

"Thermax Limited Q4 FY2022 Earnings Conference Call"

May 23, 2022







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Moderator: Ladies and gentlemen, good day and welcome to the Q4 FY2022 Earnings Conference Call of Thermax Limited hosted by DAM Capital Advisors. As a reminder, all participant lines will be in the listen-only mode and there will be an opportunity for you to ask questions after the presentation concludes. Should you need assistance during the conference call, please signal an operator by pressing '*' then '0' on your touchtone phone. Please note that this conference is being recorded. I now hand the conference over to Ms. Bhoomika Nair from DAM Capital Advisor. Thank you and over to you, Madam!

- Bhoomika Nair:Thanks, Steven. Good morning, everyone and a warm welcome to the Q4 FY2022 earnings
call of Thermax limited. We have the management today being represented by Mr. Ashish
Bhandari Managing Director and CEO and Mr. Rajendran Arunachalam, Group CFO and
Executive Vice President. I will now hand over the call to Mr. Bhandari for his opening
remarks post which we will open up the floor to Q&A. Over to you, Sir!
- Ashish Bhandari: Very good morning, Bhoomika to you and to everybody else on the call. Thank you for being part of this session today and based on what the earnings release were, I expect this to be quite interesting discussion, so I will take some of those things head on , first of which is about our environment business, what happened in our chemicals business, what is the impact of commodity prices across the board and then kind of covering it with headwinds and tailwinds for our businesses, so first maybe just taking a step back and talking about the macroeconomic situation. I would say, cautiously optimistic and I will say why I would be optimistic in terms of with the rest of the world already talking about a recession and why do we think we are looking at this, with the glass more than half-full.

Interest in terms of the headline numbers that you see of this 3400 crores order book, over the last year we have spoken about that there is a pipeline of these big projects that we expect to get decided sometime in the year and the first quarter was a little slower, but in the second, third, fourth quarter, there was quite a bit of faction out there. I take my strength not from these bigger orders but from the continued broad-based recovery that we have seen in multiple segments, so segment after segment I can look back and say these have been some of the best quarters in terms of steel, cement, pharma, food, multiple sectors, so that kind of gives us a little bit of strength.

Second in terms of the question around what is happening globally and how is then India been difference in this and India and many of the markets here, I would say that I think is an open question and that is why the cautious part comes in, but from the optimist side, I



would say the fact that overall debts rates are relatively lower. Multiple sectors are benefiting from on manufacturing side from just these PLI schemes, the China Plus One Story, overall India from a debt rate perspective from the overall capacity to continue to invest seems in a reasonable position and then the last one, I would say is that from a sector's perspective not just India even some of our growth sectors and Southeast Asia and Africa are showing resilience because our exports markets were relatively slow while India had taken off, we are seeing some amount of strength there as well and you will see that that are international numbers which are relatively strong in Q4 as well.

So, all of that kind of says that that it can continue for a little bit, we challenge for the Indian economies to work in the zone where, demand continues to be managed and on the input costs, are kind of tapered down in a proactive fashion and in that regard the events of the last one week in themselves, some of these exports says on the steel side ,allowing them to import coking coal, helping them on managing the input costs overall, I think if we can manage that gradually that the sector does not hurt, continues to be strong yet becomes a supporter of overall growth could be a fantastic time for India, so that is the whole part one.

Second what happened in our chemicals business, I will say what we did not do as well and what were economic situations that impacted us. So what we did not do well is the raising the prices even before some of this happened, I think we could have done more to increase prices and the reason we did not or we could not as effectively as we would like, was that we have structured our chemicals plant to become more of an export oriented business on the risen side especially, which is where the impact was the maximum elsewhere and so we have structured our business to be in exports unit as I said and what happened was that through this particular year we have been pushing out some of the freight charges and getting better and better it doing that and absorbing some of the commodity price increases because we are looking, we are with the new plant that we have in Dahej, volume growth is also a big area that we are focusing on.

So many of our long-term customers we could increase prices little bit, but not to the extent that the commodity price impact that happen to us, so that I think overall we could have done a little better on we have taken big steps in Q4, but the result of that will start to show up partly in Q1 and then later on as well, so that his point one. Point two, what happened was because of some of what happened in the geopolitical situation, the supply chain got impacted quite a bit. Supply chain got impacted one in terms of revenue where we had a lot of inventory, which was on the water, lot more than any of the previous quarters and even



previous quarters we have had inventory in water, but that number kind of grew even more so, so the profitability on those we were not able to recognise.

We had a couple of shipments to Russia, which again ,we were not able to deliver because of all the complications and the customer that we had was actually an MNC customer, which has now chosen to terminate operations in Russia, so it went through a little bit of that challenge as well and then fourthly from a supply perspective gas availability got impacted in Q4 quite a bit in our Dahej plant and surrounding both are Dahej and Jhagadia plant where gas was not available because of some of what happened and whatever gas was available the price on that went up as well, so that was the net impact of that, I think we started recovering from that in April, but the sharper recovery as things stand in May, that is the expectation.

Now that the supply chain issues have somewhat managed the biggest concern that I see on our chemicals business still is styrene supply where two of the plants globally for various different reasons are going through shut down, etc., so this styrene supply which is the big question is we look at in the chemicals business, so that is the second part of how I look at the business. Third, I would say in terms our green products and things around waste to energy, our overall business model in terms of biomass, bio-ethanol all of that continues to be very robust and some of the supply chain problems globally are getting people to focus even more on some of these options and in that sense a portion of our portfolio, which is growing - is slow, but growing definitely is our solutions business, which is our Biomass supply and our solar opex.

On the Biomass side, I think we are now crossing 30 plants in India, which we are doing on a build and operate basis where we do long-term contracts and then in terms of solar opex it is relatively small part of our business so far and the opex part only started in the last four months. We were putting the team for the three to four months before that and we have now kind of done two opex projects and committed deliverability of 25 megawatts more or less in Tamil Nadu and Maharashtra and with the expectation that in the first year we would like to do somewhere in the 50 to 100 megawatts range and we are confident of getting to that number. Our focus is industrial, our focus is our core customers who we work with many other aspects of energy usage and that is the segment that we want to continue to focus on. I think that is the summary. Let us get into the questions as there are more things to explain about the numbers we will get into otherwise as well.



- Moderator:Thank you very much, Sir. We will now begin the question and answer session. Ladies and
gentlemen, we will wait for a moment while the question queue assembles. The first
question is from the line of Ravi Swaminathan from Spark Capital. Please go ahead.
- Ravi Swaminathan: Sir, good morning. My first question is with respect to the enquiry pipeline and the large orders which are there in the pipeline, you can throw some light on it, we have seen very good order inflow traction, how much can it continue over the next one to two years, you can give your thought process, it will be great, Sir?
- Ashish Bhandari: How much can it continue? I think we will see because the market overall has got reasonable view to large projects at least for the next one year as well, which means the areas where we got these large projects, which is refining and petrochemical, maintain steel and power, which is the FGD portion of our business, all four of these segments have continued visibility to wanting to do capital intensive projects, the question is the availability because they are all areas where projects are competitive, so very difficult to say and especially in an environment where Thermax wants to increase prices whether we will win these projects are not remains to be seen and even in these last quarter while you see so many orders coming in there were at least two major orders that we said no to as well because we were not comfortable with long-term pricing on some of these projects and so it is going to be an interesting time period in the next three to nine months I would say which is difficult to predict.
- Ravi Swaminathan: In terms of the enquiry pipeline in terms of megawatt terms or gigawatt terms, year-on-year, if you can indicate some kind of growth that we might have seen if you can put a number to it, will be great, Sir?
- Ashish Bhandari: I think we are not in the megawatt business at all in power is actually direct power is a small portion of our business with always impact of waste to energy and various different impacts from our product portion of the business, if I take a look at just general pipeline improvement in terms of overall pipeline relative to where we were before Covid I would say more than 20% above in terms of overall pipeline development and health of pipeline relative to pre-COVID times.
- Ravi Swaminathan: Got it, Sir, and lastly development on export duty on steel, will it push capex lower in the steels itself your views on that?



Ashish Bhandari: I think it will impact it a little bit because you can see many of the steel companies, which had very robust capex plans many of them are already saying no this will impact their capex, too early to say by how much, but I think for the government also it is a balance of high steel pricing bringing the entire economy down versus moderation of prices, which keeps the rest of the sectors also wanting to invest and steel while may not wanting to invest to the entire extent still wanting to invest, so I think the question is better put to the steel companies, I do think this will moderate demand got from the steel sector, but it should give a jump to the overall economy in terms of managing inflation and including Thermax would be a beneficiary of that year given the impact that we have from steel prices.

- Ravi Swaminathan:Got it, Sir and my second question is with respect to the chemical margin so basically last
year full year we did around 12% in this margin, what kind of margins should we look at in
the next one two years given the fact that we are delaying price increases a bit?
- Ashish Bhandari: In Q4 some prices were increased quite a bit and the impact of those prices will take some time to show up, so if there is some amount of stability we do want to get to that double digit profitability very fast. I think because that stumbled so badly on predicting on how our chemicals business will pan out previously as well give us some time, but our focus is clearly on that double digit profitability in our chemicals business.
- **Ravi Swaminathan**: So, it is fair to say low teen kind of margins is something that we would be getting for on an annual basis?
- Ashish Bhandari: So, Rajendran what would you say.
- **Rajendran A**: Well, Ravi, I think you will have to wait for a bit probably this quarter for it to run-through because that will give us hopefully visibility on supply availability as well as the supply chain issues and getting down, then I think we will be able to see the margin story for this year coming through.
- Ravi Swaminathan: Got it, Sir. Thanks a lot, Sir.
- Moderator:Thank you. The next question is from the line of Sujit Jain from ASK Investment Managers.Please go ahead.
- Sujit Jain:
 Thank you for the opportunity. Just in with the previous question where you are working towards getting back the margins and chemical business, but on a longer term strategy if



one looks at it, the chemicals sector in India, this sector particularly for Thermax was like you had mentioned in the past speciality chemicals and construction chemicals, so this was in line with selling to your own clients utility chemicals, but the kind of scale up in other chemical companies in India that has happened, perhaps Thermax has missed that trend and like you just mention if I look at Q4 FY2018 data as well, we do not have control over our destiny in number of margins because of styrene fluctuations whenever crude goes up, so in terms of a long-term strategy for your chemical business so there could be some improvement?

Ashish Bhandari: Ok, so, there are actually, now five parts of our chemicals business, two that are resin based, which are specialty resin and then kind of more general purpose anion and cation based resins, the second part is our water treatment chemicals, these three are our biggest portions, we have oil field chemicals and we have construction chemicals both of these are relatively small, in this particular quarter that went by our oil field chemicals business was where we have supplies to Russia, which got impacted. I think I would not be as pessimistic on our chemicals business, it is a business where we think tremendous potential exist and while we just need to work through some of these short-term hiccups, but in long-term, this is a place where we want to continue to add capacity because in these places that are resins business play, the overall demand globally because Indian suppliers have a very low market share is something that we can continue to grow and so let me help understand what is it peer doing to manage our price impact at least, what we have gotten into in Q4 is with more and more of our customers get into a variable pricing model where the price that we provide to them has got some link to styrene, not all of our customers will have such a link, but if we can get to 30% to 40% of our major customers with such a linkage that helps and brings some amount of sanity to our margins here because last year we were posting 24% to 25% profitability in couple of quarters and this year kind of we have gone the other way, but getting into that consistently in that double digit profitability number is I think something that we are looking to get with this indexing in, in terms of pricing. Second, I think our focus of working with US customers in particular and Europe, we are adding headcount in those markets, which means we are investing cost in those markets to build long-term relationships in both specialty chemicals and in terms of resin, so both of these will take a little bit of time, but both of them we see enough line of sight to give us confidence that we think we are on the right track and if anything long-term, which is long-term is the next one to two years we want to be in the mode that we are actually adding capacity in our chemicals business. Last, I would say our construction business is a small business, but there also we are seeing some amount of strength where India overall is demanding more



and more construction chemicals and if we continue our focus on the industrial segments it is a very small part of our business not even relevant to be, it is only relevant to the second similar for chemicals profitability, but one that we think has tremendous potential for growth as well, so overall I think our chemicals business has got a lot of these headwinds, but if we do it right these headwind should be short-term and this long-term business, which has well more than 50% of its revenue coming from exports is one that can be a big part of the Thermax's growth story in the long-term as well.

Sujit Jain: What portions of clearances are actually dependent on Styrene as a raw material?

Ashish Bhandari: Styrene as the raw material, what is the impact percentage, quite substantial on a resin specific, it is a single biggest commodity and we can get you the exact number, I know the number, but I just want to put it in context of how much of our overall business and so before the call is over, I will give you that number.

Sujit Jain: And the current resins capacity and the capacity utilisation?

Ashish Bhandari:The current capacity in Q4 was relatively low because of some of these price increases,
Russia impact, natural gas impact where we could not run the capacity beyond a particular
point, I would say we were barely at a 60% capacity utilisation in our new plant at Dahej, so
we have got quite a bit of capacity available to grow.

- Sujit Jain: And overall capacity also for resin business would be?
- Ashish Bhandari: For which business, for resin?

Yes.

Sujit Jain:

Ashish Bhandari: So, resins overall capacity would still be 70% to 75%.

Sujit Jain: No, 40,000 tons, right?

Ashish Bhandari: Yes, 40,000 between the two plants, but in Dahej, our rated capacity and a de-bottleneck capacity is slightly different because we do not run the plant at full capacity either, but yes, we are looking to manage it effectively. At our Paudh plant, we have close to full capacity utilization, despite some impacts such as gas availability etc., in Q4, but overall we are at capacity utilization. Dahej phase one and phase two together, we would be at 68% in Q4 as



	per the team, Q3 we were at 76%. But I would say even the 76%, there is still some de-bottlenecking we can do in Dahej to increase our rated capacity.Our current rated capacity is 36,000 a year, and with the de-bottlenecking, it can go up to 40,000.
Sujit Jain:	And what is the question is standard boilers out your sales on hiring boilers, which we will be booking I believe in TBWES, full year numbers?
Ashish Bhandari:	What was the question?
Sujit Jain:	I am asking what is the size of standard boilers for Thermax FY2022 and what is the size of high range boilers, which I believe would get booked under TBWES, your subsidiary in the annual revenues?
Ashish Bhandari:	Yes, sure. TBWES you see we share the revenues as part of our subsidiary numbers, both of these businesses are cracking 20% plus growth numbers.
Sujit Jain:	And its absolute numbers?
Ashish Bhandari:	I do not know. Do we share absolute numbers, Rajendran?
Rajendran A:	Not for individual businesses but for TBWES you can wait for the subsidiary results that will be part of our annual results, you will have it at that time.
Sujit Jain:	Thank you.
Moderator:	Thank you. The next question is from the line of Ankur Sharma from HDFC Standard Life Insurance. Please go ahead.
Ankur Sharma:	Good morning. Thanks for your time. Three questions, one on the overall demand environment per se given the sharp slowdown we see in the consumption side towards FMCG, cement, you may agree right I mean everything getting hurt by base cement, seeing negative volume growth just wondering by the positivity on the capex side, so that is something I am trying to kind of understand and secondly, you just see pipeline is up by 20% pre-COVID, but it is a more price driven and therefore that was getting reflected in the higher 20% pipeline?



Ashish Bhandari: So, on your first question, I need to answer that question by having a larger view of the industry's macroeconomic impact. While there is a slowdown in FMCG, I do not see that in every sector. At least in many other places that I look, people are still looking to add capacity. Many people, including air-condition manufacturers, water solution providers, real estate and textile players, continue to see growth.Both cement and steel are certainly looking to add capacities. Refining and petrochemicals, too, are looking to add capacities quite a bit. This is what I think, but what will be the situation in 80 to 90 days from now, it is difficult to say, so we can have our range ability.I would be cautiously optimistic. It is not that kind of a sharp slowdown, at least not in the way that you had mentioned. I do not see it; maybe it is a bit slightly off, so let us just wait and see. Sorry, what was your second question again?

Ankur Sharma: We saw there is a 20% growth in the pipeline?

- Ashish Bhandari:I would still say there would be a double-digit volume growth even in that. Yes, there is a
price impact, and you can see from our numbers. We have not done as good a job of passing
all the pricing so there has been a price impact, which is maybe 10%. But, there has been
more than a 10% volume growth clearly and we can see that the plant capacity utilization,
the labour hours that we are doing at the plant and vis-à-vis the labour hours in the new
volume that is coming, in all of those counts we see those numbers going up.
- Ankur Sharma: Okay perfect. Sir, secondly on the FGD side there again you got few orders this year, so my guess is that NTPC is largely done ordering on the FGD state and private, so how do you see the pipeline kind of building up there, also on the margins given, I think some of the calls also you mentioned that have not increase, right, so just one thing how are you looking at in the order and model?
- Ashish Bhandari: On the order side for FGDs, from the private players we see more strength then maybe I would have said six months ago. Yes, so NTCP and the government ones are done, but on the private side, multiple customers are now looking to execute projects, and that is a positive sign. On the state side also, several projects are in play, but we are very, very cautious on the state side. Yes, we are not an active player working with the state electricity board and all that, so we are very, very cautious. As the year goes, we may choose to act on the state side as possible, but on the private players, we would like to bid, and we see sufficient activity that is actually better than what I would have said maybe six months ago. In terms of pricing and the impact, there has been a big impact on our bottom line from



FGD projects, driven primarily by the long gestation period of these projects. We thought we did a good job of bidding these projects, but even in the six to nine months for these government projects between when we bid for them and when it actually gets awarded, there has been quite a bit of impact. In NTPC, there is a clause for steel price indexing, but that only takes care of some part of the cost. There is an impact on our margins, which is being seen in Q3, Q4, and there will be some impact this year and potentially a little bit next year as well on these. And in some cases, we are even going back to renegotiate contracts and pricing; for at least all the new projects, it has been increased quite a bit. I can see FGD as an area that we will continue to talk to you about in future quarters as well. Yes, we see some strength on the order side, some tailwinds on the cost side as well where there is some softening of steel prices and everything. Still, we have seen a lot of headwinds in this business as well.

- Ankur Sharma: Just last one on the refining side, globally, we have seen a timing capex come given the energy transition. My guess is even in India, apart from IOC, which is still ordering, even HPVC have largely done with the orders on refineries, so you know obviously that's a large area of orders for this year and maybe even 2023, but then going into the next two years, how do we view the space, how do we reduce our dependency and which big sectors I must compensate for the slower ordering from refinery?
- Ashish Bhandari: So I think long-term I would agree with you, but the definition of long-term to me is beyond the seven to ten year period. I think next five years at least India's dependency on fossil fuels in many of the segments relating to transportation, petrochemicals, plastics, and all the derivatives, will continue to be strong. We can see in the discussions that were happening. As much as we want to have control of our supply chain in fertilizers and in many other places, the requirement and the need for investments in refining, petrochemical, fertilizer will continue to be very high. And here, we have a very different story from global because globally, in many markets, oil demand may have reached a peak or closed to a peak, but in India, we are far from that number, so that's in the refining and petrochemical. And if anything, we continue to see projects that are being announced that are reasonable. In my view, what will replace it, is also a thing which is a good discussion to have. First part is, how much can you convert into electricity? So there, I think India wants to do 30 gigawatts a year until 2030. We are far from that number right now, at barely half of that number, so where does that come from is an open question. Bio-mass and bio-ethanol are a part of the answer, but that can barely address 5% of what India needs. The question then is, what happens to coal in India's energy basket? Because we today do not have a replacement for



coal, it could be nuclear in the long-term, which I think would make a lot of sense, but it has a lot of geopolitical and other questions anytime you touch nuclear. I think coal gasification will have a role to play in India, and Thermax is actively looking at coal gasification technologies, including working on our own technology, which in our mind, is best suited to address Indian high ash coal. I think coal gasification is part of this answer to energy security and winning global supplies. So now, to answer your question, I think that is a discussion beyond just the Thermax quarterly results, but from the refining and petrochemical side in the next three-period at least, I do not see it will slow down.

Ankur Sharma: Got it, thanks and all the best.

- Moderator:Thank you. The next question is from the line of Bhavin Vithlani from SBI Mutual Fund.Please go ahead.
- **Bhavin Vithlani**: Thank you for the opportunity. Just a housekeeping question of the 9,400 Crores odd of order inflow for the year, what percentage would be the base orders and what percentage are the large orders?
- Rajendran A:Bhavin, Just give us some time. I think we have declared the large ones to you during the
period of time. We will just figure out what percentage and will let you know shortly.
- **Bhavin Vithlani**: Sure, but is the assumption of 60% base and 40% larger orders, and out of that assumption of broadly, you would say that as more or less, correct?
- Ashish Bhandari: Look, I will say that when we started, I mean pre-COVID, we were at 1,100 to 1,200 Crores base order book, then early in the quarter we talked about 1,500 Crores base orders, which is where that 20% number comes from. Today I look at the business and expect it to provide 1,600 Crores or thereabouts as the order book and then on top of it bigger orders; Q4 was slightly better even on that account, but I think there may be some softening as steel comes down etc. because that price impact is also there. In terms of the direct big orders that we had this quarter about 1600 Crores were the direct big orders that we had in this particular quarter. Even if you take the 1,600 Crores, the number shows more than 2,000 Crores to 1800 Crores would be the base orders that we could have done in Q4.

Bhavin Vithlani: Sure, in terms of margins about mid single digit for the larger orders and early teens margins for the base orders, would that be the fair assumption according to you given the



way that we have gone through unprecedented times on the availability as was the price of materials if assuming it is a big assumption that things settle down now in the next financial year would this assumption be fair according to you?

- Rajendran A: Bhavin, as you see, we take two fixations, one is on our product side, and the other is on our project side, where both of these primarily are in fixed price scenario for us. The ordering out for a project typically happens precedent short period of time of the orders getting finalized, whereas the products will get ordered over a period of time of the execution. So we have challenges on the product side primarily and project side to a limited extent on certain explosives that we incur over the life cycle of the project, which is at the time of execution at the site. Yes, to the extent that the prices come down and settle lower than the current situation there is, I think on the products side we should see an improvement definitely, that is the hope because some of these orders that we have would have been picked up at prices that we would have considered at the time of paid on certain estimates basis given the current prices and now that the prices are at a higher level a decrease over that would definitely help us.
- **Bhavin Vithlani**: Sure, and just last question from my side, you alluded to the outlook on the sector wise maybe just, how are you seeing the opportunities in the steel and the cement sector, cement sector earlier you are saying that the opportunities are largely in the waste heat, is that opportunity still existing or bulk of that is over, this is my last question, the opportunity that you see in the steel and cement?
- Ashish Bhandari: In cement, I think we went through a phase where the brownfield projects many of them happened, and there I think we are going through a bit of a lull period now within Q4 in particular. But on the other side, there are lots of new plants in cement that have been announced, so I do think this place will be active again in the three to nine months window in terms of ordering because overall, on the cement side, there are quite a few new projects that are getting announced. On the steel side, we have not gone through a slowdown, and are still seeing strength on the steel side, but there are bigger projects that are still on the anvil. These bigger projects may not even hit our books in terms of orders in this calendar year. In our estimate, they are more set for our portion of the ordering for next year. So both cement and steel, I would say are reasonably positive brownfield projects are done, but the private capex based new project spending is still available.

Bhavin Vithlani: Thank you so much for taking my question.



- Rajendran A:Bhavin, regarding the question that you asked on the orders, we had FGD orders of about
1,400 Crores and sulphur recovery order of about 1,200 Crores during the year, and then we
had also declared 350 Crores approximate order in our large boiler business. So roughly all
of them put together is about 2,900 Crores plus and order book of 9,400 Crores,
approximately 32% as you can see.
- Moderator:
 Thank you. The next question is from the line of f Charanjit Singh from DSP Mutual Fund.

 Please go ahead.
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- Charanjit Singh: Sir, good morning. Thanks for the opportunity. Sir, my first question is on the international side, while you have talked about in detail on the domestic opportunity and how various end markets are behaving, so in the international markets in Indonesia where we have done the business and in the other geographies where we have a significant presence, how is the outlook there and is it now when the global worries are starting to become much more bigger that there is some kind of slow down which you might see in the export side that is my first question?
- Ashish Bhandari: See, international is an interesting one. All of last year, outside of Q4, we thought international was lagging to where our India business was, effectively. In Southeast Asia, the overall pick up was a lot more muted relative to India. And I think, the areas where demand was really strong, like Vietnam, etc., maybe we were not able to be as locally present and active as we perhaps could have, so many of those opportunities in those markets went to Chinese companies and other people. But in our core markets in Southeast Asia around Indonesia, Thailand, Philippines, and Malaysia, our pipeline is now getting somewhat more stable; it is still not great, but our pipeline is a lot more stable now. Even our plant in Indonesia, I would say had a reasonable Q4; if they can keep their orders at that number, they can break even and get the plant into profitability, which for year four of an operation of a plant is quite good because plants in that geography can take lot more time to get there. So I would say the slowdown that you see in the western markets, in many of our markets which is Southeast Asia, Africa, and the Middle East, we started a bit after the recovery in the western markets. So I think the story there is slightly different. Our challenges are more around improving our market share, hitting our cost points, and providing quality products to customers so that they come back and give us repeat business - that is more of our focus.



- Charanjit Singh: The other question is we have talked about the price hike in this quarter, one is, what is the quantum of price hike across which product category which we would have taken and we have largely also project business, which is what tender driven, so what percentage of the business which you benefit from this price hikes and incremental quantum of price hike what are you expecting to do in the next quarter?
- Ashish Bhandari: Rajendran, you will take that?
- **Rajendran A**: Yes, so, Charanjit, I do not think we have a single number to share with you because we have multiple businesses where the price hikes are based on multiple bids that we do in different segments. One is our standard product, which is pushed through the channel segment, and then there are direct bids, and then there are export jobs both on the product side as well as on the project side for each of our businesses. So these all factored in the current reality and the outlook as we see at that point of time and for the balance execution period for which it has to be done over for the margins that are required to be maintained in that business. So there is no one percentage across all our businesses or even in a single business that we can share with you that what is the kind of percentage increase, I hope that answers.
- Charanjit Singh: And again, then some parts of the business, can we get some sense of what we have been doing on price, not a future projection, but at least?
- Rajendran A:Yes, I do not have that number now, but I think we can probably try and get you the exact
numbers on what we did in Q4. I think we can probably try and give you that.
- Ashish Bhandari: Overall, I do not think we have covered the impact we have had in terms of commodity price increases through our price increases, especially in Q4. That said, in Q1, we see that commodity price, especially the steel prices softening that went up in a big way, but it is now coming down reasonably faster. In terms of price increases we will try and give some colour; we have these numbers, but the question is how much do you share and how much do you not because this is competitive information as well quite a bit. So segment by segment we have targets on commodity prices in the like for like which is in the projects business, the reason I can say that on the project side business where customers that delayed ordering in Q3 and then in Q4 came back with the exact same project, exact same scope wanting to order on a project side our numbers of price increases were close to 20% very high teens what is the number that we had increased the numbers by. I can also say that some of those projects we were not able to close because the customer said no, the numbers



are way out of their budget. They need to go and re-budget and everything. We even lost those orders in some cases, are you guys there?

Charanjit Singh: Yes, thanks, Ashish. I think that is helpful, so just lastly, from my side, we have been talking about the new initiatives, new areas that you want to get in, on the solar renewables. Any thoughts in terms of how we are scaling up any incremental, the momentum which we would have seen and the industry perspective on the renewable side, how you see the thing shipping up in the Indian environment?

Ashish Bhandari: See the market in this segment overall for renewables on the opex side is bit of a mess right now because of effects fluctuations, lack of availability of panels overall, even in wind, there is a little bit, then there is lack of availability and then you have this whole requirement that for certain projects in India the sourcing has to be local and then after that suddenly because India does not have enough capacity then the government says, no you can import for these projects and then even for the projects that you are reporting for the tax impact, the BCD and the way it is applied all of that, so it has been like from our supply side it has been very topsy-turvy. So in that environment, if I think relative to that environment, the demand is very good, so if the market can have some amount of stability on the cost side, I think a lot of opportunities on the demand side will get fructified. Our focus is entirely on industrial; we are not going for utility solar. In the last four months that we have been active in the market on the opex model, we have closed 25 megawatts worth of orders with at least one project that will go into revenue streams in this quarter itself, so either at the end of this quarter or, more likely the beginning of next quarter. We would start to see revenues from the solar opex side. As I said, our goal for the first year of operations is somewhere between 50 and 100 megawatts, which we are reasonably confident of doing and hitting.

Charanjit Singh: Thanks, Ashish for this detailed answer. That is all from my side. Thank you.

Moderator:Thank you. The next question is from the line of Sandeep Tulsiyan from JM Financial.Please go ahead.

Sandeep Tulsiyan: Very good afternoon. The first question is pertaining to the margins in the energy segment, we have seen these margins being quite volatile, and when we contrast the same with the share of the international projects in the same, there has been a lot of weakness, the international contribution of the segment has come down significantly to half over the last three years. If one were to look at that, so if you can just give some guidance over here in



terms of margins, is it more the project mix, which is causing the decline in the margins and as and when these projects come into execution these pressures will sustain or it is more a temporary impact of the mix, which may change and then probably we should look at the margins going back to 9% to 10% levels in energy segments?

Ashish Bhandari: So, in the energy segment, if you go back multiple layers, then it is very simple that there was one very big project in Africa that, both by the size of its project and the overall profitability, which we were able to maintain by executing that project extremely well, so there is an impact from relative to last year and this year I would say in the energy segment we have done reasonably well to maintain our share and possibly grow our share and without this Q4 impact, overall we were on track to delivering numbers that were okay on the profitability side, from a percentage basis not great, but very good from the total number percentage. Our goal when we started the year was to improve profitability and increase volume. In increasing volume, we did better than expectations, but profitability until Q3, we were kind of saying okay can we find a way out, but what happened in Q3 and Q4, 50% was down, what happened in Q4 in March was entirely unexpected. The steel that we buy the flat steel that we buy went up by 15%, the long steel that we buy and the BQ plates we buy went up by more than 20%, the stainless steel tubes that we buy went up well above 20%. All the aluminium and nickel were at 1.8% plus above within a two-week period, so that impact in Q4 was quite a bit. In that light, I would say, the energy segment and our energy business actually did quite well to put out the numbers that we did. I think Chemicals is where the impact was massive for us, but in the energy segment, they kind of did okay. If the numbers come down and there is some reasonable amount of growth that we can do, I think we can grow this number in the coming year and beyond because we see fundamental reasons where why our products will have better demand and acceptance in the market than other people's. For international - I already talked about that one single international project - our focus is more on growing based business in international, which is our factories internationally are getting into more and more segments internationally as opposed to depending on just one big project. I like the path that we are on, yes, it is a slow path, but it is a consistent path, which is a good one. So, I am more cautiously optimistic on growing international business and not comparing us to one project of three years ago, but looking at it on year by year basis and looking now to grow from the base we have.

Sandeep Tulsiyan:Got it. The second question is on the solar assets that you are aiming to build - what kind of
annual capex allocation will you put to that, which will be based on the model where you
set up capacity and then sell power to the industrial customers, which you have spoken



about. If you can give us guidance more from one year and also from a five-year perspective, how do you plan to increase the size of this business?

Rajendran A: So, Sandeep, we have I think, disclosed early as well that over the three to five years timeframe, we intend to deliver 1 gigawatt of solar assets in that particular business and I think as Ashish mentioned that we are targeting 50 to 100 megawatts in this business during this period. Yes, not all of the capital would have been put by us in this, we would be raising debt for all these projects; you can assume that we would probably be contributing more than a standard of close to 30% of the capital that might be required on the equity side.

Sandeep Tulsiyan: So, absolute numbers if you can guide, how much would be the investment next year and from a five-year perspective?

Rajendran A: Yes, I will give that to you over this call.

Sandeep Tulsiyan: Sure, thank you. That was my last question.

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

- Jonas Bhutta: Hi Ashish and Rajendran. I had one question which has three parts I wanted to understand, sort of take a status update on a couple of new initiatives that you had announced three or four quarters back - waste to energy, solar films, etc., out of which waste to energy was something that was heading towards maturity or was more tangible than the other two announcements, so just wanted to get a status update on how the development has been in the past three to four quarters regarding that business?
- Ashish Bhandari: Which announcement specifically in waste to energy are you referring to?

Jonas Bhutta: So, about three quarters back, we tied up with a European company for waste to energy technology.

Ashish Bhandari: So I would say both of those were, and one was announcement that we did I think you are referring to the Steinmuller one, the second one was not an announcement while we did that was more of an early stage startup investment that we did, so it is too early to talk about the solar thin film because I think it is in the technology side and is still very much being worked on. It is I would say a couple of years away before any of that becomes worth



talking about. Specifically, even on waste to energy, if you are talking about the Steinmuller partnership, they have several bids out in the market, but no closure because the market itself has not had much closure because of the pricing for waste to energy in India and this is municipal solid waste. So, I am specifically talking about a category of municipal solid waste projects in India, and I do think that sector will break, government will have to improve pricing, and in that improved pricing many projects will become possible, but right now, the market is still relatively small. That said, waste to energy overall is massively important to Thermax, and if you take a look at even the last quarter, the number of projects that we did that were biomass related and all of biomass is waste, which is agro-waste coming back into energy of various chips and then you have the whole distillery and sugar based waste, which is the gas and spent wash and getting some of that back into the energy source. We received three orders, one in this guarter for non-recoverable solid waste for paper plants, we have got now two orders for bio-CNG and the third one and many more that are on the anvil and a plant of our own on bio-CNG that is also being put in. Last year we got Assam bio-utility project which was relating to a 2G ethanol project, but after that plant, which will get commissioned this financial year, we think lot more projects are also possible, so this waste to energy movement as a whole is of tremendous importance to Thermax and one where we are and of course we talked about the cement waste sheets recovery projects that we had last year and we will continue to get this year as well. Similarly, in steel also, there will be quite a bit of traction, so I think there we are strong. The markets continue to be robust overall, but if you are talking about the specific two announcements, I think those both were really early stage announcements with different expectations, not much to talk about.

- Jonas Bhutta: Sure, the second part of my question was more around the new product launches even this quarter, even the PPT talks about two products in about couple of other projects in steam engineering, so internally how do we track the progress that these products are making, and if you can share with us products introduced in the last three years on account of what percentage of sales and we also sort of understand the kind of progress these products are making otherwise it will largely become announcement products. So if you can help us track that, that would be great?
- Ashish Bhandari: I think your question is reasonable and unfortunately, what is our products and services business, I think we share what are of those as part of our annual reports, we do not give that on a quarterly basis, but we do share our products and services business on an annual basis. In terms of what is new and what percentage of that business comes from new



products that historically we have not done a good job of tabulating and it is something that we are working on internally, but even if we do that, I do not know if we will be comfortable sharing that from a competitiveness point of view I do not know if you want to share that bit, but what I can share with you is growing services is a big part of our focus and services grew massively in this last year and we think that growth in services in terms is something that is repeatable, which means once you get to a particular point you won't fall down as much as like water project business can in a different environment, second - in terms of growing our products and our products business is essentially four segments - it is our we call as a standard boilers business, it is our clean air business, which is our environmental business where we provide a lot of pollution control equipment to many industries, the FGD part of the businesses is the project business. If I remove that the rest of the businesses is the clean air, the environment part of the business that is a standard product. The third is our cooling business, where we have lots of new interesting applications around waste energy and the most recent product that we launched was the heat pump and then we have created products around low heat conversion, so all of those are on the cooling side, and then finally our water business, which is where we have had good amount of growth on our water business and what we are seeing is as we standardise the portfolio there, the impact on profitability is good. In fact, our water business did the best this year in terms of growing top line and keeping bottom line percentages stable, and of course, with the growing top line, the bottom line overall improved quite a bit as well. But this whole standard product business is something that is of importance. Internally, we have restructured our company also to create an industrial products business unit running them very differently from philosophy, from a capability perspective than our project businesses.

- Jonas Bhutta: Lastly, Sir, we have seen the comments Thermax announced the SRU project recently and you spoke about how you are working towards the coal gasification technology. Sir, if you can elaborate on certain other large breakthroughs?
- Ashish Bhandari: The refinery one has been a breakthrough that was part of the Thermax initiative to expand our portfolio in refining and petrochemical beyond the utility and the power block and so this particular project is our fourth attempt at quoting such a project and this one was successful. This one we are very happy to also share that because it is in Assam where we are already executing a big project, our understanding of the local situation, our ability to manage and understand the cost structures all of that was relatively good, so it gave us confidence to go for this project aggressively and now that we have won it, this creates a new segment for Thermax because SRUs and the many Indian refinery and global refinery



projects will need SRUs and doing this project will give us the required track record both internally and externally to do more projects in the future. They may not happen immediately like we do not expect another such order in the next 12 months, but if you look at a five-year horizon, this creates a brand new segment for Thermax. Coal gasification is in its infancy, I think depending on who you talk to, coal gas application can be a very big sector for India or it may not become big because for India, there is a thinking and I subscribe to that, that without coal India's energy basket of 20 to 30 years from now you just cannot see how it will happen, because even if you grow solar at 30 to 35 gigawatts a year, you are still be left with a massive energy basket, which you have to fill from somewhere and if you have to figure out how to fill that beyond coal, you cannot depend on fossil fuels. And we see what is going on in natural gas and in oil pricing because India does not have enough of a supply chain of that so then the question is how do you get coal to become somewhat cleaner, and the only way coal can become cleaner is through coal gasification and carbon capture. Many companies in the world are working on carbon capture, but there is nobody working in India on high ash coal, so there we think the work Thermax has done is truly novel from an India point of view and if the sector takes off we will see, but we will need government help to take the technology to the next level. Here, our technology is still kind of good, we have addressed a big technical risk of our technology, but the plant that we have done, but scalability to plant which is 1,000 times and 3,000 times to size of the plant that we have built will require an intermediate plan before which we will need government support. So, long answer to your question, but I think I have given you a very good insight into both these new areas.

Jonas Bhutta: Thank you, Sir and all the best.

Moderator: Thank you. The next question is from the line of Aditya Mongia from Kotak Securities. Please go ahead.

- Aditya Mongia: Thanks for the opportunity. The question that I had was the first one was on margins. I understand that the capacity utilisation where Thermax is and the sector is can give a chance to have bigger let us say, big margins incrementally, and I want to get a sense whether that will play out in a scenario wherein project cost is going up, how much lever does Thermax have to improve big margins given the capacity utilisation right at this point of time?
- Ashish Bhandari: So, your question was on capacity utilisation and how is it doing and then what is your ability to impact prices now that capacity utilisation is high is that the question?



Aditya Mongia: Absolutely, and what I am trying to get a sense of today - we are at very, very low levels given the technologies that are there; again can the capacity utilisation take margins on the complete other path over the next two years?

- Ashish Bhandari: So I think I will divide the question into two parts the first question is on chemicals and then what is it for the rest of our business, especially in the heating side where we make large boilers and small boilers. On the heating side, we will make boilers, we are close to 100% of our capacity from a rated perspective, we can do a lot of projects, start another shift all of that to increase capacity, but whatever else we do has to be profitable and very well understood. On the chemical side is where we have ideal capacity which is something that we have to grow volumes to be able to use. I think this year will be the litmus test of whether we are able to do that. I am optimistic and confident that we should be able to grow our volumes this year, and as we grow these volumes, be somewhat profitable and what that somewhat profitability is again kind of something that we need to deliver, but clearly for this business, the team's profitability and growth both are expected, at least that is my expectation from the business. We are far from that right now on the profitability side in the way we finished Q4, clearly.
- Aditya Mongia: Understood, the second question that I had was more on the theme of energy efficiency and how Thermax is kind of players in that. We can see through waste to energy part, I can see through the heat pump part, I can see through the electric boiler part. For now, I wanted to get a sense of how from a bandwidth perspective, are you approaching the scheme and maybe some sense of a market price that you have seen at this point?
- Ashish Bhandari: Interesting, waste to energy efficiency even beyond the products has a ramification for services, has a ramification for digital and then almost a solutions approach and how we interact with our customers, so I also think there is quite a bit of potential out there and Thermax is understanding of processes across many industries where energy gets used if we are able to translate that into solutions where we work closely with our customers to deliver certain things and you will see I think we have added quite a bit of digital capability. Our product basket is as good as anybody else, what we need to be able to add as the solutions mindset and an approach very specific key account approach around energy efficiency to be able to win, we are doing that whether that will become successful or not, I do not think anybody in India has done something like this so let us see if we are successful, but I think I agree with you that that the opportunity exists.



- Aditya Mongia: Can we get fructified slightly better in our head if the energy efficiency was to be classified as a portfolio for Thermax, would the contribution to the overall topline be let us say 10% of reports and can this become second larger number, can you just give us some sense of how to take the opportunity?
- Ashish Bhandari: It depends on whether you take wast heat recovery and some of those projects are energy efficiency or sustainability, so if I assume the first one, we have not done a cut overall, all of those solutions we bundle as part of our green portfolio and so the green portfolio we have been sharing our numbers, which is reasonably a big portion of Thermax overall and perhaps the fastest portion. The energy efficiency and the way you are terming all this cooling and the wast heat recovery base projects as energy efficiency, we have not done a math on, but is it 10% of our portfolio I would say it would be somewhere between 5% and 10% of our portfolio.
- Aditya Mongia: Understood, just one last question from my side and this is coming back on margins in the product portfolio which is in the product portfolio chemical where we understand that at a contract level things are changing, but then there is also a standard boiler in the product segment which may have long-term contract, which may be price bound. Are you also focussing on those products segment beyond chemicals wherein, at a contract level, changes are being made or will you be resorting price hikes the way we have done this time around incrementally also?
- Ashish Bhandari: Second ones are easier to execute; yes, the first one so, say take a customer in the US who says I take so many containers per month or fewer chemicals for the next two years, those are the ones where increasing pricing, has been bit more of a challenge the boilers where the delivery is three months, six months, nine months, increasing pricing is relatively fast because you increase your pricing all new orders that you get in have to be at the new price even though you execute them over three months, six months and nine months, increasing the pricing is relatively faster, you do not get into long-term contracts for boiler supply.
- Aditya Mongia: Understood, best of luck. These are my questions. Thanks for your response.
- Rajendran A:Before we close, on the capital expenditure side on the solar business, so over the next one
year on the 1,500 megawatts that we are planning to put is a size of about 50 crore to 100
crore on that plant, and over a five year period it could go up to more 1,000 crore. I think
that was the data point that you wanted to share, thank you.



Moderator:	Thank you. I now hand the conference over to Ms. Bhoomika Nair for closing comments.
	Over to you, Madam!
Bhoomika Nair:	I would just like to thank everyone for taking time out and being on the call and especially the management for giving us an opportunity to host you. Wishing you all the very best, Sir. Thank you so much.
Ashish Bhandar:	Thank you so much, thank you Bhoomika. I wish everyone a very good day and a good week as well. Thanks.
Moderator:	Thank you. Ladies and gentlemen, on behalf of DAM Capital Advisors, that concludes this conference. We thank you all for joining us. You may now disconnect your lines.