

ESG Report

FY 2022-23





Dear APAR Stakeholders,

I am extremely happy to present the 3rd edition of our ESG report. The progress made in the realm of Sustainability has been incredibly rewarding thus far.

Sustainability is not just a buzzword; it is a responsibility that we all share as custodians of this planet. In a world marked by rapid industrialization and resource depletion, our role in ensuring a harmonious coexistence between human progress and the health of our environment cannot be underestimated.

Our journey in the realm of sustainability has been both enlightening and transformative. We have embraced innovative technologies and strategies that minimize our ecological footprint while maximizing our positive impact. Through diligent efforts, we have incorporated sustainable practices into our operations, reducing waste, conserving energy, and responsibly sourcing materials. Our commitment to sustainability isn't merely a strategic move – it's a moral imperative that drives us forward.

Recognizing the significance of emissions from our value chain partners, we have taken a proactive step by commencing the computation of scope-3 GHG emissions from the fiscal year 2022-23 onwards. Moving ahead, our focus will be on greater collaboration with our value chain partners to play our part in reducing emissions across the entire chain.

But let's not forget that sustainability extends beyond environmental considerations. It encompasses social and economic dimensions as well. We are dedicated to fostering inclusive growth within our communities, promoting fair labour practices, and contributing to the overall well-being of society.

As an organization, we are not only committed to the principles of sustainability but also to inspiring others to join this noble cause.

As we look back on our accomplishments, we acknowledge that there is still much ground to cover. The challenges ahead are significant, but they are also opportunities for innovation and collaboration.

We are making gradual yet steadfast progress, drawing lessons from our previous actions and consistently striving for improvement.

I urge each and every one of us to embrace sustainability not as a burden, but as a shared responsibility. Let us work together towards a future where prosperity and harmony coexist, where progress is achieved without leaving scars on our planet.

Thank you.

Kushal Desai, Chairman & Managing Director



Dear APAR Stakeholders,

We have traversed a long way in the last 3 years as far as sustainability is concerned. I would like to highlight some areas where we made progress during FY 2022-23.

We calculated GHG scope-3 emission for the first time in FY 2022-23. Supply chain is another area where we are increasing our focus. We are engaging with our suppliers to take them through our learnings and work with them on the various ESG initiatives.

We had successfully implemented our first wind-solar hybrid power (3.30 MW wind-turbine and 2.80 MWp of solar energy) project in partnership with a leading supplier on 18th June 2023. It is expected to generate approx. 15 million units annually (over 10% of our annual electricity consumption), and help in GHG emission reduction of over 10,000 tCO₂e per year. We are also working to commission a second wind-solar hybrid project during FY 2023-24.

We engaged with leading organizations for energy audits at our Conductor and Cable plants. As we write this section, 72 projects have been identified by these energy audits, with a potential to save approx. 8,500 tCO₂e GHG emissions per year. We will focus to accelerate implementation of these identified projects.

Needless to state that water is precious resource, and we should work for water security. We are happy to state that plan is under implementation to make our Khatalwada cable plant water neutral by FY 2024-25.

Sustainability related compliance is increasing not only in India but the entire world. We are very much prepared for this. We submitted our first BRSR (Business Responsibility and Sustainability Report) during FY 2022-23.

We believe that a sustainable future extends beyond our organization and into the communities in which we operate. We have actively engaged with local communities by supporting educational programs, environmental initiatives, and social development projects. Our commitment to being a

good corporate citizen will remain firm.

While we have made significant progress, we recognize that there is still much work to be done. Sustainability is an ongoing journey, and we are committed to continually raising the bar. Our sustainability goals for the coming years are ambitious, but we believe they are achievable with dedication and collaboration.

Before closing, I want to express my gratitude to our employees, partners, and stakeholders who have supported our sustainability initiatives. Your dedication and commitment have been instrumental in our progress. Together, we will continue to strive for a sustainable future, not just for our organization but for the generations to come.

Thank you, and let us move forward with renewed determination to make a positive impact on our planet and society.

Chaitanya Desai, Managing Director



Reporting principle

APAR has prepared its greenhouse gas (GHG) data on the principles of ISO 14064-1, World Resource Institute (WRI) GHG Protocol, Emission factors from the Intergovernmental Panel on Climate Change's (IPCC) fourth & fifth Assessment Reports, Institute for Global Environmental Strategies (2022) - List of Grid Emission Factors, Central Electricity Authority, Govt. of India, Dubai Electricity and Water Electricity (DEWA), Govt. of Dubai, and ASHRAE Standard 34.

The financial and statutory details disclosed in this report are in line with the requirements of the Companies Act, 2013 (including the rules made thereunder); Indian Accounting Standards; the Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015; and the Secretarial Standards issued by the Institute of Company Secretaries of India.

The Report is also aligned with the United Nations Sustainability Development Goals (UN SDGs).

To better serve our investors, customers, communities, people and other stakeholders and to help them make informed decisions, we have developed this ESG (Environmental, Social and Governance) report around six Capitals in a modular, uniform and consistent manner.

Reporting period

The information provided in the Report is for the period 1st April 2022 to 31st March 2023.

Operational control

Our organizational boundary covers all our manufacturing plants, offices, warehouses, and all such emission sources under our operational control. It includes our manufacturing plants in India at (1) Gujarat: Khatalwada & Umbergam (2) Maharashtra: Rabale (3) Orissa: Jharsuguda & Sambalpur (4) Dadra and Nagar Haveli: Silvassa & Athola; and our manufacturing plant in UAE at (5) Sharjah: Hamriyah.

Operational boundary

Operational boundary consists of Scope-1 and Scope-2 emissions.

Scope-1: Direct emissions come from sources that the APAR owns or controls. It includes emissions due to use of Diesel, Furnace Oil (used at 3 of our 4 conductor plants), LPG, PNG & Refrigerant etc. Diesel is mainly used in the forklift for material handling, for DG sets, and for company owned vehicles. Refrigeration gases are used for the air conditioning purpose.

Scope-2: APAR is using the location-based method for Scope-2 emission computation. It includes greenhouse gas emission due to purchase of grid electricity.

Scope-3: We have started measurement of our Scope-3 emissions from FY 2022-23 onwards. It was calculated for six categories, which are material to us, for the reporting period. Scope-3 emissions are not shown as part of our carbon footprint, and are reported separately.

Independent assurance

DNV Business Assurance India Private Limited ('DNV') has carried out the verification of APAR's GHG emission data (scope-1 and scope-2) as per their verification methodology VeriSustain, which provides a limited level of verification of selected GHG emission data while applying a $\pm 5\%$ materiality threshold for errors and omissions.

The financial numbers are taken from our Annual Report, which is audited by an independent auditor M/s. CNK & Associates LLP, Chartered Accountants. The annual report is available at the url: <https://apar.com/investor/>

FY 2022-23 highlights

Financials (Rs. Crores) **14,352** Revenue from Operations



1,320 EBITDA

638 Profit After Tax

Operational (Rs. Crores) **6,994** Export Business



7,358 Domestic Business

248 CapEx

Environmental



104,928 tCO₂e GHG emission

328,325 KL Water Footprint

People



1,659 Employees

Other highlights

- Commissioning of first Wind-Solar hybrid (3.30 MW wind-turbine and 2.80 MWp of solar energy) project in partnership with a leading supplier. This project is expected save 10,000 tCO₂e GHG emission per year.
- Share of renewable energy in the overall energy mix increased from 3% in FY 2021-22 to 4% in FY 2022-23. This will further increase to 18% in FY 2023-24. Planning to increase it to 30% by Q2 FY 2024-25.
- Scope-3 GHG emission computation done for the first time.
- Disclosure through the BRSR (Business Responsibility and Sustainability Report) for the first time.
- 72,000 KL RWH (Rain Water Harvesting) through aquifer recharge project operational at our Khatalwada Cable plant. Plan to make Khatalwada plant 'water neutral' by FY 2024-25.
- EPD (Environment Product Declaration) to communicate life-cycle emissions (cradle-to-gate) published for four important Conductor products.
- Partnered with leading organizations for Energy Audits at our plants.
- Gender diversity improved from 5.8% in FY 2021-22 to 8.3% in FY 2022-23. Many initiatives are being taken to improve the gender diversity further.
- Climate-related first full-version disclosure to CDP for the first time.
- Registered as 'Brand Owner' under CPCB (Central Pollution Control Board) Extended Producer Responsibility (EPR) regulation, to manage APAR's downstream operations' plastic packaging waste, which are recycled through a certified recycler.

About APAR

APAR was founded in 1958 in India. We are a manufacturing conglomerate and hold a leadership position in our principal business segments. Our main businesses are Transformer Oils & other Speciality Oils, Conductors & Cables. We serve customers across 140+ countries.

For over 6 decades, we have been leading the innovation curve in our industry segments and growing our presence across markets globally. We are trusted by major Transformer OEMs, Power Utilities, Global EPC majors, Automotive OEMs and Telecommunication companies globally to deliver cost-effective, quality products and services.

Our business is firmly anchored in India with our head office at Mumbai, 10 branch offices, and 8 state-of-the-art manufacturing facilities (including 1 in Hamriyah, Sharjah). We have a wide range of 350+ products in our portfolio and we serve 4000+ global clients.

We are :

- World's largest aluminium and alloy conductor manufacturer
- The 3rd largest global transformer oil manufacturer
- Largest exporter and producer of renewable and speciality cables
- We have strategic tie-ups with big global firms such as ENI S.p.A Italy and CTC Global USA.

APAR's Cable, Oil & Conductor division have state of the art laboratories with more than 2000+ testing facilities as per various national & international standards, and are certified by NABL (National Accredited Board for Laboratories) as per ISO 17025:2017.

For more details about APAR Industries, please visit www.apar.com.

Ascending
Passionately,
Achieving
Responsibly.

The term "APAR," which is the Sanskrit word for limitless, appropriately expresses our relentless dedication to significantly enhance the energy efficiency, environmental sustainability and safety of our world. It embodies the idea of making boundless contributions to these aspects.

OUR MISSION

To design & manufacture building blocks for energy infrastructure, transportation & telecommunication sectors that contribute meaningfully to make this world more energy efficient, environmentally sustainable and a safer place.

OUR VISION

To be a global leader in the energy Infrastructure, transportation & telecommunication sectors by providing the best solutions & value creation for our stakeholders.

OUR VALUES

Innovation – We will go beyond obvious solutions

Accountability – We will take responsibility of outcomes

Entrepreneurial Drive – We will be self-driven

Leadership – We will inspire others

Materiality assessment

The materiality exercise done during FY 2020-21 has enabled us to remain focused on key ESG parameters which are most important to the stakeholders as well as to us. We plan to revisit the materiality assessment during FY 2023-24.

The materiality matrix is plotted on two dimensions - importance to stakeholders and significance to APAR's Business. The topics have been categorized relative to each other and the placement of a topic under the 'low' importance category does not imply low importance in an absolute sense.



The outcome of the materiality analysis are in alignment with the eight UN-SDGs (United Nations - Sustainability Development Goals) as depicted.

These materiality parameters are our ESG priorities – which define our areas of action towards driving strategic initiatives on the path of our sustainability efforts. These priorities helps us to address those issues that matter the most to our stakeholders.

Importance to Stakeholders	High	<ul style="list-style-type: none"> ▲ Circular Economy ▲ Renewable Energy 	<ul style="list-style-type: none"> ▲ Carbon Footprint ▲ Water Management ◆ Human Capital ▲ Packaging and Waste ◆ Occupational Health & Safety ▲ Innovation & Technology ● Compliance Management 	
	Medium	<ul style="list-style-type: none"> ▲ Air Pollution 	<ul style="list-style-type: none"> ◆ Community Wellbeing ○ Sustainable Finance 	<ul style="list-style-type: none"> ▲ Product Stewardship ▲ Supply Chain ESG ● Governance
	Low	<ul style="list-style-type: none"> ▲ Biodiversity 		
APAR Industries		Low	Medium	High
Significance to APAR				



Our Capitals

The ESG Report is prepared based on the concept of Capitals Creation framework.

We are driven by our purpose of manufacturing products that make the world Better, Greener and Smarter. This approach will provide a clearer roadmap of value creation to our stakeholders.

The following six Capitals are discussed:

- Financial Capital
- Manufacturing Capital
- Intellectual Capital
- Natural Capital
- Human Capital, and
- Social Capital

This focuses to ensure the collective well-being of APAR's stakeholder groups, primarily focusing on our communities, suppliers, vendors, and customers. It involves factors like trust, collaboration, and our impact on the well-being of these groups. This further helps us strengthen our ties and increase ease of doing business.

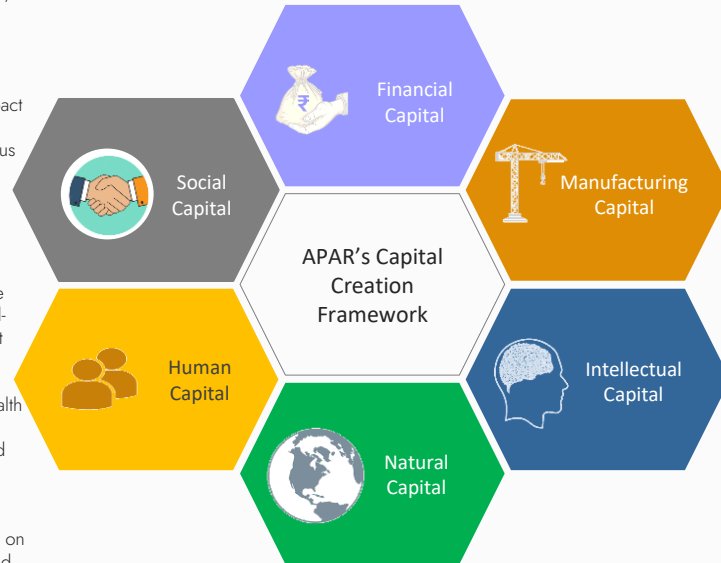
Human capital refers to the skills, knowledge, and well-being of APAR's people. It encompasses factors like employee development, diversity and inclusion, health and safety, and fair work practices. Recognizing and investing in human capital aligns with ethical and sustainable business practices. We aim to keep on improving performance and safety and well-being of our people.

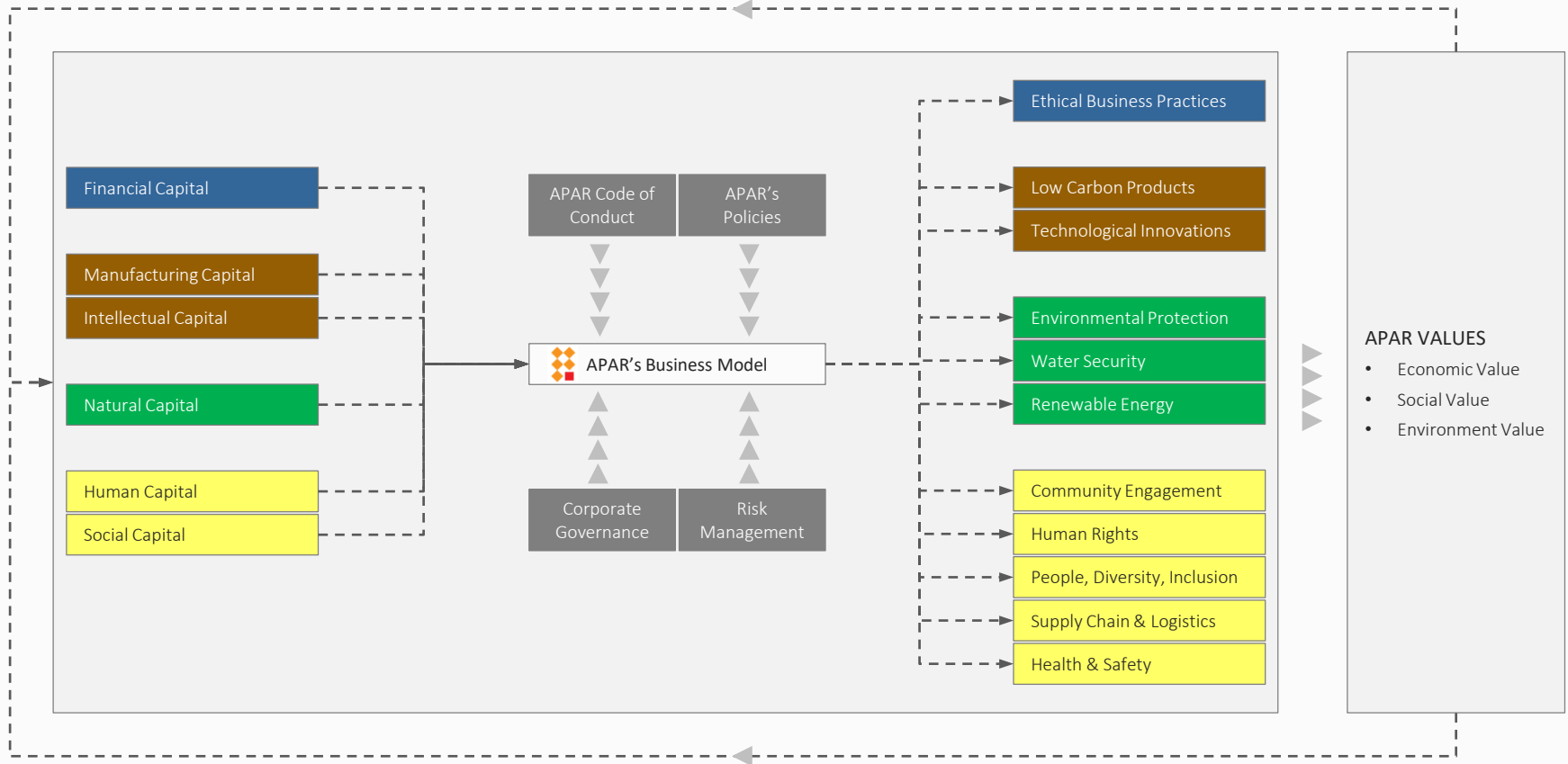
This represents our financial resources which are utilized to create sustainable value while ensuring business continuity. Outcomes of the capital signify financial value creation for the Company. It represents the monetary investments made with the goal of achieving both financial returns and positive environmental, social, and governance outcomes.

This showcase our manufacturing capabilities, our diversified product portfolio, operational excellence, technological leadership and other operational details. It allows us to manufacture competitive products as per the ever changing market demands.

This includes our knowledge, innovation, patents, trademarks, and employee expertise. We demonstrate our concern about the environment through innovative product and process design which minimizes the impact on the environment through focus on improving our intangible capabilities including Research & Development and Collaborations.

This highlights the progress made by us towards our commitment for the environment. APAR nurtures a culture of conservation that emphasizes meticulous monitoring of use of resources and encourages innovations that aid in minimizing our environmental footprint.





Business Outlook

Energy Transition: Energy transition refers to the global energy sector's shift from fossil-based systems of energy production and consumption — including oil, natural gas and coal — to renewable energy sources such as wind, solar, hydro-power and hydrogen.

- The global energy mix is projected to shift rapidly towards electricity and hydrogen.
- The share of electricity and hydrogen, in final consumption, is expected to grow from the current 20% to approx. 50% by 2050.
- Total investments across energy sectors are projected to grow by more than 4% per annum and are projected to be increasingly skewed towards non-fossil and de-carbonization technologies.

Global scenario: Owing to the rapid growth of electricity demand, the global wires and cables market size is projected to reach USD 294.73 billion in 2029 from USD 200.23 billion in 2022 and exhibit a CAGR of 5.7% during the forecast period.

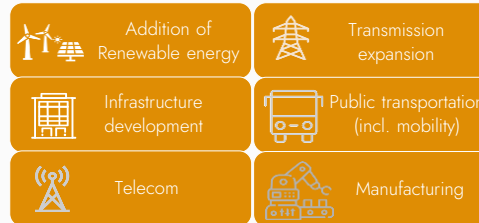
Indian scenario: India has some of the most aggressive RE targets in the world – to reach 500 GW by 2030 (from about 170 GW installed as on July 2023).



Renewables - strong opportunity for all business verticals of APAR:

Segment	Apar's product portfolio
Renewable Power Generation	String cables, low voltage cables, nacelle wiring, torsion cables, tower cables, control cables, earthing cables, fire resistance OFC cable, LAN cables etc.
Power Transmission (Sub Station & Grid)	Transformer oil, CTC conductors, PICC conductors, T&D traditional overhead conductors, T&D new generation overhead conductors, OPGW, ADSS cables, turnkey solutions, Medium Voltage Covered Conductors (MVCC) etc.
Power Distribution	Application based cables and wires, Light duty cables, FTTX cables, ADSS cables etc.

Business outlook for APAR: We see growth opportunities in:



APAR's growth opportunities basket

The escalating establishment of solar farms and wind turbines boosts the demand for wires and cables, and APAR is the largest producer of renewable cables in India.

The electricity grids in India and the rest of the world need to get augmented and APAR's conductor business will be a major beneficiary of this upgradation.

APAR being a leading manufacturer of cables, conductor, transformer oil, and lubricants, and with a wide and diversified product portfolio, we anticipate significant growth in our business and market share. In addition, we are preparing for the upcoming growth wave through capacity additions and product innovations.

APAR is both the beneficiary of the energy transition, as well as the enabler for the rest of the world to achieve it.



Financial Capital

Financial Capital

At APAR, our aim is to provide optimum returns to the providers of our financial capital. Our business processes are aligned to maximize surplus from both business operations and relevant monetization of assets and investments.

The key metrics for FY 2022-23 are provided on the right hand side.

Managing our financial capital

At APAR, financial strength is an essential factor that facilitates us in being a resilient organization in a dynamically changing environment.

Our robust financial management process involves strategically allocating and overseeing resources to achieve specific financial goals, whether it's optimizing investments, funding operations, mitigating risks and also generating shareholders value. It necessitates a deep understanding of financial markets, risk assessment, and prudent decision-making.



Our stronger balance sheet in FY 2022-23 is the outcome of optimum capital allocation, disciplined treasury management and prudent deleveraging to reduce finance cost and strengthen profitability.

We will continue to fulfill all fiduciary responsibilities vested upon us by the investing community.

Our growth story is a consequence of several strategic factors including a diversified revenue base, appropriate Capital investments, strong cost controls, continuous investment in R&D activities and our proximity to customers.



Turnover

Rs. 14,352 Cr (▲ 54 % YoY)



EBITDA

Rs. 1,320 Cr (▲ 130 % YoY)



PAT

Rs. 638 Cr (▲ 148 % YoY)



PAT to Sales Ratio

4.45 %



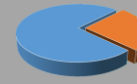
Return on Capital Employed

33.80 %



Earning Per Share

Rs. 166.64



Dividend payout

400 %

D/E

Debt Equity Ratio

0.14

Financial highlights (FY 2022-23):

- APAR recorded an all-time high revenue of INR 14,352 crore, up 54% YoY and driven by strong growth from the export of conductors and cables.
- All three major business verticals recorded their highest year in sales.
- EBITDA increased 130% YoY to reach INR 1,320 crore due to higher margins in conventional and premium conductors and an increase in cable volume.

Managing capital inputs and liquidity

The year under review witnessed stability in the economic condition with fewer business interruptions, improvement in market sentiments as the economy progressed on the path of recovery. Major inputs to the financial capital were as follows:

- Internal accruals generated a free cash flow of INR 1041.51 Crores during FY 2022-23 (after considering dividend) which was primarily utilized for:
 - i. the repayment of loans of INR 54.19 Crores and
 - ii. investments in working capital and CapEx of INR 741.98 Crores.

Managing capital outputs

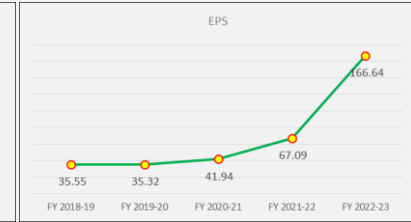
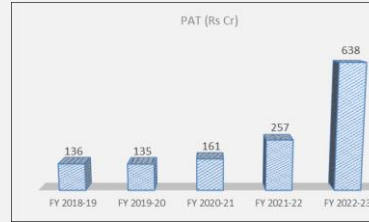
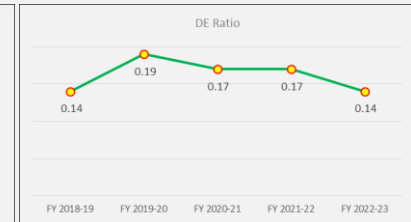
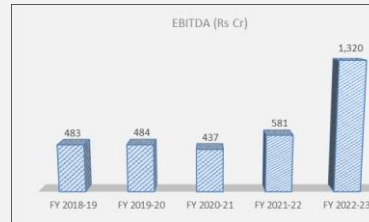
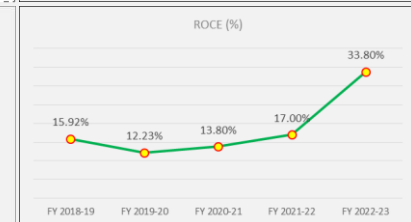
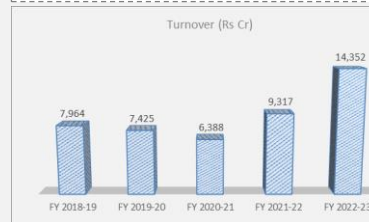
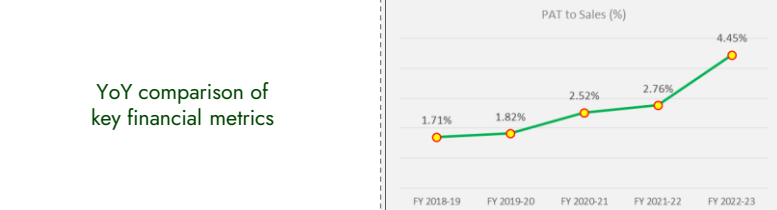
In the post Covid-19 era, businesses have slowly started to bounce back to normalcy in FY 2023. We at APAR have managed to grow with agility, from innovative new product introductions, focused execution, improved operational efficiencies and market share gains.

We achieved an all-time high revenue of INR 14,352 Crores, up 54% YoY due to strong growth from the export of conductors and cables. All three major business verticals recorded their highest sales so far. EBITDA increased 130% YoY to reach INR 1,320 Crore due to higher margins in conventional and premium conductors and an increase in cable volume.

We have planned capital expenditure to the tune of INR 102 Crore, majorly towards de-bottlenecking, capacity enhancement, increase in productivity, cost reduction and R&D.

An uptick in the T&D sector, coupled with increased renewable energy projects in the pipeline and infrastructure spends on a global scale to become key demand drivers.

YoY comparison of key financial metrics



Manufacturing Capital

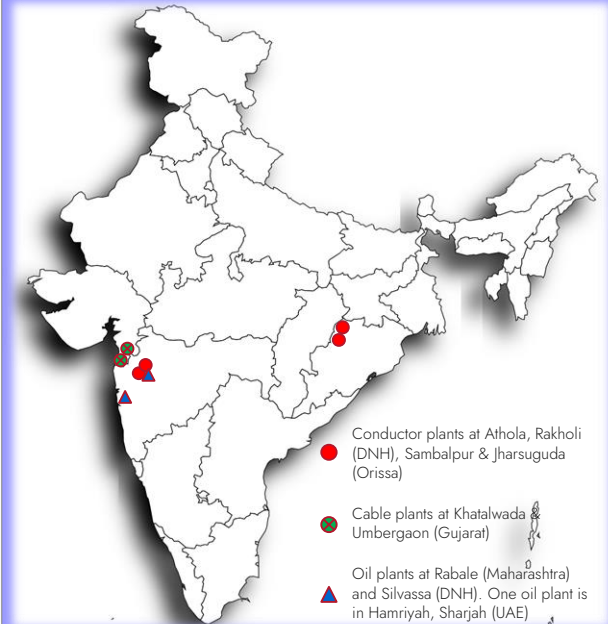
Manufacturing Capital: Key Metrics

Plant capacities	825,600	KL: Oil plants
	33,600	MT: AdBlue capacity
	630,000	Km: Cable plants
	349,804	MT: Conductor plants
Production	468,500	KL of Oil (up by 2%)
	81,411	MT of Cables (up by 22%)
Infrastructure	270,134	MT of Conductors (up by 33%)
	8	Plant locations (incl. 1 in UAE)
	9	Operating plants
Products & reach	15	Offices in India
	350+	Products portfolio range
	140	Countries served
	4000+	Global clients

Key highlights

- ISO 9001 and 14001 certifications in place at all the sites
- 9 operating plants (3 oils, 2 cables and 4 conductors). 2 of our plants (Oil business & Conductor business) are co-located in Silvassa (Dadra & Nagar Haveli)
- All the export plants are strategically located near sea ports & international airport
- Own India's largest electron beam facility dedicated for the irradiation of cables (4 electron beam machines – one 1.5 MeV, two 2.5 MeV and one 3 MeV; 2 more electron beam machines are under procurement)
- In-house research & development facilities, and all plants are equipped with state-of-the-art NABL (National Accreditation Board of Laboratories) accredited laboratories
- APAR is the largest manufacturer in India for special application and renewable cables; have the largest e-beam facility in India; and hold the maximum number of UL approvals in US (12 numbers) from India
- APAR is the world's largest manufacturer of aluminium and alloy conductors; have executed 150+ HTLS turnkey solutions projects in last 5 years with zero accidents
- APAR is the world's 3rd largest manufacturer of transformer oil and is amongst the top 10 lubricant players in India

Linkage with SDGs





Technology Leadership

Conductor business:

Two of our manufacturing facilities are located at Dadra & Nagar Haveli, which are close to Mumbai ports, making it easier to handle export shipments.

Another two conductor plants are located in Orissa, next to aluminium smelters giving us the advantage of using liquid molten aluminium as direct raw material as against the industry practice of procuring aluminium ingots and then melting it before use. APAR's modern plants enable us to produce world-class quality in massive capacities.

We are the world's largest manufacturer of aluminium and alloy conductors and have experience of executing 155 turnkey solutions projects in India to date.

APAR's journey to becoming the world's largest manufacturer of conductors with loyal customers in 107 countries spans across six decades. As a leading global supplier, we offer a full range of both conventional and new-generation speciality conductors. We maintain total in-house control over the design, manufacturing and testing process. This enables us to guarantee innovation and quality while maintaining cost competitiveness.

Our commitment to leading the innovation curve is why we've pioneered turnkey solutions for reconductoring with HTLS, live line installation with OPGW and environmentally-friendly packaging solutions. Six decades of experience and expertise is hard to replicate.

All our manufacturing plants are certified for Integrated Management Systems of Quality, Environment, Health and Safety as per ISO:9001,14001 and 45001 standards.





Cable business:

We are the manufacturer and supplier of the largest and diversified range of cables in India.

Our manufacturing facilities are located at Umbergaon & Khatalwada, Gujarat and has a vast infra over 300,000 sq. meter land. These are around 150 Km from Mumbai sea port which makes it easier for export shipments.

Both the cable plants are certified for ISO 9001 (Quality Management System), ISO 14001 (Environmental Management System), and ISO 45001 (Occupational Health & Safety).

We are the only one in India with four e-Beams irradiation facilities (one 1.5 MeV, two 2.5 MeV and one 3.0 MeV) for cross linking polymers. In addition, order for another two e-Beam facilities have been placed.

We have an in-house R&D facility and compounding plant that processes various types of compounds like EPDM, Silicone, CSP, PCP and EVA.

We have rich experience in manufacturing of all types of special cables like submarine cables, tactical cables, torpedo cables, umbilical cables, tether cables, tow cables and many other defense application cables.

APAR is the first Indian wire and cable company to venture into the harness segment for diverse applications such as electric vehicles (EV), solar energy, locomotives etc.



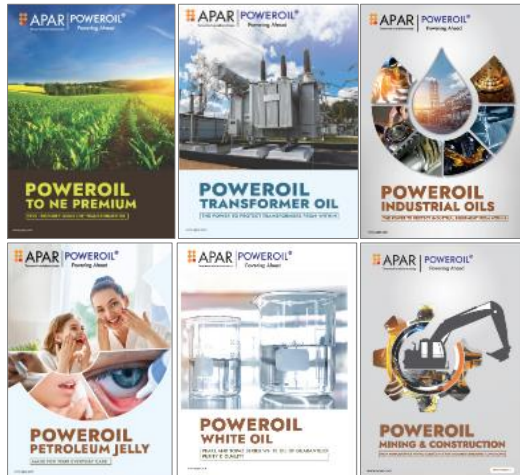
We provide innovative solutions for a wide range of industries

Oil business:

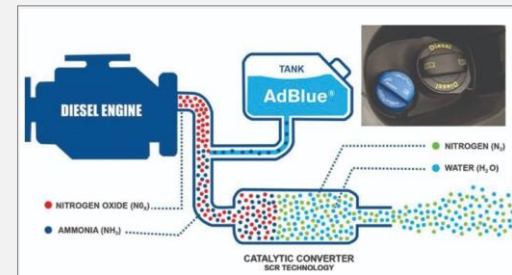
Our manufacturing facilities are located at Rabale, Navi Mumbai; Silvassa, Dadra & Nagar Haveli; and Hamriyah Free Zone, Sharjah (UAE). The Hamriyah, Sharjah (UAE) speciality oils plant serves Middle East & East Africa regions

All the 3 plants are near sea ports making it easier for export shipments. These plants have huge storage capacities and are spread over an area of 100,000+ square meter.

As a leader in the oil industry for over 50 years, we are known for our product quality and timely service. The complete range of oils have been developed through our in-house research & development efforts and is recognized under the brand name 'Poweroil'.



AdBlue – APAR is first company in India to obtain a VDA license which is used in the Selective Catalytic Reduction (SCR) system of vehicles to convert the NO_2 emissions to nitrogen enabling vehicles to conform to BS6 emission norms.



Product Portfolio

CABLE BUSINESS

Elastomeric cables

- up to 72 KV
- 1 core up to 1000 sq. mm and multi core up to 630 sq. mm copper, aluminium and copper clad aluminium

XLPE power cables

- Up to 66 KV
- Single core up to 1000 Al, 630 sq. mm Cu
- Multi core up to 630 sq. mm aluminium and 630 sq. mm copper

Optical fibre cables

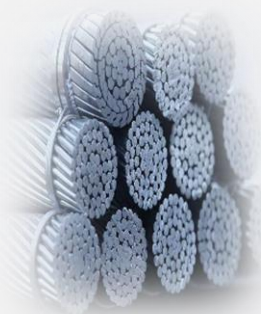
- up to 732 fiber cables, UniTube & loose tube armoured/ DUCT/ ADSS/ Aerial/ Ribbon

Fluoroplastic polymer cables

Electron beam irradiated cables

- We are the largest manufacturer in India for special application and renewable cables
- We have the largest e-beam facility in India
- We hold the maximum number of UL approvals in US (12 numbers) from India

CONDUCTOR BUSINESS



Aluminium products

- 1XXX, EC wire rods
- 6XXX series, 6201, 6101 series wire rods
- 5XXX, 8XXX series wire rods
- Conventional conductors
- High Temp Low Sag Conductor (HTLS)
- Covered Conductor (Green Solution)
- Solid Shape Conductors
- GSW earth Wire

OPGW

- Aluminium clad steel wire (ACS)
- Optical Ground Wire Cable (OPGW)

Copper

- Copper Rod
- Copper railway conductors
- Copper wires
- CTC, PICC, enamelled wires
- Copper Bus bar

- We are the world's largest manufacturer of aluminium and alloy conductors
- We have executed 155 turnkey solutions projects in India till date

OIL BUSINESS

AdBlue

- #### Automotive and Industrial oil
- Automotive oil
 - Industrial oil

Transformer oil

Rubber process oil

White oil

- White oil - Pharma
- White oil - Tech
- Petroleum jelly

- We are the world's 3rd largest manufacturer of transformer oil
- We are amongst the top 10 lubricant players in India

Growth Drivers

The global wires and cables market size is projected to reach USD 294.73 billion in 2029 from USD 200.23 billion in 2022 and exhibit a CAGR of 5.7% during the forecast period (source : Fortune Business Insights, in its report titled, Wires and Cables Market, 2022-2029).

The main drivers behind this are:

- Rising urbanization and growing infrastructure worldwide
- Increasing demand for renewable energy generation
- Increased investments in smart upgrading of the power transmission and distribution systems and the development of smart grid
- Increasing need for grid interconnection
- escalating demand from IT facilities and data centers

The deployment of green energy technologies by governments all across the globe to reduce the usage of fossil fuels is rising. India has some of the most aggressive RE targets in the world – to reach 500 GW by 2030 (from about 170 GW installed as on July 2023). The escalating establishment of solar farms and wind turbines boosts the demand for wires and cables, and APAR is the largest producer of renewable Cables in India.

Increased electricity demands in India, Asia Pacific, Middle East, and the Americas have resulted in rising investments in smart grids in these regions. This will fuel the demand for APAR's conductor businesses. We are already seeing substantially increased business from overseas markets.

APAR being a leading manufacturer of Cables & Conductors, and with a wide and diversified product portfolio, we anticipate significant growth in our business and market share.

Conductor business:

▪ Diversification

Many multinational companies are focusing on diversification and reducing their dependence on one single country by establishing alternative manufacturing sources. This has resulted in a steep growth in demand for our OPGW (Optical Ground Wire) conductors, a combination of optical fibres with overhead power conductors for communication and power transmission purposes.

▪ Upgrade and uprate of power transmission & distribution

As the power transmission and distribution infrastructure ages or becomes inadequate to meet the growing energy demands, there is a need for upgrading and uprating the systems. This includes replacing old conductors with advanced ones that can handle higher power capacity and reduce transmission losses.

As companies and utilities seek premium and efficient conductors for infrastructure improvement projects, APAR has positioned itself as a steadfast counterpart for executing large-scale projects. We offer comprehensive solutions that entail designing, engineering, manufacturing and turnkey services, providing an end-to-end project advantage.

▪ Government investing in infrastructure

Governments of both developed and developing nations have made substantial investments in infrastructure of power, railway and metro projects. APAR has positioned itself as a trusted partner by actively participating in these infrastructure projects and offering tailor-made solutions. Infrastructure projects, including the construction of renewable power plants, substations and transmission lines, necessitate using high-quality conductors to ensure reliable and efficient energy transmission. APAR has successfully catered to these requirements by supplying superior conductors for such projects.

Cable business:

▪ Increasing demand for energy

The growing population and rapid industrialization have led to an exponential rise in the demand for energy. Cables are essential for the transmission and distribution of electricity, making them a critical component in meeting this increasing energy demand.

▪ Infrastructure development

The construction of power plants, smart cities, transportation networks and telecommunications systems, have fueled the demand for cables. The expansion and modernization of infrastructure require a reliable and efficient cable network to support their operations.

▪ Urbanization and industrialization

The rapid urbanization and industrialization taking place globally have led to increased construction activities and the establishment of manufacturing facilities. Cables play a vital role in providing power and connectivity to these urban and industrial areas, hence driving the demand for cables.

▪ Renewable energy transition

The shift towards renewable energy sources, such as solar and wind power, have been a significant driver of growth in the cables business. Renewable energy projects require extensive cable infrastructure to transmit power from remote generation sites to consumption centres.

▪ Technological advancements

Technological advancements, such as the Internet of Things (IoT), 5G connectivity and smart grids, have significantly increased the complexity and demand for specialized cables. These cables are designed to handle higher data transfer rates, withstand harsh environmental conditions and support advanced communication systems.

Oil business:

▪ Rise in energy sector & sustainability

The energy sector is currently experiencing remarkable growth due to rising power demands and a shift towards renewable energy sources. At APAR, we have been actively contributing to the energy sector, specifically in the transformer oil segment. We supply high-grade transformer oils ensuring longer transformer life and optimal performance.

Our portfolio comprises of more than 350 different types of specialty oils. These oils cover the complete voltage range, starting from 0.4kV for pole-mounted transformers and going up to 1200kV for high-voltage direct current (traction transformers).

The reliability and performance of our POWEROIL® transformer oils have been acknowledged by leading utilities globally. This recognition has propelled us to hold a substantial 40% market share in India and a dominant 70% share in the special grade application category.

▪ Increase in demand for home and personal care products

The demand for home and personal care products, including cosmetics, lotions, creams and ointments, is experiencing a steady rise. APAR has introduced a comprehensive range of white oils and petroleum jellies specifically formulated to meet the needs of the personal care industry. These specialty oils play a vital role in enhancing the performance, texture and functionality of these products.

Serving to these specific needs, we have become one of the most trusted and the world's third-largest supplier of white oils. Under our POWEROIL® PEARL brand, we manufacture a variety of pharmaceutical and food-grade liquid paraffin, while our POWEROIL® TOPAZ brand encompasses technical grade white oils produced from carefully selected highly refined paraffinic and naphthenic base stocks.

Capacity augmentation

To cater the increased demand from customers, we have undertaken several capacity augmentation. Some highlights are as below:

- APAR Cable business had expanded its manufacturing facility at Khatalwada by acquiring an additional 7.5 acres plot adjacent to the existing plant. This will house an additional 3 Bull Nose Line, 2 Multi Stranding Line, 4 Skipbow Line, 3 Wire Drawing Line etc., which will enhance the production capacity from 470,000 Km to 630,000 Km annually.
- Capacity augmentation at APAR's conductor business: (a) Our Rakholi unit, one of our conductor's facilities in Silvassa, UT of DNH has expanded its production capacity by 40,000 metric tons per annum. The expansion project was completed on 27th Feb 2023 (b) In addition, we are expanding capacity at a 8.4 acre plot close to our Athola plant and a 10.5 acres plot at Khanvel.
- Blending Capacity augmentation: We have tie-ups with blending plants in various countries including RSA, Turkey, Malaysia, and we are further increasing the capacity through more proposed tie-ups in Uganda, Brazil and Europe.
- Warehouse in Silvassa for our conductor business : It is spread over 12360 sq. meter and having storage capacity of 9000 MT of products, and located in heart of Dadra & Nagar Haveli, near our existing plants.
- Warehouse in Gujarat for our LDC business: Includes an office, a conference room and a 350 m² open area integrated with required logistics tools and platforms The facility currently hosts 90 meter coils, 180 meter coils, flexible wires and our flagship products Shakti and Anushakti cables.

New storage capacity for sensitive materials

- The biggest challenge any oil company faces is storing and preserving sensitive base oils for a longer period of time .With the right technologies and advanced tools, we were able to manage just in time processing of our base oils, and avoid the need for preserving these oils for long periods of time.
- The challenge to create an isolated storage for special case base oils (used in making transformer oil) to avoid atmospheric degradation still remained.
- Our operations team at Rabale came up with an innovative idea (first time in India) by installing a properly designed '**Nitrogen Blanketing System**'. This system is so technologically advanced that it can be generated, stored and controlled with ease in any of the storage tanks available at our Rabale facility.



Industry collaboration



IEEMA: the apex association of manufacturers of electrical, industrial electronics and allied equipment in India



Collaborative global community committed to the world's leading knowledge development program for the creation and sharing of power system expertise.

CTC GLOBAL



Apar Industries Ltd has tied up with Eni Lubricants, one of the biggest industrial house in Italy for manufacturing and marketing world class lubricants

CACMAI

Cable And Conductor Manufacturers Association of India



Draft Committee Member in BIS: The Bureau of Indian Standards is the National Standards Body of India under Department of Consumer affairs, Ministry of Consumer Affairs, Food & Public Distribution, Government of India



International Electrotechnical Commission

Draft Committee Member: The International Electro technical commission is an international standards organization that prepares and publishes international standards for all electrical, electronic and related technologies

Other collaborations

Member of

- CII (Confederation of Indian Industry)
- SEZ (Special Economic Zone, UAE, Hamriyah)
- State Industrial Development Authority of Maharashtra & Gujarat
- DNH Industry Association
- Umbergaon Industry Association
- Vapi Industry Association
- Sarigam Industry Association



As we remain committed towards our vision, we maintain active memberships & collaborations with industry trade associations. We leverage this engagement to advance further initiatives aimed at making the industry even more sustainable.

Intellectual Capital

Product innovations:

As a technology-driven and customer-centric organization, we provide cutting-edge, value-driven solutions that effectively address the genuine business challenges faced by our clients. In this pursuit, our expertise, manufacturing excellence, strong market presence and diversified product portfolio have been pivotal in more than 140 countries worldwide

a) Product innovation in Conductor business:

HTLS e-beam cured covered conductor

Problem: In India, overhead power distribution lines using bare conductors are afflicted by issues like tree falls, bird-related disturbances, line flashovers, tornado & hurricanes and overloads. These issues not only disrupt power supply but also pose risks to wildlife, especially in forested areas, coastal areas and high congestion areas. The available solutions of covered conductors in the market are capable of withstanding an operating temperature of 90°C, which restricts the power transfer capability of covered conductors and less reliable.

Solution: To address these challenges, APAR has developed HTLS e-beam cured covered conductors. These innovative conductors offer a range of advantages and can operate up to 120°C, providing 50% additional power transfer capability. This includes reduced risks, enhanced mechanical protection, and improved environmental compatibility. By adopting APAR's covered conductors, utilities can ensure reliable power distribution while safeguarding wildlife and minimizing environmental impact. This solution aligns with international and national standards, making it a reliable and safe choice for medium voltage applications.



Solid Sector shaped aluminium conductors – first in India

Problem: Manufacturing power cables with 3 or 4 cores had become a laborious and time-consuming process. The core of the issue lies in the production of the aluminium wires, which were drawn from aluminium wire rods, circular stranded based on conductor size, and then compacted into sector shapes before insulation. These multiple steps required significant effort and processing time, causing delays and inefficiencies in the production line and meeting deadlines for certain projects.

Solution: Leveraging existing resources, we developed Solid Sector shaped aluminium conductors for multi-core power cables for fixed installation. These conductors met international standards and offered key advantages:

- Optimal Termination & High Ampacity
- Clear Sound & Efficient Transmission
- Durability & Low Resistance
- Cost-Efficient & low maintenance

This innovative solution was introduced to expand our customer base and meet the rising demand in the European market. We are eager to further enrich our product portfolio, considering the evolving bandwidth requirements driven by our clients' applications.



Innovative ACCC conductor design & turnkey solutions

Problem: APAR's Conductor division had a challenge to design a custom conductor for a 220 KV transmission line in India that can carry more than 1800 A of current. The transmission towers are tested for ACSR moose conductors (rated for 400 KV), and the custom conductor should match the weight of ACSR moose while exhibiting sag and tension properties similar to ACSR zebra conductor. Specifically, the conductor must weigh a maximum of 2004 Kg/ Km, have a sag of 6.24m at 0°C, and maintain a maximum sag of 9.00 m at the designed operating temperature.

Solution: APAR spearheaded an innovative design & manufacturing process, utilizing composite materials, geometry optimization, and exhaustive testing to fulfill the exacting project specifications.

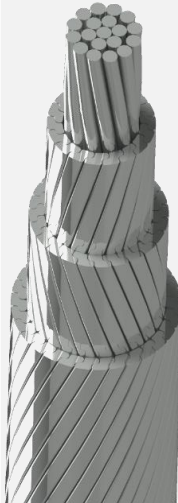
The result was the development of ACCC-ULS conductor using CTC Global's ULS core technology, meeting all parameters and project requirements. Rigorous testing and evaluation by CTC Global USA confirmed its compliance with current-carrying capacity and sag tension properties. Following qualification, the conductor underwent type testing according to CEA guidelines, passing characteristic tests, electrical and mechanical tests, installation tests, and in-service tests. ACCC-ULS conductor represents a successful and advanced solution for the 220 KV & 400 KV transmission line in India for exceptionally high amount of current transmission.



Innovative power-ZAD conductors

Problem: The power lines are always in motion, vibrating, and dealing with constant stresses from varied weather conditions, like strong winds and temperature changes with electro-mechanical & thermo-mechanical stress causing conductor fatigue & damage. Exceptional high winds at the coastal areas, tornado & hurricanes causes forced deterioration increasing the probability of power blackouts for several months.

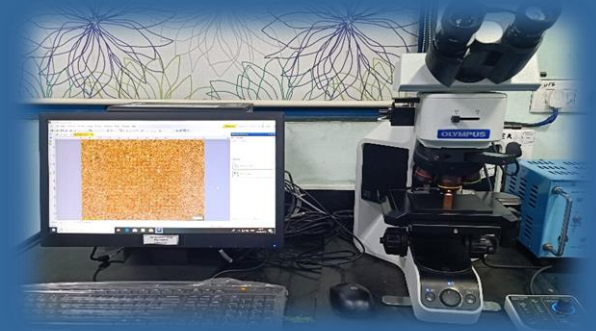
Solution: Engineered with an aerodynamic design of conductors and developed a solution of APAR power-ZAD conductors using Z-shaped wire profiles of aluminium alloy which fully locking the conductors integrity and offering reduced drag, effectively minimized vibrations and endured high winds, ensuring uninterrupted electricity supply during hurricanes. Its superior shock absorption and heat dissipation capabilities combated electro-mechanical and thermo-mechanical stresses, extending the service life of the power lines. Moreover, its corrosion-resistant property shielded it from the corrosive effects of coastal environments, guaranteeing reliability.



APAR's solution to testing challenges

Problem: The lack of domestic testing facilities for copper and copper alloy products in India has posed significant challenges and was dependent on foreign labs for type testing, resulting in time delays, increased costs, and reduced quality control. APAR, being leading manufacturer of copper products and copper alloy products, has developed a wide range of materials for both domestic consumption and export but the non-availability of accredited testing laboratory impacted APAR at a competitive disadvantage, impacting innovation, and hampering the growth of the industry.

Solution: Conductor division laboratory of APAR expanded the scope of accreditation to include copper and copper alloy products intended for railway and other electrical applications. This helped to provide timely, reliable, and quality testing reducing dependency on foreign labs but also enhanced the competitiveness by streamlining production processes, ensuring compliance, and promoting self-reliance in the copper and copper alloy industry aligning with the goals of 'Make in India'.



Conductor turnkey solutions

- APAR started total turnkey solutions with HTLS reconductoring for augmentation of transmission lines in the year 2013.
- Business was based on assumptions that at least 30% of lines installed prior to 2014 will start becoming highly congested, old and due for uprate/ upgrade.
- Over the years, APAR's focus has been on integrated efforts to achieve uprating of existing transmission lines with HTLS conductors, live line OPGW replacement work and integration of OPGW with telecommunication.
- APAR has completed 155 nos. reconductoring projects having 4428 CKMs (Circuit Kilo Meters) in a decade time, which added 7.25% additional power transmission capacity installed up to 2014 in the country.
- 45+ more projects (1610 CKMs) are being added in the above list by 31st March 2024.



Innovation - methods

- Live power line crossings incl. EHV lines
- Live railway line crossings
- Live working in upper Himalayan region & western ghats
- Live working in most difficult terrains & congested city limits
- Live working in limited time slot (1.5 hours) for central railway project
- Live working in sea/ ocean/ back-waters
- Live working in dense forest amid wildlife
- Live working in border and disturbed areas

Our trajectory with conventional EPC



220 KV D/C Twin Bajoli to Holi

17.826 Km

was the line length

59

number of towers

220.059 Km

Conductor quantity

19 Km

OPGW length



400 KV D/C Twin Lahal to Chamera

35.307 Km

was the line length

112

number of towers

444.067 Km

Conductor quantity

38.62 Km

OPGW/ EW length



Terrain: Hilly

Scope: EPC/ turnkey project (complete package) comprising of:

- survey (check & detailed);
- design (development of structural drawings and fabrication shop drawings along with foundations);
- engineering;
- manufacturing;
- testing (incl. tower testing);
- supply;
- civil works;
- erection of towers;
- stringing;
- sagging & commissioning of tower materials (lattice structures, stubs, template, extensions, bolts & nuts, accessories);
- earthing;
- ACSR moose conductor;
- OPGW and their associated hardware fittings & accessories and insulators.



APAR's offering:

- EPC works with T&D traditional conductors
- Reconductoring with HTLS in transmission systems
- Augmentation of substation (EHV/ HV)
- Reconductoring with HTLS/ MVCC in distribution systems
- Installation of OPGW/ ADSS and associated hardware
- Integration of OPGW with telecommunication equipment for reliable communication

800 CKM with ACCC® in 7.5 months created 'World Record'



BSPTCL Completes 22 ACCC® Reconductor Projects in a "World Record" 7.5 Months

ctcglobal.com/bsptcl-completes-22-acc-reconductor-projects-in-a-world-record-7-5-months/

May 2, 2023



With heroic leadership from ACCC® Conductor supplier and EPC firm Apar Industries, Bihar State Power Transmission Company Ltd. (BSPTCL) completed an incredible 22 ACCC® Conductor installations in a record 7.5 months, ~20 days ahead of a tight schedule.

With the clock starting on the project award date of August 2, 2022, and a completion deadline of March 31, 2023 – Apar assembled and managed nearly 1,200 crew members spread over two dozen teams using an impressive amount of equipment, supplies, and resources.

Apar's highly experienced crews and ACCC Master Installers installed more than 2,450 kilometers of ACCC® Conductor on BSPTCL's 22 reconductoring projects. These projects included 20 major river crossings, 27 railway crossings, 48 major highway crossings and 1,597 crossings traversing other T&D lines ranging from 11 kV to 765 kV – all without incident or shutdowns – often during adverse weather conditions.

While BSPTCL selected Casablanca and Drake size ACCC® Conductor manufactured by Apar Industries with a portion ordered through Gupta Power – with ACCC® Core supplied quickly by CTC Global's California and Indonesia production facilities – CTC Global also manufactured and shipped its stainless-steel internal hardware components for 12,000 ACCC® dead ends and splices supplied to Apar for these projects by the TAG corporation.

Source: <https://ctcglobal.com/bsptcl-completes-22-acc-reconductor-projects-in-a-world-record-7-5-months/>



b) Products innovations in Oil business:

India's largest engineering company prefers POWEROIL® Transformer Oil

The exceptional performance of POWEROIL® Transformer Oil has won numerous approvals and the hearts of the users globally seeking custom-made solutions.

An esteemed 85-year-old Indian multinational company required a specific high-grade insulating dielectric fluid with precise technical requirements and low gassing tendencies for their instrument transformers and bushings - a crucial electrical equipment in the power transmission and distribution network.

Our dedicated R&D team formulated a unique blend of POWEROIL® Transformer Oil that offers less than +5ppm gassing tendency. During a thorough analysis of technical parameters POWEROIL® outperformed every expectation.

By consistently exceeding every expectation, we continue to solidify our position as a leading player in the transformer oil industry.

APAR's petroleum jelly production touches record high

FY 2022-23 marked a significant milestone for us as we achieved the highest recorded total production of Petroleum Jelly at our Rabale plant in Mumbai, reaching 5900+ metric tons.

This remarkable achievement was driven by the increasing trust and demand from our international clients, with 82% of the production being exported. This record-breaking export volume is a testament to the growing recognition and preference for POWEROIL® Petroleum Jelly worldwide. Our customers trust our products and rely on us for timely delivery. The

optimal utilization of resources at our factory level has played a crucial role in meeting the increasing orders.

Our complete range of petroleum jellies meets the performance and compliance requirements of the Indian Pharmacopoeia (IP) and holds certifications from HALAL and KOSHER. We also offer special zero-odour grades of petroleum jelly that meet the standards of USP, EP, BP and US FDA 21 CFR 172.880.

We look forward to continuing our growth trajectory across-the-board for petroleum jelly.



Field trails of biodegradable Transformer Oil

APAR's POWEROIL range of products has a range of specially formulated transformer oils that are environment friendly, having excellent cooling characteristics, higher oxidation stability, lower gassing tendencies and stable insulating properties over its useful life. These are natural ester-based transformer oils that are formulated from plant-based feedstocks, having very low embedded carbon (as compared to mineral oil-based feedstock) and biodegradable. NE premium field trials are taking place in free breathing transformers. Once these trials are completed there is an opportunity to seamlessly retrofit the existing installed transformer base with this bio-degradable transformer oil. In addition, field trails are in progress in higher rated 132 KV transformers with larger grid operator for obtaining approval for POWEROIL NE PREMIUM.

APAR's white oils gains prominence in Europe

In FY23, APAR's White Oils Pearl Series was approved by one of Europe's leading cosmetic companies, achieved through thorough evaluations, inspections and quality analyses.

The approval is a significant milestone for us, as it will result in a remarkable 400% increase in the sales of our white oil in the European region.

Even amidst the challenges posed by global shipping issues during the COVID-19 pandemic, we have been able to maintain orders of bulk supplies, impeccable packaging and on-time deliveries. This dedication has been acknowledged by our European patrons, who expressed their appreciation and satisfaction with our services.

This achievement furthers our position as a reliable and preferred supplier in the white oil market. Moving forward, we remain dedicated to innovation, quality and customer satisfaction, while continuing to spread our reach in the European region and beyond.

Other developments in Oil business:

Developed the following:

- nanofluids for engine oil applications in forklifts. It extends the life of the engine oil by 25% as compared to the conventional mineral oil-based engine oils of similar performance grade.
- specialty process oils for battery separator (membrane) applications for a major global customer and obtained approvals after extensive field trials.
- white oils for spray oil applications in horticultural applications and obtained approvals from Japanese/ Latin America customers and executing bulk orders.
- metallic and non metallic anti seize compounds for applications up to 1100 degree centigrade for rust protection in industrial bolts and sealant applications in chemical/ thermal and manufacturing environments.
- in-house methods for moisturizing test methods and UV stability tests for product performance.
- in- house product range for hand sanitization/ hand wash/ floor cleaning products during Covid for protecting and supplying to all manufacturing facilities and offices of APAR.
- high temperature chain lubricant POWEROIL HTCO
- water based rust preventive POWEROIL AQUA 3050 for metal tube industry for improved storage protection and minimized cleaning applications. Developed range of rust preventive products with lower evaporation loss and improved acid fume resistance and salt spray performance and lower VOC emissions.
- environmentally improved refining process for key additive components which save huge amount of water consumption, minimizes oil loss and processing time.

Others innovations:

- Computational Fluid Dynamics (CFD) studies for mapping the thermal and flow behavior of transformer oils of different designs and flow patterns in collaboration with Dharmsinh Desai University
- Development of single phase immersion coolants for server and data center cooling applications
- Development and introduction of lubricants for EV
- Battery cooling management for improving the thermal management systems etc.



c) Products innovations in Cable business:

Driving renewable energy and infrastructure development Worldwide

As India's largest exporter of specialized cables and wires, we contribute to a greener horizon by providing top-notch cables that meet the evolving needs of the renewable sector and infrastructure development.

APAR Industries offers a selection of solar cables, windmill cables and utility cables, built to last, with a lifespan exceeding 25 years. Our range meets stern global requirements and is equipped with features such as zero transmission loss and fire-retardant properties, ensuring uninterrupted power transmission in all scenarios. We also offer sustainable infrastructure solutions, with a wide variety of HT, LT XLPE and Medium Voltage covered conductors for overhead power lines.

Customers choose our cables for their superior quality and adherence to safety standards, incorporating high end hazard-free polyolefin polymer alloy insulation and advanced electron beam technology to ensure their exceptional performance and reliability



Supporting make in India's electric vehicles and EV chargers

Our latest additions to cable solutions are automotive wires and wiring harnesses. The launch of these cutting-edge, next-generation products positions us as the first Indian cable manufacturer to venture into the EV segment, supporting the "Make in India" initiative.

In response to the unique challenges of the EV segment, our dedicated R&D team studied the component specifications and assembly drawings for EV passenger vehicles and custom-made the cables and harness solutions to meet the exact OEM manufacturer's needs. With our pledge of sustainability, APAR is contributing to the revolutionary Indian EV market. All our products are manufactured at our state-of-the-art, IATF-certified cables facility in Khatlawa, Gujarat.

Special cables for Indian defence

APAR Industries has established itself as a trusted partner to major naval and private shipyards in India. We meet the rigorous demands of the Indian Army and Navy, by supplying specialized cables such as OFC cables, tactical cables, submarine cables, torpedo cables and more.

Our cables play a critical role in strengthening and safeguarding Indian borders and coastlines. We understand the unique challenges faced by the defence sector. Thus, we design our products to be reliable and durable, specially to withstand extreme conditions, ensuring seamless communication, power transmission and data transfer in defence operations. We are committed to providing technologically advanced and reliable cable solutions that empower our armed forces.

Launched special FRP OFC cables (resist 750OC) for critical infrastructure projects

APAR has crafted and launched special non-metallic 12F/48F/72F Triple Sheath FRP Armoured Fibre Optic Cables, which have remarkable heat resistances of up to 750°C for a duration of 120 minutes. What sets this cable apart is its exceptional fire survival capabilities achieved without the use of any metallic elements.

This cutting-edge non-metallic design ensures that the cable remains intact and fully functional during fire incidents, enabling critical communication and data transmission even in the most challenging conditions. The use of FRP (Fibre Reinforced Polymer) for armouring makes these cables lighter and still provides improved strength and protection, ensuring the cable's durability and reliability in extreme environments.

Thus, we are enabling industries to prioritise safety without compromising on performance. They are ideal for applications where fire survival and reliable communication are paramount, such as in critical infrastructure, transportation and hazardous environments.

APAR's Excellence in Rolling Stock Cables

72% market share in Indian Rolling stock – achieved by way of in-house production capacity.

Manufacturing, testing and supplying cables/ cable harness for 150 coaches/ 50 Locos every month.

98% cables used in Vande Bharat trains are "APAR".

Over three lakh kilometers of cables in assorted sizes manufactured, tested and supplied to Indian locomotive manufacturing units in 3 years.

Research & Development

We have state of the art laboratory, in each businesses, with more than 2000+ testing scope as per various national & international standards. All our laboratories are accreditation by NABL (National Accredited Board for Laboratories) as per ISO 17025:2017.



State-of-the-art laboratory: Cable business

Cable business: Our Cable business laboratories are equipped with state-of-art Brabender extruder and mixture to design cable compounds as per customer requirement. We have testing facilities as per all international and Indian standards. Our speciality is that we test our cables as per the environment which it would face during the final application stage.

Mechanical Tests

- Tensile strength
- Elongation properties
- Abrasion resistance
- Bending test
- Cable flexibility
- Heat shock
- High temperature ageing
- Air bomb ageing
- Other mechanical tests

Fire Resistance Tests

- VW-1 Flame test
- Bunch cable fire test/ FT-4 test
- Oxygen index
- Smoke density Index
- CWZ fire test
- Other fire tests

Environmental Tests

- UV resistance
- Torsion test
- Low temperature torsion test
- Low temperature bending
- Fluid migration test
- Ozone resistance
- Oil resistance
- Hot water resistance
- Other environmental tests

Electrical Test

- HV test
 - IR test
 - Spark test
 - Dielectric constant
 - DC resistance
 - CR test
 - Other electrical tests
- OFC cable attenuation test*



1 OFC cable attenuation test

2 Smoke Density test for cable

3 Oxygen Index test for power cable

4 Fire survival test

Conductor business: Our Conductor business's laboratory is equipped with state-of-the-art test equipment and facilities complying international standards and approved by Government of India, providing accurate and reliable results with global quality. The laboratory is specialized in physical, electrical, mechanical and chemical testing on overhead bare aluminum conductors and its constituent components including various type testing on HTLS/ OPGW/ HPC and cables.



State-of-the-art laboratory at APAR's Conductor plant



Sheave test: Automatic controlled Sheave test setup with multiple sheaves to assess the performance of HTLS conductors simulating worst stringing conditions.



Creep test setup: Equipped to perform four tests at the same time at different stress, laser sensor extensometers for accurate strain measurement connected with master data logger for continuous storage of temperature and creep readings to insure utmost accuracy.



Torsional Ductility Setup: Automated torsional ductility setup to assess the ability of conductor to withstand the torsional forces during installation.

Test facilities in Conductor business



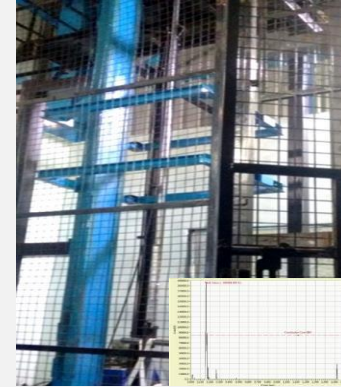
Computerized Horizontal Tensile Test Bed of 75 Ton capacity for complete conductor test at room temperature & at high temperature with automated tension loading rate.

Highly sophisticated laser sensors for displacement measurement with multi-channel measured-value acquisition systems for load, displacement & temperature.

Complete in-house facility for dead ends compression fittings and epoxy resin system.



Aeolian vibration test: Automatic computerized software controlled Aeolian Vibration test setup for verification of the mechanical integrity of the OPGW cable/ conductor and the supporting hardware when subjected to simulated vibration condition.



Axial Impact test: Software supported Axial Impact test equipment for evaluation of dynamic forces during impact on HTLS conductor.

Oil business: The R&D laboratories at our oil plants are well equipped with modern facilities providing support on product quality and providing innovative solutions to customers for over 500 types of products. The range of tests conducted and services provided include raw material characterization, bench marking, formulation optimization, safety and environmental impact evaluation, field trails and condition monitoring of lubricants.

Analytical facilities for base oil characterization

- carbon type
- simulated distillation
- Noack's volatility
- FTIR
- GC
- SIM GC
- HPLC
- ICP
- XRF
- UV spectrophotometer

Physico-chemical tests and other performance parameters to ensure raw material characterization and rationalization, formulation optimization as per customers' requirements and specifications/ standards

Biodegradability Tests

- as per OECD 301 B standards

Performance testing facilities as per ASTM, BIS, IEC

- oxidation test
- accelerated oxidation/ ageing tests
- Quenchometer
- auto titrator for Total Acid Number (TAN)
- Total Base Number (TBN)
- Karl fischer titrator for moisture content
- breakdown voltage
- Resistivity
- tan delta
- gassing tendency
- stray gassing/ DGA
- UV stability
- load bearing characteristics of lubricants
- corrosion tests etc.

Test facilities for the biodegradability of the products by OECD 301B & 301D are established.



State-of-the-art laboratory: Oil business



Certifications

Manufacturing Qualifications of ACCCC® Conductors



Cable business: NABL certificates



Oil business: NABL certificates



Conductor business: NABL certificates



APAR products validation by various International laboratories



Natural Capital

Natural Capital: Key Metrics

104,928 tCO₂e GHG emission22,717 tCO₂e Scope-1 emission82,212 tCO₂e Scope-2 emission

328,325 KL Water Footprint

57,649 KL Rain Water Harvesting

28,429 KL Water Re-cycled/ Re-used



208,808 MWh total energy consumed

4.45 million units solar electricity generated

4% Share of renewable in total electricity mix

Key highlights

- ISO 9001 and 14001 certifications in place at all the sites
- Scope-3 GHG emission computation done
- Both purchase and generation of renewable energy
- Improvement of energy efficiency through technology or equipment upgrades
- Measures to reduce energy consumption
- Use of waste heat recovery system(s)
- Reduction of internal wastes through material reuse, recovery or repurpose
- Regular noise measuring campaign
- On-site wastewater treatment facilities
- Water-stress assessment or mapping performed to identify exposure to water-related risks
- Water accounting performed
- Implementation of RWH (Rain Water Harvesting) system
- Formalized process in place to assess and document environmental risks
- Periodical analysis on the volumes of major air pollutants or ambient air quality monitoring (testing levels of PM, NO_x, SO₂, VOC or heavy metals)
- Provision of SDS (Safety Data Sheets)
- Registered with EPR (Extended Producer Responsibility) as Brand Owner

Linkage with SDGs



Environmental management

APAR nurtures a culture of conservation that emphasizes meticulous monitoring of use of resources and encourages innovations that aid in reducing the dependence on natural resources.

With the objective of reducing the environmental impact of our operations, we are working towards decreasing our energy consumption, increasing the use of renewable and clean energy, reducing emissions, lowering fresh water intake, enhancing rain water harvesting and limiting waste generation.

We are inspiring our supply chain partners by conducting regular sustainability awareness webinars for them and will continue to do the same.



Climate change

APAR recognizes that climate change is now an immediate reality; its effects are already being experienced worldwide. Over the past year, there have been alarming incidents like devastating wildfires, extreme floods, and record-breaking high temperatures on a global scale. In India, there has been an increasing frequency and severity of cyclones along coastal regions, wildfires in the state of Rajasthan, exceptional temperatures in northwestern and central states, floods and cloudbursts in the eastern and northern states, as well as unexpected droughts in several places. Unless we take measures to mitigate its effects, the next potential event of this nature might manifest as a climate change-induced catastrophe.

As a manufacturing enterprise, APAR produces broad range of products, incl. speciality oil, cables and conductors. The Capital Goods sector is not an emissions intensive sector from direct emissions (Scope-1) or indirect emissions from energy use (Scope-2). However, indirect emissions in the value chain (Scope-3) are key for this sector.

Towards this, we have started measuring our Scope-3 emissions from FY 2022-23 onwards for six key categories which are material to us. In addition, we maintain an ongoing collaboration with our supply chain partners to further investigate emission reduction possibilities.

We are also in discussion with leading scientific and engineering institutions in the country to find appropriate technological solutions like circularity in waste management.



Energy management

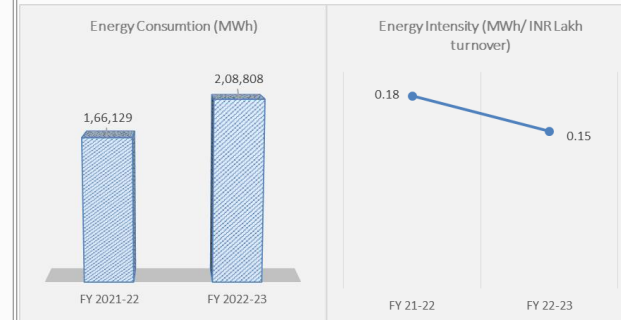
APAR has taken another significant step by carrying out a comprehensive energy audit at two of its Conductor facilities through leading consultants during FY 2022-23. This initiative was meant for improved energy efficiency, minimizing environmental impact by reducing energy consumption and emissions, optimizing equipment performance, enhancing workplace safety, enabling data-driven decision-making, and bolstering the plant's reputation as a responsible and sustainable entity, ultimately leading to long-term financial savings and operational resilience. As a result, **62 new projects were identified which had a potential to save 7,000 tCO₂e emission per year.** Implementation has already commenced for these newly identified projects. We will undertake similar energy audits at our other facilities during FY 2023-23.

Through our state-of-the-art in-house research & development facilities, and technology tie-ups, we manufacture products which are having lesser embedded carbon, and long life and lower emission over its life. Some examples are as follows:

- ACCC (Aluminium Conductor Composite Core) have higher current carrying capacity (CCC) compared to conventional ACSR (Aluminium Conductor Steel-Reinforced cable) or AAAC (All Aluminium Alloy Conductors), and thereby upgrade transmission networks with minimal infrastructural impact. These are more energy efficient for power transmission as they generally have lower resistance (lower I²R losses).
- APAR's POWEROIL NE/ POWEROIL NE PREMIUM has a range of specially formulated transformer oils that are environment friendly, having excellent cooling characteristics, higher oxidation stability, lower gassing tendencies and stable insulating properties over its useful life. These are natural ester-based transformer oils that are formulated from plant-based feedstocks, having very low embedded carbon (as compared to mineral oil-based feedstock) and biodegradable.

Through better management practices, we had closed one shift operation of our lubricating oil plant in Rabale without affecting the overall production volume. The plant is now operating in two shifts instead of three and production volume has gone up. This action has resulted in significant saving in energy consumption.

Industry 4.0 initiatives are initiated at our Cable facilities to improve productivity, thus reducing energy wastage. The initiative is ongoing and we expect to achieve higher specific energy savings in subsequent years



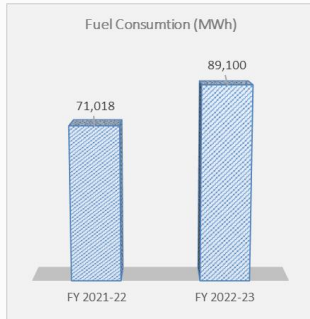
208,808 MWh was the energy consumed in FY 2022-23

0.15 MWh/ INR Lakh turnover was the energy intensity

The decrease in energy intensity was due to the various measures taken by APAR during FY 2022-23 which is elaborated later in this report.

Fuel consumption

We understand and acknowledge that the share of fossil-fuel based energy needs to come down substantially and overall energy consumption has to go down.



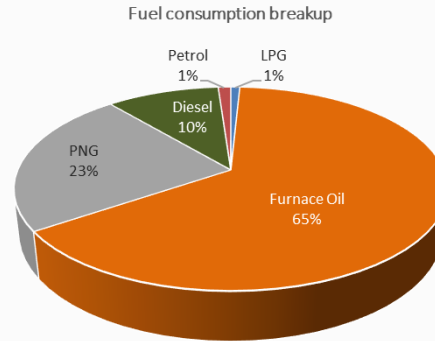
Our fuel consumption during the reporting year was 89,100 MWh.

The increase in consumption was due to increased production in all the businesses during FY 2022-23

(Production up by 2% in Oil, 22% in Cable & 33% in Conductor business).

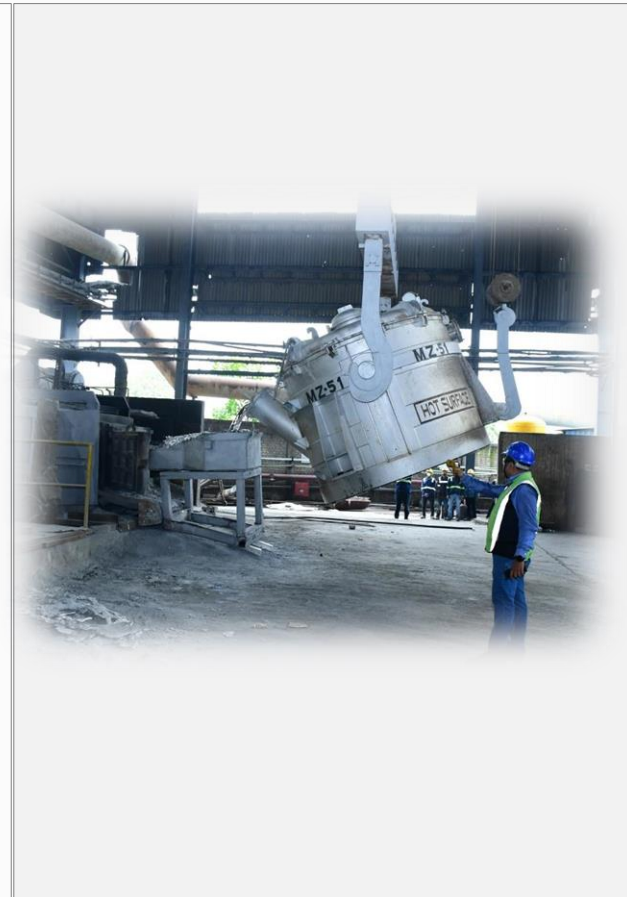
Fuel consumption intensity (Fuel consumed per Rs. of turnover) has gone down by 19% in FY 22-23 because of many initiatives taken by us which is elaborated later in this report.

Furnace Oil account for majority of fuel consumption due to melting of aluminium in furnaces at our Conductor plants.



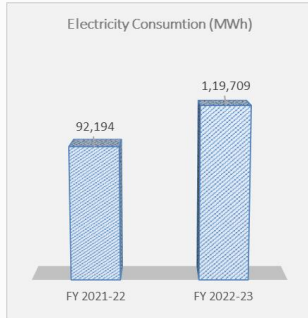
Towards this, we had set up our Sambalpur Conductor plant closer to the raw material sources thus reducing significant amount of energy requirement. This plant is situated next to aluminium smelters giving us the advantage of using liquid molten aluminium as direct raw material as against the industry practice of procuring aluminium ingots and then melting it before use.

We managed to transport molten aluminium through public road for a long distance of 30 Kilometers from our supplier to our Sambalpur Conductor plant. Details are provided under 'sustainable procurement' section.



Electricity consumption

The electricity is sourced primarily from the electricity grid, and there is a small element of roof-top solar in the energy mix.



Our electricity consumption during the reporting year was 119,709 MWh.

The increase in consumption was due to increased production in all the businesses during FY 2022-23

Many initiatives have been taken by APAR towards reduction of electricity consumption.

In addition, there is increased focus on increasing the mix. of renewable energy in the overall electricity mix.

Renewable energy

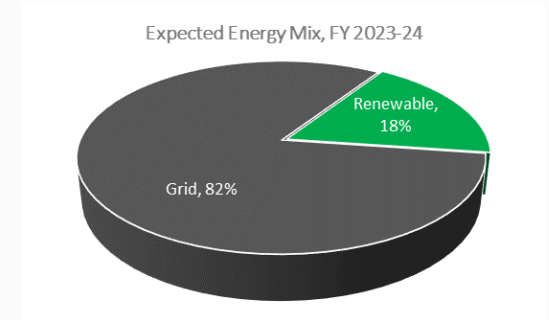
Many of our plants are situated in places with high solar radiation and high duration of availability of sunlight. We have installed roof-top solar plants at many of our facilities, and have generated 4.50 million units of solar electricity during FY 2022-23 at our various plants.



Roof-top solar at our Conductor plant in Orissa

Our current roof-top solar capacity is 5.14 MWp. Besides this, we had entered into a power purchase agreement under open-access mechanism (subsequently commissioned in June 2023) to procure wind-solar hybrid energy. The details are as follows:

- Comprise of 3.30 MW wind-turbine and 2.80 MWp solar energy
- Expected to generate approx. 15 million units annually, and help in GHG emission reduction of over 10,000 tCO₂e per year besides saving in direct cost
- With this, the share of renewable energy in the overall electricity mix will increase from 4% to 18%



In addition, we are also working on a second wind-solar hybrid project, which is planned to be commissioned by Q2, FY 2024-25. This will further enhance the share of renewable energy in the overall electricity mix to 30%.

Solar Roof Top capacity:	5.14 MWp
Wind-Solar Hybrid capacity:	2.80 MWp solar 3.30 MW wind-turbine

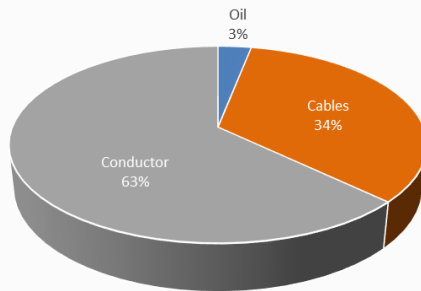
GHG emission

We have maintained a steadfast commitment to reducing our environmental impact by implementing a range of initiatives. We adhere to the GHG Protocol for the assessment of our greenhouse gas emissions.

We are actively assessing and managing our scope-1 and scope-2 emissions. Measurement of Scope-3 emission also started from FY 2022-23.

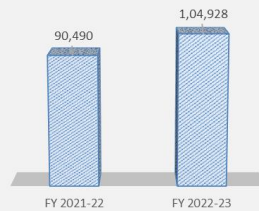
Total GHG emission during FY 2022-23 was 104,928 tCO₂e (Scope-1 and Scope-2).

Business wise GHG emission breakup

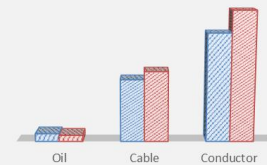


Conductor is having the biggest share in emission pie because it is the largest business at APAR in terms of sales turnover. Also conductor manufacturing is as an energy intensive process, primarily because of melting of metals using furnaces.

Absolute GHG emission (tCO₂e)



Business wise GHG emission (tCO₂e)



	Oil	Cable	Conductor
FY 2021-22	4,036	31,618	54,837
FY 2022-23	3,197	35,745	65,986

The increase in absolute GHG emission during FY 2022-23 was due to increased production in all the businesses during FY 2022-23

Change in emission vs. change in production:

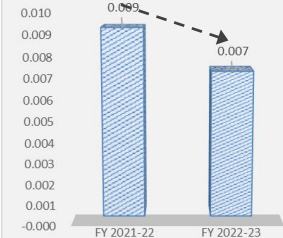
- Oil Business: production up by 2%, emission down by 21%
- Cable Business: production up by 22%, emission up by 13%
- Conductor Business: production up by 33%, emission up by 20%

GHG emission intensity

Although there was an increase in absolute GHG emission in FY 2022-23, but the GHG intensity per unit of production had come down.

It was possible through various GHG reduction initiatives taken at all of our plants (provided under the heading GHG reduction initiatives).

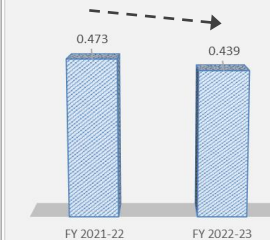
OIL Business:
GHG emission intensity (tCO₂e/ KL)



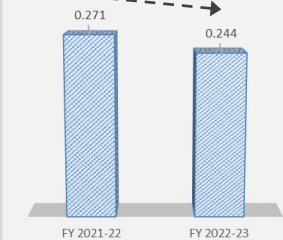
Drop in GHG Emission Intensities

- Oil Business: 23%
- Cable Business: 7%
- Conductor Business: 10%

CABLE Business:
GHG emission intensity (tCO₂e/ MT)



CONDUCTOR Business:
GHG emission intensity (tCO₂e/ MT)



GHG reduction initiatives

We had implemented several GHG reduction projects and many more are under implementation. These include:

OIL BUSINESS

- Replacement of diesel forklift with battery operated forklifts
- Replacement of CFL and MH lights with LED light fittings
- Installation of additional roof-top solar panels
- Pre heating of boiler infeed water for reduction in PNG consumption
- Flash steam recovery and reuse to heat boiler infeed water
- Improvement in blending process by introducing jet mixing
- Installation of TDS based auto blowdown in boiler

Key focus areas

Focus on electrification (shifting away from fossil-fuel based energy)	Increasing share of Renewable Energy (through roof-top solar & procurement of wind-solar hybrid energy)	Increasing productivity (e.g. initiation of Industry 4.0, six sigma etc.)
Reduce Electricity consumption (efficient utilities, machine efficiency etc.)	Identifying GHG reduction opportunities (e.g. through Energy audits)	Waste reduction & recycling (promote recycle & reuse of materials)

CABLE BUSINESS

- Provision of VFD on circulation pumps of cooling towers to reduce electricity consumption
- Renewable energy through wind-solar hybrid power plant under open access scheme
- Installation of roof-top solar energy generation
- Installation of AC drive in place of Star Delta starter for compressors
- Replacing electrical heating system of curing tank with direct steam heating system
- Increase of Line Speed for Solar & LDC HW
- Replacement of poor efficiency pumps with more efficient pumps
- Providing auto control On-Off for cooling fans with line start stops
- Replacement of Dual starter with VFD

CONDUCTOR BUSINESS

- Replacement of old transformers with OLTC type transformers
- Installation of ratio control device to control optimum oxy-fuel ratio in melting furnace
- Replacement of VFD with Star Delta for CCR regenerative burner air blowers
- Harmonics filter to filter out voltage spikes & current harmonics
- Increase aluminium scrap blending ratio
- Roughing mill installation
- Enhance productivity by enhancing motor capacity in finishing mill

We have measured the life cycle carbon footprint (cradle to gate) for some of our major products, particularly the ones with significant emission during the usage phase. The details are provided at our website, www.apar.com

In addition, we had engaged with the leading institutes for energy audits at our Conductor and Cable plants. As we write this report, approx. 72 GHG reduction projects have been identified, as a result of these detailed energy audits. The objective of energy audits were as follows:

- **Identify energy efficiency opportunities (GHG reduction projects)**
- Reduce energy costs
- Enhance sustainability – reduce environment impact of the manufacturing process
- Compliance with regulations
- Optimize equipment and systems
- Risk mitigation
- Benchmarking (industry benchmark & best practices)
- Long-term energy planning
- Monitoring and verification
- Safety and compliance

These projects have a potential to save approx. 8,500 tCO₂e GHG emissions per year.

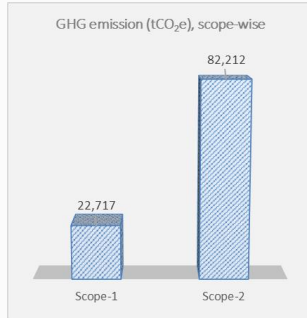
These projects are taken up for implementation during FY 2023-24.

GHG emission – scope wise

Total GHG emission during FY 2022-23 was 104,928 tCO₂e (Scope-1 and Scope-2).

78% of the emission was on account of scope-2 (purchased grid electricity).

We are addressing it by increasing the share of renewable electricity in our overall electricity mix.



In addition, we have started measuring our scope-3 emission from FY 2022-23. It was measured for following six categories which are material to us:

- Category-1: Purchased Goods & Services
- Category-3: Fuel & Energy Related Activities
- Category-4: Upstream Transportation & Distribution
- Category-5: Waste Generated in Operation
- Category-6: Business Travel
- Category-9: Downstream Transportation & Distribution

The scope-3 emission during the period was 47,04,710 tCO₂e.

Category-1 accounted for 81% emission due to high embedded carbon in our raw material, namely aluminium, copper and base oil.

We are regularly engaging with our supply chain partners through online webinars, questionnaires, audits and other modes of communication; and trying to rationalize our suppliers based on their readiness/ progress on sustainability. This will help us to reduce the embedded carbon in our raw material and will further provide/ maintain our competitive edge over our competitors.

We are also exploring alternate options to procure less carbon intensive raw materials, e.g., base oil for our speciality oil business, and aluminium and copper for our Conductor & Cables businesses.

GHG reduction target & status

APAR had set an ambitious target in FY 2020-21 of 15% reduction in GHG emission intensity over next 2 years, i.e. by FY 2022-23. The targets and current status are provided below:

Particulars	Period	Oil	Cable	Conductor	APAR
		tCO ₂ e/ KL	tCO ₂ e/ MT	tCO ₂ e/ MT	tCO ₂ e/ INR Cr. turnover
Baseline GHG Intensity	2020-21	0.018	0.527	0.255	14.57
Actual GHG Intensity	2022-23	0.007	0.439	0.244	7.31
Targetted reduction	2022-23	15%	15%	15%	15%
Actual achieved	2022-23	62%	17%	4%	50%

We have set GHG emission intensity reduction target of 10% for FY 2023-24 as compared to FY 2022-23.

Net Zero target

While we are aggressively taking all the necessary action to reduce our GHG emissions, we prefer to use GHG emission intensity metric which is practical to forecast, is aligned with our business objectives, and can be measured and reported regularly.

The net-zero target will depend on several factors not in our control, including (a) carbon emission factor of Indian grids (b) availability and affordability of greener fuels etc. With our efforts and external factors becoming favorable over a period of time, we expect to achieve Net Zero Carbon status within a reasonable time.

Science based target initiative

We will set an ambitious climate action plan as per SBTi (<https://sciencebasedtargets.org/>) in near future to set our course towards Paris Agreement goals

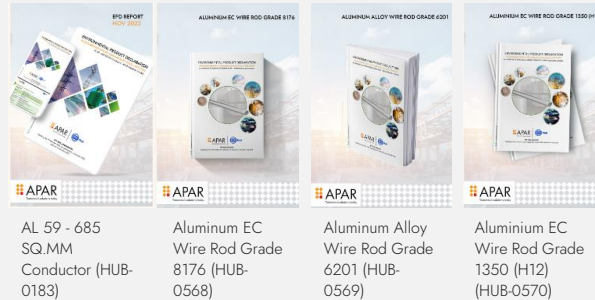
Environment Product Declaration (EPD)

APAR is the world's largest Aluminium & Alloy Conductor manufacturer. With the growing global environmental issues, we have taken an initiative to address carbon emissions of our conductors compared to global standards. Accordingly, we have successfully developed and published the Environmental Product Declaration (EPD) on EPD HUB for our various products as follows:

- AL 59 - 685 SQ.MM Conductor (HUB-0183):
<https://manage.epdhub.com/> and search for 'HUB-0183'
- Aluminum EC Wire Rod Grade 8176 (HUB-0568):
<https://manage.epdhub.com/> and search for 'HUB-0568'
- Aluminum Alloy Wire Rod Grade 6201 (HUB-0569):
<https://manage.epdhub.com/> and search for 'HUB-0569'
- Aluminium EC Wire Rod Grade 1350 (H12) (HUB-0570):
<https://manage.epdhub.com/> and search for 'HUB-0570'

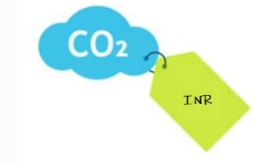
These reports are verified by independent external verifier, publicly available at the above link, and covers carbon footprint computation, verification, validation and certification over its lifetime (Cradle to Gate) as per EN 15804+A2:2019 & ISO 14025 standards.

APAR is the first Indian company to release the Environment Product Declaration and Certification (EPD) for AL59 conductors.



Internal carbon pricing

We are fully committed to reducing our intensity as a part of journey towards net-zero. As of now, we have enough projects which does not warrant application of ICP (Internal Carbon Price) in determining viability of those projects. For calculation purpose based on data analysis, **we proposed and got an approval from the top management for an internal price of USD 15 (INR 1200) per tCO₂e**. We will start using this in next couple of years once we run out of commercially viable carbon reduction projects (we are using MACC for project selection).



In the interim, we are calculating the savings based on USD 15 (INR 1200) per tCO₂e saved and utilizing the same for our water footprint reduction projects (to ensure water security at all our plant locations as well as for the local communities) which are otherwise commercially not feasible using standard payback periods in the computations.

Water footprint

We manage our water responsibly, including water withdrawal and discharge, and seek continuous improvements in water management through the principles of 3Rs. As a result, the water footprint intensity has gone down from 24.40 KL/ Rs. Cr. turnover in FY 2021-22 to 22.88 KL/ Rs. Cr. turnover in FY 2022-23.

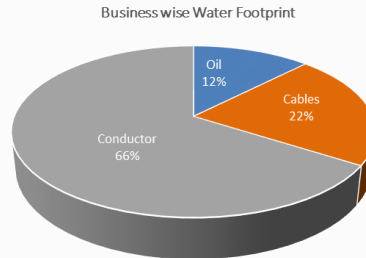


328,325 KL Water Footprint

57,649 KL Rain Water Harvesting

28,429 KL Water Re-cycled/ Re-used

The water footprint during FY 21-22 was 328,325 KL.



Conductor business is having the biggest share in water pie because it is the largest business at APAR in terms of sales turnover.

Water Footprint reduction initiatives @ APAR

- Reduction of water consumption**
 installation of water flow meters, water conservation awareness training to all the employees, identification & implementation of water reduction projects
- Increasing re-cycling of water through ETP/ STP**
 Re-cycle & reuse of treated water from ETP and STP plants for water conservation and reducing the overall environmental impact.
- Augmenting the RWH (Rain Water Harvesting) facilities**
 APAR had done substantial investments in RWH facilities at its Khatalwada Cable plant. The current RWH capacity at Khatalwada plant is 72000 KL per year.

As water is free in the country, water reduction projects are economically not feasible. To tackle this, we are using the monetary savings due to GHG emission reduction to finance our water footprint reduction projects.

An Internal Carbon Price (ICP) of USD 15 (INR 1200) per ton equivalent of GHG saved is applied to fund the water footprint reduction projects, which otherwise are not viable. This will ensure water security at all our plant locations as well as for the local communities) which are commercially not feasible using standard payback periods in the computations.



Save Water

Rain Water Harvesting

APAR has created rainwater harvesting potential through extensive investments in its Rain Water Harvesting (RWH) initiatives. We had completed hydrological & topological studies of our plants through a leading consultant for water conservation through aquifer recharge. It included:

- Preparation of watershed map
- Estimation of underground water level, pressure, quality & quantity
- Water flow intensity computation through pores or fractures etc.
- Evaluation of water bearing levels of rocks and their capabilities for filtration
- Assessment of intrinsic ability of the rock to either store or resist water

Facility for RWH up to 72000 KL per year, through aquifer recharge, is already implemented at our Khatalwada plant.

57,649 KL rain water harvesting was achieved during FY 2022-23.

Net Water Neutral: A detailed roadmap is being drawn to make our Khatalwada Cable plant water neutral by FY 2024-25.

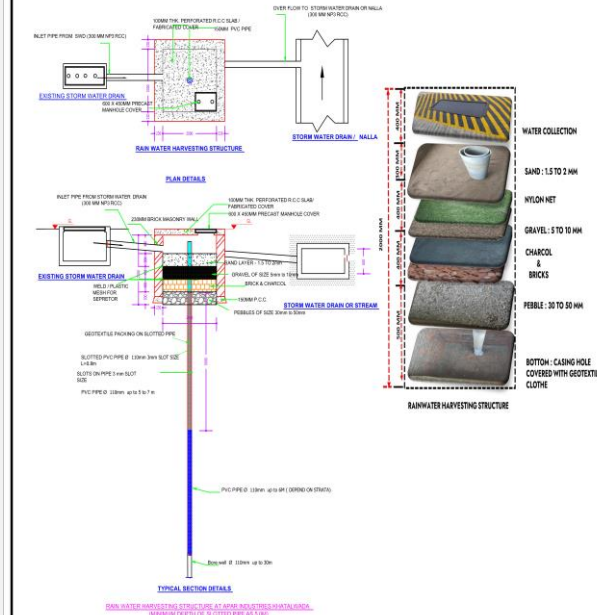


RWH facility at Khatalwada Cable plant

The RWH facility at our Khatalwada Cable plant not only ensures water security for APAR but also contributes to maintaining a healthy water table in the surrounding area, benefiting both our company and the neighbouring communities.



RAIN WATER HARVESTING STRUCTURE



Zero Liquid Discharge

We ensure that our plants do not discharge any liquid effluent into surface waters, in effect completely eliminating the environmental pollution. We are committed to make effective use of wastewater treatment, recycling, and reuse, thereby contributing to water conservation through reduced intake of fresh water.



Wastewater

Maintaining **Zero Liquid Discharge**

Water Footprint reduction target

APAR has set a target of water footprint intensity reduction of 12% in FY 2023-24 as compared with that of FY 2022-23.

Waste management

Solid waste inventory is prepared for all the plants, and we manage and minimize waste through the 3R principle of reduce, reuse and recycle.

Our main finished products are Cables, Conductors and Speciality Oil. The Cables & Conductors typically have a long life of 30+ years, and most of the material are recyclable and the users do the recycling to get value out of the material. In case of Oil, we ensure long life of oil through product innovation. However, used-oil finds its way to the unorganized sector where it is burnt in an uncontrolled manner for its inherent calorific value which causes the attendant emissions. Ministry of Environment, Forest and Climate Change has issued a draft notification for re-refining of used-oil. We expect that over next few years, the infrastructure and required regulation will ensure adequate collection of used-oil for re-refining.

Following initiatives are implemented and practiced at APAR:

Waste reduction: We manage waste reduction through implementation of various quality improvement processes, upgradation of the plants, regular trainings, six sigma implementation, and process monitoring.

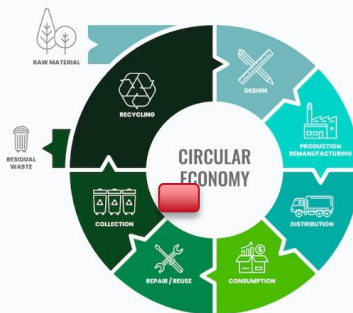
Waste disposal: We ensure compliance with the Plastic Waste Management (PWM) Rules 2016, and follow the Extended Producer Responsibility (EPR) regulation to manage the downstream operations' plastic packaging waste, and these are recycled through a certified recycler.

E-Waste: We have tie-ups with certified e-waste recyclers who specialize in safely dismantling and processing electronic devices. The recyclers extract valuable materials such as metals, plastics, and glass, which can be reused in the manufacturing of new products.

Hazardous Waste: We are constantly exploring to reduce the amount of hazardous waste. All such waste is strictly kept under the limits prescribed in the CTO (Consent to Operate) of respective plant locations. The waste is provided to Govt. approved vendors for proper treatment.

Waste recycle & re-use:

- Our conductor division re-cycles 100% aluminium waste. 100% of the plain copper scrap is directly recycled by the company, and the finned copper scrap is sold to authorized recyclers for further processing, in our Cable division.
- The waste of GI wire/ aluminium wire or strip which is used as an armouring material for the cable, is directly used as a re-manufacturing armouring material for the new cable.
- The waste of copper tape which is used as a screening material for the MV/ HV cables is used as a re-manufacturing material for the new cable.
- PTFE additives and PTFE grease – PTFE pre-sintered scrap is converted into low molecular type PTFE additives by molecular scissoring using in-house E-beam and ultrahigh speed pulverisers. The PTFE micronized powders are used as additives in ink and resin industry and in grease applications for improving anti blocking and extreme pressure additives respectively.



Circularity

Steps taken for circularity:

- Started using Re-Refined Base-Oil (RRBO):** used-base-oil undergoes an extensive re-refining process to remove contaminants to produce a good-as-new base oil.
 - Using re-used IBC's (Intermediate Bulk Container) for our oils business
 - Enhanced re-cycling:** of Aluminium and Copper wastes
- Total 2.8% of recycled or reused input material (by value) was used in production during FY 2022-23.**

- Waste as input material in manufacturing process:** e.g. buying Copper scrap for input to manufacturing processes.

We are also exploring opportunity to put up aluminium and copper scrap processing unit at one of our plants.

- Extended product life:** APAR is the first Indian company to manufacture E-beam (HR FR EBXL) wires. These are provided with highly improved insulation, incl. cross linking by electron beam radiation, which causes our cables to have extended life span, thereby future-proofing houses with 'fix and forget' for 50 years period (up to approx. 2 times of normal cable).

- Reuse of packaging drums: Over 16,000 steel drums were re-used for the packing of finished goods (cables & conductors)
- Substitute of wooden lagging: Over 115,000 nos. of PP sheets were used in place of wooden lagging for covering the finished goods (cables & conductors)
- Use of re-furbished pinewood pallet for exports: 24,000 re-furbished pinewood pallets (100%) used for export in our Oil business.

Reduce wood use

We have replaced the packaging wooden drum/ reels with steel/ hybrid (made of steel frame & PP sheet) drums/ reels. These are re-used 6-7 times, before being sold as MS scrap for further rec-cycling.



However, wherever logistic safety is concerned, the wooden leggings are provided.

In addition, we have converted two ageing furnaces which were using wood for firing to electrical heating furnaces. It has resulted in

- Reduction of GHG emission by 700 tCO₂e per year;
- Saving of over 500 MT of wood every year;
- Increase in material ageing capacity from 150°C to 250°C; and
- Reduction in ageing cost/ ton.



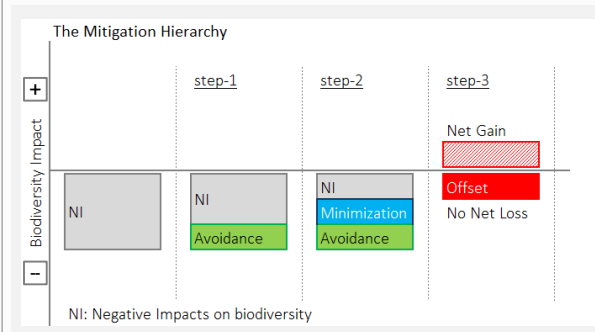
Biodiversity

All our plant locations are outside the buffer areas and eco-sensitive zones notified around biodiversity hotspots. This includes wildlife sanctuary, national park and world heritage sites declared under applicable regulations or international treaties ratified by India.

APAR had been actively contributing to Sri Chaitanya Seva Trust and Govardhan Eco Village (Palghar, Maharashtra) for horticulture, floriculture, organic farming, tree plantation, water conservation, propagation of desi breeds of cow, geographical indexing (GI) for Wada Kolam rice which is indigenous seed & local characteristic of Wada block of Palghar district etc.

We have implemented Biodiversity policy at APAR, which outlines our plans and commitments in this regard. It includes our plan to work towards achieving minimum NNL (No Net Loss) of biodiversity across our plants.

Govardhan Eco Village, Palghar (Maharashtra)



APAR, along with the Dharmsinh Desai Foundation has been actively contributing to Sri Chaitanya Seva Trust and Govardhan Eco Village (Palghar, Maharashtra). The following activities, among others, are being conducted:

- Horticulture, Floriculture, Organic farming, Tree Plantation, Rain Water Harvesting), Propagation of desi breeds of cow, Geographical indexing (GI) for Wada Kolam rice which is indigenous seed & local characteristic of Wada block of Palghar district

There has been a signification greening of the area and various bird species have started migrating there.



Commitment to work towards **No Net Loss** of biodiversity at our operating plants

Human Capital

Human Capital: Key Metrics (FY 2022-23)



1,659 Employees

432 New hiring (incl. 49 women employees)

8.26% Women employees (up by 2.10%)



8.6% Attrition

2,189 Man-days of training (up by 37%)

47 APAR value workshops

21 Leadership & team building programs

8 HiPo Identification & Dev. Program



1.59 LTIFR (Lost Time Injury Frequency Rate)

Key highlights

- ISO 45001 certificate in place at all sites
- Improvement in gender diversity due to increased focus
- Provision of crèche facilities
- Specialized training for women employees
- Implementation of POSH policy
- Grievance mechanism on discrimination and/or harassment issues
- Compensation for extra working hours
- Communication with employees through internal monthly newsletter
- Employee satisfaction survey
- Transparent recruitment process
- Internal Job Posting
- Annual assessment of individual performance
- Identification of HiPo
- Maternity & Paternity leaves
- Flexible organization of work (e.g. remote work, flexi-time)
- Regular employee health check-up
- Health care coverage of employees in place
- Training of employees on various social policies

Linkage with SDGs



Key focus areas



Employee care



Exercising rights



Equal opportunities



No child labour



Work life balance



Facilities for well being



Safe work environment



Continuous skill improvement



Support in pandemic



Promote diversity

Reward & Recognition

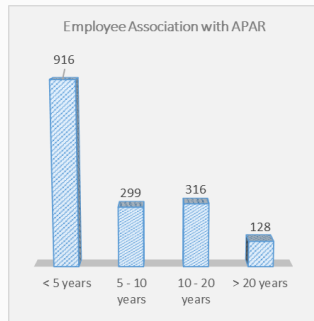
Employee care

Our people are the key to our growth. One of our fundamental beliefs is that a group of passionate and empowered individuals can accomplish absolutely everything.

APAR's corporate philosophy is to encourage practice "to do what is right as a human being". It nurtures a cohesive team culture that inspires employees to actively participate in all organizational development initiatives with no limitation of opportunities which makes APAR an exhilarating place to be in.

With the intent of connecting people for fostering and building people interaction, APAR encourages employees to undertake fun-at-work initiatives also, so that they enjoy a sense of bonding within the company. At the same time safety and health of employees is extremely important to the Company.

45% of our employees are working with us for more than 5 years. This is evidence of employee care being a priority for APAR since the very beginning. The Company believes that employees are one of its main pillars and appreciates their contribution towards the organization.



45% employees (743 out of 1659), have been working with APAR for over five (5) years

APAR always respects the right to freedom of association, participation, collective bargaining, and provide access to appropriate grievance redressal mechanisms.

Our employment policies provide and maintain equal opportunities of employment. At APAR, we want the best talent for the job. **Socio-economic background, race, caste, religion, ancestry, marital status, sex, age, nationality and disability have never been, and will never be a deciding factor for employment.**

Our corporate & factory locations have not any child labor, forced labor or any form of involuntary labour, paid or unpaid.

Our priority is to provide a work environment that is safe, hygienic, humane, and which upholds the dignity of the employees; so that employees feel safe and secure in discharging their responsibilities.



Benefits to employees

APAR offers certain benefits to its employees besides wages, which include :

- Long term service award
- Benevolent fund for employees
- Education assistance
- Advance loan
- Home loan interest subsidy
- Canteen & subsidies food facility
- Employee wedding (premium car rental) policy
- Mediclaim for employee & family members & GPA for employees
- Annual medical checkup & hospital assistance
- Maternity & paternity leaves
- Ambulance service @ home
- Free bus facility
- Flexi working hours
- Hybrid model of work from home & work from office

Addition to employee benefits during FY 2022-23

- Enhanced health insurance coverage
- Introduction of paternity leaves
- Amendment on leave policy (leaves allowed even during probation; removal of sandwiched leaves)
- Introduction of Internal Job Posting (IJP) policy
- Counselling facility for employee wellness
- Introduction of several other policies – e.g., policy on employee H&S, working condition, human rights, child & forced labour, DEI (Diversity, Equity and Inclusion) policy, re-hire policy etc.

Employee health check-up program

"Prevention is better than cure" – It is the responsibility of not only the employee but also the company to ensure its employees' Health & Safety.

Investigation list

- Routine tests: General clinical examination
- Blood tests (CBC, sugar testing, HbA1C)
- Liver profile tests
- Lipid profile tests
- Kidney profile tests
- Thyroid function tests
- PSA: Prostate Specific Antigen (prostate screening for men aged over 40)
- PAP smear (cervical screening for women) & gynecological consultation
- Radiology investigation
- Special cardiac evaluation
- Vitamins D & Vitamin B12
- Consultations

APAR had rolled out executive health checkup program, and had tied up with a leading wellness center.

It has capabilities to deliver this program across all locations of India, covering all metros and tier I/II cities.

APAR Wellness Program : Counselling Facility

Taking care of our emotional balance and mental peace is an essential part of our overall health and well-being. In the post Covid world, mental wellness has gained utmost importance along with physical fitness. This is a cause which most of the progressive companies are championing today to instill resilience among the employees. **APAR has introduced counselling sessions as part of employee wellness initiatives and had engaged a qualified, trained and highly experienced psychological counsellor.**

APAR employees co-operative credit society

- Founded by late Dr. Narendra D Desai for APARians in 1995
- Objective was to drive the culture of savings within all employees in the form of monthly contribution and support APARians with financial assistance in time of crisis
- 264 members are part of this co-operative society
- Introduction of new members during AGM
- Monthly contribution by employees to be minimum Rs. 1,000/-
- Member employee can earn an annual interest of Rs. 6% p.a.
- In case of requirement of financial assistance (for house loans, medical emergencies, marriage & children's education) members can take a loan up to five times the accumulated savings, subject to maximum Rs .400,000/-
- This loan is disbursed at a fixed interest rate of 6% p.a., within 2 days
- **A sum of Rs. 1,61,30,000 was disbursed during FY 2022-23 to the requested members requiring financial assistance**



Employee engagement

APAR has a remarkable track record of long tenures and minimal attrition at all levels. Throughout the year, we organized several impactful employee engagement events that fostered a sense of belonging and enthusiasm among our workforces

We engage with our people through direct interactions, feedback, newsletter, e-mails, employee engagement surveys, open forum and exit interviews.

Employee engagement activities

- Reward & recognitions
- Long Service Award
- Farewell ceremony for our valued employees
- Celebration of festival, cultural & sports events
- APAR town hall
- APAR internal newsletter – 'Engage'
- Birthday & marriage gifts
- Employee engagement survey
- International women's day celebration
- Senior leadership conclave, etc.

Suggestion scheme award:

216 APARians received special recognition for their outstanding contribution and suggestion. The Primary objective of the suggestion scheme is to inculcate a value and culture of looking for continuous improvement in our every day working.

Rewards & recognition

APAR encourages the recognition of excellent performance and achievement through the use of rewards and recognition that are meaningful to reinforce the behaviors of collaboration, accountability and build a growth mindset and employee engagement.

Rewards & Recognitions @ APAR

- APAR Spot Recognition Award
- APAR Employee of the Month
- APAR Employee of the Quarter
- APAR Star Performer/ Employee of the year
- APAR Innovative Idea/ Suggestion & Implementation Award



Long term service award (Aabhar Pradarshan)

Recognizing and acknowledging our employees for their commitment and accomplishments is deeply ingrained in our company's ethos. At APAR, we highly value and appreciate the dedication of our long-serving employees. To show our gratitude, we have established a tradition of presenting long service awards to commemorate their achievements. These awards are bestowed upon employees who reach significant milestones in their tenures, such as 5, 10, 15, 20, and 25 years of service, as a heartfelt gesture of appreciation and recognition for their enduring contributions.

We have employees who have been with us for 10, 20, 30 and even beyond 40 years. For many employees, APAR is their first and their last job.

Service Duration	Letter of Appreciation	Trophy	Monetary Award *
5 years	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
10 years	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
15 years	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
20 years	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
25 years	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

* Monetary award keeps on increasing with the duration of service.



Sports activities @ APAR

APAR Premier League: Cricket is not just a sport but a feeling that is deep rooted within all of us. This spirit of cricket was at it's peak as we celebrated APAR Premier League (season 3) in Feb 2023 at lush green cricket fields of beautiful Sagar Sports Club Cricket Grounds, Nargol, Umbergoan. The highlights were as follows:

- The event saw a gathering of 1000+ APARians
- Participation of 16 cricket teams from all APAR locations displayed strong sportsman spirit, teamwork and camaraderie
- Six overs match; one bowler could bowl maximum two overs
- Umpire hired from outside for the neutral decision making
- Post match presentation & award ceremony for:
 - Man of the match after every match
 - Man of the series after final match
 - Best bowler of the tournament after final match
 - Best fielder of the tournament after final match
 - Trophy for the winning team & runner up team

Annual Sports Day: Like every year, APARians celebrated the annual sports day.



Inter APAR Badminton Tournament (Doubles): APARians from 12 different locations participated in the tournament.

The event was organized in memory of Late Shri Harish Singh (Sr. GM, Operations & Production), on his 1st death anniversary, to pay tribute to his sporty nature and sportsmanship spirit. COVID took a few of our great leaders far from us, but their vision, ideologies, energy and love will always remain in the hearts of APAR Parivaar.



"This is not the end of the day or the event, but a part of an infinite game. For this day all teams have been preparing for months. In future, each one of you will continue to prepare, with a vision to win this tournament. This attitude of never giving up makes this an infinite game and the privilege to surpass our own abilities every time."

Kushal Desai, Chairman & Managing Director



Cultural activities @ APAR

Celebrating festivals is a great way to bring a family together. And when it comes to APAR Parivaar, we leave no stone unturned to spread happiness, good luck and prosperity around us.

We have a diversified cultural ecosystem within the APAR Parivaar, and we celebrate these festivals as 'one big family'.

Celebrations @ APAR: Diwali Celebration, Christmas celebration & celebrating Secret Santa, Birthdays celebration (last day of each month), Apar Premier League 2023 (Season III) – APL, Annual Sports Day, Badminton tournament, Yoga Day, Family get-together, 'Azadi Ka Amrit Mahotsav' celebration @ APAR, Competitions like drawing, painting, poems etc.



Family get-together

As we believe in one APAR Parivaar, we organize family get-together programs for the APARians and their immediate family members to celebrate the contributions of our hardworking employees & appreciate the effort they made. In addition to this, the goal is also to build & strengthen the bonds between employees.



APAR internal newsletter – ‘engage’

APAR publishes a monthly internal newsletter ‘engage’ which communicates important updates including news and success stories of the company.



ABC of the month (Employees Success stories):

We have introduced a special article series, ‘ABC of the month’, where our corporate communications team interviews one of our biggest news contributors of APAR ENGAGE and shares their success story. It has enabled all APARians to know more about each others.



I still remember, last year just after Navratri in October when the 1st newsletter landed in my inbox. I was like wow, APAR will now have its own newsletter. On 1st year of APAR ENGAGE, I just wish it should never stop and the company updates should reach all of us in one form or the other.

– Rahul Suresh Badgujar

The best thing I like about APAR ENGAGE is the content. It gives me the complete overview about the different improvements/ advancements & achievements across different APAR plants. It is not a newsletter but a learning platform through which we get new insights ideas for implementing at our workplace.

– Deepak Madan



Transparency in communication at all levels is the essence to grow together and APAR ENGAGE is doing it flawlessly. It also inspires us to keep working innovatively everyday as with APAR ENGAGE we are able to clearly witness how our efforts are adding to overall vision of the company.

– Sachin Zinjurke

Employee engagement survey

Employee Engagement survey was carried out in April 2022 in online mode. To ensure Employees' responses to survey remain completely confidential, APAR had engaged an external independent company Market Search India Pvt. Ltd., a sister concern of Thomas Assessments.

Engagement Index



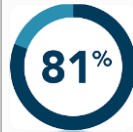
Each and every member of the APAR Parivaar is highly valued! Their feelings, opinions and suggestions are very important to Company. Employees' thoughtful, honest, and candid feedback provided important guidance to the Organization's ongoing efforts to ensure a satisfying and productive work experience for all.

The objective was to get a better understanding of the employees' perspective on the Organization as it values their ideas, opinions, and suggestions.

We have addressed all the areas of improvement which needed management or policy approval, e.g., sandwich leave policy, increment in insurance coverage, amendment in continuing education assistance policy, paternity leave etc. since the outcome of the engagement survey.



1,511 Total sample size
1,397 Number of respondents
92% Survey response rate

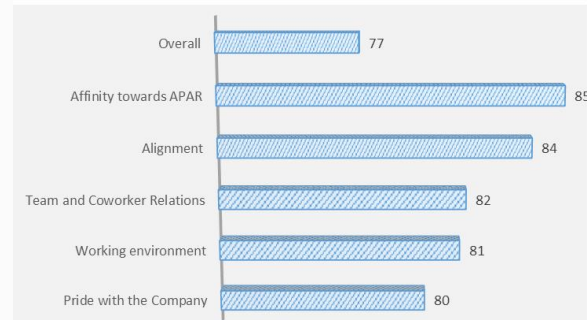


Highest engagement scoring on two key questions :

Questions:

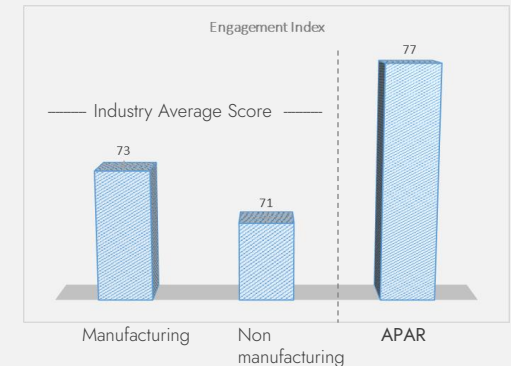
- I would recommend my company to a friend as a good place to work.
- Considering all things, I am satisfied working in APAR.

Satisfaction Index Score



Employee engagement matrix – 81% employees of APAR are engaged

		Satisfaction with APAR - >		
Affinity towards APAR - ^	Lost direction (01%)	Engaged (25%)	Fully engaged (32%)	
	Looking around (01%)	Indifferent (13%)	Engaged (24%)	
	Disengaged (01%)	Looking around (02%)	Non committal (01%)	



Employee attrition

The company nurtures the work environment that enables superior performance and mitigate attrition in the organization.

Employee attrition increased slightly by 0.3% in FY 2022-23, whereas overall employee count increased by 10%.

The company's LDC business has recently undergone significant growth, leading to a substantial influx of new hires. Many of these fresh recruits reside in smaller towns and work from home, and they had limited exposure to APAR's corporate culture and/ or the company's leadership. As a consequence, attrition rates were higher among these new employees who had been with APAR for less than a year. APAR has since implemented numerous measures to reduce attrition rates within this cohort. We are actively striving to enhance the engagement of new employees through a variety of approaches, including diverse training programs and other engagement activities.

APAR was awarded 'Top 50 Happy Companies to work for' award and 'Best Company with innovative HR practices' award during FY 2022-23 at the 31st edition of the World HRD Congress 2023 held in Mumbai, due to the various initiatives and practices.

The employee engagement survey of 2022 also pointed out that a high percentage of our employees are engaged and have affinity with the company.

Some of the benefits which our people enjoy are listed out separately in the next section.

Performance appraisal and KRA

APAR practices PMS (Performance Management System) that is helping us find and develop talent as a source of competitive advantage and not just a way to ensure compliance. Our appraisal system, which is transparent in nature has the power to motivate our employees.

Objectives of our performance management system :

- Link business objectives to the annual operating plans of various business units and in turn to individual targets
- Driving transparency & clarity on roles, performance expectations and performance outcomes and ensure that targets are aligned to the role
- Objectively measuring performance against defined targets
- Understanding & managing employee expectations
- Enable a culture conducive to coaching and counselling through regular communication & feedback
- Encourage desirable behaviour through behaviour assessment

KRAs (Key Result Areas) at APAR are a set of activities on which performances are rated. We are planning to include climate related parameters in the KRAs of select employees, where appropriate and applicable.

Recent awards

World HRD Congress 2023

APAR Industries has been recognized with 4 prominent awards at 31st edition of the World HRD Congress 2023 held in Mumbai.

* APAR's Chairman, Mr. Kushal Desai was recognized as the 'Most Prominent Contributors to innovation'



* Most Prominent Contributors to innovation



Top 50 Happy Companies to Work for



Best Company with Innovative HR Practice



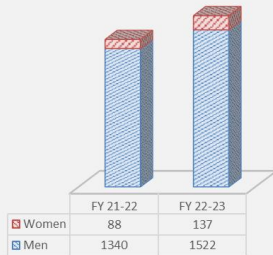
National Best Employer Brand

Diversity & Inclusion

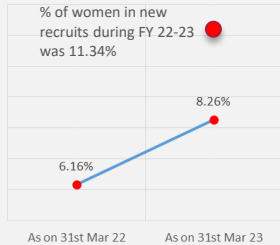
As per our organizational policy, we strictly do not differentiate between employees on the basis of their gender, colour, caste, creed, nationality, religion, race and disability.

We're committed to improve diversity at APAR, and are working towards the same. We are also working to improve the diversity at the shop floor at each of our plant locations.

Employees Count as on 31st Mar



Gender Diversity (% women employees)



Increased focus on Diversity resulted in **increase in our women employee strength by 56%** (from 88 to 137) in FY 2022-23, whereas overall employee count increased by 14%.

Gender diversity improved from 6.16% to 8.26% in FY 2022-23.

Additionally, 11.34% was the percentage of women amongst all new hires during FY 2022-23 (49 women employees in 432 new recruits).

APAR Diversity, Equity and Inclusion (DEI) policy was implemented during FY 2022-23, with objective to lay down the guidelines to be followed for fostering diversity, equity and inclusion at APAR.



Initiatives for women employees

- Maternity benefits
- Crèche facilities
- Specialized training – ‘Sarasvati’ Trainee program
- Prevention of Sexual Harassment (POSH) policy
- Implementation of DEI (Diversity, Equity & Inclusion) policy
- Equal remuneration as per the act based on qualification & experience
- Periodical health check ups
- Safety & precautionary measures for all employees



Women's day celebration @ APAR

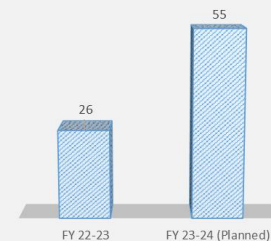


Saraswati trainee program

The Company also initiated a 'Saraswati Training Program' for women employees across the company, wherein we hire and groom the women employees for future. The purpose of this program is to provide employment opportunities to women employees, especially at our plants.

Currently we are hiring in departments like QC, R&D, Technical, Commercial, Procurement, HR, Finance & Accounts etc. and plan to hire for other core departments at our plants.

Women trained under Saraswati Program



This is besides, hiring women employees as replacements and for growth/ new positions.

Sponsor of Women Premier League cricket

We have sponsored the Women Premier league (WPL 2023) to promote the women's version of India's favorite sport among a wider audience.

All APARians witnessed the APAR's first-ever national campaign along with some exciting cricket action in all 22 matches of WPL 2023.



Proud to be the Associate sponsor of



Employment opportunity for weaker section of society

APAR management always looks forward to offer merit based employment to the historically disadvantaged sections of society including scheduled castes/ tribes, other backward classes at all the plant locations. Details for our plants are as follows :

- 36% of employees on Company rolls are in ST, SC, OBC & Others category
- 78% of employees on Contract are in ST, SC, OBC & Others category

In addition, currently we are training 59 apprentice at our plants in Gujarat and Maharashtra. Total 88% of these apprentices are from SC, ST and OBC category.

Learning & Development

The most important resource in any organization is its human capital – that is, the collective knowledge, attributes, skills, experience and health of the workforce.

Work experience adds to the value of human capital. While formal education is an important driver, learning continues through-out the working life. Organizations that set up their working environments with systems and practices that help employees become more productive, enhance their human capital.

Role moves bring new skills and unlock value. When someone makes a move, their new job typically involves significant skills and responsibilities that were not a part of the previous job. This kind of movement is enabled when an employer is willing to take a chance on someone's potential. The new role may be a major learning opportunity, or it may be a better match that enables someone to deploy existing skills that they have not been utilizing.

Employers can attract and retain talent by recognizing potential, embracing mobility and strengthening learning.

Learning and Development (L&D) has played a pivotal role in ensuring APAR's growth, efficiency, and competitiveness. These initiatives are strategically designed to equip our people with the necessary skills, knowledge, and capabilities to excel in their roles and adapt to the ever-evolving industry landscape. Through structured training programs, workshops, and continuous education opportunities, our people are empowered to enhance their technical competencies, embrace new technologies, and foster a culture of innovation. Moreover, L&D initiatives also promote safety and quality standards.

Following are the training programs/ workshops that were conducted during FY 2022-23.

- Social policies related training: 29 batches
- Environment policies related training: 29 batches
- H&S related training: 561 batches
- Code of Conduct training: 2 batches
- Sustainability awareness program for suppliers: 8 batches

Total 629 batches were trained during FY 2022-23. **The average training per employee was 30.33 hours/ employee.**

In addition, several other training programs/ workshops were conducted. The details are as follows:

- **Training to Apprentices:** Currently we are training 59 apprentice at our plants in Gujarat and Maharashtra. 88% of these apprentices are belong to SC/ ST/ OBC category.



- **Skill development training:** Skill development training is provided as per the TNI (Training Need Identification). Following types of skill-development trainings are imparted for skill upgradation:
 - Functional/ Technical training
 - Training on soft skills
 - On-the-job training

The employees receive training through classroom as well as web-based training programs. Various trainings are identified and conducted as per the training calendar, including operational/ functional training, soft skills and leadership development programs which are derived from the performance appraisals and competency matrix.



- **Saraswati Trainee Program for women employees:** Under this program, we hire and groom the women employees, especially for our plants. 26 women employees were imparted trained under this program during FY 2022-23.

The objective of this training program is (a) to create a talent pool of young women who would take up higher responsibilities in APAR in the future; (b) enhance participation of women in the manufacturing process, in particular and in sustainable economic development of nation, in general; (c) to integrate conceptual understanding gained through academic curriculum into practical application and (d) to have professionally qualified and multi-skilled women employees who could be assigned various functions/roles at APAR.

The duration of this training is one year, and it consists of training in these broad areas:

Training areas (Saraswati Trainee Program)	Duration	1	< -- 10 weeks -->	< ---- 38 weeks ---->	1	2
Orientation/ induction/ APAR values	1 week					
Specialty training in related function	10 weeks					
On-the-job training	38 weeks					
IT training	1 week					
Exposure to seminars/ QMS concepts; visit to other units	2 weeks					

During the training period every trainee is assigned a supervisor/ reporting manager who is responsible for the day-to-day functioning/ conduct of the trainee. In addition, every trainee is assigned a mentor (an internal employee) who conducts a structured review of the performance of the trainee once in a quarter.

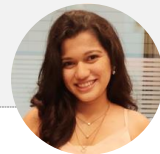
On successful completion of the training period and subject to business requirement, the trainee is formally assigned to a function.

After completing my graduation, it was difficult for me to get a job as female civil engineer, but when I got selected in APAR, I was very happy being the first women civil engineer in APAR, because I always want to do something different, for life-long learning and making an impact in the world around me. In APAR I have gone through such experience where my seniors provide mentoring and extended support. I really love being part of a company that values collaboration and teamwork. Saraswati trainee program is the platform where college passed women can get employment opportunity in APAR, especially in the manufacturing sector and the APARs DEI and other policy create an inclusive workplace culture that encourages women to participate and contribute. — **Bhargvi Machhi**

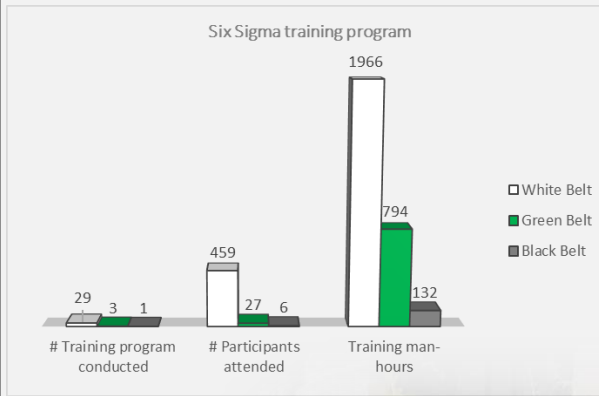


I have joined APAR as a fresher under 'Saraswati Trainee Scheme' which was really a good opportunity for my career and success. I'm glad to work in a great environment where I am gaining the knowledge relating to my field and learning the skills which shall be helpful to me in future. I would love to take more experience with APAR for my growth.

— **Pratiksha Bhosale**
Indirect Taxation, Rabale



- **Six Sigma training:** APAR has been continuously working on establishing a culture of quality improvement by implementing various quality training program which includes Lean Six Sigma (LSS), KAIZEN methodology at all factory levels.

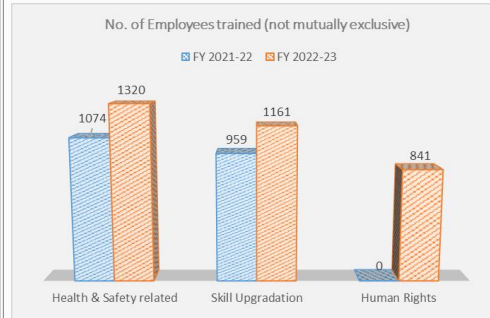


Six Sigma qualified employees:
 327 employees qualified in White/ Yellow Belt
 67 employees qualified in Green Belt, and
 8 employees qualified in Black Belt.



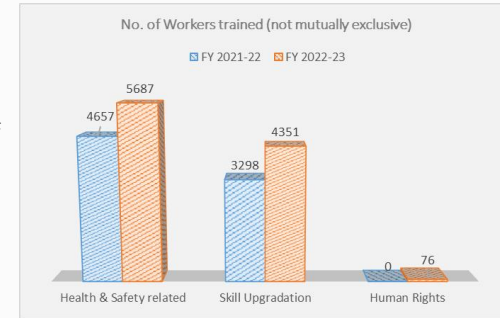


- **POSH training:** The Company has an Internal Complaints Committee for POSH (Prevention of Sexual Harassment) as a part of the Prevention, Prohibition and Redressal Act, 2013. POSH training is mandatory for every employees.
- **Health & Safety related training:** Safety is of paramount importance to the Company. All the plant person, including employees, workers and contract workers are imparted at least one training on H&S each year. The Company's contractual employees receive mandatory safety training before entering the premises and also get on-the-job training through the contractor.



Number of employees trained on various topics

- **Value Workshops:** 47 value workshops were conducted during the reporting period covering 1250 employees.
- **Leadership & Team Building workshops:** 21 leadership and team building workshops were conducted during the reporting period.
- **IT awareness:** Several training programs were conducted on the topic during the year covering more than 95% the employees of APAR.
- In addition, the Company had designed and implemented a 55 hours rigorous training program for new joinees in the Company's LDC business, which includes training on Sales Basics, Product Basics, Sales field automation, Soft skills, Presentation skills etc.



Number of workers trained on various topics

Occupational Health & Safety

APAR is committed to providing a safe and healthy workplace. Making sure that our employees, associates, and contractors return home from work safely each day is more important than anything else. We are committed to ensuring zero harm to our employees, associates and contractors, and the communities in which we operate. This is integral to our business and is laid down in our health and safety policies, standards, and working procedures.

Key Metrics



1.59 LTIFR (Lost Time Injury Frequency Rate) *



17,517 EHS training man-hours (up by 67%)



249 Safety Kaizen projects (up by 66%)

150 FSI Risk mitigation projects (up by 7%)

* Combined LTIFR for employees & workers

- APAR corporate occupational Health & Safety (OHS) policy provides the direction to all employees, workers, contractors & suppliers to maintain and sustain a productive & accident-free workplace.
- All APAR's manufacturing locations have been certified for ISO 45001 for Occupational Health & Safety.
- Safety audits are undertaken regular to identify hazardous acts, ensure compliance with standard operating procedures, and assess the performance of the company's safety measures at all the plants.
- Each manufacturing unit of APAR has its own unit-level safety committee, led by the unit or facility heads.
- Each APAR plant has been equipped with the (a) safety & 5S committee (b) suggestion scheme (c) Kaizen (d) Safety engagement activities, and (e) a team of qualified H&S professionals at each manufacturing location.
- LTIFR reduced from 3.03 (FY 2021-22) to 1.59 (FY 2022-23), due to various measures.



FSI (Fatal & Serious Injury) prevention

There were no fatal accidents during FY 2022-23. Our FSI team prioritized the top five areas of FSI risks from all location by using a standardized hazard & risk assessment process which were fall from height, rotating & moving parts, high voltage areas, vehicle to vehicle and man Interference, and fire & explosion. Based on the risk control method of elimination > substitution > engineering control > administrative > personnel protective equipment, we are limiting our FSI risks.

During the reporting period, we had undertaken many project to benchmark the safety system like:

- Fire hydrant system to ensure the fire safety.
- Installation of retractable lifeline system for curing tank.
- Fall protection system for rooftops during the project and maintenance work at height.
- Additionally, more than 150 numbers of safety Kaizen has been implemented under the suggestion schemes to make our people safe.
- Implementation of flood management system to protect plant property in premises. We had engaged with a flood management consultant and designed & implemented complete control system as recommended. It included (a) construction of water collection pit (b) installation of heavy capacity water evacuation pumps along with flood gates to prevent flood during monsoon in plant premises (c) provision of safety railings and walkways in roof top solar panels for safe repairing and cleaning jobs etc.

National Safety Week celebration:

"Safety in mind, safety in action, always provide complete protection" – this simple slogan tells us about the significance of safety in our daily life. APAR has deeply understood this and has prioritized implementing this practice at all factory locations.



52nd safety week was celebrated at all our plant locations, during 4th to 11th March 2023 to spread awareness.

The theme for the celebration was aligned with the United Nations Sustainable Goal 03 (Good Health and Well-being) and derived as "Our Aim, Zero Harm (हमारा लक्ष्य शून्य क्षति)".



Hazard Identification and Risk Assessment (HIRA)

We use a hazard and risk identification-based approach to assess potential hazards and risks in our daily operations and projects. When there is a change in the workplace, such as to a production line layout, equipment, applicable legal requirements, we conduct hazard identification and risk assessments to prevent new hazards and reduce risks.

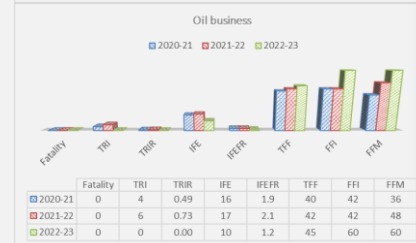
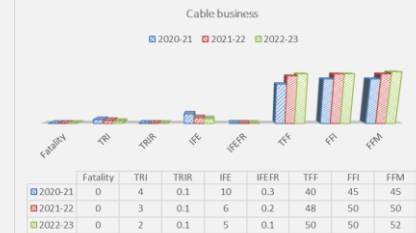
Each manufacturing location conducts hazard and risk assessments annually to determine if additional precautions are needed for health and safety management. We engage employees and encourage participation in health and safety management. This program enables employees to understand how to identify potential risks and hazards in their daily work environment. Through this and other programs, we are able to increase awareness and implement a sense of ownership in maintaining a safe workplace for everyone.

Following measures are taken by APAR to ensure a safe & healthy workplace:

- Hazard Identification and Risk Assessment (HIRA) Procedure.
- Hierarchy of controls is followed for application of risk control measures. Control plans commensurate to risk are deployed before execution of job. No job is executed until risks are brought to acceptable range.
- Safety committees are in place at various levels to review the adequacy of resources for safety and to provide support for safety management system deployment.
- Deployment of safe and healthy system of work is assured through periodic safety audits and inspections across sites.
- Suggestion and feedback scheme deployed at all levels for further improvement towards safe & healthy workplace.

Safety performance

We rigorously monitor & record our safety performance & check where we are faltering so that corrective measures are taken immediately. Our safety performance over last three years are provided in the charts:



Legends

TRI: Total Recordable Incident

TRIR: Total Recordable Incident Rate

IFE: Injury Free Event

IFEFR: Injury Free Event Frequency Rate

TFF: Target Find and Fixed

FFI: Find and Fixed Identified

FFM: Find and Fixed Mitigated



06/03/2023 10:00

Social Capital

APAR's procurement function ensures the following while procurement of goods and services: (a) Environmental assessment: We assess the impact of our purchases on the environment and ensure that it is in line with APAR's sustainability goals (b) Social responsibility: We ensure that the products are made in a responsible way, working towards ending poverty, and respecting workers' rights, etc. (c) Fair trade practices: We ensure that we purchase goods from regions where workers are paid fairly for their work. This helps to improve workers' conditions and protects the environment.

Towards the above, we interact regularly with our suppliers through various modes including online awareness webinars and questionnaire survey etc. The details are provided later in this section.

Sustainable Procurement: Key Metrics FY 2022-23

awareness programs	8 Sustainability Awareness webinars for suppliers
	244 Suppliers participation in awareness webinars
	8.1% Supply chain partners were covered (by value of business done) under the awareness programs
sourcing	4.7% Input materials (by value) directly sourced from MSMEs/ small producers
	13.3% Sourcing done (by value) from within the district and neighbouring districts

Linkage with SDGs



Key highlights

- Global and diverse supplier base
- Implementation of SCoC (Supplier Code of Conduct)
- Sustainable procurement policy implemented
- Capacity building of suppliers on environmental and social issues (e.g. corrective actions, training)
- Regular supplier assessment (e.g. questionnaire) on environmental or social practices
- Integration of social or environmental clauses into supplier contracts
- Supplier grievance handling policy implemented
- Deeper engagement with MSME and smaller suppliers
- Resilient supply chain & supply security
- Promote ethical business practice
- ESG as a parameter for supplier assessment
- Use of re-cycled material as input material

Supply chain

We are committed to fostering positive relationships with our suppliers and customers, and we strive to engage with them in a fair, transparent, and cooperative manner to cultivate enduring partnerships.

This necessitates association with the right partners. We conduct a proper due diligence at the time of vendor on-boarding. Amongst many other evaluation criteria, the vendors are also evaluated against the health, safety and environment sustainability parameters.

Our Supplier Code of Conduct includes, amongst other points, environmental sustainability; health & safety issues; labour practices such as child labour avoidance, freely chosen employment, diversity & inclusion, fair treatment, working hours, wages & benefits; freedom of association etc.

We engage with our suppliers and customers regularly, through online webinars to increase awareness on sustainability and also to share our own progress in this area.

As part of sustainable sourcing, following are in place :

- Supplies assurance through long term partnership with suppliers: Over period of time, we have established long term relationship with our key suppliers for all the three businesses. It has helped us in maintaining the right quality of products and timely deliveries.

- Strategic location of our plants: Two of the APAR's conductor plants are strategically located in Jharsuguda and Lapanga, which is eastern part of India in Orissa. We source the raw material (molten aluminium) easily as our plants are situated almost adjacent to the primary producer.

We were also successful in transportation of molten aluminium through public road for a long distance (approx. 30 kilometers) from our primary supplier to our Sambalpur conductor plant in Orissa.



Molten aluminium being transported to our Sambalpur plant

The GHG emission from procurement of molten aluminium directly from the suppliers was much lesser as compared to emission from procuring aluminium ingots and then melting in the furnaces for further processing.



Molten aluminium being transported to our Sambalpur plant



It was not just a mere logistic operations, but a meticulous orchestration of teamwork, expertise, and precaution. The transportation of hot molten metal on public roads is a rare event in India. The dedicated team from APAR and the supplier were deployed, with pilot cars moving ahead and behind the trailer to ensure safe and seamless transportation of molten aluminium.

- **Proximity to Port:** Our oil units are located in Rabale (Navi Mumbai) & Silvassa. Our cable units are located in Umbergam & Khatalwada (Taluka Umbergam). Two conductor plants are located in Silvassa (Athola & Rakholi). All these units are located very near to the Mumbai port. Hence, procurement/ transportation of raw material as well as export of finished goods becomes very easily thereby saving on both inward as well as outward freight.
- **Direct connectivity to the port through pipeline:** Storage tanks at our Hamriyah oil plant are connected directly to the port jetty through a 1.5 kilometer underground pipeline. This gives us advantage of getting our raw materials directly from the ship to our storage tanks. This arrangement cuts all the activities related to raw material shifting by road transport.



Long term supplier associations

Conductor business

- Aluminium suppliers include BALCO, Hindalco etc. in India; Emirates Aluminium, Alba, Qatalum, Rio Tinto, Sohar Aluminium etc. overseas.
- Copper suppliers include Hindalco, Sterlite, Sumitomo, Taihan etc.
- Steel suppliers like Electrosteel Castings, Jindal Steel and Power, Nippon Steel etc.

Cable business

- Optical fibre suppliers include Owens Corning, Sterlite, Fujikura etc.
- XLPE suppliers include Borouge, Hanwa; PVC Resin: LG, Reliance etc.
- Other suppliers like Dow Chemical, Lion Elastomers, KLJ Polymer

Oil business

- Base oil supplies include S-Oil, Shell, Saudi Aramco, GS Caltex, Tenoit, Hyundai Shell Bank, etc.

Sustainable Procurement policies

Several sustainable procurement related policies were implemented during FY 2022-23. These are:

- **Sustainable Procurement Policy:** APAR had implemented a Sustainable Procurement policy. It demonstrates a set of guiding principles and objective that integrate, amongst other points, environmental issues such as emission of greenhouse gases, consumption of water and energy, management of waste and hazardous materials, labour & human rights issues, diversity & inclusion etc. in supply chain management.
- **Supplier Code of Conduct (SCoC):** This Code sets forth the basic requirements that we ask our Suppliers to respect and adhere to when conducting business with APAR. We have implemented the SCoC across the supply chain. All new suppliers who get on-boarded need to accept and sign the SCoC at the time of on-boarding itself. We are also getting our existing suppliers to go-through, understand, accept and sign the SCoC. Our target is to get all our suppliers to commit to our SCoC.
- **Supplier Grievance Handling Policy:** Supplier Grievance Handling policy is formally implemented for faster closure of grievances of suppliers.

Some complaints were received from the suppliers and have been documented and acted upon. These are as follows: (a) Delay in vendor payment: Resolved by our automatic due date payment intimation system (b) High loading & unloading time: Resolved by providing 2 weigh bridges in Khatalwada plant location (c) Additionally, we have introduced E-Sourcing (SAP, Ariba) to bring complete transparency in procurement process and reduced grievance/ complaints.

Supply chain Partners can also register their grievances formally by e-mailing at ethics.taskforce@apar.com.

Engagement with suppliers

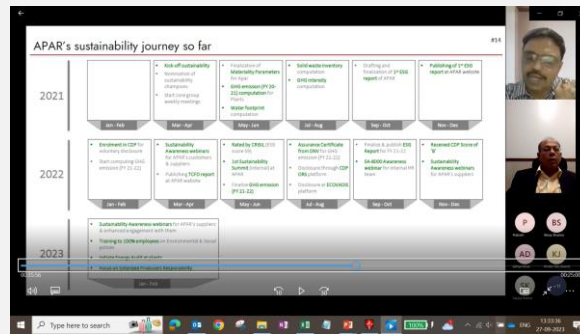
We consistently interact with our suppliers through discussions and webinars to spread awareness and adopt the sustainable practices to reduce the adverse environmental aspect of our products over their life cycle.

Several supplier sustainability awareness webinars were conducted during FY 2022-23, and the following topics were discussed during the webinar:

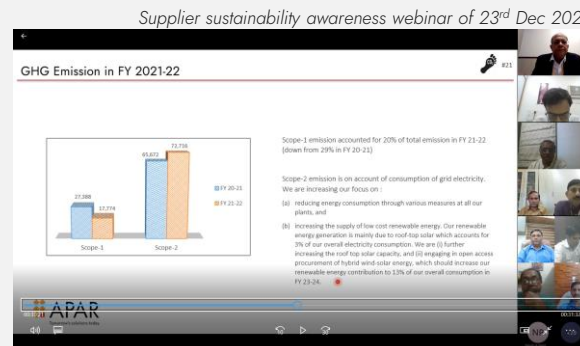
- ESG overview
- Cause of Climate Change
- Global Warming Potential
- Emission scopes
- Sustainability initiatives @ APAR
- GHG emissions @ APAR and various emission reduction initiatives taken
- Water Footprint @ APAR and various water footprint reduction initiatives
- Human Rights initiatives @ APAR
- Supplier Code of Conduct
- Questionnaire for suppliers to assess their ESG readiness
- Open forum to discuss how the emission reduction initiative can result in lowering the costs

8 supplier sustainability awareness webinars were conducted during FY 2022-23

244 supplier were covered in these webinars



Supplier sustainability awareness webinar of 3rd Mar 2023



Supplier self-assessment on ESG readiness

APAR had prepared and circulated a self-assessment questionnaire amongst its suppliers specially small suppliers and MSMEs, who have participated in its sustainability awareness webinars.

These suppliers are requested to answer the short questionnaire and submit back to APAR. The objective is to enable APAR and help the suppliers assess their readiness on various ESG parameters, so that they can take remedial actions where they are falling short.

Self-Assessment Supplier Questionnaire		
Company Name	Company Person details	
Name	Name	
Address	City	
	Company Number	
	Contact email	
101. Do you measure CO2 emissions (at least once a year)?	Response	Comments & Date
102. If yes, which scope do you measure?	Response	
103. Do you regularly disclose your carbon footprint?	Response	
104. If yes, please provide the link here	Response	
105. Do you facilitate your emission data to CDP?	Response	
106. Please use drop-down menu to select the information you want to report	Response	
107. Do you have a climate plan?	Response	Comments & Date
108. Do you measure and disclose renewable energy?	Response	
109. If yes, what % of your total energy is renewable?	Response	
110. Please use a drop-down menu to select the renewable energy data you want to report	Response	
111. Do you have a water conservation policy?	Response	Comments & Date
112. Have you installed a water meter for measurement of water consumption?	Response	
113. Do you have a policy for recycling and reusing materials?	Response	Comments & Date
114. Do you have a policy for recycling and reusing materials?	Response	
115. Do you have a policy for recycling and reusing materials?	Response	Comments & Date
116. Do you have a policy for recycling and reusing materials?	Response	
117. Do you have a policy for recycling and reusing materials?	Response	Comments & Date
118. Do you have a policy for recycling and reusing materials?	Response	
119. Do you have a policy for recycling and reusing materials?	Response	Comments & Date
120. Do you have a policy for recycling and reusing materials?	Response	
121. Do you have a policy for recycling and reusing materials?	Response	Comments & Date
122. Do you have a policy for recycling and reusing materials?	Response	
123. Do you have a policy for recycling and reusing materials?	Response	Comments & Date
124. Do you have a policy for recycling and reusing materials?	Response	
125. Do you have a policy for recycling and reusing materials?	Response	Comments & Date
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197. Do you have a policy for recycling and reusing materials?	Response	Comments & Date
198. Do you have a policy for recycling and reusing materials?	Response	
199. Do you have a policy for recycling and reusing materials?	Response	Comments & Date
200. Do you have a policy for recycling and reusing materials?	Response	

Supplier can select the relevant response from the drop-down list against each of the questionnaire

390 suppliers signed the APAR Supplier Code of Conduct (SCoC)

279 suppliers answered the self-assessment questionnaire

Focus on local suppliers

- We procure goods from local suppliers including MSMEs (Micro, Small and Medium Enterprises) and materials are imported under advance license scheme to the extent possible.
- We also support vendors for improving their productivity and technical capability to reduce their operation costs.
- In addition, APAR procures goods and services like security, housekeeping, gardening, and such other services from the suppliers located near our factories.
- Majority of our workforce is employed from the surroundings of the manufacturing unit across all the locations.
- APAR ensures right quality production at suppliers' end as well to ensure the desired quality levels of the end product, resulting into enhanced capability of suppliers to produce right quality material for elevated volumes.
- We are consistently putting efforts for vendor development locally for high quality premium grade products (ultra-high strength steel, export quality packaging material, specially designed tools and spares).



Suppliers visit @ plants

We had organized a supplier visit at our Oil plant with the following objective:

- presentation to our supply chain partners on ESG initiatives @ APAR
- plant visit to showcase our sustainability related work
- supplier facilitation and award of certificate
- deeper engagement with supply partners



Import substitution & MSME push

APAR is promoting import substitution strategies alongside a dedicated push for Micro, Small, and Medium Enterprises (MSMEs) for faster economic growth and resilience.

We are substituting the imported material with local procurement, wherever possible and feasible. Few examples are as follows:

- **Cable division:** We have replaced imported XLPE from Singapore to local supplier based in Gujarat.
- **Oil division:** We have successfully developed domestic fully-refined paraffin wax supplier as a substitute for the existing Chinese supplier. Although the cost saving is minor but the procurement lead time is significantly reduced.

Training to Customers

APAR conductor division & EPC team organized a six days training program for Delhi Transmission Limited official's on design, manufacturing, testing & installation of HTLS conductor.

In addition, we have done few sustainability awareness webinars for our customers in all the three businesses.



Customer Speak

'We know APAR as market leader in power line sector from decades. Today as I witnessed the stringent process the company follows in their manufacturing process clearly states why customer prefers APAR products. We are amazed to see that as a conductor manufacturer APAR is able to develop an indigenous in house lab for type testing the complete range of conductors with ILAC MRA approval. This really needs a strong team and a focused approach.'



Mr. Arun Kumar, Delhi
Transmission Limited (DTL)

Community engagement

We call it Community Support Responsibility, and we've been doing it since 1958. APAR engages with the community through education, healthcare, nutrition, children welfare, training & employment and focus on environment & sustainability.

Healthcare : In order to provide quality healthcare to all sections of society, APAR has been involved in setting up hospitals and supporting accessible healthcare all across India.



DDMM (Dharmsinh Desai Memorial Methodist) Heart Institute

Dharmsinh Desai Memorial Methodist Institute of Cardiology and Cardiovascular surgery, known as the DDMM Heart Institute, is a super specialty hospital in Nadiad, dedicated for Cardiovascular care. It combines state of the art facilities with compassionate care and makes this available to people of all walks of life - both from Gujarat and the surrounding regions.

1996

Set-up in 1996, the institute carries out open heart surgeries, angiographies and angioplasties with a prolific success rate, and a focus to treating patients who are below the poverty line.

70% +

patients are from economically backward strata.

7500+

Echocardiography tests performed free of charge

12500 +

free OPD consultations for heart issues

12000+

patients with blood components treated at no cost

1500+

free cardiac catheterization procedures administered

300+

free heart surgeries conducted



Bhaktivedanta Hospital

We have also contributed to setting up the

- Bhaktivedanta Hospital Mira Road, Thane District and
- a fully-equipped Hospice in Vrindavan, Uttar Pradesh to provide high-quality healthcare to the poorer sections of society.

APAR has spent Rs. 70 lakhs towards 160Kw roof-top solar plant for the DDMM (Dharmsinh Desai Memorial Methodist) Heart Institute to reduce its environmental footprint.

Education: Our late Chairman, Dr. Narendra Desai, was passionate about medical education and extending healthcare in an affordable manner.

Dr. ND Desai Faculty of Medical Science & Research is located at Nadiad, Gujarat. (webpage: <https://medical.ddu.ac.in/index.php>)



Dr. ND Desai Faculty of Medical Science & Research



800+

Multi-speciality hospital with 800+ beds

350000+

OPD and IPD cases treated at no cost

800000+

laboratory test conducted at no cost

6000+

patients benefited from free blood donation services

700+

newborns treated and saved at specialized NICU



Dharmsinh Desai University (DDU)

Education : We support the Technical High School and Boys High School at Nadiad, as well as set-up the Dharmsinh Desai University in Nadiad, which provides education in technical and other areas (diploma and degree courses) to students at a nominal cost.

45 acres

spread over 45 acres with well-equipped labs, well-stocked library, sports facilities, thoughtfully-created hostels, research centres, and conference centres.

50+

years of experience in education

35+

35+ courses accredited by various national bodies such as NAAC, NBA, AICTE, PCI, DCI & UGC.

50+

major & minor research projects in last five years

57000+

books

Highlights

- First autonomous technical college of Gujarat in 1990
- First technical college in Gujarat to introduce compulsory industry training in the final semester of B. Tech. program for all disciplines
- First deemed university in Gujarat
- MCA program was started in 1987
- Integrated BE + MBA program was started in 1994
- First autonomous college to become deemed university and then university through this evolution
- Our first NBA accreditation was in 1998
- ISO:9001 standard certified

We also have a full-fledged dental hospital wherein treatment are given to the poor/ needy patients on free/ concessional rates.



Employment Generation through technical skill development of local tribal youth of Khatalwada, Umbergaon and surroundings areas

- We have tied up with Sri Nityanand Educational Trust Sanchalit Govardhan Skill Development Centre, Wada (District: Palghar, Maharashtra). **Govardhan Skill Development Centre** is working with the objective of employment generation for tribal youth through their technical skill development. They run various short term technical courses which are affiliated to National Institute of Open Schooling.
- We have designed customized 'Cable Line Extruder Operator' course and its curriculum as per our plant requirements; and have erected customized set up of completely new extrusion line including pay off, extruder, hopper and caterpillar at Govardhan Skill Development Centre for the purpose of their learning this course.
- Duration of the course is six months, and it is currently running at Govardhan Skill Development Centre.
- We selected a batch of 24 students in FY 2022-23, from the backward, tribal, scheduled caste (SC), scheduled tribe (ST) communities, specially school drop-outs, whose annual income was less than Rs. 50000/-, from the surrounding villages of our Umbergaon and Khatalwada plants. Out of the above, 14 students completed the course and were provided employment opportunities at APAR (7 employed as Assistant Operator in printing/ paring/ coiling process and 7 as Skilled Helper in extrusion line).
- APAR Industries bears the lodging and boarding cost of these youth for entire course period of 6 months.
- It benefitted the locals in getting employment and helped us to manage the demography balancing and bridge the shortfall of skilled manpower. We received incredible responses and appreciation from the surrounding villagers as well as from the local leaders.



- We decided to make this initiative more impactful by organizing the awareness camp and published a notice in surrounding village panchayat to conduct the selection camp for the second batch. 140 students from tribal communities participated in this and 39 students were selected followed by basic written test. They will be trained and will be provided employment at APAR as per their qualification and merit.
- Additionally, we have installed 75 kWp (divide into 3 set) on-grid solar PV power for the benefit of students belonging to backward communities.
- We have also provided a bus for transportation facility for the tribal youths/ students/ ladies belonging to the tribal/ SC/ST communities under rural development project for education (learning and training).





Other Communities activities

- 1 - Rural child development (Anganwadi inauguration)
- 2 - Computer system for Umbergaon police
- 3 - High mast lighting tower in Manekpur village
- 4 - Plantation in Khatalwada village
- 5 - Employment to Govardhan Skill Centre pass out youths
- 6 - Support to sports activity of Manekpur village youth
- 7 - High mast lighting tower in Manekpur village

Ronak Dongkar
Asst. O/p Printing
(Elastomeric)



One year back I was just a school drop out teenager. Due to less qualification and skill, I had to work as a daily wage labour to support my entire family. Due to family constraints, I could not complete further studies in any school or college. Through the campaign run by APAR, many school dropouts like me got technical education, practical experience and also scholarship during studies. I also got employment opportunity in APAR company itself. I express my gratitude on behalf of all like me to the APAR management.

APAR has always given importance to the socio-economical development of the nearby villagers, employment for local youth, and upliftment of unprivileged society by their words & actions. Being the head of village, I express my gratitude to the APAR management and I am determined to collaborate in future accomplishment for socio-economic development.



Mr. Rakeshbhai Bhagat
Head of Manikpur Village



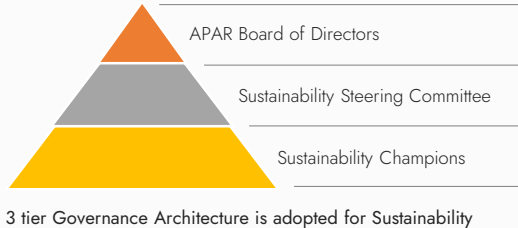
Governance

ESG governance & Board oversight

Our governance structure follows the international best practices by integrating the Environmental, Social and Governance considerations in all our business decisions. It ensures that ESG performance monitoring and decision making permeates through different levels in the organization.

APAR has adopted a three-tier governance structure:

- 1) At the top of the pyramid is the **APAR Board of Directors**. They provide overall direction to our sustainability efforts. The Chairman & Managing Director (CMD) has oversight of the sustainability agenda that includes climate change. He, along with the Managing Director (MD), conducts regular meetings with the Sustainability Steering Committee to monitor and review progress of the ESG related commitments of the Group. Under their guidance, the company has committed to reducing carbon emissions intensity by another 10% by 2023-24 in line with our de-carbonization initiatives.



- 2) **Steering Committee:** A sustainability steering committee consisting of leadership (manufacturing & business) from all the three businesses at APAR, convene meeting regularly where the following are discussed:
 - progress made by the Sustainability Champions in terms of implementation of ESG initiatives against the agreed targets
 - review of targets
 - budgets are approved or taken up for Board approval as the case may be
 - discussion on climate related risks and opportunities
 - sharing of developments in industry and sustainability related regulations
 - discussion on best practices
- 3) **Sustainability Champions:** APAR had identified sustainability champions who represent our various businesses, geographies and functions. They explore and identify various GHG reduction projects which are then discussed, debated, analyzed and approved before we decide to take them up for implementation. Sustainability Champions drive the implementation of these projects. These champions also sensitize other employees of APAR on environmental issues through various online awareness programs.

Linkage with SDGs



Risk management

APAR uses an integrated, cross functional and company-wide risk management process to evaluate climate change risks and opportunities annually that aligns with its medium- and long-term corporate strategy process.

Our risk management team works directly with the businesses to evaluate direct operational risks and opportunities. As a part of this process, meetings are conducted to assess the impact and likelihood of risks that could influence APAR's strategic objectives. These include a qualitative and quantitative assessment and evaluation of climate topics including policy and legal, reputational, and other strategic and operational risks. Once identified, APAR evaluates whether the risk or opportunity is substantive based on its potential to have a material legal, financial, operational, reputational, or customer impact.

An example of a physical risk to our direct operations is reduced production capacity due to extreme weather events. APAR evaluates whether this risk is substantive by analyzing

- the potential financial impact from interruptions to our business;
- the impact on our ability to successfully deliver products and services to our customers; and
- estimated costs of losses.

We also consider the mitigation measures we have in place, such as our business continuity program, which will reduce the potential business and financial impact. An example of an opportunity for our direct operations is reducing energy costs by increasing the share of renewable energy. We evaluate whether this opportunity is substantive by analyzing the potential financial impact of reducing grid energy consumption across our plants, and comparing it to key financial metrics, such as revenue, operating expenses etc.

Another example is that we regularly assess the competency and capability of our suppliers on parameters such as carbon footprint and sustainability, capacity to meet our current and future requirements and ethical business practices.

Once the risk is identified, we determine ownership, and work collaboratively to develop mitigation strategies and monitoring. In case of sudden changes, an interim review is done and corrective action is taken.

We are also in regular dialogue with our multinational customers to share information and understand their potential risk identification/ concerns and mitigation strategies.

If any risk is having impact of 10% or more on the average revenue of the Company for the previous three years, we classify it as substantive.



Internal Controls

APAR has established adequate Internal Control Systems (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.

Systems Applications and Products (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.

Business continuity

IT Systems

We have a BCP (Business Continuity Plan) to ensure continuity of our business operations during unforeseen disruptions. It outlines procedures to respond to a disaster situation and resources necessary to maintain critical business functions and minimize the impact of disruptions such as natural disasters or cyberattacks. Periodic risk assessments are undertaken to assess the probability of occurrence and impact of occurrence of a disaster situation. Based on this assessment, mitigating action is undertaken and emergency response plans, communication protocols, backup systems, and recovery strategies are put in place accordingly. By proactively identifying potential risks and developing contingency measures, we can mitigate financial losses, protect reputation, and sustain operations in adverse conditions. Regular testing, training, and updating of the BCP to ensure its effectiveness and adaptability to evolving circumstances is in place.

Climate Resilience

In addition, we identified climate related risks for increased climate resilience which are described under 'Climate related risks' section.

Climate related risks

We have identified inherent climate-related risks with the potential to have a substantive financial or strategic impact on our business. Few examples are as follows:

Direct Risks

- **Higher costs from increased energy consumption:** We have successfully commissioned a wind-solar hybrid energy project through open-access mechanism on 18th June 2023, which should increase our renewable energy contribution from 4% to 10+ % in FY 23-24. We are also planning to increase the share of renewables to 20+% in the year 2024-25 and 50% by FY 2027-28.
- **Cyclones:** Cyclone Yaas, Gulaab and Jawad caused major disruptions in many states including Odisha, where our 2 conductor plants are situated. Cyclone Tauktae hit Gujarat & Dadra and Nagar Haveli, where our 2 Cable plants, 2 Conductor plants, and 1 Oil plant are situated. All our plants remained stable and operational. This was possible due to the mitigations like design-strengthening during construction phase, covered sheds, higher floor level and higher capacity pumps for water evacuation, safety equipment and training at all our plants.
- **Carbon Tax:** Most of our customers are based in US, Canada & Latin America. So the impact of the CBAM (Carbon Border Adjustment Mechanism) would be minimal. In addition, we are working to reduce our carbon emission intensity.

In India, the Govt. is encouraging the formal carbon trading mechanism to be set-up. Consultation papers have already been shared to relevant stakeholders for their views. So we believe the regulations around carbon trading should be in place in near future.

Downstream Risks

- **Carbon footprints:** We have been continuously working to bring down the carbon footprint in our products. This is already giving us the competitive advantage over other suppliers, and we are confident to maintain this advantage in the near future.
- **Wide-scale introduction of EVs (Electric Vehicles):** It will have a reduced demand for our lubricants business. We believe that this loss will be compensated by increased demand of lubricants due to surge in industrialization. Also, transformer oil demand will increase. Electrification will also result in increased demand of cables in the transportation industry.

Upstream Risks

- **Increased cost of Raw Material due to Supply disruption:** APAR does not consider it significant as the increased cost will be pass-through to the customers. This has been borne out during FY 2020-21 and 2021-22 when there was Covid related supply chain disruptions, during which APAR's competitive position improved vis-à-vis competition.

Grievance Redressal Management

APAR is committed to providing a safe and conducive work environment to all of its stakeholders, and the mechanism to receive and redress grievances is in place.



Employee & Workers Grievances: We have implemented proper grievance management system for our people through

- **Implementation of various policies** such as (a) Policy for Prevention of Sexual Harassment at Workplace (POSH) (b) Whistle Blower Policy (c) Employee Relations Policy. All these policies are available publicly at our website www.apar.com.
- **Constitution of Committees** such as (a) Grievance Committee, which addresses the grievances raised by employees & workmen including grievances against canteen facilities, working conditions, harassments, facilities, overtime, leave etc. This consists of five members across functions at locations, and the Chairman is nominated by the local management. (b) In addition, the Company has an internal Works Committee as per the Industrial Disputes Rules 1957 Subsection (1) of Section (3). This committee comprises of employees & workmen who are elected. This committee addresses the concerns and issues raised by employees, takes collective decisions and maintains harmonious relationship between employer and workmen.
- **Awareness training** on various grievance related policies are imparted regularly.

Community Grievances: We ensure that there is regular engagement on a pro-active basis with the local communities and their representatives at all our manufacturing locations. As such there are no long standing grievances at any of our locations. In addition, any stakeholder can also submit any grievance through email to ethics.taskforce@apar.com

Customer Grievances: Customer complaints and feedback are received by the business development/ sales team, and attended to by them and the respective manufacturing facility. Complaints are tracked till closure. We conduct a MRM (Monthly Review Meeting) for each business every month, wherein, besides other important matters, the customer complaints are reviewed, resolution status shared, and corrective actions are discussed to eliminate such issues in future.

Supplier's Grievances: We have implemented a 'Supplier Grievance Handling Policy' to address and manage the supplier's grievances. It is available publicly and the mechanism to receive, record, screen, investigate, action and closure is described.

Investor's Grievances: Share Transfer and Shareholders' Grievance-cum-Stakeholders Relationship Committee has been constituted in accordance with the requirements of Section 178 of the Act and Regulation 20 of the Listing Regulations with the objective of overseeing the redressal of investors' complaints pertaining to transfers/ transmission of shares, issue of duplicate share certificates, non-receipt of dividend/ interest, dematerialization (Demat) of shares and all other related matters concerning investors and to consider and resolve the grievances of Security-holders of the Company.

Other Stakeholders' Grievances: The stakeholders are free to write to us at ethics.taskforce@apar.com for any grievances. The Ethics Taskforce Committee is responsible for addressing all grievances, unethical issues, including human rights, violation of APAR Code of Conduct, integrity, financial wrongdoing, harassment, discrimination, victimization, malpractices etc.

These policies are uploaded at our website, www.apar.com. The link to these are as follows:

Grievance Redressal Policy for Employees:

https://apar.com/wp-content/uploads/2023/03/Social_Policies/APAR_Grievance_Redressal_Policy_for_Employees.pdf

Supplier Grievance Handling Policy:

https://apar.com/wp-content/uploads/2023/03/Supplier_Grievance_Handling_Policy.pdf

Code of Conduct

The APAR Code of Conduct applies to APAR Directors, all the employees, suppliers/ vendors/ business associates and any other third party representing APAR, and subsidiaries and controlled affiliates of APAR. It defines the values and principles upon which we operate our business, compete in the marketplace and serve our customers around the world. It provides expected behaviour from employees and its stakeholders – at workplace and/ or during work related events.

Some salient points are as follows :

- Be ethical, unbiased, trustful and respectful to everyone around our activities. Trust and Respect is the basis of Human Relations at APAR.
- Keep away from any conflicts of interest between work and personal gains in all decisions and transactions.
- Protect the confidentiality of all critical information, intellectual property and assets of APAR.
- The Company's interest comes first; the individual's is subordinated to the former.
- Strive to create a very safe workplace with zero accident and to protect the environment.
- Embrace the APAR DNA in each and every task you perform.

"If you have a doubt or concern about what is proper conduct for you or anyone else, promptly raise the issue with your manager, an APAR ombudsperson or through one of the many other channels the Company makes available to you. Do not allow anything to compromise your commitment to integrity"

– excerpts from APAR's code of conduct

Business ethics

The key constituents of ethical business principles followed at APAR are enshrined in the APAR's Code of Conduct. The Code of Conduct clearly articulates how the Company stands committed to business ethics, the measures it takes to protect any person raising a genuine concern related to violation of or non-adherence of its ethical principles and policies.



We are committed to transparency, disclosure and reporting to promote ethical conduct of our business throughout the organization.

Whistleblower helpline

We have implemented a robust whistle blower policy to enable anyone within the company and those dealing with the company to voice their concern to the ombudsmen of the company, if they discover any information which he/ she believes shows serious malpractice, impropriety, abuse of power and authority, financial wrongdoing or unethical conduct/ practices, without fear of reprisal or victimization, subsequent discrimination or disadvantage.

The details including the mobile number and email id of the APAR ombudsmen are provided in the APAR Whistle Blower policy.

All complaints lodged under the purview of this policy and the action taken thereon, is reported to the Board of Directors.

These policies are uploaded at our website, www.apar.com. The link to these are as follows:

APAR Code of Conduct policy:

https://apar.com/wp-content/uploads/2023/03/Social_Policies/1.APAR_Code_of_Conduct.pdf

Whistleblower Policy:

https://apar.com/wp-content/uploads/2023/03/Social_Policies/20.Whistle_Blower_Policy.pdf

Board of Directors & composition



6 Directors

50% Board Independence

16.7% Women Director in the Board

The Board of Directors is the apex body constituted by the Shareholders for overseeing the overall functioning of the Company. The Board provides and evaluates the strategic direction of the Company, management policies and their effectiveness and ensures that the long-term interests of the shareholders are being served.

APAR's Board of Directors currently comprise of six Directors who are eminent individuals with exceptional qualifications, professional expertise and extensive experience and they have made outstanding contributions to the industry.

- Mr. Kushal N Desai, Chairman & Managing Director (Executive) - KND
- Mrs. Nina Kapasi, Independent Director (Non Executive) - NK
- Mr. FB Virani, Independent Director (Non Executive) - FBV
** (resigned w.e.f. 3rd Nov 2022)
- Mr. CN Desai, Managing Director (Executive) - CND
- Mr. Rajesh Sehgal, Independent Director (Non Executive) - RS
- Mr. Kaushal J Sampat, Independent Director (Non Executive) - KJS
- Mr. Rishabh K Desai, Non Executive Non Independent Director - RKD

The Board has a combination of independent, executive as well as non-executive directors.

Board Member	Executive Director	Non-Executive Director		Qualifications	Expertise
		Independent	Non-Independent		
KND				Bachelor of Science in Electrical Engineering from Moore School of Electrical Engineering, USA and Bachelor of Science in Economics from the Wharton Business School. Both are part of University of Pennsylvania, USA.	Business & Strategic Management and Engineering
CND				Bachelor of Science (Hons.) in Chemical Engineering from University of Pennsylvania, USA and a Bachelor of Science in Economics (Hons.) from the Wharton Business School, USA	Business & Strategic Management and Engineering
FBV **				B.E. (Chemical Eng.), M.S. (Chemical Eng.) USA, M.B.A. (USA)	Chemical Engineering & Business Management
RS				Chartered Financial Analyst, Master of Business Administration in Business Management with specialisation in Finance and Marketing, XLRI (India) and Bachelor of Science with specialisation in Physics, Mumbai University	Finance, Investment and Business Management
NK				Chartered Accountant	Taxation, Audit and Managing Consultancy
RKD				Bachelor of Science in Business Management & Entrepreneurship from Babson College, USA	Business Management, Finance and Strategic Management
KJS				Master of Business Administration (MBA) from Bowling Green State University, Ohio, USA, Diploma in Business Management from Narsee Monjee Institute of Management Studies (NMIMS), Mumbai, India and Graduated in Commerce from University of Bombay	General Management, Sales, Marketing and Operations, International Business Development, Risk Management, Data and Analytics.

** During the Financial Year under review, Mr. FB Virani resigned as an Independent Director (Non-Executive) of the Company w.e.f. November 03, 2022 due to his advancing age and certain personal commitments/ pressing engagements.

The Board has an optimum combination of Independent, Woman Director, Executive as well as Non-Executive Directors that is in conformity with the provisions of Regulation 17 of the Listing Regulations.

All Directors are selected to serve based on their independence, integrity, diversity and experience. Other selection criteria include sound judgment in areas relevant to our businesses and willingness to commit sufficient time to the Board.

Board committees

We have five Board Committees – to assist the Board in discharging its duties. The name of the committees and the composition are provided in the table.

Board Committees	Board Committee Member					
	KND	CND	FBV	RS	NK	KJS
Audit Committee	M		M	M	C	M
Corporate Social Responsibility Committee	C	M	M		M	
Nomination and Compensation-cum-Remuneration Committee			M	C	M	M
Share Transfer & Shareholders Grievance-cum-Stakeholders Relationship Committee	M	M	C	C		
Risk Management Committee *	C	M		M	M	M

M Member of Committee

C Chairperson of the Committee

Notes:

* In addition, Risk management Committee has other members also from the Management

Mr. FB Virani was member/ chairman in the respective committees till 3rd November 03, 2022

In addition, a Sustainability Steering Committee is also in place for increased focus on ESG priorities, action plan, risks and its mitigation plans.

Each of the Committee has a clearly defined charter including the terms of reference. The details are provided in our annual report, which can be accessed from our website,

Board remuneration

- Remuneration paid is as per the Remuneration Policy for Directors, Key Managerial Personnel and other Employees.
- Independent Directors and Non Executive Non Independent Director are paid only sitting fees.
- There were 1,659 permanent employees on the rolls of Company as on March 31, 2023.
- The percentage increase in the median remuneration of employees for the Financial Year 2022-23 was around 1.51%.
- Average percentile increase already made in the salaries of employees other than the managerial personnel in the last Financial Year i.e. 2022- 23 was 6.79% whereas the percentile increase in the managerial remuneration for the same Financial Year was 115% due to increase in commission which is on increased profit. The profit before tax for Financial Year 2022-23 increased by 157%.

Sl	Name of Director/ KMP and Designation	% increase/ decrease in Remuneration	Ratio of remuneration of each Director to median remuneration of employees
1	KND	116%	147.86 : 1
2	CND	114%	148.51 : 1
3	FBV (upto 3rd Nov 2022)	-32%	0.41 : 1
4	RS	16%	0.59 : 1
5	NK	16%	0.59 : 1
6	RKD	25%	0.32 : 1
7	KJS	422%	0.43 : 1
8	Mr. Ramesh S Iyer, Chief Financial Officer	NA	
9	Mr. Sanjaya R Kunder, Company Secretary	8.09%	

Disclosure of Remuneration

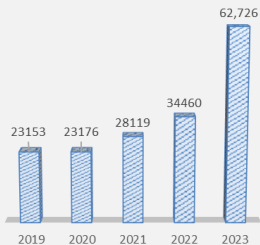
Board meetings

- The Board of Directors meets at least four times in a year.
- Five Board Meetings were held during Financial Year 2022-23.
- All the Meetings were held through Video Conferencing as permitted by the law.
- There were 100% attendance of the Directors in all the Board Meetings, Annual General Meetings and Committee of Directors' Meetings.

Shareholder relations

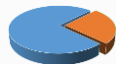
- Shareholders relations & interests are looked after by Share Transfer & Shareholders Grievance-Cum Stakeholders Relationship Committee
- Notices, documents, annual reports etc. are delivered to the shareholders via electronic mode (to those Members whose email addresses are registered with the Company/ Depositories).
- All the documents including quarterly & annual accounts, corporate presentations, shareholding patterns, annual general meetings, notices of board meetings, Postal Ballots, Annual Returns, Investor Education & Protection Fund, important events and all the policies (including Business Responsibility Policy, Policy on Dividend Distribution, Whistle Blower policy, Insider Trading policy etc.) are available at <https://apar.com/investor/>
- Notice and Annual Reports of APAR are also available on websites of the BSE Limited at www.bseindia.com and National Stock Exchange of India Limited at

Number of Shareholders as on 31 Mar



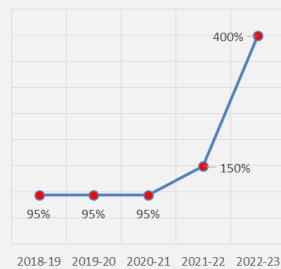
The number of shareholders increased from 34,460 as on March 31st 2022 to 62,726 as on March 31st 2023.

Shareholder's return



INR 1.37 Cr. unpaid/ unclaimed dividend amount transferred to IEPF
 # 109,320 unclaimed shares transferred to IEPF
 400% dividend declared for FY 2022-23

Dividend Distribution



- APAR is consistent in paying dividend in line with Dividend Distribution policy of 25% to 35% of profit
- We have enabled the shareholders of APAR for reclaiming their dividends and shares from IEPF authority from time to time
- The details of dividend & shares transferred to IEPF is also available on the website of the Company at <https://apar.com/investor/>
- For more details you may refer the Corporate Governance Report on page 96 of the Annual Report of FY 2022-23, which is available at our website, www.apar.com

- APAR's share price exhibited a compounded annual growth rate (CAGR) of 28% over past 5 year period (31st March 2018 to 31st March 2023).
- APAR is proud to be listed among the Economic Times top 500 companies in India in 2022 list, ranked at 196th position (27 ranks higher than the previous year).

Investor complaints

Since the listing of the APAR's shares on BSE (1991) & NSE (2004), we have been redressing investor grievances promptly on real time basis.

As on date, there are no complaints pending from the investors which is reported in SEBI SCORES as well as in BSE and NSE records.

There were no penalties or strictures imposed on the Company.

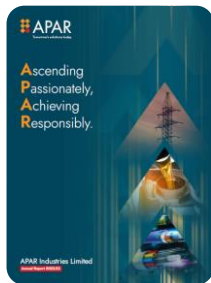
Disclosures

Financial disclosures:

We take care of all the disclosure requirements as mandated by SEBI and other regulators, including financial position/ performance of the company, shareholding pattern, corporate governance, as well as event-based disclosures including material developments in the business, changes in shareholding pattern, etc. by way of announcements on the stock exchange(s) on an as and when basis and depend on the company's judgment with respect to materiality.

The additional disclosures as required by SEBI for a listed company, are made through the annual report of the Company.

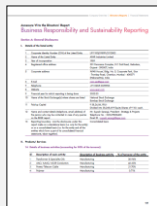
Please visit our website, www.apar.com for more details.



Environment related disclosures:

While we diligently measure our greenhouse gas emissions and actively undertake various initiatives to reduce them; simultaneously, we transparently share our emissions data and targets through reputed platforms, allowing stakeholders to access this information.

ESG Report: This is our 3rd ESG report (FY 2022-23). It, along with previous reports, is uploaded at our website, www.apar.com under the Sustainability > Report tab.



BRSR Report: As mandated by SEBI, we had published our first BRSR (Business Responsibility and Sustainability Report) for FY 2022-23. It is a part of our Annual Report, and can be accessed from our website.

CDP: We have completed the voluntary disclosure of our full-version Climate related emissions to CDP for the year ending 31st March 2023.



EcoVadis: We have also completed the disclosure to EcoVadis which is a renowned evidence-based online platform, providing supplier sustainability ratings and allowing companies to assess the ESG performance of their global suppliers.

EPD: We are also disclosing our product carbon footprint for major products to our supply chain partners, as and when required by them. EPD for four of our major conductor products are available at our website, www.apar.com under the Sustainability > Report tab.



TCFD: We have prepared Climate Related Risk Management Report (prepared in accordance to the recommendations of the TCFD). The report can be accessed from the link: <https://apar.com/tcf-report/>

In addition, we are disclosing our sustainability related progress to our esteemed customers, as and when required, on demand.



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