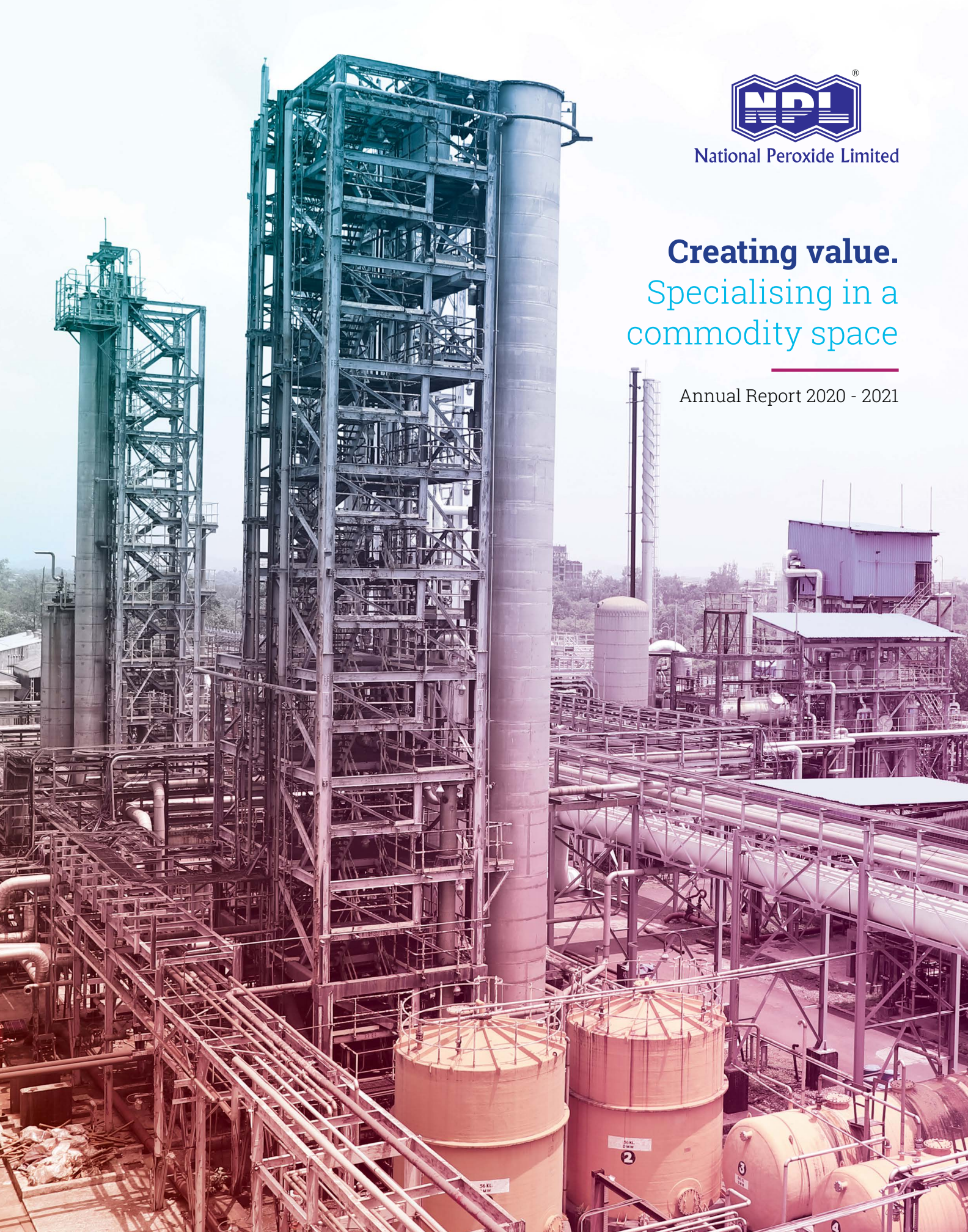




National Peroxide Limited

Creating value.
Specialising in a
commodity space

Annual Report 2020 - 2021



Forward-looking statements

Some information in this report may contain forward-looking statements which include statements regarding Company's expected financial position and results of operations, business plans and prospects etc. and are generally identified by forward-looking words such as "believe," "plan," "anticipate," "continue," "estimate," "expect," "may," "will" or other similar words. Forward-looking statements are dependent on assumptions or basis underlying such statements. We have chosen these assumptions or basis in good faith, and we believe that they are reasonable in all material respects. However, we caution that actual results, performances or achievements could differ materially from those expressed or implied in such forward-looking statements. We undertake no obligation to update or revise any forwardlooking statement, whether as a result of new information, future events, or otherwise.



To know more about us in digital mode, scan this QR code in your QR mobile application.



For additional information log in to www.naperol.com

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Value creation lays the foundation for a formidable business. It enables an organisation to lead with efficiency, garner greater productivity and fulfil cherished objectives. At National Peroxide Limited, we derive value as a specialist – manufacturing Hydrogen Peroxide for multiple applications.

Our success is pivoted in creating value for our business as well as those of our customers. With focus on delivering the finest quality and consistently upgrading our process backed by robust R&D efforts, we have created a pathway for excellence and value creation. Our unique capacities empower us to be creative, ideate novel methods and focus on distinctive change. It is the sum of these efforts that lend credibility to our uniqueness and empower us to create exceptional value – today and tomorrow.



About National Peroxide


National Peroxide Limited pioneered peroxygen chemicals in India and is the largest manufacturer of Hydrogen Peroxide in the country today.

Since its inception in 1954, the Company has established a firm market presence as a reliable Hydrogen Peroxide (H2O2) manufacturer. We have developed strong customer relationships, backed by our robust technological expertise, state-of-the-art manufacturing facilities and superior quality solutions.

Our integrated business model allows us to produce Hydrogen Peroxide, used for diverse applications in many downstream sectors. We serve several clients across the country, adding new clients from across the globe. Headquartered in Mumbai, India, our market presence are spread across different cities in India.

Manufacturing blueprint

Location




• Kalyan
Maharashtra

Capacity

150,000 MTPA

Products



Hydrogen Peroxide

Certifications

ISO 9001:2015
(Quality Management System)

ISO 14001:2015
(Environment Management System)

ISO 45001:2018
(Occupational Health and Safety Management System)

ISO 50001:2018
(Energy Management System)

RC-14001:2015
(Responsible Care 14001 Standards)



Use of Responsible Care Logo from Indian Chemical Council



Hydrogen Gas



Peracetic Acid



Downstream industries application

 Paper & Pulp	 Sugar	 Metallurgy	 Cosmetics
 Textile	 Pharmaceuticals	 Water & Effluent treatment	 Chemical Synthesis

Message from the CEO

//

As a pioneer and largest manufacturer of Hydrogen Peroxide (H₂O₂) in the Country, we boast a complete value chain of chemistry within H₂O₂ that includes hydrogen peroxide, compressed hydrogen gas as well as peracetic acid. //



Rajiv Arora

Chief Executive Officer & Director

Dear Shareholders,

I sincerely hope you and your loved ones are staying safe and healthy. As COVID-19 pandemic impacted countless lives and created uncertainty amongst economies and businesses at large, I am pleased to report that NPL responded with agility and resilience to sustain growth and ensure business continuity. As Wadia Group's flagship manufacturing company, and the largest manufacturer of hydrogen peroxide, we have always strived to create value, despite operating in a commodity business.

As a pioneer and largest manufacturer of Hydrogen Peroxide (H₂O₂) in the country, we boast a complete value chain of chemistry within H₂O₂ that includes hydrogen peroxide, compressed hydrogen gas as well as peracetic acid. Creating a niche market, we serve large companies operating across multiple downstream industries with our products, earlier imported in the country.

COVID-19 did pose challenges to our business in the first quarter of FY21,

as demand slowed and the supply chain were disrupted due to lockdown and minimal movement of people and goods. However, as the lockdown restrictions eased, demand picked up and we served our customers with agility and speed.

Notwithstanding the trailing impacts of the pandemic, we continued to make progressive investments in our already established R&D facility. It continues to deliver excellence, helping us expand our markets into new downstream sectors with sustained product innovation. It gives me great pleasure to report that during the fiscal we started our journey of export, emerging as the largest exporter from India for H₂O₂.

Performance Highlights

This year, we reported a consolidated revenue of ₹ 21,500 lakhs, 12.43% higher than previous year. Our EBIDTA stood at ₹ 4,244 lakhs and PAT for the year was at ₹ 2,117 lakhs. Nonetheless, we sustained our profitability levels year-on-year driven by focused customer

centricity and implementing cost-controls across the product value-chain. Prudent financial management helped generate cash flow, resulting in an interest coverage ratio of 3.16 times.

Creating value

Over the years we continue to override the perception that we operate in a commodity-driven segment with minimum value creation. However, our value-accretive business model rests on key strengths that generate value for our stakeholders. First, our growing customer base with growing trust forms the foundation of our market share. Further, our recent foray into export market marks a new chapter of growth in our corporate journey and we are optimistic of expanding our international presence in the coming years.

Second, our operational excellence remains cornerstone of our business. Our process innovations, energy conservation methods and enhanced capacities allow us to achieve greater

economies of scale to deliver products with highest quality.

Third, measures taken to strengthen our balance sheet ensured that the key ratios stayed healthy. Our aim is to grow our earnings in line with recurring Free Cash Flows and reduce our long-term debt by year 2024.

Restructuring

Moreover, in our quest to create more value for our stakeholders, we are restructuring our organization by demerging our chemical business into NPL Chemicals Ltd., and merging our subsidiary company, Naperol Investments Ltd., engaged

in the business of making long term investments and corporate lending.

This restructuring is aimed at segregating different businesses with different risk and return profiles. It also allows investors to put their money in a company that best suits their investment strategies and risk profile. This strategy is expected to bolster our growth aspirations as well as create value for stakeholders.

NPL and future

The year marks an important in chapter in our legacy. While COVID-19 posed challenges, we mitigated the risks with proactive measures in

place. We prioritized employee health and safety over business growth. People development has always been our key focus, and we continue to recruit and retain talented individuals across our company. We implemented safety protocols at our plant and office in guidance with the government regulations.

We welcome the new year with lot of expectations. We thrive to reduce our operational costs so as to offer competitive pricing for our customers. Leveraging on our newly set-up R&D unit, we are also looking forward to widen our product applications across new downstream sectors.

I would like to thank the Board of Directors, Shareholders, Customers, and Employees for their continuous support and trust in our Company. I am very grateful to everyone who has contributed to this growth and I look forward to continuing with you on this exciting journey.

Rajiv Arora

Chief Executive Officer & Director

//

We prioritized employee health and safety over business growth. People development has always been our key focus, and we continue to recruit and retain talented individuals across our company. //

Performance Highlights

Revenue (₹ in lakhs)

2020-21	22,725
2019-20	20,859
2018-19	42,061

Profit before tax (₹ in lakhs)

2020-21	1,179
2019-20	2,899
2018-19	23,526

Networth (₹ in lakhs)

2020-21	58,842
2019-20	48,645
2018-19	61,509

EBIDTA (₹ in lakhs)

2020-21	3,079
2019-20	2,642
2018-19	22,894

Profit after tax (₹ in lakhs)

2020-21	2,081
2019-20	1,736
2018-19	15,303

EPS (in ₹)

2020-21	36
2019-20	30
2018-19	266

Our Core Competitiveness



Pioneers

We are the pioneers in manufacturing Hydrogen Peroxide in India, a highly versatile chemical used for multiple downstream industries. The chemical was earlier imported due to its unavailability in India.



Capacity

We are the single largest manufacturer of Hydrogen Peroxide in India with a manufacturing capacity of 150,000 MTPA.



Integrated business model

Our operations and processes are completely integrated, driving economies of scale and sustaining product quality.



Experience

With over five decades of experience and market leadership, we are a preferred supplier to some of the leading companies in India.



In-house R&D

We have set up a sophisticated, FDA compliant R&D facility that empowers us to widen our product portfolio and cater to several new downstream industries, thereby increasing our potential for enhancing business profitability.



Gearing

Our robust balance sheet and comfortable gearing ratio has allowed us to sustain our market leadership with timely capacity expansions, without any stress on our books.



Customer Relationship

In FY21, majority of our revenue was driven by customers with whom we are associated for several years. Our singular focus on manufacturing one product reassures our customers of timely supply, enabling them to source products at the most competitive price without compromising on the quality of the product.



Quality

Hydrogen Peroxide produced at our facilities meet national and international quality standards. Moreover, our facilities are certified to abide by stringent regulatory norms. Our credibility is built on our reputation to deliver the finest quality product to customers in India and abroad.



Certifications

The trust of our customers and our consistent revenue visibility is reinforced by the quality, health and safety and environmental certifications acquired by National Peroxide.



Smart manufacturing

Our state-of-the-art manufacturing unit allows us to produce and supply Hydrogen Peroxide in varied concentration levels, making it easily adaptable to Indian climatic conditions.

Creating Value

Specialising in commodity space.

Our business model is prudently designed to enhance value creation for our stakeholders. Being the single largest manufacturer of Hydrogen Peroxide, we are now unfolding a new chapter in our corporate journey with strategic endeavours that position us for accelerated growth in the long-term.

Strategic priority



Focused

We work with companies of global repute, who seek the best overall price-value proposition and not just the lowest cost. Our expertise in single product manufacturing has deepened our capability to deliver excellent customer service with robust quality control methods. We shall continue to strive to focus on increasing customer satisfaction and enjoy very old relationship with customers on PAN India basis.



Value-driven

Over the years, we have largely focused on improving manufacturing efficiencies and it has resulted in consistent value creation through our various cost saving initiatives which result in higher margins and value creation. We are the only Company to significantly invest in capacity expansion in the last twenty years, allowing us to improve efficiencies and meet domestic demand for Hydrogen Peroxide. We have progressively enhanced our customer outreach and product application to serve more customers in domestic and international markets.



Operational Excellence

To remain competitive, we aim to improve operational excellence across our manufacturing cycle. We have also entered into price-agreements to create a natural hedge against volatility of crude oil prices, a crucial ingredient affecting our operating costs. Other cost optimisation strategies and energy conservation methods help us to further drive growth without compromising our margins



Diversified customer profile

We are the Market Leader in Hydrogen Peroxide in India. We are now increasing our wallet share by driving revenues from exports and adding new customers in the domestic market. Our R&D team is closely working on adding new applications to our product portfolio and capitalising on emerging opportunities to increase the utilization of Hydrogen Peroxide.



Exponential growth

We have constantly focused on building a strong foundation for growth. We have invested more than ₹ 20,000 lakhs to more than double our capacity in the last 20 years. The new assets and capacity expansion have proportionately increased our throughput, assisting more revenue generation without any delay in commissioning. As we look forward to cater to new markets and customers, we are poised to outperform industry growth and enhance our profitability in the years to come.

Supporting Communities, Ensuring Sustainability

At NPL, we are consistently working to improve our operations and upgrade our facilities with a heartfelt consideration for enhancing the wellbeing of our people, the communities we operate in and the environment. Our approach to sustainability is defined by our CSR principles that are integrated with our business objectives.

Due to the COVID-19 pandemic, the healthcare sector was heavily burdened and we tried to help hospitals and healthcare centres with necessary support. We also had a keen focus on rural development projects and the creation of opportunities for education.

Our CSR initiatives focus on:

- Promoting health care including preventive healthcare
- Promoting education
- Eradicating hunger, poverty, malnutrition
- Sanitation

₹280 lakhs

Total CSR Amount spent for the Financial Year 2020-21

Promoting healthcare

To combat the challenges posed by the COVID-19 pandemic, we have undertaken efforts to support healthcare institutions. We have initiated 2 projects in Mumbai and one in Coimbatore.

Mumbai

Upgradation of Neonatal & Pediatric Intensive Care Units	Improved Service Delivery and Retrofitting Project for Medical Gas works
₹ 70 lakhs	₹ 47 lakhs
Amount spent for the Project	Amount spent for the Project

Coimbatore

Mudi's Hospital Project
(preventive healthcare and sanitation)

₹ 51 lakhs

Amount spent for the Project



Relief and aid related to COVID-19 pandemic

The COVID-19 crisis had a devastating impact on our economy and the people. Amidst tough times, healthcare workers emerged as true heroes, leading the fight against a

₹ 37 lakhs

Amount spent for Relief Project

deadly disease. We salute their effort and relentless dedication. To support relief work during the pandemic, we contributed to several projects.

Rural Development Projects

We aspire to improve the standard of living of people residing in rural areas. With an aim to bring positive change in society, we initiate several rural development projects.

Village Development Project

₹ 40 lakhs

Amount spent for the Project



Supporting Education

We believe education is the key to a healthy and self-sufficient society. To ensure economic and social well-being, we create opportunities for education of children from underprivileged families, allowing them to nurture their innate capabilities and become confident individuals capable of ushering change in society.

School repair and refurbishment project

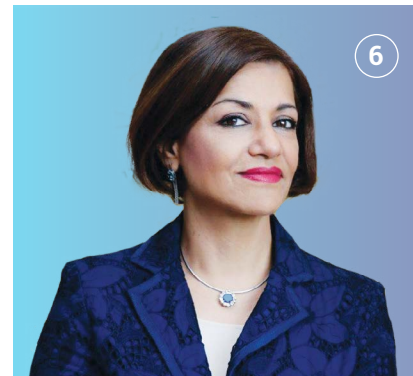
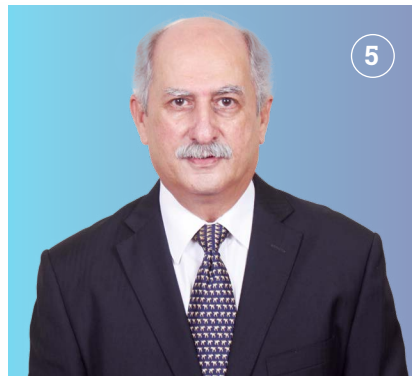
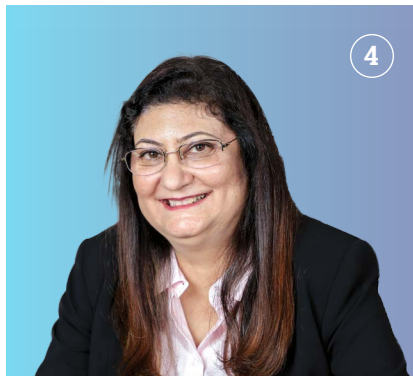
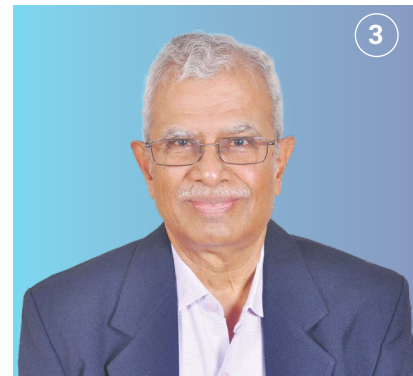
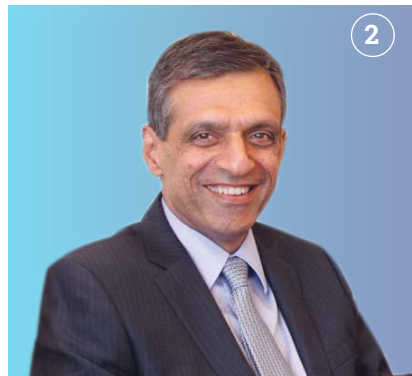
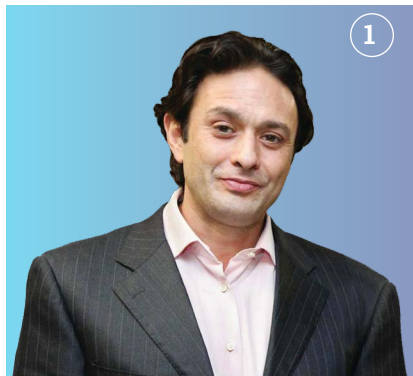
₹ 35 lakhs

Amount spent for the Project



Board of Directors

The decisive leadership of our Board Members drives us to sustain progress year after year. We believe, good governance rests on prompt action and our leaders have played a pivotal role in consistently steering the Company towards greater glory, keeping our competitive spirit alive and driving us to accomplish objectives with agility.



- 1 Mr. Ness N. Wadia**
Chairman / Non - Executive and Non - Independent Director
- 2 Mr. Rajesh Batra**
Non - Executive and Independent Director
- 3 Mr. S. Ragothaman**
Non - Executive and Independent Director
- 4 Dr. (Mrs.) Minnie Bodhanwala**
Non - Executive and Non - Independent Director

- 5 Mr. Viraf Mehta**
Non - Executive and Independent Director
- 6 Mrs. Harshbeena Zaveri**
Non - Executive and Independent Director
- 7 Mr. Rajiv Arora**
Chief Executive Officer & Director

Corporation Information

LEADERSHIP TEAM

Rajiv Arora
Chief Executive Officer

Conrad Fernandes
Chief Financial Officer

Rajeev Pradhan
Chief Information Officer

Gyan Shankar Awasthi
Vice President - Sales

Subhayu Basu
Human Resource, Head

Chandukumar Parmar
Company Secretary

BANKER

Standard Chartered Bank

SOLICITORS AND ADVOCATES

M/s. Khaitan & Co.
M/s. Crawford Bayley & Co.

AUDITORS

Satutory Auditors
M/s. Price Waterhouse Chartered Accountants LLP

Internal Auditors
M/s. PKF Sridhar and Santhanam LLP

Cost Auditors
M/s. D. C. Dave & Co.

Secretarial Auditors
M/s. Parikh & Associates

REGISTERED OFFICE

Neville House,
J. N. Heredia Marg,
Ballard Estate, Mumbai-400001.
Phone: 022-22678301

HEAD OFFICE

C-1, Wadia International Centre,
Pandurang Budhkar Marg,
Worli, Mumbai-400025.
Phone: 022-66620000
Website: www.naperol.com

FACTORY

N. R. C. Road, P. O. Atali,
Via Mohone, Kalyan-421102,
Dist. Thane, Maharashtra.
Phone: 0251-2278000

REGISTRAR & SHARE TRANSFER AGENTS

Link Intime India Private Limited

Unit : National Peroxide Limited.
C-101, 247 Park, L.B.S. Marg,
Vikhroli (West), Mumbai-400083
Phone: 022-4918 6270
E-mail ID: mt.helpdesk@linkintime.co.in

MANAGEMENT DISCUSSION AND ANALYSIS REPORT

Global Economy

The global economy in 2020 faced a huge setback due to spread of the virus and its impact worldwide. It is the year that experiences the worst recession since a decade where the world experienced global financial crisis, the period of ‘the Great Depression’. The economy underwent a contraction of -3.3% for the year 2020¹. In emerging markets and developing countries, cumulative per capita income losses over 2020–22 are forecasted to be equivalent to 20% of 2019 per capita GDP, whereas losses in advanced economies are likely to be comparatively less, at 11%. Approximately 95 million people are estimated to have fallen below the brink of acute poverty, compared to that of pre-pandemic estimates. Despite considerable efforts and policy supports, unemployment rates in both advanced and emerging market and developing economies have grown by around 1½ % points above pre-pandemic levels.

The first half of the year experienced lockdowns and stringent social distancing as critical measure of containment and recovery, allowing the health-care system to cope with the increased demand for its services while also affording researchers time to produce treatments and vaccines. To aid the crisis, governments at domestic levels have taken a number of fiscal measures, including initiatives to soften income losses, stimulate hiring, increase social assistance, guarantee credit, and inject ownership into businesses. The later part of the year witnessed slow but steady recovery in the economy, mostly in parts where lockdowns have been eased.

The advanced economies have been able to provide more direct expenditure and liquidity support in relation to GDP. The industrial production has restored to pre-pandemic levels through a V-shaped recovery curve after a brief and synchronized drop². The release of repressed demand for durable goods in general and strong demand for products that facilitate working from home have been major elements driving the worldwide recovery since the second half of 2020. Although car industry accounts for the major driver in manufacturing sector, contributing to about 35% in

recovery, demand for certain items, including electronics, plastic, rubber, and textiles as primary materials for personal protective equipment contribute for around 10% of the manufacturing recovery. In relation to international trade, merchandise trade volumes have restored to pre-pandemic levels but cross-border service commerce still remains sluggish.

Outlook

In 2021, the global economy is expected to rise at 6%, subsequently slowing to 4.4% in 2022. Though the present situation is grim and uncertain, a road out of this health and economic distress is becoming clearer with time and experience. Multispeed recovery is underway in regions and across socio-economic classes, owing to significant variances in healthcare facilities, vaccine implementation and availability, economic policy assistance, and certain structural variables. Parallel to this, adaptability to pandemic life has allowed the global economy to thrive despite low overall mobility, resulting in a stronger-than-expected recovery in all areas. The near-term outlook for global manufacturing remains optimistic, as demonstrated by the global manufacturing purchasing managers’ index indications, which indicate that growth will continue, though at a slower rate. Among advanced economies, United States and among developing economies, China have done exceptionally well in respect to returning back to pre-covid GDP in 2020. Others are expected to recover by 2022-23.

Indian Economy

The financial year 2020-2021 witnessed an unparalleled economic turbulence with the outbreak of worldwide pandemic due to the coronavirus disease (COVID-19). All economic activities came to a grinding halt with the stringent countrywide lockdown from the mid of March’20. Followed by a period of subdued growth in 2019, the Indian economy that had begun to gain momentum in January 2020, experienced a dramatic drop of 23.9% in Q1: FY 2020-21 and 7.5 % in Q2: FY 2020-21³. The real GDP is estimated to

soften by 7.7% this year as compared to a growth of 4.2% in 2019-20. This is the fourth contraction in GDP in the history since 1960-61.

The production hampered to a great extent and it resulted in a subsequent derail in supply-chain. The industry and service sectors became the worst hit, with an estimated decline of 9.6% and 8.8% during the year. Among all odds, only agriculture contributed to positive growth to the GDP. With 3.4% growth in 2020-21, it is expected to soften the impact of the pandemic. On the supply side, Gross Value Added growth is pegged at -7.2% in 2020-21 as against 3.9% in 2019-20. The stifled credit appetite and risk-aversiveness of public sluggish down overall bank-credit in the FY 2020-21. In the contrary, Government consumption sustained the growth of GDP with its share increasing by 2% compared to that of the previous year and Net Exports seem to buffer the contraction in GDP, largely due to a sharper contraction in imports than in exports. India sees the current account surplus of 2% of GDP this year, ‘a historic high after 17 years’. India also remained a preferred investment destination in FY 2020-21 with FDI flooding in, despite the global asset shifts towards equities. Investors’ risk appetite returned as net FPI inflows hit an all-time monthly high of USD 9.8 billion in November 2020.

Outlook

Despite of the deep-rooted disruption in overall economy, the Country witnessed a perceptible V-shaped recovery. High frequency indicators such as E-way bills, GST Collection, rail freight and power consumption surpassed previous year levels⁴. The record-high monthly GST collections provided sufficient evidence for restarting of industrial and commercial activity. The plethora of reforms were enacted to guarantee that supply-side disruptions, which were unavoidable during the lockdown, were reduced in the medium to long term. With relaxations in lockdown phase, demand appetite of the nation seemed to regain confidence.

Economic mobility grew with a favourable monetary policy that ensured sufficient liquidity and prompt relief to debtors via temporary curtailments. Also, the positive value addition growth in most sectors in the second half provided for a fairly good indicator for the economy. This amounts to a 0.3% increase in the second half of 2020-21, compared to a 14.9% contraction in the first half. The impressive recovery

pattern of the Country has caught the eye of the globe. The Organization for Economic Co-operation and Development (OECD) has raised the projection for India’s economic growth rate by 4.7% points at 12.6% for 2021-22. The IMF also forecasts India to become the fastest growing economy in next two years. But the prevail of the pandemic and unexpected fluctuations in COVID waves can jeopardize the future of the nation, alongside, the future of the world.

Hydrogen Peroxide Industry Overview

Hydrogen Peroxide (H₂O₂) is a transparent, pale blue chemical molecule in its purest form. It is a well-documented component of living cells that can be found naturally in biological systems. Because of its low molecular weight, hydrogen peroxide is also a popular oxidizing agent. In terms of revenue and volume, the market for hydrogen peroxide is forecasted to grow at a CAGR of 2.87% and 4.09% respectively, over the projected period of 2019-2024⁵. The increased demand from the textile industry, paper and pulp sectors as bleaching agents, as well as its increasing usage as a raw material for propylene oxide manufacturing, are major factors driving the market in India.

Besides the obvious, the Government of India has promoted the use of hydrogen peroxide due to its emission-free and environmentally friendly properties through a number of environmental laws and regulations. As a result, the use of this compound for water treatment and pollution control has increased significantly. Furthermore, with the outbreak of the COVID-19, hydrogen peroxide is being frequently used in sanitizers and other sanitary items as it is a virus-fighting agent. The market is likely to maintain its moderate growth throughout the forecast period as a result of these factors.

Outlook

With large-scale hydrogen peroxide consumption, Asia-Pacific is expected to hold a significant share of the market. The exports from India totaled at USD 981 thousand in 2020⁶. Sales of “hydrogen peroxide, whether or not solidified with urea” from India went up by 63% compared to 2019. Qatar (29%), Nepal (12.2%), UAE (9.79%) remained as major export destinations for the year. The total of imports to India for \$ 15.7 million in 2020. Sales to India have subdued by 33% in value terms compared to 2019.

⁴<https://pib.gov.in/PressReleasePage.aspx?PRID=1693232>

⁵<https://www.thecowboychannel.com/story/43459420/hydrogen-peroxide-market-trends-outlook-2021-industry-analysis-by-growth-segments-opportunity-and-challenges-future-scope-and-business-size-with>

⁶<https://trendeconomy.com/data/h2/India/2847>

¹2021/03/23/world-economic-outlook-april-2021

²2021/03/23/world-economic-outlook-april-2021

³https://www.indiabudget.gov.in/economicsurvey/doc/vol2chapter/echap01_vol2.pdf

Peracetic Acid Industry Overview

Peracetic acid is a functional product that is frequently used to treat wastewater as an environmentally favorable alternative to chlorine. It's an excellent bleach and disinfectant substitute for chlorine. Due to its performance advantages over other biocides, peracetic acid is one of the most inventive advancements in the biocide sector. The global peracetic acid market is expected to increase at a CAGR of 7.6% from USD 813 million in 2020 to USD 1,685 million in 2030⁷. With increasing demand from end-use industries, the global market is fast rising and is expected to continue to grow strongly in the future.

The prospects of this industry in Asia-Pacific are quite attractive. The key end-use sectors in this region are food, pharmaceuticals, pulp and paper, aquaculture and water treatment, all of which are rapidly expanding. Peracetic acid has been utilised in various industries since its inception, and it continues to be a significant market in the biocides business. It's widely utilised in the food business, namely in the processing and packaging of juices, milk, tea and soft beverages. Because of the rising healthcare industry, peracetic acid is also employed in pharmaceutical, life sciences, hospitals, and other industries.

Compressed Hydrogen Gas Industry Overview

Compressed hydrogen is a type of storage in which hydrogen gas is held at high pressures to increase storage density. In industries and space programmes, compressed hydrogen in hydrogen tanks is employed as a propellant. The need to use hydrogen for on-board energy storage in zero-emission vehicles is driving the development of new storage systems that are better suited to this new application.

Industry Overview by End User Applications

a) Paper and Pulp Industry

For both mechanical and chemical pulp bleaching, hydrogen peroxide is an effective chemical which guarantees high levels of brightness. Hydrogen Peroxide is active in alkaline circumstances, which are common in the repulping of papers. It also aids in ink removal. Hydrogen Peroxide is a very effective and convenient chemical for paper and waste paper upgrading for these reasons. Leading pulp and paper producing countries include China, the United States, India, and others. Global pulp and paper output is steadily expanding at a modest rate. Paper manufacturing is increasing in Asia-Pacific, as demand for packaging has expanded as a result of eco-friendly products and rising newspaper and book sales due to growing population.

The Indian paper sector has also grown more promising with increased domestic demand. The Indian paper industry is predicted to increase as the population grows, literacy rates rise, and the manufacturing sector improves. The paper industry's focus is currently changing toward more environmentally friendly goods and technologies.

Although COVID-19 has undeniably posed significant issues to the pulp and paper sector around the world, this pandemic also provided pulp and paper manufacturers with unprecedented opportunities in areas such as rising demand for personal hygiene paper, food packaging, corrugated packaging materials, medical specialty papers, and so on.

b) Textile Industry

This is one of the leading industries in the Country. The domestic textiles and clothing industry accounts for 2% of India's GDP, 7% of industry output in value terms, and 12% of the Country's export revenues. The textiles and apparel industry in India is the country's second largest employer, employing 45 million people directly and another 60 million in affiliated businesses. In the textile industry, hydrogen peroxide bleaching in an alkaline media is utilized for pretreatments because it retains the intrinsic properties of the cellulose. Hydrogen peroxide has also been successfully employed in the cold bleaching of textile materials in both the organized and unorganized sectors. Even for synthetic fiber bleaching, the most common bleaching agent is Hydrogen Peroxide and it is used in both batch and continuous processes.

c) Sugar Industry

After Brazil, India is the world's second largest producer of sugar and the world's largest consumer. In about nine states of the Country, namely Punjab, Uttar Pradesh, Maharashtra, Andhra Pradesh, Bihar, Gujarat, Haryana, Karnataka, and Tamil Nadu, the sugar sector supports an estimated 12% of the rural population through direct and indirect employment. Various ancillary operations such as transportation, trade service of machinery, and supply of inputs produce employment. According to Indian Sugar Mills Association (ISMA), India's sugar output is predicted to increase by 17.69% to 32 MT in 2020-21. The Indian cane sugar market is expected to grow at a CAGR of 4.3% during the forecast period (2020-2025).

The Indian cane sugar segment is further segmented into categories such as organic & conventional sugar, crystallized sugar & liquid syrup, bakery and confectionery, dairy, drinks, and other applications. Hydrogen peroxide is a superb reagent for producing bright, long-lasting sugar. It can also be used in the sugar sector for syrup bleaching. This creates a numerous economic advances and opportunities, as it generates sugar with exceptional brightness, good keeping quality, and lower Sulphur dioxide and sulphated ash levels.

d) Water and Waste Water Treatment Industry

India is the second-largest water consumer in the world. To serve its population, the country requires approximately 740 billion cubic meters of water every year. Furthermore, within the next 20-25 years, water demand is predicted to outstrip supply. As a result, the water and wastewater treatment industry has a lot of room for expansion. Companies must also address avenues to meet the rising demand for pure water to address the water security issues combined with greater public knowledge about water quality and health. Furthermore, the sector has a high need for worldwide, cutting-edge water treatment technology. The water sector is expected to grow to USD 130 billion in investment potential by 2030⁸.

Because of the increased awareness of hygiene during the epidemic, water consumption became comparatively high. According to the UN report, water sanitation is currently a profitable business. They believe that the water and wastewater treatment business has a high return on investment. Better sanitation has a cost-benefit ratio of 5.5, whereas improved drinking water has a cost-benefit ratio of 2.0.

e) Metallurgy Industry

The growing need for infrastructure projects and their restoration has had a significant impact on India's metallurgy industry. However, the industry provides raw materials to more than simply these two industries. Rather, as a material provider, it is deeply intertwined with a variety of sectors. India is strategically located for exporting to both developed and rising Asian markets.

Hydrogen Peroxide is a very attractive reagent used in metallurgy. It also has its uses in purification of uranium and treating and brightening a number of metals and alloys. Though the initial phase of 2020-2021 witnessed subdued

demand and supply in metal industry, with gradual ease in lockdowns, when industrial productions started recovering, the industry started gaining momentum.

f) Disinfectant Industry

The industry is currently gaining traction based on the rise in the utility of maintaining regularly touched surfaces sanitized, as a consequence of global pandemic. The industry has grown at par with growth in consumer awareness regarding importance of preserving health and hygiene in their surrounds and homes. Besides, with increase in healthcare associated infections (HAI) and rising safety and health standards in industries, new product launches are increasing the market for surface disinfectant in India. In FY 2020-21, the Indian Surface Disinfectant Market was worth USD 460.66 million, and it is expected to increase at a CAGR of 7.68% from 2020 to 2025⁹.

Hydrogen peroxide solutions are presently used to sanitize public areas such as airports, roads, and train stations, among other things. Peroxide makers are assisting in the disinfection of physical surfaces by collaborating with numerous institutions and government organizations across India, such as municipal corporations, gram panchayats, and other agencies.

Company Overview

National Peroxide Limited (NPL) is a specialty chemical manufacturing company, established in 1956 by the Wadia Group, one of the oldest conglomerates of India and a major shareholder in the Company. The Company is a pioneer in the peroxygen chemicals which touches an individual's life at multiple touchpoints and predominantly found in sanitizing formulations.

NPL is the largest producer of Hydrogen Peroxide in India with an installed capacity of 150,000 MTPA at its fully integrated manufacturing site at Kalyan, in Maharashtra. The facility manufactures a concentrated aqueous solution containing 50% Hydrogen Peroxide by weight, denoted as 50% w/w, as per the international standards using the auto-oxidation process.

Hydrogen Peroxide is widely used as antimicrobial chemical against a wide range of microorganisms, including bacteria, yeasts, fungi, viruses, and spores. It is used in both liquid and gas form for disinfection and sterilization. In the wake

⁷<https://www.marketsandmarkets.com/Market-Reports/peracetic-acid-market-1111.html>

⁸<https://www.maiervidorno.com/industry-expertise/water-and-waste-water-treatment>

⁹<https://www.prnewswire.com/news-releases/india-surface-disinfectant-market-competition-forecast--opportunities-fy2026-301209980.html>