

**Corporate
Presentation**

**February
2025**



TIME

**TIME TECHNOPLAST LTD.
Bringing Polymers To Life**

BSE: 532856 | NSE: TIMETECHNO | ISIN: INE508G01029 | CIN: L27203DD1989PLC003240

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Company Overview



LEADING THROUGH INNOVATION AND TECHNOLOGY

Leading Global Industrial packaging company

First to launch Type-IV Composite Cylinder for LPG, CNG (CNG cascade and on-board application), and Hydrogen in India. **2nd Largest** Composite Cylinder manufacturer worldwide.

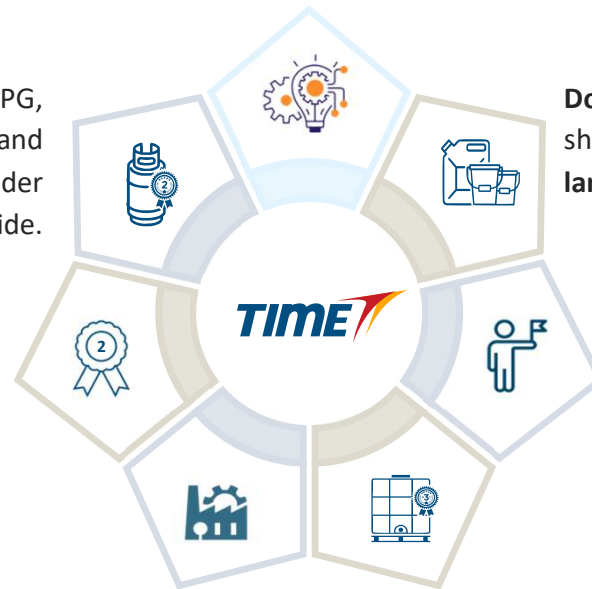
Dominant market position with over 55% market share in domestic Industrial packaging. **World's largest manufacturer** of large size plastic drums

2nd largest MOX film manufacturer in India

Market leader in 9 out of 11 countries it operates in

Major Player in manufacturing of HDPE pipes in India

First to launch Intermediate Bulk Container (IBC) in India and **3rd Largest** IBC manufacturer worldwide.



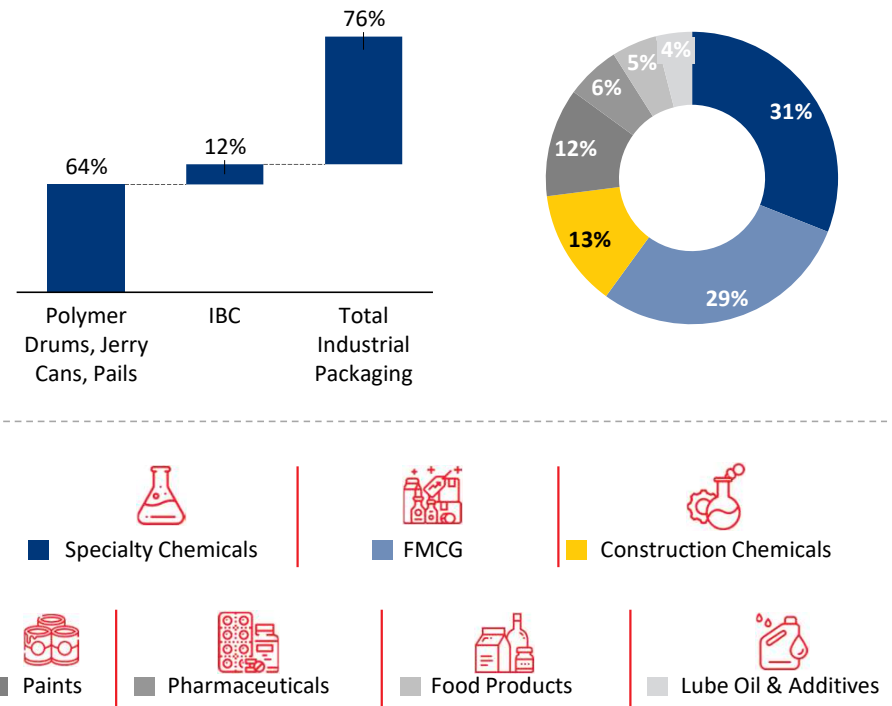
Time Technoplast at a Glance



Business Mix (FY24 Total Revenue : Rs. 5,007 Cr.)

75%	(Rs. 3,725 Cr.) Established Products	25%	(Rs. 1,282 Cr.) Value-Added Products
64%	Industrial Packaging (Rs. 3205 Cr) Polymer Drums, Jerry Cans, Pails	12%	Industrial Packaging - Intermediate Bulk Container (IBC) (Rs. 600 Cr)
7%	Infrastructure (Rs. 350 Cr) Polyethylene (PE) Pipes, Energy storage devices	10%	Composite Products (Rs. 500 Cr) (LPG, CNG & Oxygen)
4%	Technical & Lifestyle (Rs. 200 Cr) Turf & Matting, Disposable Bins, Auto Products	3%	MOX Film (Rs. 150 Cr) (Techpaulin)

Industrial Packaging Sales by User Industry



- Strong presence in Asia & MENA regions
- 14+ recognized brands with over 900 institutional customers globally
- Well established in-house R&D team of over 30 people combined experience of 450+ years

Innovative Polymer Products

Industrial Packaging

Drums & Containers



Jerry Cans



Conipack Pails



Infrastructure

HDPE Pipes



Energy Storage Devices



Auto Components



Value Added Products

Industrial Packaging - Composite IBCs



Composite Products (LPG, CNG and Oxygen)



MOX Films



Hi-Tech Products

DEF (Urea) Tanks



Composite Air Tank



Hydraulic Oil Tank



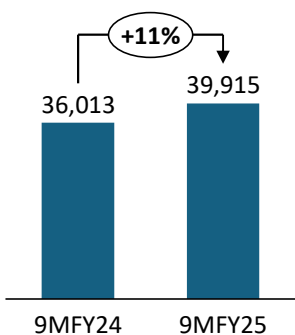
and more...

- Focus on Innovative & Tech oriented polymer products and have several firsts to our credit-
- 1st to launch PE drums to replace steel
- 1st to launch IBC
- 1st to launch Composite Gas cylinders
- 1st to launch Tubular Gel Batteries
- 1st to launch Anti-Spray Rain Flaps
- 1st Plastic Fuel tanks in CVs
- 1st to receive approval for Composite cylinders for Hydrogen

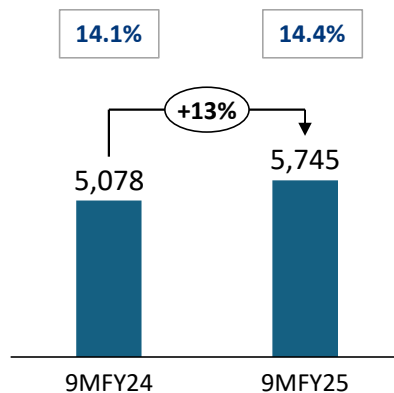
9MFY25 Financial Snapshot



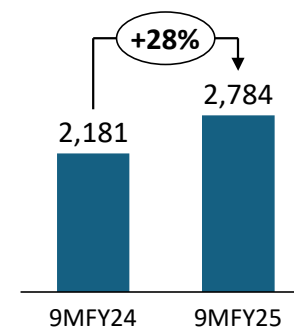
Total Income (₹ Mn)



EBITDA (₹ Mn) and Margin (%)



PAT (₹ Mn)



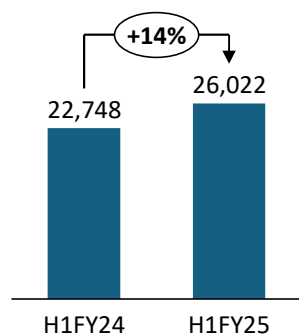
Particulars	India	Overseas
Volume Growth (14% YoY)	14%	16%
Revenue Growth (11% YoY)	10%	12%
Revenue Contribution	65%	35%
EBITDA Margin	14.5%	14.2%
PAT Margin	6.6%	7.7%
Cash Profit Margin	10.1%	10.4%

- Value added products grew by 17% in 9MFY25 as compared to 9MFY24, while established products grew by 9%. The company's focus remains to increase the share of value-added products in its revenue and improve margins.
- Total Debt reduced by Rs. 924 Mn in 9MFY25
- Net Cash from Operating Activities in 9MFY25 is Rs. 2,850 Mn

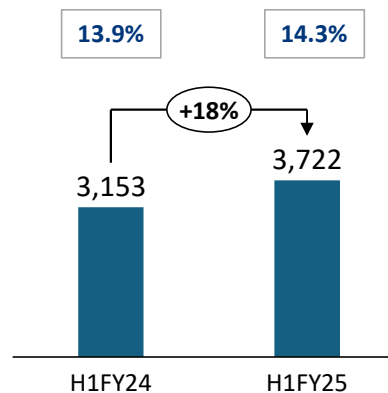
H1FY25 Financial Snapshot



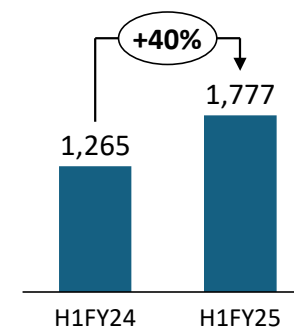
Total Income (₹ Mn)



EBITDA (₹ Mn) and Margin (%)



PAT (₹ Mn)



Particulars	India	Overseas
Volume Growth (16% YoY)	16%	16%
Revenue Growth (14% YoY)	14%	14%
Revenue Contribution	65%	35%
EBITDA Margin	14.4%	14.1%
PAT Margin	6.4%	7.6%
Cash Profit Margin	9.8%	10.4%

- Value added products grew by 20% in H1FY25 as compared to H1FY24, while established products grew by 13%. The company's focus remains to increase the share of value-added products in its revenue and improve margins.
- Total Debt reduced by Rs. 518 Mn from H1FY24
- Net Cash from Operating Activities in H1FY25 is Rs. 1,378 Mn

Over three decades of leadership position



Pre IPO (prior to 2007)

Post IPO (from 2007)

1992 - 2000

- Incorporated Pvt. Ltd. Co.
- Production facilities in western region



- Launched Lifestyle products



- Expanded in North and South India

2001 - 2006

- Launched Automotive related Products



- Production facilities in East India
- Ventured in Thailand
- Acquisition of TPL Plastech Ltd. formerly known as Tainwala Polycontainers Ltd.

2007 - 2010

- Got listed on NSE & BSE
- Entered into battery business by way of acquisition of NED Energy Ltd.
- JV with Mauser for manufacturing steel drums
- Green field manufacturing set up in Sharjah (UAE)
- Additions in products base such as Plastic Fuel Tanks, IBC and Disposal Bins



2011 - 2020

- Green field manufacturing set up overseas - Bahrain, Indonesia, Vietnam, Egypt, Malaysia and USA
- Acquisition in Industrial Packaging Segment – Thailand, Taiwan and Saudi Arabia
- Started HDPE and Cable Ducts pipe manufacturing
- Acquisition of company for technology of Composite Cylinders, consolidation with existing operations and Launch of LPG cylinders
- Started MOX films business



2020 onwards

- Expanded in USA with 3rd Greenfield unit
- 1st and only company in India to receive PESO approval for manufacturing of Type-IV CNG cylinders for Cascade and on-board applications.



- Expanded composite cylinder portfolio with launch of Type-III Cylinders for breathing air and medical oxygen.
- 1st company in India to receive PESO approval for manufacturing of High-Pressure Type-IV Composite Cylinders for Hydrogen.



Wide Geographical Presence



Manufacturing Presence in **11 Countries** to meet local demand | **20 Manufacturing** locations in India



WE are where OUR CUSTOMERS are.... Focus on high growth manufacturing geographies

...with global marquee clients



Entrenched and longstanding relationship across multiple locations



Established long-term relationships has allowed capturing significant share of business for reputed clientele across the globe

Customer	No. of years of Relationship	Estimated wallet share	Countries
Solvay	30	~30%	3 (India, Thailand and Indonesia)
Dow Chemicals	16	~70%	7 (India, Thailand, Taiwan, Vietnam, Bahrain, KSA & UAE)
Ecolab	16	~60%	8 (India, Thailand, Taiwan, Malaysia, Indonesia, Bahrain, Egypt & UAE)
BASF	16	~50%	7 (India, Thailand, Indonesia, Taiwan, Malaysia, Vietnam and UAE)
Chemanol	15	~70%	2 (Bahrain and KSA)
Synthomer	15	~75%	6 (Thailand, Malaysia, Vietnam, Bahrain, UAE and KSA)
Shell	15	~70%	5 (India, Thailand, Malaysia, Egypt and UAE)
NALCO	12	~50%	3 (Sharjah, Bahrain and KSA)
SABIC	9	~40%	2 (Bahrain and KSA)
Galaxy	8	~70%	2 (India and Egypt)
Centurion	5	~75%	1 (USA)

Low customer concentration with no customer accounting for more than 5% of total sales

Diversified end user base with significant part of revenue coming from specialty chemicals and relatively non-cyclical sectors like FMCG, F&B & Paints



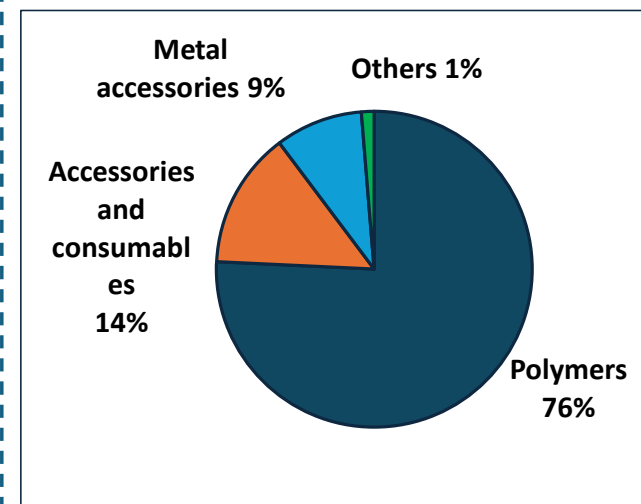
Diversified and Strong Sourcing/Supplier Base



Established relationship with most of the Global Suppliers

INDIA	MENA	SOUTEAST ASIA	USA
Local			
ONGC Petro	Q-Chem, Qatar	Chevron Phillips, Singapore	Chevron Phillips, USA
Reliance Industries	Sabic Asia Pacific, KSA	GS Caltex, Korea	Exxon Mobil, USA
Indian Oil Corporation	OQ Oman	PTT Global Chem, Thailand	
HPCL – Mittal Energy Ltd	Borouge, Abu Dhabi	Sabic Asia Pacific, Malaysia	
Haldia Petroleum	Sidi Kerir Petro, Egypt	Formosa Plastics, Taiwan	
GAIL Authority		Lotte Chemical, Malaysia	
Imports			
Q-Chem, Qatar	GS Caltex, Korea	Q-Chem, Qatar	
Chevron Phillips, Singapore	PTT Global Chem, Thailand		
GS Caltex, Korea	ONGC Petro, India		
PTT Global Chem, Thailand			
Borouge, Abu Dhabi			

Polymers account for the largest share in raw materials



Risk distributed by having MULTIPLE SUPPLIERS; Each region procuring majority of raw material locally

Robust pass-through mechanism to manage price volatility; 100% of packaging business is B2B

Established Products - Industrial Packaging



- Time Tech produces Polymer drums / barrels, Jerry cans and Pails for varied packaging requirements.
- The Company uses technologies of polymer processing such as blow moulding, injection moulding and extrusion to produce a wide range of products.
- These are made through a fully automated continuous process without any welds or joints. They are fitted with special stoppers, plugs, bungs, inserts, caps, handles to meet specific design & requirements.
- The Company caters to varied sectors like chemicals, paints and pigments, food and beverage, petroleum, industrial coatings, agricultural, pharmaceutical, mineral, packaging, automotive and building products.

Range:	5 Ltr to 250 Ltr capacity
Brand:	Techpack
Manufacturing Locations:	India (16) & Overseas (10)
Industry:	Chemicals, Petrochemicals, Paints, Etc.

Global Industrial Packaging Ranking (Polymer)

Company	Polymer Drums	IBC
Mauser	2	2
Schutz	3	1
Greif	4	4
TimeTech	1	3

TECHPACK[®]
Technology driven Packaging



Key Highlights

- Over 900 institutional customers
- Largest manufacturer of Industrial Packaging in Asia and MENA Region
- Increasing strategic tie-ups with MNCs across different countries due to significant presence in the Asia and MENA Region
- Market Leader in 9 out of 11 countries in Industrial Packaging

Market

- The global market for industrial packaging is estimated to reach \$123.2 Bn by 2032, at a CAGR of over 5.9% owing to increasing trends in end-use industries such as automotive, food & beverages, chemical, construction and oil & lubricant.

Drivers

- Shift from metal to polymer packaging due to technical and operational advantages and lower costs.
- A clear trend towards IBC is visible, which is correlated with a growing demand for reconditioning solutions mainly in developed regions.
- Given the presence of strong domestic demand for specialty chemicals, low cost of production and availability of skilled labour, large foreign players are increasingly looking at India as an alternative investment destination due to implementation of strict environmental norms in China.

Emerging Packaging Scenario

- Multinational companies looking east for lower cost of production.
- Bringing in Good Manufacturing practices and improved handling systems.
- Improvement in transportation and handling facilities.
- Bulk transportation reducing logistic and shipping costs

Packaging Product (Market Size)	Asia (Mn Units)			Global (Mn Units)		
	India	Rest of Asia	Total	Asia	RoW	Total
Steel Drum	11 (41%)	131 (87%)	142 (80%)	142 (80%)	127 (81%)	269 (81%)
Polymer Drums	16 (59%)	19 (13%)	35 (20%)	35 (20%)	30 (19%)	65 (19%)
Total	27 (100%)	150 (100%)	177 (100%)	177 (100%)	157 (100%)	334 (100%)
IBCs	1 (28.5%)	2.5 (71.5%)	3.5 (100%)	3.5 (19%)	15.0 (81%)	18.5 (100%)

Time Tech Customer Segment- Industrial Packaging

Segment	% Business	Expected Growth in FY25
Speciality Chemicals	31%	11% - 13%
FMCG	29%	11% - 13%
Construction Chemicals	13%	6% - 8%
Paints & Inks	12%	6% - 8%
Pharmaceuticals	6%	8% - 10%
Lube Oils & Additives	4%	6% - 8%
Others	5%	5% - 7%

High Density Polyethylene (HDPE) Pipes



- HDPE pipes are capable of handling semi-solid & gaseous effluents and has unmatched resistance to corrosive chemicals. They are lighter, easy to handle & install compared to heavier metallic or concrete pipes.
- These pipes are 100% leak proof therefore they are preferred over Galvanized, Ductile iron, Cement and conventional piping systems.

Range: 20 mm to 1400 mm in different pressure range.

Brand: Max'm PE Pipes

Manufacturing Locations: India (4)

Industry: Water Supply , Irrigation, Sewage, Effluent Treatment, Desalination Plant, Power Plants, Cable ducting, Etc.

Launched new generation multilayer pipes for power / communication cable ducts with silicon in-lining. The pipes / ducts have substantial business potential specially in development of Smart Cities

Energy Storage Devices



- TimeTech manufactures valve-regulated lead-acid (VRLA) Batteries conforming to National and International Standards by adopting internationally proven Eco-Friendly processes.
- These batteries has a proprietary Grid alloy composition with high tin composition which improves the positive grid corrosion resistance and battery life.

Range: Up to 3000 Ah

Brand: MAX Life, MAX Pro, Sun Qualita & MAX Qualita

Manufacturing Locations: India(2)

Industry: Solar power, UPS, invertors, Telecom, Railway Etc.

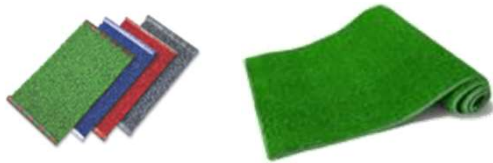
Sr. No.	Major Customers
1	KLSR Infratech Ltd.
2	WPIL Ltd
3	Adani Ports and SEZ Ltd
4	GCKC Projects and Works Ltd
5	Gyan Construction Co
6	Larsen & Toubro Construction
7	JWIL Infra Ltd
8	Enviro Infra Engineers Ltd.
9	Megha Engineering & Infra Ltd
10	Indian Hume Pipe Ltd.
11	BSCPL Infrastructure Ltd
12	J K Projects Pvt Ltd
13	Parixit Irrigation Ltd.
	Total Business – Rs 200 Cr

Turf & Matting

DuroTurf
PREMIUM

DuroSoft
Elegance with efficiency!

DuroWipe
ALL-PURPOSE MATTING



- TimeTech is one of the leading players in the matting segment. TTL has been delivering value for money solutions across industries and customers.
- These Lifestyle Products are not only functional but also add to the aesthetics
- Brands:**
 - Duro Turf/Soft: Mats used to scrape off dirt
 - Duro Wipe: Mats for wiping water
 - Duro Mat Regular
 - Duro Active: Mats for application in industrial outlets
 - Duro Comfort: For professionals demanding long standing hours
- Manufacturing Locations:** India(2)
- Industry:** Household, Hotels, Hospital, Multiplex, Etc.

Disposal Bins

DUMPO[®]
BINS



- Disposal Bins a necessity for hygienic life and made from recyclable material. These Bins adhere to stringent international quality standards. It's superior design ensures easy handling
- Offers high resistance to UV Radiation & Decay.
- Range:** 120 & 240 Ltr capacity
- Brand:** Dumpo Bins
- Manufacturing Location:** India(1)
- Industry:** Household, Commercial, Industrial, Municipal Corporation, Etc.

Auto Components

3S RAINFLAPS

TechDAT

TECH TANK



- Rain flaps consists of unique surface formed by multiple tufts / grass blades with a strong and sturdy backing.
- The company offers a range of high performance, dependable & long lasting De-aeration & Fuel Tanks., which are stronger, lighter in weight, corrosion resistant and more efficient to transfer the coolant.
- The Air Ducts manufactured by the Company meets the high performance requirement needed by the automobile industry.
- Brand:** 3S RainFlaps, TechDAT & TechTANK
- Manufacturing Locations:** India(3)
- Industry:** Automotive

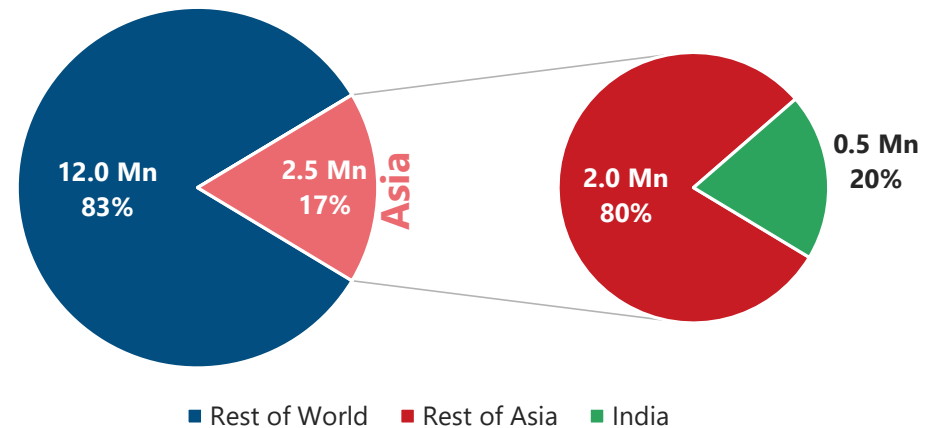
Value Added Products – Intermediate Bulk Containers - IBC



- Range:**
 - 1,000 Ltr capacity
- Capacity:**
 - 6.3 Lakh units p.a. in India and
 - 14.4 Lakh units p.a. overseas
- Users:**
 - Petrochemicals, Foods, Solvents, etc.
- Features:**
 - Space Efficiency, Eliminate Waste, Durability and Eco-friendly.
- Opportunity:**
 - Rapid growth in chemical industries across Asia
 - Increasing automation
 - Multi-fold growth in trade from Asia to the western countries
- Position:**
 - 3rd Largest manufacturer Worldwide.



IBC's Market Size (Mn Units)



Value Added Products – MOX Film



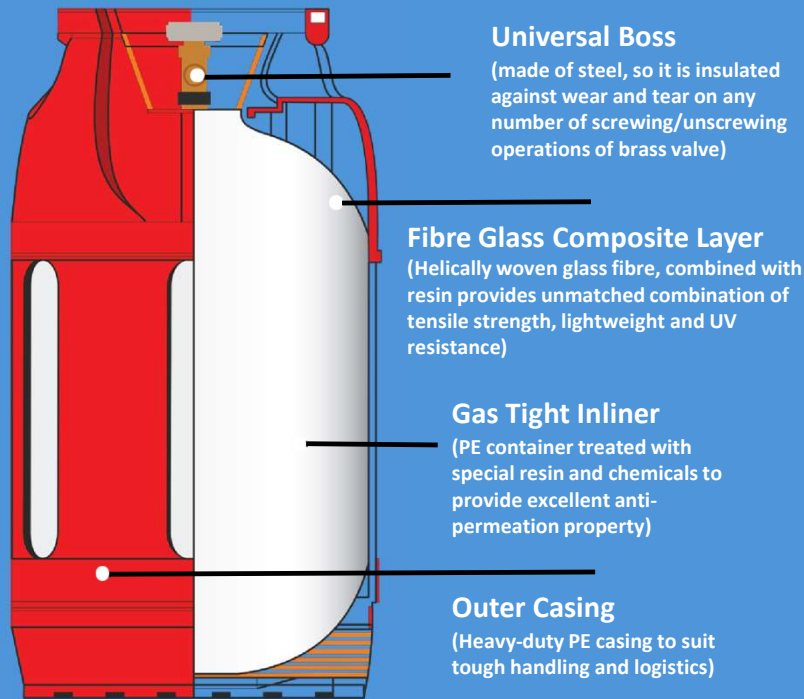
-
- Range:** ▪ 35 to 320 GSM thickness
-
- Capacity:** ▪ 12,000 MT p.a.
-
- Users:** ▪ Agriculture, Infrastructure, Packaging, Commercial Vehicles and many more
-
- Features:** ▪ Tear/Puncture Resistant, 100% Waterproof, Weathering Resistant, UV Resistant, and Chemical Resistant.
-
- Opportunity:** ▪ The size of agricultural films market was USD 12.2 Bn in 2022 and is projected to grow at a CAGR of 6.9% to reach USD 18.5 Bn by 2028.
- Asia Pacific is likely to see robust growth in these films and TIME would be leveraging its wide distribution network in domestic as well as overseas market
-





We are at inflection point
Shifting from Tech based products to High-Tech products with focus on Composites

- Composite is a material of future replacing metals in high performance applications
- Tectonic shift
- Harnessing new growth opportunities in existing business
 - Launching new products with huge business potential
 - Aspire to be largest Composite product company in the country
 - New product launches will help improve margins and reduce working capital
 - We draw strength from the launch of LPG Composite Cylinders and maintaining market leadership in 10 years



UV Protected



Non-Corrosive



Translucent Body



Recyclable Material



Low Maintenance



Aesthetically Appealing



Explosion Proof



High-Tech



Light Weight

- World's largest range of composite cylinders; 2nd largest manufacturer worldwide
- Approved in over 50 countries and supplied on over 45 countries
- There are over 2.5 bn metal cylinders in circulation worldwide implying significant addressable opportunity
- Supplies ongoing to Indian Oil Corporation Limited (largest oil marketing company in India) in domestic market; Discussions ongoing with BPCL and HPCL
- New countries added recently include Taiwan, Ghana, Nigeria, Bermuda, St. Lucia, Romania, Burundi, Australia, UAE and the USA



Exporting to over
51 countries

Order Supply
started to IOCL
since 2022

Supplied over 20 Lakh
Cylinders in a span of
24 months

Sample submitted
to new countries
like Kuwait, Oman
and Saudi, etc.

Rs. 400 Cr+
Revenue
generated by
LPG Cylinders
in 2 years

Company is currently supplying LPG cylinders in over 51 countries

New countries added recently include

Ethiopia, Albania, Iraq, Taiwan, Ghana, Nigeria, Bermuda, St. Lucia, Romania, Burundi, Australia, UAE and the USA

MoPNG initiates transition from steel to new age fiber-based LPG cylinders



Union Minister of Petroleum and Natural Gas, Hardeep Singh Puri (File Photo- ANI)

New Delhi [India], August 5 (ANI): The Ministry of Petroleum and Natural Gas has announced the gradual replacement of traditional steel LPG cylinders with new-age fibre-based composite cylinders. This was disclosed by Suresh Gopi, Minister of State in the Ministry of Petroleum and Natural Gas, in a written reply in the Rajya Sabha on Monday.

As of July 1, 32.68 crore active domestic LPG consumers are being served by public sector Oil Marketing Companies (OMCs). To ensure a steady supply of refills and to accommodate new LPG connections, OMCs have over 50 crore cylinders in circulation, most of which are steel cylinders. To meet the needs of replacement and future demand, OMCs regularly review their inventories and issue tenders for the procurement of new cylinders.

Composite cylinders, a recent introduction by PSU OMCs, are gradually being introduced into the market. These innovative cylinders feature a three-layered construction: an inner liner made of blow-moulded High-Density Polyethylene (HDPE), a composite layer of polymer-wrapped fibreglass, and an outer jacket of HDPE.

While these composite cylinders are more expensive than the traditional steel ones, they offer several advantages—they are significantly lighter, rust-free, translucent, and notably safer.

OMCs procure these composite cylinders through a competitive bidding process from manufacturers who meet the tender requirements. Currently, there is no proposal for OMCs to set up their manufacturing facilities for these cylinders in India.

To promote the adoption of composite cylinders, OMCs have launched various awareness campaigns. These include generating consumer awareness through the display of banners and standees, distributing pamphlets during home deliveries, and other marketing initiatives. These efforts are designed to educate consumers about the benefits of composite cylinders and to encourage their usage. (ANI)

LPG Distributor Meet



IOCL Distributor Meet

Sr. No	Location	Date
1	Hyderabad	06.03.2024
2	Trichy	11.03.2024
3	Bangalore	27.06.2024
4	Delhi	29.06.2024
5	Chennai	06.07.2024
6	Pune	09.07.2024
7	Jaipur	12.08.2024
8	Surat	14.08.2024
9	Ranchi	28.08.2024
10	Kharagpur	30.08.2024
11	Coimbatore	12.11.2024
12	Vijayawada	13.11.2024
13	Noida	04.12.2024
14	Lucknow	06.12.2024
15	Varanasi	21.01.2025
16	Kanpur	23.01.2025

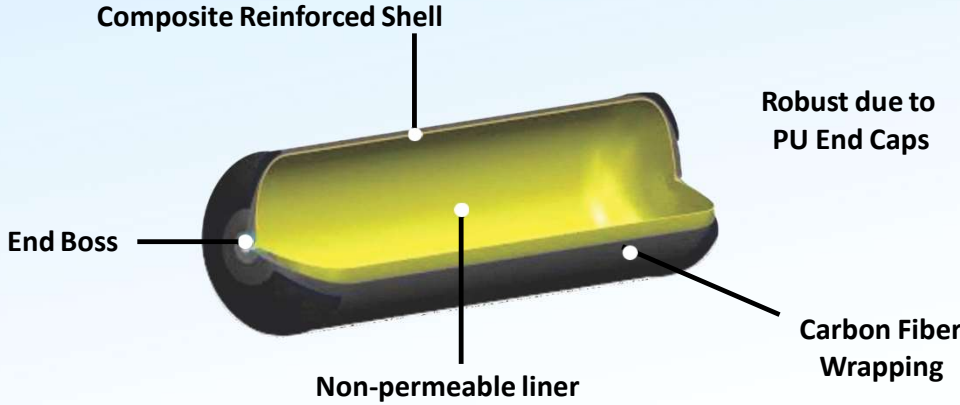
HPCL Distributor Meet- Mumbai
(06.11.2024)

IOCL Quantity Allotment



S. No	State	Quantity (Nos.)	% share
1	Uttar Pradesh	2,24,160	15%
2	Tamil Nadu	2,04,830	14%
3	Delhi	1,45,900	10%
4	Karnataka	1,38,810	9%
5	West Bengal	1,23,150	8%
6	Gujarat	86,160	6%
7	Telangana	81,940	5%
8	Punjab	60,940	4%
9	Madhya Pradesh	59,480	4%
10	Rajasthan	48,220	3%
11	Haryana	45,310	3%
12	Andhra Pradesh	44,580	3%
13	Jharkhand	34,720	2%
14	Bihar	34,250	2%
15	Kerala	31,180	2%
16	Assam	21,920	1%
17	Uttarakhand	18,360	1%
18	Maharashtra	15,760	1%
19	Odisha	15,220	1%
20	Chattisgarh	14,910	1%
21	Manipur	8,720	1%
22	Tripura	6,860	0%
23	Pondicherry	6,510	0%
24	Mizoram	6,200	0%
25	Himachal Pradesh	4,340	0%
26	Meghalaya	4,090	0%
27	Jammu & Kashmir	3,020	0%
28	Nagaland	2,470	0%
29	Sikkim	1,990	0%
	Total	14,94,000	100%

Value Added Products – Type-IV CNG Composite Cylinders



Increases Gas Carrying Capacity



70% Lighter In Weight



Increases Fuel Efficiency



Maintenance Free



Metal free / Corrosion free In liner

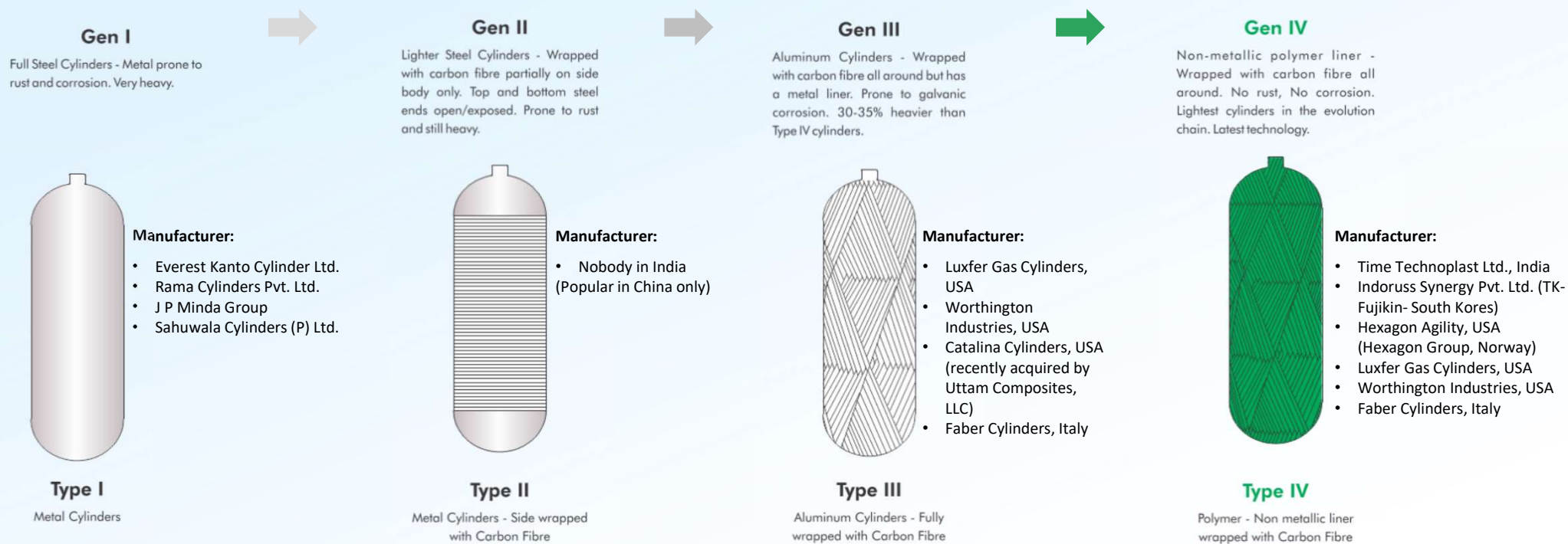


Higher Service Life



Explosion Proof

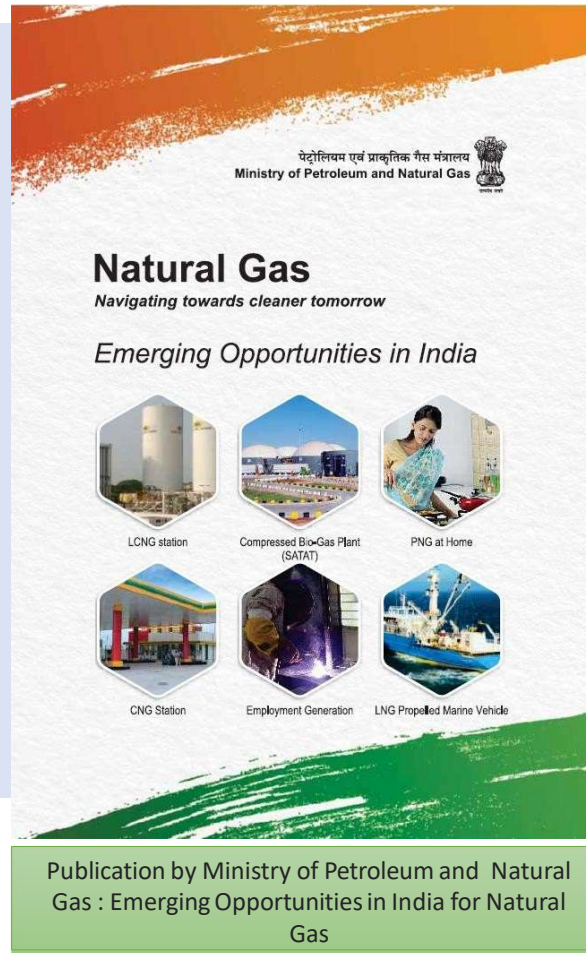
Comparative Advantages – Type-IV CNG Composite Cylinders



CNG cylinders		
Size	Working Pressure	Applications
60 Ltrs	200 Bar	On-Board Applications for vehicles
156 Ltrs, 350 Ltrs	250 bar	Storage and Transportation Applications
Hydrogen Cylinders		
60 Ltrs	500/700 Bar	For hydrogen Fuel cell Passenger vehicles
100 Ltrs, 150 Ltrs 350 Ltrs	500/700 Bar 350 Bar	For hydrogen Fuel cell passenger vehicles And Commercial Vehicles
350 Ltrs	350 bar	For storage & transportation of Hydrogen

CNG Composite Cylinder Applications

- CNG Gas Distribution
 - Cascades
 - Mobile Refueling Units
 - Compressed Bio-Gas Plant
 - Gas Generators for Telecom Towers



- On – Board Applications
 - Roof Mounted Bus
 - Chassis Mounted Truck
 - CAB Mounted Truck
 - Boat
 - Car
 - 3 Wheelers / 2 Wheelers

Type-IV CNG Composite Cylinders – Cascade Application



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



Type IV CNG Cylinder – Metal Free

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

- Approved by **PESO** and Third party (Bureau Veritas – Europe) in August 2020 for Type-IV cylinder for the **first time in India.**



Carries **DOUBLE** the quantity of gas



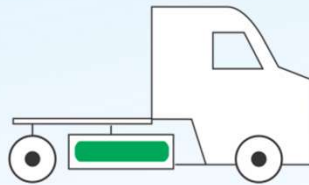
Cuts operations cost by **HALF**



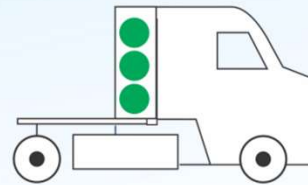
Type-IV CNG Composite Cylinders – Onboard Applications



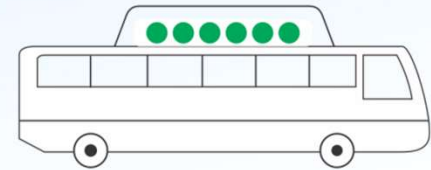
Dump Truck



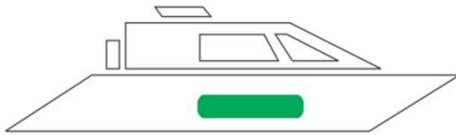
Chassis Mounted Truck



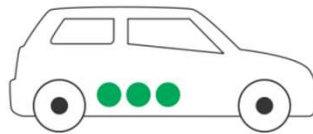
CAB Mounted Truck



Roof Mounted Bus



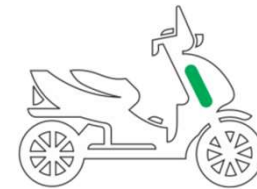
Boat



Car



3 Wheeler




2 Wheeler

Approved by PESO and Third party (Bureau Veritas – Europe) in May 2021 for Type-IV cylinder for the first time in India.

CNG Cylinder : Overall Market Potential



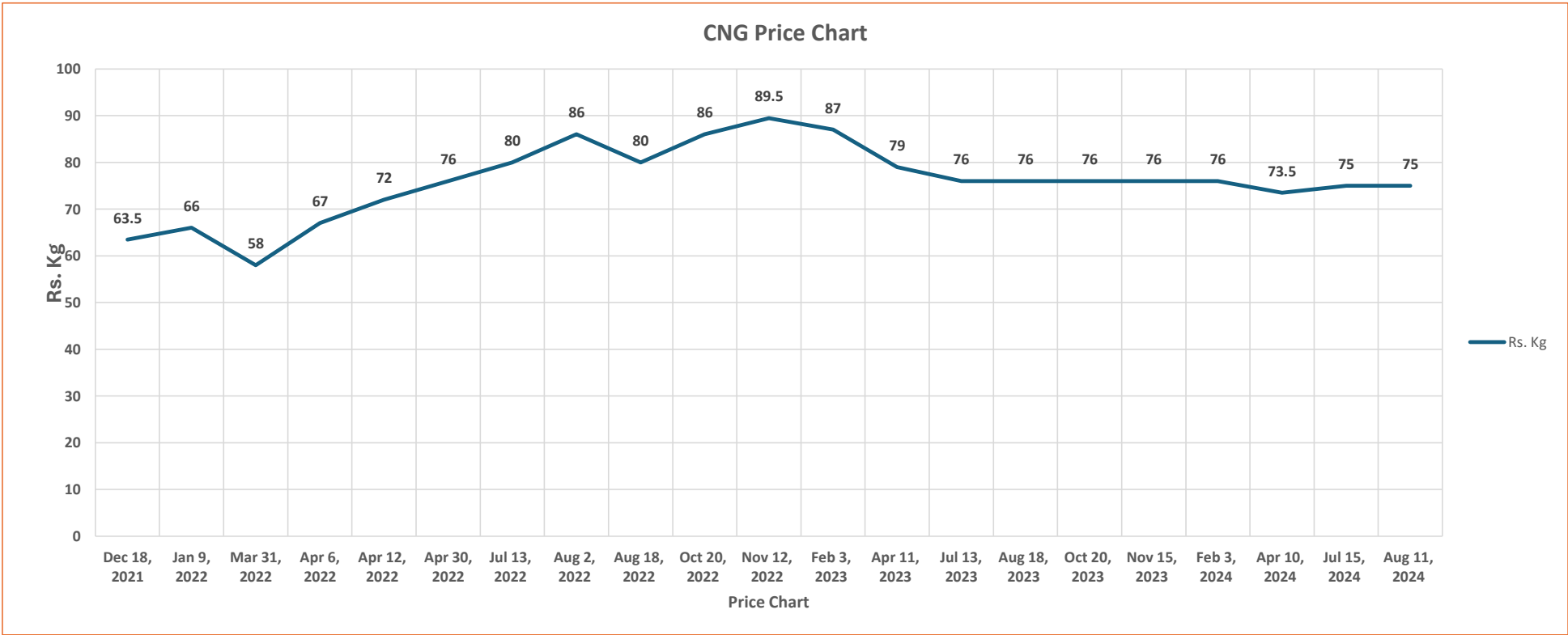
Huge revenue potential given India's low penetration of CNG fuel stations and CNG vehicles

	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
Total Estimated value of Business	28,877		6,288		~2,200

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

Geographical Area Allocated to CGDs

S. No	CGD Entity	Nos.	CNG stations	%
1	Consortium of AG&P LNG Marketing Pte Ltd. & Atlantic Gulf & Pacific	10	1462	18%
2	Indian Oil Corporation Limited	17	1213	15%
3	Indian Oil-Adani Gas Private Limited	19	876	11%
4	Hindustan Petroleum Corporation Limited	10	864	11%
5	Torrent Gas Private Limited	14	745	9%
6	Adani Gas Limited	17	501	6%
7	GAIL Gas Limited	14	377	5%
8	Bharat Gas Resources Limited	17	312	4%
9	Gujarat Gas Limited	24	310	4%
10	Indraprastha Gas Limited	11	306	4%
11	Think Gas	5	238	3%
12	Haryana City Gas	4	222	3%
13	Maharashtra Natural Gas Limited	4	218	3%
14	Megha Engineering & Infrastructure Limited	7	209	3%
15	AGP CGD India Private Limited	2	91	1%
16	Consortium of Assam Gas Company Limited, Oil India Limited and GAIL Gas	2	72	1%
17	Unison Enviro Private Limited	3	72	1%
18	IRM Energy Private Limited	3	35	0%
19	Rajasthan State Gas Limited	2	26	0%
20	Dholpur CGD Private Limited	1	14	0%
21	Tripura Natural Gas Company Limited	3	12	0%
22	Green Gas Limited	4	6	0%
	Total	193	8181	100%



CNG prices have started coming down since last year; A decline of 16.0% from February 2023
Increased price differential compared to other conventional fuel options will drive Auto demand

Recent News articles



RATIONALISATION OF NATURAL GAS RATES HELPS

Tata Motors Doubles Down on CNG Variants as Demand Surges

New launches, price differential with petrol, increased availability of CNG stations driving demand, says auto co

Sharmistha.M @timesgroup.com

New Delhi: Tata Motors, the country's biggest automotive group by revenue, is looking at doubling the

In Fast Lane
Tata expects 10-12% of its sales to come from CNG vehicles this fiscal, up from 6% in FY23

13% of all PVs sold in Jan and Feb were CNG vehicles

34,000-35,000 CNG vehicles are sold in the local market every month

Govt aims to put in place 8,000 CNG pumps across the country by the end of next year

RISING SHARE
CNG accounted for 13% of all passenger vehicles sold in the country in the first two months of the year, up from 3.5% in 2019. Market leader Maruti Suzuki, which offers CNG options in 12 models, said it has seen an uptick in de-

"The value proposition of CNG cars remains strong. As the network (for dispensing CNG) grows, consumers will feel more confident in owning CNG vehicles. The share of CNG vehicles in overall sales in the industry will grow further," he said.

27th June 2023- ET

- Tata Motors expect **10-12%** of its sales to come from **CNG vehicles** in FY24, up from 6% in FY23.
- New launches, **price differential with petrol and increased availability of CNG dispensing stations** driving demand.
- **5,665 CNG distribution outlets** were operational in India by end of **March 2023** compared to **~1,400 outlets 3-4 years back.**

EXPANDING BIZ Co to widen portfolio of services to a range of clean fuels

Adani Total Gas Plans to Build Over 1,800 CNG Stations in 7-10 years

Kalpna.Pathak @timesgroup.com

Mumbai: Adani Total Gas (ATGL), a joint venture between Adani Group and French firm Total Energies, plans to build more than 1,800 CNG stations in the next seven to 10 years, its CEO Suresh P Mangla said in the company's annual report for 2022-23.

"ATGL is spreading its footprints pan-India. Added to this number are 19 GAs with our JV-Indian Oil Adani Gas (IOAGPL), we now have a presence in 124 districts."



WORK IN PROGRESS
The co has completed laying 10,888 km of steel pipes

28th June 2023- ET

- Adani Total Gas Ltd (ATGL) plans to **build over 1,800 CNG stations in 7-10 years.**
- Along with IOCL JV, ATGL has presence in **124 districts with 460 CNG stations, currently.**
- Adani Total Energies Biomass (wholly owned subsidiary of ATGL) is currently building one of the **India's largest Compressed Bio Gas (CBG) plants at Barsana in UP with 600 TPD feedstock processing capacity.**
- **Reliance and ATGL** to set up **10 CBG plants** each with an investment of **USD 313 Mn each.** 5 of these will come in next 5 years. Currently there are 30 CBG plants in India.
- Sector to attract over **USD 2 Bn investments** in next **5-7 years.**

RIL, Adani Total Gas Plan to Set up 10 CBG Plants Each

Cos may invest about ₹2,500 cr each for plants with 30 tonnes per annum capacity

Kalpna.Pathak @timesgroup.com

Mumbai: Mukesh Ambani's Reliance Industries (RIL) and Gautam Adani-led Adani Total Gas (ATGL) are planning to set up 10 compressed biogas (CBG) plants each, across the country, senior executives aware of the development said. These plants will be of upto 30 tonnes per annum capacity. FI-

Biogas Trends

Five plants will be set in the next 5 yrs at strategic locations

5 of RIL's CBG plants will be in Gujarat & 5 would be across the country

India has nearly 30 CBG plants under operation

Sector to attract over \$2 billion investments in next 5-7 years

Compressed Bio Gas or CBG is a greener fuel produced from waste/biomass sources

7th July 2023- ET

PNG SALES UP 11% DURING SAME PERIOD

CNG Sales Volume Grows 51% in 6 Months to March

Sanjeev.Choudhary
@timesgroup.com

New Delhi: City gas companies have grown their super-profitable CNG sales volume at a faster rate in the past two years than the less profitable segment of gas supplies meant for homes.

City gas distributors sold 19.4 million metric standard cubic meters a day (mmscmd) of CNG in six months to March 2023, up 51% from October 2022 to March 2021 period, oil ministry data showed. In the same period, the sale of piped natural gas (PNG) meant for cooking at home rose 11% to 2.9 mmscmd.

Sales to commercial customers that includes hotels and malls, dropped 25% to 0.7 mmscmd, while those to industries fell 38% to 10.3 mmscmd as high imported gas prices forced them to switch to alternative fuels.

As a result, the share of CNG in city gas distributors' overall sales sharply increased to 58% in two years from 39% in the six months to March 2021. The share of sales to industrial customers fell from 50% to 30%. The share of sales to households, or domestic PNG, rose marginally to 8.7% from 9%.

City gas companies get price-controlled domestic natural gas, which they can sell at market rates as CNG and domestic PNG. They are mostly

monopolies in their licensed areas, giving them pricing power and fat margins. CNG and domestic PNG prices are mainly influenced by the rates of alternative fuels such as petrol and LPG cylinders. Petrol is heavily taxed and mostly moves in line with international prices, while CNG and domestic PNG are very lightly taxed.

At March-end, the number of CNG stations in the country was 5,665, up 83% in two years. Domestic PNG customers expanded by 41% to 1.1 crore in the same period. Delhi is the largest market for CNG, while Gujarat is the largest market for domestic, commercial, and industrial customers of natural gas.

City gas distributors mostly import liquefied natural gas (LNG) to supply commercial and industrial customers. Extraordinarily high prices of natural gas in international markets in the past two years forced industrial and commercial customers to switch to alternative liquid fuels such as LPG and fuel oil.

India's LNG imports fell to 19.9 million metric tonnes (mmt) in the last fiscal year, down 22% from 25.6 mmt in 2019-20.

Expansion of CNG stations across the country, increased availability of CNG cars, and high petrol prices have combined to boost CNG sales in the country, an industry executive said.

15th August 2023- ET

RIL to Spend ₹5,000 cr to Set up over 50 Biogas Plants in 2 Years

Co which plans to set up 106 CBG plants is said to have tendered out half of them

Kalpana.Pathak
@timesgroup.com

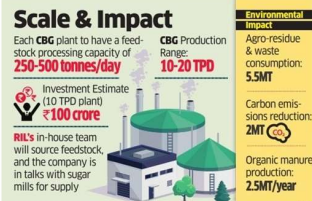
Mumbai: Reliance Industries (RIL) is planning to set up more than 50 compressed biogas (CBG) plants in the next two years at a cost of over ₹5,000 crore, according to two oil and gas industry executives aware of the development.

At RIL's annual general meeting last August, chairman Mukesh Ambani had announced plans to set up 100 CBG plants in five years. CBG is a green fuel produced from waste or biomass sources. It has properties similar to compressed natural gas (CNG) and can be used for automotive, industrial and commercial uses.

"RIL has tendered out over 50 compressed biogas plants to be set up in the next two years. It will shortly be floating a tender for the remaining plants," said one of the executives.

"The tenders have been given out for technology as well as engineering, procurement and construction."

The retail oil refining conglomerate has also revised the target on the number of CBG



plants to 106 from 100, this person added. RIL did not respond to an email sent on February 19 seeking comment.

Each plant, the people said, would have a feedstock processing capacity of 250-500 tonnes a day, with CBG production in the range of 10 tonnes to 20 tonnes per day. The estimated investment in a 10-tonne-per-day plant is around ₹100 crore.

RIL's in-house team would be sourcing the feedstock for the plants. The company has also been in discussions with multiple sugar mills for sourcing sugarcane press mud and feedstock for CBG production, the people said.

"India produces nearly 230 million tonnes of non-cattle feed biomass, most of it contributing to air pollution. Within a short span of one year, we have become India's largest bio-energy producer based on our indigenously developed technology," Ambani had said at the AGM. RIL has already set up two CBG demo units at its refinery facility in Jamnagar and has commissioned the first commercial-scale CBG plant at Barabanki in Uttar Pradesh. Through its CBG units, RIL

26th February 2024- ET

TO ACCELERATE EXPANSION EFFORTS

GPS Renewables Raises ₹411 cr from Top Lenders

Our Bureau

Mumbai: Bengaluru-based GPS Renewables on Tuesday said it has raised \$50 million (₹411.5 crore) in debt financing from a clutch of private and public sector banks, and non-banking financial companies including Punjab National Bank, HDFC, Yes Bank and HSBC Bank.

The funds will be used for its nationwide execution of compressed biogas (CBG) plants, said a company statement.

GPS Renewables provides end-to-end solutions for the development, production and distribution of biofuels.

It has set up more than 100 biogas plants and has an order book of \$240 million (₹2,000 crore) and memorandums of understanding worth \$540 million (₹4,500 crore) for the execution of CBG plants across the country.

vos-Triodos Fund and Hyderabad-based Caspian Impact Investments.

"To further accelerate our efforts, we not only need financial backing but also strategic collaborations. The current round of funding will allow us to accelerate our expansion efforts and promote India's transition to sustainable green energy," said Tilak Minocha, chief finance controller, GPS Renewables.

In August 2023, GPS Renewables had acquired Germany-based Proweps Envirotech GmbH, a design and engineering company specialising in technologies for utilising municipal and industrial organic waste and agri-residue for biogas production.

Looking ahead, through its climate infrastructure platform, GPSR Arya, the company plans to develop own CBG projects via a joint venture with Indian Oil Corporation.

"The company reported a turnover of about \$60 million (₹500 crore) for 2023-24, "registering a 225% growth over 2022-23". During this period, the company increased its full-time employee strength to 500-plus from 72, it said, adding that it continues to stay net profitable despite a steep turnover growth of more than 2,500% since 2020-21.

17th April 2024- ET

- CNG vehicle sales expected to increase significantly
- Reliance Industries to set up over 50 Biogas plants in 2 years
- Compressed Biogas (CBG) has properties similar to CNG and would require cascades for transportation
- GPS renewables raises funds for setting up of CBG plants across the country

S. No.	Major Customers
1	Maharashtra Natural Gas Limited (MNGL)
2	Adani Total Gas Limited
3	Indraprastha Gas Limited (IGL)
4	Sabarmati Gas Limited
5	Bharat Petroleum Corporation Limited (BPCL)
6	Mahanagar Gas Limited (MGL)
7	GAIL Gas Limited
8	Indian Oil Corporation Limited (IOCL)
	Total Business- 250 Cr



New CNG stations allotted in 9 th and 10 th round	8,181
Number of Cascades required per station	2
Total number of cascades required	16,362
Estimated cost of one cascade (Rs. per cascade)	70,00,000
Total Value of Business in next 8 years (Rs. Cr.)	11,453



9th & 10th CGD Bidding Round – A Great Success

Particulars	9 th Round	10 th Round	Total
Geographical Areas offered	86	50	136
Bids received	406 Bids from 38 Entities	225 Bids from 25 Entities	631 Bids from 41 Entities
Coverage			
State/Union Territories	22	14	23
(a) Districts	174 Districts (156 full & 18 part)	124 Districts (112 full & 12 part)	298 Districts (268 full & 30 part)
(b) Area (%)	23.82	17.92	41.74
(c) Population (%)	26.38	24.23	50.61
Minimum Work Program			
PNG Domestic Connections	221 Lakh	202 Lakh	423 Lakh
CNG Stations	4,603	3,578	8,181
Steel Pipeline (mcr-KM)	1.16 Lakh	0.58 Lakh	1.74 Lakh

Source: Petroleum and Natural Gas Regulatory Board

Type-IV CNG Composite Cylinders – Mobile Refueling Units (MRUs)

India's First Mobile Refueling CNG Unit with Type-IV Composite Cylinders

Virtual inauguration on June 8, 2021 by Mr. Dharmendra Pradhan- Union Minister for Petroleum and Natural Gas



- MRUs act as Mobile CNG Stations
- Can be parked anywhere for filling
- Fills up to 300-400 vehicles per day

Market Potential : Mobile Refueling Units (MRUs)

Total existing and committed new CNG stations in India by 2024	7,300
Conversion to MRUs (~30%)	2,200
Estimated cost of one cascade (Rs. per cascade)	60,00,000
Total Value of Business in next 4 years (Rs. Cr.)	1,320



Key Benefits of Mobile Refueling Units

- It is an efficient solution for market seeding since it is cheaper and faster to deploy
- Reduction in Service cost (O&M expense) of CNG stations
- It is an effective solution for Transporters, Taxi aggregators, School vans etc.
- Help in congestion management at existing CNG stations
- Help in increasing geographical reach to areas with Ltd. pipeline connectivity (hilly terrains etc.)



~7,300

Total existing and Committed new CNG stations in India by 2024*

~2,200*

Estimated MRUs in India

*Assuming 30 percent conversion of CNG stations



Source: Ministry of Petroleum and Natural Gas- Emerging Opportunities in India

Market Potential : Compressed Bio-Gas (CBG)

Total CBG plants by 2023	5,000
Number of Cascades required per plant	2
Total number of cascades	10,000
Estimated cost of one cascade (Rs. per cascade)	60,00,000
Total Value of Business in next 3 years (Rs. Cr.)	6,000



❖ Under the SATAT scheme, total 5,000 CBG plants have been envisaged by 2023, which will produce around 15 MMT of CBG per annum.

Potential in the Country

- It has been estimated that there are six major sources from which CBG can be synthesized in India – Recoverable Cattle Dung, Bagasse, Agri residue, Sewage Treatment Plant, Municipal Solid Waste and Spent Wash/Press Mud.
- The total CBG potential in India has

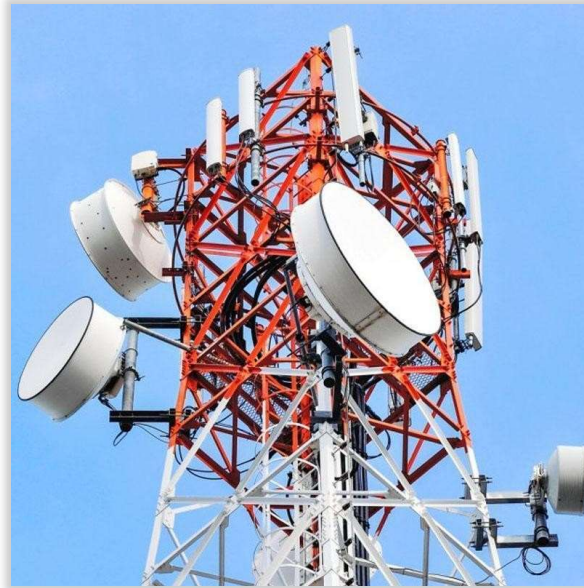
Benefit to the Country

- As per international carbon accounting standards, CBG has 'zero' associated Carbon emissions.
- Reduction in emissions due to crop burning.
- Reduction in landfill emissions due to municipal and sewage waste.

Source: Ministry of Petroleum and Natural Gas- Emerging Opportunities in India

Market Potential : Gas Generators for Telecom Towers

Towers- 20% of existing Telecom Towers use gas generators(~1.8 lakhs towers)	32,000
MRUs required (1 MRU for every 4 towers)	8,000
Estimated cost of one cascade (Rs. per cascade)	60,00,000
Total Value of Business in next 4 years (Rs. Cr.)	4,800



Opportunity in India

- Addressable market for conversion to gas generators is estimated to be ~1.8 lakh towers.
- The market is expected to grow at a CAGR of 3 percent over the next 4-5 years.
- Assuming 20 percent of existing and upcoming telecom towers use gas generator as back-up fuel, the total realizable potential is estimated to be around 32,070 towers.

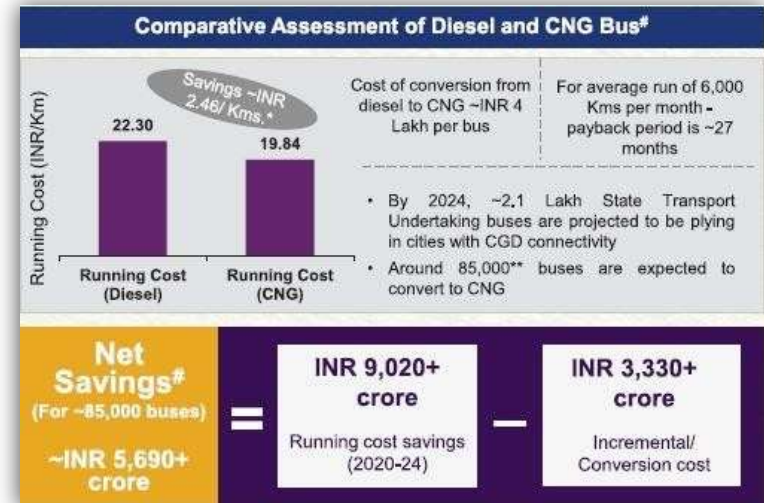
Cost Benefit Analysis

- The cost of retrofitting a 25KVA DG set is ~INR 3 lakhs, while the cost of a new 25KVA Gas based generator set is ~INR 5 lakhs*.
- The cost of retrofitting a 125KVA DG set is ~INR 6 lakhs, while the cost of a new 125KVA Gas based generator set is ~INR 13 lakhs*.
- For an average outage of 4 hours per day, annual consumption of 5,760 litre of diesel may be replaced by Natural Gas.
- Total annual diesel savings for 32,070 towers is estimated to be 184.7 million litre (0.18 percent of India's diesel consumption).

Source: Ministry of Petroleum and Natural Gas- Emerging Opportunities in India

Market Potential : Onboard Applications – Intracity Bus

No. of buses on road by 2024	2,10,000
Buses converted to CNG (~40% conversion)	85,000
No. of cylinders per Bus	8
Total No. of Cylinders required	6,80,000
Estimated Cost of 156 litre cylinder (Rs. per cylinder)	78,000
Total Estimated value of Business in next 4 years (Rs. Cr.)	5,304



Source: Ministry of Petroleum and Natural Gas- Emerging Opportunities in India

Focus on Buses; to be followed by commercial vehicles (new & conversion) and passenger vehicles.

Type-III Composite Cylinder for Breathing Air / Medical OXYGEN

- Successfully developed Fully Wrapped Carbon Fibre Reinforced (Type-III) Composite Cylinder for Breathing Air/ Medical Oxygen; 1st locally manufactured cylinder to get approval from PESO in India.
- **Application as Self-Contained Breathing Apparatus (SCBA) by-**
 - Fire Fighters,
 - Divers (SCUBA)
 - Mountain climbers at high altitudes
 - Hospitals
 - Portable home oxygen bottles
 - Emergency use in ambulances



Numerous advantages over Type-I metal cylinders



Explosion Proof



60% lighter in weight than Type-I metal cylinders



No Rusting and No Corrosion



Long service life

Type-III Composite Cylinders form a part of High-Tech Composite Products and are classified under Value-added products.



Hydrogen Type III Composite Cylinder

**Fly Longer,
Higher & Faster**

~50% Lighter
Than Battery variant*

3 Times More Flying Hours*
In single fueling

5 minute
Refueling time* Vs 3 hour charging
time for battery variant

5000+ hours for Fuel cell system
500-1000 charge cycles for battery* variants

Approved by **PESO** in November 2024 for Type-III cylinder for the **FIRST TIME IN INDIA.**

Drone Application – Advantages of Hydrogen V/s Lithium-Ion Batteries

Longer Flight Duration

Hydrogen fuel cells can provide a higher energy density compared to lithium-ion batteries, allowing drones to fly for longer periods without recharging/refuelling.

Lighter Weight for Energy Storage

Hydrogen systems generally offer better energy-to-weight ratios, which can be crucial for drones where weight significantly impacts performance.

Faster Refuelling

Refuelling a hydrogen cylinder takes a few minutes, whereas recharging lithium-ion batteries may take hours.

Higher Altitude Performance

Hydrogen-powered drones perform better at higher altitudes due to less dependency on air density for cooling compared to battery systems.

Eco-Friendly

Hydrogen fuel cells produce water as a byproduct, offering a more environmentally friendly solution compared to lithium-ion batteries, which may involve rare earth materials and hazardous chemicals.

Key Takeaways

Long Flight Missions

Hydrogen variants are ideal for long-duration missions, such as surveying or mapping.

Cost Considerations

Initial costs for hydrogen systems can be higher, but operational costs may decrease over time due to longer life cycles and reduced refuelling times.

Weight Efficiency

Hydrogen systems reduce the drone's weight, improving flight efficiency.

Environmental Advantage

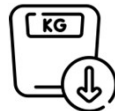
Hydrogen systems are more sustainable in the long term.

Advantages of Type – III Composite Hydrogen Cylinder

Parameter	Lithium-ion Battery Variant	Hydrogen Cylinder Variant (6.8L)
Weight (Energy Storage)	~12 kg (for equivalent 3 kWh capacity)	~6.5 kg (cylinder + 500 g hydrogen + fuel cell)
Flying Hours	1.5-2 hours	5-6 hours
Maximum Flight Height	~5000 m	~8000 m
Fuel/Power Capacity	15 Ah, ~300 Wh per battery pack (10 battery packs)	500g compressed hydrogen in 6.8-liter cylinder
Refuelling/Charging Time	~2-3 hours	~5 minutes
Operational Weight	~20 kg (including drone, payload, and batteries)	~14 kg (including drone, payload, and cylinder)
Environmental Impact	High (battery manufacturing & disposal)	Low (water is the only byproduct)
Durability (Cycles)	~500-1000 charge cycles	~5000+ hours for the fuel cell system
Energy Storage Capacity	~3 kWh	~3.3 kWh (usable after fuel cell efficiency)
Cost (Initial)	Lower initial cost	Higher initial cost (fuel cell system)
Cost (Operational)	Moderate (battery replacements every 1-2 years)	Lower (hydrogen refuelling costs)
Noise Levels	Moderate	Low (quiet fuel cell operation)
Temperature Range	-10°C to 50°C	-20°C to 60°C



Reduced Chances of Explosion



~50% lighter in weight than Batteries



Higher Durability



Low Maintenance



Composite Air Tank for Heavy Vehicles



- The air compressor draws filtered air from the atmosphere and compresses it, storing the compressed air in high-pressure reservoirs.
- Currently these reservoirs are made-up of steel which are very heavy & prone to corrosion due to presence of moisture in the air.
- Time Technoplast Limited, first time in the world has developed these Type-4 Composite tanks which are 54 % lighter than steel tanks, has long life, no corrosion & can sustain large pressures.

Specification

- Capacity : 30L
 - Material : Liner-HDPE
Composite-Glass fibre + Epoxy resin
 - Weight : 5.6 kg
 - Weight of metal air tank : 12 kg
 - Weight saving- 54%
 - Customer name- TATA MOTORS
 - Vehicle name-Tata Ultra 9/9m EV & Tata Ultra 9/12m EV
-



Commercial supply started to TATA Motors.

WIPRO Hydraulic Tank- 120 Litre

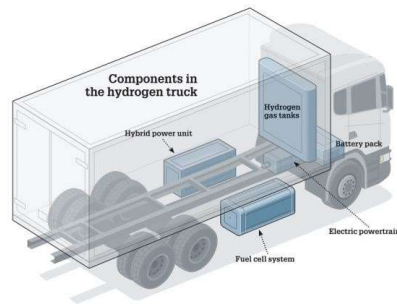


- All the tippers with back body tilting arrangement uses hydraulic systems for tilting operation.
- Currently Wipro is supplier of this hydraulic system with metal hydraulic oil tank to the Automotive OEM's.
- 1st time in India, Time Technoplast Limited has developed this polymer hydraulic oil tank for Wipro.
- Advantages-
 - 75 % lighter than the metal tank of same capacity.
 - No contamination of the oil due to tank corrosion.

Specification

- | | |
|----------------------------------|---------------------------------------|
| • Capacity : 120L | • Weight saving-75% |
| • Material : HDPE | • Vehicle name-Tata Signa 3523 Tipper |
| • Weight : 7.5 kg | • Customer: Wipro |
| • Weight of metal tank : 30.5 kg | • Supply location: Bangalore |
-

Hydrogen Cylinder for Fuel Cells



- Type-IV Carbon wrapped cylinders
- Light weight (90% weight reduction) - provides better fuel economy and better payload
- Reliable and safe
- Applications – Hydrogen Cars, power generation (Towers)

Composite Fire Extinguisher



- Made with HDPE inner liner
- Light Weight, Carbon Neutral and 100% recyclable
- Higher Strength with winding
- Maintenance Free & Corrosion Free
- Long shelf life

Composite Fire Extinguisher In Railways



भारत सरकार Government of India
रेल मंत्रालय Ministry of Railways
रेलवे बोर्ड Railway Board

(E-File No.-3322416)

No. 76/M(C)/137/31 Vol. V

New Delhi, Dated-22.06.2021

PCMEs
All Zonal Railways

& ICF, MCF and RCF

Sub: Use of Fire extinguishers having Composite cylinder.

IR has witnessed many serious fire incidences in past in field units like workshops, Diesel loco sheds, Electric loco sheds, rolling stock maintenance depots and at stations. Provisions of stipulated Nos. of conventional DCP type Fire extinguishers are normally available. However, many a times these malfunction during emergency.

This happens due to various limitations due to its heavy weight, corrosion proneness and other factors. In this regard it is essential to leverage the latest technology available to achieve effective operation of fire extinguishers during any fire incident.

It is understood that many government organizations (ICF, Central Railways, CISF and MoPNG) including some Railway field units have already taken initiatives to leverage the latest technology available to as per latest BIS 15683:2018.

In this context, it is advised that the procurement of Fire extinguishers, to be installed at Rolling stock field units e.g. PUs, workshops, coaching depots, EMUs/MEMU maintenance depots, freight depots etc. may be done with Fire extinguisher having composite cylinder, of same fire rating as per latest BIS 15683:2018 and as per specific service pressure requirement for the use.

Further all rolling stock field units may get fire safety audit conducted by an independent third party and accordingly the identified gaps may be plugged in a time bound manner.

The above has approval of AM/ME.

SUMAN
KUMAR TANTI
Principal Engineer (Mechanical),
Railway Board, New Delhi
(Suman Kumar Tanti)
Dir. Mech. Engg./ Chg.
Railway Board

C/- ED/Carriage / RDSO/Lucknow – For kind information and necessary action please.





IBC's growing faster
Time Technoplast is the largest and major player in most countries it operates in



Polymer and Composite products to gain share from metals



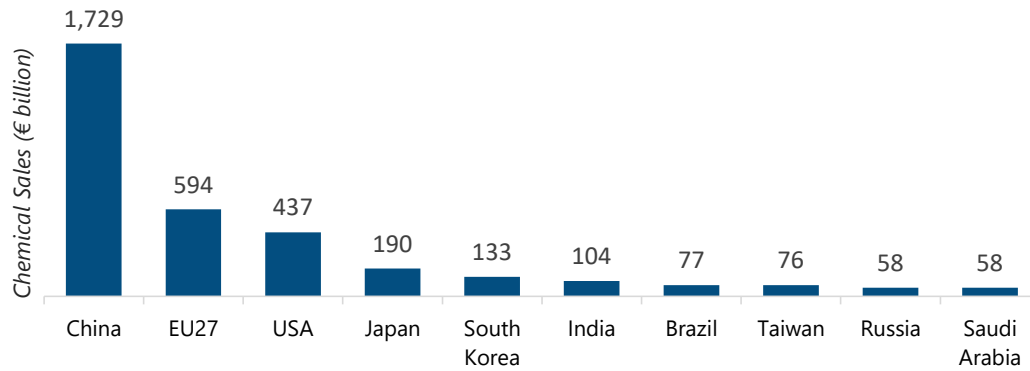
Recycling efforts to encourage sustainability



Chemical production shifting from China to other Asian countries

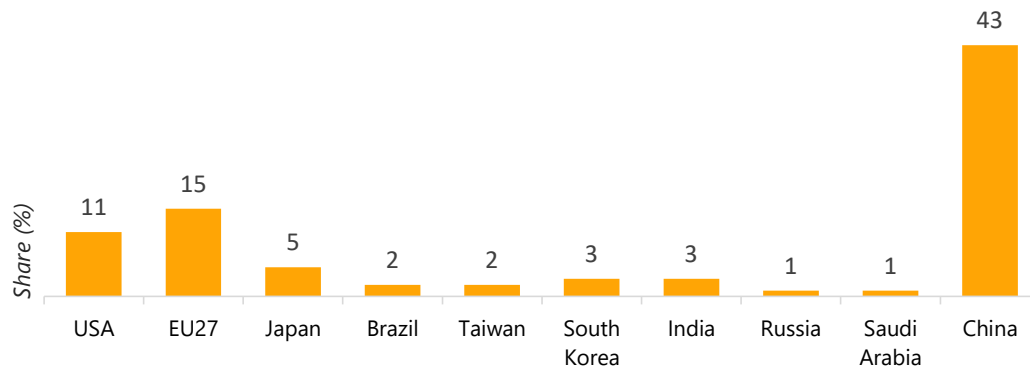


2021 Chemical Sales By Country: Top 10



For the year 2021, World chemical sales (excluding pharmaceuticals) stood at €4,026 Bn.

2021 Chemical Share (%) By Country: Top 10



China dominates the world chemical market while India holds its position as 6th largest.

Source: Cefic Chemdata International

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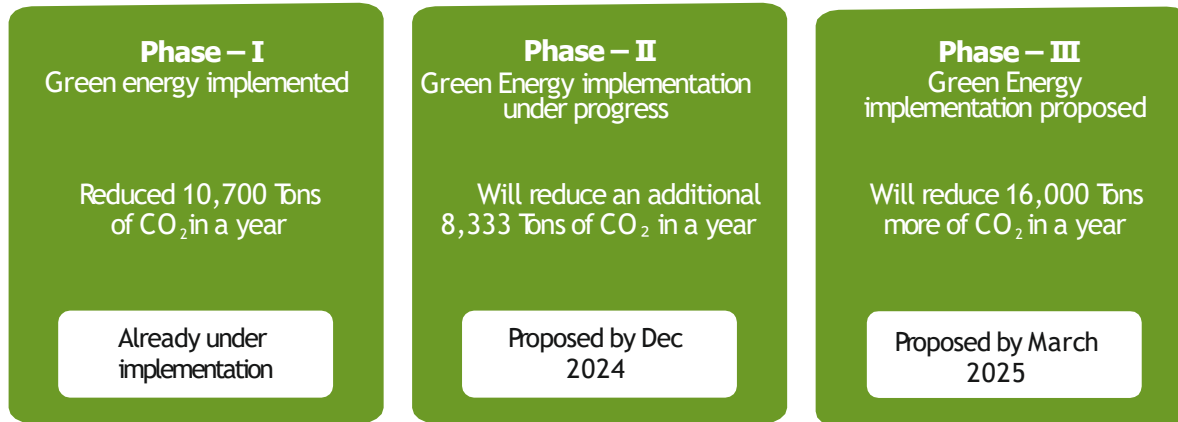
ESG & CSR



Energy Savings Initiative

Making our contribution towards efforts in arresting “Climate Change”

- ✓ Took initiative to convert part of our Energy consumption to clean energy
- ✓ 10 % of our total consumption converted to green energy and by FY 25, this would increase to 32 %.



The above action will improve Carbon dioxide balance by more than 35,000 Tons.



Step Towards Green (Solar) Energy



Total Electricity Units Consumed Per Year	15 Crore Units p.a.
---	----------------------------

Phase- I

(i) <u>Green Energy (Solar) Completed and Implemented</u> Karnataka Savings Per Unit (Rs. 2.50 per unit) (2 Cr x 2.50)	2 Crore Units p.a.	Rs 5.00 crores
--	--------------------	-----------------------

Phase- II

(i) <u>PPA Signed/ Finalized for Solar Energy</u> Tamil Nadu Maharashtra Gujarat Savings Per Unit (Rs. 2.50 per unit) (4 Cr x 2.50)	Will be implemented by the end of FY25 4 Crore Units p.a.	Rs. 10 Crores
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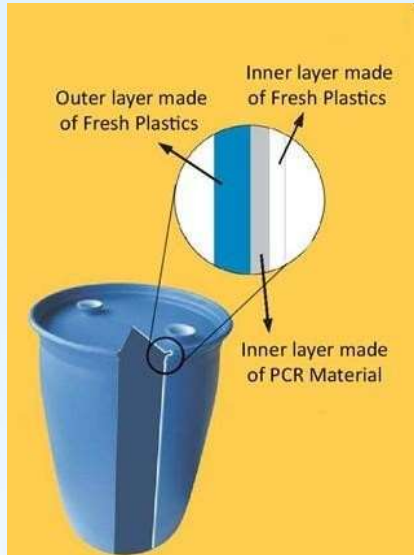
Total Savings

Units	6 Crore Units p.a.	
Annual Savings (Units)- {6 Cr/15 Cr x 100}	40%	
Cost Savings (Payback Period is Less than 1 Year)		Rs. 15 Crores

Total Investment In Equity Form	Rs. 9 Crores
--	---------------------

Firms Involved: (1) FPEL Phoenix Pvt. Ltd. (2) Neo Green Power Energy Pvt. Ltd.
(3) Enerparc Solar Power Pvt. Ltd. (4) Radiance Renewables Pvt. Ltd.

Continuous Innovation to create a **POSITIVE** Environmental Impact
Focus on reduction of waste from packaging products by **RECYCLE and REUSE**

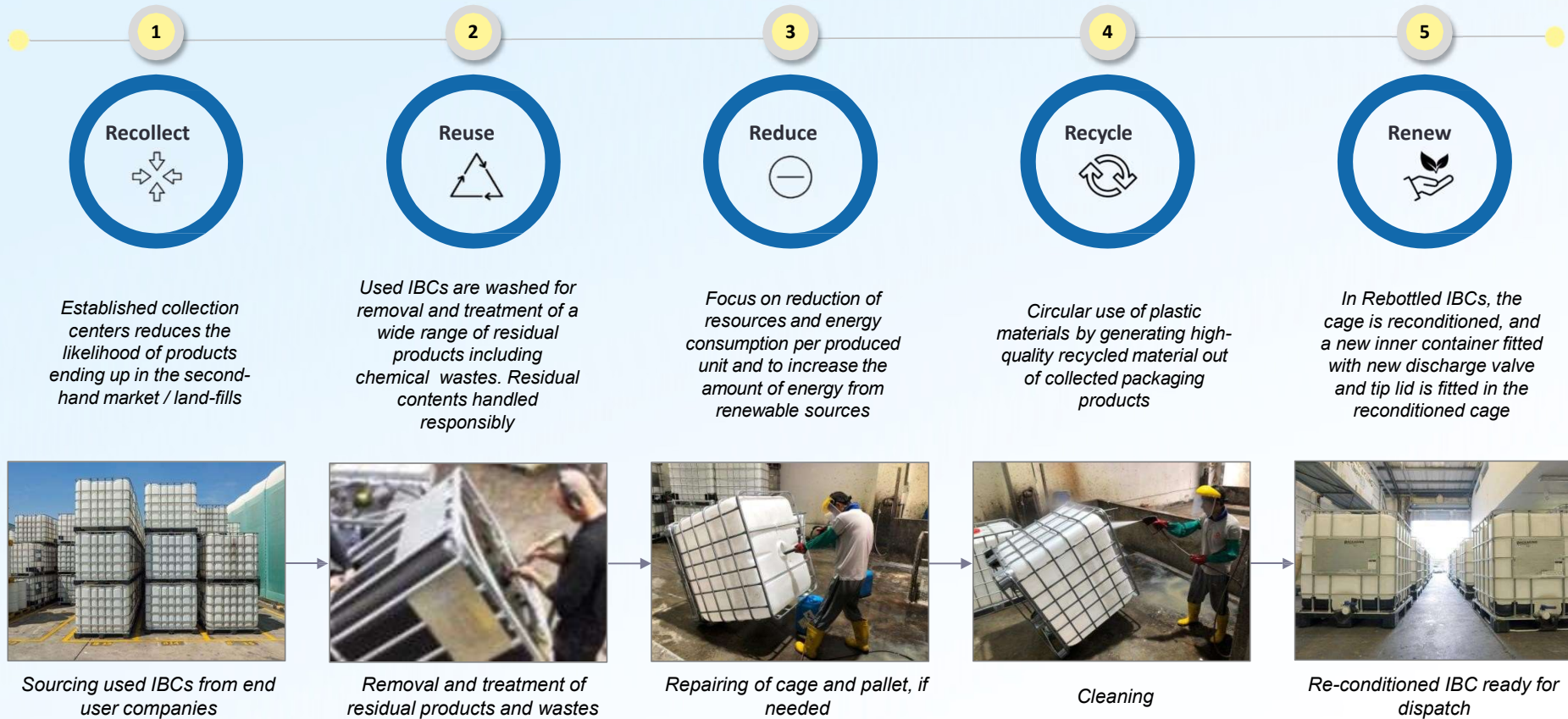


Introduction of Multi-Layer Technology for Industrial Packaging products (Drums, Jerry cans and IBCs) for use of Post Consumer Recycled (PCR) material in the middle layer of the product.

Use of PCR material to manufacture Intermediate Bulk Container (IBC) Components like seal cap, security flap, corner protector, pallet etc.



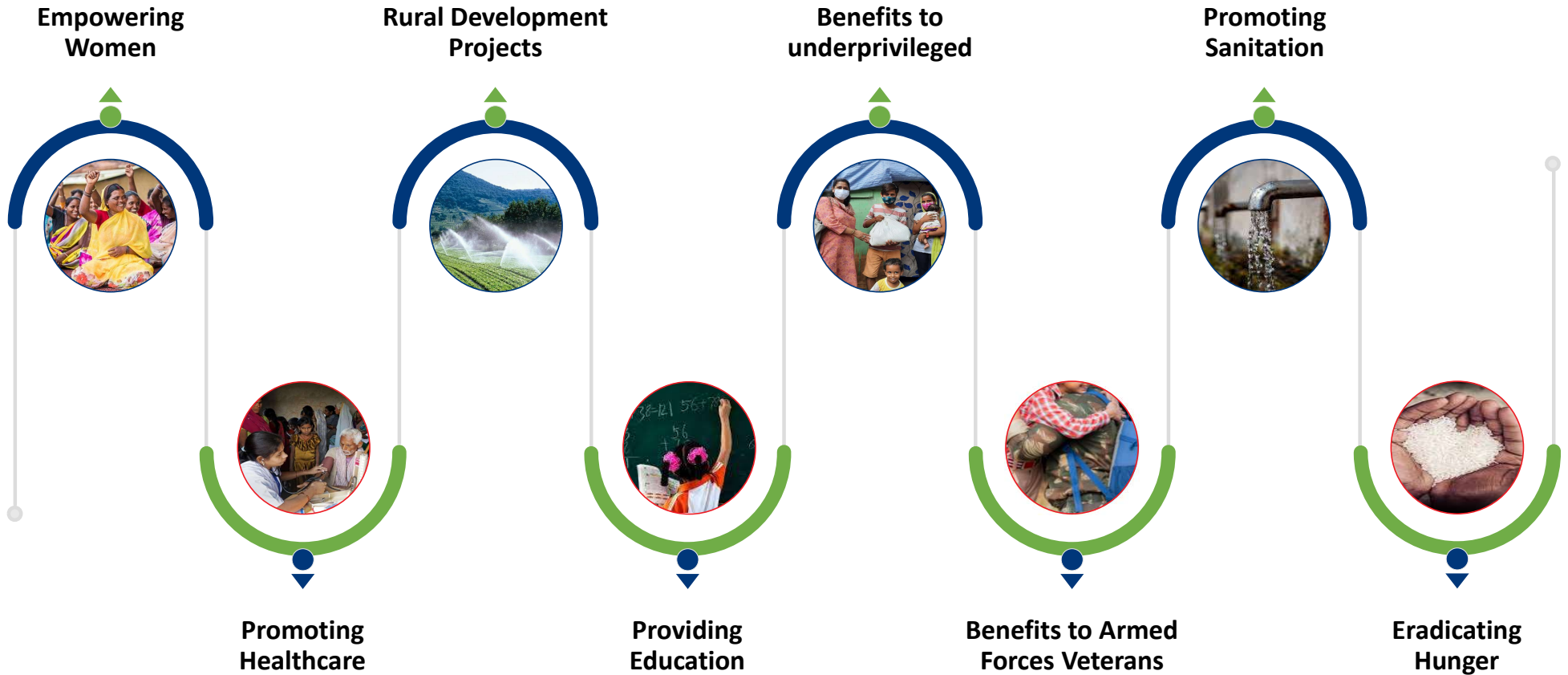
REBOTTLE & REUSE of IBC with collection system



Continuous measures and innovation in place to optimize the use of water, fossil fuels and raw materials across processes

10% Reduction in Carbon Footprint from FY23



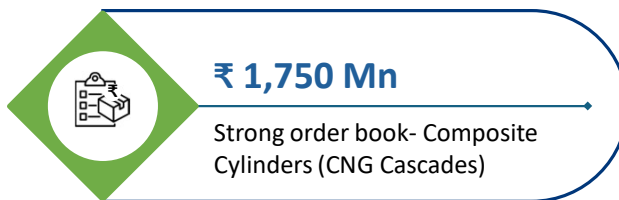
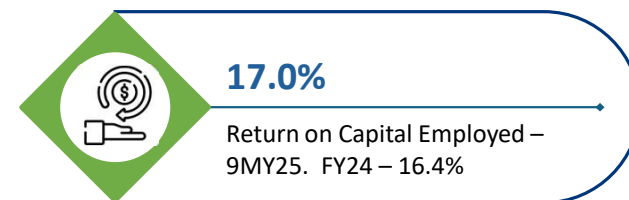
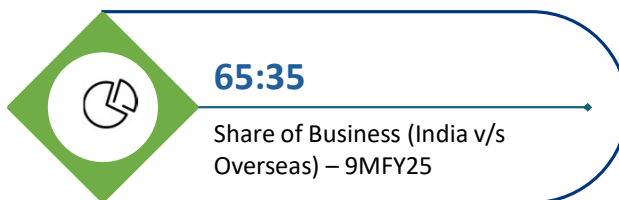
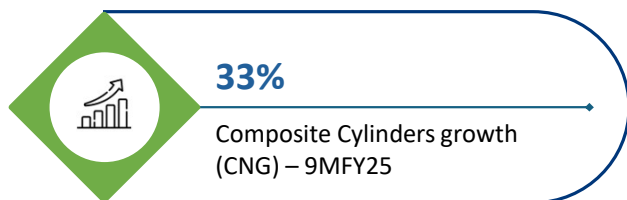
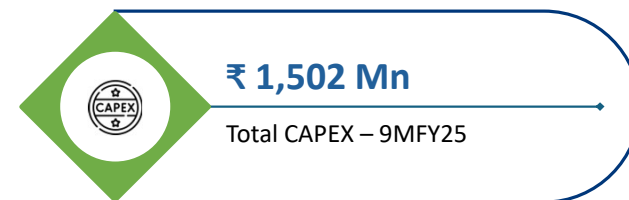




Appendix



Key Highlights 9M FY25



Product Segment Wise Value and Volume Numbers



Particulars	Value			Unit	Volume		
	9MFY25	9MFY24	YoY Growth		9MFY25	9MFY24	YoY Growth
	(₹ Mn)	(₹ Mn)	%				%
TURNOVER							
Established Products							
Packaging (Excl. IBC Business), Lifestyle , Auto , Batteries Business etc.	26,883	24,846	8.2%	M.T.	229,506	203,563	12.7%
PE Pipes	2,047	1,792	14.2%	M.T.	18,515	15,775	17.4%
Sub - Total	28,930	26,638	8.6%		248,021	219,338	13.1%
VALUE ADDED PRODUCTS							
IBC (Including Inner Containers)	5,107	4,469	14.3%	Nos.	641,916	543,722	18.1%
Composite Products							
- LPG Cylinders	1,764	1,621	8.8%	Nos.	813,753	766,239	6.2%
- CNG Cascades	2,798	2,102	33.1%	Nos.	364	274	32.8%
MOX Film	1,317	1,183	11.3%	M.T.	5,519	4,923	12.1%
Sub - Total	10,985	9,375	17.2%				18.5%
Total	39,915	36,013	10.8%				14.2%

Consolidated Income Statement



Particulars (₹ Mn)	Q3FY25	Q3FY24	Y-o-Y	9MFY25	9MFY24	Y-o-Y
Total Income	13,893	13,266	5%	39,915	36,013	11%
Total Expenses	11,871	11,341		34,170	30,935	
EBITDA	2,022	1,925	5%	5,745	5,078	13%
EBITDA Margin (%)	14.6%	14.5%		14.4%	14.1%	
Finance Cost (Net)	225	249		695	768	
Depreciation	430	417		1,256	1,330	
PBT	1,367	1,258	9%	3,794	2,980	27%
Tax	343	327		967	764	
PAT before Minority Interest	1,024	931		2,826	2,216	
Minority Interest	16	15		42	35	
PAT after Minority Interest	1,008	916	10%	2,784	2,181	28%
PAT Margins (%)	7.3%	6.9%		7.0%	6.1%	
EPS (₹)	4.44	4.05		12.27	9.64	

Consolidated Balance Sheet



Particulars (₹ Mn)	H1FY25	FY24
Equity & Liabilities		
Shareholder's Funds		
Share Capital	227	227
Other Equity	26,597	25,301
Total Shareholder's Fund	26,824	25,528
Minority Interest	661	635
Non-Current Liabilities		
Long-Term Borrowings	2,155	1,654
Lease Liabilities	842	739
Deferred Tax Liabilities (Net)	1,224	1,127
Total Non-Current Liabilities	4,221	3,520
Current Liabilities		
Short-Term Borrowings	4,773	5,792
Trade Payables	4,713	4,439
Other Financial Liabilities	128	115
Other Current Liabilities	463	457
Short-Term Provisions	173	167
Current Tax Liabilities	363	487
Total Current Liabilities	10,613	11,457
TOTAL - EQUITY AND LIABILITIES	42,319	41,140

Particulars (₹ Mn)	H1FY25	FY24
ASSETS		
Non-Current Assets		
Fixed Assets		
Property, Plant & Equipment	12,873	12,867
Capital Work-in-Progress	578	412
Right-to-Use Assets	909	815
Intangible Assets	0.4	1
Others Financial Assets/Long Term Loans & Advances	411	400
Total Non-Current Assets	14,771	14,495
Current Assets		
Inventories	10,829	10,503
Trade Receivables	11,262	10,821
Cash and Cash Equivalents & Bank Balance	1,711	1,535
Other Current Assets	3,144	2,883
Total Current Assets	26,946	25,742
Assets Classified As Held For Sale*	602	903
TOTAL - ASSETS	42,319	41,140

*In accordance with Ind AS 105 for Non-current Assets Held for Sale and Discontinued Operations, the management has identified a classified certain assets as held for sale

Consolidated Cashflow



Particulars (₹ Mn)	H1FY25	FY24
Net cash flow from operating activities	1,874	4,062
Profit before tax & extraordinary items	2,426	4,310
Depreciation	827	1,726
Interest	470	1,014
Others	9	(83)
Working Capital Changes	(1,342)	(1,984)
Tax Payment	(516)	(920)
Net cash used in Investing Activities	(714)	(1,870)
Purchase of fixed assets	(941)	(1,808)
Others	227	(62)
Net cash used in financing activities	(1,064)	(1,973)
Net proceeds from borrowings	(518)	(656)
Increase in Share Capital Including Premium	-	97
Repayment of lease liability	(60)	(105)
Dividend paid & tax on dividend	(16)	(295)
Interest paid	(470)	(1,014)
Net increase/(decrease) in cash & cash equivalents	96	219
Cash & cash equivalents as at (opening balance)	912	693
Cash & cash equivalents as at (closing balance)	1008	912

Shareholders	As of 31 st Dec 2024	As of 30 th Sep 2024
Promoters	51.56%	51.56%
Domestic Institutional Investors	13.20%	12.87%
- Tata Mutual Fund - Tata Small Cap Fund		
- HDFC Trustee Company Ltd. A/c HDFC Balanced Advantage Fund		
- HSBC Small Cap Fund		
Foreign Institutional Investors	7.65%	6.69%
- Foreign Portfolio Investors Category I & II		
Public	27.60%	28.88%

S. No.	Customer name
1	ADANI TOTAL GAS LTD
2	MAHANAGAR GAS LTD
3	BHARAT PETROLEUM CORPORATION LIMITED
4	HINDUSTAN PETROLEUM CORPORATION LTD
5	INDIAN OIL CORPORATION LTD
6	MAHARASHTRA NATURAL GAS LTD
7	INDRAPRASTHA GAS LTD
8	GAIL GAS LTD
9	MEGHA ENGINEERING & INFRASTRUCTURE
10	ASHOKA BUILDCON LIMITED
11	SPECTRUM RENEWABLE ENERGY PVT LTD.
12	UNISON ENVIRO PRIVATE LIMITED
13	BHARAT GAS RESOURCES LIMITED
14	HP OIL GAS PRIVATE LIMITED
15	BEERENSGAS (INDIA) PRIVATE LTD
16	SKN-HARYANA CITY GAS DISTRIBUTION
17	BENGAL GAS COMPANY LIMITED
18	AG & P CGD INDIA PVT LTD
19	SABARMATI GAS LIMITED
20	PROXY GAS DJIBOUTI S.A.R.L
21	VILLA HAKATHA PVT. LTD.
22	BORG VENTURES FZE

Good customer profile over a short period of time; Continuous addition of new customers every year





Commercial Benefits – Type I vs Type IV



Sr. No	Parameter	Steel Cylinder Type I Cascade	Composite Cylinder Type IV Cascade	Remarks
1	Size	75 Litre	156 Litre	
2	Number of Cylinders/Cascade	60 Nos	60 Nos	
3	Total CNG Carrying Capacity (Water Litre Capacity)	4,500 WLC	9,360 WLC	
4	Indicative Cost of Cascade (Rs)	23.00 Lakhs	82.00 lakhs	
5	Cost of Vehicle (Rs)	20.00 Lakhs	20.00 Lakhs	
6	Capex per Cascade with vehicle (Rs)	43.00 Lakhs	102.00 Lakhs	
7	Capex required for carrying 9000 WLC CNG (including vehicle)	43.00 X 2 = 86.00 Lakhs	102.00 Lakhs	Additional Capex 16.00 Lakhs





Commercial Benefits – Type I vs Type IV



Sr. No	Parameter	Steel Cylinder Type I Cascade	Composite Cylinder Type IV Cascade	Remarks
1	Distance Assumed	100 kms	100 kms	
2	Running Cost (Rs/km)	32	30	Type I Cascade Wt: 9702 X 2 = 19404 kg Type IV Cascade Wt: 5820 kg
3	Cost of Running 100 kms (Rs)	3200 X 2 = 6,400	3,000	
4	Running cost (Rs/Litre/100 km)	0.71 per Litre per 100 km	0.32	
5	Total CNG carried per trip (Litres)	9000	9360	
6	Number of Trips per month (per fill station)	52	52	
7	Cost required for transporting 9000 WLC CNG (Rs)	6,400	2,884	55% Savings of Rs 3,516 per 9000 Ltrs
8	Saving per 9000 WLC CNG transportation (Rs)		3,516	
9	Monthly transportation Cost 52 trips (Rs)	3.32 Lakhs	1.50 Lakhs	
10	Monthly savings per 9000 Ltrs (Rs)		1.82 Lakhs	





Commercial Benefits – Type I vs Type IV



Sr. No	Parameter	Payback period and Savings over 20 years
1	Additional Capex for 9000 Litre CNG transport (Rs)	16.00 Lakhs
2	Savings per month in 52 trips (Rs)	1.82 Lakhs
3	Payback period (for Rs 9.00 lakhs extra Capex)	Less than 9 months
4	Total Savings over a 20 year period (Rs)	437.00 Lakhs

* Additional Savings on Recertification charges



Except for the historical information contained herein, statements in this presentation and the subsequent discussions, which include words or phrases such as "will", "aim", "will likely result", "would", "believe", "may", "expect", "will continue", "anticipate", "estimate", "intend", "plan", "contemplate", seek to, "future", "objective", "goal", "likely", "project", "should", "potential", "will pursue", and similar expressions of such expressions may constitute "forward-looking statements". These forward looking statements involve a number of risks, uncertainties and other factors that could cause actual results to differ materially from those suggested by the forward-looking statements. These risks and uncertainties include, but are not limited to our ability to successfully implement our strategy, our growth and expansion plans, obtain regulatory approvals, our provisioning policies, technological changes, investment and business income, cash flow projections, our exposure to market risks as well as other risks. The Company does not undertake any obligation to update forward-looking statements to reflect events or circumstances after the date thereof.



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Thank You