the CBG front?

Shishir Joshipura: Sorry, I couldn't follow your questions.

Levin Shah: So have we received any new order on the biogas front during this quarter?

Shishir Joshipura: During this quarter, we haven't received any new order.

Levin Shah: How are you seeing in your dialogues with your customers or people who are interested in putting up the CBG plant post this price revision has there been renewed interest? And do we see some kind of pipeline which can materialize maybe over the next two to three quarters?

Shishir Joshipura: Yes, we are seeing an increased interest and the activity levels have gone up. As I was mentioning, somebody also asking what happens if these two big players enter with the intention to setup capacity. So I think those are clear positive signs, some more clarity is required on how the overall dynamics would play out. As you know that the price increase has come into play only over the last four to six weeks. So we'll still have to see impact of that. But overall, we clearly see an increased level of activity in the market.

Levin Shah: Lastly, on this CBG front. So what we understand is that there are a lot of other suppliers as well in the market. So, how do you see the competition panning out, will we have dominant share when the order start coming in or this will be different kind of business dynamics versus what we have in 1G?

Shishir Joshipura: I always believe that if there's competition, that's a good sign, because then that shows that there's a good potential that is developing, right. That is where people are wanting to jump into the fray. So that's a good sign because these are nascent markets, we'll have to see how the market shares play out and probably we will have to see at least three, four years kind of timeframe for one to arrive at a market share position. But obviously, everybody will try and push their own solutions and technology and unless things are proven on the ground, I think once that whole cycle is gone through, then one will know which technology suits best. We strongly believe given our pedigree that we have the solutions because a major question on this will also be the feedstock that was being asked in a different context earlier by one of the participants. What happens to that, the understanding on those feedstocks? These are several questions that are still to be answered and with only time will tell as to what actually works out. So market shares are still difficult to predict right now. But definitely the activity levels are improving.

Moderator: The next question is from the line of Divyanshu Sachdeva from White Oak. Please go ahead.

Divyanshu Sachdeva: In your HiPurity business, like you mentioned that has there been a new optionality in terms of fermentation and currently you are also into pharma market. So just wanted to understand, is there a new optionality in terms of semi-conductors and new age tech companies as well because given the fact they are also in requirement of huge or high purity water. Can we take that as an optionality going ahead?

Shishir Joshipura: Yes, that's a very good observation. The semi-conductor industry needs is very close to what pharmaceutical industry needs. So, having capability in that space will obviously put us in a pole position to address the needs of emerging semi-conductor industry as well.

Divyanshu Sachdeva: In the last concall, you mentioned a couple of new words like clean tech or green tech as well as carbon capture and also today you mentioned on hydrogen. Just wanted to understand from a longer term perspective like how do you see Praj panning out in these segments as well?

Shishir Joshipura: As I was mentioning to you, there are different solutions on the offer. So, let's take hydrogen as an example. Globally, the movement is to use the electrolyzer technology for production of green hydrogen and also, in several locations, people are producing blue hydrogen which has fundamentally captured the carbon and separated out in not let it go to good atmosphere. That itself is creating a huge opportunity because we are able to conceptualize and design and manufacture a plant on modules which can then go and very quickly help startup these plants and not take long time of construction at site. So that's one clear opportunity that is emerging. The second bit I was mentioned about the overall at a very broad level the low carbon intensity solutions that are required, whether in form of low carbon ethanol or we talk of CBG, which is also a low carbon intensity solution as far as CNG is concerned. So different product baskets out there. There also, as you know, we have a significant play and technology and experience to bring to the table and offer our deep understanding on the feedstocks, will help us to address these needs in a good way. As I was mentioning, US already has a pretty advanced carbon pricing market. We don't have that yet. But as and when that comes, even that will open up several new opportunities. We already have a business offering which offers to customer capture of CO₂, the biogenic CO₂ out of our processes, which is considered to be superior grade. So there are several solutions that are available in our basket and they're all on the offer to our customers depending on which segment needs what.

Moderator: The next question is from the line of Kunal from B&K. Please go ahead.

Kunal: Sir, I just wanted to get some sense. So, out of the total capacity required to meet the 20% blending target, how much would have been already ordered out, sir?

Shishir Joshipura: So, as I was mentioning, when we started out this accelerated program, about 1,000 crore liters was to be created, and as we mentioned earlier, around 500 crore liters still needs to get order now.

Kunal: So basically 50% we have reached?

Shishir Joshipura: These are not built capacities yet.

Kunal: Yes, yes, ordered. If I'm not wrong, out of this, about 70% is starchy is what you mentioned?

Shishir Joshipura: I said that in this quarter that went by, we saw that 70% of the order finalizations were on the starchy feedstock and 30% on the sugary feedstock.

Kunal: This 500 crore that is being ordered, so what would be your sense on how much would be sugar and how much would be starchy?

Shishir Joshipura: That's a tough one to say, but, as I mentioned that the shift is in favor of starchy feedstocks right now in India because that's obviously the feedstock in terms of availability and volumes that are now available. Sugary feedstocks are already captured in the ecosystem in terms of the sugar mills and then it gets processed from there onwards. So, sugary feedstock-based growth may have a different dimension as compared to starchy feedstock.

Kunal: Within the starchy feedstock, any specific feedstock there you're seeing more traction or more enquiries than others because of the better availability or it's more region-specific?

Shishir Joshipura: Kunal, for example, if we go to United States, it is corn and nothing else. In India, that's not the case where we have broken rice is another feedstock that is available, we can also get maize or corn in parts of India. So that's a very local geographical solution. The key issue is that we are in a position to provide a solution irrespective of the feedstock.

Moderator: The next question is from the line of Bharat Sheth from Quest Investment Advisor. Please go ahead.

Bharat Sheth: Sir, my question is related to this flexi fuel what we are talking. For a next leg of the growth for our company 1G ethanol, is that correct understanding that beyond 15% there has to be a change in the engine as well as the dispensing center by the OMC or it is up to 20% this is a workable?

Shishir Joshipura: As our understanding goes right now, the first stage that needs to be overcome is the EBP-20 compatibility for the vehicle. As I mentioned that some test repairs are underway to understand what needs to change in the existing vehicles. I won't name, but I was talking to one of the largest automotive companies in India. And they mentioned to us that their vehicle are default EBP-20. They've not mentioned about it. So, it depends on what the technology is deployed by different OEMs when they manufacture their vehicle. So, some of them which are large multinationals, they told me that our vehicles are already suited as EBP-20, some may not be and especially the very old vehicles may not be in a sort of condition to immediately accept it. And there also we know that some of the fuel train components will have to change in terms of the gaskets, in the material rubber that is used etc., But no major change is there. In terms of flex fuel, it is a different car or a different vehicle. So, can't take the current vehicle and then start using, it is completely flex fuel vehicle. That is a slightly different technology, especially in the way the combustion is controlled, the compression vessels that are required to be brought into the engine, etc., So, those will have to be designed them, as I would call first principles or

already in a big way they exist in the same brands and same cars in Brazil. So in that sense, it's the technology already proven on the road.

Bharat Sheth: So how OMC will be affected, because if some of the vehicle which if they go for 20%, some of the vehicle will not be really able to take that 20%, so do they have to set up a separate dispensing machine? And second thing, to make them more, what our government is doing to incentivize OMC to have a separate dispensing. If you can throw more light on it? Ethanol is under GST whereas gasoline is under say old regime. So, whatever 20% or beyond that also if they go blending, so whether taxation will be on the blending rate or say 20% will be the GST? Otherwise the government is making the whole money. So what we did in playing as a facilitator role to bring those kind of change in the system?

Shishir Joshipura: As you rightly said, these are some of the issues to be resolved where obviously number of ministries will get involved, OMCs themselves. I think this issue is also being taken up by the industry associations with the government. So it's a very involved dialogue. But obviously these questions will have to be answered as we start to move and I'm sure that we will be able to find an answer. It's just sitting down and finding a logical answer. It's not rocket science. So I'm sure they will do.

Moderator: The next question is from the line of Sagar Kapadia from Anvil Share & Stock Broking. Please go ahead.

Sagar Kapadia: I just wanted to ask you the technology solution we have come up with this BIOSYRUP. So suppose if the plant is on 100 KLPD sugar plant and this is working for seven months, now, it's going to work for the entire year. So how much CAPEX will the client have to incur for this? And this CAPEX with the client entering, will be the revenue for Praj? And another thing on this, any recurring revenue Praj will get by supplying engines, etc., from this technology?

Sagar Kapadia: If an existing plant wants to run for full year and therefore, they would like to treat the syrup and store it and then use it for production of ethanol, they will need the BIOSYRUP technology which will entail a one-time plant modification and installation of a set of equipment as well as recurring expenses may be required to be incurred on the enzymes and some of other performance enhancers, etc., So that both will be required as far as the operations of a BIOSYRUP- based plant is concerned.

Sagar Kapadia: What will be the value of one-time CAPEX, say, example, just 100 KLPD -?

Shishir Joshipura: I would not be able to answer that on the phone because we are engineers, right. So we'll ask you 55 questions on what is the scope, and what's the existing infrastructure, and what's the existing facility, how much capacities we have got. So there are many questions to be answered. So tough call for me to answer on this, and all my proposal engineers will kill me if I give you a number. So, let's stay with this. It's not something that it cannot be considered for

economic viability, the big issue, and I think I keep on saying this to many. One is, of course, the fact that you will expand your asset utilization from six, seven months to round a year. The bigger one in my opinion is the fact that you drop the effluent generation volume by a factor of four to five depending on where current process is. So that is the critical part. I think that's very, very important to understand that this process also dropped to effluent generation itself by a factor of four to five. And that is a big positive for the customers when they consider. And then what happens is that by going through this route, you're also in a manner of tweaking providing a flexibility for use of raw materials as to what they would like for the production of ethanol. BIOSYRUP itself becomes the feedstock

Sagar Kapadia: I just couldn't hear. You said you are also in dialogue with Reliance and Adani for the CBG project?

Shishir Joshipura: I said in my opening remarks that we are seeing big corporates now announcing plans which was there in the newspapers and then somebody said, "Are you talking to them?" And I said "Yes."

Sagar Kapadia: So hope sir, the rainfall which is coming for ethanol plant starts coming in the CBG plants also in order inflow.

Moderator: The next question is from the line of Pankaj Kumar from Kotak Securities. Please go ahead.

Pankaj Kumar: Sir, my question is more related to the previous participant question related to implementation of EBP-20. There might be some challenges going forward because the OEMs need to do some modification or even the old vehicles need some modification. But do you see any risk of further CAPEX or the balance CAPEX that we have delayed by some year or something, any comment on that?

Shishir Joshipura: Is your question that, are there likelihood of some of the CAPEX is getting delayed, and what is the cause you said?

Pankaj Kumar: Cause maybe because of the implementation of EBP, we still need to do something, because our petrol pump maybe the fluid dispensing machines might be different for EBP-20, or normal fuel, or maybe some other technical issue related to the old vehicles and all.

Shishir Joshipura: Because up to 10% maybe some of these issues didn't exist, but as we move forward, we will have to address them comprehensively not only for EBP-20, but also if we've to go beyond to say flex fuel vehicle, etc., So SIAM, CII, ISMA, all these industry associations of different stakeholders are currently in dialogue with the concerned ministries and officials and I'm sure that we will see a comprehensive and conducive policy being rolled out because otherwise if we don't have the enabling mechanisms, it will not work.

Pankaj Kumar: Of course, we are creating such a huge capacity on the ethanol side. So how do you see services as an opportunity for us in this? Are we looking at that as an opportunity?

Shishir Joshipura: Yes, that's a great question. I think very, good question. We recognize the need for bringing our technology and knowledge to our customers, even as they start to operate the plants and not just at the stage of commissioning. So, there's a big focused effort right now underway where we believe that we can bring a host of solutions to our customers as they start operating their plants. Now that could come in the form of, at one end could be CO2 biogenic, CO2 capture, at one end, it could be O&M services for the plant, it could be performance enhancers that we have a whole host of solutions, enzymes, we will have yeast. So, all of these where we have innate knowledge of what happens to different feedstocks and how can we combine them together. The universe already exist. The good news is that there's a big market which is where we have great relationships with our customers, and now our ability to bring all of this in a combined fashion obviously we will be able to create decent inroads on the OPEX side of customers further.

Pankaj Kumar: And just to extend this question, so what is the current portion of the services business in our revenue mix?

Shishir Joshipura: I would say maybe about 5%.

Pankaj Kumar: And what could be the potential assuming this EBP-20 gets over, so by that time, what would be the potential in our mix, assuming all other –

Shishir Joshipura: The market is very nascent on those counts, and maybe we will be in a position to go 10% end... our aim is to start growing pretty rapidly in that space, because we believe there's a lot of headroom for growth. That is the plan that we are rolling out right now to see as to how that business can start growing at a fairly good pace.

Moderator: The next question is from the line of Naiser Parikh from Native Capital. Please go ahead.

Naiser Parikh: Sir, the first question is, if you could give a break up between 1G, 2G individually on bioenergy side both revenue and PAT also?

Sachin Raole: From our presentation point of view or the monitoring point of view, we generally consider bioenergy as one segment. We have not yet started segregating the segment into three or four buckets the way in which you are asking for. And that's the reason why we basically give a number for the bioenergy segment, all put together.

Naiser Parikh: If you can even give some directional context, because –

Sachin Raole: Because there are two segments basically, CBG and 2G, we have seen in a very nascent stage. We said that they will be graduating over a period of time. And once they gets into a little

consistency kind of a more, then we will be in a position to talk about them in a separate way. Otherwise, there is no point in talking for one quarter, next quarter nothing, still it has not reached to that kind of a maturity level we can start giving you the different numbers for the segment. The market is definitely developing, seeing the development on CBG and 2G both. Please wait for some time and at the opportune time we will start talking about definitely.

Naiser Parikh: So is it safe to assume the orders of 80%, 90% still would be 1G only roughly?

Sachin Raole: So unfortunately on a quarter-on-quarter it keeps on changing. Yes, right now there is a huge influx of order on the 1G side. As the earlier participant, Shishir, was making a mention that there is no CBG order in this quarter. So yes, on a quarter-on-quarter the numbers might look very different. And yet currently 1G is the one which is dominating this case.

Moderator: The next question is from the line of Saket Kapoor from Kapoor & Co. Please go ahead.

Saket Kapoor: Firstly, when we look at your consolidated numbers, with the increase in revenue, there is a dip in margin. So if you could explain what goes into the consolidation and the reason for lower margins when we look at the consolidated numbers?

Sachin Raole: Mr. Saket, sorry, can you please just a little bit elaborate your question? I didn't get your question.

Saket Kapoor: So, when we look at the standalone number, the revenue stands at Rs.667 crores and the PBT at Rs.53 crores wherein for the consol number, the revenue is at Rs.730 crores and the PBT is Rs.54 crores. So would like to –

Sachin Raole: This quarter we have not seen major contribution coming up from our subsidiaries. And that's the reason why you're not seeing any kind of a difference between standalone and the consolidated numbers.

Saket Kapoor: No, revenues have increased sir, there's a 10% increase in revenue, but I think the costs are higher. That is the only reason?

Sachin Raole: Yes, yes, that's right, because in the subsidiary these times only the execution activity going on and not the supply portion which has played a role especially into PHS segment, and that is what has contributed, not having the corresponding margin coming in.

Saket Kapoor: So going forward, this will even out sir, because the costs have been built in this quarter?

Sachin Raole: That's right, that's right.

Saket Kapoor: Sir, you earlier explained about the higher raw material cost especially on the stainless steel front affecting the margins and the pass-through was not easy. So, now with this correction

and the prices remaining lower, do we see an incremental increase in margin on the engineering segment especially in terms with the stainless steel prices, response are good for portion of our raw material?

Sachin Raole: Yes, we expect that this softening of the commodity prices which has now started happening will have an impact, but in our kind of a business in place, need to understand that there will be some kind of a lag effect. So all these downfall which is happening in the commodity prices, earlier also we said that in H2 we will see these impact coming in when the older orders which were at the high getting executed at the high commodity prices will come down and the new orders will start getting in from the execution side.

Moderator: The next question is from the line of Aayush Shah from InvestYadnya. Please go ahead.

Aayush Shah: I wanted to ask what's the development on the diesel blending front with ARAI?

Shishir Joshipura: There's nothing new that has happened in two months, but there is a thinking now going on to see because that itself when we started to dive deeper into this, there are very different segments and different standards that are prevalent for diesel engine, for example, stationary engines have a different norm, railways engines have a different norm, automotive engines have a different norm, telecom towers have a different norm. So as we started to dive deep, but this is something on which work is continuing. And mentioned last time also that is something which is about 18-odd months kind of time cycle. So that would probably take it towards the end of next calendar year and then we should start seeing. Overall, I'm saying. There will be actions in between, but overall, you'll see that momentum.

Aayush Shah: My next question is on the (SAF) Sustainable Aviation Fuel front. So I wanted to know Is there any traction we are looking at that front on a company wide level?

Shishir Joshipura: So as I was mentioning, sustainable aviation fuel is something that is beginning to attract a lot of attention globally. That business has a little different business process and model compared to say ethanol. So there the first stage has to be an offtake agreement to be signing from the airline. That's very significant, because they are the only consumer for this fuel. And then, apart from the fact that there are standards and norms to be followed, etc., But having said that, a few pathways have been now approved internationally and pathways are the technology processes that you use. Alcohol to jet is a permanent one amongst them, where 50% of the blending is allowed, right now, that's the maximum and that's permissible. In United States, we are seeing traction building up because some of the US airlines have actually signed up for offtake agreements. But all these offtakes are not now, they are in '25 onwards, not right now. Of course, the capacities will also take time to build. So, we will see these activities space actually coming to core. Although right now, there was a thing around clean skies and policy environment and initial airline signature. The volumes are very large. Several questions will have to be answered in terms of what we saw waste capacity, what norm, how much blending,

what are the green sign of that will come into play at what moment in time. So, there are different dimensions. The whole policy environment which will regulate or enforce use of blended fuel. As we go forward, you will hear more and more about it. And one clear indicator there is that since the purpose is to reduce the carbon footprint, any fuel which has got a lower carbon footprint will have a higher acceptance, and that is where we were mentioning that the second-generation ethanol, low carbon ethanol, they will become the preferred feedstock as we move forward.

Aayush Shah: I wanted to know that on CBG front, what is the order book that Praj might have executed or is under execution till date?

Sachin Raole: As I earlier mentioned that we are not giving this breakup between the bioenergy number as of now. We will start giving at the opportune time. Three orders are already executed. That's what we mentioned to you. One order is under execution. That's what we can tell you, but not in terms of the rupee numbers.

Moderator: The next question is from the line of Chandramouli, an individual investor. Please go ahead.

Chandramouli: Normally, I see whatever is your Q1 end of the order backlog number, you will be able to achieve that at a phase in the rest of the financial year. Now, at this point of time Q2 backlog order is about Rs.3,200-plus crores. Is it my fair assumption, can we expect the same in this financial year also?

Shishir Joshipura: Rs.3,200 crores number is correct, because that's the fact. We will have to repeat our performance as you rightly said. That is the aim that we also have. And the thing is that we need to execute these jobs and order book in line with what customers expect us to do. The way their project manages are, the way their project schedules are, the way their overall site preparedness. So there are many factors that walk in. Right now, we don't see any reason to think otherwise.

Chandramouli: Because normally if I could see your Q1 2021, whatever the backlog which you have, approximately you could able to achieve it. So if that is the thing we are heading towards the top line of approximately close to Rs.4,000 crores this year.

Shishir Joshipura: The thing as I was mentioning it, there are also some other changes that are taking place and I was mentioning, for example, in our PHS business that now we see a traction building on the fermentation side. Now, just to share with you, while a water treatment plant order if it comes, I will execute it on an average in 12 weeks or even less. Our ferment order on the other hand could be 12 months contract. So it's a wide array of technologies that are in display. I think some of that changes will also have to be factored in. And we will have to see how we end the year. I am not in a position to tell you exactly the number right now, because that's not the way we sort of provide guidance, etc., But a good healthy order book is the first thing that we need.

I also mentioned that in my opening remarks that this was the quarter that actually proved to us that our execution cycle, our capabilities and capacities are robust, to take us forward in the year in a very constructive sort of fashion. Because that was the first requirement. If we build the base, then we can obviously build the building. And that is our attempt.

Chandramouli: Maybe I'm repeating. At least do you have the capacity to execute all these orders?

Shishir Joshipura: Yes.

Moderator: The next question is from the line of Mahek Talati from YellowJersey Investment Advisors. Please go ahead.

Mahek Talati: So as the transport minister had made a huge statement of running a lot large number of vehicles –

Shishir Joshipura: We can't hear you, Mr. Talati.

Mahek Talati: So the transport minister has made a huge statement of running a huge amount of ethanol-based in the country by 2025. So are we doing enough CAPEX or taking any steps to capitalize the opportunity?

Shishir Joshipura: Talati, as I was mentioning, to Mr. Chandramouli's question as well, that we saw this quarter as a proof of the fact that we are in a position to execute improved and large volumes at relatively short notice. That is something that has not happened because we just acted in six months. We have been acting in direction with what developments take place in market because you and I know from experience that capacity creation takes time both in terms of getting the right people and knowledge onboard, but also the fact that I have to then create an executing infrastructure that can do both the manufacturing part but as well as product execution commissioning. So right now we have put in place a mechanism that allows us to see... and if we see further improvement in the market, as I was mentioning earlier, we expect better traction going forward, even in the export jobs. So we now understand the model that we need to follow internally to augment our capacity and capability and we'll continue to do so.

Moderator: The next question is from the line of Tanvi Bhandari from Hem Securities Limited. Please go ahead.

Tanvi Bhandari: Sir, just first of all I wanted to know about the government plans and how we are in line with the –

Shishir Joshipura: We are not able to hear you very well.

Tanvi Bhandari: Sir, one thing I wanted to ask that you earlier mentioned that the target for CBG was 5,000 from '23 to '24. So is it now possible? And second, on the ethanol blending programs. I just wanted to know what is the current update in terms of what is the opportunity that we anticipate with the existing ethanol blending target of 20% by 2025?

Shishir Joshipura: We are not a country that is using gas as a significant source of energy in our overall energy pie. We have been a very liquid and solid energy sources in this country. So introducing gas itself is a challenge. And that is what was recognized. This is the first program of its kind anywhere in the world. So there were many firsts that was associated with it, and obviously that has delayed the program a little bit. So I don't think '23 we will have 1,000 plants. So that's a difficult one to achieve. However, what is important, and as I was mentioning earlier, as well, there have been very active dialogue with all the industry stakeholders, and that has allowed the government to also introduce necessary changes and amendments to the policies that were already announced, as well as supporting programs around the policy. Now, with the stepping in of the large corporates, we see a good ecosystem building. There has been demonstration projects that have already been done at commercial scale. So these are the elements of the ecosystem that are all now falling in place, and therefore, we should see a good traction build as we move forward. Whether it is 5,000 in '23, that's a little tough call, because I think we may not have capacity to build 5,000 plants in a year's timeframe. But obviously, this is a positive movement forward. Maybe two, three years delay is definitely going forward. On the ethanol front, I think the capacity that is getting built in as mentioned earlier, around 500-odd crore litres will still have to be built to meet the EBP-20 target.

Moderator: The next question is from the line of Keshav from RakSan Investors. Please go ahead.

Keshav: Sir, I just have one broad question. The bioenergy in material space if we see is growing rapidly, will grow for a very long time. But, there are also a lot of positive disruptions happening on the technology side, for instance, CRISPR edited Algae for better lipid modified yeast for pretreatment chemical resistance. So, to exploit our competencies of process and systems engineering, are we working on some of these early stage projects, let's say, or planning to work with biotech companies that develop these cell lines, build a system together with them and then outlicense these systems going forward?

Shishir Joshipura: Maybe I will attempt a broad answer as this is pretty broad-based question. So we understand that there are areas where we will need to partner with organizations external to Praj, and we are very open to that. And that is a dialogue that is constantly on. We are already working with several companies with whom we can co-develop, if I can use this word, or add value to what they've already done, take that and add it to the next step and bring it to a commercialization stage. What capabilities and capacities we use, depends on what's the value proposition that needs to get defined. And that's an area that we are working on, but I won't be able to tell you name because our agreements with them do not permit us to say so. Wherever it is possible, you will clearly hear about it. For example, when we introduce **Cellunite** technology, which

takes care of forest wood and forest waste to ethanol conversion, and we work with Sekab, at some stage it was allowed for us to speak about it and we are going out saying that that's a new offering from our end along with Sekab. So as and when development takes place, we'll keep you informed. But yes, that is also part of the way of life at Praj.

Moderator: We will take the last question from the line of Priyesh Babariya from B&K. Please go ahead.

Priyesh Babariya: So I just had one question regarding starchy-based feedstock ecosystem, because we are seeing more production in the quarters and almost 60% to 70% to 80% of our order inflow is coming from starchy-based feedstock. So I just want to understand the supply side availability of the starchy-based feedstocks.

Shishir Joshipura: So right now, we don't see that to be a challenge. I think the country is sufficiently provided for the starchy feedstock and to meet the goals that are set out in EBP-20, we don't see a problem at all.

Moderator: That was the last question. I now hand the conference over to the management of Praj Industries Limited for their closing comments.

Sandip Bhadkamkar: Thank you, everyone for your time today. In case you have any more questions, feel free to write us at info@praj.net. Thanks again for your time and have a nice day.

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