



ESG REPORT

FY 2021-22

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Dear APAR Stakeholders,

It is a matter of great satisfaction and pride that APAR is presenting the 2nd edition of its ESG report this year. The journey so far in Sustainability has been immensely enriching. A vision to serve a larger societal purpose has now become the very soul of the enterprise, driving every thought and action as well as the strategy and purpose of the organization. We continue to remain steadfast in our commitment to delivering on Environmental, Social and Governance goals.

The past decades have had a long-lasting impact on the natural ecosystem, atmosphere, communities, governments, and businesses. This has increased the need for urgent climate action. As a responsible organization, we are fully committed to our actions to support this cause.

During the year, **we voluntarily participated in the CDP climate disclosure. We also made sustainability related disclosure at 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.

We genuinely believe that responsible and transparent governance is vital to creating long-term sustainable value for our stakeholders and progressing on our strategic objectives consistently. Our high corporate governance standards are in accordance with the Securities and Exchange Board of India (SEBI) and the Companies Act, 2013, mandates. The Board of Directors at APAR guides our operations and monitors and drives compliances.

I am also delighted to share that **APAR's name found a place in the CRISIL ESG rating for the first time this year.** We were ranked at the 148th position amongst the top 586 Indian companies rated by CRISIL.

For the first time, **we have completed an independent assurance of our Scope 1 and Scope 2 Greenhouse Gas (GHG) emissions for the FY 2021-22 through a renowned assurance provider**, in accordance with ISO IEC 17021:2015 - conformity assessment requirements.

We are committed to continue our efforts in this direction.

Regards,

Kushal Desai
Chairman & Managing Director

Dear APAR Stakeholders,

This was the year of many firsts – we published our first TCFD report, our Scope 1 and Scope 2 GHG emissions were verified for the first time by a renowned independent assurance provider, our name found a place in CRISIL ESG rating for the first time, we made a voluntary disclosure to CDP on climate change for the first time, company wide disclosure on sustainability was made to EcoVadis for the first time etc. We are confident to make many more such statements in the times to come.

We have taken a big leap in setting the foundation for water conservation and reducing the consumption of fossil-fuel based grid energy.

To augment the rain water harvesting capacities, we are engaging with a leading consultant for hydrological, hydrogeological and topological studies to identify strategies for sustainable water security at our various plants.

Additionally, we have entered a definitive agreement with a leading supplier to jointly develop a 3.3 MWp hybrid power project (wind - solar hybrid) under the group captive model. The HCGP (Hybrid Captive Generating Plant) is being set-up in Gujarat for our Cable facilities. This will reduce our requirement of grid based electricity significantly. Once implemented, it would have the potential to reduce the GHG emission by approx. 10,000 tCO₂e per annum. We are also exploring such opportunities for our other plants.

Supply chain is another area where we are increasing our focus going forward. We have initiated the process of engaging with our suppliers to take them through our learnings and work with them on the various ESG initiatives.

We realize that our sustainability journey has just started. We are committed to remain focused and proactive in the times ahead.

Yours sincerely,

Chaitanya Desai
Managing Director



- This Report sums up our strategy, management approach and performance - an effective confluence of aspects that drives our sustainability agenda.
- 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 5 Capitals in a modular, uniform and consistent manner.
- The report is developed in line with our perception about our stakeholders' interests, based on stakeholder engagements and materiality.
- We realise that the biggest threat to our business could be from effects of climate change. We have discussed about these risks across our business value chain and how managing this risk is an integral part of our business risk management process.

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 Assessment Report, Institute for Global Environmental Strategies (2022) - List of Grid Emission Factors, version 10.12 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).

Reporting Period

The information provided in the Report is for the period 1st April 2021 to 31st March 2022.

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.

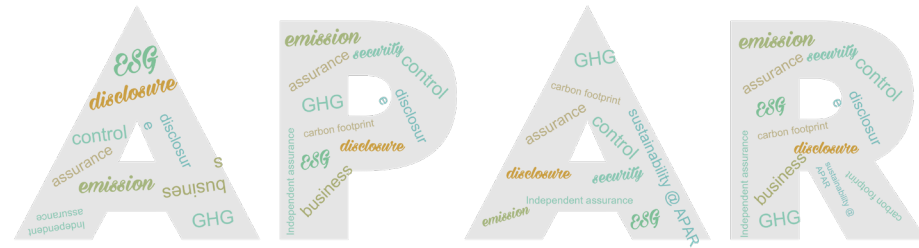
Scope-1 - Direct emissions come from sources that the APAR owns or controls. It includes emissions due to use of Diesel, Furnace Oil (used at 3 of our 4 conductor plants), LPG, PNG & Refrigerant etc. Diesel is mainly used in the forklift for material handling, for DG sets, and for company owned vehicles.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

Independent Assurance

DNV Business Assurance India Private Limited ('DNV') has carried out the verification of APAR's GHG emission data 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 2021-22 highlights



Financials (INR crores)

9,320 Revenue from Operations
574 EBITDA
257 Profit after tax



Environmental highlights

90,490 tCO2e GHG emission
227,000 KL Water Footprint



People

1,428 Employees



Operational (INR crores)

3,550 Export Business
5,770 Domestic Business
130 Capex

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 :

- The 3rd largest global transformer oil manufacturer,
- Largest manufacturer in India for special application and renewable Cables, and have the largest e-beam facility in India, and
- World's largest aluminium and alloy conductor manufacturer.
- 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.



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

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 every three years.

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				



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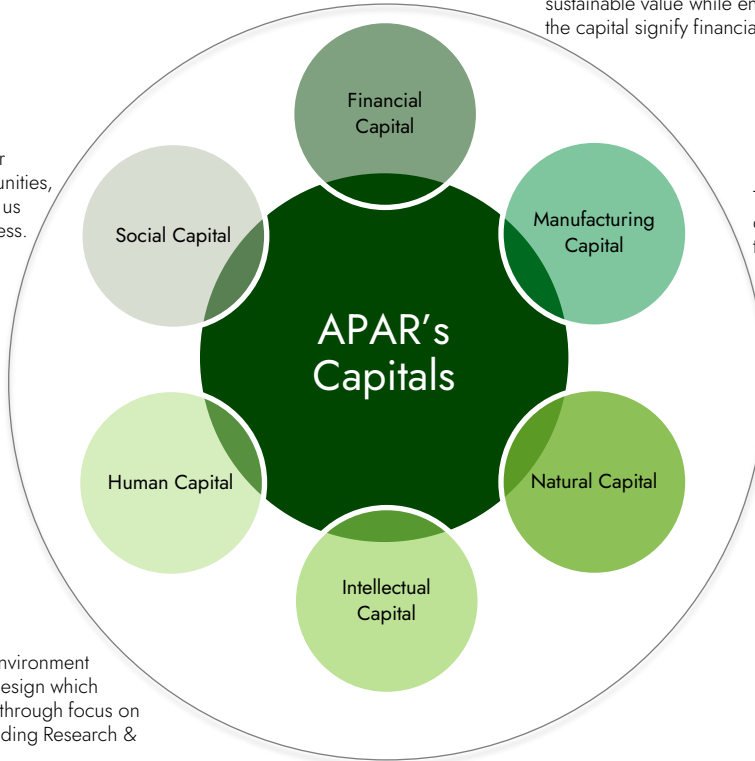
This is the first time that we are introducing the concept of Capitals Creation framework in our ESG Report. We are driven by our purpose of manufacturing products that make the world Better, Greener and Smarter. This approach will provide a clearer roadmap of value creation to our stakeholders.

The following Capitals are introduced:

This focuses to ensure the collective well-being of our stakeholder groups, primarily focusing on our communities, suppliers, vendors, and customers. This further helps us strengthen our ties and increase ease of doing business.

This highlights our capabilities to enhance our people's competencies through talent management and investments in training and development. We aim to reach our outcomes of improving performance and safety and well-being of our people.

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.

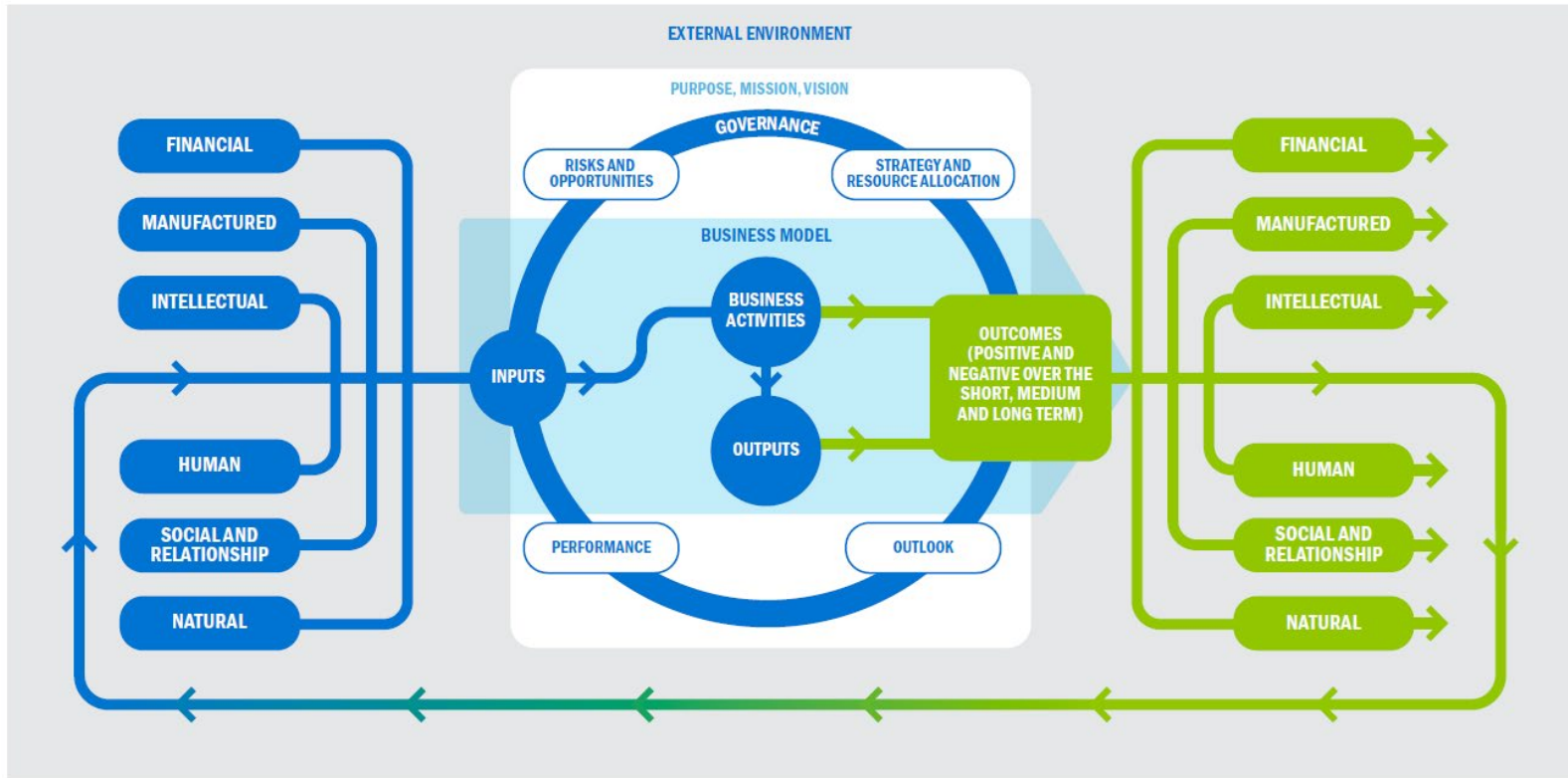


This represents our financial resources which are utilized to create sustainable value while ensuring business continuity. Outcomes of the capital signify financial value creation for the Company.

This showcase our manufacturing capabilities, our diversified product portfolio, operational excellence, technological leadership and other operational details.

This highlights the progress made by us towards our commitment towards 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.

APAR's business model draws on various capital inputs and shows how its activities transform them into outputs



VALUE CREATION, PRESERVATION OR EROSION OVER TIME

Source : Integrated Reporting – International <IR> Framework, Jan 2021

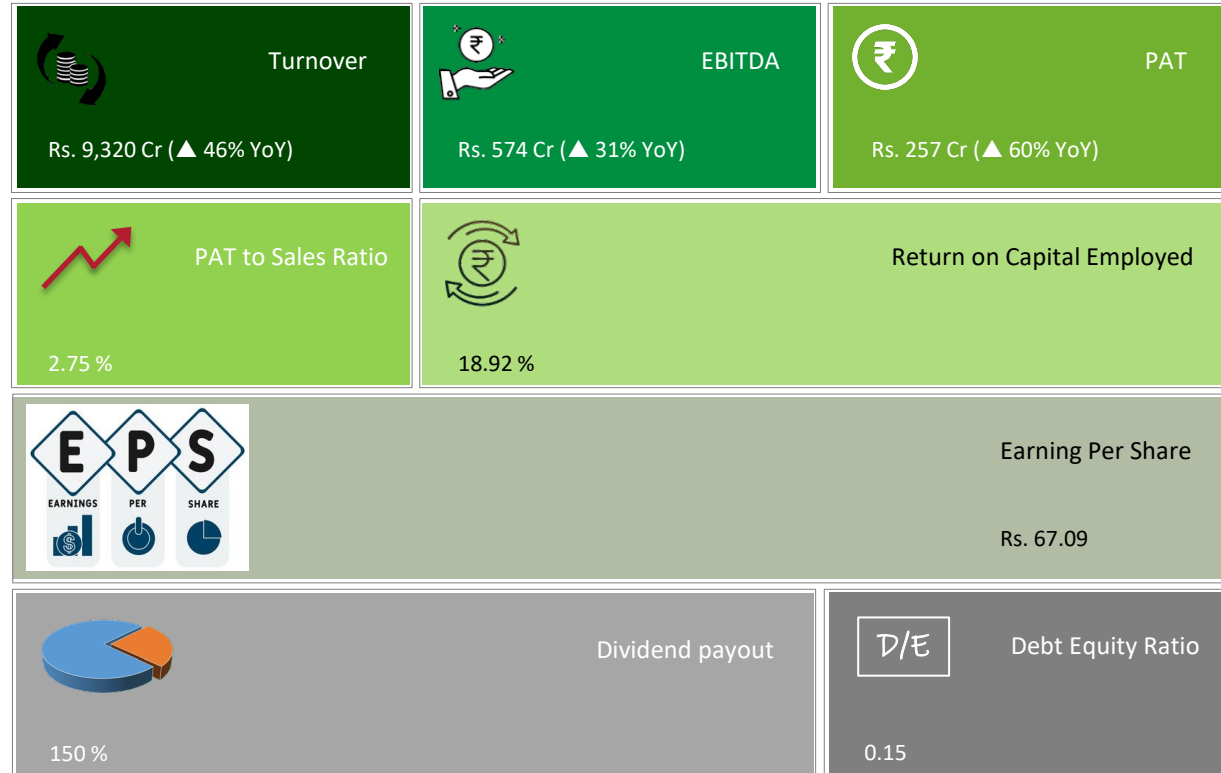
Financial Capital



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 2021-22 are as follows :



Managing our financial capital

We have a robust financial management process that assesses the requirement of funds for sustainable business operations as well as for investments towards business sustainability and growth opportunities.

Managing capital inputs and liquidity

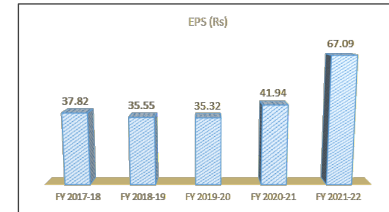
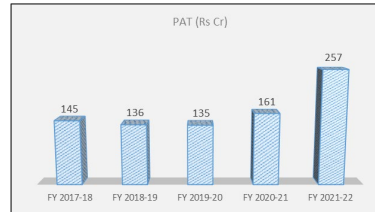
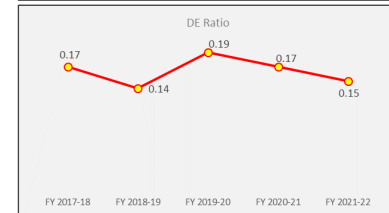
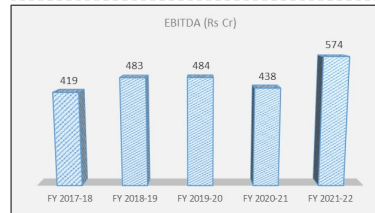
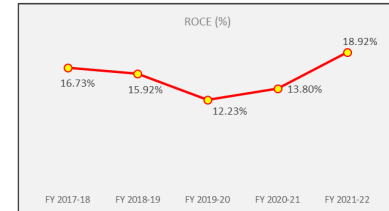
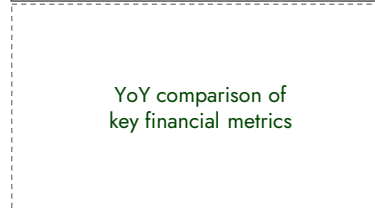
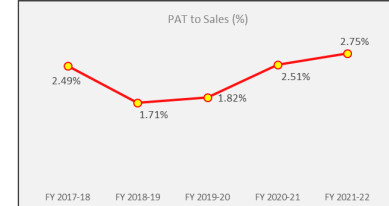
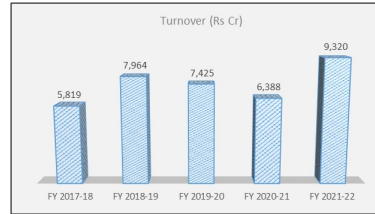
The year under review witnessed stability in the economic condition with fewer business interruptions, improvement in market sentiments as the economy progressed on the path of recovery after severe interruptions due to the pandemic in FY 2020-21. Major inputs to the financial capital were as follows:

- Internal accruals generated a free cash flow of ₹188 crore during FY 2021-22 (after considering capex and dividend) which was primarily utilized the repayment of loans of Rs. 17 crore and investments in working capital.

Managing capital outputs

There has been a significant increase in demand of our products, particularly conductors and cables in global markets. Macro economic forces including the de-carbonization of the world economy, as well as the market development efforts done by the Company over the last few years, and the wide range of innovative products have contributed to this unprecedented market opportunity. We expect this trend to continue for the foreseeable future.

In order to expand our delivery capability on a sustainable basis, we have increased our capital investments : (a) increasing productivity through Industry 4.0 initiatives (b) increasing OPGW capacity, E-beam facilities, Rubber cable operation, (c) mega warehouse, and (d) building the digital capabilities.





Manufacturing Capital

FY 2021-22 highlights



Production

457,790 KL of Oils

66,841 MT of Cables

202,547 MT of Conductors

Oils include production of various kinds of transformer oil, white oil, automotive and industrial oil, and fuel additives at our plants in Maharashtra, Dadra & Nagar Haveli and Sharjah, UAE

Cables include production of various kinds of elastomeric cables, optical fibre cables, light tension cables, high tension cables, light duty cables, poly tetra fluoro ethylene etc. at our plants in Gujarat

Conductors include production of various kinds of rods, conductors, optical ground wires, continuously transposed conductors etc. at our plants in Dadra & Nagar Haveli and Orissa

Other highlights

- Manufacturing facilities based in India (8 plants) and Sharjah (1 plant)
- 350+ products in our portfolio and we serve 4000+ global clients
- One of the largest aluminium & copper processing facilities
- Global leader in energy infrastructure, transportation & telecommunication sector
- In-house research & development facilities, and all plants are equipped with state-of-the-art NABL (National Accreditation Board of Laboratories) accredited laboratories
- Zero fatality over 2 million man-days operation
- 6000+ direct and indirect people working
- Long term agreements with reputed suppliers



Linkage with SDGs



Manufacturing capabilities



Plant capacities

690,000 KL – combined capacity of 3 oil plants

33,600 MT – AdBlue capacity

11,70,000 Km – combined capacity of 2 cable plants

303,200 MT – combined capacity of 4 conductor plants



Manufacturing locations

7 Manufacturing locations in India

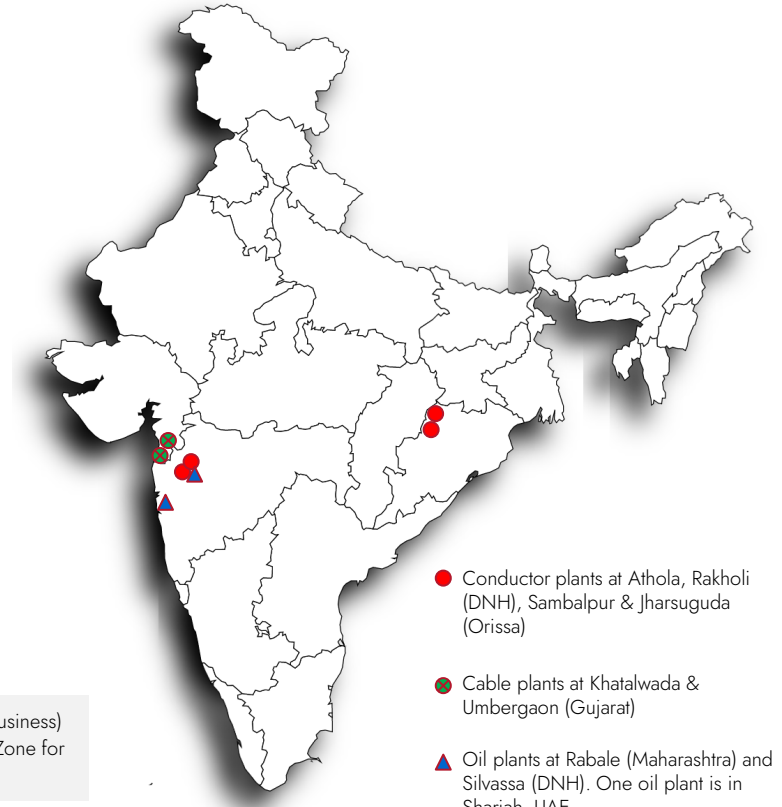
1 Manufacturing location in UAE

***9** Operating Plants (Oil – 3, Cable – 2, Conductor - 4)

All the export plants are strategically located near sea ports & international airport

Plants in Orissa are located very close to the primary producer of liquid aluminium metal

The Sharjah, UAE plant (oil business) is situated in the Free Trade Zone for Gulf countries



● Conductor plants at Athola, Rakholi (DNH), Sambalpur & Jharsuguda (Orissa)

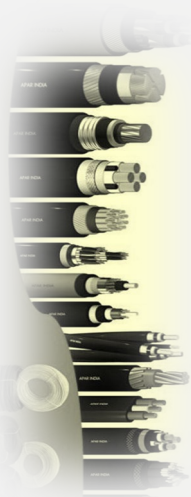
● Cable plants at Khatalwada & Umbergaon (Gujarat)

▲ Oil plants at Rabale (Maharashtra) and Silvassa (DNH). One oil plant is in Sharjah, UAE

* 2 of our plants (Oil business & Conductor business) are co-located in Silvassa (Dadra & Nagar Haveli)

Product portfolio

CABLE BUSINESS



Elastomeric cables

up to 33 KV
1 core up to 1000 sq. mm and multi core up to 400 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 400 sq. mm copper

Optical fibre cables

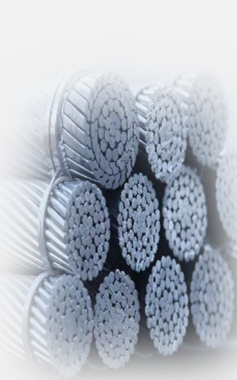
up to 432 fiber cables, UniTube & loose tube armoured/ DUCT/ ADSS/ Aerial/ Ribbon

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 (11 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)

OPGW

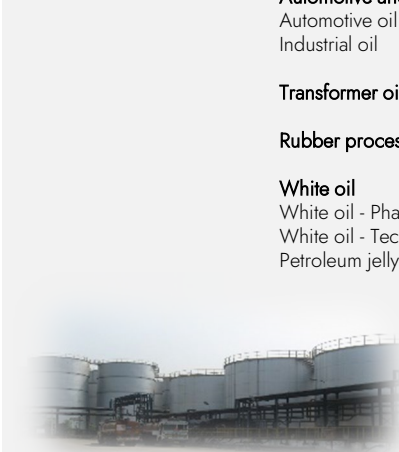
Aluminium clad steel wire (ACS)
Optical Ground Wire Cable (OPGW)

Copper

Copper Rod
Copper railway conductors
Copper wires
CTC, PICC, enamelled wires

- ✓ We are the world's largest manufacturer of aluminium and alloy conductors
- ✓ We have executed 100+ 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

Technology leadership - Cables

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 250,000 + 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 three e-Beams irradiation facilities of 1.5 MeV, 2.5 MeV and 3.0 MeV for cross linking polymers. In addition, another e-Beam facility of 2.5 MeV is under installation.

The plants & machinery are sourced from world's renowned suppliers to ensure maximum productivity at the best quality – to name a few, the wire drawing machines are from Niehoff, Germany and electroplating - tinning facility is from OTOMECH, Italy.

Nearly all the insulation and sheathing compounds used in the manufacturing of cables are produced in-house.

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.



<< Cable plant at Khatalwada

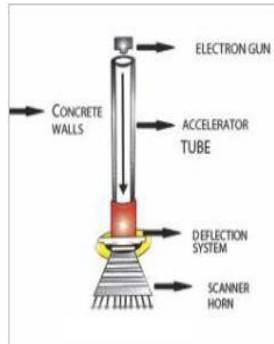


Cable plant at Umbergaon >>

Technology leadership - Cables

E-beam cable manufacturing : process flow

An **Electron Gun** is housed in a thick vessel where electrons are accelerated in an **acceleration tube** & directed to a scanning device magnetically to scan



The cables are **passed under the beam** through a set of under beam equipment



Highly accelerated electrons **penetrates** insulation or sheath of cables

Generates **carbon radicals** which **cross links** polymer chains of plastic three dimensionally with each other

APAR has pioneered and set the trend of the future of wiring in India through its innovative products.

The e-beam technology is a worldwide state of the art technology used in cable manufacturing.

APAR has set up two electron beam (e-beam) accelerators at its Khatalwada, Gujarat plant. At par with international standards, it is a definite edge over other manufacturers in India.

Electron beam irradiated cables and wires offer superior performance as compared to conventional PVC or XLPE cables



Technology leadership - Conductors

We are the world's largest manufacturer of aluminium and alloy conductors and have experience of executing 100+ turnkey solutions projects in India to date.

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 melting it before use. APAR's modern plants enable us to produce world-class quality in massive capacities.

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 re-conductoring 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.

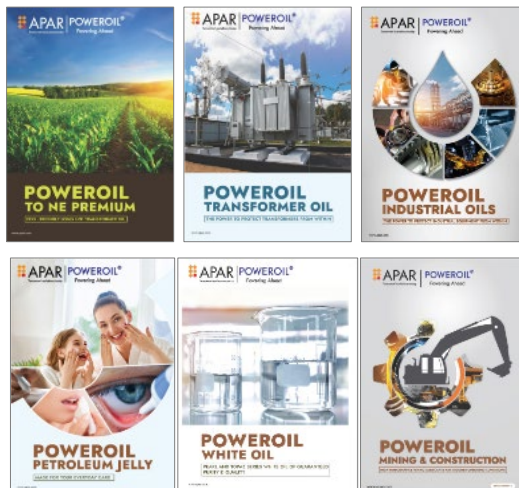
Our conductor division has state-of-the-art modern laboratory which is certified by NABL (National Accredited Board for Laboratories) as per ISO 17025:2017.



Technology leadership - Oil

Our manufacturing facilities are located at Rabale, Navi Mumbai; Silvassa, Dadra & Nagar Haveli; and Hamriyah Free Zone, Sharjah (UAE). 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'.



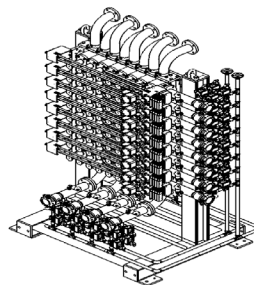
In the speciality oil segment, our comprehensive product range includes transformer oils, white and pharmaceutical oils, petroleum jelly, industrial process oils, automotive lubricants and greases. All our oils undergo extensive quality checks at every stage of production for all oil characteristics by test methods specified in the latest standards at NABL accredited ISO/ IEC 17025:2017 certified quality control laboratories.

The plants are certified for ISO 9001 (Quality Management System), ISO 14001 (Environmental Management System), ISO 45001 (Occupational Health & Safety), IATF 16949 (Automotive and RPO), ISO/ IEC 17025 (Testing & Calibration), REACH registration for transformer oil and white oil, CGMP and HALAL certified white oil plant, VDA certification for AdBlue plant.

Our oil business laboratories have state-of-art facilities and are certified (a) by NABL (National Accredited Board for Laboratories) as per ISO 17025, and (b) by Department of Scientific and Industrial Research (DSIR)

Our Automotive & Industrial (A&I) oil plant at Rabale has fully automatic operations with peggable line and advanced SCADA system.

Piggable automatic manifold with 8 In x 8 out connections



The piggable pipeline for base oil charging offers the following advantages :

- 8 in x 8 out fully automatic piggable manifold can handle 8 different filling machine with 12 different finished storage tanks
- Highly accurate measuring systems and advanced blending technology improved FTR more than 92%
- High speed filling lines can cater 0.5 litre cans to 210 litre drums

Collaborations

CIGRE

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



CTC GLOBAL

ieema
your link to electricity

IEEMA

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



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



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

CACMAI

- Cable And Conductor Manufacturers Association of India



Draft Committee Member

The International Electrotechnical 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)
- Members of State Industrial Development Authority of Maharashtra & Gujrat
- 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.



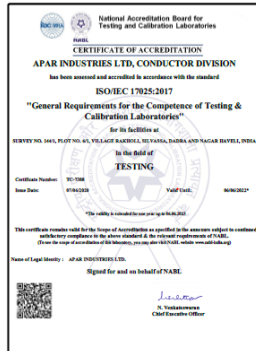
Intellectual Capital

Product Innovation & Research

APAR's commitment is customer focused R&D. Our specialty lies in delivering product performance in extreme environments; we engineer and manufacture cable, conductor and speciality oil that consistently outlast and outperform the competitions.

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.

Cable : Our R&D department has a global reputation as a leader in developing innovative insulating and sheathing compound to solve problems in wire and cable application in harshest conditions. We have specialized experience in conventional chemical cure system as well as modern state of art irradiation cure system and also in PVC insulated cables with vast variety of designs as per customer requirement and application.



NABL accreditation -
Conductor business



NABL accreditation -
Oil business



NABL accreditation -
Cable business

a) **Polymer Science :** Superior insulation and sheathing systems are our specialty. Our polymer technologists create unique, economical, state of art insulation/ sheath compounds with a wide variety of properties that perform well in rugged applications. We develop critical recipe both for chemical curing as well as electron beam curing with different polymers. We are experienced in wide range of polymers.

Polymer range @ APAR	
EVA	PVC
EPR/ EPDM	PVDF
CPE	NYLON
PCP	VAMAC
CSP	HNBR
NBR-PVC	ETFE
PE/XLPE	FEP
VITON	PEEK
SILICONE	TPE

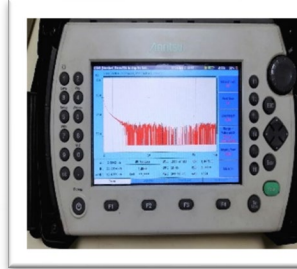
b) **Chemical curing Technology :** We have both autoclave curing & continuous curing facility for different critical application including smooth surface finish as per customer requirement.

c) **Irradiation curing Technology :** Electron beam cross-link technology enables us to enhance insulation material performance by changing thermoplastic material to thermoset. Our four irradiation units are capable of cross-linking wire from 0.2 sq mm to 400 sq mm and cables with diameter upto 60 mm.

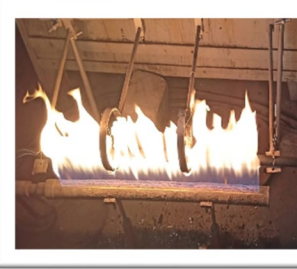
Irradiation benefits & features

- ✓ Higher temperature resistance
- ✓ Thermoset (will not melt)
- ✓ Increased mechanical strength
- ✓ Increased abrasion and cut through resistance
- ✓ Increased chemical and oil resistance
- ✓ Increased crush resistance
- ✓ Increased shear and compressive strength

Apart from other cross-linking technologies, irradiation cross-link products are easy to cut and strip.



OFC cable attenuation test



Fire survival test



Smoke Density test for cable



Oxygen Index test for power cable

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
- ✓ Related 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
- ✓ Related 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
- ✓ Related other environmental tests

Electrical Test

- ✓ HV test
- ✓ IR test
- ✓ Spark test
- ✓ Dielectric constant
- ✓ DC resistance
- ✓ CR test
- ✓ Related other electrical tests

APAR's cable solution has bagged the highest number of UL approval (#18) from India till now.

UL certification is mandatory to market any cables or wires in USA, and these are one of the stringent & difficult certification owing to it's rigorous & comprehensive testing process

We have innovated special technologically advanced PV wire for Solar Industry which serves the following challenges-

(a) zero transmission loss (b) life expectancy beyond 25 years (c) fire retardant (d) RoHS compliant (e) UV resistant, and (f) anti rodent & anti termite

We have developed special FRP cables of 12F/48F/72F triple sheathed FRP armored fiber optic cable. This cable is one of it's kind for having fire survival capabilities without any metallic elements being used.

The prime requirement of this cable is to sustain a fire test of more than 120 minutes at 750 degree centigrade without fiber break (also known as circuit integrity of fire resistant)

We are associated with Indian defense and naval department (DRDO/ NPOL) for over 15 years, and have developed and supplied the following cables :

- Heavy tow cable
- Mareech cable/ Torpedo cable
- Umbilical cable
- ROV cable
- Tactical cable for army
- Tether cable air surveillance balloon system
- Pressure tight and Non-Pressure tight cables up to 60 BAR for ship building
- Airport lightening cable
- EV cables

APAR has already developed mining cables as per ICEA, NEMA, ASTM etc., and catering mining segment.

We have developed special tactical cables for Indian Defense. These cable has following properties.

- ✓ Thickness <3.8 mm (approx. thickness of two 5 rupees coin)
- ✓ Lightweight <24 KG/Km (easy to carry)
- ✓ Strong - sustains even a military truck passes over it

After in-depth R&D, our OFC team had developed 2F OM2 cable which was able to reduce the diameter by 6% and weight by 14% as compared to earlier version.

We have develop special micro module OFC cables which has following unique set of requirements for a micro module FO cable :

- ✓ reduced diameter with higher fibre count
- ✓ supports super high speed network flow
- ✓ outstands durability test (withstand -40 degree centigrade to +70 degree centigrade)
- ✓ waterproof
- ✓ light weight yet with high tensile strength
- ✓ Easy to handle and highly durable



Conductor :

a) **Innovative manufacturing of AL59 conductors** : AL59 conductors are made out of Al-Mg-Si low resistance high conductivity alloy with excellent electrical characteristics, excellent sag-tension characteristics and superior corrosion resistance to that of ACSR (Aluminium Conductor Steel-Reinforced). As compared to ACSR they have lighter weight, comparable strength and current carrying capacity.

The metallurgy and manufacturing of AL59 requires energy intensive processes for precipitation of SiMg₂ phase. This involved multiple heat treatment processes to achieve consistency in parameters and manufacture first time right material.

With the consistent R&D efforts, thorough analysis and setting up the stringent process norms followed by several trials on various wire sizes, APAR team succeeded in achieving the desired wire parameters as per the technical specification by redefining the recipe which did not require the drawn wire to be heat treated thereby providing the following benefits :

- Improving the productivity
- Saving of electricity 13.75 units/ MT
- Material saving

b) **Development of 5xxx series wire rods and wires** : In-house development of 5xxx series aluminium alloy wire rods and wires were undertaken for usage as input material to the industry as well as to capture downstream market potential of welding wires/ armouring wire/ rivet product segment.

Successful production achieved after various commercial trials. Product range established for specific applications and industries from wire size of 2.00 mm to 6.00 mm.

c) **Stranding machine modification to accommodate more number of wires** : Distribution conductors generally are made with 7 strands and the machines available in market are either 7 strand or 19 strand. As APAR grew its presence in overseas market there was demand for conductors with 8 strands which was un-economical to manufacture on a 19 strand machine.

To capture 8 strand conductor market potential of the export market & especially American market, APAR team with indigenous efforts and engineering, successfully modified the existing 7 strand machine to 8 strands. The same machine is now utilized to produce any conductor up to 8 strands thereby augmenting the capacity and increase in revenue.

d) **Atomization in grease application** : The overhead bare aluminum or aluminum alloy conductor is subject to various exposures like heat, moisture, rain, pollutants over its service life. At coastal areas it also has exposure to salty air.

Protective compound (grease) application in overhead transmission conductors are used to prevent moisture, direct ingress of water and pollutants at interstices between the layers and wires.

The application of grease and minimum weight is directed by the applicable standards. However, in the actual usage/ application, the amount of grease applied on the conductor had high variations.

To provide consistent grease application in conductor as per applicable specification, APAR team designed and developed motorized grease applicator with pneumatic control which successfully facilitated grease application in conductor at controlled rate and weight at each cage of stranding machine. **This innovation resulted in waste reduction and consistency in the quality of product.**

e) **Development of 8xxx series compact conductor** : With the emergence of a borderless world and changing market dynamics, the requirement of compact conductors with 8xxx series aluminium alloy was received from our cable division. APAR team innovated to build the capability of both machines and processes to manufacture the 8xxx series compact conductors as per benchmark quality.

This increased the production capacity, diversifying the product segment and expansion of product portfolio.

f) **Development of air expanded conductors** : We have indigenously designed conductors using larger diameter of individual strands and a filler of air is used in between the inner strands and the outer aluminium strands to increase the overall diameter of the conductor. Air expanded conductor uses free space by using skeletal type of stranding in inner layers to increase the diameter and increase the ratio of surface area to metal cross-section or weight providing following significant advantages:

- Increased outer diameter without increasing the weight of aluminium decreases corona losses and radio interference and audible noise derived from the corona also decreases. It also improves electromagnetic performance in the transmission line.
- As compared with conventional conductors with the same increase in outer diameter, a single conductor can be used instead of twin bundle configuration. This saves material and in addition, stresses on tower due to conductor weight is reduced.
- Material consumption of the tower and cost of hardware fittings is also reduced.
- Larger diameter conductor provides higher heat dissipation rate, hence losses due to heat minimized. Thermal loading of line is also minimized.

Modern laboratory, certified by NABL, with all test facilities at conductor plant.

Dull finish conductor : We produce dull finish conductor (to reduce the reflection of conductor surface due to aluminium lustre) which offers following benefits :

- The surface emissivity increases from 0.23 to approx. 0.42
- Improvement in current carrying capacity by 5%
- Suitable for V, HV and EHV overhead, long distance transmission and distribution lines
- Can be installed within the vicinity of airport as dull finish conductors eliminates the light scattering from conductors surface



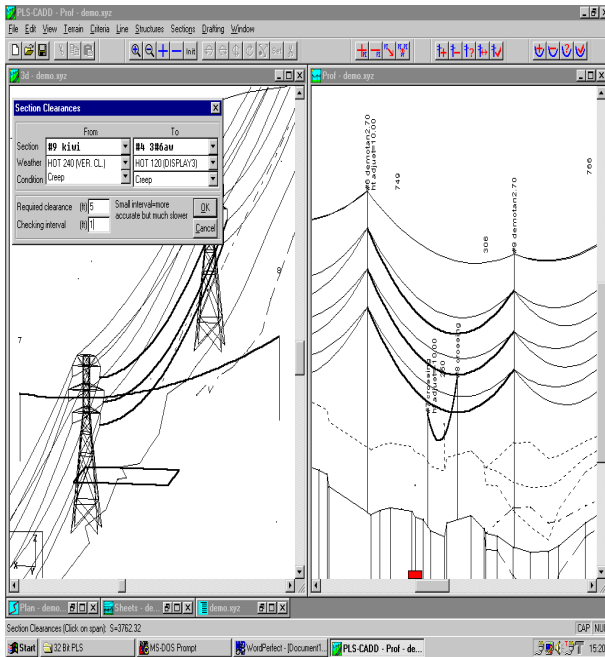
Traditional conductor
with shiny surface



Dull Finish
(non-specular) conductor



Software based simulation : We use advanced software for simulations and calculation of critical transmission line parameters for new product development and validation.



QA testing : All critical quality tests are carried out using computerized machines with display for accuracy, transparency and data storage



Improvement in annealing furnace & reduction in power consumption : The team at Athola with due diligence and brainstorming activities took up the challenge to enhance the existing capacities of the installed annealing furnaces thereby enabling the plant capacity to meet the growing demand and subsequently reducing the power cost of the output material. This activity enhanced annealing capacity by 33% for alloy, ACSS and ACCC type conductors spools. It also saved the purchase cost of one new furnace & daily power saving of 20 to 25 Kwh/ MT.

Oil :

Some highlights of our innovation at oil business are :

- We introduced first of its kind fire resistant biodegradable transformer oil “NE premium” with superior oxidation stability, having oxidative life 4 times more than any other product in the market
- Amidst all volatile economic world and uncertain overseas condition, APAR has developed storage which can last long. The technology used ‘**Nitrogen bracketing system**’ is an outcome of several trials and tests.
- AdBlue – APAR is 1st company in India to obtain a VDA license which is used in the Selective Catalytic Reduction (SCR) system of vehicles to **convert the NO₂ emissions to nitrogen enabling vehicles to conform to BS6 emission norms.**



- 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.

- The environmentally Acceptable Lubricants (EAL) segment is the focus and test facilities for the biodegradability of the products by OECD 301B & 301D are established.
- Computational Fluid Dynamics (CFD) studies for transformer thermal behaviour in collaboration with DDU is an ongoing project currently. This will be extended to other lubricants.
- Launched nanofluids for engine oil applications in forklifts. It extends the life of the engine oil by approx. 8% as compared to the conventional mineral oil-based engine oils of similar performance.
- Fuel additives of biodegradable type launched for diesel applications with a fuel saving of 5 to 7% in field performance.

We are in advanced stage of discussions with an innovative international company for the sourcing of biodegradable natural plant-based esters to manufacture transformer oil. The product meets the required specifications and trials have commenced in five utilities in India. 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, we are in advanced stage of obtaining approval from a leading utility to use this bio-degradable transformer oil in transformers up to 132 KV.



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.

All the laboratories are certified by NABL (National Accredited Board for Laboratories) as per ISO 17025, and by Department of Scientific and Industrial Research (DSIR).

Biodegradability Tests

- ✓ as per OECD 301 B standards

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

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.

Laboratory at oil plant, Silvassa





Natural Capital

Key metrics (FY 2021-22)



90,490 tCO₂e GHG emission

17,774 tCO₂e Scope-1 GHG emission

72,716 tCO₂e Scope-2 GHG emission



227,289 KL Water Footprint

79.4 % Bore well water

19.1 % Surface water

1.5 % Purchased water



2.90 million units solar electricity generated at plants

14.0 million units renewable generation planned for FY 2023-24 in addition

72000 KL of rain water harvesting facility ready for monsoon of FY 2023-24

Linkage with SDGs



Focus areas



Climate Change



Energy management



GHG emission



Water conservation



Solid waste reduction



Circularity

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. We are also partnering with leading science and technology institutions in this journey.



Climate change

APAR acknowledges that climate change is no longer a distant reality, its repercussions are already being felt by people across the globe today. Over the last year, we have seen terrifying wildfires, extreme flooding and some of the hottest temperatures on record around the world. In India, we have been experiencing increased frequency and severity of cyclones in coastal regions, wildfires in state of Rajasthan, extreme temperatures in northwestern and central states, floods and cloudbursts in eastern states, unexpected draughts in southern states. The Covid 19 pandemic has made all of us more aware of how helpless human beings are against such global black swan events and the possible next such event will be disaster due to climate change unless we take action to try and reduce the impact.

The manufacturing sector produces a broad range of products that serve a range of markets and industries. This sector is a large energy user and greenhouse gas (GHG) emitter, and faces risks associated with climate change and other sustainability issues. It is linked across entire value chains across almost all other industries, and is a key enabler of the low-carbon economy.

As a responsible company, we not only are trying to manage the climate related risks to our business, but we are also consistently trying to reduce the impact that our business contributes to this risk. We have also been partnering with our supply chain (both suppliers and customers) in such initiatives. We are in discussion with leading scientific and engineering institutions in the country to find appropriate technological solutions like circularity in waste management.



Climate related risks

Through a series of internal discussions among our Sustainability Champions and Leadership, we were able to identify the climate change related risks and opportunities in our business across the product groups and locations where we operate.

Our intention has been to:

- make our business, supply chain, people and communities more resilient to climate threats
- obtain inclusive business benefits from the opportunities
- align our actions with the UN SDGs, India's NDC and our net zero aspirations

(1) TRANSITION RISKS

Technology related risks - Medium term (03-10) years

- High carbon intensive raw material
- Keeping pace with demand for low carbon products
- Higher costs from increased energy consumption
- Reduced demand of lubricants due to wide-scale introduction of EVs (Electric Vehicles)

Reputation risks - all time frames

- Focus on fossil fuel avoidance
- Change in consumer preferences
- Increased stakeholder concern

Market related risks - Medium term (03-10) years

- Changes in consumer preferences from high carbon intensive to low carbon products
- Increased cost of raw materials
- Access to financing & insurance increasingly affected by climate & environmental risks

Policy & Legal risks - Medium & Long term (03-20 years)

- Increased operational costs due to changes in environmental legislation
- Implementation of carbon tax in jurisdictions in which the company operates
- Exposure to litigation
- Enhanced emissions reporting obligations

(2) PHYSICAL RISKS

Acute risks - Medium & Long term (03-20 years)

- Increased severity of extreme weather events such as cyclones, droughts, and floods

Chronic risks - Medium & Long term (03-20 years)

- Amplification of cyclone activity over the long term. Most of our factories are located close to the sea and we have seen sudden unexpected cyclonic activities and their frequency as well as impact increasing in the recent past
- Coastal and inland flooding
- Extreme heat and more severe weather/ rainfall can disrupt supply chains
- Rising temperatures will impact work conditions, and increase stress on the health of our shop-floor workforce
- Availability of water could become a challenge

Risk disclosures :

- ✓ APAR has completed voluntary disclosure of **Climate Related Risks** to CDP, and
- ✓ prepared its first **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/>

Climate related opportunities

Products & services

- Customer preference for low carbon products is an opportunity for innovation.
- Manufacture of products that has minimal carbon footprint during usage
- Increase longevity of products

Resource efficiency

- Use of more efficient production and distribution processes
- Use of recycling
- Building efficiency improvements
- Reduced water usage and consumption
- New technologies to reduce resource intensity in production

Resiliency

- Participation in renewable energy programs and adoption of energy efficiency measures
- Resource substitution, innovation, and diversification
- Development and deployment of recycling technologies
- Building eco-system of suppliers with good sustainability practices – resilient supply chain
- Supply security of water through rainwater harvesting and aquifer recharge

Energy

- Use of alternate energy sources including wind-solar hybrid
- Use of supportive policy incentives
- Reduction in energy demand through efficient manufacturing & optimization
- Participation in carbon markets
- Innovative power purchase contract structures

Climate risk management

Climate risk is managed through our Enterprise Risk Management program, which is an enterprise-wide risk management framework.

A wide range of risks faced by us, including the physical and transition risks of climate change, are evaluated. The top risks that could materially affect our financial condition or results of operations are typically identified periodically, and on an ongoing basis as and when new relevant risks emerge.

Plans for managing and mitigating material risks, including climate-related and other environmental topics as appropriate, are regularly reported to the leadership.

Our enterprise risk evaluation processes address a wide array of issues associated with climate change, including but not limited to

- customer requirements/ issues (e.g., need for carbon efficient products to address climate change regulations in different countries, consumer demands, profitability, etc.);
- operational issues (including new climate-related regulations and voluntary actions and norms); and
- supply chain (including weather-related disruptions influenced by climate change).
- resilience building (including water security)

Our Sustainability Steering Committee convenes meeting every month where the progress made by the Sustainability Champions in terms of implementation of climate risk management initiatives are discussed, goals are reset if necessary, budgets are approved or taken up for board approval as the case may be, developments in industry and sustainability related regulations are shared and best practices are discussed. Our decision to voluntarily participate in CDP climate disclosures 2022 was discussed and approved in one such meeting. The committee has set clear path forward for the journey of sustainability in alignment with the relevant SDGs, with specific focus on SDG 13 Climate Action.

Energy management

We have, in the recent past, set up plants closer to the raw material sources thus reducing significant amount of energy requirement. The conductor plants in Orissa are 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 melting it before use.

Through technology tie-ups, we are manufacturing electrical conductors that have reduced energy losses during usage at our customers' end. These conductors have a useful life of about 35 years on an average. Thus the volume of greenhouse gas emission loss saving potential over the useful life is significant.

We have developed lubricating oils that have a longer usage life thus reducing lesser frequency of replacement and thus saving petroleum based resources. We are in the process of developing plant based lubricating oil that will reduce petroleum resource requirement. This plant based oil will require less direct processing energy too, thus reducing scope 1 carbon emissions.

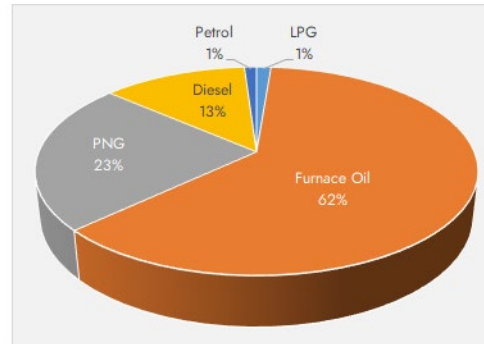
Through better management practices, during FY 2021-22, we have closed one shift operation of our lubricating oil plant in Rabale without affecting the overall production volume. The plant is now operating in two shifts instead of three and production volume has gone up. This action has resulted in significant saving in energy consumption.

In our cable manufacturing plants, we have initiated Industry 4.0 initiatives to improve productivity, thus reducing energy wastage. The initiative is ongoing and we expect to achieve higher specific energy savings in subsequent years.

Fuel consumption

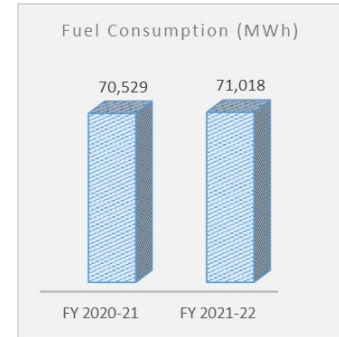
We understand and acknowledge that the share of fossil-fuel based electricity needs to come down substantially and overall energy consumption has to go down. Hence our focus is on both the demand side as well as the supply side management of energy.

Our fuel consumption during the reporting year was 71,018 MWh. The break-up of the consumption is as below:



The consumption of furnace oil has gone down as compared to last year because of design changes in furnace to avoid heat loss and optimize fuel consumption.

Fuel consumption in the reporting year is almost same as that in FY 2020-21, despite overall increase in production during FY 2021-22. This was possible because of many initiatives taken by us. Examples are cited under the heading 'Initiatives taken for GHG emission' later in this report.



Electricity consumption

Our electricity consumption during the reporting year was 95,111 MWh. The electricity is sourced primarily from the electricity grid, and there is a small element of roof-top solar in the energy mix.

Some of the initiatives taken up by us to reduce electricity demand:

- Optimize the operating pressure of utility compressed air in all our plants thus reducing the compressor motor running hours and arresting leakages
- Replacing conventional high GWP refrigerant based ACs with VRV-R 410 gas-based cooling system
- Better insulation of blending vessels thus reducing heat loss
- Replacing MHD lamp with LED lights
- Replacing de-rated capacitors with new capacitor units
- Installation of energy meters on high energy intensive machines to monitor and reduce the idle energy losses

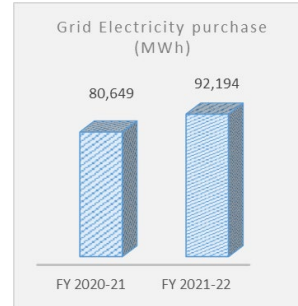
Supply side management

- Increased focus on renewable energy – please refer the section on 'Renewable energy'



There is increase in purchase of grid electricity in the reporting year as compared with FY 2020-21.

This was due to (a) overall increase in production, and (b) shifting from diesel to grid electricity SEWA (Sharjah Electricity & Water Authority) at our PSF plant, Hamriyah, Sharjah.



Renewable energy

Many of our plants are situated in places with high solar radiation and high duration of availability of sunlight. We have already started using solar energy and are exploring opportunities for further enhancements.

We have generated 2.92 million units of solar electricity at our various plants during FY 2021-22, and this is expected to increase in near time.

We have installed solar rooftops energy solutions at our plants at :

- Khatalwad & Umbergam (both in Gujarat),
- Rakholi (Dadra and Nagar Haveli) and
- Rabale (Navi Mumbai).

We have current installed capacity of over 4 MWp of solar energy across all the plants.



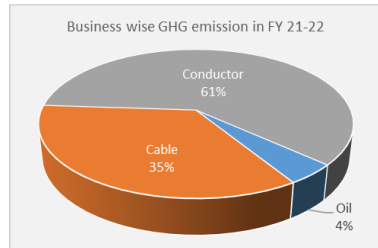
Additionally, we have entered a definitive agreement with a leading supplier to jointly develop a 3.3 MWp hybrid power project (wind - solar hybrid) under the group captive model. The HCGP (Hybrid Captive Generating Plant) is being set-up in Gujarat for our Cable facilities. This will reduce our requirement of grid based electricity significantly. Wind energy is typically available during evenings and night at this location, thus a hybrid solar-wind energy source will be optimally suited for us. Once implemented, it would have potential to generate 13.4 million units each year, and thereby reducing grid electricity consumption.

We are also exploring similar opportunities for our other plants and we have definite targets in place to replace grid power with renewable sources.

GHG emission

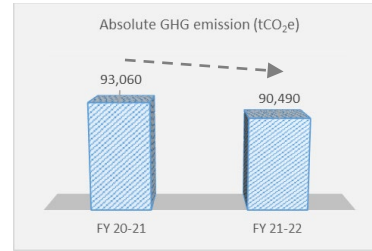
We have been working consistently towards lowering our carbon footprint through various initiatives. We follow the GHG Protocol for measuring our GHG emission. Currently we are measuring, managing and disclosing our scope 1 and scope 2 emissions. We will start measuring and disclosing our scope 3 emissions going forward.

The GHG emission during FY 21-22 was 90,490 tCO₂e

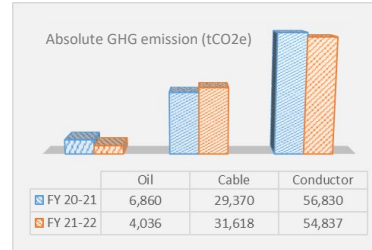


Conductor business accounted for 61% of the total emission.

The high share of GHG emission in conductor business is due to high energy intensive operations primarily in metal melting and holding furnaces. We are working on increasing the direct use of liquid metal to reduce our emission intensity.

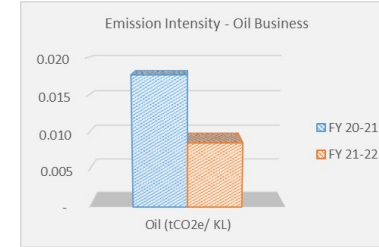


Due to various measures taken by APAR, the absolute GHG emission in FY 21-22 reduced by 3%, despite overall increase in production



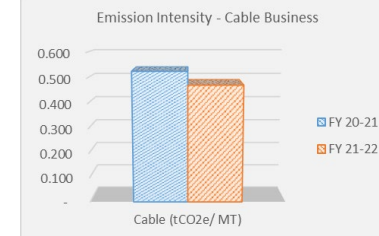
The reduction in GHG emission in FY 21-22 was mainly attributable to our Oil business, which registered a reduction of over 40% in absolute GHG emission

It was possible through various productivity enhancement measures taken at our lubricating oil plant at Rabale. The most significant was to change from three shifts operations to two shifts operations without affecting the overall production volume. On the contrary, the production volume has gone up. This action has resulted in significant reduction in GHG emission.



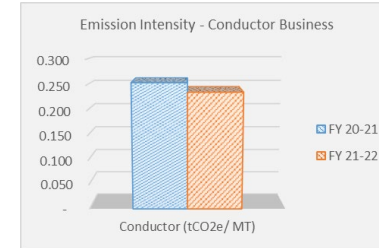
The emission intensity reduced by 51%

(from 0.018 tCO₂e/ KL to 0.009 tCO₂e/ KL)



The emission intensity reduced by 10%

(from 0.527 tCO₂e/ MT to 0.473 tCO₂e/ MT)

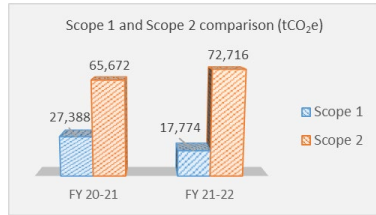


The emission intensity reduced by 7.3%

(from 0.255 tCO₂e/ MT to 0.236 tCO₂e/ MT) had we kept the product mix same as the previous year (FY 2020-21) – like to like comparison

However, due to change in product mix the reported intensity increased marginally to 0.271.

Scope-1 emission accounted for 20% of total emission in FY 21-22 (down from 29% in FY 20-21) and Scope-2 emission accounted for 80% emission



Scope-2 emission is on account of consumption of grid electricity.

We are increasing our focus on:

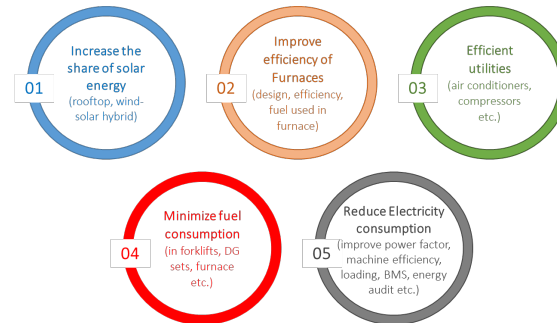
- reducing energy consumption through various measures at all our plants, and
- increasing the supply of low cost renewable energy. Our renewable energy generation is mainly due to rooftop solar which accounts for 3% of our overall electricity consumption. We are (i) further increasing the roof top solar capacity, and (ii) engaging in open access procurement of hybrid wind-solar energy, which should increase our renewable energy contribution to 13% of our overall consumption in FY 23-24.

GHG emission reduction initiatives

APAR has been continuously identifying projects for decarbonization at all its plants. We have completed implementation several GHG reduction projects and many more are under implementation. The major initiatives include:

Oil division

- Shifting from 3-shift operations to 2-shift operations at our Rabale plant owing to increased productivity
- Shifting from diesel to grid electricity SEWA (Sharjah Electricity & Water Authority), at our PSF plant, Hamriyah, Sharjah
- Optimize the operating pressure of compressed air at receiver tanks & maintaining air leakage below 6% in plant processes
- Installation of roof-top solar panels
- Replacing conventional high GWP refrigerant based ACs with VRV-R 410 gas based cooling system
- Better Insulation of blending vessels thus reducing heat loss



Cable Division

- Improvement in productivity through increase in line speed in LDC (Light Duty Cable) and Elastomer cables
- Rooftop solar electricity generation
- Arresting the compressed air leakages
- Replacing MHD lamp with LED lights
- Replacing de-rated capacitors with new capacitor units

Conductor Division

- Arresting ghost energy by providing energy meters on individual high energy intensive machines to automatically reduce the idle energy losses
- Modification in compressed line with respect to the requirement of production line
- Installation of rooftop solar power
- Automatic controls through PLC drives instead of manual
- Installation of recuperator in holding furnaces to heat the combustion air and increase burner efficiency
- Design changes in Furnace to avoid heat loss
- Construction of Heat Chamber for pre-heating of Aluminium Ingots (with excess heat)
- Increased share of production utilising direct liquid metal

We have measured the life cycle carbon footprint for some of our major products, particularly the ones with significant emission during the usage phase. We are in constant discussion with our suppliers of major raw materials as well as logistic companies to reduce the upstream and downstream emissions for our products.

GHG emission reduction targets & status

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

Particulars	FY	Oil	Cable	Conductor
Emission Intensity Unit		tCO2e/ KL	tCO2e/ MT	tCO2e/ MT
Baseline	2020-21	0.018	0.527	0.255
Target	2022-23	0.015	0.448	0.217
(15% reduction targeted)				
Status (midway)	2021-22	0.009 ahead	0.473 ahead	0.236 as planned

Net zero target

How early we can achieve Net Zero will depend on several factors, some within our direct control and some on which we do not have control. We will aggressively pursue and implement all necessary actions to reduce the scope 1 and scope 2 carbon footprint. With favorable results like (a) Grid becoming less carbon intensive as a result of India's aggressive renewable energy targets of 450GW by 2030, (b) Green Hydrogen Fuel being available for our use and (c) Natural Gas being made available in all our plant locations, we should be able 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.

Product carbon footprint

While we aspire to achieve carbon neutrality in our direct operations, our major suppliers of raw materials have also pledged to move in the same direction

Hindalco – <https://www.hindalco.com/upload/pdf/tcf-d-summary-report-2021.pdf>

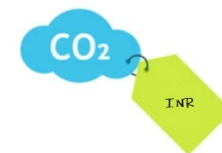
Vedanta - <https://www.vedantalimited.com/img/homepage/TCFD-FY2022.pdf>

We are in discussion with other supply chain partners around their carbon reduction plans and are sharing with them the knowledge and experience that we have gained from our own journey of ESG. We have arranged webinars and workshops on how to manage carbon footprint. We have even suggested certain actions for them and most of our supply chain partners are working towards a leaner carbon ecosystem. With such collective efforts, we would be able to reduce our product carbon footprint significantly. We have initiated calculation of our Scope 3 emissions and our next year's ESG report will cover our scope 3 emissions of relevant categories. Once we have done the measurement, we will be better equipped to manage our scope 3 emissions too.

Internal carbon pricing

Our team had identified approx. 100 carbon emission reduction projects after detailed technical and financial feasibility evaluation during FY 2021-22. These are at various stage of detailed evaluation, approval, implementation or implemented. This list is steadily growing as we keep on identifying & adding new projects to our list. Thus a pipeline is already in place for next couple of years.

We may reach a stage in future when we exhaust all our financially feasible projects, and there is no project to work upon. To tackle this scenario, we have set up a process for computation of **Internal Carbon Pricing (ICP)**, so that it may be used when required in future.



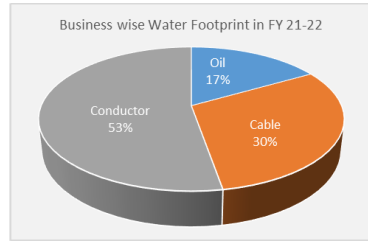
We have done studies of several GHG abatement projects, which were financially not feasible due to higher pay-back period. On the average, we find that if we apply an ICP of US\$ 15 to US\$ 20, some of these projects become viable. We will use this ICP if and when required, in future.

APAR has adopted Shadow Pricing mechanism for computation of ICP.

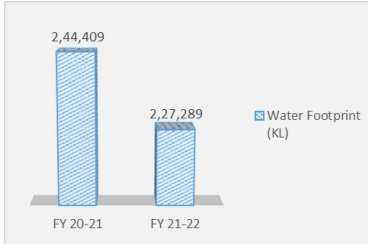
Water footprint

We manage our water responsibly, including water withdrawal and discharge, and seek continuous improvements in water management through the principles of 3Rs.

The water footprint during FY 21-22 was 227,289 KL.



Conductor business accounted for 53% of the total footprint.



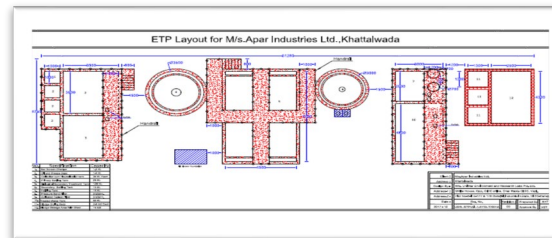
Due to several measures undertaken, the water footprint has gone down from 244409 KL in FY 2020-21 to 227289 KL in FY 2021-22.

All our plants in the Cable & Oil Businesses have Zero Liquid Discharge (ZLD). 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.



Cooling Tower @ our Conductor Plant

ETP layout @ our Cable Plant



ETP facility @ our Oil Plant



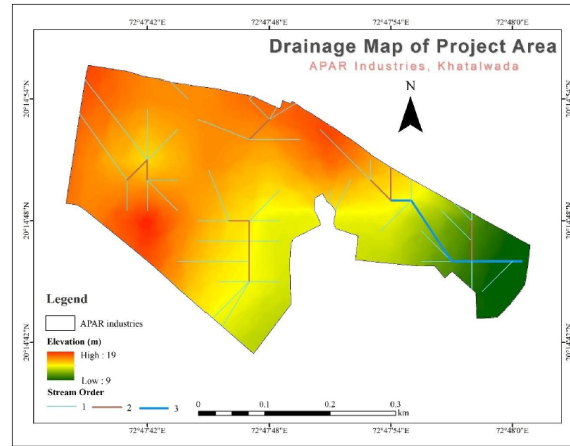
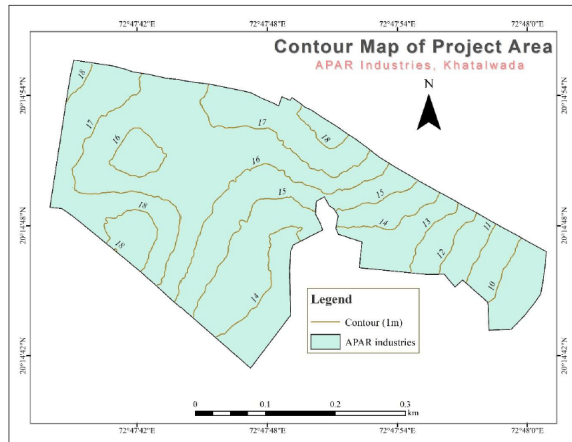
STP facility @ our Cable Plant



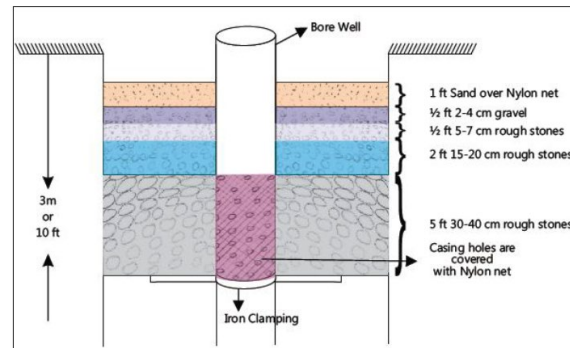
We have completed Hydrological & Topological studies of our plants through a leading consultant for water conservation through aquifer recharge. This includes :

- Preparation of watershed map
- Estimation of underground water level, pressure, quality & quantity of water
- Computation of intensity of the water flow 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

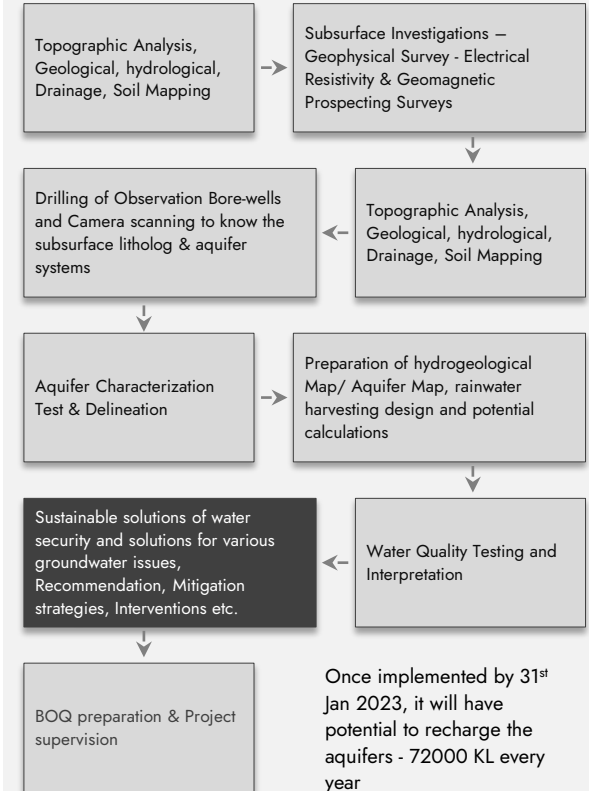
Objective is to give back to the nature through aquifers recharge & thereby maintain water table in the nearby area. **This will ensure water security for both APAR and the neighborhood communities.**



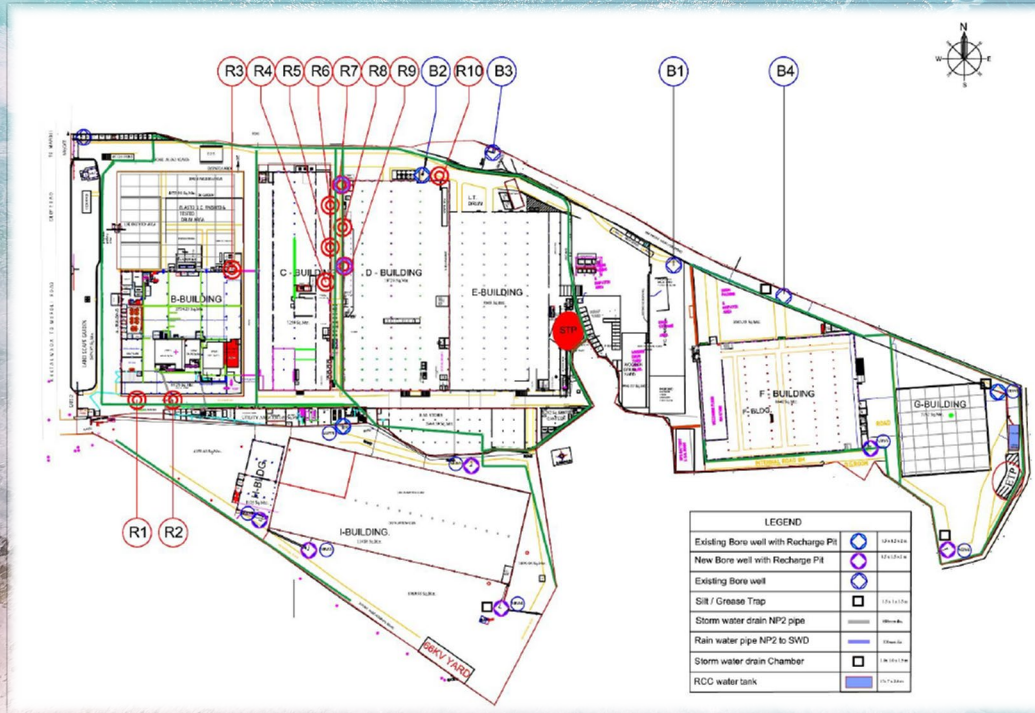
Conceptualized schematic depicting the Recharge Injection borewell & Pit



Process flow



Once implemented by 31st Jan 2023, it will have potential to recharge the aquifers - 72000 KL every year



Location map of Recharge Pit with BW and Recharge Pit without BW @ APAR Khatalwada Plant

Water footprint reduction targets & status

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

Particulars	FY	Oil	Cable	Conductor
Water Intensity Unit		KL/ KL	KL/ MT	KL/ MT
Baseline	2020-21	0.099	1.662	0.510
Target	2022-23	0.084	1.413	0.434
(15% reduction targeted)				
Status (midway)	2021-22	0.083 ahead	1.038 ahead	0.592 behind



Solid Waste Management

We manage waste reduction through implementation of various quality improvement processes, upgradation of the plant, regular trainings, six sigma implementation, and process monitoring. Across all our processes, we try to increase the share of recycled materials as inputs in our production process, reduce and reuse waste and improve the material management process for greater resource efficiency.

Solid waste inventory is prepared for all the plants. We are exploring better & effective ways to manage and minimize waste through the 3R principle of reduce, reuse and recycle. Following initiatives are implemented and practiced at APAR :

Re-cycle: Our conductor division re-cycles 100% aluminium waste. 100% of the plain copper scrap is directly recycled by the company, and the tinned copper scrap is sold to authorized recyclers for further processing, in our Cable division.

Re-manufacture: 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.

Re-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 recycling.

Extended Life: We manufacture high quality cables (with highly improved insulation, incl. cross linking by electron beam radiation), which have extended life span (up to approx. 2 times of normal cable).

We are exploring better way to re-cycle/ dispose of MS scrap and plastic waste. It will not only get the best value of the scrap, but will also be another step towards circular economy – where the waste of one industry is used as input for other industry.

Reduce wood use :

We started using polypropylene (PP) as covering material instead of wooden battens to cover outer surface.



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

Biodiversity

Govardhan Eco Village, Palghar (Maharashtra)

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, 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
- Water Conservation (including 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 significant greening of the area and various bird species have started migrating there.





Human Capital

Key metrics (FY 2021-22)



12% Women workforce at Offices



8.3% Attrition during FY 2021-22



1,590 Man-days of training

8 Employee Engagement program by Corporate HR

4 Leadership Development program

40 E-learning program



0.03 LTIFR (Lost Time Injury Frequency Rate)



226 New hiring

Linkage with SDGs

3 GOOD HEALTH AND WELL-BEING



8 DECENT WORK AND ECONOMIC GROWTH



11 SUSTAINABLE CITIES AND COMMUNITIES



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

Our people

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.

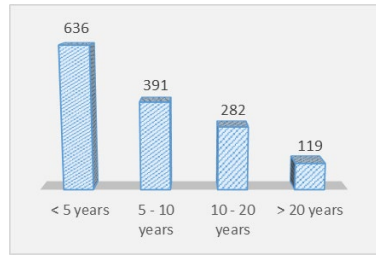
APAR's corporate philosophy is to encourage practice "to do what is right as a human being". It nurture a cohesive team culture that inspires employees to actively participate in all organizational development initiatives with no limitation of opportunities which makes APAR an exhilarating place to be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



Employee care

55% 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.



55% (792 out of 1428 employees), have been working with APAR for over 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.

APAR management ensure continuous skill and competence upgrading of all employees by providing access to necessary learning opportunities, on an equal and non-discriminatory basis to promote employee morale and career development through human resource interventions.



Benefits to employees

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

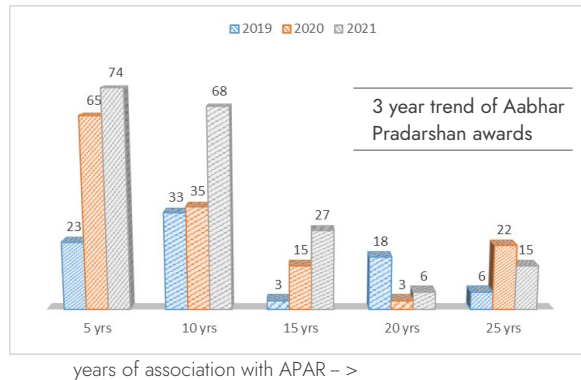
- Long term service award
- Benevolent fund for employees
- Education assistance
- Advance loan
- Home loan interest subsidy
- Canteen & subsidies food facility
- Employee wedding (premium car rental) policy
- Mediclaim for employee & family members & GPA for employees
- Annual medical checkup & hospital assistance
- Ambulance service @ home
- Free bus facility
- Financial support to family members (employee deceased due to Covid-19)
- Flexi working hours
- Hybrid model of work from home & work from office

50 employees have availed the benefit of our home loan interest subsidy policy in FY 2021-22

Long term service award (Aabhar Pradarshan)

Our 'Parivar' culture is why people have been with us for their entire career. We have employees who have been with us for 20, 30, 40 and even up to 50 years. For many employees, APAR is their first and their last job.

Recognition of employees for their commitment and achievements has been a way of life. APAR recognizes and appreciates long service awards for its employees. The employee who have completed milestone tenures (5, 10, 15, 20 and 25 years) are felicitated with the employee service recognition award as a gesture of appreciation and recognition for their contribution.



Continuing education assistance policy

Our leadership and training models help identify areas of improvement, and proactively help employees become their best. We also invest heavily in identifying and training future leaders.

Continuing Education Assistance Policy for employees at APAR provides framework for continuing education of the deserving employees through assistance to support them upgrade their knowledge, skills & qualification

Financial support to family members

During the entire pandemic period, APAR provided war footing support to our people to ensure availability of hospital, ambulance, oxygen, medicines, consultation by expert medical panel and financial support. As a gesture of support for the family members of the deceased employee, the Company announced 'Financial Support to Family Members' policy.

Mediclaim type	# Person	Claim settled
Covid 19	14	Rs. 17.4 Lakhs
General	279	Rs. 96.3 Lakhs

APAR employees co-operative credit society

APAR employee co-operative credit society was established in the year 1995 – 96. The main objective of this credit society is to provide hassle free funds to its members at the time of crisis at a very nominal rate of interest. This is also one of the option for employees to encourage savings on monthly basis.

Total number of members = 265



Employee engagement

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

All of our people are free and are motivated to provide their ideas, suggestions, and insights across strategy, operations, technology, and organization.

Employee engagement activities

- Reward & recognitions
- International women's day celebration
- APAR finance conclave
- APAR town hall
- Thank you card
- Celebration of festival, cultural & sports events
- APAR ENGAGE newsletter
- Farewell ceremony for our valued employees
- Birthday & marriage gifts
- HR Leadership Team strategy meet
- Employee engagement survey
- LSS & KAIZEN scheme

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.

- create the culture of appreciation and give an opportunity to value each other
- motivates employees to perform to the fullest extent of their capabilities
- encourages employees to follow workplace rules and undertake special behaviors beneficial to the organizations
- instantly and innovatively recognize and reward employees for exemplary individual and team behavior



Rewards & Recognitions @ APAR

APAR Spot Recognition Award

Contribution beyond expected deliverables

APAR Employee of the Month

Contribution beyond expected deliverables and execute the thing innovatively

APAR Employee of the Quarter

Innovative ideas, must demonstrate a positive and dedicated- attitude last quarter

APAR Star Performer/ Employee of the year

Innovative ideas, must demonstrate a positive and dedicated- attitude throughout the year

APAR Innovative Idea/ Suggestion & Implementation Award

Any Innovative Idea/ suggestion & its implementation which resulted into adding value to the business and reduce the cost

International women's day celebration

On the occasion of International Women's Day, as a gesture of care & appreciation towards the women of our APAR Parivaar, special facilitation programs for all women APARians were organized at our all locations.



Sports & fitness at APAR

To add excitement and enhance personal bonding with each other, like every year, several sports were organized.

This was the first post-pandemic gathering, and all safety precautions were followed during the day at all times.

APAR premier league cricket tournament was organized at an open ground near Nargol beach – 6 teams, 78 APAR players and 300+ spectators including senior APAR members to cheer their team, were involved..

Yoga camp was organized for the employees for their mental and physical wellbeing.

In addition, Badminton and other sports were also organized.



Employee engagement survey

APAR has always prioritized employee care. Employees are the pillars, the foundation of the Organization. The Company is receptive of employee sentiments and feelings and keeps it at the forefront.

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

The objective is to get a better understanding of the employees' perspective on the Organization as it values their ideas, opinions, and suggestions. Employee Engagement Survey has provided good a platform for employees to express their thoughts about the Company and its practices.



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.



1511 Total sample size

1397 Number of respondents

92% Survey response rate

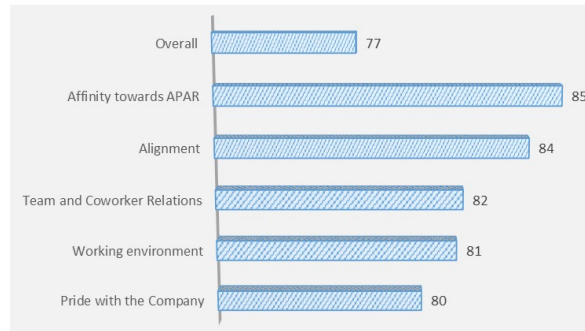


Highest engagement scoring on two key questions :

Questions

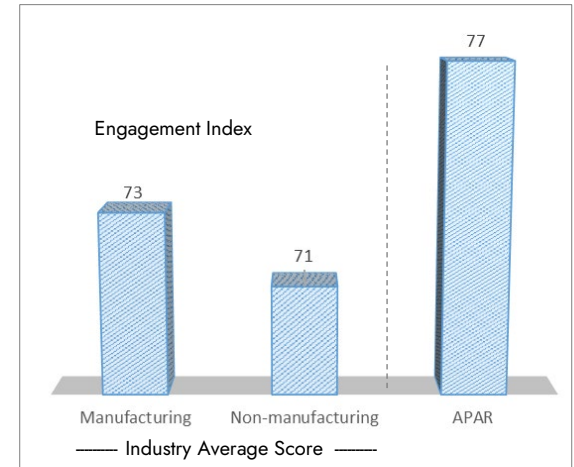
- 1) I would recommend my company to a friend as a good place to work.
- 2) Considering all things, I am satisfied working in APAR

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%)



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.

Out of the total 616 employees at our offices, 74 are women, which translates to 12% of the total office workforce – they are part of all management positions including junior, middle and senior levels handling various responsibilities in human resources, quality, procurement, information technology, sales & marketing, accounts & finance etc.

We are focused on adding more women employees to improve the workforce diversity along with building an inclusive culture. Being a part of the workforce, women employees are bringing significant positive changes to the business with their perspective and attention to detailing among other things. Therefore, gender diversity is one of our prime focus areas.



Kushal Desai
Chairman & Managing Director

“As a way forward we shall give preference to the female candidate, without compromising the competency, qualification, work experience of the job profile to recruit for new or replacement positions. The niche fit candidate who suffice the job profile requirement shall be selected”

Initiatives for women employees

- Maternity benefits
- Prevention of Sexual Harassment (POSH) policy
- Crèche facilities at our plant units
- Equal remuneration as per the act based on qualification & experience
- Periodical health check ups
- Safety & precautionary measures for all employees
- Adequate training & development initiatives for all

APAR is committed to provide a work environment that ensures every employee is treated with dignity, respect and afforded equal treatment.

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 :

- 34% of employees on Company rolls are in ST, ST, OBC & Others category
- 78% of employees on Contract are in ST, ST, OBC & Others category



Chaitanya Desai
Managing Director

“With the strong belief in the principle of trusteeship, APAR group continues to serve the community through a focus on employment and upliftment of weaker sections of the society”

Performance Appraisal, Incentives & Rewards

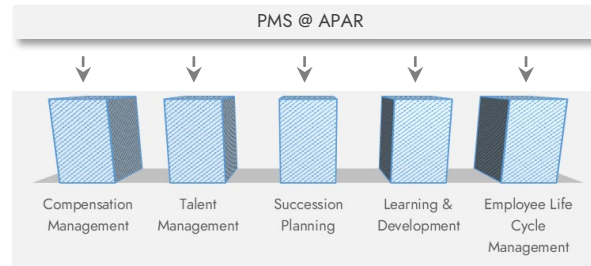
APAR practices PMS (Performance Management System) that is helping us find and develop talent as a source of competitive advantage and not just a way to ensure compliance. Our appraisal system, which is transparent in nature has the power to motivate our employees.

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

Integrated with other Talent Management Processes

Outcomes like PMS ratings, training needs identified thru PMS process are used as inputs in other processes as depicted below :



Mentorship program

Our mentorship program is designed to facilitate the senior leaders (identified as Mentors) in the company to pass on their experience and expertise to the Mentees (**High Potential – HiPo employees**) and develop them into the future leaders of the company. This is a great opportunity for the senior leaders to pass on their legacy and give back to the company in terms of knowledge & skills and strengthen the organization further in the long run. Unlike similar learning initiatives like training programs or online courses, mentoring utilizes the current available resources that company already has in order to upgrade its workforce.

150 numbers of HiPo were identified during FY 2021-22

SMART KRAs

KRAs at APAR are a set of activities on which performances are rated. Our appraisal process is based on SMART KRAs. It has been linked to annual business plan which is cascaded down to the HOD's KRAs and their teams.



Coaching

Periodic performance reviews serve as an ideal tool for identifying coaching needs of an employee. Continuous feedback on targets are coupled with coaching. Coaching comprises of multiple activities that a manager at APAR may carry out to help an employee improve his/ her performance.

Learning & Development

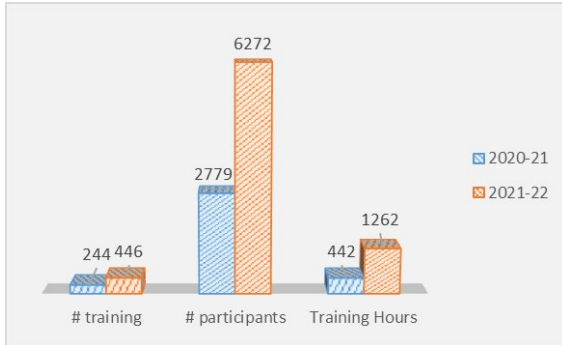
For our company to grow, our employees must grow and develop continuously. We offer learning and development opportunities for employees across levels.

Total 446 training programs were conducted during FY 2021-22. Of these 65 training programs were for soft skills development, and 381 training programs were conducted for technical trainings.

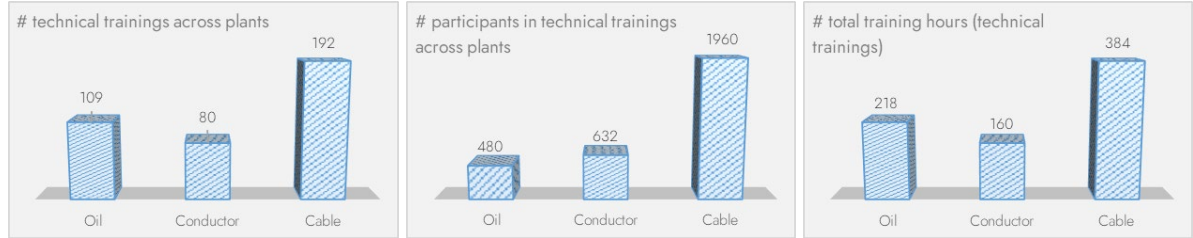
Details of the training conducted during FY 2021-22 are as follows :

Training type	# training	# participants	Training Hours
Soft skill	65	3200	500
Technical	381	3072	762
Total	446	6272	1262

Comparison of training programs over last 2 years :



Details of technical training in FY 2021-22



Workshops conducted during FY 21-22

- Values workshop (80% employee covered across location)
- Effective Personal Productivity intervention by the Leadership Management Institute (LMI) – 2 batches
- Johari window exercise
- Public speaking workshop
- Mind over matter
- International women's day workshop
- Advanced accident investigation and reporting workshop for conductor division employees (online mode)
- Workshop on life skills for young employees (2 batches) – by Mr. Avatar Lila, for developing qualities and skills required to be successful and resilient leaders of the future and navigate through their career efficiently – concept of identity, emotions, behavior and productivity and steps to strike a work-life balance
- Workshop on life skills for the kids of employees
- Workshop on psychometric testing methods - Personal Profile Analysis (PPA)
- Workshop on interviewing skills (for select employees)
- Workshop on 'Post Covid care : restoring health with yogic practices' (by Govardhan School of Yoga (GEV - ISCON)



Training for shop-floor employees

We train our shop-floor employees on

- Health and safety- wellness and awareness
- Technical aspects of machine operations, and
- Behavioral aspect – discipline & work culture.

18% of workman were upgraded with new roles & responsibilities through our skill development program during FY 2021-22.

Lean Six Sigma (LSS)

To embed the continuous improvement culture in the organization, we implemented LSS methodology & under the LSS initiative we have 1 master black belt, 7 black belts, 58 green belts, and 132 yellow/ white belts certified APARians at our Rabale, Silvassa, Rakholi, Athola, Khatalwada and Umbergaon facilities.

With the support of these certified APARians, 50+ white belt projects were implemented in quality improvements, productivity improvements, cost savings, change-over time reduction, breakdown reductions, and manpower productivity improvements.

Attrition

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

The voluntary separation for the FY 2021-22 stood at 8.3%.

Attrition rate FY 2021-22		
Avg. # of employees	Employees left	Attrition rate
1379	114	8.3%

APAR has taken many initiatives to ensure lower attrition. Some of the initiatives are as follows :

- Providing conducive work environment
- Promoting diversity & inclusivity
- Implementation of large number of employee engagement initiatives across the company
- Employee feedback survey
- Career development – implementation of performance management system, SMART KRAs, HiPo program, mentorship program etc.
- Various programs for skill development, trainings, workshops, continuing education assistance policy etc.
- Long term service award (Aabhar Pradarshan) and celebration of employee accomplishments
- Employee centric HR policy
- Assistance for the personnel and professional growth
- Reward & recognition



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.

- APAR corporate occupational Health & Safety (OHS) policy provides the direction to all employees, contractors, & suppliers, required to maintain and sustain a productive & accident-free workplace.
- All APAR's manufacturing locations have been certified for OHSAS-18001/ ISO 45001 for Occupational Health & Safety; undertakes regular safety audits to identify hazardous acts; ensure compliance with standard operating procedures; and assess the performance of the company's safety measures.

In addition to a collaborative approach for continual improvement and promotion of Health & Safety at the workplace, each plant has been equipped with the

- safety & 5S committee
- suggestion scheme
- Kaizen
- Safety engagement activities, and
- A team of qualified H&S professionals at each manufacturing location



Key metrics (FY 2021-22)

0.2 TRIR with zero FSI *

10470 EHS training man-hours

150 Safety Kaizen project

140 FSI Risk Mitigation Project

Digitalization of OH&S Management system



* TRIR - Total Recordable Incident Rate, FSI - Fatal & Serious Injury

FSI (Fatal & Serious Injury) prevention

An FSI is any work-related incident, risk, or unsafe condition that results in – or has the potential to result in – a fatality, life-threatening, or life-altering injury or illness.

Each of our manufacturing locations have cross-functional FSI team. On an average of 12 risks were identified per month during the year which were mitigated within the stipulated time frame.

Accident Prevention by providing horizontal & vertical lifeline system:

Fall is one of the highest FSI risk associated with our day to day operations at rooftop and other height locations specially solar panel cleaning & roof maintenance activities. Our FSI team identified this FSI risk. The safety committee meeting decided to eliminate this FSI risk by providing the horizontal lifeline system at rooftop & vertical lifeline at monkey ladders along with fall arrestor, rope grab arrestor & runner at our all rooftops.



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.

FSI risk accident prevention by 3 level safety measures in rewinding machines:

Our cable & conductor business have a large no. of rewinding machines which have major risk of FSI. We have provided three levels of protection from the rotating drum,

- level one by providing the safety interlocking chain
- level second is an optical sensor, and
- Level three is the use of foot-operated safety switch/ optical based safety curtains.

This system ensures us the safe rewinding.

In addition, the following measures have been implemented :

- All rotating and moving parts have been equipped with adequate guarding
- Active fire protection CO₂ flooding system installation in electrical panels
- Provision of ELCB for prevention of electrocutions



Safety Audit

APAR Industries undertakes regular safety audits to

- identify hazardous and unsafe acts
- ensure compliance with standard operating procedures, and
- assess the performance of the company's safety procedures

All units has annual ISO 45000 certification & surveillance audits for the assurance & strengthening of the occupational health & safety management system.

National Safety Week Celebration

We celebrate National Safety Week across all our factories from 4th to 10th March every year. We organized many safety awareness and promotional events like safety drama, nukkad naatak, safety quiz, safety poster competition, safety games, safety poem, safety suggestions etc.

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.

Incident Investigation and corrective action

When a work-related injury, illness or near-miss incident occurs, managers and the OHS team quickly initiate an investigation of the incident, develop corrective action plans, and track the actions to closure. A safety bulletin alert is distributed to all manufacturing locations to ensure corrective actions are in place. This enables other locations to benefit from information sharing and data statistics and analysis, which contribute to continuous improvement and reduces repeated incidents.



Safety training

In order to ensure safety at workplace, we conduct various safety trainings like personnel protective equipment, electrical safety, work permit system, chemical safety, fire safety, fire & emergency mock drill, Covid 19 awareness session etc. for all our employees as well as contractual workers.

OHS training in FY 2021-22 :



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 4 years are provided in the charts :

Legends

TRI - Total Recordable Incident

TRIR - Total Recordable Incident Rate

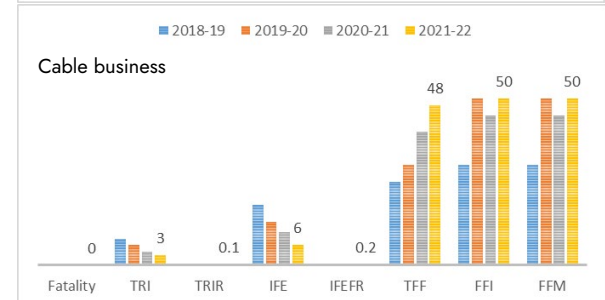
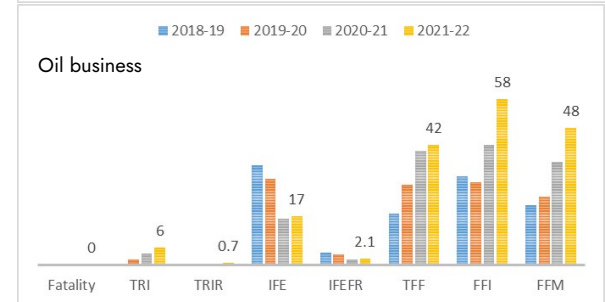
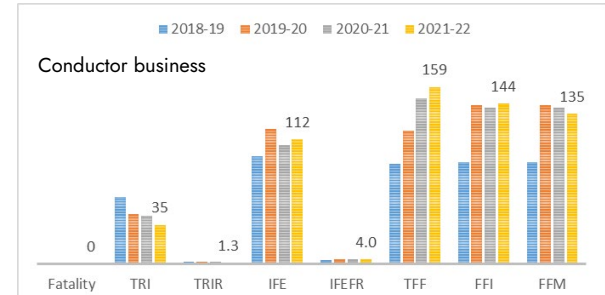
IFE - Injury Free Event

IFEFR - Injury Free Event Frequency Rate

TFF - Target Find and Fixed

FFI - Find and Fixed Identified

FFM - Find and Fixed Mitigated





Social Capital

Supply chain

We believe in engaging in healthy relationships with our suppliers and customers and associating with them in a fair, transparent and collaborative manner to build long-term 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 :

a) **Strategic location of our plant:** Two of the APAR's conductor plants are strategically located in Jharsuguda and Lapanga, which is eastern part of India in Orissa. **We can source the raw material (molten aluminium) easily as our plants are situated almost adjacent to the primary producer.** Similarly, the finished goods, viz. different kinds of conductors can also be supplied more easily to the eastern parts of India.

b) **Supplies assurance through long term partnership with suppliers:** Our relationship with suppliers allows us to maintain right quality of products and timely deliveries. Over period of time, we have established long term relationship with our key suppliers for all the three businesses.

c) **Proximity to Port:** Our conductor plants are located in Silvassa. The close proximity to Mumbai port enables us to save both on inwards as well as outwards freight.



Storage tanks at our Hamriyah oil plant are connected directly to the port jetty through a 1.5 Km. 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.

Our oil units are located in Rabale (Navi Mumbai) & Silvassa. Also our cable units are located in Umbergam & Khatalwada (Taluka Umbergam). All these units are located very near to the Mumbai port. Hence, procurement/ transportation of raw material as well as finished goods can be exported very easily thereby saving on both inward as well as outward freight.

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 Owen Corning, Sterlite, Fuzikura etc.
- XLPE suppliers include Borogue, Hanwa; PVC Resin: LG, Reliance etc.
- Other suppliers like Dow US, Royalene US, KLJ Polymer

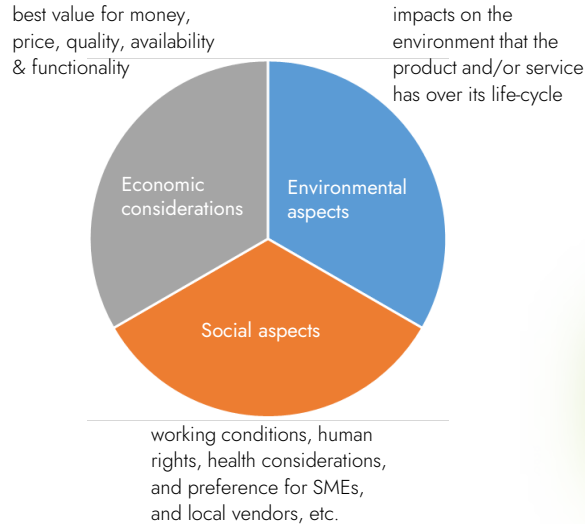
Oil business

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



Sustainable Procurement

Our procurement policy is based on following 3 parameters :



APAR's supplier code of conduct takes into account the well-established principles of sustainability and these have been incorporated in it.

The supplier's code of conduct is shared with all the suppliers, and their acknowledgement is taken. It addresses topics including

- Ethics – business integrity; fair competition; privacy & intellectual property; identification of concerns; animal welfare and conflict minerals
- Labour issues – child labour avoidance; freely chosen employment; diversity & inclusion; fair treatment; working hours, wages & benefits; freedom of association
- Health & safety issues – quality requirements; health, safety, environment & quality regulations; product safety; occupational health & safety; process safety; emergency preparedness, risk information & training; waste & emissions; resource conservation & climate protection; security

We are consistently interacting with our customers & 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.



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).



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, 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.

Set-up in 1996, **Dharmsinh Desai Memorial Methodist Institute of Cardiology and Cardiovascular surgery** has benefited about **400,000 patients** mainly from rural Gujarat. 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% of the patients are from economically backward strata. It served as Covid ICU during 2nd wave of pandemic.

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.

Dharmsinh Desai Methodist Memorial Heart Hospital



Bhaktivedanta Hospital



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 and Research is the fifth Faculty to be started by the Dharmsinh Desai University of Nadiad (DDU) after Faculty of Technology, Faculty of Pharmacy, Faculty of Dental Science and Faculty of Management and Information Science.

Dr. ND Desai Faculty of Medical Science and Research is extending its hospital capacity to 750 beds for serving the community.

Statistics of patients benefitted till date :

Sl	Services	Patients benefitted till now	Charges
1	Outdoor Patients (OPD)	8,32,119	Free
2	Indoor Patients (IPD)	56,468	Free
3	Surgeries (OT)	17,126	Free
4	Laboratory Test	18,34,406	Free
5	X-Rays	1,28,341	Free
6	Sonography	48,664	Free
7	New Born Treated in NICU	1,934	Free
8	Gynecology Delivery	4,073	Free
9	Food Three Times	Approx. 600 meals daily	Free

Sl	Services	Patients benefitted till now	Charges
1	Blood Donor	4,595	Free
2	Plasma Issue	817	Free
3	Platelet Issue	740	Free
4	Blood Issue	4,565	Free

Dr. ND Desai Faculty of Medical Science and Research



Faculty of Pharmacy



The Dental School which is part of Dharmsinh Desai University, has since its inception in 2006, provided highly subsidized dental care to 15 lakhs patients at an average of one lakh patients a year. All patients are treated at a token case fee of Rs 5 and Dentures at Rs. 50. The dental school also runs an oral cancer centre of excellence where oral cancer surgeries are done for Rs. 15,000 to Rs. 25,000 against a market price of Rs. 100,000 to Rs. 300,000. Since its inception the oral cancer centre has done 700 such cancer treatments.

This has transformed health care for the economically challenged section of society by providing them quality healthcare at minimal cost.

Faculty of Dental Science



Activities conducted by Sri Chaitanya Seva Trust with the support of APAR Industries Limited

We support the following community services initiatives:

- **Healthcare Initiatives** – The healthcare initiatives are rendered through Bhaktivedanta Hospital & Research Institute.
- **Dental services** at Hamrapur healthcare centre, Palghar (Maharashtra)
- **Women Empowerment** incl. skill development and formation of SHG
- **Homeopathy Project** (Door step clinic)
- **Rural Development** incl. organic farming, alternative energy, soil bio-technology

Women empowerment



Homeopathy mobile clinic rendering Homeopathy services to 15 villages in and around Wada region (Maharashtra)



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.

Dharmsinh Desai University



35+ courses

50+ years of experience in education

50+ research projects

42 acre sprawling campus

8000+ students annual intake

57000+ books

Most recently, we have set up a school in Rajkot for children from nearby slums. We also aim to rehabilitate abandoned, unclaimed, parentless and destitute children.

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

We realize that one of the greatest social impacts is making the youth employable. One person getting employed at our factory is able to sustain a whole family.

Towards this, we have initiated 'Cable Line Extruder Operator' training course at Govardhan Skill Development Centre, Wada. The salient features are as follows :

- APAR Industries Limited – Khatalwada & Umbergaon plants are in tribal belt of Umbergaon Taluka of Valsad district.
- We have taken unique initiative of employment generation for tribal youth of this area. **We have a rigorous plan to develop these youth by enhancing their technical skills and finally give them employment opportunities at our cable manufacturing facilities.**
- We have tied up with Shri Chaitanya Trust Sanchalit Govardhan Skill Development Centre, Wada (Dist :Palghar, Maharashtra). Shri. 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. Duration of the course is 6 months, and it is currently running at Govardhan Skill Development Centre.
- We have a batch of 24 local, scheduled tribe (ST) category, underprivileged young boys from the surrounding villages of our Umbergaon and Khatalwada plants. These villages are Aahu, Malkhet, Nargol, Khatalwada, Umbergaon Town & Solsumba. Out of these, 22 candidates (92%) have been selected.
- We 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 of cable extrusion.
- We have deployed our qualified supervisor and technical team at Govardhan Skill Development Centre to train the candidates on multiple technical skills like extrusion, fitting work, plumbing, electrical work, welding, basic computer skills etc. during this 6-month training period.
- These candidates will be employed at our Umbergaon & Khatalwada plants after successful completion of the course.
- APAR Industries is bearing lodging and boarding cost of these youth for entire course period of 6 months. We are also paying a stipend of Rs. 363/- per day to these youth during this training period, which is in line with the National Apprenticeship Act.

B.T.P - Student Stipend (Wada Project)	Costs (Rs.)	
	6-month	one-time cost
Student stipend (24 Nos. x Rs. 10,779/- per month)	15,52,176	
Lodging & boarding expenses @ Rs. 2,500 per person per month	3,60,000	
Trainer Salary (considered for 3 months)	1,66,656	
One time costs		
75 mm sheathing extruder (old machine refurbished)		35,00,000
Bus expenses for dropping to Wada		20,000
Stationery		5,000
Safety shoes		19,200
	20,78,832	35,44,200
Total cost of the project		56,23,032



Practical machine learning on extruder line

Practical machine learning on extruder line



Apprentice program @ APAR

- Currently we are training 38 apprentice at our Umbergaon and Khatalwada plants as per requirement of National Apprenticeship Act. Total 37% (14) youth are from tribal category and remaining 63% (24) are from other social and economically backward class category.
- All the apprenticeship trainees have been imparted on-the-job training during the course duration of 2 years.
- We are also registered with BOTS (Board of Apprenticeship Training), Western Region, Mumbai. Under this program, we are training Graduates and Diploma Engineers at our plants for one year duration.
- Our vision is nurturing and developing local youth in the form of Apprentice and Graduate and Diploma Trainee Engineers through providing learning opportunities at our plant. It is a win-win situation – underprivileged local and tribal youth are getting learning opportunities and APAR gets skilled manpower after successful completion of the training program. We have provided direct employment to many Apprentices and Trainee Engineers after successful completion of their Apprenticeship Training.

Outreach program at Govardhan Eco Village

APAR provides support to the community through skill development program, at Bhakti Vedanta Kaushal Vikas Kendra, Govardhan Eco Village (Palghar, Maharashtra).

Highlights :

- India's 3rd largest skill development centre
- Specifically for rural youth & tribal women
- Taught from 70 skill areas to select specialization
- Residential facility is being built



Fabrication of air cooler



Repairing of E-Rickshaw



Vegetable cultivation



Civil Work at Anganwadi



Water Pump Installation



Vermi-compost



Civil Work at Anganwadi



Cooking



Taking care of cows

Anganwadi

There was the need for a proper Anganwadi center in villages that would provide basic facilities like pre schooling education, supplementary nutrition, health check-ups etc. APAR Group has adopted about 25 Anganwadi and 4 Zilla Parishad Schools in Wada District, Maharashtra for providing good infrastructure, a positive environment, giving direction to right path, providing clean drinking water, teaching aides and teaching the teachers to nurture children's knowledge and values.

Our cable division Khatalwada plant had done inauguration of an Anganwadi sponsored by the APAR Industries with the support of District Collector and the guidance of ICDC (Integrated Child Development Scheme) for the construction of good Anganwadi.

This Anganwadi had an area of 1,000+ sq ft and was completed on February 12, 2022.

For further details, please refer the Company's CSR report at <https://apar.com/CSR/>



Other community activities

School visit at Silvassa plant



School visit at Silvassa plant



Governance Structure

1

Corporate Overview

- Chairman's Statement
- Message from Managing Director
- About the Report
- Key Performance Highlights
- About APAR
- Materiality Parameters & Alignment with SDGs

2

Our Capitals

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

3

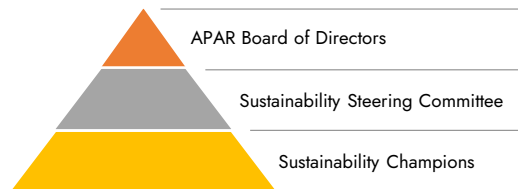
Governance Structure

- ESG Governance
- Ethics & Compliance
- Human Rights
- Board Governance
- Shareholder Relations
- Disclosure Practices

ESG Governance & Board Oversight

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

At the top governance level, there is APAR Board of Directors which provide overall direction to our sustainability efforts. It oversees the implementation, monitoring, and reporting of climate-related issues, ESG performance and sustainability, along with the CSR policy and its implementation.



3 tier Governance Architecture is adopted for Sustainability

The ESG aspects and Risk Management are further incorporated within the organization by establishing an **Enterprise Risk Management (ERM) program**. This system has been implemented across the Company to enable all the employees and business associates to raise any kind of risk identified by them up to the next level. The risk management framework has the provision to evaluate, prioritize and escalate the risk till the highest governing body within the organization.

Plans for managing and mitigating material risks, including climate-related and other environmental topics as appropriate, are regularly reported to the leadership.

The Board examines and approves the ESG priorities, action plan, risks and its mitigation plans. Its business plan incorporates the principle guidelines to promote a sustainable business model and lay down the basis for long term value creation. We are looking to make our Governance structure world class.

Sustainability Steering Committee – consists of Leadership (manufacturing & business) from all the 3 Businesses for regular review of progress

Sustainability Champions – These comprise of a team of 15 individuals from various geographies/ businesses/ plants/ functions to do the actual work.

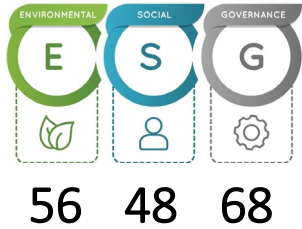
Linkage with SDGs



ESG rating

CRISIL had started ESG rating of top Indian companies since 2021. These companies are rated based on the information available in public domain, separately on E (Environment), S (Social) and G (Governance) parameters, and then an overall ESG score is derived.

For the first time, APAR's name has also found a place in the CRISIL ESG rating in 2022. 586 top companies across 53 sectors were rated this year, and APAR had scored an overall score of 59 out of 100.

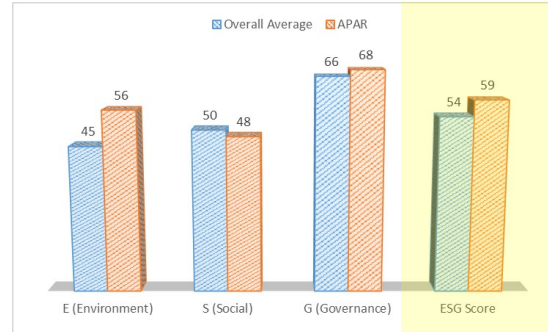


APAR stands at the upper end of 'Adequate' level.

CRISIL scoring band :

Leadership : > 70
 Strong : 61-70
 Adequate : 46-60
 Below average : 30-45
 Weak : < 30

Relative showing : APAR vs. rest of Companies



What does APAR's ESG score of 59 mean ?

We performed well in the Environment category, as is evident from the score. Our performance in Social category were slightly below average, and our Governance related disclosures were at par with the averages.

APAR's ranking stand as follows :

APAR's overall rank = 148th amongst top 586 companies
 APAR's rank in 'Industrial' segment = 3rd out of 42 companies

The report is publicly available & can be downloaded from CRISIL's website at the url:

<https://www.crisil.com/en/home/what-we-do/financial-products/crisils-sustainability-solutions/download-crisil-sustainability-yearbook-2022.html>

Ethics & Compliance

“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

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.

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 how we win with integrity, and it is our roadmap for making good decisions that will serve us well over the long term. The code defines the values and principles upon which we operate our business, compete in the marketplace and serve our customers around the world.

The APAR Code of Conduct is uploaded at <https://apar.com/wp-content/uploads/2021/03/Apar-Code-of-Conduct.pdf>

Whistle blower helpline

We maintain a robust whistle blower reporting system called the 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, which is uploaded here:

https://apar.com/wp-content/uploads/2022/07/Whistle_Blower_Policy_Jul_2022.pdf

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



Human Rights

APAR respects and supports the protection of human rights through striving for the:

- elimination of discrimination in employment;
- prohibition of modern slavery, including child and forced labour; and
- eradication of harassment and physical or mental abuse in the workplace

Training on POSH

APAR respects the dignity of all employees working for the organization, irrespective of their gender or hierarchy and we expect responsible conduct and behaviour on the part of all our employees across levels. Providing for a safe and congenial work environment is an integral part of the Company's employment policy.

Towards that APAR had implemented POSH policy, which can be accessed from the url :

<https://aparindltd.sharepoint.com/SitePages/HR%20Policies.aspx>

During FY 2021-22, we had conducted :

- 4 virtual awareness sessions on POSH
- Covered 120 employees across various locations

Modern Slavery

APAR has several policies and guidelines that support the identification of modern slavery risks and the steps to be taken to mitigate these risks.

These include our :

- Flexible Working Hours Policy
- Work From Home Policy
- Policy for Employee Welfare Trust for Medical Assistance
- Policy on POSH
- Code of Conduct
- Vendor Management Guidelines etc.

Board Composition

7 Directors

57% Board Independence








14% Women Director in the Board

Our current Board of Directors consists of seven Directors who are eminent individuals with exceptional qualifications, professional expertise and extensive experience and they have made outstanding contributions to the industry.

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

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.

Mr. Kaushal J. Sampat was appointed as Non-Executive Independent Director during the year.

Board Member	Executive Director	Non-Executive Director		Qualifications	Expertise
		Independent	Non-Independent		
KND				Bachelor of Science degree in Electrical Engineering from Moore School of Electrical Engineering, USA and Business degree from the Wharton School, USA. Both are part of University of Pennsylvania	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.

Legends:

KND - Mr. Kushal N Desai, Chairman & Managing Director and Promoter; CND - Mr. Chaitanya N Desai, Managing Director and Promoter; FBV - Mr. FB Virani; RS - Mr. Rajesh Sehgal; NK - Mrs. Nina Kapasi; RKD - Mr. Rishabh K. Desai; KJS - Mr. Kaushal J. Sampat

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	RKD	KJS
Audit Committee	M		M	M	C		
Corporate Social Responsibility Committee	C	M	M				
Nomination and Compensation-cum-Remuneration Committee			M	C	M		
Share Transfer & Shareholders Grievance-cum-Stakeholders Relationship Committee	M	M	C				
Risk Management Committee *	C	M		M	M		M

Member of Committee M

Chairperson of Committee C

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

There were 100% attendance of the Directors in all the Board Meetings, Annual General Meetings and Committee of Directors' Meetings.

In addition, a Sustainability Committee is also planned to increase 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 the following url:

https://apar.com/wp-content/uploads/2022/07/APAR_Industries_Limited_AR_21-22.pdf

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.
- Average percentage increase made in the salaries of employees other than the managerial personnel in the last financial year i.e. 2021-22 was 4.4 % and percentage increase in the managerial remuneration for the same financial year was 126% due to voluntary foregone monthly salary by Managing Directors in FY 20-21 due to pandemic.

Sl	Name of Director/ KMP and Designation	% increase/ decrease in Remuneration	Ratio of remuneration of each Director to median remuneration of employees
1	KND	122%	69.64 : 1
2	CND	128%	70.41 : 1
3	FBV	6%	00.61 : 1
4	RS	12%	00.51 : 1
5	NK	12%	00.51 : 1
6	RKD	0%	00.26 : 1
7	KJS	NA	0.08 : 1
8	Mr. VC Diwadkar, Chief Financial Officer - upto 2nd Feb 2022	7.6%	
9	Mr. Ramesh S Iyer, Chief Financial Officer - from 3rd 2022	NA	
10	Mr. Sanjaya R Kunder, Company Secretary	9.4%	

Shareholder Relations

Share Transfer & Shareholders Grievance-Cum Stakeholders Relationship Committee is in place to look after the shareholders relations & interests. The main purpose of this committee is to oversee the redressal of investors' complaints, including:

- 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

To support the "Green Initiative" undertaken by the Ministry of Corporate Affairs (MCA), to contribute towards a greener environment, we ensure delivery of notices, documents, annual reports etc. to the shareholders via electronic mode (to those Members whose email addresses are registered with the Company/ Depositories).

Please visit <https://apar.com/investor/#> for 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.).

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 www.nseindia.com

There were 4 complaints received by the Company from BSE Limited (BSE) on behalf of the Shareholder of the Company through email and the said complaints were pertaining to the SEBI SCORES (<https://scores.gov.in/scores/Welcome.html>) which were re-directed to the Company by BSE instead by SCORES site, all of which (100 %) were promptly attended to and redressed suitably to the satisfaction of shareholder and replied to the Statutory Authority also viz. BSE.

The number of shareholders has increased from 35000 as on 31st Mar 2022 to 54000 as on 30th Sep 2022. The Company is serving them on a real-time basis and is very prompt in redressing their issues. As a result there are no complaints pending from the stakeholders which is reporting in SEBI SCORES as well as in BSE and NSE records.

Please refer to <https://scores.gov.in/scores/Welcome.html> (official website of SEBI).

There are no penalties and strictures by the Regulator.

Participation of shareholders in virtual AGM proceeding increased considerably; over 80% of total shareholding voted on AGM resolutions. All the proposed resolutions passed with requisite vote.

Company is consistent in paying Dividend in line with Dividend Distribution policy of 25% to 35% of profit.

- Total unpaid dividend amount transferred to IEPF is INR 94.37 lakh, as on 26th Sep 2022
- Total unclaimed shares transferred to IEPF is 104223, as on 14th Oct 2022



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 <https://apar.com/investor/> and click <View our Policies> to view the following policies at APAR –

- Climate Change Policy
- Energy Policy
- Environmental Policy
- Remuneration and Diversity Policy
- Business Responsibility Policies
- Policy on Preservation of Documents
- Policy on Dividend Distribution
- Policy on Corporate Social Responsibility
- Policy on Related Party Transaction
- Whistle Blower Policy
- Code of Conduct (SEBI (REG) 2015) Policy for Leak of UPSI
- Code of Conduct (SEBI (REG) 2015) Revised Code for Fair Disclosure
- Code of Conduct (SEBI (REG) 2015) Revised Code of Conduct for Insider Trading
- APAR Code of Conduct
- SEBI (Listing Regulation), 2015 Policy on Materiality of Events and its Disclosure
- APAR's Policy on Material Subsidiaries

Environment related disclosures:

While on the one hand we are measuring the GHG emission and taking various initiatives for its reduction; on the other hand we are publically disclosing our emissions and targets through various renowned platforms. This will enable for stakeholders also to view the same.

This is the 2nd edition of our ESG report, and we make all effort to disclose our sustainability related plans, efforts, achievements & targets to our stakeholders and public at large.

We have completed the voluntary disclosure of our Climate related emissions to CDP for the year ending 31st March 2022.

Additionally, we have also completed the disclosure to EcoVadis, which assesses the various sustainability parameters based on documented evidence submitted to them.

We are also disclosing our product carbon footprint for major products to our supply chain partners, as and when required by them.



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Thank you

