



I G Petrochemicals Limited

2nd January 2024

Looking beyond short-term hiccups

I G Petrochemicals Limited (IGPL), serving as the flagship Company within the Dhanuka Group, is the largest manufacturer of Phthalic Anhydride (PAN) in India. The Company is one of the most cost-efficient producers of PAN globally. PAN is a downstream product derived from Orthoxylene (OX), a fundamental petrochemical. Functioning as a versatile intermediate in organic chemistry, PAN plays a pivotal role in the production of Plasticizers, Unsaturated Polyester Resins, Alkyl Resins, and Polyols. Presently, the spread between PAN and OX has narrowed from its decadal average of ~\$150-200 per MT to ~\$90 per MT. We anticipate that this deviation will normalize, fostering robust growth in gross profit. To further grow its sales, the Company is expanding its PAN capacity by ~24% (from 222,110 MTPA to 275,110 MTPA) as it is working at ~90% capacity utilization.

Capacity expansion

To grow its sales, IGPL is currently executing its brownfield capacity expansion plan, which will lead to an increase in its PAN capacity from 222,110 MT to 275,110 MT, along with an increase in its Maleic Anhydride (MAN) and benzoic Acid capacity from 7,660 MT to 9,160 MT and 1,000 MT to 1,250 MT, respectively. The Company is spending Rs. 3.5Bn, which will generate sales of Rs. 4.5-5Bn at optimum capacity utilization. This capacity is expected to be completed in Q4 FY24.

Furthermore, the Company has initiated the process of obtaining environmental clearance for the production of downstream derivatives of PAN, specifically Advance Plasticizer. Currently, the management is evaluating the project, and the expansion is subject to the Company's board approval; IGPL has outlined a capital expenditure of ~Rs. 1.5-2Bn dedicated to the establishment of a greenfield facility for this purpose. According to management projections, this expansion will have a revenue potential of ~Rs. 8-9Bn.

Lowest cost producer

IGPL's plants are strategically located in MIDC, Taloja. This location enables the Company to procure raw materials from the largest supplier of OX efficiently, offering a cost advantage compared to competitors who incur additional transportation expenses. The majority of their sales come from the western chemical belt of India; IGPL acts as the nearest source of PAN for the customer, thereby minimizing freight costs. Moreover, the consolidation of all plants in a single location presents a distinct advantage for IGPL, allowing for the equitable distribution of fixed costs among its four facilities. Additionally, the utilization of steam generated during the PAN manufacturing process contributes to a reduction in power and fuel expenses for the Company.

View & Valuation

We initiate coverage on IGPL with a high conviction BUY rating at 5-year median PE of 8x on FY26E EPS, giving a target price of ~Rs. 819, implying an upside of 64%. The new capacity addition of 53,000 MTPA of PAN and improving the spread of PAN & OX will lead to sales growth and improvement in EBITDA margin, leading to strong growth in PAT.

BUY

CMP Rs. 500

TARGET Rs. 819 (+64%)

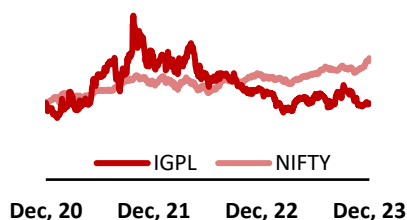
Company Data

Company Data	IGPL IN
Bloomberg Code	IGPL IN
MCAP (Rs. Mn)	15,397
O/S Shares (Mn)	31
52w High/Low	589/393
Face Value (in Rs.)	10
Liquidity (3M) (Rs. Mn)	17.6

Shareholding Pattern %

	Sep-23	Jun-23	Mar-23
Promoters	68.74	68.74	68.74
FIIs	3.74	3.81	3.71
DIIIs	1.80	1.69	1.95
Non-Institutional	25.74	25.78	25.61

IGPL vs Nifty



Source: Keynote Capitals Ltd.

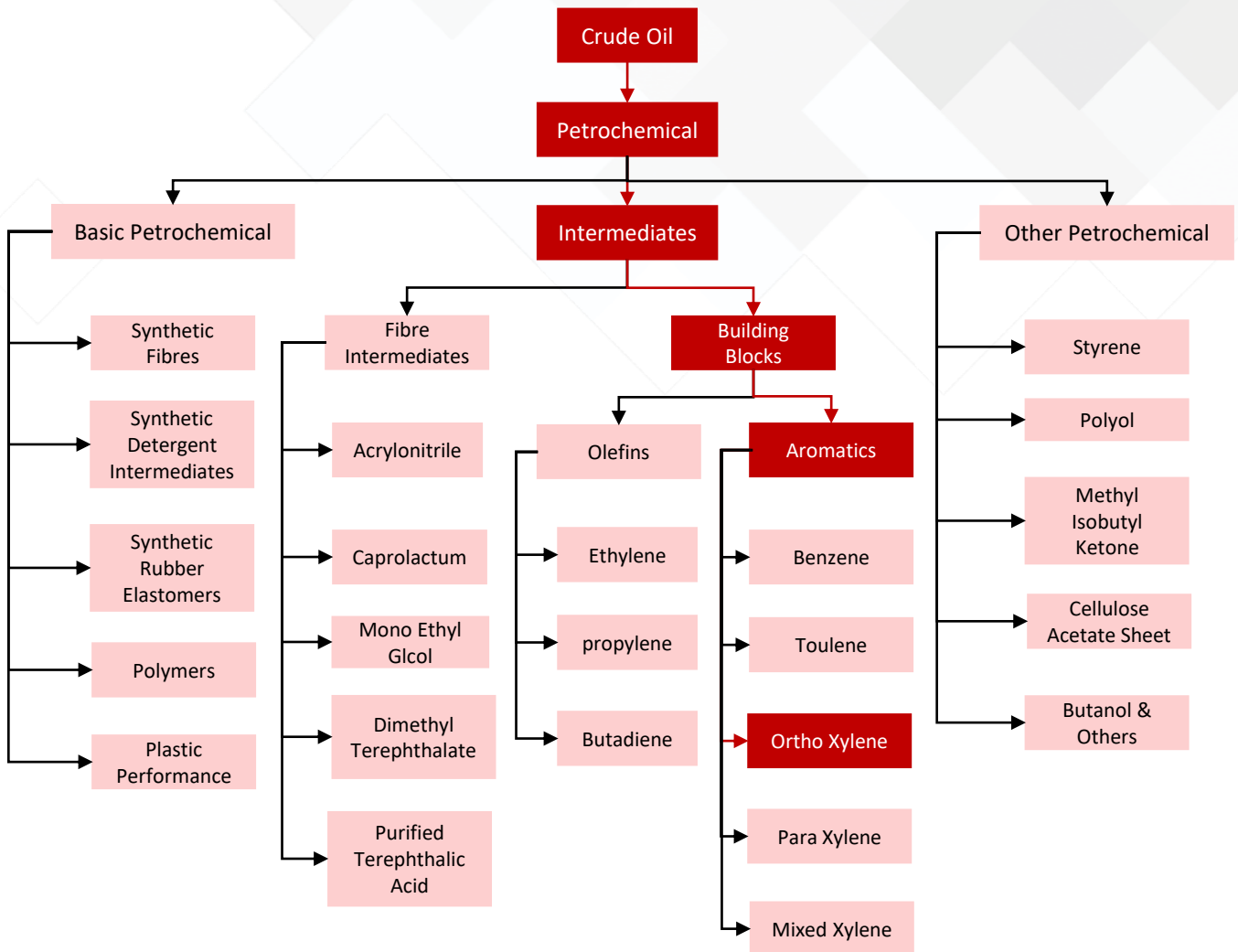
Key Financial Data

(Rs Bn)	FY23	FY24E	FY25E
Revenue	24	20	24
EBITDA	3	2	3
Net Profit	2	1	2
Total Assets	20	21	23
ROCE (%)	17%	7%	12%
ROE (%)	17%	6%	11%

Source: Company, Keynote Capitals Ltd.

Chirag Maroo, Research Analyst
Chirag@keynotecapitals.net

Petrochemical Industry



Source: Department of Chemicals & Petrochemicals, Keynote Capitals

The chemical industry is the backbone of industrial and agricultural development of the country and provides building blocks for several downstream industries, such as textiles, papers, paints, soaps, detergents, pharmaceuticals, varnish etc. It is one of the most diversified sector of all industrial sectors covering thousands of commercial products. Indian chemical industry comprises of both small scale as well as large scale units. With initiatives like "Make in India" programme gaining steam, investments, innovation and infrastructure are going to be the major thrust areas for chemical industry players. The industry is important as it has several linkages with other sectors of an economy. Petrochemicals have backward linkages with other industries in petroleum refining, natural gas processing and forward linkages with industries dealing variety of downstream products. Also, the industry offers alternatives, which serve as substitutes for natural products and therefore, it has the capacity to meet the constantly growing demand that would otherwise strain the natural resources. The value additions in the petrochemicals chain offer immense possibilities and cater to the need of textiles and clothing, agriculture, packaging, infrastructure, healthcare, furniture, automobiles, information technology, power, electronics and telecommunication, irrigation, drinking water, construction needs and host of other articles of daily and specialized usage, amidst other emerging areas.

IGPL | Initiating Coverage Report

Petrochemical are broadly divided into Basic Petrochemical, Intermediates and Other Petro based Chemicals. Intermediates are further divided into two parts: i) Fibre Intermediates and ii) Building Blocks. Building blocks are even further divided into two: i) Olefins and ii) Aromatics.

Olefins

Olefin, also called as alkenes contains one or more pairs of carbon atoms linked by a double bond. Examples include ethylene, propylene and butadiene. Both ethylene and propylene are used in the industrial production of chemicals, plastics and plastics products while butadiene is used in the industrial production of synthetic rubber.

Aromatics

Aromatics are hydrocarbons derived from petroleum, characterized by a ring-like molecular structure. Examples include benzene, toluene, and xylene. Benzene is used in making dyes as well as synthetic detergents. A combination of benzene and toluene are used in making isocyanates which are required in making polyurethanes while xylenes are used in the industrial production of both plastics and synthetic fibres.

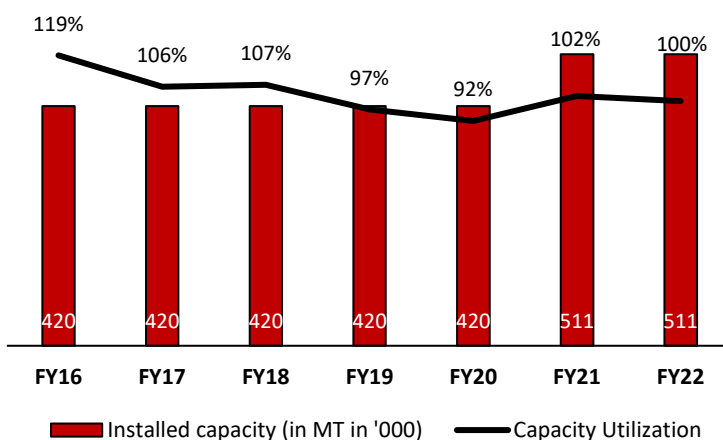
Ortho-Xylene (OX)

OX is an aromatic hydrocarbon. It is majorly used for manufacturing Phthalic Anhydride (PAN), which is used to make plasticizers used in compounding Polyvinyl Chloride (PVC) resins, unsaturated polyesters used in glass-reinforced thermoset engineering applications, and alkyd resins used mainly for surface coatings. It can be substituted for toluene in thinning paints and varnishes, where slower drying is necessary. It is also necessary in the production of plastic bottles and polyester clothing. Small quantities are used in solvent applications (which are declining) and to make bactericides, soya bean herbicides and lube oil additives. A new outlet is in the production of Polyethylene Naphthalate (PEN) polymer, which is a high-performance polyester used in film and rigid packaging where performance needs are more rigorous than polyethylene terephthalate products.

As of 2022, India has an installed capacity of 511,000 MT of OX which was working at 100% capacity utilization. Reliance Industries is the largest manufacturer of OX in India, with a capacity of 450,000 MT.

Note: India is a net exporter of OX

India's capacity of OX & its utilization

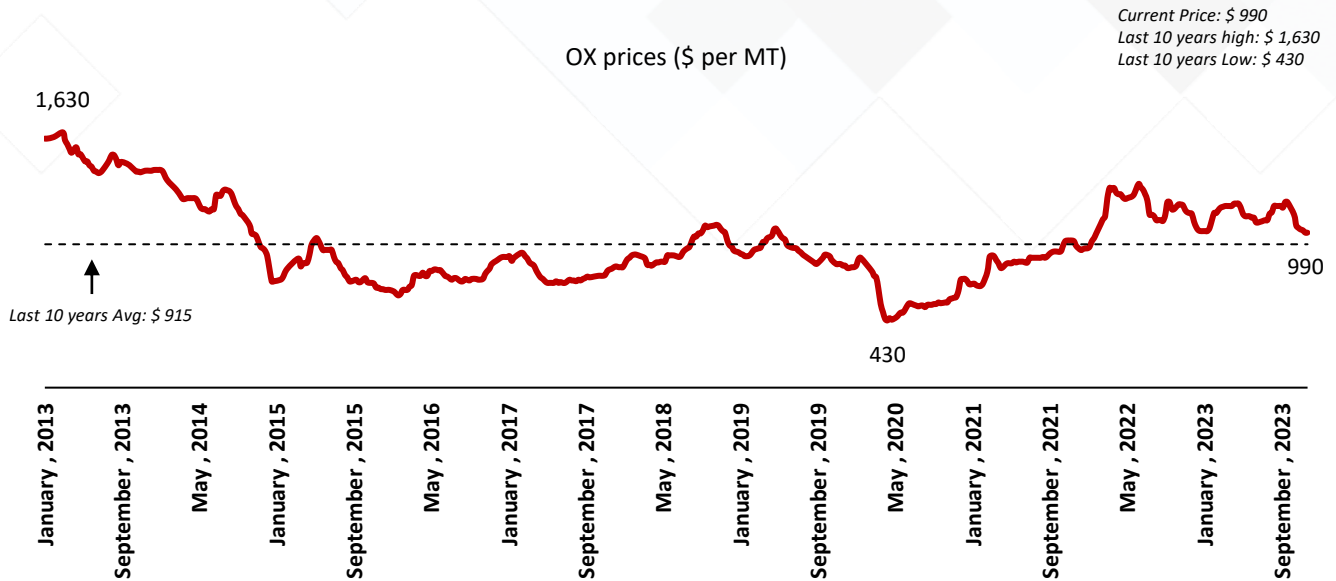


Source: Ministry of Chemicals & Fertilizers (Department of Chemicals & Petrochemicals), Keynote Capitals Ltd.

IGPL | Initiating Coverage Report

As a commodity, the fluctuations in OX prices are intricately linked to the supply of crude oil and the demand for PAN.

In Q4 FY22, Pramod Bhandari (CFO – IGPL) mentioned: “In FY22, prices of key raw material followed by crude oil have been really volatile and sold rapidly due to the various factors like global supply chain disruption, unprecedented events like cyclones at few developed countries.”

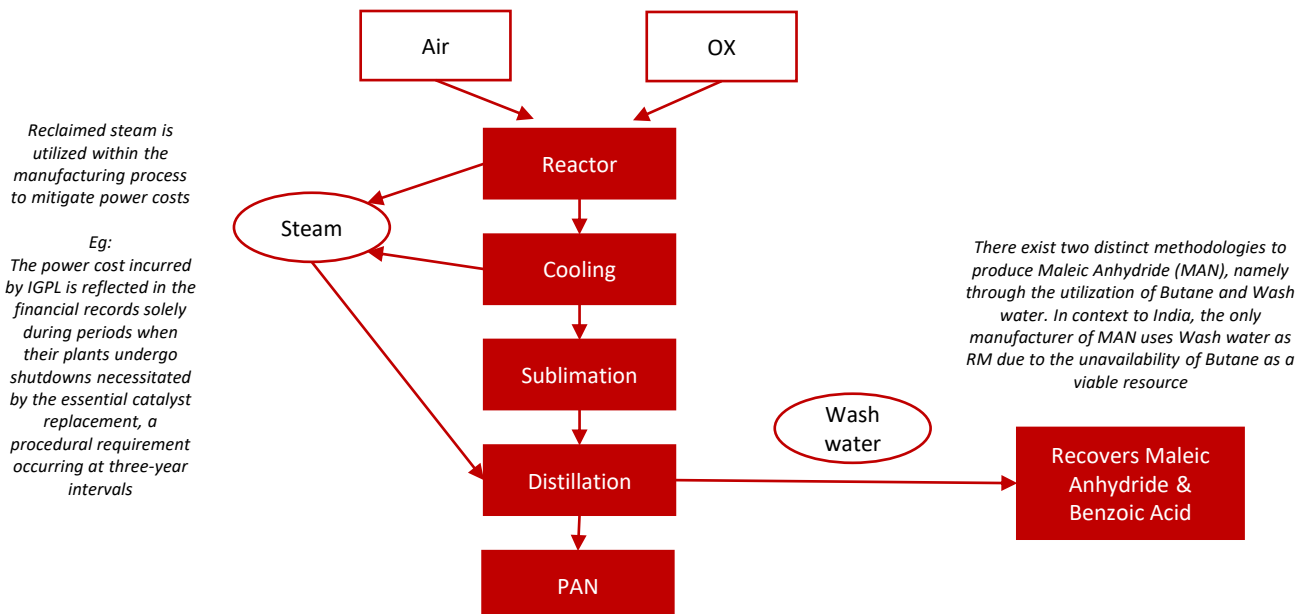


Source: Bloomberg, Keynote Capitals Ltd.

Phthalic Anhydride (PAN)

PAN is a downstream product of OX which finds application in multiple industries. Globally, PAN is manufactured by two ways: 1) through naphthalene 2) through OX. 90%+ of world’s PAN manufacturing is done through OX route.

Manufacturing process of PAN through OX



Source: Company, Keynote Capitals Ltd.

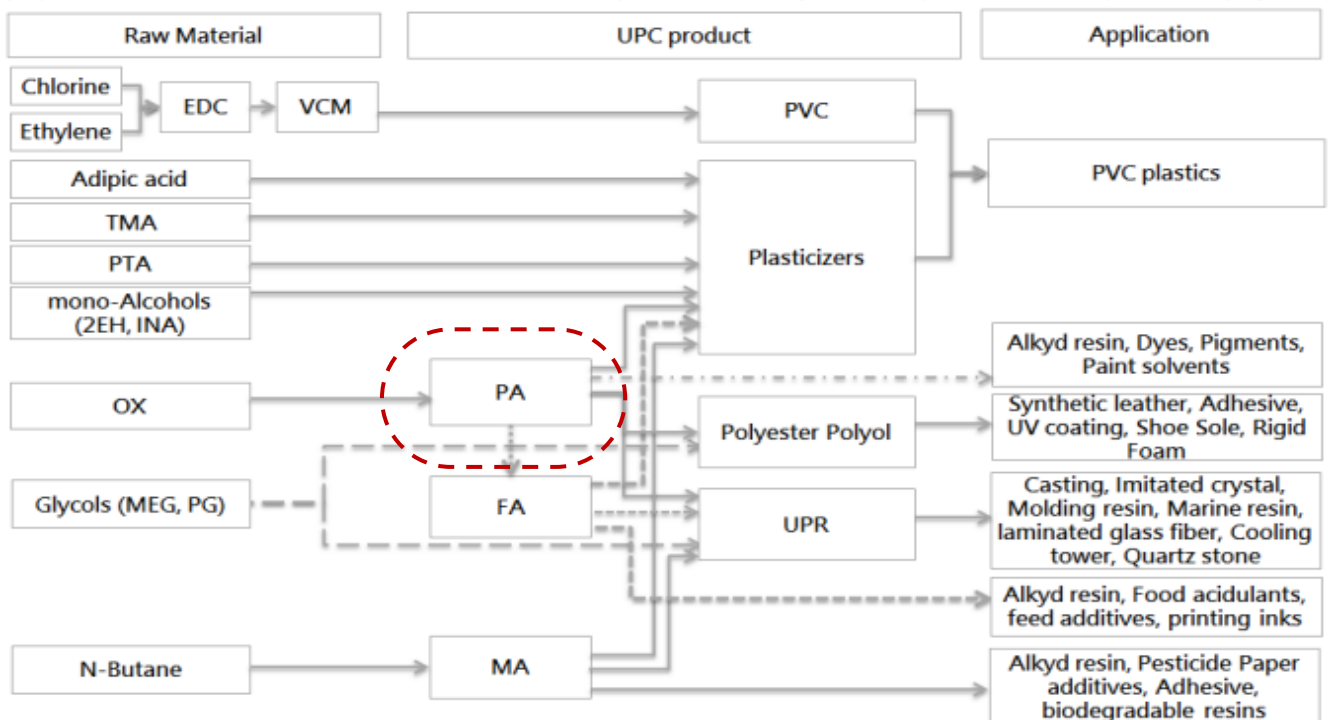
IGPL | Initiating Coverage Report

Manufacturing PAN from OX offers advantages such as better process efficiency, higher yield, and reduced environmental impact compared to using naphthalene. OX-based production often involves milder reaction conditions, leading to lower energy consumption and fewer by-products. Additionally, OX is derived from more readily available feedstocks, contributing to a more sustainable and cost-effective production process.

Supply Chain of PAN

Historically, PAN as an intermediate was used in industries such as paints, plasticizers, Unsaturated Polyester Resin (UPR) and CPC pigments.

Currently, industry is facing headwinds due to lower demand from CPC pigments



Source: UPC Technology Corporation, Keynote Capitals Ltd.

EDC: Ethylene Dichloride, VCM: Vinyl Chloride Monomer, PVC: Polyvinyl Chloride, TMA: Trimethylamine, PTA: Purified Terephthalic Acid, FA: Ferulic Acid,

UPR: unsaturated polyester, MA: Maleic Anhydride, PA: Phthalic Anhydride

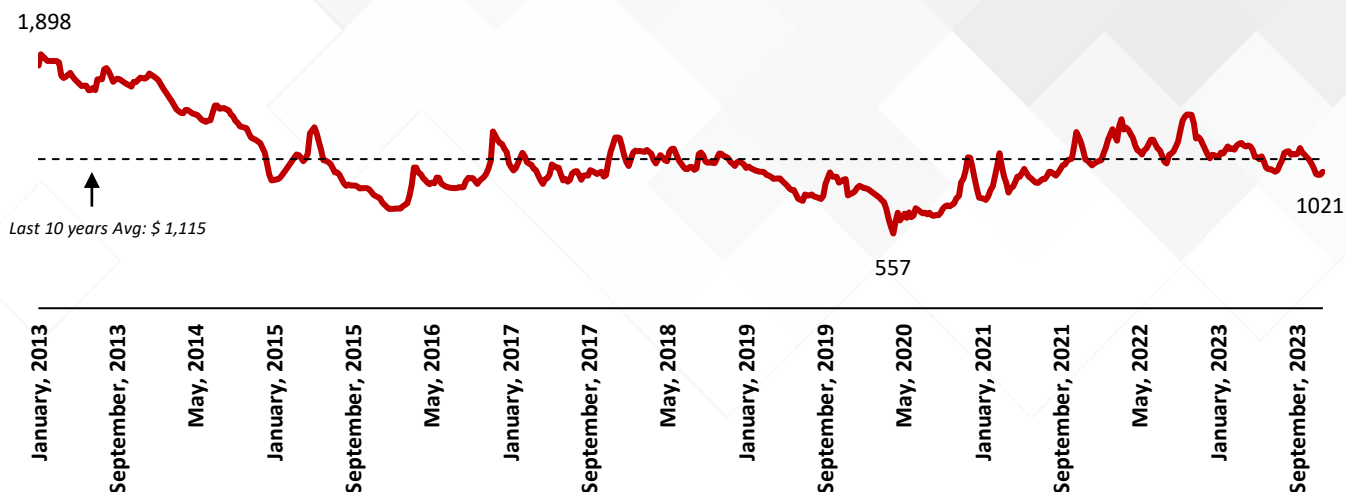
However, over the years, its application has expanded widely to multiple industries. Today, PAN is also used in the production of speciality chemicals, agrochemicals, specialized polymers, electric vehicles & electronic products, insect repellents and urethane polyester polyols. It is also being innovatively used for making plastic currency, paper boards, leisure boats and sail of windmills etc.

PAN usage has increased from 5-10 to 20+ industries

In Q4 FY22, Pramod Bhandari (CFO-IGPL) said "Phthalic anhydride is a downstream product of orthoxylene, the consumption of PAN and its derivatives is growing rapidly over the past few years. The consumption of phthalic anhydride was historically concentrated in the paint, plasticizer and CPC industry. We have witnessed a lot of changes in the last few years and many other industries had increased the application of PAN."

PAN Prices (\$ per Ton)

Current Price: \$ 1,021
Last 10 years high: \$ 1,898
Last 10 years Low: \$ 557



Source: Bloomberg, Keynote Capitals Ltd.

Over the last decade, the price spread between PAN and OX has been ~\$150-200 per ton. At its upper limit, this differential has exceeded \$500 per ton. It is noteworthy that there have been instances where PAN prices were lower than OX prices. Over the past decade, the lowest spread recorded was ~-\$90, this situation occurs due to supply and demand mismatch.

Note: Correlation between PAN & OX prices for last 10 years is 0.9, suggesting a strong positive correlation.

As per IGPL management, if the spread goes down any further, a lot of plants in China, Korea and Taiwan will close.

India's PAN capacity

PAN Capacity in India (in MT)	FY16	FY17	FY18	FY19	FY20	FY21	FY22
Installed capacity	3,49,000	3,49,000	3,49,000	3,49,000	4,02,000	4,02,000	4,02,000
Production	3,06,000	2,97,000	2,90,000	2,75,000	2,70,000	2,93,000	3,40,000
Capacity Utilization	88%	85%	83%	79%	67%	73%	85%
Import	79,803	92,057	1,30,440	1,44,800	1,74,482	1,40,780	1,21,210
Export	40,448	42,032	37,869	26,495	28,898	23,296	32,492

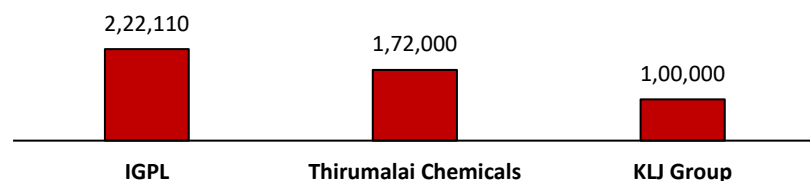
Source: Ministry of Chemicals & Fertilizers (Department of Chemicals & Petrochemicals), commerce.gov.in, Keynote Capitals Ltd.

Presently, India is a net importer of PAN, with a significant share sourced from Taiwan & Korea, supplemented by smaller volumes originating from China, Indonesia & Thailand.

As of FY22, 89% of total imported PAN comes from 5 countries: 30% from Taiwan, 25% from Korea, 14% from China, 12% from Indonesia & 8% from Thailand.

India's PAN market operates within an oligopolistic structure. Presently, three major players dominate the industry, namely IGPL, Thirumalai Chemicals, and the KLJ group (who uses PAN primarily for internal consumption). The manufacturing process involves intricate and critical chemistry, contributing to substantial entry barriers for potential new entrants. As of FY23 India's market size of PAN is ~450,000-480,000 MT and is expected to grow at 6-8%.

Top 3 players capacity (in MT) in India (FY23)



IGPL | Initiating Coverage Report

About the Company

Founded in the year 1988, I G Petrochemicals Ltd. (IGPL) is promoted by Dhanuka Group and headquartered in Mumbai. The Company has emerged as a prominent global player in the petrochemical industry. Renowned for its status as a leading and lowest cost manufacturer, IGPL specializes in the production of PAN. With a remarkable market presence, the Company commands an impressive market share of 50%+ in India.

IGPL operates with a robust production capacity 222,110 MTPA. In addition to its primary focus on manufacturing PAN, over years, the Company has progressively diversified its product portfolio and started manufacturing products like Maleic Anhydride (MAN), Benzoic Acid, and Diethyl Phthalate (DEP). This strategic expansion underscores IGPL's commitment to delivering a comprehensive range of high-quality petrochemical products to meet diverse market demands.

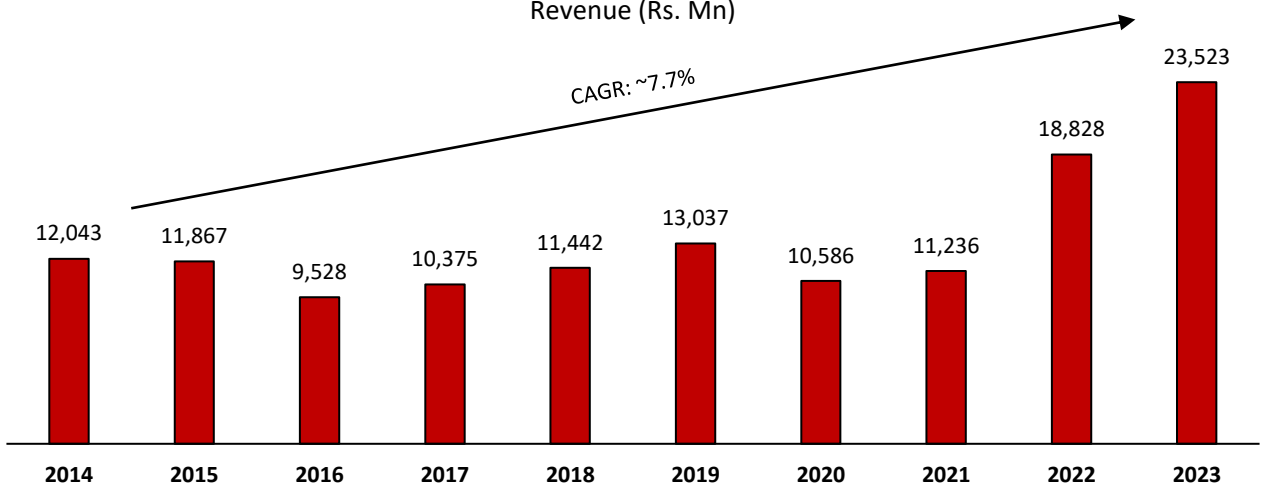
IGPL's facility was designed through technical collaboration with Lurgi GmbH, Germany, with the objective of achieving enhanced efficiencies that position IGPL as one of the most cost-effective producers of PAN. The utilization of an advanced catalyst in IGPL's generator further contributes to increased yield in Phthalic production, thereby elevating overall production efficiency.

Note: IGPL is country's largest manufacturer of PAN and the only producer of MAN.

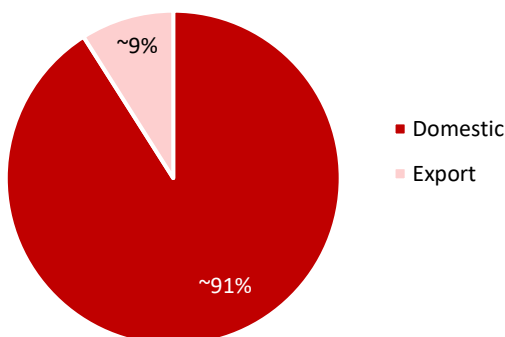
At present, IGPL operates four state-of-the-art manufacturing plants that adhere to international standards. The catalyst of each plant necessitates replacement every three years, resulting in an annual occurrence of additional expenses and a temporary shutdown of the plant for a 25-30 days during a quarter of the year and cost ~Rs. 120-150Mn.

Revenue (Rs. Mn)

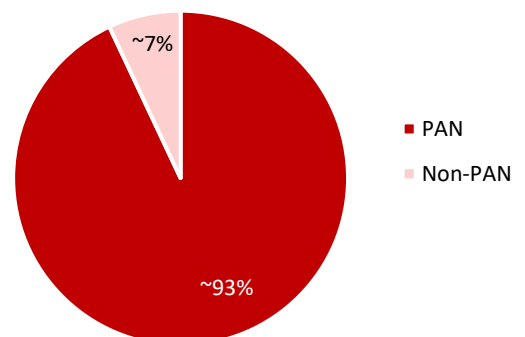
CAGR: ~7.7%



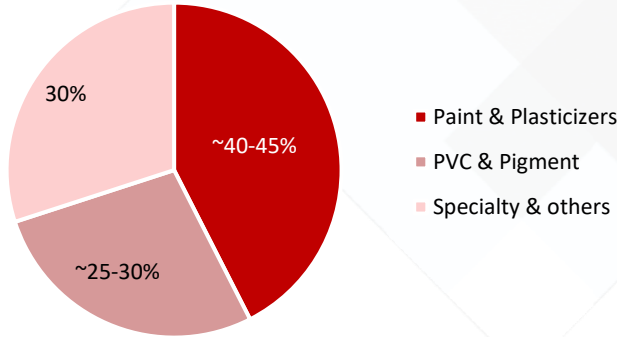
Geography wise Revenue Mix (FY23)



Product wise Revenue Mix (FY23)



End User Industry wise Revenue Mix (FY23)



Source: Company, Keynote Capitals Ltd.

Product portfolio & its application

PAN

PAN is a crucial chemical compound widely used in the production of various industrial and consumer goods. It is an organic compound and is classified as an anhydride of phthalic acid. This white crystalline solid is notable for its significance in the synthesis of plasticizers, resins, and dyes.

One of the primary applications of PAN is in the manufacturing of phthalate esters, commonly employed as plasticizers to enhance the flexibility and durability of plastics. These plasticizers find extensive use in the production of PVC (polyvinyl chloride) products, such as cables, pipes, and vinyl flooring.

Additionally, PAN serves as a key building block for the synthesis of alkyd resins, which are essential components in the formulation of coatings, paints, and varnishes. The compound also plays a role in the production of certain polyester resins and dyes.

PAN is a downstream product of OX (a petrochemical). Currently, ~85-90% of the Company's demand for raw materials is sourced from the domestic market, and the balance quantity is imported.

As of FY23, IGPL has a capacity of 222,110 MTPA, working at a utilization level of ~90%. The Company owns 55%+ of the PAN capacity in India.

The Company has very strong relations with largest supplier of OX in India, as they are procuring OX from them since FY98.

End User Industry



Plasticizers



Alkyd Resins & Paints



Unsaturated Polyester Resins



CPC Pigments

Source: Company, Keynote Capitals

IGPL | Initiating Coverage Report

MAN

In 2017, IGPL acquired MAN business from Mysore Petro Chemicals Limited (MPCL) as a going concern on a 'Slump Sale Basis' at a lump sum consideration for Rs. 745 Mn payable over 5 years. Moreover, both plants of IGPL and MPCL, are at a common location in Taloja. Therefore, this acquisition yielded benefits for IGPL (as raw material to manufacture MAN is available with them) along with an enhanced presence in the domestic market.

MAN is alternatively produced using Butane, resulting in an enhanced product suitable for various consumption purposes. However, due to the unavailability of Butane within the Indian market, ~85-90% of the MAN consumed in India is imported.

IGPL produces MAN from wash water, which is derived while manufacturing PAN. There is hardly any additional cost required for manufacturing MAN, leading it to become a highly profitable business for IGPL. The Company is the only producer of MAN in India, with a capacity of 7,660 MTPA as of FY23.

Based on the capacity size of MAN & PAN of IGPL, we believe that the yield of MAN would be ~3%

MAN Capacity in India (in MT)	FY16	FY17	FY18	FY19	FY20	FY21	FY22
Installed capacity	6,400	6,400	6,400	7,660	7,660	7,660	7,660
Production	3,540	3,530	3,310	4,560	5,020	5,380	6,330
Capacity Utilization	55%	55%	52%	60%	66%	70%	83%
Import	47,399	50,813	52,627	69,920	66,942	59,533	74,467
Export	80	232	233	87	167	50	114

Source: Ministry of Chemicals & Fertilizers (Department of Chemicals & Petrochemicals), commerce.gov.in, Keynote Capitals Ltd.

End User Industry

MAN is a chemical intermediary, used in practically every field of industrial chemistry like production of UPR, manufacture of coatings, pharmaceuticals and surfactants, additive of plastics, lubricating oil additives and agricultural chemicals (Precursor to compounds used for water treatment detergents, insecticides and fungicides).



Lubricant Additive



Agro Chemicals



Plastics

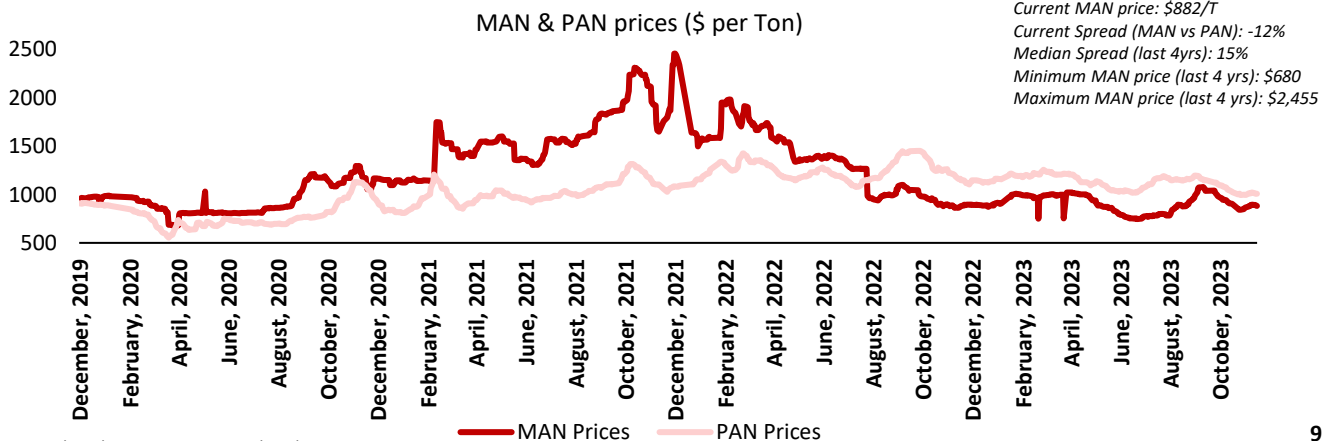


Unsaturated Polyester Resins

Source: Company, Keynote Capitals Ltd.

The global market for MAN experienced a deceleration in the latter half of 2022 due to a decrease in downstream UPR demand, resulting in a decline in MAN prices. Furthermore, the resurgence in production capacity in China leads to an increase in the supply of MAN in the international market.

As of FY22, 98% of total imported MAN comes from 5 countries: 49% from China, 20% from Taiwan, 13% from Malaysia, 4% from Indonesia & 3% from Korea.



Source: Bloomberg, Keynote Capitals Ltd.

IGPL | Initiating Coverage Report

Benzoic Acid

IGPL also produces Benzoic Acid from wash water which is derived while manufacturing PAN. As of FY23, the Company has a capacity of 1,000 MTPA. Benzoic Acid finds its application in pharmaceuticals, perfumes & fragrances, industrial application, etc.

As of FY23, IGPL generates <2% of revenue from Benzoic Acid



Perfume



Insect Repellent



Speciality Chemicals

Source: Company, Keynote Capitals Ltd.

DEP

DEP is a downstream derivative of PAN. IGPL forayed in the manufacturing of DEP in FY22. As of FY23, the Company has a capacity of 8,400 MTPA and working at a capacity utilization of ~55-60%. This product is primarily used in industries like incense sticks, personal care products, cosmetics, toiletries, plastic, aromatic.



Incense Stick



Perfume



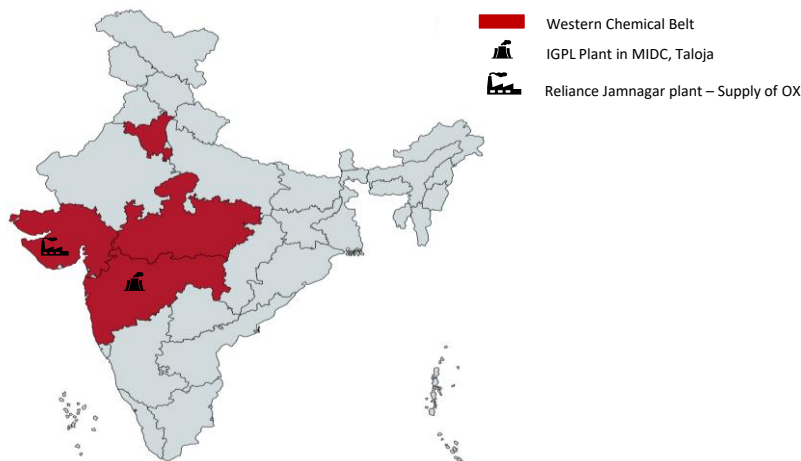
Personal Care

Source: Company, Keynote Capitals Ltd.

Plant & its Capacity

Being a commodity business, we believe that an ideal site should be strategically located in proximity to both the raw material source and the customer base. This advantageous location yields several benefits for the Company. On the supply side, the primary raw material for PAN production is readily available within the vicinity, leading to significant cost efficiencies in transportation. The Company also has a selling advantage due to its strategic location in the western chemical belt of India.

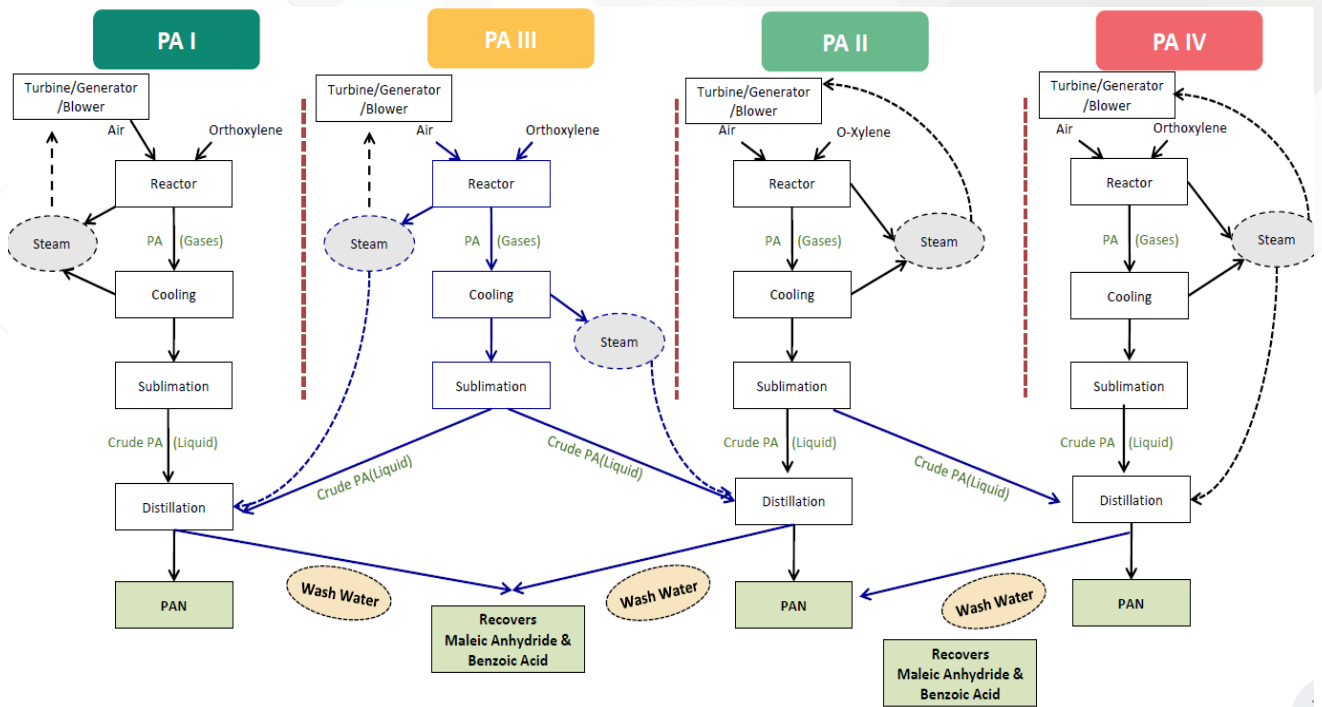
Note: All the four plants are situated in Taloja.



Source: Company, Keynote Capitals Ltd.

IGPL | Initiating Coverage Report

IGPL's Plant Structure



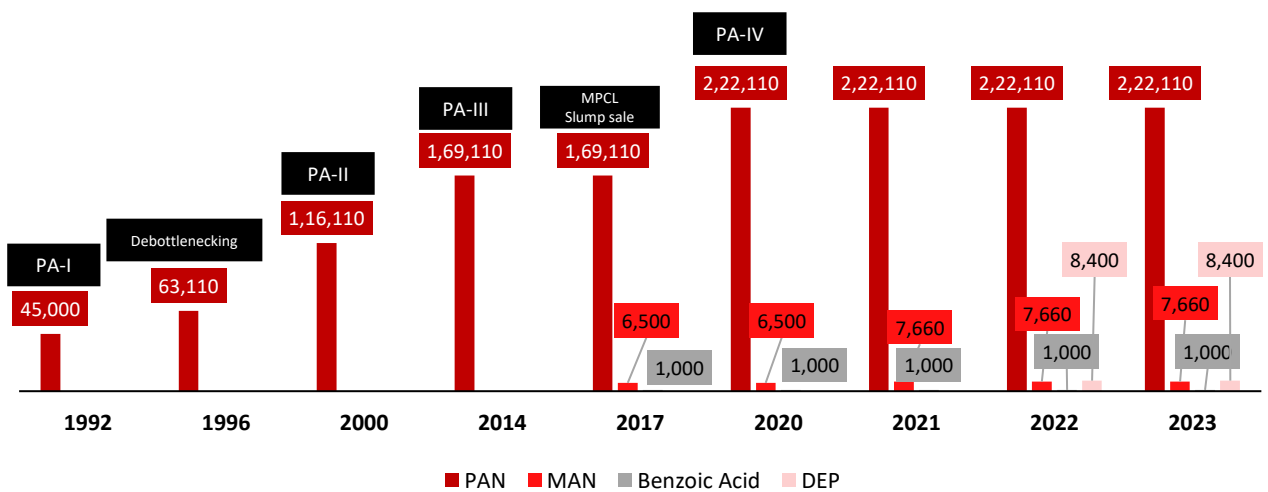
Source: Company, Keynote Capitals Ltd.

The steam generated inside the plant are used as a source of power. The Company only uses external power in the case of plant shutdown or change in catalyst.

Note: IGPL's entire complex is fully insured and secured not only for the normal policy but also for the loss of profit also and all the policies whether it is a marine policy, stock policy

Capacity Addition (Over Years)

Capacity (in MT)



Source: Company, Keynote Capitals Ltd.

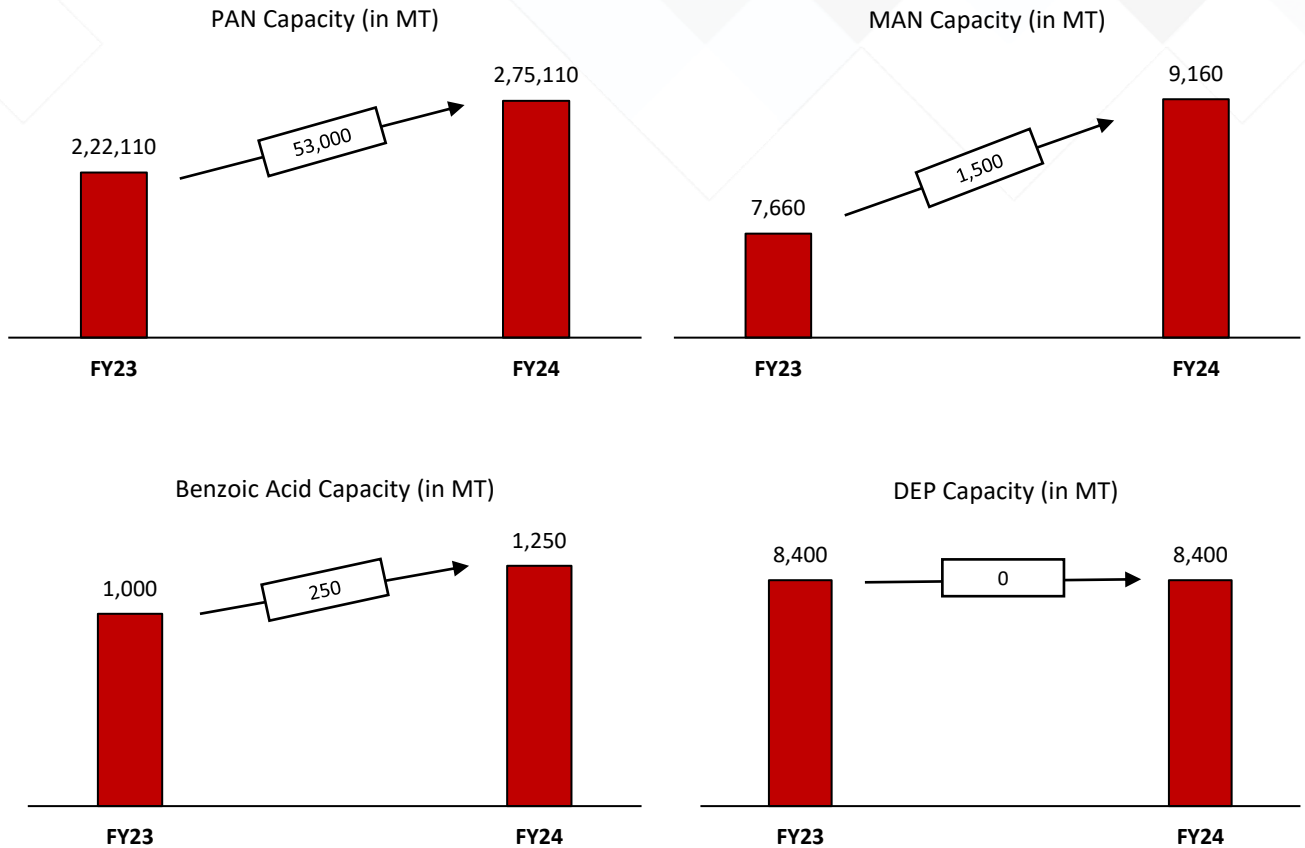
IGPL | Initiating Coverage Report

Capacity Expansion

IGPL is doing a brownfield capacity expansion. The Company is spending Rs. 3.5Bn for setting up PA-V plant. As per management, this expansion is on track is expected to be completed in Q4 FY24. Revenue potential from this plant at optimum capacity utilization would be Rs. 4.5-5Bn.

Management says if this would have been a greenfield capex, it would require Rs. 6Bn for same capacity.

Capacity Post Expansion



Source: Company, Keynote Capitals Ltd.

In addition to this, the Company has applied for an environmental clearance for downstream derivatives of PAN (Advance Plasticizer). Currently, the management is evaluating the project, and the expansion is subject to the Company's board approval; IGPL has planned for a capex of ~Rs. 1.5-2Bn for this greenfield capacity. As per management, this expansion will have a revenue potential of ~Rs. 8-9Bn.

IGPL | Initiating Coverage Report

Peer Analysis

Thirumalai Chemicals Ltd (TCL) is a peer of IGPL. It also manufactures PAN, MAN, DEP, Maleic Acid and Fumaric Acid. It is the second-largest player in India. Unlike IGPL, TCL has global presence with operational facilities in Malaysia, the Netherlands, and the USA (under construction). TCL manufactures MAN through Butane in its Malaysian plant. It has a PAN capacity of 172,000 MT and further going to expand it by 90,000 MT. In addition to this, it has a 40,000 MT capacity of MAN.

Peer Comparison	IGPL					TCL				
	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023
Revenue (in Rs Mn)	13,037	10,586	11,236	18,828	23,523	12,610	10,848	10,857	19,982	21,322
G%		-19%	6%	68%	25%		-14%	0%	84%	7%
Common Sizing of P&L										
Gross Profit	30%	23%	42%	34%	24%	34%	28%	40%	40%	28%
Power & Fuel Cost	2%	2%	2%	2%	2%	4%	5%	3%	3%	4%
Employee Cost	5%	6%	6%	4%	3%	4%	5%	5%	4%	4%
Operating & Manufacturing Expenses	2%	3%	3%	3%	2%	4%	4%	4%	3%	4%
General & Administration Expenses	1%	2%	1%	1%	1%	1%	1%	2%	1%	2%
Selling & Distribution Expenses	2%	2%	3%	2%	2%	4%	5%	5%	6%	5%
Miscellaneous Expenses	0%	1%	1%	1%	1%	1%	2%	2%	1%	1%
EBITDA	17%	7%	26%	21%	14%	16%	7%	20%	22%	9%
Depreciation	2%	3%	3%	2%	2%	3%	4%	5%	3%	3%
Interest Cost	1%	2%	1%	1%	1%	1%	2%	2%	1%	1%
Other Income	1%	1%	0%	1%	1%	1%	2%	1%	1%	1%
PBT (incl. OI & Exceptional)	14%	3%	22%	19%	11%	13%	4%	14%	19%	6%
PAT (incl. OI & Exceptional)	9%	2%	17%	14%	9%	9%	2%	11%	14%	4%

Source: Company, Thirumalai Chemicals, Keynote Capitals Ltd.

Note: The green color cell suggests that it is better than its peer, Yellow color cell suggests that it is equivalent

Based on our assessment, within a commodity-driven industry, the entity with robust cost management practices is positioned as a more competitive player. Notably, Thirumalai Chemicals Ltd (TCL) outperforms IGPL in terms of gross margin, primarily attributable to a marginally distinct product mix. However, the pivotal factor contributing to IGPL's superior cost control, and a more favourable EBITDA margin is its manufacturing operations in India, particularly within the western chemical belt of India. This strategic positioning affords IGPL advantages such as lower power costs, reduced freight expenses, and decreased repairs and maintenance outlays.

Peer Comparison	IGPL					Thirumalai Chemicals				
	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023
Return Ratios										
ROE	20.2%	3.3%	25.9%	28.1%	17.4%	18.3%	3.5%	16.3%	29.8%	7.9%
ROCE	28.8%	5.7%	29.0%	33.3%	21.5%	26.0%	6.8%	19.6%	35.5%	11.2%
ROA	11.7%	1.8%	15.1%	17.8%	11.0%	10.7%	2.0%	9.3%	17.6%	4.3%
Turnover Ratios										
Total Asset Turnover	1.3	0.9	0.9	1.3	1.3	1.2	0.9	0.9	1.3	1.0
Gross Block Turnover	1.5	1.2	1.0	1.5	1.8	3.0	1.9	1.6	2.6	2.4
Working Capital Cycle	16.6	6.2	12.9	21.0	16.8	25.1	-19.3	-33.6	-17.6	-20.1
Leverage Ratios										
Financial Leverage	1.7	1.8	1.7	1.6	1.6	1.7	1.8	1.8	1.7	1.9
Debt/Equity	0.3	0.4	0.2	0.2	0.2	0.2	0.3	0.2	0.1	0.4
Operational Ratios										
Receivables as % of sales	14.0%	13.5%	17.7%	18.4%	13.8%	8.9%	8.3%	8.0%	7.8%	4.8%
Inventory as % of sales	9.9%	9.0%	12.8%	8.1%	7.0%	15.2%	13.5%	12.1%	12.1%	15.0%

Source: Company, Thirumalai Chemicals, Keynote Capitals Ltd.

Note: The green color cell suggests that it is better than its peer, Yellow color cell suggests that it is equivalent

IGPL | Initiating Coverage Report

Management Analysis

The Management team of IGPL consists of a proper mix of promoter family members and professionals.

Name	Designation	Promoter / Professional	Experience with IGPL (Yrs.)
Mr. M M Dhanuka	Chairman	Promoter	35+
Mr. Nikunj Dhanuka	MD & CEO	Promoter	25+
Mr. JK Saboo	Executive Director	Professional	25+
Mr. Pramod Bhandari	CFO	Professional	5+

Source: Company, Keynote Capitals Ltd.

Promoter Holding and Management Compensation

Particulars	FY19	FY20	FY21	FY22	FY23
% Promoter Holding (~)	68.9%	68.7%	68.7%	68.7%	68.7%
*Promoter Salary (Rs Mn)	54.8	20.6	76.7	11.9	96.8
As a % of PAT (~)	4.7%	9.9%	4.1%	4.5%	4.8%

Source: Company, Keynote Capitals Ltd.

* Promoters include Mr. M M Dhanuka, Mr. Nikunj Dhanuka

The compensation received by the promoter group of IGPL has always been in the range of 4-5% (except in 2020 where it was closer to 10%).

Top Shareholders with more than 1% stake (%)

Particulars	FY19	FY20	FY21	FY22	FY23
Investor Education & Protection Fund Authority	2.50%	2.50%	2.50%	2.50%	3.30%
Aditya Birla Sun Life Trustee Pvt Ltd	4.60%	4.80%	3.00%	1.70%	1.70%
Ajay Upadhyaya			1.10%	1.10%	1.10%
Anil Goel	1.90%	1.90%	1.20%		

Source: Company, Keynote Capitals Ltd.

IGPL | Initiating Coverage Report

Opportunities

Capacity expansion

To grow its sales, IGPL is currently executing its brownfield capacity expansion plan, which will lead to an increase in its PAN capacity from 222,110 MT to 275,110 MT, along with an increase in its MAN & Benzoic Acid capacity from 7,660 MT to 9,160 MT and 1,000 MT to 1,250 MT, respectively. The Company is spending Rs. 3.5Bn, which will generate sales of Rs. 4.5-5Bn at optimum capacity utilization. This capacity is expected to be completed in Q4 FY24.

Furthermore, the Company has initiated the process of obtaining environmental clearance for the production of downstream derivatives of PAN, specifically Advance Plasticizer. Currently, the management is evaluating the project, and the expansion is subject to the Company's board approval; IGPL has outlined a capital expenditure of ~Rs. 1.5-2Bn dedicated to the establishment of a greenfield facility for this purpose. According to management projections, this expansion will have a revenue potential of ~Rs. 8-9Bn.

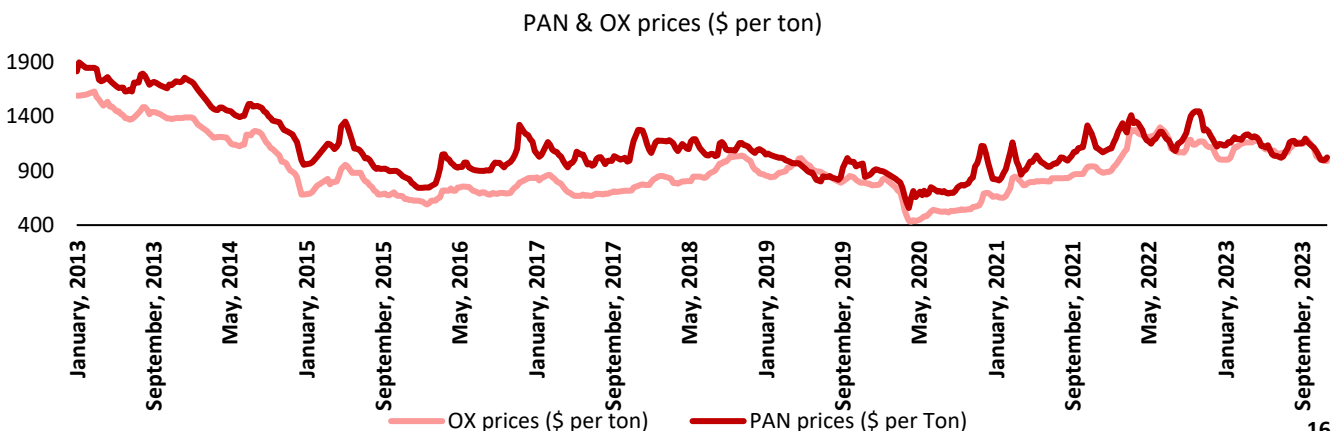
Lowest cost producer

IGPL's plants are strategically located in MIDC, Taloja. This location enables the Company to procure raw materials from the largest supplier of OX efficiently, offering a cost advantage compared to competitors who incur additional transportation expenses. The majority of their sales come from the western chemical belt of India; IGPL acts as the nearest source of PAN for the customer, thereby minimizing freight costs.

Moreover, the consolidation of all plants in a single location presents a distinct advantage for IGPL, allowing for the equitable distribution of fixed costs among its four facilities. Additionally, the utilization of steam generated during the PAN manufacturing process contributes to a reduction in power and fuel expenses for the Company.

Room for improvement in PAN/OX spread

Over the last decade, the average spread between PAN and OX in the last decade has been ~\$150-200 per ton. At its upper limit, this differential has exceeded \$500 per ton. Notably, there have been instances where PAN prices were lower than OX prices. Based on Q2 FY24, the spread is in the range of \$80-100 per ton. An improvement in demand can lead to average spread levels of ~\$150-200 per ton.



Challenges

Lack of pricing power

The product manufactured by IGPL, namely PAN and its raw material which is OX, are inherently commoditized. While a significant positive correlation exists in the price movement of PAN and OX, the spread between their prices experiences fluctuations based on prevailing demand and supply dynamics. This dynamic implies that IGPL does not possess substantial pricing power, and the gross margins of the business are predominantly contingent on the industry's demand and supply conditions. Historical data indicates that over the past decade, the spread between the prices of these two products averaged ~\$150-200 per ton. Presently, this spread has contracted to ~\$90 per ton.

Significant increase in PAN capacity in India

A substantial increase in PAN capacity of IGPL, TCL, and KLJ Group by 53,000 (expected to be added in FY24), 90,000, and 100,000 (added in FY23) MTPA, respectively can lead to a potential risk of excess capacity creation. As a result, it can lead to disparity between demand and supply, consequently causing a contraction in the spread of PAN and OX. It is crucial to acknowledge that while KLJ Group's capacity is intended for self-consumption, its existence in the market as a client of IGPL may influence the volume sales of the latter.

Financial Statement Analysis

Income Statement

Y/E Mar, Rs. Mn	FY22	FY23	FY24E	FY25E	FY26E
Net Sales	18,828	23,523	20,230	24,276	30,345
Growth %		25%	-14%	20%	25%
Raw Material Expenses	12,397	17,817	16,184	18,693	22,000
Employee Expenses	751	817	850	971	1,214
Other Expenses	1,656	1,712	1,659	1,942	2,276
EBITDA	4,023	3,177	1,537	2,670	4,855
Growth %		-21%	-52%	74%	82%
Margin %	21%	14%	8%	11%	16%
Depreciation	443	474	515	557	580
EBIT	3,579	2,703	1,022	2,113	4,276
Growth %		-24%	-62%	107%	102%
Margin %	19%	11%	5%	9%	14%
Interest Paid	129	239	290	290	290
Other Income & exceptional	113	219	220	220	220
PBT	3,563	2,683	952	2,043	4,205
Tax	918	683	238	511	1,051
PAT	2,645	2,000	714	1,532	3,154
Others (Minorities, Associates)	0	0	0	0	0
Net Profit	2,645	2,000	714	1,532	3,154
Growth %		-24%	-64%	115%	106%
Shares (Mn)	30.8	30.8	30.8	30.8	30.8
EPS	85.89	64.95	23.19	49.76	102.42

Balance Sheet

Y/E Mar, Rs. Mn	FY22	FY23	FY24E	FY25E	FY26E
Cash, Cash equivalents & Bank	1,275	1,916	1,137	1,189	3,312
Current Investments	725	1,065	1,065	1,065	1,065
Debtors	3,468	3,245	3,035	3,641	4,552
Inventory	1,521	1,649	2,428	2,804	3,300
Short Term Loans & Advances	37	111	111	111	111
Other Current Assets	90	123	123	123	123
Total Current Assets	7,117	8,111	7,899	8,934	12,463
Net Block & CWIP	8,542	10,658	11,643	12,586	13,506
Long Term Investments	85	750	750	750	750
Other Non-current Assets	768	400	400	400	400
Total Assets	16,512	19,919	20,692	22,670	27,120
Creditors	2,950	3,709	4,071	4,577	5,399
Provision	21	9	9	9	9
Short Term Borrowings	423	545	545	545	545
Other Current Liabilities	530	677	677	677	677
Total Current Liabilities	3,924	4,940	5,302	5,807	6,630
Long Term Debt	1,143	1,692	1,692	1,692	1,692
Deferred Tax Liabilities	778	853	853	853	853
Other Long Term Liabilities	45	85	85	85	85
Total Non Current Liabilities	1,966	2,630	2,630	2,630	2,630
Paid-up Capital	308	308	308	308	308
Reserves & Surplus	10,313	12,041	12,452	13,924	17,551
Shareholders' Equity	10,621	12,349	12,760	14,232	17,859
Non Controlling Interest	0	0	0	0	0
Total Equity & Liabilities	16,512	19,919	20,692	22,670	27,120

Cash Flow

Y/E Mar, Rs. Mn	FY22	FY23	FY24E	FY25E	FY26E
Pre-tax profit	3,563	2,683	952	2,043	4,205
Adjustments	486	537	585	627	650
Change in Working Capital	-2,169	-282	-205	-478	-584
Total Tax Paid	-788	-613	-238	-511	-1,051
Cash flow from operating Activities	1,093	2,325	1,094	1,682	3,220
Net Capital Expenditure	-985	-2,395	-1,500	-1,500	-1,500
Change in investments	-120	-284	0	0	0
Other investing activities	49	125	220	220	220
Cash flow from investing activities	-1,056	-2,554	-1,280	-1,280	-1,280
Equity raised / (repaid)	0	0	0	0	0
Debt raised / (repaid)	169	747	0	0	0
Dividend (incl. tax)	-226	-303	-303	-60	473
Other financing activities	-131	-237	-290	-290	-290
Cash flow from financing activities	-188	206	-593	-350	183
Net Change in cash	-152	-23	-779	52	2,123

Valuation Ratios

	FY22	FY23	FY24E	FY25E	FY26E
Per Share Data					
EPS	86	65	23	50	102
Growth %		-24%	-64%	115%	106%
Book Value Per Share	345	401	414	462	580

Return Ratios

Return on Assets (%)	18%	11%	4%	7%	13%
Return on Equity (%)	28%	17%	6%	11%	20%
Return on Capital Employed (%)	26%	17%	7%	12%	19%

Turnover Ratios

Asset Turnover (x)	1.3	1.3	1.0	1.1	1.2
Sales / Gross Block (x)	1.5	1.8	1.5	1.6	1.8
Working Capital / Sales (x)	11%	14%	14%	12%	15%
Receivable Days	53	52	57	50	49
Inventory Days	44	32	46	51	51
Payable Days	75	68	84	83	81
Working Capital Days	21	17	19	19	19

Liquidity Ratios

Current Ratio (x)	1.8	1.6	1.5	1.5	1.9
Interest Coverage Ratio (x)	28.7	12.2	4.3	8.0	15.5
Total Debt to Equity	0.2	0.2	0.2	0.2	0.1
Net Debt to Equity	0.0	0.0	0.1	0.1	-0.1

Valuation

PE (x)	8.2	10.8	19.6	9.1	4.4
Earnings Yield (%)	12%	9%	5%	11%	23%
Price to Sales (x)	1.1	0.9	0.7	0.6	0.5
Price to Book (x)	2.0	1.0	1.1	1.0	0.8
EV/EBITDA (x)	5.5	4.2	9.4	5.4	3.0
EV/Sales (x)	1.2	0.6	0.7	0.6	0.5

Source: Company, Keynote Capitals Ltd. estimates

IGPL's valuation

Valuation	
(in Rs., otherwise stated)	FY26E
PAT (Rs. Mn)	3,154
EPS	102.4
Median PE Multiple (x)	8
Target Price	819
Current Market Price	500
% Upside/(Downside)	+64%

Source: Company, Keynote Capitals Ltd. Estimates

We initiate coverage on IGPL with a high conviction BUY rating at 5-year media PE of 8x on FY26E EPS, giving a target price of ~Rs. 819, implying an upside of 64%. The new capacity addition of 53,000 MTPA of PAN and improving the spread of PAN & OX will lead to sales growth and improvement in EBITDA margin, leading to strong growth in PAT.

We believe that the spread between PAN and OX will again normalize to its long-term average of \$150-200 per ton.

Our Recent Reports

Cigniti Initiating Coverage Report
KEYNOTE

Cigniti Technologies Ltd.

According to the value chain

Founded in 1986, Cigniti Technologies Ltd (Cigniti) has emerged as a global leader in delivering comprehensive quality assurance and software testing solutions within the digital insurance landscape. Cigniti stands among the leading industry players and holds a notable position within the global top 3 for independent testing. The Company has over 800 clients, spanning industries like BFSI, Retail, Travel, Healthcare, and Energy, across five continents. Cigniti specializes in Digital Assurance, Quality Engineering, and Quality Assurance services, placing a particular rate in getting enterprises toward delivering transformational digital experiences. In a strategic move, the Company has extended its footprint into the rapidly growing Digital Engineering segment, capitalizing on synergies with its existing digital engineering expertise, thereby also facilitating cross-selling opportunities. This strategic diversification aligns with Cigniti's commitment to innovation and staying at the forefront of the evolving technological landscape, becoming an A to Z end-to-end digital engineering and digital assurance services provider.

Digital Engineering: Catalyst for the next growth phase

Cigniti's strategic shift to digital engineering has seen exponential growth, with revenues increasing 12% in four years. The F1C3 expansion of Apsara Digital, a specialist in AI/ML, Blockchain and product engineering positions Cigniti as a leader, responding to capabilities and service offerings and aligning with the working digital lifecycle. The classification of data across industries driven demand for related user experiences, adding the use of digital engineering and ensuring Cigniti's prominence as a S450M+ and growing player.

Client-Centric Growth Strategy: Nurturing Relationships for Value Expansion

Cigniti's strategy focus on solid client engagement and growing higher value accounts has yielded significant results. The "nurturing and learning" approach, implemented over the past 20-24 months, has strengthened long-term client relationships, particularly within the Top 5 and Top 10 clients. In FY23, the Top 5 clients contributed 25% of total revenues, up from 21% in FY22. Further client responses to additional digital services indicate Cigniti's consistent growth strategy. The recent award acquisition further underlines the commitment to nurturing client relationships, with a focus on cross-selling engineering offerings and expanding digital assurance services to unadopted clients.

View & Valuation

We believe that Cigniti's shift toward increasing the value chain and integrating new offerings along with the strategic client retention and cross-selling will result in consistent growth. Besides, an increasing reliance on Cigniti, with a BUY rating, will drive multiple expansion and a target price of Rs. 1,421, reflecting a 15% upside.

19th December 2023

BUY

CMF Fy: 1,130

TARGET Fy: 1,201 (+20%)

Company Data

Revenue (Rs. Crores)	1026.64
Market Cap	84.76
EV/Share (INR)	86.1
Shareholding (%)	1,208,002
Free float (%)	30
Liquidity (Rs. Crores)	888
Div. Yield	0.88

Shareholding Pattern %

As on	30-09-2022	30-09-2023
Promoters	26.06	24.63
MFI	0.00	0.00
Ins	0.07	0.00
Mutual Funds	66.89	69.37
Others	0.00	0.00

Key Financial Data

Rs. (Mn)	FY22	FY23	FY23E
Revenue	8,488	10,407	12,174
Net Profit	1,381	1,701	2,049
EPS	1,400	1,848	2,159
ROCE	28%	30%	30%
ROE	28%	30%	30%

Source: Company Reports, Research Analyst
Research@keynotecapitals.com

Cigniti Technologies Ltd.

PSP Projects Ltd | Initiating Coverage Report
KEYNOTE

PSP Projects Ltd.

Priority rating the following

PSP Projects Ltd (PSPPL) is an Integrated Engineering, Procurement, Construction (EPC) company providing services across the construction value chain. PSPPL holds an irreplaceable track record of completing each project on time without compromising on quality. The Company has been consistently improving its capabilities under the aegis of Mr. Pankaj by concentrating resources across India. PSPPL is capable of constructing the "World's Largest Dam (WLD)", which will qualify as the largest office building globally. As a result, the Company is now pre-qualified to bid for a single project of up to Rs. 25 bn. In addition, PSPPL is anticipated to benefit significantly from the current infrastructure push by the central government. These factors, coupled with the problem and risk capabilities of the management, are expected to bring significant growth while maintaining healthy profitability and financial position in the future.

Moving to a larger league

The Company started as a small contractor and gradually built rich credentials through its strong execution capabilities. After completing the construction of the WLD, PSPPL is now pre-qualified to bid for a single project up to Rs. 25 bn. In line with the theme, the company has already bagged a Rs. 1.5 Bn project to construct the cabinet administrative office building in Gandhinagar, which is currently under construction. In addition, PSPPL, in its existing bid book, has multiple individual projects that are worth more than Rs. 1.8 Bn. Simultaneously, the Company is also contemplating bidding (in a JV) for the replacement project of the Durgam Cheruvu station, which holds a worth of Rs. 65 Bn.

Robust growth outlook

PSPPL's ability to participate in significant project bids, coupled with numerous large projects in the bidding pipeline, is strongly backed by the government's robust infrastructure initiatives. This has resulted in many large projects being announced, making the order inflow and revenue growth sustainable for the coming years. Additionally, the building price-cost index is also expected to grow substantially in the short to medium term. This can also be inferred from the recent expansion PSPPL undertakes in its private division. In line with this, the management anticipates to close a FY 24 Rs. 100 crore of PPA, followed by a 20% growth in the subsequent 2-3 years.

View & Valuation

Currently, multiple factors are playing out positively for PSPPL, enabling the Company to achieve robust growth in the coming years. In addition to this, we are also confident that the superior execution capabilities and financial discipline that the Company has demonstrated in the past will continue to make sure that the business attains good quality growth while maintaining EBITDA margins in the period ranging of 25-30%. Thereby keeping its track record of never being valuation money market. Given to the solid all-round business outlook, we initiate coverage on PSP Projects Ltd. with a BUY rating and a target price of Rs. 188, valuing it at 15x FY23 EPS.

4th December 2023

BUY

CMF Fy: 780

TARGET Fy: 928 (+27%)

Company Data

Revenue (Rs. Crores)	999.16
Market Cap	68.00
EV/Share (INR)	69.16
Shareholding (%)	846,717
Free float (%)	30
Liquidity (Rs. Crores)	54
Div. Yield	0.76

Shareholding Pattern %

As on	30-09-2022	30-09-2023
Promoters	60.20	65.00
MFI	0.00	0.00
Ins	0.00	0.00
Mutual Funds	34.28	25.43
Others	0.00	0.00

Key Financial Data

Rs. (Mn)	FY22	FY23	FY23E
Revenue	10,270	12,492	14,770
Net Profit	1,280	1,520	1,800
EPS	1,300	1,570	1,800
ROCE	28.00%	29.47%	29.80%
ROE	28.00%	29.47%	29.80%

Source: Company Reports, Research Analyst
Research@keynotecapitals.com

PSP Projects Ltd.

ESDM Industry | Industry Report
KEYNOTE

ESDM Industry

Harvesting the tailwinds in the industry

India's Electronic System Design and Manufacturing (ESDM) industry stands at the cusp of an unprecedented transformation. As the digital landscape continues to evolve, the ESDM industry is poised to lead the charge, emerging as a cornerstone of India's economic growth. With a combination of favorable factors, ranging from growing domestic demand, global firms shifting their sourcing "hubs" closer to other countries in its vicinity, government initiatives, it is expected that for the next 5 years, the Indian ESDM industry is expected to grow at "20%+."

Increasing the segment of outsourcing

The phenomenon of outsourcing is an irrevocable and advantageous aspect that greatly contributes to various industries. Given the escalating production of electronics in India, the trend of outsourcing manufacturing components to ESDM companies is poised to become an inseparable reality. As OEMs continue to focus on their core activities, primarily, in India, the ESDM sector accounts for "25% of the total electronics market, is expected to "15% globally."

China + 1 strategy

In a strategic move to mitigate the vulnerability of heavily relying on China for their primary source of digital firms, particularly based in the US and Europe, have initiated a shift towards sourcing electronics and electronic products from advanced destinations, and India is emerging as a prominent player. This shift is driven by the notable disparity in labor costs between China and India. Furthermore, recent initiatives taken by the government designed to reinforce Indian enterprises to set up manufacturing facilities and increase their output capacity have bolstered the thrust of growth in the Indian ESDM sector, especially in terms of sourcing opportunities.

Increasing content of electronics in various products

The surge in electronic content is palpable across various end-user segments. Notably, the automotive industry is poised to witness a strong increase in electronic content per vehicle, primarily attributed to the ongoing shift towards electric vehicles. In addition to this, within the realm of consumer durables, the proliferation of smarter air conditioners and AC/EC fans is a key catalyst driving the demand for PCB/PCBA. Furthermore, in the industrial sector, the transition from analogue to smart meters, coupled with the widespread adoption of digital displays in control panel equipment, is fueling the growth of electronics components.

20th November 2023

POSITIVE

Companies Covered

Company	Current Price	Target Price	Upside
AVL	807	478	41%
AVL	807	548	30%
AVL	807	548	30%
AVL	807	548	30%
AVL	807	548	30%

Research Analyst
Research@keynotecapitals.com

ESDM Industry Report

Rating Methodology

Rating	Criteria
BUY	Expected positive return of > 10% over 1-year horizon
NEUTRAL	Expected positive return of > 0% to < 10% over 1-year horizon
REDUCE	Expected return of < 0% to -10% over 1-year horizon
SELL	Expected to fall by >10% over 1-year horizon
NOT RATED (NR)/UNDER REVIEW (UR)/COVERAGE SUSPENDED (CS)	Not covered by Keynote Capitals Ltd/Rating & Fair value under Review/Keynote Capitals Ltd has suspended coverage

Disclosures and Disclaimers

The following Disclosures are being made in compliance with the SEBI Research Analyst Regulations 2014 (herein after referred to as the Regulations).

Keynote Capitals Ltd. (KCL) is a SEBI Registered Research Analyst having registration no. INH000007997. KCL, the Research Entity (RE) as defined in the Regulations, is engaged in the business of providing Stock broking services, Depository participant services & distribution of various financial products. Details of associate entities of Keynote Capitals Limited are available on the website at <https://www.keynotecapitals.com/associate-entities/>

KCL and its associate company(ies), their directors and Research Analyst and their relatives may; (a) from time to time, have a long or short position in, act as principal in, and buy or sell the securities or derivatives thereof of companies mentioned herein. (b) be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the company(ies) discussed herein or act as an advisor or lender/borrower to such company(ies) or may have any other potential conflict of interests with respect to any recommendation and other related information and opinions.; however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of KCL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report.

KCL and / or its affiliates do and seek to do business including investment banking with companies covered in its research reports. As a result, the recipients of this report should be aware that KCL may have a potential conflict of interest that may affect the objectivity of this report. Compensation of Research Analysts is not based on any specific merchant banking, investment banking or brokerage service transactions.

Details of pending Enquiry Proceedings of KCL are available on the website at <https://www.keynotecapitals.com/pending-enquiry-proceedings/>

A graph of daily closing prices of securities is available at www.nseindia.com, www.bseindia.com. Research Analyst views on Subject Company may vary based on Fundamental research and Technical Research. Proprietary trading desk of KCL or its associates maintains arm's length distance with Research Team as all the activities are segregated from KCL research activity and therefore it can have an independent view with regards to Subject Company for which Research Team have expressed their views.

IGPL | Initiating Coverage Report

Regional Disclosures (outside India)

This report is not directed or intended for distribution to or use by any person or entity resident in a state, country or any jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject KCL & its group companies to registration or licensing requirements within such jurisdictions. The securities described herein may or may not be eligible for sale in all jurisdictions or to certain category of investors. Persons in whose possession this document may come are required to inform themselves of and to observe such restriction.

Specific Disclosure of Interest statement for subjected Scrip in this document:

Financial Interest of Research Entity [KCL] and its associates; Research Analyst and its Relatives	NO
Any other material conflict of interest at the time of publishing the research report by Research Entity [KCL] and its associates; Research Analyst and its Relatives	NO
Receipt of compensation by KCL or its Associate Companies from the subject company covered for in the last twelve months; Managing/co-managing public offering of securities in the last twelve months; Receipt of compensation towards Investment banking/merchant banking/brokerage services in the last twelve months; Products or services other than those above in connection with research report in the last twelve months; Compensation or other benefits from the subject company or third party in connection with the research report in the last twelve months.	NO
Whether covering analyst has served as an officer, director or employee of the subject company covered	NO
Whether the KCL and its associates has been engaged in market making activity of the Subject Company	NO
Whether the Research Entity [KCL] and its associates; Research Analyst and its Relatives, have actual/beneficial ownership of 1% or more securities of the subject company, at the end of the month immediately preceding the date of publication of the research report or date of the public appearance.	NO

The associates of KCL may have:

- Financial interest in the subject company
- Actual/beneficial ownership of 1% or more securities in the subject company
- Received compensation/other benefits from the subject company in the past 12 months
- Other potential conflicts of interests with respect to any recommendation and other related information and opinions.; however, the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of KCL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report.
- Acted as a manager or co-manager of public offering of securities of the subject company in past 12 months
- Be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the company(ies) discussed herein or act as an advisor or lender/borrower to such company(ies)
- Received compensation from the subject company in the past 12 months for investment banking / merchant banking / brokerage services or from other than said services.

The associates of KCL has not received any compensation or other benefits from third party in connection with the research report.

Above disclosures includes beneficial holdings lying in demat account of KCL which are opened for proprietary investments only. While calculating beneficial holdings, it does not consider demat accounts which are opened in name of KCL for other purposes (i.e. holding client securities, collaterals, error trades etc.). KCL also earns DP income from clients which are not considered in above disclosures.

Analyst Certification

The views expressed in this research report accurately reflect the personal views of the analyst(s) about the subject securities or issues, and no part of the compensation of the research analyst(s) was, is, or will be directly or indirectly related to the specific recommendations and views expressed by research analyst(s) in this report.

Terms & Conditions:

This report has been prepared by KCL and is meant for sole use by the recipient and not for circulation. The report and information contained herein is strictly confidential and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent of KCL. The report is based on the facts, figures and information that are believed to be true, correct, reliable and accurate. The intent of this report is not recommendatory in nature. The information is obtained from publicly available media or other sources believed to be reliable. Such information has not been independently verified and no guaranty, representation of warranty, express or implied, is made as to its accuracy, completeness or correctness. All such information and opinions are subject to change without notice. The report is prepared solely for informational purpose and does not constitute an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments for the clients. Though disseminated to all the customers simultaneously, not all customers may receive this report at the same time. KCL will not treat recipients as customers by virtue of their receiving this report

Disclaimer:

The report and information contained herein is strictly confidential and meant solely for the selected recipient and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent. This report and information herein is solely for informational purpose and may not be used or considered as an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments. Nothing in this report constitutes investment, legal, accounting and tax advice or a representation that any investment or strategy is suitable or appropriate to your specific circumstances. The securities discussed and opinions expressed in this report may not be suitable for all investors, who must make their own investment decisions, based on their own investment objectives, financial positions and needs of specific recipient. This may not be taken in substitution for the exercise of independent judgment by any recipient. Each recipient of this document should make such investigations as it deems necessary to arrive at an independent evaluation of an investment in the securities of companies referred to in this document (including the merits and risks involved), and should consult its own advisors to determine the merits and risks of such an investment. The investment discussed or views expressed may not be suitable for all investors. Certain transactions -including those involving futures, options, another derivative product as well as non-investment grade securities - involve substantial risk and are not suitable for all investors. No representation or warranty, express or implied, is made as to the accuracy, completeness or fairness of the information and opinions contained in this document. The Disclosures of Interest Statement incorporated in this document is provided solely to enhance the transparency and should not be treated as endorsement of the views expressed in the report. This information is subject to change without any prior notice. The Company reserves the right to make modifications and alternations to this statement as may be required from time to time without any prior approval. KCL, its associates, their directors and the employees may from time to time, effect or have affected an own account transaction in, or deal as principal or agent in or for the securities mentioned in this document. KCL, its associates, their directors and the employees may from time to time invest in any discretionary PMS/AIF Fund and those respective PMS/AIF Funds may affect or have effected any transaction in for the securities mentioned in this document. They may perform or seek to perform investment banking or other services for, or solicit investment banking or other business from, any company referred to in this report. Each of these entities functions as a separate, distinct and independent of each other. The recipient should take this into account before interpreting the document. This report has been prepared on the basis of information that is already available in publicly accessible media or developed through analysis of KCL. The views expressed are those of the analyst, and the Company may or may not subscribe to all the views expressed therein. This document is being supplied to you solely for your information and may not be reproduced, redistributed or passed on, directly or indirectly, to any other person or published, copied, in whole or in part, for any purpose. This report is not directed or intended for distribution to, or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject KCL to any registration or licensing requirement within such jurisdiction.

The securities described herein may or may not be eligible for sale in all jurisdictions or to certain category of investors. Persons in whose possession this document may come are required to inform themselves of and to observe such restriction. Neither the Firm, not its directors, employees, agents or representatives shall be liable for any damages whether direct or indirect, incidental, special or consequential including lost revenue or lost profits that may arise from or in connection with the use of the information. The person accessing this information specifically agrees to exempt KCL or any of its affiliates or employees from, any and all responsibility/liability arising from such misuse and agrees not to hold KCL or any of its affiliates or employees responsible for any such misuse and further agrees to hold KCL or any of its affiliates or employees free and harmless from all losses, costs, damages, expenses that may be suffered by the person accessing this information due to any errors and delays.

Keynote Capitals Limited (CIN: U67120MH1995PLC088172)

Compliance Officer: Mr. Jairaj Nair; Tel: 022-68266000; email id: jairaj@keynoteindia.net

Registered Office: 9th Floor, The Ruby, Senapati Bapat Marg, Dadar West, Mumbai – 400028, Maharashtra. Tel: 022 – 68266000.

SEBI Regn. Nos.: BSE / NSE (CASH / F&O / CD): INZ000241530; DP: CDSL- IN-DP-238-2016; Research Analyst: INH000007997

For any complaints email at kcl@keynoteindia.net

General Disclaimer: Client should read the Risk Disclosure Document issued by SEBI & relevant exchanges and the T&C on www.keynotecapitals.com; Investment in securities market are subject to market risks, read all the related documents carefully before investing.