



Praj Industries Limited

Q3 FY18 Earnings Conference Call

February 07, 2018

Moderator

Ladies and gentlemen, good day and welcome to Praj Industries Limited Q3 FY '18 Earnings Conference Call. As a reminder, all participant lines will be in the listen-only mode. 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 '*' followed by '0' on the touchtone phone. Please note that this conference is being recorded.

I now hand the conference over to Ms. Priyanka Watane from Praj Industries Limited. Thank you, and over to you, ma'am.

Priyanka Watane

Good day everyone. We welcome you to this conference call organized to discuss Praj Industries' operating performance & financial results for Q3 FY18, which were announced on February 6, 2018.

I have with me, Mr Sachin Raole, CFO & Executive Director – Finance, Mr Atul Mulay – President Bio-Energy Business, and Mr Surendra Khairnar, AVP – Accounts.

Before we begin, I would like to mention that some of the statements made in today's discussion may be forward-looking in nature and may involve risks and uncertainties. Documents relating to our financial performance were emailed to all of you earlier. These documents, along with a quarterly results presentation, have also been posted on our corporate website. I would now like to hand over the floor to Mr. Raole for his opening remarks.

Sachin Raole

Good day ladies and gentlemen. I welcome you to Praj Industries' Earnings Call for Q3 FY18.

Before getting into the details of the performance, I am delighted to share that subsequent to the MOU signed in Dec 2016, BPCL has issued a Letter of Acceptance for the commercial 2nd generation ethanol plant in Odisha. Atul will share details about the same in a while. Now, I will briefly discuss the macro-economic landscape.

Recent Union Budget 2018 made some major announcements related to the agriculture, rural and biofuel sectors. The clear emphasis on driving rural growth and providing a much needed support to the distressed farm sector, is largely positive to drive demand and increase consumption in the domestic market.

Another key highlight was the government's persistent effort towards developing the agri sector, which was aptly termed as the "growth driver of the economy" by the honorable finance minister. At the outset, we believe, the budget was well-balanced, reinforcing the Government's pro-growth and pro-reform agenda. Budget has given 2 clear indications for the growth of biofuels in the country. First, it finds allocation of Rs 1,290 crore for a restructured National Bamboo Mission (NBM) and brings bamboo into the category of grass. This bodes well for a range of bamboo-based industries. Bamboo is a rich source of lignocellulose and is a valuable feedstock for 2nd generation ethanol and renewable chemicals.

Second, acknowledging air pollution in the Delhi-National Capital region (NCR) as a serious problem, budget has a scheme to support the governments of Delhi and neighboring states namely Haryana, Punjab, Uttar Pradesh in tackling high levels of air pollution. Steps will be taken to subsidise the machinery required for management of crop residue. Development of such ecosystem will help to ensure uninterrupted supply of feedstock for 2nd generation ethanol projects. These measures are expected to have a significant impact on the bioenergy matrix of the country of which ethanol is the main constituent. These indicators recognize biofuels not just for the economic benefits, but also for their contribution to improved air quality in high-density urban centers and their ability to reduce crude imports for the country. We believe that the government is undertaking measures to ensure sustainability of biofuel program and the progress gives us comfort.

Now, before we get into the details of financial, I invite Atul to discuss each of the business lines.

Atul Mulay

Thank you, Sachin. Good day everyone.

Thriving interest in ethanol and other renewable fuels has once again confirmed the Indian government's commitment to using biofuels in the long run. It has also bolstered visibility prospects for India as one of the frontrunners in global ethanol market.

You may recall that we had entered into a MOU with Bharat Petroleum Corporation Limited (BPCL) in Dec, 2016 as technology partner to set up a 2nd generation ethanol biorefinery at Bargarh, Odisha. Both the parties have been working closely on several aspects of the project including site selection and detailed engineering. I am happy to share that BPCL has now given a formal confirmation by way of Letter of Acceptance to Praj for its proprietary technology, basic engineering and design package for a value of Rs 16.75 cr as a services order. This is a major milestone towards commencement of work on the ethanol biorefinery with production capacity of 100 kiloliter per day to be set up by BPCL. The feedstock will be biomass sourced from the local farming community. This is an important development toward progressive blend ratio for the country.

Execution of this 2nd generation ethanol biorefinery will span over 15 – 18 months.

We also have MOU in place with IOCL for multiple 2nd generation ethanol plants in India. 2nd gen ethanol plants in India will follow a standard execution pattern of OMCs. Broadly, there will be 3-4 phases of execution namely licensing of technology, basic and detailed engineering package followed by process critical equipment supply then EPCm/PMC, other equipment and finally, site erection.

India's need for progressive blends can be fulfilled by the abundantly available agri-residue. This techno-socio-economic model not only brings the agri community in the mainstream but also gives a boost to the rural employment generation. In the 1st generation ethanol market – In India, ethanol supply has stabilized for the

blending program. The combined effect of improved cane crushing, subsequent molasses availability and firming up of higher ethanol price than the previous year has led to producers responding positively to the tender issued by OMCs for the procurement of ethanol. It is estimated that ethanol supply to OMCs for the year 2017-18 will touch 1.13 bn liter corresponding to 5% blend ratio.

Among the neighboring countries Thailand has reported a growth in the sugar industry, whereas Indonesia and Vietnam are on their way to implement ethanol blending mandate. Thai government has set target to increase the blend ratio from the current 14% to 18%. Countries like Myanmar and Philippines also offer us opportunities for other grades of ethanol. South America continues to be an important market for us – for greenfield as well as modernization opportunities. Argentina has a policy in place for increasing the blending mandate from the current 12% to 20%. Bolivia is also expected to increase the blend mandate from the current 10% to 12%. A welcome news comes from the European Union with the Renewable Energy Directive II to come into effect in December 2018. The European Parliament in a plenary session on January 17, 2018 agreed on a 12% renewables target in road and rail transport per member state. According to the draft, the share of 1st generation biofuels in member states must remain below 7% until 2030. Additional 5%+ capacity will come from advanced biofuels including 2nd generation ethanol. The share of advanced biofuels like 2nd generation ethanol will be progressively increased through 2018 to 2030.

India and EU are joining hands to extend cooperation on renewable fuels and chemicals. The EU-India conference on Advanced Bio Fuels to be held in March in New Delhi aims to facilitate the deployment of advanced renewable fuels in the two regions. The conference targets primarily technology developers, industrial participants and investors producing low carbon fuels for the decarbonisation of transport. This will be followed by a technical visit to Praj's 2nd generation integrated biorefinery demonstration plant in Maharashtra. In Africa, Zambia and Uganda have been given cabinet nods to ethanol blending program. With over 20 years of presence in the continent, it also offers us opportunities for other grades of ethanol. Our retrofit and modernization offering has proved to be a value accretive proposition for customers and we are confident on pursuing modernization and retrofit cases across both -domestic and international markets.

PHS businesses contributed 18% of the total revenues in Q3FY18, which is attributable to improved growth reported across the international and domestic markets. Brewery business continues to steadily contribute. The consolidation witnessed in the industry has largely settled and as capacities get rationalized we will see major brewers begin to consider growth plans. We have recently commissioned a greenfield brewery in India for one of the top European brewers. Praj was selected such a prestigious job over European competition.

In Industrial wastewater business, our focus continues to be on zero liquid discharge applications. We have recently bagged a large sized order from steel industry. The critical process equipment and systems business is progressing well and continues to receive healthy enquiries. As discussed last quarter, we have made breakthrough with some prestigious customers and received orders in the period under consideration.

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

Sachin Raole

Thank you Atul. The results reported for the third quarter of fiscal 2017-18 were a reflection of the business environment, which continues to be challenging.

For the quarter ending 31st Dec, 2017, Income from operations stood at Rs 248.28 cr, a 19% increase over the previous quarter and 7% increase over the corresponding quarter. Of this, bioenergy forms 42%, Praj HiPurity forms 18% and remaining 40% is attributable to the engineering business. PBT and PAT stood at Rs 11.83 cr and Rs 7.51 cr respectively.

Order intake for the quarter stands at Rs 251 cr. Of this, bioenergy forms 61%, Praj HiPurity forms 8% and engineering business forms 31%. Overall margins have got impacted due to a change in sales composition. Hardening of yields has adversely affected other income for this quarter. For the 9 months of fiscal 2017-18, Consolidated income from operations stands at Rs 648.93 cr, comparable with the corresponding period. PBT and PAT stand at Rs 18.20 cr and Rs 12.68 cr respectively.

Cash on hand as of 31st Dec, 2017 stands at Rs 249 cr, owing to improvement in the working capital cycle. Order backlog as of 31st Dec, 2017 stands at Rs 750 cr, with 70% orders coming from domestic market. Also, bioenergy forms 63%, Praj HiPurity forms 11% and engineering business contributes 26%. There is one clarification. Order intake for the first 3 quarters of FY 2017-18 stands at Rs 665 cr and for the corresponding period stands at Rs 775 cr. Please refer to the presentation on our website. Please also note that the order intake for FY 2016-17 was inclusive of Petrobras related order of Rs 196 cr.

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

Moderator

Thank you very much. Ladies and gentlemen, we will now begin the question-and-answer session. We will take the first question from the line of Nirav Vasa from B&K Securities. Please go ahead.

Nirav Vasa

My first question pertains to the order inflow that we have received from BPCL of Rs. 16.5 crore. Can you share more details about that and can we expect more order inflow from this particular Odisha-based unit because I believe Rs. 16.5 crore of order inflow is a very small amount as compared to the capex that is planned for this particular unit? Can you share more details about the same?

Atul Mulay

As I mentioned in my earlier reference, Rs. 16.75 is only soft order, which is service order for basic design engineering. And as I mentioned that the typical oil marketing corporations, their flow or notice to proceed, starts from the design engineering package followed by process critical equipment, followed by EPCM or PMC and then it goes for the non-critical equipment and erection. So this is a sequence of order finalizations. So today, we have initiated with the soft order of technology engineering, the basic and design engineering package and remaining orders will follow and they have to finish the whole thing between 15 months to 18 months time, plant should be up and running by 18 months.

Nirav Vasa

What can be the order inflow per plant?

Sachin Raole

The first order of Rs. 16.75 is already in place. The next stage will be of critical equipment and the critical equipment will range between around Rs. 90 crore to 125 crore. So that will be the next stage. Now, the balance equipments, those will be in the range of maybe Rs. 150 crore to 200 crore. This will be the size of orders, which are expected to flow. But over a period of time, the engineering portion, which we are supposedly to complete will be a period of almost three months to four months maximum and post that this critical equipment will follow.

- Nirav Vasa** On the Petrobras order, we are still negotiating with the customer. So can you share any update or any outcome on that particular order?
- Sachin Raole** Yes. So Petrobras has finally finalized this order with Kero, a China based company. There were three more players and ultimately Kero was one of the final bidder selected by them. The order finalization with Kero is right now going on. It will take almost one and half more months to complete that process. So we are expecting by March end, Kero order will get finalized. Post that, Kero will start negotiating with other suppliers like us and we expect that there should be some movement on the order discussion and negotiation with Kero in the month of April.
- Moderator** Thank you. We will take the next question from the line of Shrishti Dhoot from Sunidhi Securities and Finance. Please go ahead.
- Shrishti Dhoot** Can you please elaborate on your partnership with the Qteros, private Massachusetts biofuel-based company and your partnership with that company regarding the establishment of the 2G technology? And also, a report says that they had raised an additional of \$22 million for the technology and they haven't disclosed the amount that has been gone into the establishment of the second-generation technology. So can you please elaborate on that?
- Sachin Raole** Qteros, this was there I believe couple of years back. And now, it's not in active consideration at all. So we are not considering any business with Qteros and this has not been there for last two years.
- Shrishti Dhoot** From where do you get your resources for the establishment of the second-generation technology and what is the costing and what is the likely revenue, like how much of the cost are you likely to cover in your first establishment?
- Atul Mulay** The technology is completely developed in-house with our technology center Matrix. As we've mentioned, the project cost is in range of about Rs. 600 crore to 700 crore and these business opportunities for us are ranging between Rs. 200 crore to 300 crore in a phase-wise manner, per project and we have at the moment, as I said, we are working on the BPCL, we have got the clearance from Bharat Petroleum Corporation.
- Moderator** Thank you. The next question is from the line of Vikram Suryavanshi from Phillip Capital. Please go ahead.
- Vikram Suryavanshi** Can you highlight how was the performance in brewery in terms of revenue in this quarter or how is the order book?
- Sachin Raole** We generally don't give the breakup of verticals for specific business-related reason. Brewery is doing definitely the way in which it was expected to do in this current year, you know the challenges, which brewery scenario has faced, but it is absolutely up to the mark at this point of time.
- Vikram Suryavanshi** We have seen a good growth in export at least in this quarter in terms of order inflow or execution. How do you see now domestic side to pickup, particularly from ethanol side, how is the sugar companies' response for the incremental blending?
- Atul Mulay** Yes. In fact, we see a good traction in domestic also and in fact one can see the composition, it's a 70-30. So today, the 70% orders are of domestic and out of which 63% are of bioenergy. So already, we have seen the traction from domestic and that too from a sugar industry, especially because as I said, the availability of molasses is more than adequate, so prices has come under very much control.

The profitability per se and in fuel ethanol prices, there is an increment over previous year. So all this three, four factors has given sugar industry a good boost. So we have seen lot of good inquiries and then good closure of orders in domestic market in ethanol.

- Vikram Suryavanshi** Are we seeing any material change in terms of outlook for critical process equipment with the poor run-up in oil prices or how is the sentiment there?
- Atul Mulay** Yes. On critical process equipment also, we've seen upswing and as rightly said, that petroleum prices or the crude oil prices, the upswing is already there and it is not only in domestic, but international upswing also because largely we're again focusing more on international for even our critical process equipment. We see a good traction there as well.
- Moderator** Thank you. The next question is from the line of Kirti Jain from Sundaram Mutual Fund. Please go ahead.
- Kirti Jain** With regard to IOCL, we have signed some binding agreement for the Gujarat based plant and for Panipat unit. What is the stage of it getting translated to order?
- Atul Mulay** Like Bharat Petroleum Corporation, with the IOCL also we have signed an MoU. And again in the same phased manner, it will get concluded for IOC also. All of them are actually on the same stages, but among them, the BPCL has given us that confirmation and we expect a confirmation anytime from IOCL also to come on the same line.
- Kirti Jain** In the budget they have not given any allocation for say the biofuel project implementation, is there any other source through which this biofuel thing would be done?
- Atul Mulay** The biofuel policy came into the force somewhere in 2004 has undergone its revision in 2017 with the various stakeholders, and we are also expecting that and then the policy also provides good incentives for biofuel because as we said that the inquiry for blending has come for 300 crore liters, for ethanol. And today, whatever the sugar industry has given a bid, they have given a bid only for 113 crore, which is a 5% blend. So remaining 5% necessarily has to come from somewhere else and somewhere is that second-generation. So even today for getting that another 5% of the 150 crore, there is no raw material available and that's why government even in budget you would have seen that there are a lot of encouraging references given for agromass waste collection mechanism and the methods and incentivization there. So we see this as an opportunity and this is exactly where the policies are driving and we expect policy to come on anytime. That's what we are waiting for.
- Kirti Jain** But in budget, there isn't any allocation that has been done.
- Atul Mulay** It is not linked to budget, the policy is already in place. It is only the question of implementation and then issuance of the cabinet note, that's what the information the respective ministries have given to the stakeholders. So irrespective of budget, the policy is going to be there and there is no specific mention. On the contrary, people were busy in the budget, perhaps this got delayed.
- Kirti Jain** Despite our traction in domestic ethanol improving, our overall order intake is still dropping Y-o-Y?

- Sachin Raole** We are making a mention that the conversion of inquiry into order is definitely taking more than the expected time, but that's not the question that whether inquiries are disappearing, the inquiries are very much on the horizon and we expect, post the clarity on the budgets and all that stuff, now the conversion should start happening in a faster manner.
- Kirti Jain** So sugar side, we're seeing good traction from Maharashtra and UP for ethanol?
- Atul Mulay** Yes. I was just mentioning that the inquiries are there, projects are there, but the execution of this project is typically the sugar season when they have started, they have started with a good sugar pricing. And off-late, it has come down to some states but now once they again get it stabilized to the certain point, the movement from financial institution will start and then project will start moving.
- Kirti Jain** Now people are doing the ethanol through that waste sugarcane or through the B method or C method, sir?
- Atul Mulay** Today, government, their policy is mentioning that you can do ethanol from B grade, B heavy molasses or C grade molasses, but as of now, it is coming from only C heavy molasses.
- Kirti Jain** But with the current cane variety of the CO2 40 and the ethanol price of Rs. 40 per liter, will it make any IRR sense sir for the sugar company?
- Atul Mulay** In fact today it is one of the best gross margins they're getting because the prices of molasses has come down to the extent of Rs. 600, Rs. 700 a ton in state like UP. Last year, the rate was Rs. 7,000, Rs. 8,000 a tonne. And the rate of ethanol last year was Rs. 39, which has come to Rs. 42. So now, sugar industry is getting benefit from both the sides. The problem the sugar industry is facing what we have learned from the institution is that their **short** margins, their margins when the sugar prices, when their sugar season started was somewhere around Rs. 3,500, 3,600 has come down to the level of about Rs. 2,900-2,700 and now it is getting stabilized and above because of certain policies and incentives, which they're expecting from the government. But actually, the savior is coming from the ethanol industry, which is helping their balance sheets because the gross margins are better here.
- Kirti Jain** On exports markets, how is the traction on the ethanol side?
- Atul Mulay** Ethanol side, country by country, the mandates have been increasing in various countries, whether it is South America, whether it is Thailand or whether it is for that matter with country like Bolivia. Everywhere, the mandates are increasing, and we see the market would come from fuel ethanol, at the same time, we have large base of our customer, which are over about 400 customers across the globe. And with our special efforts on the modernization business, wherein that effluent reduction and steam economy is one of our target technological innovative schemes, we expect a good traction for our modernization vertical, that is we call it as an applied technology in customer solution vertical apart from ethanol business as a whole. So we see good traction from international business.
- Kirti Jain** The flex fuel vehicles are about to come in the country. Are we going to separate fuel for that?
- Atul Mulay** See the flex fuel vehicles today, whatever is coming on to the media is 100% fuel ethanol, this is what we are selling or it is 30% fuel ethanol and remaining is petrol.

And there are in fact some motorcycles also got introduced in the market from multiple producers with the flex fuel in motorcycles.

- Kirti Jain** Do they give similar fuel efficiencies, like what a normal petrol driven, gasoline driven vehicle gives?
- Atul Mulay** Till 20%, it hardly makes any difference, but the whole objective of getting this flex fuel vehicle, whether it is four-wheeler or two wheeler, it's coming from a point of view of environment and logistic. So today, the rural, the whole economics is coming from the rural industry, the industry of manufacturing economies in rural and some of the ministry wanted them to have their own source of fuel there rather than transporting it from refineries to depots and depots to that location, so it saves not only on the cost but environment. So it is coming from both the sides. So generate, promote and consume. So that's the basic fundamental for developing this flex fuel cars or two wheelers.
- Kirti Jain** When can they come to our country?
- Atul Mulay** What I have seen is that a name like TVS is already on in some of the seminars, I have seen their vehicle, motorcycle. I've also seen recently some rickshaws, auto rickshaws from Bajaj and their motorcycles are going to be operated on flex fuel.
- Kirti Jain** In a blended product, only 5% or 10% of the ethanol goes per liter, whereas it is 90%, 100%. The consumption per vehicle is far higher
- Atul Mulay** Yes. So it's an independent consumption, points are getting created. Even today, we are not able to supply 10%, but the whole opportunity of this fundamental is that import substitute and environmental friendly, so government is completely pushing these possible schemes and technology in the market.
- Moderator** Thank you. The next question is from the line of Parul Inamdar, Individual Investor. Please go ahead.
- Parul Inamdar** Could you just throw some light on the kind of margins that we enjoy in the different segments of the business?
- Sachin Raole** Generally, we don't give the segment-wise margins per se, but I can just give you some idea that engineering business margins are almost 3% to 4% lower as compared to the bioenergy margins.
- Parul Inamdar** Could you highlight on what is happening on the partnership front with Gevo?
- Atul Mulay** As we have mentioned that it is already on and it is coming from iso-butanol and iso-butanol from the molasses as a root. Okay. So in country like India, already there is molasses, which is being used for the fuel ethanol. So there is an opportunity coming from other than the fuel ethanol mandate countries wherein the surplus molasses can be converted to iso-butanol.
- Parul Inamdar** Are we seeing any projects coming around from that partnership?
- Atul Mulay** We have definite inquiries and we have also certain inquiries from the domestic market, but it is yet to come to the level wherein we will announce it at the appropriate time.
- Moderator** Thank you. We'll take the next question from the line of Pawan Parakh from Bank of Baroda. Please go ahead.

- Pawan Parakh** The Rs. 16.75 crore order from BPCL has been booked in the current quarter, right?
- Sachin Raole** That's right.
- Pawan Parakh** Yes. If I calculate 61% of the current quarter order inflow, which is Rs. 251 crore, it comes to about Rs. 15 crore, while the BPCL order inflow is Rs. 16.75 crore. So is there some other cancellations or how should we read this?
- Sachin Raole** You are considering 61% as the bioenergy flow.
- Pawan Parakh** Yes.
- Sachin Raole** So in this quarter, order flow was Rs. 251 crore, bioenergy was 42% and within that 42%, you have 2G order also. 61%, if I'm not wrong, you are referring to nine months story.
- Pawan Parakh** On slide eight, Q3 FY18 order inflow of 251 crore, 61% is bioenergy.
- Sachin Raole** Yes. I will get it clarified, don't worry. But it is inclusive of 2G order. So this 61% or whatever percent has been mentioned is inclusive of 2G order. 2G is not other than this.
- Pawan Parakh** Okay. Maybe we can discuss it offline. As you said there are three, four parts of this BPCL order. So as we do the design and engineering portion and we do the equipment supply, which is also both critical and non-critical in nature, how do you see the margin profile across various sub-segments of this order?
- Atul Mulay** See typically, engineering will have definitely much higher margins in the soft order. Though non-critical portion will go on a similar lines of an engineering margins and the process critical will be on very similar line of a 1G business. All in all, there is a much better margin than that of a 1G business in totality.
- Pawan Parakh** By when do you expect all the balance portion of this order to be in our kitty?
- Atul Mulay** It is like typically it is flowing from their processes. Already MoU is in place and what we have seen is that the MoU got closed somewhere in early January or December '17 and today, they started it flowing. So it's a matter of time. Already all tenders are in, clarification is given, bids are open, contract discussions are on. So it's basically time, so we expect really three, four months time to process critical and rest of the orders should follow.
- Pawan Parakh** There is no assurance that since you are doing design and engineering, you would get secure the balance portion of the orders as well, it is open for bidding, right?
- Sachin Raole** The best part is because the licensing of technology is from our side, critical equipments goes hand in hand with this licensing. So, even if we consider the very realistic scenario, even if we stop at critical equipment, then the total order positioning for the 2G will be at least in the range of Rs. 100 crore to 150 crore.
- Pawan Parakh** What is the execution period for this order?
- Atul Mulay** It's about 15 months to 18 months what we've seen.
- Pawan Parakh** So we should see a decent step jump in your FY19 revenues then and profitability?

- Sachin Raole** Yes, that's what we are also working on and hoping for that.
- Pawan Parakh** Any guidance that you can share?
- Sachin Raole** We generally don't share guidance.
- Moderator** Thank you. We will take the last question from the line of Deepak Kapoor from Individual Investor. Please go ahead.
- Deepak Kapoor** My first question is regarding 1G ethanol and sugar industry. Does India allow converting cane to ethanol directly?
- Atul Mulay** Yes. Today it is a basically question of economics. Now, typically, one can see the ethanol price has to be somewhere about 50% higher than that of price of sugar then it becomes commercially viable.
- Deepak Kapoor** But is it allowed by policy can cane be directly converted to ethanol?
- Atul Mulay** As of now, no, but the policy, which is under consideration based on the availability of cane, surplus availability of cane, they are considering this.
- Deepak Kapoor** If such a policy has to be brought in, what are the complications from the perspective of mills, like will we have to have designated plants, where they will allow conversion of cane to ethanol because on the FRP cane pricing mechanism, it's linked to cane yields?
- Atul Mulay** Yes those detailing, I'm not aware of it because it is working at various higher levels at the government, central government as well as various associations, ISMA and team, they're working with the government.
- Deepak Kapoor** My second question is regarding 2G. From whatever I see as the numbers of capex required and the current ethanol pricing as well as the biofuel policy announced by the government few months back giving certain subsidies etc., it seems to me that standalone 2G plants are not viable and that is why only OMCs are currently being pushed to promote it or check it out because on a standalone basis, the numbers just don't match in terms of return on capital at current ethanol prices. Is my understanding right?
- Atul Mulay** Yes, your understanding is right to an extent.
- Deepak Kapoor** What in your opinion should be price of ethanol for this to be viable on a standalone basis because I checked internationally also the best price ethanol from 2G plants is still roughly about 2X of the ethanol in India?
- Atul Mulay** See, it is largely based on what is the co-product you are trying to get out of it. It's not only ethanol, so there are multiple co-products and biochemical, that's why we call it a biorefinery. So unless, it is a biorefinery and you have two or three co-products, the standalone ethanol plant may not make really viable sense based on today's technology.
- Deepak Kapoor** And in your opinion, it could take at least about two years before clarity emerges on this front about how best can be done out of a Biorefinery?

- Atul Mulay** No, not necessarily because for us, we have a demonstration plant in operation. And we are conducting multiple trials for optimization of capex and opex, and definitely, we see a very advanced breakthrough in that.
- Deepak Kapoor** But my understanding is like full scale plant versus a demonstration plant usually has a lot of different challenges?
- Atul Mulay** Not necessarily because we have sort of built a plant of 5,000 liter per day and 12,00,000 liters per day so it is how you scale up the plant. So there are set of skills available with us, we can scale up the plant.
- Moderator** Thank you. We will take the next question from the line of Sanjeev Zarbade from Kotak Securities. Please go ahead.
- Sanjeev Zarbade** Regarding this order in 2G ethanol, would we need to make further investment in manpower resources or we can manage with the existing personnel for delivering this project from BPCL as well as maybe from IOC later on?
- Atul Mulay** See, today's product, it is built in such a way that we need not add any infrastructure or resources for that matter.
- Moderator** Thank you. That was the last question. I now hand the conference over to the management for their closing comments.
- Priyanka Watane** Thank you, ladies and gentlemen, for joining us today. In case of any queries, please write to us. We would be happy to assist. Have a good day.
- Moderator** Ladies and gentlemen, 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.

Disclaimer - The following transcript has been edited for language and grammar, it however may not be a verbatim representation of the call.