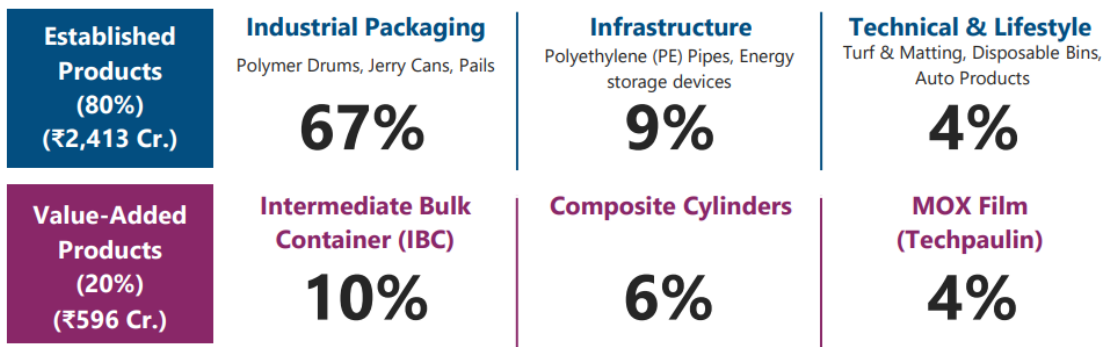


# Note on Time Technoplast

## About

1. Currently they are an industrial packaging company but going forward they want to be a composite product company.
2. Industrial packaging:
  - a. Fourth largest industrial packaging company worldwide behind three giants namely Schutz, Mauser and Greif. Schutz is a German company, Mauser and Greif are US based companies.
    - i. All three of them are more than 100 years old.
  - b. **60% market share** in domestic Industrial packaging.
    - i. World's largest manufacturer of large size plastic drums
  - c. 3rd Largest Intermediate Bulk Container (IBC) manufacturer worldwide
    - i. 70 -80% of the market share in India.
  - d. Customers in Packaging business: Speciality chemicals is about 31%, FMCG is 29%, construction chemical 13% which was virtually zero, paint is 12%, pharmaceutical 6%, food products 5%, lubes & oils are about 4%.
3. CNG:
  - a. Currently **only manufacturing of CNG composite cylinders** in India.
  - b. 2nd Largest Composite Cylinder manufacturer worldwide.
4. Overseas business:
  - a. three units in USA where they have invested around USD 15 million - Chicago, Houston and Nashua (Iowa)
5. manufacturing locations in 11 countries: Market leader in 9 out of 11 countries it operates in.
6. 2nd largest MOX film manufacturer in India
7. Business mix

## Business Mix (FY21 total revenue : ₹3,009 Cr.)



1. 70% - India and 30%-Overseas.

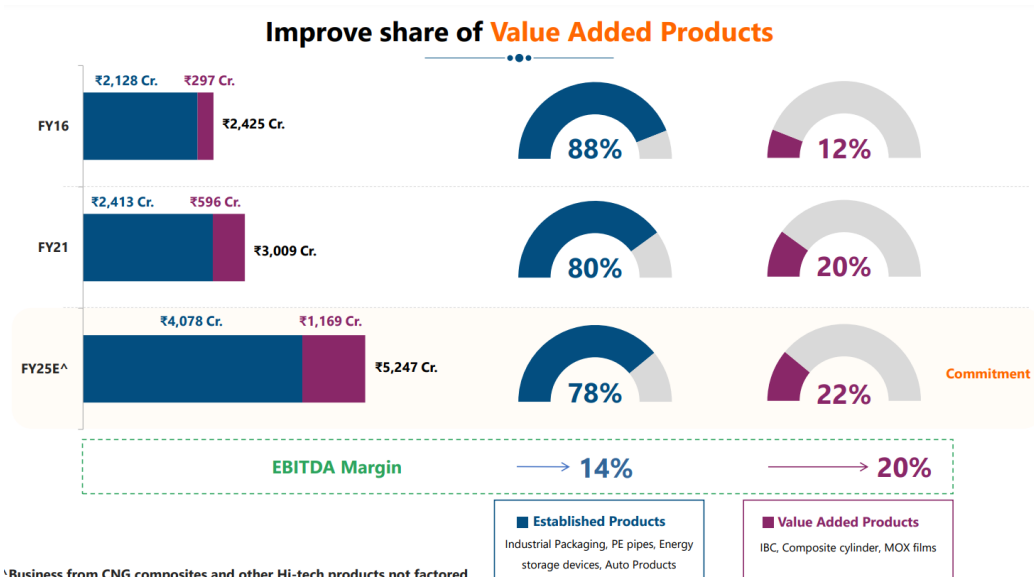
8. **Guidance: By FY25, topline of Rs.5000crs** and net working capital cycle time of 85 days with 14-15% EBITDA margins + Guiding for cumulative profits of Rs.1235crs.

a. Rs.837cr debt, if deleveraging start it will start adding to PAT. (Cost of debt: 9-9.25%)

i. Internal target: Debt to not be more than 2 times EBITDA

b. Steps to improve ROCE:

i. Increase contribution from Value Added Products



1. Value Added products have lessor working capital due to Cash and Carry model: (Q3FY22)

**Sandeep Khanna:** One more question is with regards to the CNG products and LPG cylinders. You had earlier mentioned that the value added products would be moving to cash and carry model. So, this order that you have received for this 1.5 million cylinders, is it also cash and carry basis?

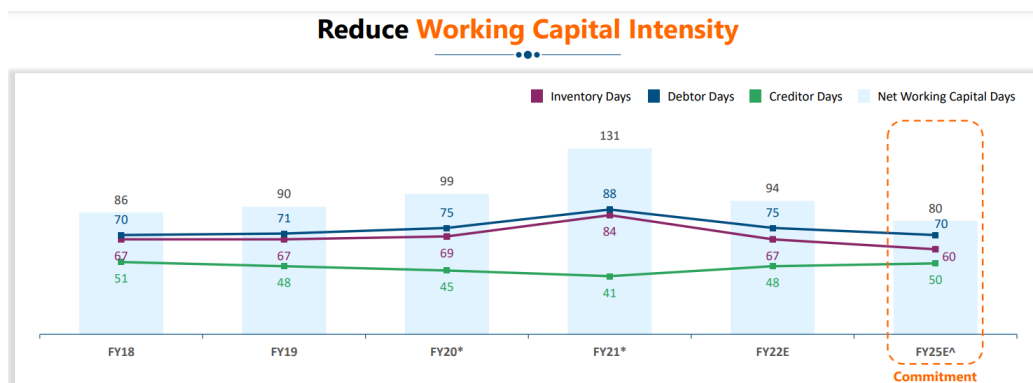
**Bharat Vageria:** Yes, you are right, cash and carry basis right, but again, the minimum time which is required in procurement of the material, because most of the components and inputs which is required for this composite products are imported one. We will have to carry the raw material inventory. Another thing, finished products also we have to keep a minimum lot size because these composite products we can dispatch after getting the approval from outside agency which is approved by the government authority and there is a minimum lot size we need to carry it and it's a continuous process. When the working capital cycle time required for the normal business is 100 days, for value added product it can go down to 60 days. But I can't say zero working capital. Yes, the cycle time will reduce, but as the value added percentage of the revenue will go up, the working capital cycle time will improve much faster. For example, currently value added product is 22% which is you see in the next two years' time it is going to be 30%, then definitely working capital cycle time will come down.

1. Value added products:



2. EBITDA Margins for value added product in the range of 18% to 22%, and the established product in the range of 12% to 14%.

ii. Reduce in Working capital days



\*Operations were impacted due to Covid-19

^Business from CNG composites and other Hi-tech products not factored

- Work on all three fronts of reducing debtors and inventory while negotiating longer payment terms with creditor. Monitor improvement in trends every six months
  - Debtors: Use bill discounting, negotiate lower payment terms. Also low credit period offered in value added products.
  - Inventory: Increase domestic sourcing, reduce inventory requirement with price risk to pass on to customers
  - Creditors: Negotiate longer payment terms

iii. Selling off non-core assets.

iv. Capital allocation:

### Capital Allocation Roadmap: Time To Reward Shareholders

Fund Flow (₹ Cr.)	FY22-25E
Profit after tax	1,235
Increase in net debt	-
<b>Source of funds</b>	<b>1,235</b>
Increase in net fixed assets	105
Increase in net current assets	230
Repayment of debt	195
<b>Application of funds</b>	<b>530</b>
Surplus for dividend payment / Share buy-back/ Development of new products/ Reduction of debt	705

- Internal cash generation remains strong, strengthened with low leverage
- Atmanirbhar (self-sufficient):** No need for external sources of funds
- Target net debt to equity:** To maintain in the range of 0.1-0.4x, assuming net debt is maintained at current levels in absolute number, leverage would come below 0.3x
- Capex:** Average gross capex of ₹175 Cr./ year less depreciation of ₹150 Cr. results in increase of ~₹100 Cr. of non-current assets over 4 years.
- Large capacity to increase dividend payouts or buy-back shares as plans for reduction in working capital take shape
- Projected surplus cash of ~₹700 Cr.**

9. Size of opportunity:

### CNG Cylinder : Overall Market Potential

Huge revenue potential given India's low penetration of CNG fuel stations and CNG vehicles

	Total Estimated Business (Rs. Cr.)	Business in No. of Years	Estimated Market Per Year (Rs. Cr.)	Conversion %	Total Estimated Business (Type-IV) per year (Rs. Cr.)
CNG Cascades	11,453	8	1,432	50%	716
MRUs	1,320	4	330	50%	165
Compressed Bio Gas	6,000	3	2,000	20%	400
Gas Generators for Telecom Towers	4,800	4	1,200	20%	240
CNG for Intracity Buses	5,304	4	1,326	50%	663
<b>Total Estimated value of Business</b>	<b>28,877</b>		<b>6,288</b>		<b>~2,200</b>

a. *Focus on buses; Commercial vehicles and passenger cars, estimated to have equal or more potential Business from commercial vehicles and passenger cars not factored*

process of being uploaded. But just to give you an idea, the bind by OMC for cylinder is about 50 million a year in fact 70 million as well in particular year. We are talking about our capacity only about 1.4 million p.a. at 100% (1.4 million p.a. when same size cylinders are manufactured and 1 million p.a. when different size cylinders are manufactured). So, you can imagine we would also like them to change over progressively rather than from one day to another because otherwise we will run out of capacity.

b. LPG Cylinder opportunity

**Ujjawal Kumar:** Just one question on the LPG side, FY2020 you did an overall business of Rs.179 Crores globally and you have claimed that you are the second largest manufacturer of composite cylinders on the LPG side, trying to understand what is the global market size here and how fast is this growing?

**Anil Jain:** You see the cylinder business per say is growing very rapidly because lot of countries are now switching over from the regular fuel to LPG especially Africa, far East, etc., so therefore the LPG business could be growing at about 10% to 11% and I am talking about LPG cylinder business.. The type-4 that is composite cylinder is only 2% of the total population of LPG cylinders all the rest is steel cylinders so the composite cylinders are gradually eating into the steel cylinder market and also the incremental demand that is coming in because of the changeover from fossil fuel to the LPG. If you ask me the total market for type-IV composite cylinders worldwide could be about 4 million cylinders in a year. We are talking about less than about million cylinders a year so we are looking at 25% of the total composite cylinder business market.

10. **CAPEX:** Incurred capex of Rs.127crs out of which 70-80cr is maintenance capex.

a. But total planned capex will be around 180-200crs.

b. Incremental capex: (Q4FY21)

**Nikhil:** Got it Sir. If my understanding is correct the incremental capex over the years will definitely be more towards cylinders probably say 60%, 70% and probably we will be incurring lesser towards the regular products, right?

**Anil Jain:** Of course the polymer products also are having a lot of opportunities and wherever we require we will be doing capex there, but you are right absolutely there will be large part of our capex is going to be in these areas where we have such large business potential that we just talked about both in cascade and on board application and oxygen, so we will judiciously allocate capital expenditure to the areas where we will have a better ROCE or higher EBITDA or better returns.

c. No expansion needed in LPG business for next 2 years.

d. No plans in expanding Composite Cylinders to oversea even though there is less competition globally, rationale being they first want to test it in India.

11. **Capacity:** 1.4 million cylinders annually (1.4 million p.a. when same size cylinders are manufactured and 1 million p.a. when different size cylinders are manufactured).

## Type-IV LPG Composite Cylinders

### Second Largest Manufacturer Globally

- European Aerospace Technology
- 1.4 million cylinders per annum – Manufacturing
- Innovative options
  - Domestic/Commercial, PU, Boat and Forklift composite cylinders
- Over 10 years of experience, exported to over 42 countries & still growing



Largest Range of LPG cylinders 2kg -22kg

**Explosion Proof | Light Weight | Long Shelf Life | No Corrosion | Translucent**

12. Plans of disinvestment in non-core business segment. Should be done in next 6 months.
13. Received order: <https://www.bseindia.com/xml-data/corpfiling/AttachLive/111d8c3e-464e-4cc2-ad65-86fceb7d95db.pdf>
  - a. Management was talking about the same in Q2FY22 and they were able to get it now:

**Anil Jain:**

Between my investors and I, I am willing to share some important information after the first order, within a month, we have received another order from Indian Oil Corporation which is under execution now. I believe as they launched these composite cylinders in 30 different locations in the country, the response had been very warm. And therefore, they had to placed order for another I think 30,000 or something which is now being executed.

But that's not exciting. **The exciting thing is that we are working very closely with them for preparation of tender specifications for 14.5 lakh composite cylinder, 14.5 lakh cylinders. So, even if you get half of it that will be close to about 7.25,000 cylinders.** And we are told that inquiry would be out by the end of this month. And since, we have already supplied cylinder successfully in the past, and they have been received well by the customers. We see no reason as to why we would not be able to get a significant part of that.

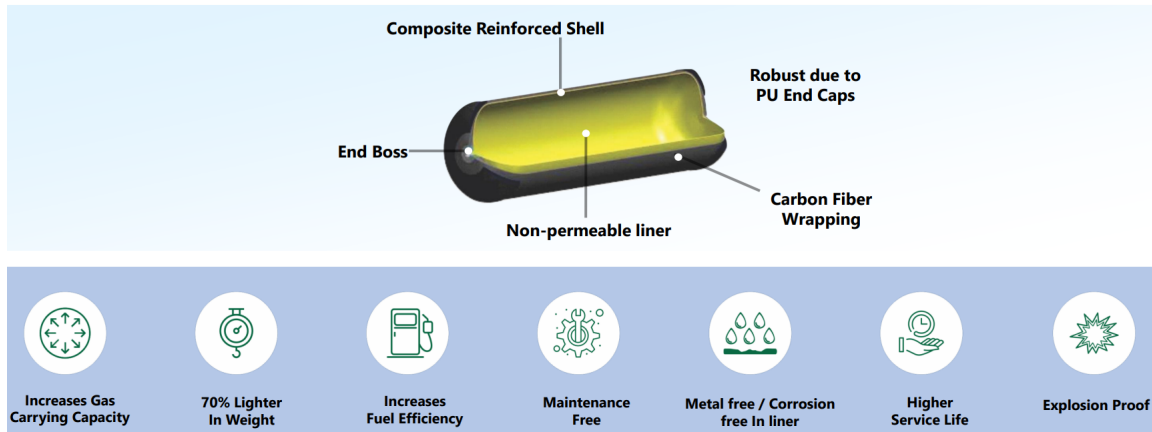
## CNG Business

1. Types of cylinders:
  - a. Type 1: Metal Cylinder (EKC Dominants here)
  - b. Type 2: Metal + small layer of composite material
  - c. Type 3: Fully wrapped in fiber + Aluminum liner

d. Type 4: Polymers + Glass/Carbon fiber (composite material)

2. About Composite cylinders:

### New Development : Type-IV CNG Composite Cylinders



**Why Move Steel ?  
Move Gas Instead.**

**70% Lighter**  
Than Type I Cylinders

**2.2 Times More Gas**  
Per Trip

**Reduce**  
Per kg CNG transportation  
cost by almost 50%

**No Dry Outs**

**Type IV CNG Cylinder Cascades**  
Lighter – Carries 220% More Gas

**Type IV CNG Cylinder – Metal Free**

- Approved by **PESO** and Third party (Bureau Veritas – Europe) in August 2020 for Type-IV cylinder for the **first time in India**.
- Current order book position of Rs. 53 Cr. to be executed during FY2022.

## New Development : CNG Cylinder - Cascade Application



**Anil Jain:**

Yes, I'll just give you a brief. We are approaching OMCs for long time but they have their own priorities. Interesting thing is one of these NGOs have filed a PIL in Delhi High Court where in they enumerated that in last 10 years there have been more than 50,000 people who died because of the steel cylinder explosion for LPG. The court directed, that oil marketing companies should be directed to change over to composite cylinder especially in the area where these cylinders are used for in public places, or in the area where fire brigade or other emergency services are not reachable. High Court refused to intervene in this matter but have directed to OMCs that their petition could be taken as a representation and the government should come back within four months' time with their views as to how it can possibly be done. And after that, we have seen a certain movement for changing over to composite cylinders with some standards are in the

3. Comparison (Source:

<https://twitter.com/katalystwealth/status/1497198783217934341/photo/1>)



Cascades	Type-I	Type-IV
<b>Material of Construction</b>	Made of Steel	Non-metallic inliner, fully wrapped with carbon fibre.
<b>Cylinder Weight(9,000 Litre Capacity Cascade)</b>	13,200 Kgs	2,538 kgs
<b>CNG Carrying Capacity(Per Cascade as per Payload &amp; RTO Norms)</b>	4,500 Litres	9,360 Litres*
<b>Residue Impact</b>	Sulphur/H <sub>2</sub> S residue, Corrodes Metal Cylinder. Maintenance Required.	Polymer inliner inert to all residues.Maintenance Free.
<b>Standard</b>	IS:7285	ISO:11119-3

On-Board	Type-I	Type-IV
<b>Material of Construction</b>	Made of Steel, Exposed to atmosphere and prone to corrosion.	Non-metallic cylinder fully wrapped with carbon fibre.
<b>Standard Sizes</b>	30 Litres – 35 kgs (Tare) 60 Litres – 65 kgs (Tare)	60 Litres – 16 kgs (Tare)
<b>Cylinder Weight</b>	Heavy weight cylinder. Huge additional load on vehicle chassis.	Light weight cylinder, More driving comfort, Higher service life to vehicles.
<b>Residue Impact</b>	Can result into engine seizure or clogging of fuel lines. Prone to rust.	Inliner inerts to CNG residues S/H <sub>2</sub> S. No Rust, No Corrosion.
<b>Vehicle Mileage</b>	Lower mileage due to higher weight.	Higher mileage due to lower weight.
<b>Cylinder Mounting</b>	Heavy Weight – Limits the number of cylinders.	Light Weight – One or more cylinders can be mounted increasing driving range.
<b>Suspension Load</b>	Higher wear and tear of suspension and brake parts.	Lighter cylinder, lighter load on suspension and brake parts.
<b>Explosion Proof</b>	Metal cylinders prone to explosion in the event of fire.	Yes

#### 4. CNG demand and EV: (Q2FY22)

a. "All composite cylinders are replacement of metal cylinder."

**Nakshita Mehta:** So, last question is on, there is increasing adoption of EVs, electric vehicle and all of that. So, what do you think in coming years will be the impact on the CNG and subsequent impact on your business?

**Anil Jain:** Nakshita, let me tell you that we are fully aware and are keeping a close watch on what's going to happen on electrical vehicle. First of all, **Government has a long term plan for CNG.** They have contracted certain areas to the private city gas distributors, and the schedule has been given. **So, from 1400-1500 gas stations, they are going to go up to 10,000 gas stations.** So, that is where we will require a lot of cascades. **And as the CNG becomes available, then we would expect that a lot of these car manufacturers will go for CNG vehicles because the CNG footprints will increase substantially.**

Let me just give you another comparison one is vis-à-vis electrical, let me be honest with you, **the electrical vehicle cost is going to be much higher than the CNG vehicles. And then the cost saving will certainly be there in operating cost, but your capital cost goes up.**

And up till now, if you leave aside some people in USA, **lithium-ion batteries have not been able to prove themselves in India, especially on automobiles.** Again, the lithium-ion batteries need to come from China, where the prices are going up every day. So, I don't know really how long electrical vehicles are sustainable. **Besides for electrical vehicles, you need a very large infrastructure. So, that you could have quick charging or a swap system of the batteries. I would like to think that will take a little longer.**

But let me interestingly tell you, **the more relevant comparison will be with hydrogen vehicles.** As Hyundai and another company have taken permission from PESO that they would like to come with hydrogen vehicles. **The operating costs in hydrogen vehicles will be much less than even electrical vehicles on one end. And secondly, it will be easier for having hydrogen available in a different location that is a replica of how CNG vehicles are operated.** I drove a vehicle which is running on hydrogen with fuel cells, believe you me, it is a pleasure to drive such a vehicle. And we are now knowing that Reliance and some other people have taken a

very aggressive approach towards hydrogen. **But hydrogen also will require composite cylinders.**

The difference is that **a CNG composite cylinder has to have a burst pressure of 470 bars, whereas a hydrogen cylinder will have a burst pressure of 1250 to 1300 bars. So, steel cylinders are completely no no for hydrogen. And we have started working for hydrogen cylinders also as and when the demand comes up. We have been able to go up to the burst pressure in excess of 1000 bars. But to go to 1200 or 1300 bar is not really going to be a problem.** So, if switchover takes place, let us assume one day from CNG to hydrogen, then we are still in good business.

## b. Q1FY22

**Raghupathy T:**

Kajol, very specifically replying to your question as to whether the CNG growth will be effected by the potential that is coming from the electric buses. I must tell you that as far as CNG is concerned, the government has rolled out a very ambitious plan to ensure that the CNG availability is improved. So far the availability of CNG has been focused mainly in the Northern NCR region I would say and probably some parts of Gujarat and Maharashtra. That is where you will see the most of the CNG growth has really taken place. Now as per the last geographical area that have been allotted by the government under the auspicious of PNGRB, they had given ambitious plan to lot of companies to whom the geographical areas have been allotted, they have said the current availability of CNG which is covering about almost 15% of the country or region will have to be increased to almost about 80% of the country. They have made an ambitious plan that the number of CNG stations has to go up from May be 1500 to 2000 currently to almost about 10,000 CNG stations over the period of 8 to 10 years, so with the availability of CNG improving this is likely to definitely grow there is no doubt about it. At the same time there is a valid question as to I mean CNG growth is also taking place primarily because of two reasons; a) it is a clean gas, so you have lesser pollution and b) it does not really make a deep hole in the pocket of the consumer because as on today with the price of the petrol and diesel that is going on when you use CNG, you are actually reducing your operating cost by almost about half, so there

### c. CNG Buses:

talking about passenger cars. Typically, if you look at bus, the bus has to be on in operation all through the day. It is supposed to be travelling something like 800 to 1000 kilometres in a day and it requires 6-8 cylinders of 156 litre capacity to be able to meet out the daily requirement. Now, these cylinders are normally mounted on the top of the bus. The type-I cylinder will be let us say in the case of 156 litre will be about 225 kg or even more whereas it will be about 40-45 kg in the case of type-IV. So what happens is, if type-I cylinder is mounted on the top of bus, the centre of gravity goes up and if the bus takes a sharp turn it is feared that it might overturn. Secondly the number of passengers allowed in such a bus are reduced because the total payload

has to remain the same and part of it is eaten away by the dead weight of steel cylinders. So anybody who is operating a bus with type-IV cylinder where the weight is reduced dramatically has a great advantage of having additional payload. Therefore they accept lot of these type-IV cylinders by the advantages they accrue. Likewise for the commercial vehicles they require 8 to 10 cylinders which are mounted on chassis. They add to the weight of the vehicle as a result of that the payload gets reduced, if they use type-IV composite cylinders where the weight is reduced by 70% to 75%, therefore, they can carry more load and get the freight for that. The buses and commercial vehicle, also the LCVs, the same is applicable, for them as well that is a great advantage. On top of it the passenger vehicles also prefer to have lightweight cylinders as the fuel efficiency improves, secondly the additional dead weight spoils the suspension and the brakes very often therefore when we talked to the passenger vehicle manufacturers they showed tremendous interest in using lightweight cylinders for CNG. Incidentally in the last year itself about 1,70,000 cars have been sold fitted with CNG cylinders by the OEMs and they could be the potential user for on board CNG cylinders. We have got cylinders in 60 litres and 156 litres denomination to meet the requirement of small vehicles and the large vehicles or we can use them in combination. We are expecting that on board application the business will grow tremendously as the rollout of CNG takes place and more CNG will be available on the routes, so people will then prefer to buy CNG vehicle, which they do not do right now. In the next five years time we expect that on board CNG business will grow to about Rs. 500 Crores per year. We talked about for the cascade about Rs. 750 Crores per year and then we talk about on board which could be about Rs. 500 Crores per year. We have not even talking about retrofit business.

**Ujjawal Kumar:** Sir my question is regarding again composite cylinder, it is definitely looking like a very good prospect. I am just trying to understand what is the difference between the pricing of the metal cylinder versus the composite cylinder so that is the first question in terms of the cost difference, second question is have you sort of received any orders from OEMs like Maruti, Hyundai for the on board business as of today?

**Anil Jain:** Second question first, we got the approval for on board application in this month, only after we got the approval we can start sending the samples to discuss with these OEMs, before that they do not even want to discuss the possibilities, so we have already started discussions with OEMs. Firstly we are going to the people like Tata Motors, Ashok Leyland, Eicher, Mahindra and all where they have a lot of buses. By the Supreme Court order the school buses and the buses inside the cities have to be run on CNG, so that is what this is a low hanging fruit when we are talking to these companies who are making buses then the next would be we will go for heavy commercial vehicles. If you ask me personally passenger car will be at the end of our priority list because the process for them is a very long one and probably they negotiate great deals so let us remain focused on area where the customer is in dire need of lightweight composite cylinder on top of the bus or on the commercial vehicle.

1. "By the way Maruti has made an announcement that in the next three years' time they will be making about 4 million cars in a year and out of that 1 million cars are going to be run on CNG"

d. OMCs wont switch:

**Deepesh:** Also, I couldn't see in the investor presentation the major OMCs as a client list. So, are we still in talks with them, have you received any orders from the OMCs like IOC, HPCL, BPCL?

**Anil Jain:** Our talk with them is exactly the same way as Ministry of Agriculture and the farmers. We have been in discussions with them uninterrupted, but Oil marketing companies for some strange reason stuck to steel cylinder, we don't want to attach any motives to that, but it is highly unlikely that they will change over from metal to composite. However, we are very happy to supply our cylinders to overseas, we are supplying right now in more than 38 countries and our product is approved in about 58 countries world over. So, I'm sure as the demand for composite cylinders grows further across the world, we should really be benefited by that. We hope and pray one day the good sense will prevail upon oil marketing companies and I guess it will come from the pressure that they will see from people. We just made a calculation from 2011 to 2019, total number of people killed because of the cylinder explosion was 50,000 and 92% of them were ladies and children. And I can tell you in UAE, there was only one accident in the last three years and one person died. They are now planning to change over entire steel cylinders to composite.

## 5. Price difference between Steel vs Composite: (Q2FY22)

First let me tell you it's not just the liking for the composite cylinder, there is another factor which plays the role. In the former time, cylinders used to be for Rs. 1,400 and we were selling composite cylinder about Rs. 2,200. So, there was a significant price difference between both. Though all these companies acknowledged that the composite cylinders had great advantages over steel cylinder, but because of the price difference, they were not willing to go aggressively for them.

In the meantime as the steel cylinder prices have gone from Rs. 1,400 to Rs. 2,000 whereas composite cylinders are more or less at the same level plus minus Rs. 50, but for the difference in the price 40% has come down to like 10% to 15%. And with all the advantages the composite cylinders have, they are lightweight explosion proof, no rusting, no corrosion etc., I think it is only logical that the oil companies will now look at switching from steel cylinder to composite cylinder.

So, essentially we don't even have to worry about the new rollout of the new connections, because they have a total population of about 36 crores cylinder countrywide. And normally, life of the cylinder is 10 years, but they are sometimes stretch to 15. So, you always have a replacement demand every year, which earlier was being replaced by steel cylinder, but now they are going to look at composites. So, most of these composite cylinder will go as a replacement to the steel cylinders.

1. "Incidentally, when he talked about Type 4 composite, I can quote a very Senior Officers in PESO, who said "that the future of CNG is Type 4 cascades and Type 4

cylinders. “And they are not going anywhere for the next 25 years.” (Q2FY22)

2. “one cascade and one truck is good enough to bring CNG equivalent to type-I two cascades and two trucks”

3. Why Composite cylinders don't burst:

**Sanjay Jain:** Just a quite technical question, you said in that composite cylinder does not explode whereas the steel cylinder explodes. Tried to search the reason, but I could not, so could you help me understand what is the technical reason this cylinder cannot explode?

**Raghupathy T:** The steel cylinder, the LPG has an operating pressure of about 20 bars whether it is used in composite cylinder or for that matter steel cylinder and as per the PESO rules they have a burst pressure of about 70 bars or so. Steel when it is used you normally use a thick gauge of steel to make a steel cylinder with the weight limitations etc., there is a certain limitation in terms of what is thickness of the steel that you can use it for a 70 bar but whenever there is a heat that gets generated in the event of a fire, the pressure inside the cylinder starts developing very, very rapidly, as LPG we would say it is a liquefied petroleum gas because it is in liquid stage it stays in that state but the moment there is heat the liquid starts evaporating and there is a huge pressure that gets developed inside and in that case what

happens is that these steel cylinder is unable to hold back the pressure so it kind of bursts up and so whenever there is an bursting of the steel cylinder it explodes and you have the sharpeners and everything flying away and there is literally a bomb kind of effect that takes place. When it comes to composite cylinder in terms of the structure you have a PE liner inside which is gas tight and then it is bound by glass fibre. In the event of any such eventuality where there is an increase in the temperature of the gas inside and it becomes viscous because of the heat and the fire outside the P-liner is the first one which will get melted over a period of time. So, in that case what happens is LPG gas kinds of permeates through the fibre, the fibres are so strong even in the event of the full thrust of the heat, the fibre does not get burnt. It remains intact and it has the necessary strength to hold back. So, fibre it does not get burst and the inner liner kinds of melts away, so you have a gas which permeates, and it oozes out like you have a small bonfire at the corner of the house that does not take any explosion so there are not any collateral damages that takes place. So, this is in short how the technical comparison takes place in the event whenever there is pressure builds up of LPG in a cylinder.

4. Customer's point of view:

**Hitesh Taunk:** Sir just wanted to know if suppose the prices of the polymers are in the peak and the same is with this metal cylinder so, do we see delay in ordering in a type-4 CNG boarding cylinders or customers are still waiting and seeing the prices going to decline going forward and we will put the order. I mean I just wanted to know whether such a steep price hikes make our customers to delay in placing some orders?

**Bharat Vageria:** As you know it is first time in India type-4 composite cylinder approval we got it, okay. So, there is no question of any prices, I tell you just give me one simple example of using the Bisleri water versus the normal water, okay you know that how Bisleri water is used in spite of what the earlier price was, what is the priced today. People are using due to health advantages and everything, so the Bisleri water usage has increased. So, CNG cylinder has a revenue benefit of 50% cost saving in recurring cost, so the customer does not see the one time capital cost investment. They need to do the one-time capital cost because the recurring cost is more they will reduce the 50% recurring cost, if any new company want to buy the composite cylinder they will slowly, slowly increase if he needs 100 CNG caskets he will buy maybe 50 steel may buy 50 composite and he will wait for at least next six months then he will come back again. There is a question of usability. When you are talking about these 25 years back, India's uses of the plastic drum was negligible and everything was under steel, now in 25 years, we have seen 60% product converting from metal drum to plastic drums, in 25 years because of the advantage of using plastic drums, light weight, no rust, no paint peeling off, easy handling.

and the boss. The advantage is that increases gas carrying capacity because 70% lighter in weight, increase fuel efficiency obviously because of the weight reduction improves. They are a totally maintenance free because they do not have any metal parts, so there is no rusting or corrosion and then there's a very long shelf life or the useful life the reason is again most of the times cylinders actually are discarded most of the time because of excessive corrosion or rusting or the deformation that takes place because of tough handling and needless to say that composite cylinders are completely explosion proof. So, no matter what application these are using in, they are safe all around. There is a distinct method in which we are working; you see the CNG business is in consonance with government's policy. As you know, the government has come up with a policy where they have laid out the future plan for the use of CNG in India. So, we are actually

5. **CNG cascades:** Each CNG station needs 2-3 cascades. (1 cascade has 60 cylinders)

They are used to bring CNG from the gasification unit to dispensing point. They are mounted on trucks for the same. If composite CNG Cylinders are used for the same then the vehicle can carry 2.2 times more gas compared to Steel cylinder.

This is how it looks:



1. "Now typically one cascade would costs about Rs. 70 lakhs so that amounts to about Rs.11453 Crores (approx.), to meet out the 8181 gas stations"
    - a. "total business for the cascade alone between the present arrangement, the 9th and 10th round and also the 11th round is going to be about Rs. 21500 Crores"
  2. **Type-1 cylinder cascade will be about Rs. 23 lakhs; however, type-IV composite cylinder cascade will be about Rs. 70 lakhs.**
    - a. But incidentally for the same capacity as type-IV cylinder cascade, in type-I cylinder cascade you will require two cascades in two trucks, so the **total capex is always comparable** and whatever little difference is there the payback is less than one year because of the operating cost being halved.
6. Competition in Composite cylinders:
- a. "If you look at other manufacturers worldwide there are just a few, there is a company called Agility, which does type-IV cylinders, Indoruss who together with TK Fujikan in South Korea, there is one Luxfer, and another one is Quantum. And there are type-III cylinders where the inliner is made out of aluminium and then you have carbon fibre on top. We have got three people, Worthington, Luxfer and Catalina, all of them are from USA and others I talked about are from Europe in type-IV. So we have the advantage of being the first one in the country, we have got PESO approvals so nobody can displace us in a hurry because PESO takes anyway between two to three years to approve cylinders and we are building up the references, our cascades are in place, we are already talking to OEMs for on board application, so I think that the leads we have taken already will stay with us and help us grow orders."  
(Q4FY21)

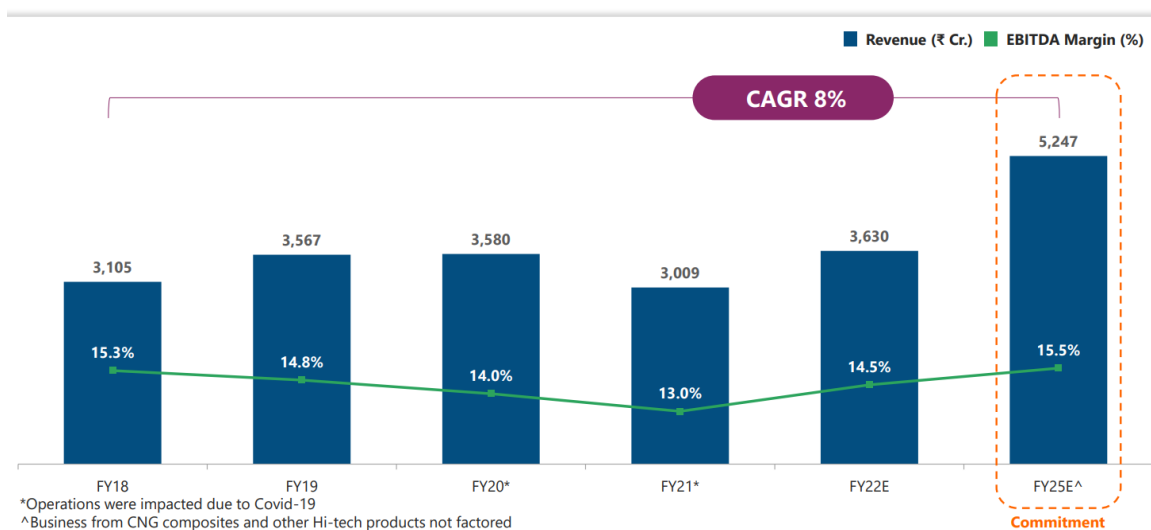


7. Life of Cylinders: 20 years for composite where as steel cylinder 10-15years with inspection every 3-5 years.

## Things I did not like

1. Death of passionate promoter Mr.Anil Jain
2. Almost 60% of their Polymers are imported.
3. Company decided to increase in the share capital from Rs.32,50,00,000 to Rs.52,50,00,000.
4. Growth has been muted in past

### Strong Revenue Growth and Stable EBITDA Margin



5. Promoter pledge was 18% now reduced to 4%: The share is given as collateral security, the prime security is land and building, which has a value of more than the loan taken from the lending company.
6. If there is pipeline then no cascades required:

**Vishal Rampuria:** Okay. But in case the entire CGD player has got a pipeline in that case, they would not need this extra cascade, right.

**Anil Jain:** Yes, you are right absolutely. If you talk about pipeline let me tell you the pipeline connection for the CNG gas station is very limited number one. Number two, government now wants to bring CNG to the doorsteps of the consumer. So, you cannot have a pipeline going to the BEST depot or to the telecom tower of Reliance. There you have to bring CNG to the place and that can be only done with the help of casing. Yes, in some areas, if you have a pipeline you would not require cascades, but you have seen we have only considered 50% of what the business potential is in our internal

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calculations. Even today, if you look at the existing CNG gas stations, the pipeline connection is less than 20-22%.

7. Pipe Business: I think they should exit this business as well but management has no such plans.
  - a. Planning to sell off battery and Pipe business but as they have started getting orders for batteries from Tesla they are looking for better buyer.
  - b. They also supply to Railways from their Bangalore unit which would attract good buyer.
  - c. Tesla as a customer for their battery business (order size is very small as of now):

**Nilesh Shah:** Any other further continuing orders from Tesla for battery sir?

**Bharat Vageria:** I think when we were talking in the last call, at that time we had received the order for Rs. 5 crores value. We have mentioned at that time that they will give some quantity of the order again, so yes, Rs. 2 crore value orders they have released. That earlier quantity we have supplied and further we are developing with them as we have mentioned lithium ion batteries for the solar sector. Whatever batteries we have supplied to them, no complaints, touchwood and the business is going to be enhanced from April 2022 onwards.

**Nilesh Shah:** So, we may not divest the battery business?

**Bharat Vageria:** I'm not saying no. Let us first improve the business because the utilization is lower at 40% which we are expecting we can get a good value when the business will be at the 60% or 70% level, which we are expecting in the next year time. But we are keeping our eyes open because the good development that is done by the company. In FY'22-23 we will have a sizable business, maybe in the range of around 180 crores business. So we are keeping our eyes open, and if we get any good value, we will sell it. We are not a distress seller at the same time because a lot of development has taken place in the last 18 months' time.

**Nilesh Shah:** Have Tesla officials visited the plant?

**Bharat Vageria:** Of course, yes, yes, their CEO, their CFO, three, four people have visited our plant. They have a system for vendor approval which is a long process which they have passed already. I advise you, since you are in Bangalore, you can go at any time and see that plant.

**Nilesh Shah:** Definitely, I will.

8. Around 60cr land and building being utilized which they plan to sell. (Q4Fy21)  
(Excluding battery business).

value, the money will be used for the other meaningful assets. Now the assets which is 60 crore identified are land and buildings which the company at one point of time acquired for expansion in the different locations but company management then decided to consolidate operation at particular location to reduce the administrative costs. These lands and buildings are available which can be planned as the market normalize and encash the value. Molds and tools related to medical business, we feel it is a good time because many companies are looking to buy some kind of the medical products so it will help them to get these tools and molds which are readily available and with all the approvals in place. Other items include business related furniture business. One point of time, personally it was very good, but now it is almost a 20 years old and non-technology business. So management had decided to opt out but again, I am clarifying the injection moulding machines, which are common machines for manufacturing of the packaging accessories, for manufacturing polymer space, that will continue remain with the company but the molds and tools which can be disposed off.

The management has decided to exit from non-core business of medical products, furniture business and battery division.

### Dispose of Non Core Business/ Assets

- **Focusing on core business and dispose of non-core business/ assets**
  - Management has decided to exit from non-core business of Medical equipments, furniture business and Battery division
  - Accordingly 'Assets held for sale' of Rs. 60 Cr., other than Battery division.  
Classified in Balance sheet for FY21 that includes
    - Unused land and building
    - Molds and tools related to medical business
    - Molds and tools related to furniture division

## Miscellaneous

1. No single customer accounting for more than 5% of revenues. (For their core business)
  - a. Long standing relationship with over 25 years with customers. Never lost a single customer.
    - i. Customers spread across industries which protects them from any single industry downturn.
2. Steel cannot be replaced everywhere (Q4FY21)

**Jigar Shah:** My question was that steel prices have gone up through the roof so do you expect that polymer drums would gain the market share as against steel drums across the world?

**Anil Jain:** Yes, you are right absolutely right. One is that we can get more market share, secondly we can get a better price for our polymer drums and I think we will prefer later because we have a fairly significant market share. 50% is steel drums and the 50% is polymer drums so I think that is more or less given, but within the same customer since the steel prices have gone up customers are willing to pay a bit better for polymer drums now rather than comparing with the steel drum prices. You see the steel drums are not being replaced in certain area for example lubricating oil or some chemicals which cannot be filled in plastic drums so that cannot be changed because of the chemical characteristic of polymers, but yes you are right the steel prices staying up certainly gives us an opportunity to penetrate into the customers who are better pay masters.



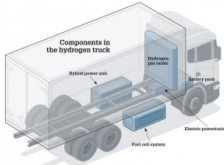

### 3. Optionality

- a. Bio gas:
  - i. "I talked to you about gas generators for telecom towers. Total telecom towers are about 1.8 lakhs. We expect 20% of them will convert over the gas generators, there will be about 32,000 telecom towers. The MRU required, either it will be an MRU or a stationary type IV cascades for each telecom tower, the total demand could be 8000 MRUs. If you take 60 lakh as the cost of cascades inside that MRU, so that alone can be built up over Rs. 4800 crores." (Analyst day)
  - b. "we are now developing composite air tanks as you know the buses and trucks require a lot of air tanks for air brakes etc, which are made from metal. So, we are trying to replace those tanks with composites."
  - c. Mobile refuelling unit for CNG

I don't know whether you have seen the newspapers, but there have been several news items wherein only recently on June 8, 2021 Honourable **Minister of Petroleum and Natural Gas, Mr. Dharmendra Pradhan** has launched what we call as **mobile refuelling unit for CNG**. Now, one might wonder what this mobile refuelling unit is. Now, you have to go to the gas station to get the CNG, government is now changing it completely. What they're saying is **we will bring CNG to your doorsteps**. So, this mobile refilling unit is nothing but **a type IV cylinder cascade as a major part of it and there is a compressor mounted on the vehicle**, so that the CNG gas can be filled on the vehicle. **Each MRU can fill in something like 300 or 400 vehicles a day**. **You don't require a very premium location for the CNG station, it could be by the side of the road**, like you have the PUC trucks waiting at the road side or it can be on the highway and the interesting thing is it can actually bring CNG to people who at present do not have an access. So for example, if there's a fleet owner this can bring CNG to his yard where they can fill in all their trucks or buses. School buses, it can be filled in the premises itself and boats, they obviously can't come out of the water and come to the gas station. This MRU can actually reach them out and another advantage of that is it sheer off the peak hour rush. So for example, if a gas station is running out of CNG during the peak hour this MRU you can reach there and share their burden or load. MRU is going to be a very, very interesting concept and government is very sure that with the advent of MRUs the reach of CNG will improve dramatically.

The demand potential for us in MRUs, the government has said that the **total gas stations are going to be about 7300 till 2024 and out of that 2200 will be converted into what we call as MRUs**. So, the total existing and committed new CNG stations in India in 2024 would be 7300, conversion to MRU will be about 30%, that's about 2200, we will take the **cost of the cascades in MRU as 60 lakhs**. The total business potential in next four years is going to be **1,230 crores**. Incidentally, I forgot to mention earlier that for **type-IV composite cylinders we are the only manufacturer in the country**. Of course there are some people who import and tried to sell it, but worldwide the key manufacturers are Agility, Hexagon in USA, Luxfer and Indoruss. They are either in USA, and one of them is in Korea. The type-III cylinder there is a aluminium inliner. There's a company called Worthington in USA, Luxfer in USA and Quantum in USA. So there is no one who is manufacturing type III or type IV composite cylinder in our country and considering the fact that the cascades is made out of type IV composite cylinders have numerous advantages that I have numerated just now. There are no marks for guessing that the business will actually get diverted into a type IV composite cylinder cascades and we will be the biggest beneficiary. The potential is just enumerated to you, both in terms of MRUs and also for the gas stations.

## Next Exciting Emerging Opportunities in Composites

Oxygen Cylinder	Composite Air Tanks	Hydrogen Cylinder for Fuel Cells	Composite Water Heater
 <ul style="list-style-type: none"> <li>Carbon Fibre Reinforced Composite Cylinder Type-III for Oxygen</li> <li>Feather weight (80% lighter) and portable</li> <li>Medical grade oxygen</li> <li>Application: Home Oxygen Therapy, healthcare institutions.</li> </ul>	 <ul style="list-style-type: none"> <li>Air Tank for commercial vehicles air brake system</li> <li>Impact resistant and light weight (75% less)</li> <li>Corrosion proof and extremely durable</li> </ul>	 <ul style="list-style-type: none"> <li>Type-IV Carbon wrapped cylinders</li> <li>Light weight (90% weight reduction) - provides better fuel economy and better payload</li> <li>Reliable and safe</li> <li>Applications – Hydrogen Cars, power generation (Towers)</li> </ul>	 <ul style="list-style-type: none"> <li>Made with HDPE inner liner &amp; glass fibre composite outer winding retains heat for longer time.</li> <li>Life Time Warranty</li> <li>Light weight (70% less), not prone to leakages, longer life, no denting, no scratches, corrosion free, no smelly water and less power consumption</li> </ul>

Now the compressed biogas (CBG), this is one of the biggest areas that the government is looking at, especially if you remember bio waste, solid waste etc is a big problem to dispose off and now it is coming under the ambitious plan that waste can actually be used for generating biogas and government is giving permission for that biogas to be dispensed from the gas stations, owned by OMCs all by way of MRUs, that I just talked to you about. So, the total CBG plants by 2023 are estimated to be 5000. Number of cascades required per plant is minimum two, one for dispensing and one for going back and bringing CNG to the location. So, the total number of cascades will be about 10,000, if you take the cost of the cascades to be about 60 lakhs each that can be a business of about Rs. 6000 crores in the next three years' time.

This is the picture that I was talking about. You can see the cylinders on the top of the bus. Normally if you take interstate buses they are required to run about 1000 kilometres in 24 or less than 24 hours time. So, before that they have to fill in adequate CNG which can suffice for their onward and return journey. So, the number of buses on road upto 2024 are estimated to be 2,10,000. We expect the buses which will convert to CNG and that is what are the estimates, 85,000 buses will convert into CNG. Of course, there are ably advice and instruction for the Supreme Court of India in one of their judgments, number of cylinders per bus is going to be about eight. So, the total number of cylinders required it's about 6.8 lakhs. If we take the cost of each cylinder as about 78,000 that generates a business of about 5300 crores. But needless to say, that this will only the buses changeover to CNG, the running cost saving will be about 9000 crores and the incremental conversion costs would only be just 3300 crores. So, you can imagine the amount of savings that both the bus owners will have, and also the government will be able to save in foreign exchange.

4. Management's focus changing:



5. Carbon fiber not available easily:



**Vishal Rampuria:** So, one more thing again on this. So, what is the raw material for this and whether it is sourced locally or it is imported.

**Anil Jain:** That is a very interesting question. You see, I told you that the cascade comprises of the inliner, which is the same material called polyethylene same one that we use for our industrial packaging, but the carbon fibre necessarily has to be imported. We import it from Japan or Korea. This is a restricted item and you can only get this carbon fibre after a lot of due diligence that takes place because you can use this carbon fibre in making rockets, missiles or even hand held guns or rocket launchers. They make sure that this carbon fibre does not fall in wrong hands.

## Valuation

Guidance of Rs.5000cr topline by FY25 with 14-15% EBITDA.

Leading to Rs.700-750crs of EBITDA.

Currently EBITDA as of 9MFY22 at Rs.368crs.

Possibility of doubling of EBITDA + Rerating: PE trades around 8 compared to CNG peers: Everest Kanto at 12-13 and Confidence Petroleum around 19-20 times.

Reason being Time Technoplast is primarily a plastic company which is now shifting towards composite products.

— Arjun badola (@badola\_arjun)