

# Board's Report

Dear Shareholders,

Your Directors take immense pleasure in presenting the 35<sup>th</sup> Annual Report of the Company together with the Audited Annual Financial Statements (Standalone and Consolidated) showing the financial position of the Company for the financial year ended March 31, 2024.

## 1. FINANCIAL PERFORMANCE

The financial performance of your Company for the financial year ended March 31, 2024 is highlighted below:

(₹ in crore)

Particulars	Standalone			Consolidated		
	FY 2023-24	FY 2022-23	% of Change	FY 2023-24	FY 2022-23	% of Change
Revenue from Operations	15,109.28	13,152.55	15%	16,152.98	14,336.30	13%
Other income	88.77	42.84	107%	86.43	37.47	131%
<b>Profit for the year before finance cost, depreciation and tax expenses</b>	<b>1,568.38</b>	<b>1,192.29</b>	<b>32%</b>	<b>1,608.75</b>	<b>1,264.42</b>	<b>27%</b>
Deducting therefrom:						
- Depreciation / amortisation	102.57	91.94	12%	115.71	104.34	11%
- Finance Costs	366.40	290.76	26%	386.58	305.50	27%
<b>PROFIT BEFORE TAXATION FOR THE YEAR</b>	<b>1,099.41</b>	<b>809.59</b>	<b>36%</b>	<b>1,106.46</b>	<b>854.58</b>	<b>29%</b>
Deducting therefrom:						
- Tax expenses	276.13	206.93	33%	280.74	216.84	29%
<b>Net profit for the year after taxation and before share in profit / (loss) of associates</b>	<b>823.28</b>	<b>602.66</b>	<b>37%</b>	<b>825.72</b>	<b>637.74</b>	<b>29%</b>
<b>Adjustment of :</b>						
Share in Profit (Loss) of Associate	-	-	-	(0.61)	(0.02)	2950%
<b>Net profit after taxation and above adjustments</b>	<b>823.28</b>	<b>602.66</b>	<b>37%</b>	<b>825.11</b>	<b>637.72</b>	<b>29%</b>
Add: Profit brought forward from previous year	1,417.43	932.17	52%	1,569.75	1,049.43	50%
<b>Amount available for appropriations:</b>						
- Reserves	-	(60.00)	-	-	(60.00)	-
- Dividend	(153.07)	(57.40)	167%	(153.07)	(57.40)	167%
<b>Leaving balance of profit carried to balance sheet</b>	<b>2,087.64</b>	<b>1,417.43</b>	<b>47%</b>	<b>2,241.79</b>	<b>1,569.75</b>	<b>43%</b>
<b>Earnings per equity share (EPS)</b>	<b>211.63</b>	<b>157.48</b>	<b>34%</b>	<b>212.10</b>	<b>166.64</b>	<b>27%</b>

## 2. INDIAN ACCOUNTING STANDARDS

The Financial Statements for the year ended on March 31, 2024 have been prepared in accordance with the Companies (Indian Accounting Standard) Rules, 2015, prescribed under Section 133 of the Companies Act, 2013 ("the Act") and others recognised accounting practices and policies to the extent applicable.

## 3. STATE OF COMPANY AFFAIRS

Please refer Para 6 on Management Discussion and Analysis (MDA).

## 4. QUALIFIED INSTITUTIONS PLACEMENT

During the year under review, the Company raised the funds of about ₹10,000 million by issue of 18,99,696 Equity Shares of ₹10/- each at a premium of ₹5,254.00 per share aggregating to ₹999,99,99,744/- by way of Qualified Institutions Placement (QIP). The Company allotted the said 18,99,696 Equity Shares to the allottees on November 30, 2023.

The Company received the Listing approval for listing of these entire 18,99,696 Equity Shares from BSE and NSE on December 01, 2023. The Trading approval from BSE and NSE was received on December 01, 2023 informing that the aforesaid shares are listed and admitted to dealings on the Exchange effective from December 04, 2023.

After the allotment of these 18,99,696 equity shares of ₹10/- each, the Issued and Paid-Up Equity Share Capital of the Company increased to 4,01,68,315 number of equity shares of ₹10/- each aggregating to ₹40,16,83,150/- and the share premium account increased by ₹998,10,02,784/- and the Promoters' shareholding diluted from 60.64% to 57.77%.

## 5. DIVIDEND

Pursuant to the Requirements of Regulation 43A of the SEBI (Listing Obligations & Disclosure Requirements) Regulations, 2015 ('the Listing Regulations'), the Company has formulated its Dividend Distribution Policy, the details of which are available on the Company's website at <https://apar.com/wp-content/uploads/2021/02/4.-Policy-on-Dividend-Distribution.pdf>.

Considering the financial results and the performance of the Company during the year under review, as compared to the previous year, the Board of Directors is pleased to recommend a dividend of ₹51 (510%) per share on 4,01,68,315 Equity Shares of the face value of ₹10/- each for the Financial Year 2023-2024.

This dividend amounting to ₹204.86 crores is payable after declaration by the Shareholders at the ensuing Annual General Meeting (AGM) and you are requested to declare the same.

## 6. MANAGEMENT DISCUSSION AND ANALYSIS (MDA)

### ECONOMIC OVERVIEW

#### Global Economy and Outlook

In a reassuring shift of events, global economy is witnessing a slow, steady growth (projected at 3.1% in 2024, 3.2% in 2025), and inflation is declining steadily. This growth forecast is on an upward trajectory, owing to greater-than-expected resilience in the United States and several large emerging market and developing economies, as well as fiscal support in China. The forecast for 2024–25 is, however, below the historical (2000–19) average of 3.8 percent, with elevated central bank policy rates to fight inflation, a withdrawal of fiscal support amid high debt weighing on economic activity, and low underlying productivity growth. We now expect a more stable global GDP growth trend, slightly above 3% for the next two years. Growth among Mature Economies is expected to remain well below the pre-pandemic average of 2.1%. We forecast real GDP growth of 1.4% in 2024, not much changed from last year's 1.5%, and a very modest pick-up to 1.6% for 2025.

Inflation is falling faster than expected in most regions, amid unwinding supply-side issues and restrictive monetary policy. Global headline inflation is expected to fall to 5.8 percent in 2024 and to 4.4 percent in 2025, with the 2025 forecast revised down.

#### Indian Economy and Outlook

According to the World Bank's latest South Asia Development Update, in terms of growth, India continues to stride ahead with force. One of the fastest growing economies of the world, India aspires to reach the high middle-income status by 2047, the centenary milestone of Indian independence. The country is poised to leapfrog ahead of challenges, such as climate change, while staying in line with its goal of achieving net-zero emissions by 2070. India's output growth is expected to reach 7.5% in FY24 before returning to 6.6% over the medium term, with activity in services and industry expected to remain robust.

According to IMF, the growth projections for India are on an upswing at 6.8 per cent in FY25 and 6.5 per cent in FY26, with the "robustness" reflecting "continuing strength" in domestic demand and a rising working-age population. For FY24, the IMF raised India's GDP growth projection to 7.8 per cent, compared to 6.7 per cent in its January report. For FY26, the IMF expects the country's economic growth to slow down slightly to 6.5 percent.

## INDUSTRY OVERVIEW

APAR Industries is a leading global manufacturer of conductors, cables, specialty oils, lubricants, and polymers. Your Company is well diversified across industries and segments. Today, APAR Industries targets:

Industries	Apar product	Apar advantage
Power T&D & Renewable Energy	Conductors, Cables and Transformer oils (T-oils)	<ul style="list-style-type: none"> <li>• APAR Industries has been the largest manufacturers of aluminium and alloy conductors manufacturer in the world.</li> <li>• The third-largest manufacturer of transformer oil.</li> <li>• Wide range of cable solutions viz., solar, wind, nuclear, mining, defence, navy, railways, housewires in India.</li> </ul>
Indian Railways	Copper Conductors, XLPE & Elastomeric Cables & Harnesses	<ul style="list-style-type: none"> <li>• Largest manufacturer of conductors and works on a wide variety of cables</li> </ul>
Automotive Sector	Auto Lubes, Automotive Cables	<ul style="list-style-type: none"> <li>• 10<sup>th</sup> largest domestic player in lubricant</li> <li>• Established a strong foundation for Automotive Lubricants under a license agreement with ENI Italy to manufacture and market high-end automotive and specialty lubricants</li> </ul>
Telecom Industry	Optical Fibre Cables (OFC), Optical Ground Wire (OPGW)	<ul style="list-style-type: none"> <li>• Manufacturer of wide range of power and telecom cables.</li> </ul>
Defence Sector	Elastomeric Cables & Specialty Cables	<ul style="list-style-type: none"> <li>• Major supplier of specialty elastomeric cables to the Indian Navy manufacturing establishments and to DRDO.</li> </ul>
Exports	45% of revenue contribution in FY2024	<ul style="list-style-type: none"> <li>• It is a multinational corporation, working in over 140+ countries.</li> <li>• The company has a global presence and exports its products to countries in Europe, Africa, the Middle East, Asia, and the Americas.</li> <li>• APAR Industries has received several awards and certifications for its export performance, including the Top Exporter Award from the Engineering Export Promotion Council of India.</li> </ul>

### Transmission and distribution industry overview

The global electricity transmission and distribution (T&D) industry plays a pivotal role in delivering power from generation sources to end consumers. Transmission encompasses the long-distance movement of electricity at high voltages, while distribution focuses on delivering power to local networks.

The T&D industry is expected to grow from \$329.47 billion in 2023 to \$429.43 billion by 2030 at 3.9% CAGR, driven by rising power demand across the world. As of February 2024, the length of power transmission lines worldwide was 86 million km, more than 13 times the length of the Earth's equator.

The global investment in transmission and distribution (T&D) infrastructure is projected to reach a \$2.2 trillion in the next decade, driven by increasing electricity demand, growing over 50% due to factors such as the electrification of the transport system, economic growth and population growth. Moreover, the integration of renewable energy sources will play a significant role due to the preferential shift towards renewables like solar and wind from non-renewables due to its cost competitiveness and eco-friendliness. The focus on smart grid technology will enhance the efficiency and reliability of the T&D network, minimizing losses and improving power quality.

Electricity demand in India rose 7 per cent in 2023 and is likely to average growth of 6 per cent a year through 2026 on account of higher economic activity. The Indian government's investment in transmission and distribution (T&D) infrastructure is anticipated to reach \$30 billion over the next ten years, focusing on key areas such as the domestic market and export market.

The government is targeting the installation of 28,000 circuit Km of transmission lines and 180,000 Km of distribution lines by 2028 as well as another 18,000 circuit Km being augmented to enhance capacity and power quality.

### Renewable energy industry overview

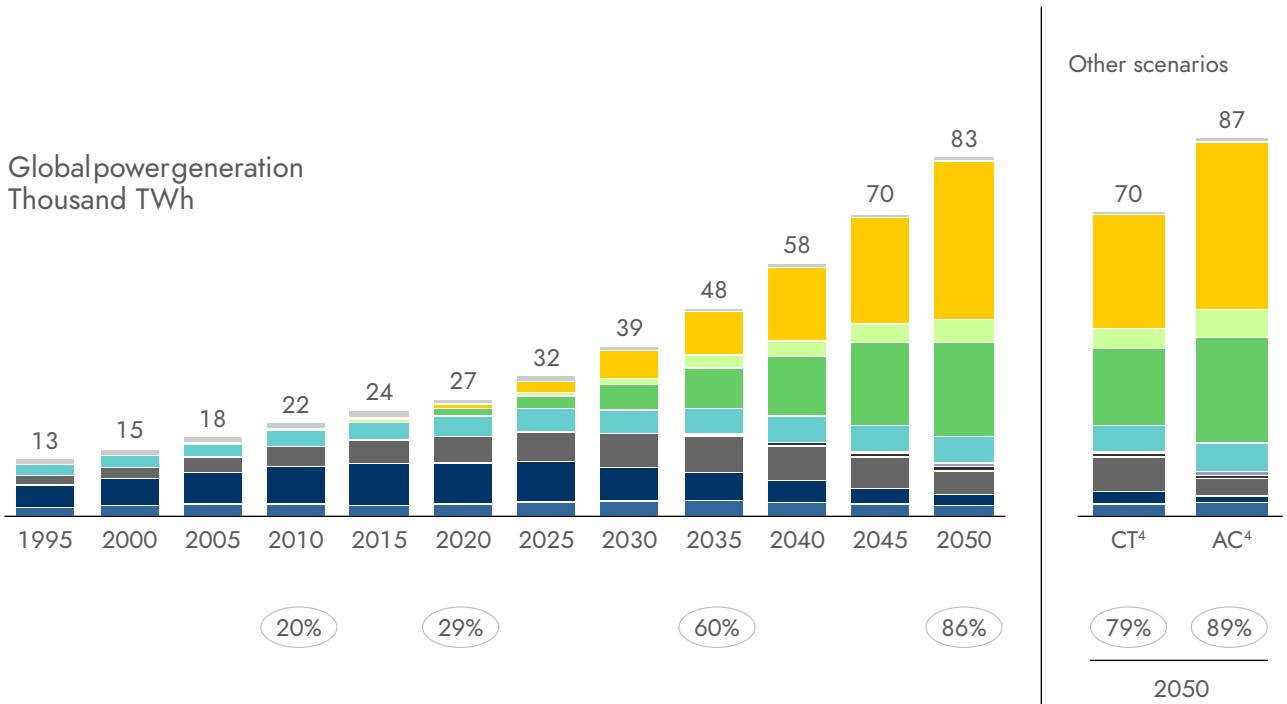
The global installed renewable energy capacity reached approximately 3.9 terawatts in 2023, up by almost 14% from the previous year, led by China, the U.S., and Brazil, the top countries for installed renewable energy capacity in 2023. In 2023, there was a significant surge in clean energy, with a 50% increase in renewable capacity added to energy systems worldwide compared to the previous year. This surge amounted to 507 gigawatts (GW) of additional renewable electricity capacity, with solar photovoltaic (PV) installations accounting for three-quarters of the global additions.

The worldwide renewable energy market was valued at USD 899.24 Billion in 2022 and is poised to grow from USD 1050.31 Billion in 2023 to USD 3637.99 Billion by 2031, growing at a CAGR of 16.80%. Global renewable energy capacity is set to increase by at least 150 GW between 2024 and 2027. The proportion of global renewable energy is expected to rise from 28% in 2021 to 38% by 2027. This growth will help reduce reliance on coal and gas, stabilize emissions, and decrease CO<sub>2</sub> intensity. By 2050, renewable generation is anticipated to make up 80-90% of the global energy mix, driven by a fivefold increase in solar build-out rates and an eightfold increase in wind build-out rates.

Further Acceleration



Global power generation  
Thousand TWh



1. Includes solar, wind, hydro, biomass, BECCS, geothermal, and marine and hydrogen-red gas turbines
2. Other includes bioenergy (with and without CCUS), geothermal, marine, and oil
3. Includes gas and coal plants with CCUS
4. CT refers to the Current Trajectory scenario; AC refers to the Achieved Commitments scenario

Renewable energy sources, including large hydropower, have a combined installed capacity of 190.57 GW. India ranks fourth globally in installed renewable energy capacity, including large hydro, and holds the fourth position in wind power capacity as well as the fifth in solar power capacity.

The Indian government made ambitious commitments to combat climate change, aiming to reduce the country's total projected carbon emissions by 1 billion tonnes by 2030, lower the carbon intensity of the economy by less than 45% by the end of the decade, and achieve net-zero carbon emissions by 2070. In line with these goals, the following initiatives have been proposed and implemented:

**Solar cities and parks:** The government approved the establishment of 57 solar parks of 39.28 GW across the nation. Moreover, it has ordained each state and union territory should have at least one solar city.

**National green hydrogen mission:** The National Green Hydrogen Mission was allocated an initial budget of INR 19,744 Cr. This allocation comprises INR 17,490 Cr designated for the Strategic Interventions for Green Hydrogen Transition (SIGHT) programme, INR 1,466 Cr for pilot projects, INR 400 Cr for research and development and INR 388 Cr allocated to other mission components.

**Off-shore wind energy:** The Ministry of New and Renewable Energy declared a long-term target for off-shore wind power capacity addition, which is 30 GW by 2030.

**Wind-Solar hybrid policy:** The primary aim of the policy is to establish a framework for advancing large grid-connected wind-solar PV hybrid systems, maximizing the efficient utilization of wind and solar resources, transmission infrastructure and land. Till date, a total of 1.44 GW of wind-solar hybrid capacity has been commissioned.

**AtmaNirbhar Bharat:** The government has announced a production-linked incentive scheme in Solar PV manufacturing with financial outlays of INR 24,000 Cr.

**Railway sector overview**

The worldwide rail transport market size is expected to grow at 6.7% CAGR from \$546.13 billion in 2023 to \$582.61 billion in 2024 and reach \$748.97 billion in 2028 at a compound annual growth rate (CAGR) of 6.5%. This growth is contributed with various factors such as the adoption of head on generation (HOG) technology for carbon footprint reduction, increase in operational profitability and widespread railway electrification.

India possesses the fourth largest railway network in the world after US, Russia and China. The Indian Railways encompasses a track length of 126,366 km, serving 7,335 stations. During 2022-23, around 5,243 km of new track was laid, a substantial increase from the 2,909 km achieved in 2021-22, surging the daily average track laying to a 14.4 km per day, marking the highest-ever commissioning rate. On an average, the Indian Railways run 13,523 passenger trains and 9,146 freight trains daily.

By FY25, the Indian Railways expects to achieve 100% electrification of its broad gauge, positioning it as the largest green railway across the world. This is in line with the sector's target to become the largest rail network with zero carbon emissions. By 2031, Indian Railway passenger traffic is expected to reach to 12 Bn per year and freight traffic is expected to cross 8,220 mn tonnes.

India is on track to become the world's second-largest metro system, surpassing Japan, Korea and the US. More than 20 Indian cities consist of metro systems, with around 870 km of track operational and an additional 1040 km under construction.

This metro expansion aligns with the government's broader Smart City initiative, aimed at enhancing urban living conditions for burgeoning populations. With urbanization projected to encompass half of India's populace by 2050, metro rail networks emerge as the foremost choice for public transportation due to their reliability, affordability, and capacity to alleviate congestion from private vehicles. Moreover, a dominant metro presence will contribute to achieving India's net zero CO<sub>2</sub> emission objectives.

#### **Mobility sector overview**

The global electric vehicle market experienced substantial growth, reaching a value of USD 388.1 billion in 2023 and expected to grow to USD 951.9 billion by 2030, with a compound annual growth rate (CAGR) of 13.7% during the period of 2023-2030. Nearly one in five cars sold in 2023 was electric, with electric car sales nearing 14 million, predominantly concentrated in China, Europe and the United States.

Globally, the number of electric cars on the roads reached 40 million, with 3.5 million new electric cars registered in 2023 alone, marking a remarkable 35% year-on-year increase. This surge in electric car adoption, more than six times higher than that of 2018, underscores the accelerating momentum of the electric vehicle market.

Over 250,000 new registrations occurred weekly in 2023, surpassing the total annual registrations in 2013. Electric cars accounted for approximately 18% of all cars sold in 2023, reflecting a steady rise from 14% in 2022 and a mere 2% five years prior in 2018, signalling the maturation of electric car markets. Battery electric cars constituted 70% of the electric car stock in 2023. China accounted for nearly 60% of new electric car registrations, followed by Europe with just under 25% and the United States with 10%, collectively representing close to 95% of global electric car sales.

The Indian electric vehicle (EV) market in 2024 is estimated to be USD 34.80 billion, growing at 26.05% CAGR to reach USD 110.74 billion by 2029. By 2032, the market is anticipated to reach USD 150.2 Billion.

This growth is driven by several key factors such as government initiatives like FAME-II that offers subsidies to make EVs more affordable for consumers. Rising fuel prices also play a role, pushing cost-conscious buyers towards EVs. Additionally, a growing focus on sustainability is leading India to reduce its dependence on fossil fuels and combat pollution, making EVs an attractive alternative. Moreover, increasing urbanization

fuels demand for two-wheeler EVs, ideal for convenient city commutes.

#### **Telecom industry overview**

The global telecommunications market size reached USD 1.8 trillion in 2023 and is expected to grow to USD 2.7 trillion by 2027. This growth is driven by factors such as increasing reliance on smartphones, internet of things (IoT) devices and cloud-based services driving the need for faster, more reliable data connections.

The Indian market is estimated to have reached USD 140 billion in 2023, growing at 9.3% CAGR to reach USD 210 billion by 2025, translating to a CAGR of around 9.3%. India possesses the world's second-largest subscriber base exceeding 1.084 billion as of February 2024 (wireless + wireline subscribers). Despite this vast reach, there is still room for growth, particularly in rural areas where tele-density is 58.92% compared to the urban figure of 134.13%.

The government is actively addressing this digital divide through schemes like BharatNet, with an approved outlay of ₹1.39 lakh crore to provide affordable broadband access in rural areas across 6.4 lakh villages. This commitment, along with decreasing data costs and rising smartphone penetration, is expected to fuel further growth in the Indian telecom sector. The GB per smartphone usage in India expected to expand at 25% CAGR, reaching 55 GB per mobile by 2028. With its large and growing subscriber base, coupled with government initiatives, technological advancements, and an ever-evolving digital landscape, the Indian telecom industry is poised for a bright future.

The deployment of 5G technology promises significantly faster speeds and lower latency, opening doors for new applications and services. Communication service providers (CSPs) are also exploring ways to integrate generative AI for improved customer service, network performance optimization, and even creating entirely new service offerings. The increasing demand for data storage and processing power is creating new opportunities for the telecom sector. The advent of data centers and cloud computing will necessitate robust and scalable network infrastructure, further propelling the growth of the industry.

#### **Defence industry overview**

The Indian defence sector is expected to be valued at USD 27.1 billion in 2024 and reach USD 54.4 billion by 2033, growing at 6.99% CAGR. This growth trajectory is underpinned by various government initiatives like Make in India, which incentivizes domestic defence manufacturing and aims to reduce reliance on imports.

The defence sector was allocated ₹6.21 lakh crore in the interim budget for 2024-25, demonstrating strong support for the sector's expansion. These allocations, the highest among all ministries, provide stability and growth opportunities for indigenous defence companies. The sector's modernization efforts encompass a wide array of military assets, including fighter jets, helicopters, warships, tanks, artillery guns, rockets, missiles, unmanned capabilities, and other combat systems. Escalating security threats, rapid technological advancements in



areas like artificial intelligence and cyber security, and the urgent need to upgrade aging military hardware further drive demand for modernization and innovation. Moreover, the strategic focus on defence exports aims to diversify clientele and boost revenue streams for domestic companies, positioning India as a reliable supplier in the global defence market.

**Growth drivers**

**Rising disposable incomes:** India’s average household income is expected to grow by 8.5% annually until 2025, fueling consumer spending and economic activity.

**Digital transformation:** India’s internet user base is estimated to reach 850 million by 2030, driving e-commerce and digital services growth. This creates a larger and more connected market.

**Increasing demand for green energy:** India is the world’s second-largest coal consumer but is actively shifting towards renewable energy to address its growing energy demand.

**Regulatory requirements:** Stricter environmental regulations are pushing industries to adopt cleaner technologies, creating a market for pollution control solutions and sustainable practices. As a result, companies across the world are moving towards sustainable energy solution.

**Geopolitical tensions:** Increasing number of conflicts across the world as well as within the neighbourhood, makes it imperative for India to have up-to-date defence technology and equipment.

**Greater connectivity:** India’s investments in infrastructure projects like the Bharatmala Pariyojana (National Highways Development Project) aim to improve transportation networks. While the total project cost exceeds ₹33 lakh crore (US\$460 billion) it is expected to significantly reduce logistics costs and improve connectivity between cities and regions, boosting economic activity.

**Company overview**

Founded in 1958, APAR Industries Limited has emerged as a pioneering force in the global market. With over six decades of unwavering commitment to excellence, the company evolved into a diversified billion-dollar enterprise, revered for its exceptional manufacturing prowess and unwavering commitment to quality. Today, the company’s footprint extends across more than 140 countries, solidifying its reputation as a trusted manufacturer and supplier of a comprehensive range of products, including conductors, a diverse array of cables, specialty oils, polymers and lubricants.

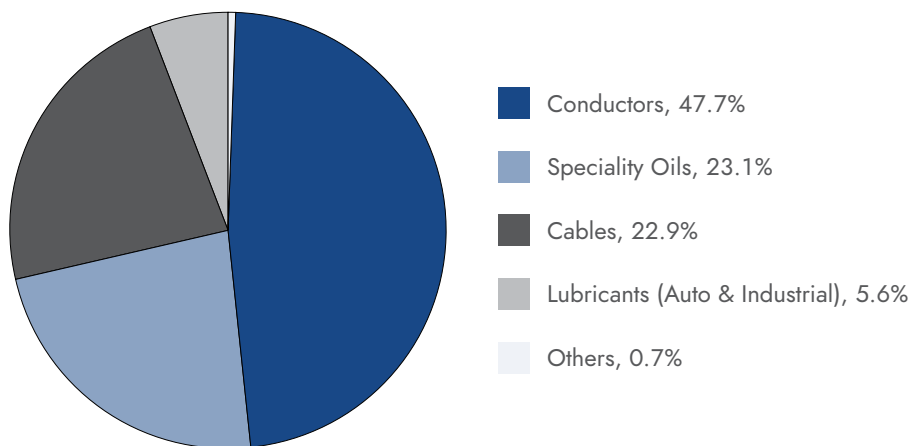
OVERALL BUSINESS PERFORMANCE

Particulars	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024
Revenue	7,964	7,462	6,388	9,317	14,336	16,153
EBITDA*	486	482	455	587	1,320	1,632
PAT	136	135	161	257	638	825
Cash Profit	203	222	254	355	742	941
ROE	12%	11%	13%	16%	32%	27%
D/E	0.14	0.19	0.17	0.18	0.14	0.10

\*EBITDA post open period forex excluding interest income, corporate unallowable expenditure.

FY24 Segmental revenue-mix (Based on Ind AS.)

**Segmental Mix 12M FY24 Revenue**



The Consolidated revenue in FY24 was at highest level of ₹16,153 crores, up 13% YoY, with growth coming from all the divisions on the back of higher volumes. Profit after tax grew 29% YoY to reach at an all-time high of ₹825 crores on the back of sustained healthy margins across divisions. Export revenue accounts for 45.2% of FY24 revenues. Consolidated EBITDA was at ₹1,632 crores up 24% YoY. Conductor business recorded a healthy EBITDA post forex of ₹42,141 MT. Cable business recorded a double-digit EBITDA post forex of 11.4%. Oil business recorded EBITDA post forex at 5,746 per KL.

## SEGMENT-WISE PERFORMANCE



### Conductors – Historically High Revenue

Your Company is one of the largest global manufacturers of Conductors. ₹512 crore of strategic capex was undertaken over FY17-FY24. During the year, the company acquired two factories in Silvassa to augment the production capacity.

Revenue for the conductors' segment increased 15% YoY to ₹8,031 crore on the back of higher share of premium products and export. The company is continuously reaping the benefits from the R&D initiative taken in the past to drive HTLS conductors. In addition to HTLS, Copper conductors for Railways, Copper Transpose Conductors for transformers, OPGW wires for power & telecommunication and a comprehensive range of high efficiency conductors including turnkey solutions altogether accounted 44.8% of revenues.

Domestic business exhibited healthy results with good demand for rod, aluminium and HTLS conductors. The globalisation initiative continues to play a significant role with export contributing to 44.9% of revenue.

In ₹ Crore	FY24	FY23	Growth (%)
Order Book	6,885	5,124	34%
Turnover	8,031	7,013	15%
Segment Result	858	682	26%
Volume (MT)	2,06,633	1,60,131	29%

- New order inflow of ₹9,372 crore in FY24 was up 20.4% YoY, with premium product contributing 48%.
- Strong & healthy order book of ₹6,885 crore, up by 34% YoY, with 45% share from higher-value products. Export contributes 37% of total order book.

EBITDA per MT after forex adjustment at ₹42,141, down by 4% YoY:

#### Outlook

- Your Company plans to spend towards capital expenditure majorly towards de-bottlenecking, capacity/capability enhancement, productivity/cost reduction, and R&D.
- Continuous rise in electricity consumption requires more technologically advanced conductors, coupled with a shift to renewable energy on a global scale will be a demand driver in future.

**Risks and Concerns:** Ongoing geopolitical instability may pose unprecedented challenges and could push up commodity and freight prices. Increased cost of capital due to higher inflation may affect export demand, which can be partially mitigated by tapping on strong domestic opportunities in premium business segment. High volatility in raw material cost can impact the

performance. However, being prudent, your Company uses hedging strategy to mitigate commodity and forex risk. The cyclical nature of the power business has some impact on your Company's performance. Regional political instability, transition of political leadership and changes in the external environment in certain export markets may affect execution.



### Speciality Oils – All time high volumes.

Your Company is the 3<sup>rd</sup> largest global manufacturer of transformer oils and the 10<sup>th</sup> largest lubricant marketer in India. This puts the Company at an advantage in terms of economies of scale for manufacture and distribution, adding to the premiumisation of the oils business. Your Company invested ₹221 crore during FY17-24 on higher-value products:

In ₹ Crore	FY24	FY23	Growth (%)
Turnover	4,837	4,656	4%
Segment Result	292	225	30%
Volume (MT)	5,37,862	4,86,582	11%

Revenue grew 4% YoY to ₹4,837 crore, driven by 15% volume growth in transformer oil led by the expansion in generation, transmission & distribution infrastructure globally.

- Exports contribution at 46% in FY24 as against 45% in FY23.
- Revenue from lubricants up 6% YoY at ₹944 crore.

EBITDA per KL after forex adjustment in FY24 was at ₹5,746, up 20% YoY from ₹4,773. The focus remains on per unit profitability rather than on volumes.

#### Outlook

- Higher or increased prices of finished goods due to global inflation and rising cost of borrowing may impact the operating performance.
- Geopolitical instability/conflicts may increase commodity and freight prices in future.
- Focus will be on per unit profitability compared to total volumes, along with keeping the cash flows in focus by maintaining the lowest possible level of inventory.

**Risks and Concerns:** Your Company is exposed to the volatility in prices of raw materials, interest rates and foreign exchange rates. Higher prices amidst global inflation and rising rates of interest may impact the business. Your Company uses a hedging strategy to mitigate the forex risk. Your company is also exposed to risk of stiff competition in the transformer oils and auto lubricants sub-segments. Due to geopolitical instability, your company is exposed not only to an increase in freight cost but also disruption in supply chain management, although for a shorter period.



### Cables segment – Largest domestic player in renewables and one of the largest exporters of cables and wires from India

The Company is the largest domestic player in renewables with one of the widest ranges of medium-voltage and low-voltage XLPE cables, elastomeric cables, fibre optic cables and speciality cables. ₹603 crore has been invested over FY17-24 towards developing new-age solutions. During the year the company has invested towards greenfield expansion to augment the capacity to cater to the future demand:

- High-voltage power cables using the latest CCV technology.
- Product portfolio includes Medium Voltage Covered Conductor (MVCC) for increased safety and uninterrupted power distribution in high population density and forest areas.
- Additional import substitution products for the defence sector.
- Largest number of UL certificates of compliance from India for sale of cable in the United States.
- 4 E-Beam capacity to produce more Anushakti house wires, railway cables and solar cables.
- Strategic focus on increasing B2C sales, with revenues up 50% YoY.

In ₹ Crore	FY24	FY23	Growth (%)
Turnover	3,859	3,263	18%
Segment Result	405	317	28%
Order Book	1,436	1,221	17.6%

Revenues from the Cables segment grew 18% YoY to reach ₹3,859 crore as revenues from domestic cable business rose by 45%, led by increase in renewable energy installation, railways and telecom business.

- Exports' contribution at 38.3% as against 50.8% in FY24, affected by slowdown in US market in second half of the year.
- Power cable continues to be highly competitive; more focus being put on export opportunities.
- The company is strategically emphasizing the expansion of its distributor network, increasing retail presence, and actively engaging with potential customers through targeted marketing efforts, including advertisements, product demonstrations, and electrician meetings.
- EBITDA margin post forex adjustments up 27% YoY to ₹438 crore in FY24.

#### Consolidating on domestic opportunities:

- Exports contributes 38% of the sales revenue as against 51% in the last year. Due to slowdown in US, export business has been largely affected. However other parts of the world as well as domestic demand continues to play a significant role in the growth. Revenues ex-US are increased by 45% YoY. Strong demand for elastomeric cables driven by renewable installation railways and telecom resulted into revenue

growth of elastomeric cables by 45% YoY. By consolidating on this the company is able to offset headwinds from a slowdown in US.

- With product approvals in place, appreciated product quality and increased acceptance, your company is prepared to exploit the global opportunity presented by the negative sentiments towards Chinese products.

#### Outlook

- In FY25, the Company will continue its focus on premium product pipeline and exports.
- Over a period of next few years, your company sees front end transformation by scaling up light duty cable business, turbocharging exports and continue to be strong player in the domestic market.

**Risks and Concerns:** Pricing is influenced by surplus capacity in the power cables market. Due to lack of financial arrangements by key customers in the renewable energy sector and by EPC contractors, collection periods could be prolonged and delivery timelines delayed. Low or no ordering by big telecom firms may have an influence on performance in optical fibre lines. The cyclical nature of their tendering has an impact on the industry's order position. Any fluctuations in fibre or polymer costs may have an influence on performance. Geopolitical instability/conflicts may affect supply chain management and increase in freight cost which may not be fully passed on to customers. Increase in cost of capital may affect customer's ability in placing orders.

#### General risks and concerns

Prolonged extension of the geopolitical situation without any resolution may impact performance. Volatile commodity prices, technical developments, currency rate fluctuation, and any influence on the broader macro-economic outlook may all have an impact on the Company's success. Any geopolitical or economic upheavals on a local, regional, or worldwide scale may have a negative influence on demand or cause input cost volatility, all of which can have a negative impact on performance. Your company is subject to the risk of SOFR rate volatility, which might raise our interest expenses and have an impact on our performance. Due to clients' difficult financial situation, the collection period for debtors may increase.

#### Internal Control Systems (ICS) and Their Adequacy

Your Company has established adequate ICS in respect of all the divisions of the Company. The ICS aims to promote operational efficiencies and achieve savings in cost and overheads in all business operations. System Application and Product (SAP), a world-class business process integration software solution, which was implemented by the Company at all business units, has been operating successfully. The Company has appointed M/s. Deloitte Touche Tohmatsu India LLP as its Internal Auditors. The system-cum-internal audit reports of the Internal Auditors were discussed at the Audit Committee meetings and appropriate corrective steps have been taken. Further, all business segments prepare their annual budgets, which are reviewed along with performance at regular intervals.



## Development of human resources

Your Company promotes an open and transparent working environment to enhance teamwork and build business focus. Your Company gives equal importance to development of human resources (HR). It updates its HR policy in line with the changing HR culture in the industry. In order to foster excellence and reward those employees who perform well, the Company has performance / production-linked incentive schemes. The Company also takes adequate steps for in-house training of employees and maintaining a safe and healthy environment. During the year, your Company has been certified to be a Great Place to Work.

Key Financial Ratios with details of significant changes

The Company has identified the following as key financial ratios:

Consolidated ratio	FY24	FY23	Growth (%)
EBITDA Margin*	10.1%	9.2%	0.9%
PAT Margin	5.1%	4.4%	0.7%
ROE	27.0%	32.3%	(5.3)%
Debtors Turnover	4.5	5.0	(9.3)%
Inventory Turnover	4.6	4.7	(1.9)%
Current Ratio	1.5	1.2	25.0%
Debt/ Equity Ratio	0.10	0.14	(28.6)%
Interest Coverage Ratio	3.9	3.8	2.6%
Net Fixed Asset Turnover Ratio	12.3	13.7	(10.2)%

\*EBITDA post open period forex excluding interest income, unallowable corporate expenditures.

### Cautionary statement:

The statements made in the Management Discussion & Analysis section, describing the Company's goals, expectations and predictions, among others, do contain some forward-looking views of the management. The actual performance of the Company is dependent on several external factors, many of which are beyond the control of the management, viz. growth of Indian economy, continuation of industrial reforms, fluctuations in value of Rupee in the foreign exchange market, volatility in commodity prices, applicable laws / regulations, tax structure, domestic / international industry scenario, movement in international prices of raw materials and economic developments within the country, among others.

## 7. DISCLOSURES RELATING TO SUBSIDIARIES, ASSOCIATES AND JOINT VENTURES

Your Company has the following subsidiaries and associates as at March 31, 2024:

1. Petroleum Specialities Pte. Ltd. Singapore (PSPL) – Wholly Owned Subsidiary of the Company,
2. Petroleum Specialities FZE, Sharjah (PSF) – Wholly Owned Subsidiary of PSPL,

3. APAR Transmission & Distribution Projects Private Limited (ATDPPL) – Wholly Owned Subsidiary of the Company,
4. APAR Distribution & Logistics Private Limited (ADLPL) – Wholly Owned Subsidiary of the Company,
5. CEMA Wires & Cables LLC, USA (CEMA) – Wholly Owned Subsidiary of the Company,
6. Apar Industries Middle East Limited\*, Saudi Arabia (AIMEL) – Wholly Owned Subsidiary of the Company,
7. Ampoil APAR Lubricants Private Limited (AALPL) – Associate of the Company with 40% stake along with PPS Motors Private Limited and Others,
8. Clean Max Rudra Private Limited (Clean Max) – Associate of the Company with 26% stake.

\* Not consolidated as there are no operations till March 31, 2024

The Company has not attached the Balance Sheet, statement of profit & loss and other related documents of its six Subsidiaries and two Associates. As per the provisions of Section 129(3) read with Section 136 of the Companies Act, 2013, a statement containing brief financial details of the Subsidiaries and Associates for the Financial Year ended March 31, 2024 in **Form AOC – 1** is included in the annual report and shall form part of this report as “**Annexure VIII**”. The annual accounts of the said Subsidiaries and Associates and other related information will be made available to any member of the Company seeking such information at any point of time and are also available for inspection by any member of the Company at the registered office of the Company.

Further, pursuant to provisions of Section 136 of the Act, the financial statements, including Consolidated Financial Statements of the Company along with relevant documents and separate audited accounts in respect of Subsidiaries and Associates, are available on the website of the Company at [www.apar.com](http://www.apar.com).

The structure of the Company's Wholly Owned Subsidiary named CEMA Wires & Cables INC, having its registered office in State of Delaware, USA initially formed as a C – Corporation entity has been converted into A Delaware Limited Liability Company w.e.f August 10, 2023.

The Company has incorporated a new Wholly Owned Subsidiary Company in form of a Limited Liability Company in name of Apar Industries Middle East Limited having its registered office in the city of Dammam, Saudi Arabia on December 7, 2023, interalia for carrying out Production of lubricants for equipments and engines.

## 8. SIGNIFICANT AND MATERIAL ORDERS PASSED BY THE REGULATORS OR COURTS

There are no significant and material orders passed during the year by the regulators or courts or tribunals impacting the going concern status of the Company and operations of the Company in future.

## 9. CORPORATE GOVERNANCE

Your Company believes in conducting its affairs in a fair, transparent, and professional manner and maintaining good ethical standards, transparency, and accountability in its dealings with all its constituents. As required under the Listing Regulations, a detailed report on Corporate Governance along with the Auditors' Certificate thereon forms part of this report as "Annexure – V".

## 10. BUSINESS RESPONSIBILITY & SUSTAINABILITY REPORT (BRSR)

Business Responsibility & Sustainability Report (BRSR) as stipulated under Regulation 34(2)(f) of the Listing Regulations forms a part of this Annual Report as "Annexure – VI".

## 11. MANAGEMENT - DIRECTORS AND KEY MANAGERIAL PERSONNEL DIRECTORS

### Appointment:

During the year under review, Smt. Nirupa Kiran Bhatt (DIN: 02006089) was appointed as an Additional Director in the category of Independent Director (Non-Executive) by the Board of Directors of the Company at its Meeting held on October 26, 2023. Subsequently, necessary approval of the Shareholders was also obtained for her appointment by way of Postal Ballot on January 09, 2024 through remote e-voting, to hold the office of Independent Director (Non-Executive) for a period of up to 5 consecutive years with effect from October 26, 2023.

### Re-appointment:

At the 35<sup>th</sup> Annual General Meeting (AGM), following appointment / re-appointment is being proposed:

- a. Mr. Rishabh K. Desai, Director (DIN: 08444660), shall retire by rotation and being eligible, offers himself, for re-appointment.

Details of the proposal for the re-appointment of Mr. Rishabh K. Desai along with his brief resume is mentioned in the Explanatory Statement under Section 102 of the Act and disclosure under Regulation 36(3) of the Listing Regulations as annexed to the Notice of the 35<sup>th</sup> AGM.

The Board recommends the re-appointment / appointment of the above Director.

### Completion of second and final term of Independent Director of the Company:

Smt. Nina Kapasi (DIN: 02856816), an Independent Director (Non-Executive) of the Company and Chairperson of the Audit Committee shall cease to be Independent (Non-Executive) Director on the Board of the Company w.e.f the closure of business hours on May 29, 2024, due to completion of her second and final term as an Independent Director on the Board of the Company. Consequently, she also shall cease to be a Chairperson / Member of the following Committees of the Board of Directors of the Company w.e.f the closure of business hours on May 29, 2024.

- i. Audit Committee (Chairperson)
- ii. Corporate Social Responsibility Committee (Member)
- iii. Nomination and Compensation-cum-Remuneration Committee (Member) and
- iv. Risk Management Committee (Member)

The Board placed on record its appreciation for the valuable contribution and expert advice given by Smt. Nina Kapasi during her tenure as Independent Director and as a Member of the various Committees of the Board and Chairperson of the Audit Committee.

### KEY MANAGERIAL PERSONNEL:

As on March 31, 2024, Mr. Kushal N. Desai, Managing Director and Chief Executive Officer, Mr. Chaitanya N. Desai, Managing Director, Mr. Ramesh Seshan Iyer, Chief Financial Officer and Mr. Sanjaya Kunder, Company Secretary are the Key Managerial Personnel of the Company.

## 12. MEETINGS

During the year, five Board Meetings and four Audit Committee Meetings were convened and held. All the Meetings were held through Video Conferencing as permitted by the Law. The intervening gap between the Meetings was within the period prescribed under the Act. The details of these Meetings, including other committee meetings, regarding their dates and attendance of each of the Directors thereat, have been set out in the Report on Corporate Governance.

## 13. DECLARATION BY INDEPENDENT DIRECTORS

Mr. Rajesh Sehgal, Smt. Nina Kapasi, Mr. Kaushal J. Sampat and Smt. Nirupa Bhatt were the Independent Directors (Non-Executive) of the Company as on March 31, 2024.

The Company has received necessary declarations from all the Independent Directors of the Company confirming that they meet the criteria of independence prescribed under the Act and the Listing Regulations.

## 14. BOARD EVALUATION

Pursuant to the provisions of the Act and the Listing Regulations, the Board has carried out an annual performance evaluation of its own performance, the directors individually as well as the evaluation of the working of its Audit Committee, Nomination and Compensation-cum-Remuneration Committee, Corporate Social Responsibility Committee, Risk Management Committee and Share Transfer and Shareholders Grievance-cum-Stakeholders Relationship Committee. The way the evaluation has been carried out, has been explained in the Corporate Governance Report.

## 15. DIRECTORS' RESPONSIBILITY STATEMENT

To the best of their knowledge and belief and according to the information and explanations obtained by them, your Directors

make the following statements in terms of Section 134(3)(c) of the Act:

- i. that in the preparation of the Annual Financial Statements for the Financial Year ended March 31, 2024, the applicable accounting standards have been followed along with proper explanation relating to material departures, if any.
- ii. that such accounting policies as mentioned in Note 1 of the Notes to the Financial Statements have been selected and applied consistently and judgments and estimates have been made that are reasonable and prudent so as to give a true and fair view of the state of affairs of the Company as at March 31, 2024 and of the Profit of the Company for the period ended on that date.
- iii. that proper and sufficient care has been taken for the maintenance of adequate accounting records in accordance with the provisions of the Act, for safeguarding the assets of the Company and for preventing and detecting fraud and other irregularities.
- iv. that the annual accounts have been prepared on a going concern basis.
- v. that proper internal financial controls were in place and that the financial controls were adequate and were operating effectively.
- vi. that systems to ensure compliance with the provisions of all applicable laws were devised and in place and were adequate and operating effectively.

## 16. REMUNERATION POLICY

The Board has, on the recommendation of the Nomination and Compensation-cum-Remuneration Committee framed a policy for the selection and appointment of Directors, Senior Management, and their remuneration. The Remuneration Policy is stated in the Corporate Governance Report.

Particulars of information as per Section 197 of the Act read with Rule 5(2) of The Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014, a Statement showing the names and other particulars of the employees drawing remuneration in excess of the limits set in the Rules and Disclosures pertaining to remuneration and other details as required under Section 197 (12) of the Act read with Rule 5 (1) of the Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014 is provided as "Annexure – III" forming part of this Report.

## 17. RISK MANAGEMENT (RISK ASSESSMENT & MINIMISATION PROCEDURES)

The Board of Directors has constituted a Risk Management Committee. Your Company has implemented a mechanism for risk management and formulated a Risk Management Policy. The policy provides for the identification of risks and the formulating of mitigation plans. The Risk Management Committee, Audit

Committee and the Board of Directors review the risk assessment and minimization procedures on a regular basis.

## 18. ANNUAL RETURN

In compliance with Section 92(3) and 134(3)(a) of the Act, Annual Return is uploaded on Company's website and can be accessed at <https://apar.com/investor/>.

## 19. RELATED PARTY TRANSACTIONS

All Related Party Transactions that were entered into during the Financial Year were on an arm's length basis and were in the ordinary course of business. There were no materially significant related party transactions made by the Company with Promoters, Directors, Key Managerial Personnel, or other designated persons which may have a potential conflict with the interest of the Company at large. **Form AOC-2** relating to the Disclosure of Particulars of Contracts / arrangements entered by the Company with related parties is annexed as "Annexure – IX" and forming part of Board's Report.

All Related Party Transactions are placed before the Audit Committee as also the Board for review and approval. A statement giving details of all related party transactions were placed before the Audit Committee and the Board of Directors for their review, approval and noting on a quarterly basis.

The policy on Related Party Transactions as approved and revised by the Board from time to time in line with the amended provisions of Act and Listing Regulations has been uploaded on the Company's website.

There were no materially significant Related Party transactions during the year under review.

## 20. AUDIT COMMITTEE

The Company has an Audit Committee pursuant to the requirements of the Act read with the rules framed thereunder and Listing Regulations. The details relating to the same are given in the report on Corporate Governance forming part of this Report.

During the year under review, the Board has accepted all recommendations of Audit Committee and accordingly, no disclosure is required to be made in respect of non-acceptance of any recommendation of the Audit Committee by the Board.

## 21. REPORTING OF FRAUDS

There have been no instances of fraud reported by the Auditors under Section 143(12) of the Act and rules framed thereunder either to the Company or to the Central Government.

During the year management detected an instance of fraud of approximately ₹8.14 crore committed by an employee by misuse of his authority. Necessary corrective measures to improve the process has been initiated and efforts to recover the amounts is in process.

## 22. MATERIAL CHANGES AND COMMITMENTS, IF ANY, AFFECTING THE FINANCIAL POSITION OF THE COMPANY WHICH HAVE OCCURRED FROM THE END OF THE FINANCIAL YEAR TILL THE DATE OF THE REPORT

There are no Material changes and commitments, if any, affecting the financial position of the Company which have occurred from the end of the Financial Year till the date of the Report.

## 23. DEPOSITS

Your Company has not accepted deposits within the meaning of Section 73 and 74 of the Act read with the Companies (Acceptance of Deposits) Rules, 2014 during the year and hence, there were no outstanding deposits and no amount remained unclaimed with the Company as on March 31, 2024.

## 24. PARTICULARS OF LOANS, GUARANTEES, SECURITIES OR INVESTMENTS

Details of Loans, Guarantees, Securities and Investments covered under the provisions of Section 186 of the Act are given in the notes to the Financial Statements.

## 25. STATUTORY AUDITORS

The observations made by the statutory auditors in their report read with the relevant notes as given in the notes to the financial statement for the Financial Year ended on March 31, 2024 are self-explanatory and are devoid of any reservation, qualification or adverse remarks.

The present Statutory Auditors, M/s. C N K & Associates LLP, Chartered Accountants (Firm Registration No. 101961W/W100036), Mumbai were appointed at the 31<sup>st</sup> Annual General Meeting of the Company held on August 17, 2020 for a first term of 5 years so as to hold office up-to the 36<sup>th</sup> Annual General Meeting of the Company. The Auditors have confirmed that they are not disqualified from continuing as Statutory Auditors of the Company.

## 26. COST AUDITORS

Pursuant to Section 148 of the Act, read with the Companies (Cost Records and Audit) Amendment Rules, 2014, the cost audit records maintained by the Company in respect of Conductors, Oils, Cables, and Polymer Divisions of the Company are required to be audited by a qualified Cost Accountant.

The Board of Directors of the Company, on the recommendation of the Audit Committee, has appointed M/s. Rahul Ganesh Dugal & Co., a Proprietary Firm, who are in Whole Time Practice as Cost Accountant, having Firm Registration no. 103425 and Membership no. 36459 as the Cost Auditor to conduct the audit of the cost records of the Company for the Financial Year ending on March 31, 2025 (2024-25) on a remuneration not exceeding ₹1,32,000/- p.a.

A Resolution seeking members' ratification of remuneration payable to M/s. Rahul Ganesh Dugal & Co., Cost Auditor is

included at Item No. 4 of the Notice convening the AGM and Board recommends the said Resolution.

## 27. SECRETARIAL AUDITORS

Pursuant to the provisions of Section 204 of the Act and the Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014, the Company has appointed Mr. Hemang Mehta, Proprietor of M/s. H. M. Mehta & Associates, Practicing Company Secretaries, Vadodara, Gujarat, to undertake the Secretarial Audit of the Company for the Financial Year 2023-24. The Secretarial Audit Report (Form No. MR-3) is annexed herewith as "Annexure - I". The Secretarial Audit Report does not contain any qualification, reservation, disclaimer or adverse remarks.

## 28. VIGIL MECHANISM

As per the provisions of Section 177 (9) of the Act read with Regulation 22(1) of the Listing Regulations, the Company is required to establish an effective vigil mechanism for directors and employees to report genuine concerns. The Company has introduced Whistle Blower Policy (APAR's OMBUDSMEN Policy) effective from March 1, 2014 by setting a vigil mechanism in place, the details of the whistle blower policy are provided in the report on Corporate Governance forming part of this report. The Whistle Blower Policy is being reviewed by the Audit Committee and Board of Directors at regular intervals.

## 29. OTHER INFORMATION

### a. Green Initiative:

To support the "Green Initiative" undertaken by the Ministry of Corporate Affairs (MCA), to contribute towards a greener environment, the Company has already initiated/implemented the same since 2010-11. As permitted, delivery of notices / documents and annual reports etc. are being sent to the shareholders by electronic mode only, unless a request for a physical copy of aforesaid document is sought by the shareholders.

Further, the Company has started using recyclable steel drums in place of wooden pallets to protect the environment and reduce costs for the Company and other initiatives are provided in the Report of Conservation of Energy, Technology Absorption and Foreign Exchange Earnings and Outgo in **Annexure IV** and BRSR in **Annexure VI**.

### b. Corporate Social Responsibility (CSR):

The CSR Committee constituted by the Board of Directors in terms of the provisions of Section 135(1) of the Act reviews and restates the Company's CSR policy in order to make it more comprehensive and aligned in line with the activities specified in Schedule VII of the Act.

The policy on Corporate Social Responsibility can be accessed at [https://apar.com/wp-content/uploads/2022/09/CSR-Policy\\_R.pdf](https://apar.com/wp-content/uploads/2022/09/CSR-Policy_R.pdf). With the strong belief in the principle of Trusteeship, APAR Group continues to serve the community through a focus on healthcare and upliftment of weaker

sections of society, Promoting Education and health care including preventive health care (Medical), Environmental sustainability and Rural Development, Welfare of under privileged and destitute children, including girl children, Empowerment of physically / mentally challenged and underprivileged children, adults and providing free education and Empowering women socially & economically etc.

The Annual Report on CSR activities is annexed herewith as "Annexure - II".

#### c. Employee Stock Options:

Members' approval was obtained at the AGM held on August 9, 2007 for introduction of Employee Stock Option Plan to issue and grant upto 1,616,802 options and it was implemented by the Company. Out of the above options, 175,150 Options have been granted in 2008, of which 26,338 Options were exercised upto May, 2015 and balance options were lapsed. Please refer "Annexure -VII" forming part of this Report providing information as required to be made under the provisions of the Act.

Further, there has been no material change in the Employee Stock Option Schemes (ESOP schemes) during the year under review. The disclosure relating to ESOPs required to be made under the provisions of the Securities and Exchange Board of India (Share Based Employee Benefits and Sweat Equity) Regulations, 2021, confirming compliance, is available on the Company's website at [www.apar.com](http://www.apar.com).

- d. Particulars relating to conservation of energy, technology absorption, research & development and foreign exchange earnings and outgo in accordance with Section 134(3)(m) of the Act read with the Companies (Accounts) Rules, 2014 is annexed hereto as "Annexure – IV" which forms part of this Annual Report.

### 30. GENERAL

The Company has complied with all the applicable provisions of Secretarial Standards 1 and 2 issued by the Institute of Company Secretaries of India (ICSI).

No disclosure or reporting is required in respect of the following items as there were no transactions on these items during the year under review:

- 1) Issue of equity shares with differential rights as to dividend, voting or otherwise.

- 2) Issue of shares (including sweat equity shares) to employees of the Company under any scheme save and except ESOP referred to in this Report.
- 3) No Managing Director of the Company receives any remuneration or commission from any of its subsidiaries.
- 4) The Company has in place the Policy on Prevention of Sexual Harassment at Workplace (POSH) in line with the requirements of Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013. Internal Complaints Committee (ICC) has been set up to redress complaints regarding sexual harassment. There were no complaints registered during the Financial Year 2023-24 under review.
- 5) There has been no change in the nature of business of the Company.
- 6) There are four pending proceedings initiated by the Company under the Insolvency and Bankruptcy Code, 2016 that have no material impact on the business of the Company.
- 7) There was no instance of one-time settlement with any Bank or Financial Institution.

### 31. ACKNOWLEDGEMENT

Your Directors wish to place on record their sincere appreciation for the continuous cooperation, support and assistance provided by all stakeholders, financial institutions, banks, government bodies, technical collaborators, customers, dealers and suppliers of the Company. We thank the Governments of Sharjah, UAE, Singapore, and USA, where we have our operations.

Your Directors also wish to place on record their sincere appreciation for the contribution made by our dedicated and loyal employees at all levels. Our consistent growth was made possible by their hard work, solidarity, cooperation and support.

For and on behalf of the Board of Directors

Sd/-

**Kushal N. Desai**

Chairman & Managing Director

DIN - 00008084

Place: Mumbai

Date: May 14, 2024



## ANNEXURE - I TO THE BOARD'S REPORT

## Form No. MR-3

## SECRETARIAL AUDIT REPORT

For the financial year ended March 31, 2024

[Pursuant to section 204(1) of the Companies Act, 2013 and Rule No. 9 of the Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014]

To,  
The Members,  
**APAR Industries Limited**,  
301, Panorama Complex,  
R. C. Dutt Road,  
Vadodara-390007,  
Gujarat, India

We have conducted the secretarial audit of the compliance of applicable statutory provisions and the adherence to good corporate practices adopted by **APAR Industries Limited** having Corporate Identification Number (CIN): L91110GJ1989PLC012802 (hereinafter called "**the Company**"). Secretarial Audit was conducted in a manner that provided us a reasonable basis for evaluating the corporate conducts / statutory compliances and expressing our opinion thereon.

Based on our verification of the Company's books, papers, minute books, forms and returns filed and other records maintained by the Company and also the information provided by the Company, its officers, agents and authorized representatives during the conduct of secretarial audit, we hereby report that in our opinion, the Company has, during the audit period covering the financial year ended on March 31, 2024, complied with the statutory provisions listed hereunder and also that the Company has proper Board processes and compliance mechanism in place to the extent, in the manner and subject to the reporting made hereinafter:

We have examined the books, papers, minute books, forms and returns filed and other records maintained by the Company for the financial year ended on March 31, 2024 according to the provisions of:

- (i) The Companies Act, 2013 (the Act) and the rules made there under;
- (ii) The Securities Contracts (Regulation) Act, 1956 (SCRA) and the rules made thereunder;
- (iii) The Depositories Act, 1996 and the Regulations and Bye-laws framed thereunder;
- (iv) The Foreign Exchange Management Act, 1999 and the rules and regulations made thereunder to the extent of Foreign Direct Investment (FDI), Overseas Direct Investment (ODI) and External Commercial Borrowings (ECB);

(v) The following Regulations and Guidelines prescribed under the Securities and Exchange Board of India Act, 1992 (SEBI Act):

- a) The Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015, as amended from time to time;
- b) The Securities and Exchange Board of India (Issue of Capital and Disclosure Requirements) Regulations, 2018;
- c) The Securities and Exchange Board of India (Substantial Acquisition of Shares and Takeovers) Regulations, 2011;
- d) The Securities and Exchange Board of India (Buyback of Securities) Regulations, 2018; - **Not Applicable during the audit period**
- e) The Securities and Exchange Board of India (Share Based Employee Benefits) Regulations, 2014 and Securities and Exchange Board of India (Share Based Employee Benefits and Sweat Equity) Regulations, 2021;
- f) The Securities and Exchange Board of India (Issue and Listing of Non-Convertible Securities) Regulations, 2021; - **Not Applicable during the audit period**
- g) The Securities and Exchange Board of India (Issue and Listing of Non-Convertible and Redeemable Preference Shares) Regulations, 2013; - **Not Applicable during the audit period**
- h) The Securities and Exchange Board of India (Delisting of Equity Shares) Regulations, 2021; - **Not Applicable during the audit period**
- i) The Securities and Exchange Board of India (Prohibition of Insider Trading) Regulations, 2015;

- j) The Securities and Exchange Board of India (Registrars to an Issue and Share Transfer Agents) Regulations, 1993 regarding the Companies Act and dealing with client;
  - k) The Securities and Exchange Board of India (Depositories and Participants) Regulations, 1996 / 2018;
- (vi) Other Applicable Laws:
- (i) The Lubricating Oils and Greases (Processing, Supply & Distribution Regulation) Order, 1987.
- We have also examined compliance with the applicable clauses of the following:
- (i) Secretarial Standards under the provisions of the Companies Act, 2013 and issued by the Institute of Company Secretaries of India (ICSI).
  - (ii) The Listing Agreements entered into by the Company with National Stock Exchange of India Limited (NSEIL) and BSE Limited (BSE), respectively.

During the period under review, the Company has complied with the provisions of the Act, Rules, Regulations, Guidelines, Standards, etc. as mentioned herein above.

**We further report that** the Board of Directors of the Company is duly constituted with proper balance of Executive Directors, Non-Executive Directors and Independent Directors. The changes in the composition of the Board of Directors that took place during the period under review were carried out in compliance with the provisions of the Act.

Adequate notice is given to all directors to schedule the Board Meetings, agenda and detailed notes on agenda were sent at least seven days in advance, and a system exists for seeking and

obtaining further information and clarifications on the agenda items before the meeting and for meaningful participation at the meeting.

All decisions at Board Meetings and Committee Meetings are carried out unanimously as recorded in the minutes of the meetings of the Board of Directors or Committees of the Board, as the case may be.

**We further report that:**

There are adequate systems and processes in the Company commensurate with the size and operations of the Company to monitor and ensure compliance with Labour Laws, Environmental Laws and other applicable laws, rules, regulations and guidelines.

During the audit period the Company has undertaken following events / actions having a major bearing on the Company's affairs in pursuance of the above referred laws, acts, rules, regulations, circulars, notifications, directions, guidelines, standards, etc. referred to above:

1. On 11<sup>th</sup> November, 2023, the members approved the following agenda item through postal ballot notice:
  - (a) Considering issuance of securities through private placement and / or qualified institutional placement or any other mode, as may be decided.
2. On 09<sup>th</sup> January, 2024, the members approved the following agenda item through postal ballot notice:
  - (a) Appointment of Smt. Nirupa Kiran Bhatt (DIN: 02006089) as an Independent Director (Non-Executive) of the Company.

Note: This Report is to be read with our Letter of even date which is annexed and forms an integral part of this report.

For **H. M. Mehta & Associates**  
Company Secretaries

**Date:** 14.05.2024  
**Place:** Vadodara

Sd/-  
**Hemang Mehta**  
Proprietor  
FCS No.: 4965  
C. P. No.: 2554  
Peer Review No.: 1184/2021  
UDIN: F004965F000365919

To,  
The Members,  
**APAR Industries Limited,**  
301, Panorama Complex,  
R. C. Dutt Road,  
Vadodara-390007,  
Gujarat, India.

Our Secretarial Audit Report of even date is to be read along with this letter.

1. Maintenance of secretarial record is the responsibility of the management of the Company. Our responsibility is to express an opinion on these secretarial records based on our audit.
2. We have followed the audit practices and processes as were appropriate to obtain reasonable assurance about the correctness of the contents of the secretarial records. The verification was done on the random test basis to ensure that correct facts are reflected in secretarial records. We believe that the processes and practices, we followed provide a reasonable basis for our opinion.
3. We have not verified the correctness and appropriateness of financial records and Books of Accounts of the Company since the same have been subject to review by the Statutory Auditors and other designated professionals.
4. Wherever required, we have obtained the Management representation about the compliance of laws, rules and regulations and happening of events etc.
5. The compliance of the provisions of Corporate and other applicable laws, rules, regulations, standards is the responsibility of management. Our examination was limited to the verification of procedures on random test basis.
6. The Secretarial Audit report is neither an assurance as to the future viability of the company nor of the efficiency or effectiveness with which the management has conducted the affairs of the Company.

For **H. M. Mehta & Associates**  
Company Secretaries

**Date:** 14.05.2024

**Place:** Vadodara

Sd/-  
**Hemang Mehta**  
Proprietor  
FCS No.: 4965  
C. P. No.: 2554  
Peer Review No.: 1184/2021  
UDIN: F004965F000365919

## ANNEXURE - II TO THE BOARD'S REPORT

# Annual Report on Corporate Social Responsibility (CSR) Activities 2023-24

### 1. BRIEF OUTLINE ON THE CSR POLICY OF THE COMPANY:

The Company has framed the CSR Policy in terms of the provisions of Section 135(1) of the Companies Act, 2013 ("The Act").

The CSR activities of the Company mainly aims at Principle of Trusteeship, by serving the community through programmes and projects having focus on -

1. Healthcare and upliftment of weaker sections of society
2. Promoting Education and health care including preventive health care (Medical)
3. Environmental Sustainability and Rural Development
4. Welfare of underprivileged and destitute children, especially girl children
5. Empowerment of physically / mentally challenged and underprivileged children, and adults and providing free education
6. Empowering women socially & economically
7. Protection of national heritage, for the socio-economic development of a country
8. Skill development and training of students belonging to backward / Tribal / SC / ST communities.
9. Animal Welfare activity

The CSR activities of the Company are aligned with the activities specified in Schedule VII of the Act.

### 2. COMPOSITION OF CSR COMMITTEE:

Sl. No.	Name of Director	Designation / Nature of Directorship	Number of meetings of CSR Committee held during the year	Number of meetings of CSR Committee attended during the year
1.	Mr. Kushal N. Desai	Chairman & Managing Director and Chief Executive Officer (CEO)	4	4
2.	Mr. Chaitanya N. Desai	Managing Director	4	4
3.	Smt. Nina Kapasi	Independent Director (Non-Executive)	4	4

### 3. Provide the web-link where Composition of CSR committee, CSR Policy and CSR projects approved by the board are disclosed on the website of the company.

For CSR Committee : [https://apar.com/wp-content/uploads/2022/01/Composition\\_of\\_Board\\_and\\_Committees\\_of\\_APAR.PDF](https://apar.com/wp-content/uploads/2022/01/Composition_of_Board_and_Committees_of_APAR.PDF)

For CSR Policy: [https://apar.com/wp-content/uploads/2022/09/CSR-Policy\\_R.pdf](https://apar.com/wp-content/uploads/2022/09/CSR-Policy_R.pdf)

For CSR Projects: [https://apar.com/wp-content/uploads/2023/05/CSR\\_Annual\\_Action\\_Plan\\_2023\\_24.pdf](https://apar.com/wp-content/uploads/2023/05/CSR_Annual_Action_Plan_2023_24.pdf)

### 4. Provide the executive summary along with web-link(s) of Impact Assessment of CSR Projects carried out in pursuance of sub-rule (3) of rule 8, if applicable.

- Not Applicable - as the Company does not have an average CSR obligation of ₹10 crore or more in the three immediately preceding financial years.

### 5. (a) Average net profit of the company as per sub-section (5) of section 135.

₹4,363,948,767/-

### (b) Two percent of average net profit of the company as per sub-section (5) of section 135.

₹87,278,975/-

### (c) Surplus arising out of the CSR projects or programmes or activities of the previous financial years.

₹ Nil

**(d) Amount required to be set off for the financial year, if any.**

₹ Nil.

**(e) Total CSR obligation for the financial year [(b)+(c)-(d)].**

₹87,278,975/-

**6. (a) Amount spent on CSR Projects (both Ongoing Project and other than Ongoing Project).**

₹87,436,235/-

**(b) Amount spent in Administrative Overheads.**

- Nil / Not Applicable

**(c) Amount spent on Impact Assessment, if applicable.**

- Not Applicable

**(d) Total amount spent for the Financial Year [(a)+(b)+(c)].**

₹87,436,235/-

**(e) CSR amount spent or unspent for the Financial Year:**

Total Amount Spent for the Financial Year (in ₹)	Amount Unspent (in ₹)				
	Total Amount transferred to Unspent CSR Account as per sub-section (6) of section 135.		Amount transferred to any fund specified under Schedule VII as per second proviso to sub-section (5) of section 135.		
	Amount	Date of transfer	Name of the Fund	Amount	Date of transfer
86,874,715/-	561,520	April 20, 2024	--N. A. --	Nil	--N. A. --

**(f) Excess amount for set-off, if any.**

Sr. No.	Particular	Amount (in ₹)
(1)	(2)	(3)
	(i) Two percent of average net profit of the Company as per sub-section (5) of section 135	87,278,975
	(ii) Total amount spent for the financial Year	86,874,715*
	(iii) Excess amount spent for the financial year [(ii)-(i)]	Nil
	(iv) Surplus arising out of the CSR projects or programmes or activities of the previous financial years, if any	Nil
	(v) Amount available for set-off in succeeding financial years [(iii) – (iv)]	Nil

\* Note : ₹0.0561 Cr. transferred to Unspent CSR Account.

**7. Details of Unspent Corporate Social Responsibility amount for the preceding three Financial Years:**

1	2	3	4	5	6		7	8
Sr. No.	Preceding Financial Year (s)	Amount transferred to Unspent CSR Account under sub-section (6) of section 135 (in ₹)	Balance Amount in Unspent CSR Account under sub-section (6) of section 135 (in ₹)	Amount spent in the Financial Year (in ₹)	Amount transferred to a Fund as specified under Schedule VII as per second proviso to sub-section (5) of section 135, if any		Amount remaining to be spent in succeeding Financial Years (in ₹)	Deficiency, if any
					Amount (in ₹)	Date of transfer		
1	FY-1							
2	FY-2							
3	FY-3							

— Not Applicable —



**8. Whether any capital assets have been created or acquired through Corporate Social Responsibility amount spent in the Financial Year:**

Yes

No: Not Applicable

If Yes, enter the number of Capital assets created/ acquired

Furnish the details relating to such asset(s) so created or acquired through Corporate Social Responsibility amount spent in the Financial Year:

Sl. No.	Short particular of the property or asset (s) [including complete address and location of the property]	Pin code of the property or asset(s)	Date of creation	Amount of CSR amount spent	Details of entity/ Authority/ beneficiary of the registered owner		
(1)	(2)	(3)	(4)	(5)	(6)		
					CSR Registration Number, if applicable	Name	Registered address
Not Applicable							

(All the fields should be captured as appearing in the revenue record, flat no, house no, Municipal Office/Municipal Corporation/ Gram panchayat are to be specified and also the area of the immovable property as well as boundaries)

**9. Specify the reason(s), if the company has failed to spend two per cent of the average net profit as per subsection (5) of section 135: - Not Applicable.**

Sd/-

**(Kushal N. Desai)**

Managing Director & CEO  
Chairman – CSR Committee  
DIN: 00008084

**Mumbai, May 14, 2024**

Sd/-

**(Chaitanya N. Desai)**

Managing Director  
DIN: 00008091

## Annexure III to the Board's Report

## Statement of Disclosure of Remuneration

## DISCLOSURES AS PER RULE 5 (1) OF THE COMPANIES (APPOINTMENT AND REMUNERATION OF MANAGERIAL PERSONNEL) RULES, 2014

1. The percentage increase in remuneration of each Director, Chief Financial Officer and Company Secretary during the Financial Year 2023-24, the ratio of the remuneration of each Director to the median remuneration of the employees of the Company for the Financial Year 2023-24.

Sr. No.	Name of Director / KMP and Designation	% increase/decrease in Remuneration in the Financial Year 2023-24	Ratio of remuneration of each Director / to median remuneration of employees
1.	Mr. Kushal N. Desai, Chairman & Managing Director	33%	189.42:1
2.	Mr. Chaitanya N. Desai, Managing Director	32%	189.71:1
3.	Mr. Rajesh Sehgal, Independent Director	102%	1.15:1
4.	Smt. Nina Kapasi, Independent Director	84%	1.04:1
5.	Mr. Rishabh K. Desai, Non-Executive – Non Independent Director	53%	0.48:1
6.	Mr. Kaushal J. Sampat, Independent Director	140%	0.99:1
7.	Smt. Nirupa Bhatt, Independent Director w.e.f. 26.10.2023	NA	0.24:1
8.	Mr. Ramesh S. Iyer, Chief Financial Officer	12.75%	
9.	Mr. Sanjaya R. Kunder, Company Secretary	9.87%	

**Notes:**

- Independent Directors and Non-Executive – Non-Independent Directors are paid only sitting fees.
- The percentage increase in the median remuneration of employees for the Financial Year 2023-24 was around 10.61%
- There were 2045 permanent employees (including permanent workers) on the rolls of Company as on March 31, 2024.
- Average percentile increase already made in the salaries of employees other than the managerial personnel in the last Financial Year i.e. 2023-24 was 11.65% whereas the percentile increase in the managerial remuneration for the same Financial Year was 32% due to increase in commission which is on increased profit. The profit before tax for Financial Year 2023-24 increased by 36%.
- Remuneration paid is as per the Remuneration Policy for Directors, Key Managerial Personnel and other Employees.

## Disclosures as Per Rule 5 (2) of the Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014

Information pursuant to Section 197 of the Companies Act, 2013, read with Rule 5 of The Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014 and forming part of the Board's Report for the year ended March 31, 2024.

Names	Age (Years)	Designation / Nature of Duty	Qualifications	Experience (Years)	Remuneration (₹)	Date of Commencement of Employment	Last Employment and Designation
Mr. Kushal N. Desai	57	Chairman & Managing Director	B.Sc. in Engg., (Ele. Engg.) U.S.A., B.Sc. in Eco. (Wharton) U.S.A.	35	137,407,121	24.03.1999	GE Lighting (India) Ltd. - President
Mr. Chaitanya N. Desai	52	Managing Director	B.Sc. in Engg., (Chem. Engg.) U.S.A., B.Sc. in Eco. (Wharton) U.S.A.	30	137,610,801	29.05.1993	-

### Notes:

- The Remuneration includes salary, allowances, commission paid to Directors, reimbursement of leave travel and medical expenses / benefits, Company's contribution to provident fund, leave encashment and other perquisites in respect of motor car, accommodation and telephone etc.
- Above directors are related to each other. None of the employees of the Company is related to any of the Directors except Ms. Gaurangi K. Desai, AGM – Branding & Digital Initiatives, daughter of Mr. Kushal N. Desai, sister of Mr. Rishabh K. Desai and niece of Mr. Chaitanya N. Desai.
- All appointments are contractual and terminable by notice on either side.
- The Company has granted cash settled share-based arrangement (Share Appreciation Right) (Refer Note no. 43 of Standalone Financial Statement).
- Information regarding remuneration and particulars of other employees of the Company will be available for inspection by the members at the Registered Office of the Company during business hours on working days upto the date of the ensuing Annual General Meeting of the Company. If any member is interested in obtaining a copy thereof, such member may write to the Company Secretary, where upon a copy would be sent.

For and on behalf of the Board

Place: Mumbai  
Date: May 14, 2024

Sd/-  
**Kushal N. Desai**  
Chairman & Managing Director  
DIN -00008084

## Annexure IV to the Director's Report

# CONSERVATION OF ENERGY, TECHNOLOGY ABSORPTION AND FOREIGN EXCHANGE EARNINGS AND OUTGO

Information as per Section 134(3) (m) of the Companies Act, 2013 read with Rule 8(3) of The Companies (Accounts) Rules, 2014 and forming part of the Directors' Report for the year ended March 31, 2024

## I. CONSERVATION OF ENERGY:

### 1) Energy Conservation measures taken and continuing on regular basis:

#### Conductor Division

- Replacement of old 1500 KVA transformers with new OLTC 3000 KVA transformers.
- Confirming 1 Convert Main motor DC to AC Conversion.
- Cu Extrusion 350 - Conversion from DC to AC.
- Confirming 4 Main motor Converted from DC to AC Conversion.
- Cu Extrusion (JANS) 350 - Converted from DC to AC.
- CTC Enameling machine - Temperature control through Thyristor, PLC and HMI for 3 Lines.
- CU Bus Bar Draw Bench – Hydraulic unit 75 KW Main motor run through VFD control.
- CCR Melting Furnace - Fan 37 KW motor runs through VFD.
- Cooling tower - 7.5 HP motor runs through VFD (20 Fan motor).
- Enameling Machine 6 Nos 3.75 KW Exhaust fan runs through VFD.
- 100 KW Solar Plant Installation for Green Energy generation.
- Replacement of inefficient motors with IE#3 motors.
- Replacement of conventional ceiling fans with BLDC fan-15 Nos.
- Replacement of cooling tower fan blades with FRP blades.
- 2 HVLS fan installed in Plant D
- Arrange with C/O switch to run CCR on both CTC and Conductor power.
- Bore well pump 7.5 HP runs through Solar.
- Replaced Diesel Forklift with Electrical Forklift.
- Replacement of inefficient cold well pump with new energy efficient pump.
- Replacement of existing inefficient air compressor in DF - 1 with a new VFD enabled PMSM screw air compressor.
- Replacement of inefficient hot well submersible pump with new energy efficient submersible pump and switch off centrifugal hot well pump.
- Replace aluminum blades with FRP blades, provide direct driven BLDC motors and thermostatic controller for CT fans in oil cooling tower.
- Replacement of all the three operating reciprocating air compressors in conductor section with a new VFD enabled PMSM screw air compressor.
- Replacement of inefficient oil cooling pump with new energy efficient pump.
- Replacement of inefficient water-cooling pump with new energy efficient pump.
- Replace aluminum blades with FRP blades, provide direct driven BLDC motors and thermostatic controller for CT fans in CCR cooling tower.
- Replacement of diesel operated forklift trucks by battery operated forklift trucks.
- Installation of 25 KW rooftop solar PV system.
- Minimize the power consumption (Furnace Ageing furnace AF 07 and AF 08)
- Minimize the fuel consumption for loading finished goods material.
- Reduce 5 MT diesel consumption of forklift.
- Minimize the withdrawal load of ground water.
- Reduce GHG emission by reducing movement of vehicles used for transportation of shift employees.

- Installation of composite pipe in compressed air network
- Centralized compressed air system
- Replacement of V belt with cogged belts for reduce energy consumption
- Fitch fuel catalyst for FO in CCR furnaces
- Installation of air preheater in CCR furnace
- Automation of installed VFD in CCR section air compressor
- All Air Conditioners are energy saving through Temperature Controller cum motion sensor.
- Installation of 1200KW rooftop solar PV system

#### **Cable Division**

- The company's Cable Division has generated 25,11,115 units of electricity during the financial year in-house energy consumption through Roof Top Solar & Hybrid model. This has reduced 2060 metric tons of CO2 emission in the atmosphere and was equivalent to planting 93596 mature trees.
- Installation of Electrical energy efficient heater on Sheathing Line help us to save 19,614 KWH Units.
- The company has saved 52,799 KWH (Units) by replacing MH lights and tube lights by LED lights and
- Energy saving of 6,11,235 KWH Units achieved through modification of Air compressor pipe, installation of VFD & controlling leakage through proper monitoring.
- Energy saving of 34,835 KWH (Units) registered through installation of VFD at 45 Ltr Intermix.
- During the year 4,68,790 units were saved in the form of PF rebate by maintaining good power factor. Continuous efforts made to maintain good power factor throughout the year at all locations.
- Effective utilization of night rebate, hence major focus is given to run the machine at full efficiency in night instead of day which help company to save 82 Lacs.

#### **Oil Division:**

- From existing 1582 KWp Roof top solar plant 17,18,000 units generated, resulting in reduction of carbon emission by 1219 Ton of CO2e/year and power fed into the internal grid. In Rabale plant additional 190 KWp solar system installed so solar capacity enhanced to 1240 KWp, this will generate 2,25,000 Lakh unit/year and carbon emission reduction by 160tCO2e/y.
- Rain water is collected through rain water harvesting and used in the process and for charging the ground water through recharge pit. This helped in improving the ground water level. Also using ETP treated cleaned water for wash rooms/toilets & STP water for gardening. Recovered 77% condensate and used this in Boiler feed system. Overall saved 6526 KL of water in a year.
- Installed Energy recovery system to recover the wasted energy through radiation losses in the air compression process. By recovery of this energy , feed water temperature of boiler will raise ,which will save PNG and saving will be Rs 5.59 Lakh/yr and GHG reduction will be by 19 tCO2e/yr.
- Energy audit is conducted in this year, energy improvement suggested points implementation work is in progress.

#### **2) Additional Investment proposals, if any, being implemented for reduction of consumption of energy:**

- Power Saving in CTC Enameling machine, Temperature control through current control SSR.
- All Pumps running through in MPI WD.
- Operating the balling machine through VFD.
- Upcast-4 Chimney Blower Motor to be run through VFD.
- Installation of Harmonics Filter in AF-7.
- CNF-1 new 150 KVA Online UPS for Tubing Production.
- TWD-1 - captions motor DC to AC Conversion.
- CU Extrusion 400 (Luck) Conversion from DC to AC.
- Confirming -2 - Main motor DC to AC Conversion.
- Confirming and Extrusion Hydraulic unit motors DOL to AC Drive conversion.
- GPS tracking of Forklifts for Speed & Location.
- Bore well pump 7.5 HP Run through Solar.
- Confirming 4 Caption & Payoff motor DC to AC Conversion.
- ACS BB-1 retrofitting of Siemens drive with PLC programing.



- Replacement of Conductor, CCR & Copper plant LED light from 50 watt to 100 watt.
- Replacement of Motors with IE3 energy efficient motors.
- Restructuring of Cable Bridge Gate No. 2 to Gate No. 3.
- Up cast -Transparent Sheet to be installed to prevent usage of Lights during Day time. (Direct Sun light)
- Replace Diesel forklifts with Electrical forklifts.
- Automation of installed VFD in all RBD process oil pumps at conductor section.
- Automation of installed VFD in all cooling tower pumps conductor section.
- Replacement of inefficient pneumatic operated grease applicator by hogger type VFD operated to save air & energy.
- Replacement of existing inefficient reciprocating air compressor with a new VFD enabled PMSM screw air compressor.
- Replacement of diesel operated forklift trucks by battery operated forklift trucks 3 ton & 5 Ton capacity.
- Installation of Automatic Condensate Drain all receiver Tanks of Compressors.
- Installation IFC at CCR & Conductor Pneumatic Circuit.
- Modification of RBD1 to produce AL59 double wire.
- Modification of RBD2 & 5 to produce above 5mm ACCC product.
- Installation of 2 MT Monorail for Drum shifting from Drum Yard to Plant.
- Relocation of Solar Plates from North Direction to South Direction.
- Installation of timers to prevent idle running of pumps.
- Replacement of motors with efficiency less than 90% with efficiency more than 95% (IE3 or above).
- Replacement of V belt with cogged belt.
- Replacement of poor efficient AC with efficient AC - 5 nos.
- Replace diesel forklift with electric forklift.
- Installation of additional 0.5 MW roof top solar plant at new production shed & FG shed.
- Replacement of hot well submersible pump 30 hp by Monoblock pump 20 hp IE 3.
- Replacement of bull-block reciprocating compressor by screw compressor.
- VFD to be installed in MF-01, 02 & 03 for 4kW ignition Blower.
- 5MT EOT crane to be installed in FG Wire Rod storage area.
- Install motion sensor in all office corridors, offices, and toilets.
- Inspection of heat generation for steam & heat water through renewal energy is under pipe-line.
- Additional 244 KWp roof top solar system installation is planned in FY 2024-25, this will generate additional 2,92,000 unit/yr and will reduce GHG emission by 209 tCO<sub>2</sub>e/yr.
- Installation of boiler automation system in boiler, PNG saving will be 12059 SCM /year and carbon emission reduction by 23 tCO<sub>2</sub>e/yr.
- Installation of air preheater in boiler, PNG saving will be 15871 SCM /year and carbon emission reduction by 29 tCO<sub>2</sub>e/yr.
- Installation of flash steam recovery system in Jelly & WO section, PNG saving will be 21033 SCM /year and carbon emission reduction by 39 tCO<sub>2</sub>e/yr.
- Replacement of existing ACs with inverter type superefficient AC's with R-32 refrigerant gas, power saving will be 74592 kwh/year and carbon emission reduction by 64 tCO<sub>2</sub>e/yr.
- Replacement of existing Air compressor with PM based screw compressor, power saving will be 23615 kwh/year and carbon emission reduction by 16.9 tCO<sub>2</sub>e/yr.
- Installation of vortex condenser in AHUs and Ductable ACs, power saving will be 33888 kwh/year and carbon emission reduction by 24 tCO<sub>2</sub>e/yr.
- Replacement of inefficient pump with energy efficient pump, power saving will be 38241 kwh/year and carbon emission reduction by 27 tCO<sub>2</sub>e/yr.
- Replacement of old motor with energy efficient motors, power saving will be 10367 kwh/year and carbon emission reduction by 7 tCO<sub>2</sub>e/yr.
- Replacement of conventional ceiling fans with BLDC ceiling fans , power saving will be 13416 kwh/year and carbon emission reduction by 10 tCO<sub>2</sub>e/yr.

### 3. Impact of measures at (1) and (2) above:

- Reduction in load loss of transformer 0.25% of actual energy consumption and electrical components life increased due to operating in rated power.
- Plant automation & modification for energy saving, automation, process control, quality improvement.
- VFD system for energy saving in close loop synchronization.
- Energy saving and productivity improvement.
- Energy saving by installation of IE3 motor with better efficiency improved motors life.
- Generation of energy through natural resources & saving Grid electrical consumption.
- Automation, control & analysis, and identification of ghost load/energy consumption help to reduce energy consumption.
- Scrap reduction due to power failure in CNF-1 tubing production.
- Lux level improvement in Plant by replacing LED lights.
- CCR can run on both CTC and Conductor power during power failure and saved DG - diesel cost.
- By using transparent sheet; day light power consumption reduced.
- Energy saving of cooling tower fan control through VFD and PID.
- Energy saving on 7.5 HP bore well pump run on solar power during day light.
- Reduction Forklift Diesel consumption and reduction in Carbon emission.
- Optimizing the exhaust fan frequency of Furnace – 1 which saved 23,896 KWH p.a.
- Power Cost reduction in PA rod drawing which saved 87,500 KWH p.a.
- Reduction in paper consumption resulting in reduced carbon emissions by 2.5 (tCO<sub>2</sub>e).
- Automation of installed VFD in CCR section air compressor saved 0.50 Lakhs p.a.
- Insulating the gap between the charging door and opening the face of the furnace saves 3.60 Lakhs p.a.
- Reduction in HTGS scrap and saving in power by 87,500 KWH p.a.
- Minimize the power consumption (Ageing furnace AF 07 and AF 08) saves 9.10 Lakhs p.a.
- Minimize the fuel consumption for loading of finished goods material saves 32 Lakhs p.a.
- Reduced diesel consumption of 5 T of forklift saves 19 Lakhs p.a.
- Minimized the withdrawal load of ground water saves 4.3 Lakhs p.a.
- Reduced GHG emission by reducing movement of vehicles used for transportation of shift employees saves 11.10 Lakhs p.a.
- About 19 Lakh plus Units of electricity are being generated through Renewable sources per year. This results in reduction of about 1300 tCO<sub>2</sub>e/year of carbon emissions.
- Further conservation measures taken will save electricity of about 5.5 Lakh units/year and result in reduction of carbon emissions of about 19 tCO<sub>2</sub>e/year.
- Through Rain water collection, water treatment and water recycling we have saved 6500 KL plus water per year.
- Further planned Solar installation will help us generate additional 2,92,000 Units/year of electricity through Renewable sources. This will save about 209 tCO<sub>2</sub>e/year.
- Many energy conservation measures are planned in FY 24-25. These measures will result in effective saving of Heat energy to the tune of 48963 SCM of PNG/year resulting in Carbon emission reduction of 91 tCO<sub>2</sub>e/year.

## TECHNOLOGY ABSORPTION AND RESEARCH & DEVELOPMENT:

### 1. RESEARCH AND DEVELOPMENT (R&D):

#### (i) Specific areas in which R & D is carried out by the Company:

- Development of 4000/5000 series Alloys for various specialized application.
- Development of Extra High Conductivity alloys for superior grade conductor.
- Development of Mega-strength Galvanized core wire for Gap type and ACSS conductor for superior design and competitiveness.
- Analysis and development of Grease for Bare conductor meeting international standards and reliable performance at field.
- Special Type test and life cycle assessment facilities (High temperature-tension cycle/ High temperature endurance and creep/ Aeolian vibration and fatigue behavior) test validation and international accreditation.
- Development of Emissivity measurement of surface treated conductor.

- Development of Rubber Hoses, Corrugated Tube, Auto cable harness, Battery cables, Earthing Kits (for Railways) and HT Aluminum Corrugated Cable.
- Development of defense, railway and ship wiring cables through electron beam technology.
- K class Fire Safety Biodegradable Transformer oil "Poweroil NE Premium" with high oxidative stability and extremely low stray gassing tendency have been launched for distribution transformer applications to improve the carbon foot print.
- Studies for higher rating transformers will be taken up with PGCIL and studies on traction transformers with OEMs like Siemens/CGL
- Inspection for chemical structure completed for horticultural spray oils and application for registration at CIBRC is under review
- Computational Fluid Dynamics(CFD) studies in progress for Transformer thermal and flow behavior in solar and traction transformers.
- Feasibility studies of re-refining of base oils and hydrogenation studies of used lubricants are in progress
- High temperature chain oils launched and the application range will be expanded to other segments and Biodegradable fluids in progress.
- Test facility for biodegradability of the oil products by OECD 301B & 301D methods established and NABL certification is in progress
- Metal working fluids for aluminum segment applications launched and field trials in progress
- Multi metal base metal working fluids are developed and field trails in progress K class Fire Safety
- Addition of latest technology sophisticated and automatic analysis equipment, Thermal Camera, Digital Microscope, additional UTM and Splicing machine, new advance Corrosion test set-up to enhance the R&D capabilities.
- Equipment upgradation and automation in Creep, UTS and Stress Strain test setup.
- R&D laboratory facility creation for chemicals, paint, coating to support various research activities.
- Project for developing advanced material, Zn-5Al-MM mischmetal alloy coated steel wires for high temperature operation.
- R&D project execution in association/ support of DD University on research and product development.
- Development of IoT based high voltage power line monitoring sensors for remote monitoring of phase conductor.
- Creation of outdoor test setup for ampacity and temperature rise equipped with multi-channel data logger & controls for specialized testing.
- Project undertaken with IISC, Bangalore for Wind Tunnel Test to evaluate the drag co-efficient on conductors with different wire profiles like Round, Trapezoidal shaped and Z-Shaped.
- Trials of a coating line involving Coated conductor testing and simulations, evaluation and validation.
- Coated conductor manufacturing set-up modification in Fluidic Line and replacement of Accelerated curing Unit to enhance the performance and efficiency of the coating and curing machinery.
- Initiated a pilot project for TATA Power to successfully demonstrate the proof of concept of coated conductor technology.
- Design, manufacturing and testing of Optical Phase Conductor Cables (OPPC) for 33KV and 66 KV transmission lines.
- Project undertaken for Industry 4.0 using the services of Falcon Labs to improve overall equipment effectiveness, reducing downtime, improving machine performance, and optimizing production quality.
- Further development of defence, railway, wind, auto cable, ship wiring & export cables.
- Development of Electrochemical cable, Shielded water blocked cable, Inter-connect cable. Fires survival cable, Data bus cable
- Development of Ethernet Lan cable, EV-charging cable, Special MVCC Cable.
- Major focus is given on development of cable by using indigenous product instead of imported.

**(ii) Benefits derived as a result of R&D:**

- Business development and market development of 5000 alloy wires.
- Market competitiveness and higher value added products (HTLS and High conductivity and Low Loss conductor, Low CO<sub>2</sub> emission).
- Business volume expansion/ market expansion in MVCC and sub transmission / distribution conductors.
- Improvement of process/ quality and productivity.
- Improvement in environment and safety, lowering greenhouse gas emission (CO<sub>2</sub>).
- In-house test facility and R&D is helping innovation, development activities, simulation and assessment at lower cost and without dependency on foreign laboratory and experts.

- In-house type test facility as per the Global standards satisfying overseas customers for additional business expansion and customer delight.
- Enhancement of competency, skill and motivating towards make in India.
- Cost Reduction of various compounds (Specifically in Solar Insulation compound)
- High performance synthetic ester based transformer oil launched with improved carbon foot print and biodegradability. Product approvals in external laboratories and OEMs in progress.
- Single Phase Immersion coolant for Li ion Battery cooling applications launched with improved performance
- Received Best Paper Award at TRAFOTEC 2023 on new generation Natural Ester based Transformer oil
- White oils for high performance thermoplastic applications meeting EU standards commercialized and collaborative projects initiated with polymer division of the company.
- Field trails at PGCIL Aizwal site are in progress for POWEROIL NE PREMIUM Transformer oil
- ESG range of products for metal working/refrigeration are in progress.
- In-house test facility and R&D is helping innovation, development activities, simulation, and assessment at lower cost and without dependency on foreign laboratory and experts, company's rapport towards global standards and customers' delight.
- Increased capacity for additional testing and experimental load.
- Enhancement of competency, skill and innovation, market competitiveness towards solutions and Make in India.
- Development of Environmental Product Declarations (EPDs) for Grade 8176, Grade 1350 & Grade 6201 Wire rods and AL59 Conductor family in accordance with EN 15804+A2:2019 and ISO 14025 standards approved and published EPD-HUB, Finland.
- Successfully manufactured and obtained type approval of "ACCC-ULS Warwick and GZTACSR Matthew" conductors by National Grid, UK.
- Design, manufacturing, type testing and approval of four designs of OPGW cables and six designs of HTLS conductors.
- Hybrid Reel design and simulation through software for sustainability for export customers and improvement implementation.
- Development of Cool Conductor Technology for loss reduction, future competitiveness & higher life cycle.
- Successful development of Zn-5Al-MM mischmetal alloy coated steel wires capable of sustaining high temperature conductor operation upto 250°C ensuring quality and customization.
- Representation and Standardization initiative for CTC Conductor with BIS ETD 33 committee.

### **(iii) Future plan of action:**

- To continue to carry on the R&D activity and try to absorb it in above mentioned areas to reduce cost especially the E-beam cables.
- To further develop finer particle PTFE powder and explore PTFE recycling business in the paint, printing ink, molding applications etc.
- Field Trials/condition monitoring of Natural Ester based Transformer oils for distribution transformers and solar power generation applications in progress along with CFD studies on offering application based products.
- new projects initiated rerefining of used lubricants to meet the EPR regulation
- Hydrogenation of base oils to improve the quality
- Representing company in CIGRE/IEC TC 10/BIS/IEEE working groups
- USP Certification for the petroleum jelly product lines will be taken up for completion.
- NPOP (organic product application) and NSF-Vegan certification for Spray oils and White oils
- Carbon foot and Life Cycle analysis of products under ESG.
- Field trials for EV fluids will be taken up.
- Development of absorptivity measurement techniques and equipment for surface treated and coated conductors and conduct comprehensive simulations to optimize parameters and validate results.
- Commercial production of coated conductor and business development to expand market reach and drive revenue growth.
- Type testing and pilot transmission line simulation to demonstrate the comparative benefits of AERO-Z conductors for their adoption in the industry.
- Development of special type fittings, hardware, junction box and test facilities for OPPC for Power Distribution & Data Transmission & Line monitoring as turnkey solutions.
- Development of Sensors, DMS and data acquisition system with AI application for Overhead Line data management for safety, reliability and security.

- Design towers using PLS Cadd Tower, providing complete packages for new powerline projects, and ensuring optimal performance and efficiency.
- Deployment of robotic inspection, cleaning and coating technology on Bare overhead conductors for life enhancement.
- Additional resources and cutting-edge technology for Transformer, Switchgear, and Substation-related solutions, enhancing efficiency, reliability and grid stability.
- Establish in-house facility for PLS Cadd cable data file generation for conductors and OPGW cables, reducing dependency on foreign laboratories and ensuring quicker turnaround times.
- R&D, Evaluation, Application of AI, ANN, Simulations, Sensors for LCA & Business Development with Power Developers & Utilities.
- Design and development of Steel Frame wooden hybrid drums for logistics and cost optimization.
- Extensive testing of high efficiency coated conductor for reduced Co2e at internationally recognized laboratory at Canada.
- To continue to carry on the R&D activity and try to absorb it in above mentioned areas to reduce cost mainly by import substitute.

**(iv) Expenditure on R&D:**

- a) Capital = Rs. 3.50 Crores
- b) Revenue = Rs. 15.97 Crores
- c) Total = Rs. 19.47 Crores.
- d) Total R&D Expenditure as a percentage of Total Standalone Turnover = 0.13%

**2. TECHNOLOGY ABSORPTION, ADAPTATION, AND INNOVATION:**

Technology imported (in last five years)	Year of Import	Has technology been fully absorbed
License to use proprietary knowhow, formulae, trademarks and trade names relating to manufacture & sale of lubricating Oils, greases and other special Lubricants for industrial, automotive and marine applications	2007 Renewed in 2023	Yes
License to manufacture high performance conductor (ACCC)	2013 Renewed in 2023	Yes

**II. Foreign Exchange Earning and outgo**

**1. Activities related to exports:**

Efforts are continuing to increase export of all products

**2. Total Foreign Exchange used and Earned**

Foreign Exchange Used	FY2024	FY2023
(a) Raw Material (CIF)	6017.53	5,313.06
(b) Stores & Spares	11.63	6.73
(c) Capital Goods	32.00	54.70
(d) Others	550.27	604.35
<b>Total</b>	<b>6,611.44</b>	<b>5,978.84</b>

Foreign Exchange Used	FY2024	FY2023
(a) Physical Exports (FOB)	7293.26	5,248.35
(b) Deemed Exports (eligible for export incentives)	31.41	83.25
(c) Others	442.94	509.82
<b>Total</b>	<b>7,767.61</b>	<b>5,841.42</b>