

SEC/2408/2023 <u>E-Filing</u> August 24, 2023

National Stock Exchange of India Limited

"Exchange Plaza",

C-1, Block G,

Bandra-Kurla Complex,

Bandra (E),

Mumbai - 400 051.

Scrip Symbol: APARINDS

**Kind Attn.: Listing Department** 

BSE Limited

Corporate Relations Department,

Phiroze Jeejeebhoy Towers,

Dalal Street,

Fort,

Mumbai - 400 001.

Scrip Code : 532259

**Kind Attn.: Corporate Relationship** 

Department

Sub.: Submission of Audio Recording and Presentation made on Investors Meet / Investors

Day organized by APAR Industries Limited (the Company)

Ref.: Reg. 30 read with Para A (15) of Part A of Schedule III & all other applicable Regulations, if any, of the SEBI (LODR) Regulations, 2015, (Listing Regulations) as amended from time to time.

Dear Sir/Madam,

We refer to our letter no. SEC/2108/2023 dtd. August 21, 2023 vide which we had intimated Exchanges about the schedule of Investor Meet / Investor Day organized by APAR Industries Limited (the Company) on Thursday, August 24, 2023 for Analysts/Investors.

Pursuant to Regulation 30(6) of Listing Regulations, audio recordings of the said Investor Meet / Investor Day organized by the Company and made on Thursday, August 24, 2023 is available on the website of the Company.

Link to access above audio recording is as under:

https://apar.com/wp-content/uploads/2023/08/APAR\_Investor\_Day\_24-08-23.mp3

The Presentation made by the Company at Investors Meet / Investors Day is also enclosed for the information of members.

The said presentation is being also uploaded at the website of the Company at www.apar.com.

We request you to take the above on your record.

Thanking you,

Yours faithfully,

For APAR Industries Limited

(Sanjaya Kunder) Company Secretary

APAR Industries Limited

Corporate Office: APAR House, Corporate Park, V. N. Purav Marg, Chembur, Mumbai - 400 071, India +91 22 2526 3400/6780 0400 corporate@apar.com www.apar.com

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# APAR INDUSTRIES LIMITED INVESTOR DAY 2023

ASCENDING PASSIONATELY, ACHIEVING RESPONSIBLY

24th AUGUST 2023

## Today's Agenda









CABLE SOLUTIONS



TELECOM SOLUTIONS



FINANCIAL OVERVIEW



ESG & SUSTAINABILITY







## INVESTOR DAY PRESENTATION

**Business Overview** 

Mr. Kushal Desai - CMD

Mr. Chaitanya Desai - MD

## **About APAR**



#### Our Mission (Why we exist):

To design & manufacture Building Blocks for Energy Infrastructure, Transportation & Telecommunication Sectors that contribute meaningfully to make this world a more energy efficient, environmentally sustainable and safer place.

#### Our Vision (Where are we going):

To be a Global Leader in the Energy Infrastructure, Transportation & Telecommunication Sectors by providing the best solutions & value creation for our stakeholders.



## **About APAR**





One of the core principles that originated from Dr. Desai which continues as a best practice at APAR:

"Be in the top 3 in each business segment that APAR is in. This has propelled us to be very focused on our business verticals, to be the best in those defined areas and to lead the innovation curve."

We are committed to delivering "Tomorrow's Solutions Today".

## **Our Businesses**





Leading the innovation curve as the world's 3rd largest transformer oil manufacturer and with a comprehensive range of over 350 products in speciality oils, process oils & lubricants. Largest exporter of Transformer oils from India.



Leading the innovation curve as the largest one-stop solution provider for design, manufacturing, upgrading transmission lines and testing of conductors in the world. Also the largest exporter from India of conductors.



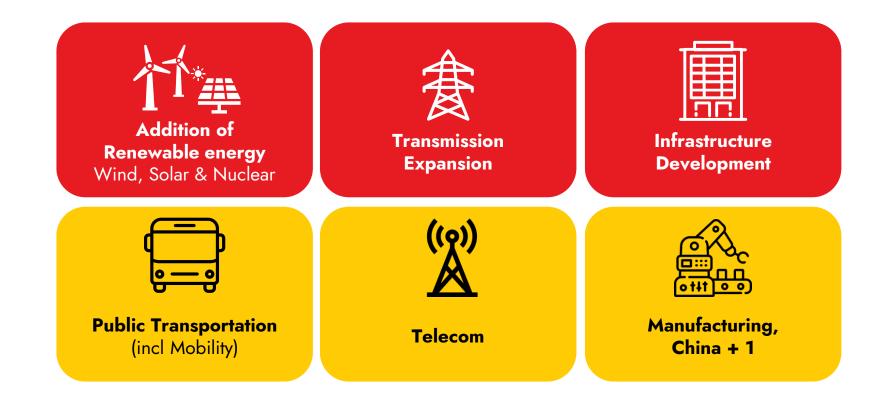
With a widest range of products in India, catering to speciality sectors like railways, shipping, submarines, solar, windmills, mining, hybrid cables and harnesses, telecommunication, safest housewires. Also the largest exporter of cables from India in FY23.



Focusing on providing telecom solutions including optical fibre, copper and hybrid cable solutions and services.

## Globally, we see growth opportunities in





## Addition of Renewable energy



#### **SECTOR OPPORTUNITY**



- Solar Installed capacity is expected to grow by 225 GW
   Wind installed capacity is expected to grow by 55 GW
   during 2024 to 2030 in India
- India aims 45% less carbon, 50% renewables by 2030, net-zero by 2070

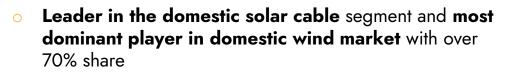


- Global renewable energy addition growth is expected to grow by minimum 150 GW from 2024 to 2027
- Globally, renewable energy share to increase from 28% in 2021 to 38% in 2027 curbing coal, gas, stabilizing emissions, lowering CO2 intensity



- Extensive transmission and cable infrastructure to transmit power from remote generation sites to consumption centres
- Concentration of expansion happening simultaneously in G20 countries

#### **APAR ADVANTAGE**

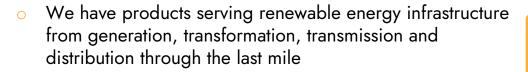




- Our range meets required global standards including as applicable EN, IEC & UL standards.
- Global approval for Wind turbine manufacturers –
   Vestas, Siemens Gamesa, Senvion, Envision, Nordex, GE



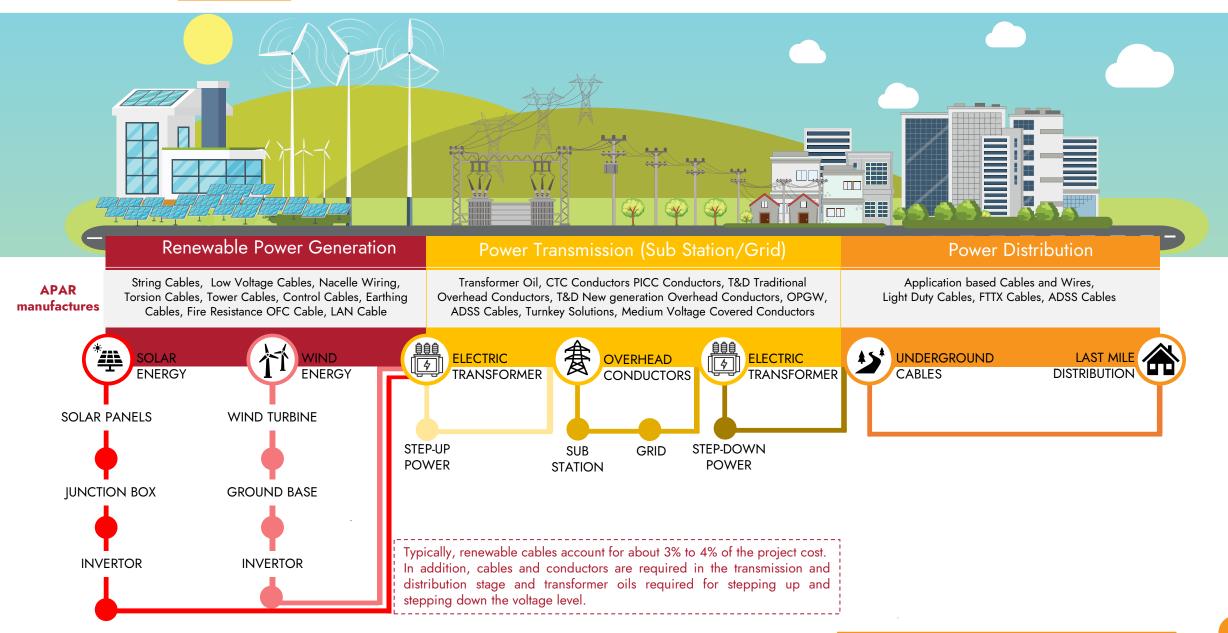
 Largest exporter for cables and conductors for FY23 from India





## Renewables — strong opportunity for all business verticals





## Public transportation (incl. Mobility)



#### **SECTOR OPPORTUNITY**

Infrastructure investments in Indian railways, Metros and High-speed rail to grow exponentially

- The EV market is projected to grow by 49% CAGR from 2021-2030
- The EV-to-public-charging ratio in India is low. As per reports, the country has over 125 vehicles per charging station. This is very low compared to the global average of 6 to 20 vehicles per charging station
- These are all highly cable intensive expansions.

#### **APAR ADVANTAGE**

- Supply of locomotive coaches, forward integration into harness. Largest cables supplier for Vande Bharat trains
- Market leader in supply of conductors for Indian railway electrification & development of new product for Bullet trains
- E-beam based auto cables and harnesses for bus manufacturers like, JBM, Olectra, as public transport goes electric.
- Developed indigenous manufacturing harness for EV charging



## Infrastructure growth, Manufacturing, China+1



#### **SECTOR OPPORTUNITY**

 Governments are allocating investments in building extensive road networks for freight transportation, ports, tunnels, airports and commercial buildings.

 There is a steady growth in personal mobility (including intercity), road freight transportation over longer distances with shorter turnaround time

## Increased manufacturing opportunities in India-capacity increase, higher speed, more automation all leading to higher volume of lubricant and higher value for performance and protection of more sophisticated

 Agriculture mechanization — tractors, farming equipment being driven by agriculture productivity.

#### **APAR ADVANTAGE**

- Lubricants for off road equipment for infrastructure development which includes, cranes, road construction, dredging, tunnel boring, mining equipments, etc.
- Offering complete range of specialised cables that goes into infrastructure equipment and infrastructure building.
- Full range of lubricants for industrial applications across hydraulic, compressor, metal working applications
- Trusted lubricant supplier for natural gas pipelines, CNG stations, tunnel boring machines, amongst other applications
- One of the largest supplier of lubricant for tractor manufacturers and farming equipments in India — oil immersed brakes, universal engine and transmission oils, and other lubricants

equipments

## Transmission expansion

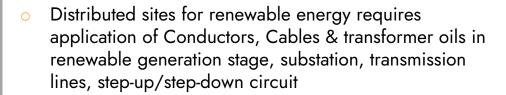


#### **SECTOR OPPORTUNITY**

#### **APAR ADVANTAGE**



80,000 ckm of transmission lines added and 350,000 MVA of transformation capacity added in last 5 years in India





<u></u>

As electric consumptions in urban areas goes high, needs higher ampacity transmission lines through limited ROW – HTLS conductors and reconductoring turnkey solutions

Special conductor requirements for overseas projects

Turnkey solutions in transforming India's transmission lines with HTLS Conductors. Completed 150+ Power lines reconductoring projects. Supplied 35,000+KM's HTLS and working satisfactorily. Technology tie-up with CTC-Global, USA for ACCC Conductors





OPGW replacing earth wires to create backbone for intercountry high-capacity data transmission across all transmission network

Railway electrification and line upgradation for high speed trains

- Elevating Industry standards with Innovation e.g.,
  - Special type of solid-shaped conductor designed for export market
  - 96 Fibres OPGW Conductors safeguarding power transmission and communication networks
  - Air expanded conductors enhancing energy efficiency to cater to specific necessities of our American client
  - Dull finished conductors bringing efficiency and sustainability together



## **Telecom**



#### **SECTOR OPPORTUNITY**

- Digital transformation evolving faster
- The GB per smartphone will grow 25% CAGR shall reach
   55 GB per mobile till 2028 in India

- 10 bn mobile connections with 64% mobile internet by 2030
- Outlay approved of ₹1.39 lakh crore for BharatNet, the government's project for last-mile connectivity across 6.4 lakh villages in the country

Advent of data centres & cloud computing to bring opportunities to the sector

- **APAR ADVANTAGE**
- End to end telecom solutions provider for hybrid copper and fibre cables

- Our range of product offerings include Fibre optic cables, hybrid cables, LAN cables, copper cables and OPGW conductors
- Customer centric innovations to capture future markets

Full set of cables for data centers and increasing approvals from consultants

## What has played well for us (1/3)



## **Premiumisation**

- Shift from conventional conductors to High efficiency conductors. Premium products in Indian market and standard products in premium market leading to optimised margins
- Ompetitive advantage in EPC turnkey solution for reconductoring High transmission low sag conductors
- Improving mix of naphthenic and special grades of oil leading to higher margins
- Increase in mix of elastomeric and special application cables used in varied industries viz., Solar, Wind,
   Shipping, Mining, Defence, Railways etc.

Premiumisation of portfolio led to increase in Return on capital employed and Return on Equity



## What has played well for us (2/3)



## **Globalisation**

- Overall presence in 140+ countries. Expanding into global markets with exports reaching 50% of topline in FY 23 across all divisions both individually and collectively
- O Synergy across divisions for common customers of conductor, cables and transformer oils
- O Approvals from global utilities, EPC contractors and OEMs increasing the export footprint

Globalisation additionally led to fragmenting our customer base



## What has played well for us (3/3)



## <u>Innovation & Robustness – solving customer's problems</u>

#### Leading the innovation curve. Some notable innovations in the past includes:

- Only Indian Transformer oil manufacturer and supplier for 800kV HVDC applications
- O High performance biodegradable renewable transformer oil launched first of its kind with extended life.
- Only Indian company to have E-Beam for housewires Anushakti which has 50% more current carrying capacity, melt resistant and withstand high temperature
- Special FRP Fibre Optic cable for critical infrastructure projects
- Few of our innovative products across all verticals:

Solid Shaped Conductors, 96F OPGW conductors, Air Expanded Conductors, Dull Finished Conductors, TO NE Premium, Transformer oil for 800kV HVDC applications, Specialised renewable cables, harness and many more.

Innovation in each division led to synergistic diversification of portfolio building into a Robust category

## To sum up



Our fundamentals are strong.

We see sustained growth opportunities in our sectors at a global level. Our focus in solving **tomorrow's solutions today** for our customers enables us to lead the innovation curve.

APAR embodies a long-term pursuit of excellence, where our DNA drives us to keep

Ascending
Passionately,
Achieving
Responsibly.









INVESTOR DAY PRESENTATION

**Conductors and Turnkey Solutions** 

Mr. Surya Shoban Babu – Sr. VP (Marketing)

#### Overhead Conductors Global Market Overview:



#### Global investment in (T&D) infrastructure is expected to reach \$2.2Trillon next 10Years.

#### **Key Drivers are:**

**Growing Demand of Electricity:** 50% of demand will increase in next 10years

- Electrification of Transport System
- Economic growth
- Population Growth

#### **Integration of Renewable Energy:**

- Growing share of Renewables adding to Grid.
- Cost competitive to fossil fuel, Drive due to climate change.

#### **Smart Grid:**

- To improve efficiency & reliability of T&D Network.
- To minimize the loses and improve of quality of power of T&D Network.

#### **Decarbonization of Power Sector:**

- O Power sector is under pressure to Decarbonize.
- Deployment of low carbon technologies like Solar, Wind power generation.



#### **Overhead Conductors Market Overview:**



Indian Govt investment in (T&D) infrastructure is expected to reach \$30 Billion next 10Years.

#### **Key Areas are:**

#### **Domestic Market**

#### **Construction of New Transmission & Distribution lines:**

- 28000ckm of Transmission lines by 2028, 1,80,000km of distribution lines
- O Which means 1.25 million MT Tx conductor requirements in next 5 years of Transmission lines

#### **Augmentation of Existing Transmission lines:**

- 18000ckm of Transmission lines are to be augmented
- Capacity and power quality of Existing Transmission line will be increased

#### **Export Market**

- O Global Overhead Conductors market is around 4.5 million tons for next 5 years.
- O APAR contributes 50% of total export from India.
- Top exports markets are USA, Australia.



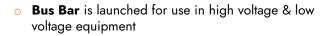
## **Transformation journey of APAR Conductors**



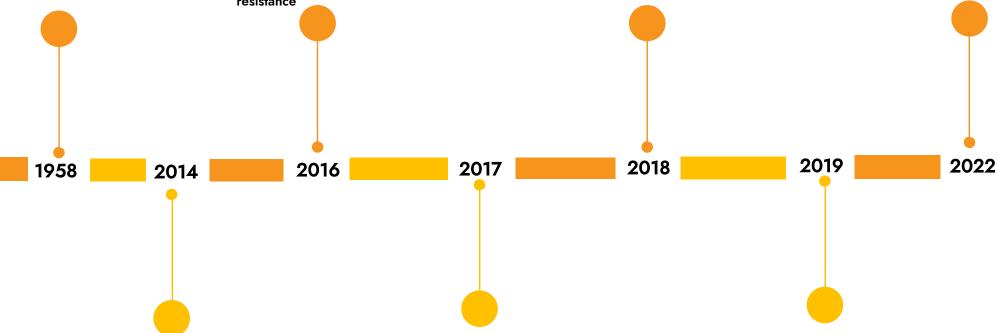
 Started the conductor division. APAR's first business, previously known as Power Cables Pvt. Ltd

- Introduced a premium product line viz.,
   HTLS- ACCC & Turnkey project –
   designing, re-conducting & laying
- A new generation conductors with light weight, comparable strength, low electrical losses and superior corrosion resistance

- Introduced Copper Railway conductors as per RDSO specifications
- The only approved Indian manufacturer to supply Copper Magnesium catenary wire to Delhi Metro



- One of the first company to successfully test 765
   KW & 800 KW conductors in India
- o Completed **100 HTLS projects** with 2500 Kms
- Largest manufacture of ACS wires with a capacity of 1000 MT/Month



- Business grew to 1759 Cr. Company mainly dealt with ACSR Conventional Conductors
- Spread our wings internationally with CTC Global, USA for ACCC Conductors.
- Introduce premium product line viz.-HTLS, ACCC & Turnkey Projects

- Introduced OPGW and turnkey solutions —
   Earthing + data transmission
- Received 1st big order of 800 KV Raigarh -Pugalur line for 2200 Km of OPGW
- Manufacturing ACS wires which are used as the core of ACSR/AW, overhead ground conductor etc.

 Launched CTC and PICC conductors for Transformer Industry

#### At the end of FY 2023

- Business Grew to 7,013 cr.
- 4 plant locations o Company mainly deal in AL 59 domestically

2023

- Strategic focus on high margin products
- Domestic-Export ratio 49:51



### **Conventional Conductors**

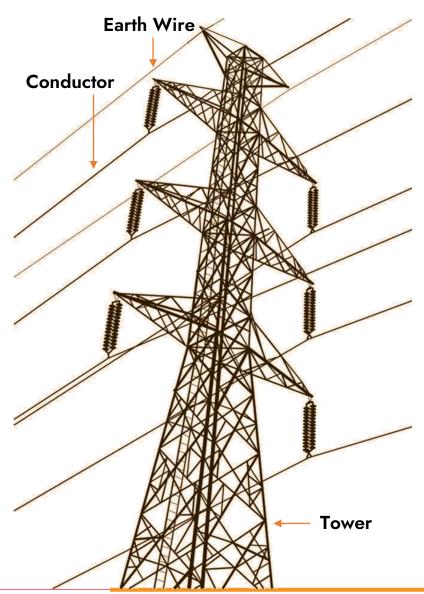


- Products: ACSR, AAAC, ACAR, AAC, GUY WIRE, AL-59
- Industries we cater to: Power Transmission & Distribution
- Customers: Power Utilities, EPC, Contractors and Distributors.

#### Strong leadership & competitive edge

- Manufacturing since 1958, developed strong expertise & rich experience
- Largest global aluminium & alloy conductor
- Supplies to all top 25 global turnkey operators and leading utilities
- Exporting to 100+ countries
- Strong design capabilities, focus on in-house R&D





## HTLS Conductors – ACCC, ACSS, GAP, STACIR

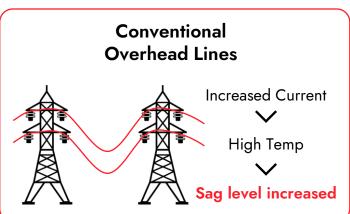


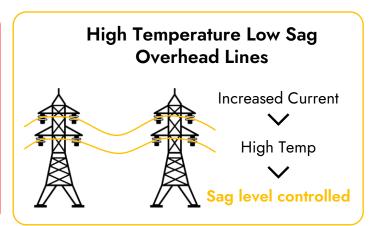
#### Technology tie-up with CTC-Global, USA, for ACCC conductors

#### APAR'S PRESENCE IN HTLS....50,000 KMS HTLS

- Supplied in Domestic & Export Markets 35,000+ KMs HTLS which is also working Satisfactorily
- O Completed 140+ Power Transmission Lines Reconductoring Projects | ~ 4200+ Ckm with ACCC® PAN INDIA basis
- O Completed 10+ Power Distribution Lines Reconductoring Projects | ~ 150+ Ckm with ACCC® in GOA, WEST BENGAL, ODISHA
- Completed 10+ Power Transmission Lines Reconductoring Projects | ~ 200+ Ckm with ACCC® in NEPAL & BANGALDESH
- O Completed 5 Power Transmission Lines Reconductoring Projects | ~ 475+ Ckm with GAP Conductors for PGCIL & Other Utilities



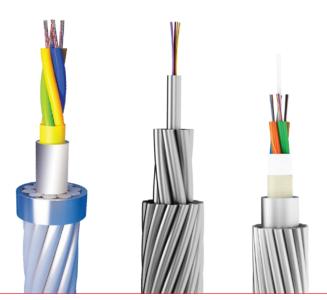




## **Optical Ground Wire (OPGW)**



- APAR OPGW in-house design and development.
- We can provide end to end customized solutions.
- We cater OPGW for special conditions & applications for snow-bound locations, high altitudes, heavy winds, river crossings, low sag conditions and low attenuation properties.



#### **OPGW PROJECT:**

Safely OPGW Installation work on tallest tower 125M under 400kv Chamera-Jalandhar link.





## Aluminium Specialty Alloy Rods & Wires — Largest Global Exporter



- Electrical grade aluminium alloy wires 6101, 6201 grade
- Mechanical grade aluminium alloy wires 5052, 5154, 5050, 6061 grade
- Welding grade aluminium wires 4043 grade
- High conductivity & high temperature-resistant TAL, STAL, XTAL

#### Industries we cater to,

- Cable Industries, Nut & Bolt Manufacturing
- Fittings & Accessories
- Fasteners Industries
- Wire Mesh Industries





**Helical Fittings & Accessories** 



Solid/Sector Conductor



**Helical Fittings & Accessories** 



**Cables manufacturers** 



**Fasteners & Rivets** Manufacturing

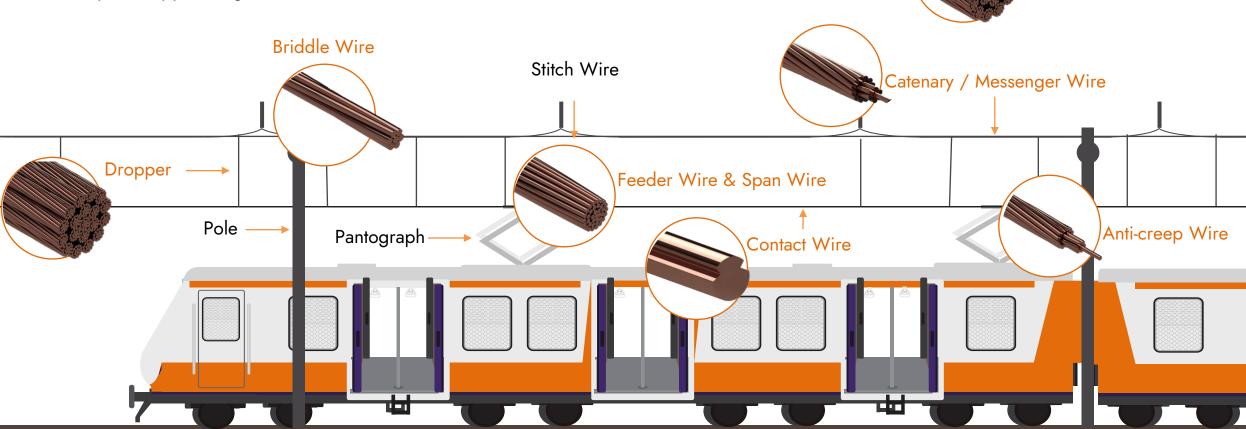


Wire for Braiding

## **Railway Overhead Conductors**



- We are No.1 among largest manufacturer in India
- 70% of market share
- O Supplied 31,000 KMs to Indian Railways out of 45,000 KMs of Electrification
- O Developed Copper magnesium conductors for bullet trains.



Copper Magnesium/ Bronze Jumper Wire

## **CTC/PICC Conductors**



CTC/PICC enamelled strips are widely used in transformers, generators and as winding material in the motor industry.

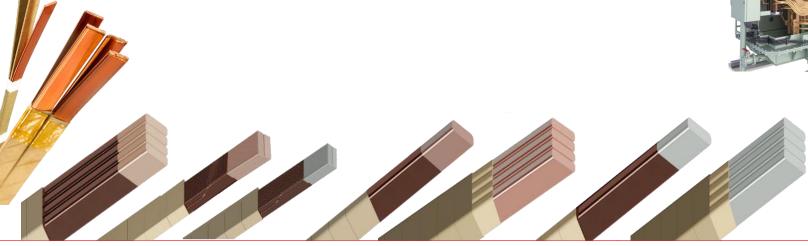
- PICC Aluminium
- EPICC Copper
- EPICC Aluminium
- **BEPICC Copper**
- BPICC Aluminium
- CTC Aluminium
- BEPICC Aluminium O CTC Copper
- PICC Copper
- Enamelled Aluminium Strip
- BPICC Copper
- Enamelled Copper Strip

#### Industries we cater to,

Power Transformer Industries







## **Copper Rods/Wires/Busbars/Strips**









Industries we cater to,

- Switchgear Industries
- **Electrical Panel Manufacturers**
- **Electrical Substations**













## **Turnkey Projects End to End Solutions for Power Sector**



## HTLS Transmission



- ACCC® CASABLANCA
- ACCC® PUNE
- ACCC® LISBON
- ACCC® GROSBEAK
- ACCC® DRAKE
- ACCC® FORT WORTH
- ACCC® MUMBAI

## HTLS Distribution



- ACCC® SILVASSA
- ACCC® HELSINKI
- ACCC® COPENHAGEN

#### **Other HTLS**







ACSS

## OPGW Live Line



#### TELECOM INTEGRATION



## CONVENTIONAL EPC





SUBSTATION AUGMENTATION



EPC - MVCC

**EPC- UG CABLE** 





## **Snapshots of Challenges During HTLS Project Work**





Working in Sea/Ocean



**Backwaters & Grooves (Kerala)** 



**High Hill Terrains with Twin HTLS** 



Highly Congested & Illegal Colonies



HTLS on pole



**Fog Conditions** 

## **APAR Laboratory (Testing & Research Centre)**



- Advanced testing and research facility for evaluation of conductor and life cycle assessment with global recognition meeting safety, performance and reliability compliance to National and International Standards.
- Laboratory accredited with ISO/IEC 17025-2017 recognized by Govt. of India.











## Competitive advantage - APAR Conductors



#### **Premium products**

- Technology & know-how involved in product and design, acting as a barrier to entry for competition
- Special stringing mechanism with sophisticated equipment to protect the carbon composite core inside
- O Customers look at life-cycle costs and lowering the transmission losses thereby requiring pre-specifications for their purchases
- O Solution-oriented ecosystem of trained manpower, gangs required to get complex work done with no/minimal power outages

#### **Conventional products (exports)**

- Customers criteria being massive capacity delivering large volumes within a short period of time with quality & reliability.
- O Customers preferring parties they can depend upon including ability to have a strong risk management framework.
- O Tight audit requirements, documentation & transparency making some of the weak players ineligible.

#### R&D, testing and manufacturing excellence

- In-house advanced R&D and Testing facility, accreditation by international agency.
- Fastest delivery due to Large production Capacity 2,00,000 MT. competitive price.
- End to End Solution by Turnkey projects execution Completed 165 turnkey projects.
- O In-house Design capability facilitates Solutions to critical customer problems.
- Technology tie-up with CTC-Global, USA, for ACCC conductors.

### **Futures Plans & New Initiatives**

- Focus on developing new HTLS products to meet export & domestic reconductoring demand.
- AL 59 manufacturing capacity expansion to meet domestic growing demand.
- Developing import substitute products
- Focus on market development of Copper Magnesium and Copper Silver Conductors for high speed Trains
- Increase export market share



### **APAR Conductor's Achievements**



- World's Largest manufacturer of Aluminum Conductors
- Superior brand recognition and approval among customers and utilities in India and other developing economies.
- Registered export house by the Indian Ministry of Commerce.













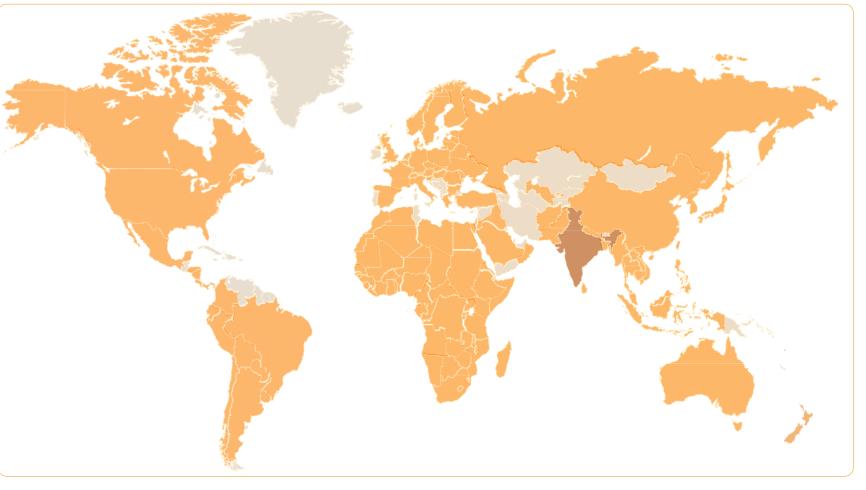




# Extensive global presence driving exports







Export revenues up 97.1% YoY, contributed 48.7% to FY2023 revenues







INVESTOR DAY PRESENTATION

**Speciality Oils** 

Mr. Rishabh Desai - Director

# Understanding our speciality oils business



- APAR is India's largest Private manufacturer and exporter of Speciality oils
- World's 3rd Largest Transformer Oil manufacturer
- Production capacity of 5,00,000+ KL in India & 1,20,000+ KL in UAE

# TRANSFORMER OILS

Heart of a transformer, used in dielectric cooling

30+ grades

Brands
POWEROIL
POWEROIL NE PREMIUM

# TECHNICAL GRADE WHITE OILS

Used in the textile industry and incense perfume

15+ grades

Brands
POWEROIL TOPAZ

# PHARMACEUTICAL GRADE WHITE OILS

Used in cosmetics & personal care products

15+ grades

Brands POWEROIL PEARL

# RUBBER PROCESS OILS

Used in EPDM, tyres and rubbers

15+ grades

Brands POWEROIL SAPHIRE

# **About Transformer Oil Applications**



#### Working with global OEM's APAR has designed a full range of products used in all types of transformers



**Power Transformers** 



**Distribution Transformers** 



**Furnace Transformers** 



**HVDC** Transformers



Traction Transformers



Instrument Transformers

# **POWEROIL Transformer Oil Global approvals**



#### **OEMs**































Voltamp Transformers Limited

#### **Utilities**





























#### Laboratories























# Areas of focus and growth



1

#### **Growth of transformer oils business**

With electrification

2

### **Biodegradable speciality oil Products**

POWEROIL TO NE and NE premium

3

### Heavy grade white oils

Used in TPE, TPV and EPDM

4

#### Hot melt adhesives

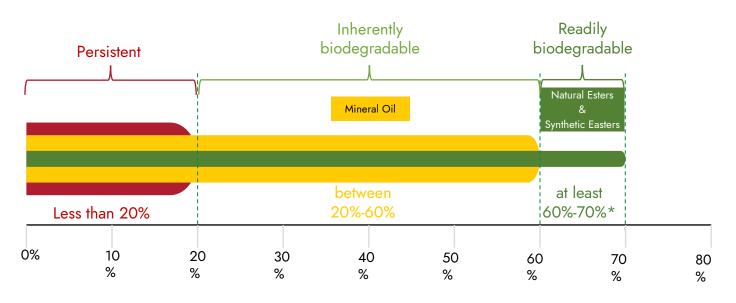
Increasing focus on health and hygiene

# POWEROIL TO NE PREMIUM - The Bio-degradable T-Oil



Biodegradability is the ability of a substance to degrade into CO2 in the presence of biomass micro-organisms (bacteria, fungi or their enzymes) measured as per OECD 301B

#### % extent of the sample oil that gets converted into CO2



#### Product range and applicable standard



\*%OECD301B

### **Hot Melt Adhesive**



#### **Product USP**

- Reduces cost and improves pressure-sensitive tack
- Decrease melt viscosity / MFI
- Decrease hardness
- Improve low-temperature flexibility/good cold resistance

#### **Competitive advantage**



- One of the three global manufacturers
- Offering grades for technical and hygiene applications
- Developed tailor made products to suit customer needs
- Confidentiality agreement with all major clients

#### Hygiene product applications





Sanitary **Napkins** 



Labels on fruit



Medicine bottle

#### **Technical product applications**







Packaging



**Furniture** 



**Appliances** 

# POWEROIL for Heavy Grade White Oil used in TPE/TPV





#### **Competitive advantage**

- Offering tailor made products to suit the customer needs
- O Variable blending capacity empowers us to manufacture micro batches for niche applications
- O Blending facilities round the globe to Turkey, Australia, South Africa, UAE and India

#### **Applications**



Non-staining shoe soles



Plastic bottles



Toys



Automobile parts



Pen grippers









INVESTOR DAY PRESENTATION

**Auto and Industrial Lubricants** 

Mr. Sundar Subramanian — Sr. VP (Lubricants)

### **APAR Lubricants Division**



- Indian Market Lubes 2.3 MMT
- O APAR Lubes established in 2007 Through a technology arrangement with Eni of Italy.
- Automotive Sales in two brands Eni and ARKOS
- Industrial Lube Sales in own brand POWEROIL
- O Volumes for FY23 at 66,000 Kl with a market share of 3%
- Exports a key area of focus into Indian Subcontinent, Middle East and Africa.



# **Lubricant Product Range (Auto + Industrial)**



#### **AUTOMOTIVE LUBRICANTS**





Motorcycle Oils



Passenger Car oils



Diesel **Engine Oils** 





Construction & Infrastructure



Agricultural Oils

#### **INDUSTRIAL LUBRICANTS**



**Maintenance** 



Reduction Gear Box oils



Hydraulic



Turbine Oils



Compressor Oils









Quenching Oils

#### Speciality areas of focus

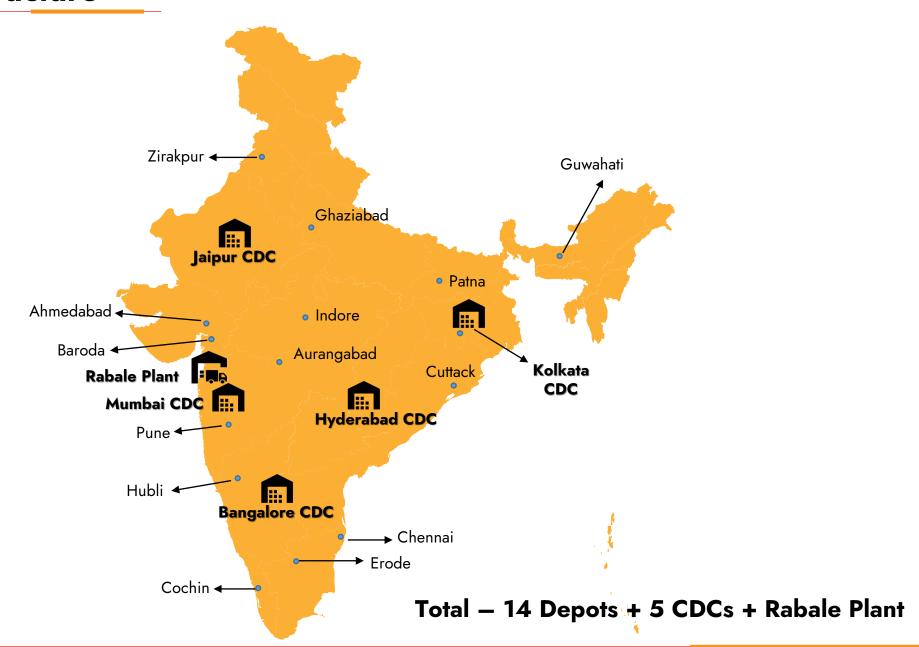
- Gas Engine oils Mobile & Stationery
- Marine Engine Oils
- Automatic Transmission Fluids
- Automotive Specialties like Coolants and Brake Fluids

#### Speciality areas of focus

- Metal Working fluids Semi Synthetic
- **Rust Preventives**
- Rolling fluids
- Drawing Fluids

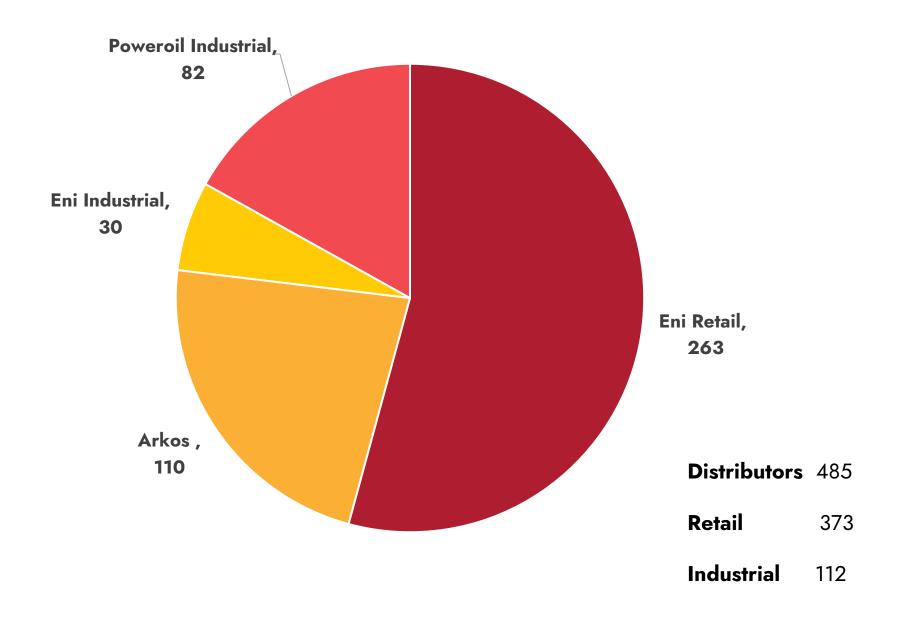
## Infrastructure





# **Distribution**







# **Strengths**



#### **Lubricant Business**

#### B<sub>2</sub>C

- Settled distribution.
- Products well established and accepted.
- O Foray into Batteries and Tyres to enhance the depth of distribution.
- O Digital loyalty program in place for both influencer and Dealers.
- Channel finance implemented w.e.f Jan 2023.

#### **B2B**

- Significant presence in conventional Industrial Fluids.
- Expansion in MWF significant in the last couple of years.
- Focus on Infrastructure sector.



# **Strengths**



#### **Lubricant Business**

#### **OEM's and Private Labels**

- Leader in Tractor OEM's.
- O Significant exposure in TAFE Eicher, Escorts, International Tractors and Carraro. New OEM's in pipeline.
- Work with leading TIER 1 OEM brands in the aftermarket.

#### **Exports**

- Office established in Dubai for pioneering export opportunities.
- O Currently present in Sri Lanka, Bangladesh, Nepal, Oman, Qatar and expanding rapidly in the middle east.
- O Focus on increasing our lubricant footprint in Africa.



### **Head Winds**



#### **Electric Vehicles**

#### EV impact would be limited to personal Mobility.

- EV 2 Wheelers for the last mile usage would increase.
- O Currently EV sales is under 1 million units per annum compared to ICE sales of 1.3 million units a month.
- O With EV subsidy being reduced w.e.f 1<sup>st</sup> July by the GOI we expect the current trend to continue and the impact of EV's in this sector will not be significant in the near term.

#### **Sectoral Changes expected**

- Passenger car sector to move towards Hybrids.
- Commercial vehicle to move towards LNG/CNG
- Buses to move to electric intra city and LNG/CNG intercity.



# Way Forward - Lube Business.



#### Industrial business will continue to significantly drive demand.

- APAR is positioned well here through its twin brand offering Eni and POWEROIL.
- Increased manufacturing opportunities in India (with China+1). All leading to higher volume of lubricant and higher value for performance and protection of more sophisticated equipments
- O Premiumisation is taking place in Industrial to significantly drive both volume and value.
- Areas of focus in Industrial remain Power, Metal working, Infrastructure and Mining.

#### Automotive business to grow inline with GDP.

- O With a huge vehicle park the aftermarket to continue to drive volumes in the coming decade.
- With an increased road network, steady growth in personal mobility (including intercity)
- O EV adoption still remains low. Infrastructure really needs to catch up for this to grow significantly.
- O Gas adoption seems more likely the way to grow and this shall have limited impacted on the lubes sector.





# INVESTOR DAY PRESENTATION

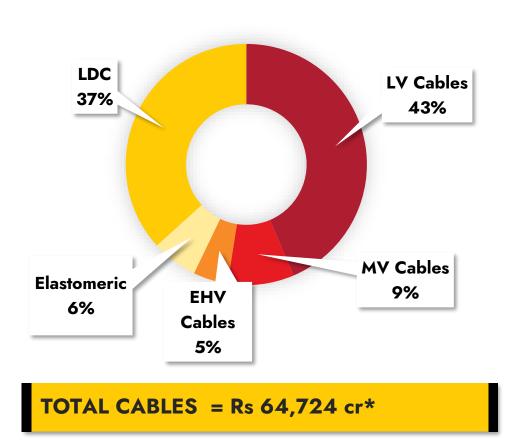
**Cable Solutions** 

Mr. Shashi Amin – CEO (Cable Solutions)

# Cable & Wires — Industry Sizing & Mix



#### **Market Product Composition - FY23**



<sup>\*</sup> Excludes JFTC and Switchboard Cables

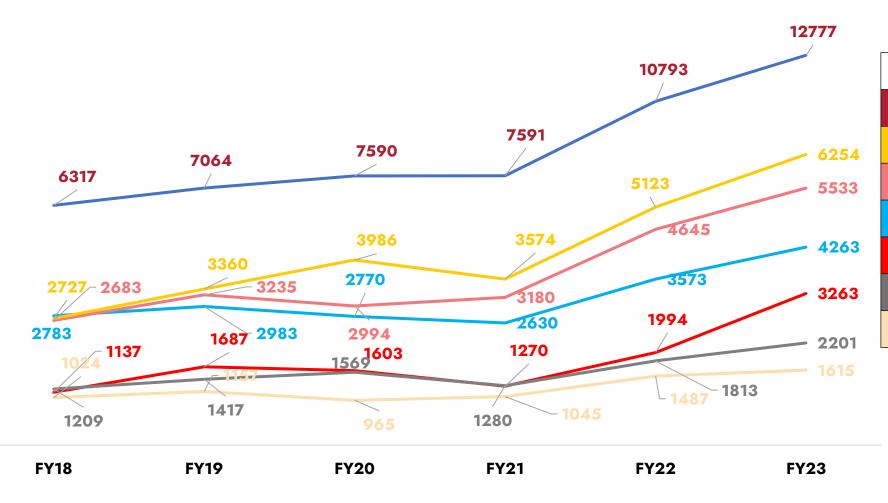
### Market Size (Org + Unorg)-Product Wise

Product Category	FY19	FY20	FY21	FY22	FY23	YoY Growth
	(Rs Cr)	%				
LV Cables	26,548	21,490	17,563	22,597	28,210	25%
MV Cables	5,644	4,329	3,887	4,105	5,759	40%
EHV Cables	2,317	4,511	1,353	2,170	3,009	39%
Elastomeric	1,503	1,350	1,500	3,566	3,988	12%
Cables	36,012	31,679	24,303	32,438	40,966	26%
LDC	20,000	16,000	18,285	20,310	23,758	17%
Cables & Wires	56,012	47,679	42,588	52,748	64,724	23%

Source: IEEMA

# APAR Performance vis a vis Peers — 5 Year Revenue (C&W) Growth





	Growth YoY	CAGR
POLYCAB	18%	15%
KEI	22%	18%
HAVELLS	19%	16%
FINOLEX	19%	9%
APAR	64%	23%
UNIVERSAL	21%	13%
KEC	9%	10%

Source: Company Annual Reports. Only Cables & wires segmental revenue considered including inter-segment revenue.

### Cable Solutions - Diversified Product Portfolio



# POWER CABLES & WIRES

- XLPE LV Power Cables
- XLPE MV Power Cables
- XLPE LV Control Cables
- Medium VoltageCovered Conductors(MVCC)
- LV & HV ABC Cables
- Instrumentation Cables
- Concentric Core (Anti-Theft) Cables
- Railway Signaling
   Cables
- Fire Survival Cables

# & E-BEAM CABLES

- Solar Cables
- Windmill Cables (72 kV)
- Locomotive Cables
- Ship Wiring Cables
- Trailing Cables
- Welding Cables
- Mining Cables
- LFH Cables & Wires
- o EPR, Silicon, EVA
- Auto Cables

# HOUSE WIRES AND FLEXIBLES

- House Wires
- E-Beam Cross Linked House Wires
- 3 Core Flat Cables
- Round Multicore
   Flexible Cables
- Cat 6 LAN Cables
- CCTV Cables
- Coaxial Cables
- Telephone Cables

# CABLES FOR LISTED USA MARKET

#### **Building Wire**

- o RW75/RW90/RHH/RHW/RHW-2/XHHW/XHHW-2 Wire (UL - 44)
- USE/USE-2/SERVICE ENTRANCE SER & SEU Wire (UL – 854)
- THHN/THWN/THW/ THW-2 Wire (UL - 83)
- Sec. Underground (URD) / Service Drop Cables (As per ICEA)

# Renewable (Solar & Wind) PV Wire

- Single Core PV Wire (UL 4703)
- Our cables comply to PR-I, PR-II, -40°C, FT1, FT2, FT4, VW1, SR (Sun Resistant) Rating.

# **CABLE HARNESS**

- Automotive & EV
- Locomotives
- Railway Coach
- Solar Projects
- Wind Projects
- Aerospace & ship building
- Data Centers
- Defence Trucks & armed vehicles, communication systems

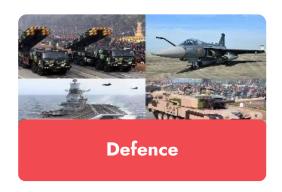
# Serving diversified sectors



















#### Innovation at Core in what we do at APAR





### Advanced PV Wire for Solar Industry

Life Expectancy of beyond 25 years, Fire Retardant, RoHS Compliant, UV Resistant, Anti Rodent & Anti Termite

### Anushakti - High Ampacity Wires

- EBXL (electron beam crosslinked) FR-PVC insulated wires for building wiring
- o Temp up to 105 degrees C
- Carries 50% more current and longer than of 50 years



Fire Survival Cables @1050 degree C for Sydney metro

Designed to pass Fire test @ 1050 degree C for sizes 1C x 50 - 1C x 300 & 2C x 10 to 3.5C x 120 mm2 - Copper cables

# What is E-Beam technology?



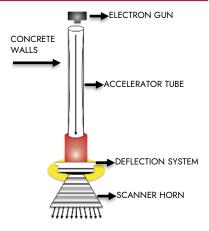
An Electron Gun is housed in a thick vessel where electrons are accelerated in an acceleration tube & directed to a scanning device magnetically to scan



Highly accelerated electrons penetrates insulation or sheath of cables



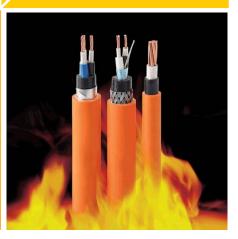
Electron beam Irradiated cables and wires offer superior performance as compared to conventional PVC or XLPE cables



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



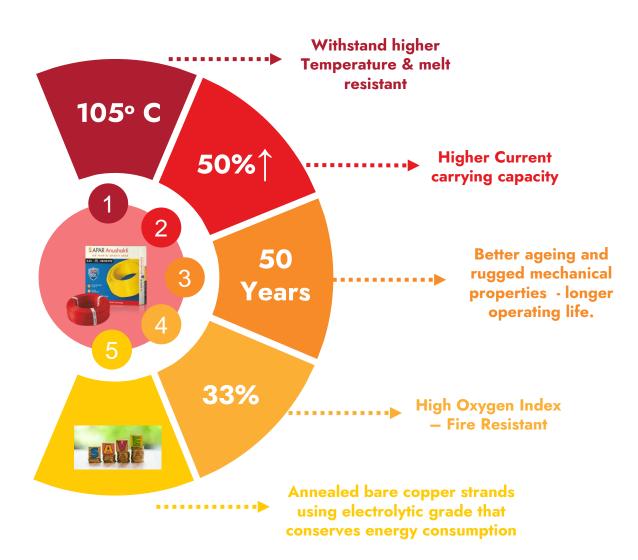
Generates carbon radicals which cross links polymer chains of plastic three dimensionally with each other



Set-up at Khatalwada, Gujarat: Green-field project with 1.5 MeV, 2.5 MeV, 3.0 MeV electron beam accelerators. A new accelerator of 2.5 MeV commissioned recently.

# **APAR Anushakti – High Ampacity Housewires Powered by E-Beam Tech**





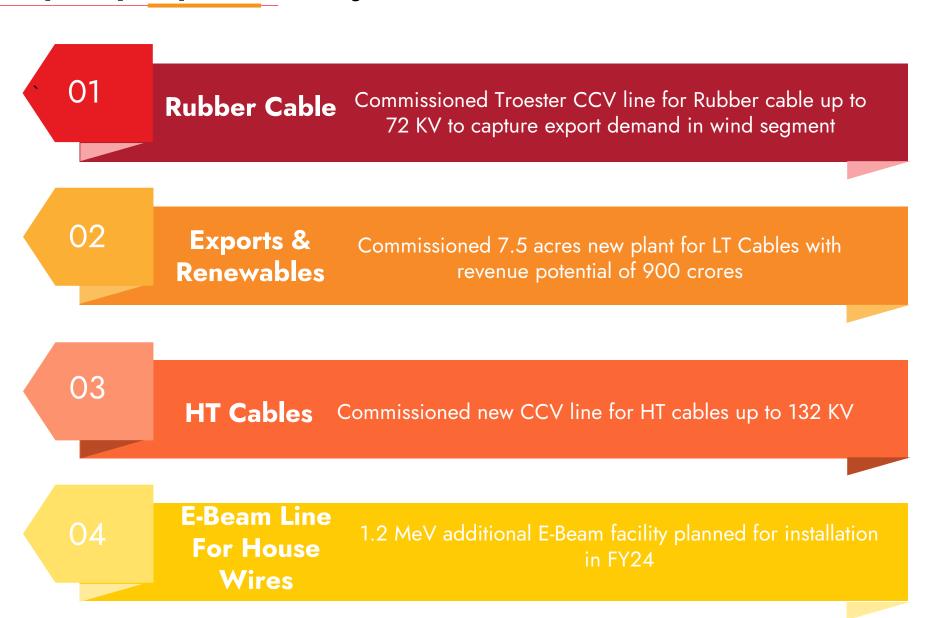
### **APAR ANUSHAKTI FR PVC**

Single core, unsheathed FR PVC cables for 1100 V as per IS 694

Nominal	Current Carrying Capacity (Amps)					
Cu Area	Anus	hakti	Others			
Sq.mm	In Conduit Trunking	Unenclosed	In Conduit Trunking	Unenclosed		
0.75	9	14	6	7		
1.0	16	24	11	12		
1.5	20	32	13	16		
2.5	27	44	18	22		
4.0	36	58	24	29		
6.0	47	74	31	37		

## Capacity Expansion Projects — FY24

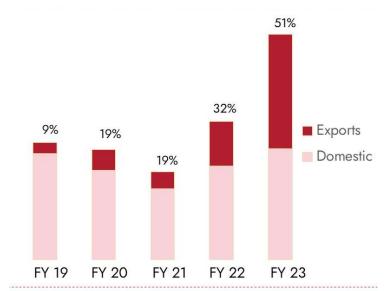




Capacity utilisation for FY23 @ 88%

# **Exports Growth**







# **Industry Tailwinds & Demand Drivers**





#### **Opportunities in Power Sector**

Rapid growth in power demand, rural electrification and green energy initiative will ensure healthy demand from power sector, RDSS scheme outlays investment of 3 lacs crore by FY26



#### **Boom in Infrastructure**

Strong Govt focus with higher budgetary allocation of 10 lac crores in FY24 with 33% yoy increase



#### **Policy reforms conducive to Business Growth**

100% FDI through direct route, National Single Window System and PLI Scheme will attract investment for growth



#### **Emerging Trends**

China + 1 theme in manufacturing; Govt emphasis on Digital infrastructure; Huge capex planned under BharatNet, 5G rollout & 4G expansion; Clean mobility to create new demand



#### **Uptick in Private Capex**

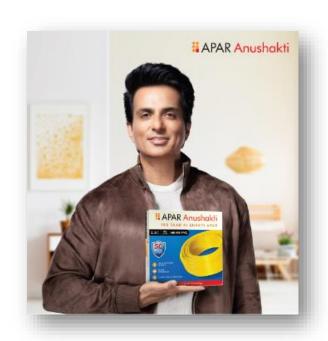
Revival of private capex which was due for some years; a lot of emerging opportunities in Steel, cement, pharma, textile etc.

# **Ongoing Journey to Improve B2C Share**





- 1st Company to introduce E-Beam powered House Wires (Anushakti)
- Appointing Sonu Sood as Brand Ambassador
- Television advertisement and WPL sponsorship. Finalised sponsorship deal for Asia Cup 2023
- Sales strategy led by aggressive BTL activities to create a dedicated and Loyal electrician base
- Targeting Tier II and III cities initially and moving towards major cities
- Footprints expanded to 19 states currently
- Successful pilot model states Kerala and Gujarat



# **Retail Business Expansion**



# Project Business & Approvals (KAM)

- Focus on key government approvals & MEP Consultants
- Focus on large builders and projects
- Exploring Railways, MES & NHAI for LDC business

# Channel Expansion

Project Business
& Approvals

Retail Network
Expansion

Influencer
Management &
Demand
generation

# Recommended brand by Electricians

- Develop a sizeable network of Electricians and maintain the same through Loyalty application
- Continue to focus on E-Meets and Nukkad Meets to drive secondary sales

# Expanding distribution to reach 50% district coverage by FY24

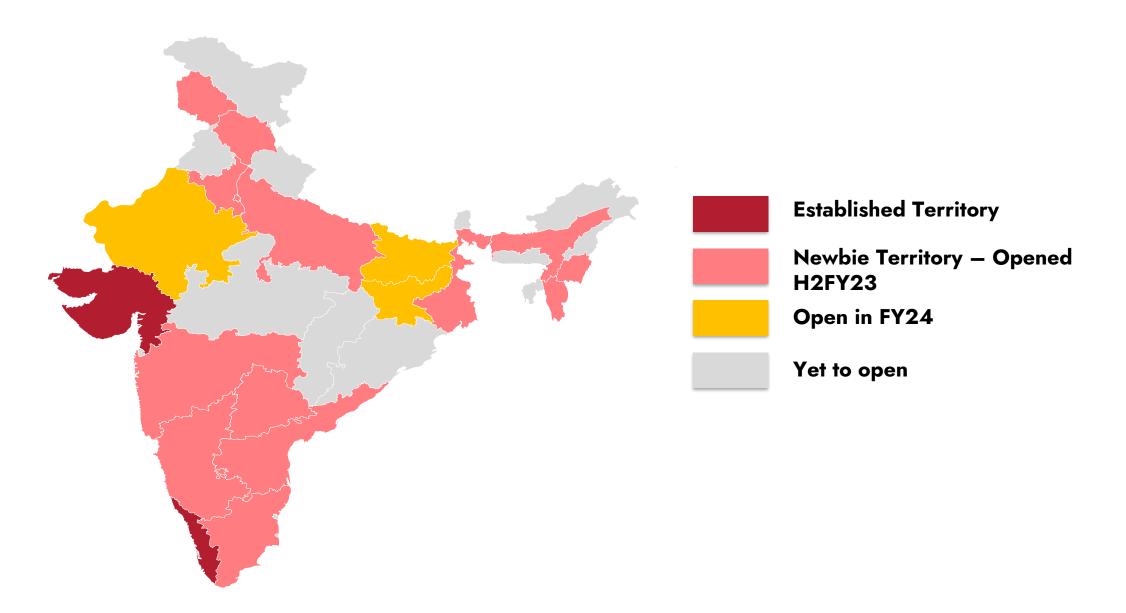
- Expand retail distribution network by adding new states and penetrating deeper in existing states
- Drive Sales through relevant Primary / Secondary Sales schemes

# **Expand Retailer Network and** maximize direct reach

- Efficient and effective planning of retailer visit in Field Assist by ASM for LAS and Sales Ex.
- Map the retail outlets in every potential District with Field Assist

# **Retail Business Expansion Reach**





# **Channel Expansion in Retail Business**



Particulars	FY 22	FY 23	FY 24 Projection
Distributor presence	19	120	267
Retail count presence	276	2,395	6,700
Active state presence	2	13	19
No. of Electrician	-	72,900	1,46,300
Demo's	6,348	35,353	61,150
Electrician Meets	474	3,373	6,860

### Competitive advantage — Cable Solutions



- E-beam technology for house wiring first mover advantage and the only company using this technology giving the product a 50year life, melt resistant and flame retardant till 105 degrees.
- O India's only Cable company with 4 e-Beam irradiation facilities.
- O Leading player in the renewable space in India (solar & wind cables).
- O Highest number of UL certificate of compliance from India for sale of cable in the United States.
- O Wide range of cable & industries served viz., railway locomotive & coaches, shipping, mining, defence, solar, wind etc.
- O Development of torpedo fibre optic guide for submarine application.
- APAR supports Indian Navy by supplying specialised cables.







INVESTOR DAY PRESENTATION

**Telecom Solutions** 

Mr. Girish Gupta – Sr. VP & Business Head (Telecom)



**Voice** 2001-2010



Feature Phones
Digitally Connected, Kbps,
High Latency, >100 ms

**Video** 2010-2020



Smart Phones
Digitally Consuming, Mbps,
Latency sensitive, 10 ms

Virtuality 2022-2030



**Connected Devices**Digitally living, Gbps,
Real time Latency, < 1 ms

### Digitalisation taking data growth to new levels...



#### **Current use cases**

#### **Video Consumption**

60%+ of total traffic high uploads, creation

# Gaming & Software Downloads

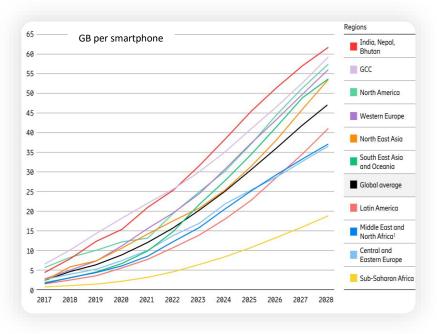
#### **Social Networking**

with heavy rural and cross demographic reach

#### AR/VR

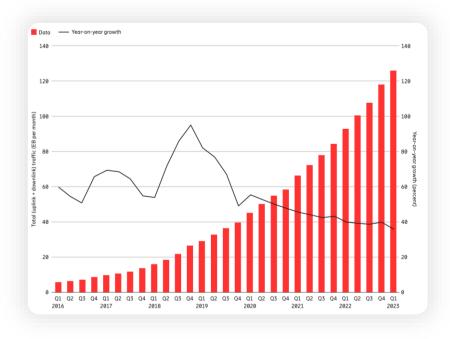
in Entertainment and Business Use cases

#### **Global Data Consumption per user**



# GB per smartphone will grow at 25% CAGR Shall reach 55 GB per mobile till 2028 in India

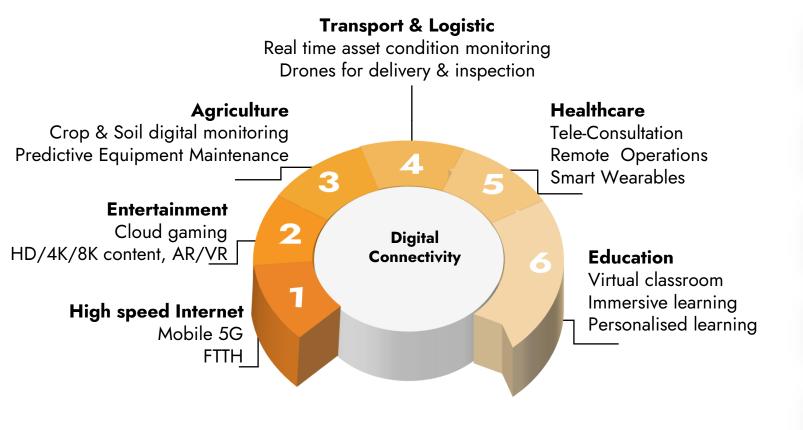
#### Global mobile Data traffic in EB/month



India's overall wireless internet data usage 7X Reached 32000 petabytes in India by 2022

### Digital Transformation evolving faster than expected...





#### By 2030

**9.8** bn sim connections\* with 114% penetration rate

**50%+ 5G adoption** up from 12% in 2022

**5.3 bn IOT Connections**Licensed IOT Connections from 2.5 Bn

**28 Mn Jobs** +12 Million from current level

**\$6 Tn Contribution**Mobile Industry contribution to GDP

### Telco's need a Transformation Shift



#### Critical needs of Telco's

- Double down the investments in core networks
- Focus on digital front-end play IOT and private networks
- Invest in edge data centers
- Enhancing managed services with higher Q-o-S
- Jump from Telco to Technology Company

Telco's Transforming from **Mobile to Digital** Co's **Need \$ 1.3 Tn CAPEX by 2030** 



### Investment already planned in building connectivity networks







- India will take Tower Fiberisation to 70% in next 5 years from existing 35%
- **530 operators** in 160 countries invested in 5G networks, out of which **254** operators have already launched commercial 5G services
- 41 carriers in 20 countries territories have launched public **5G** standalone (SA) networks

- India added 10 Mn FTTH Homes in last 2 years and plans to add 10
- UK plans for 25 Mn Homes by **2025** from 8.0 Mn up till 2022.

Mn on annual basis

China continues to deploy FTTR to prepare for AI & Internet of things





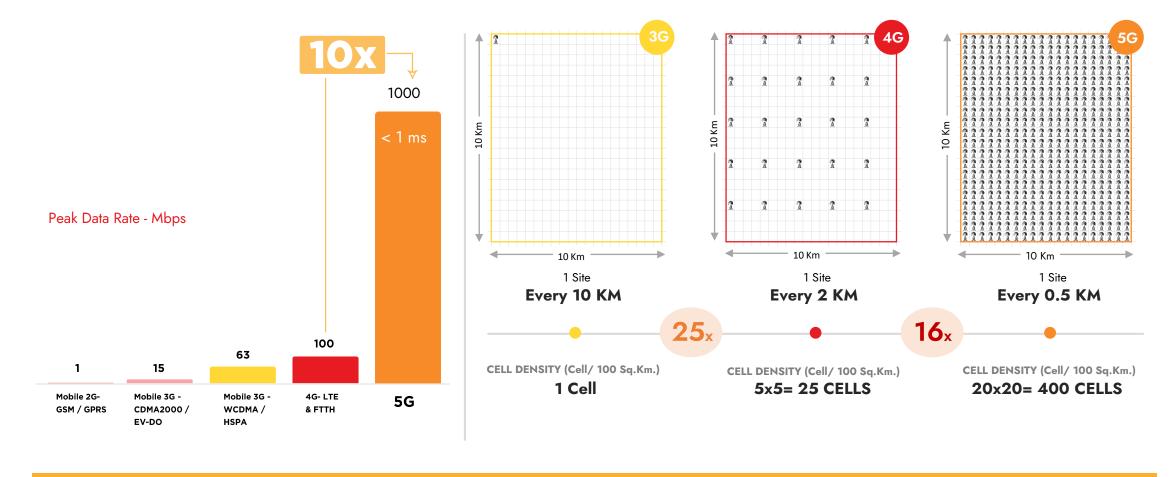
- **Bharat-Net** Cabinet approved 1.39 Lakh Cr investments to connect rural India
- USA administration announced the distribution of funding under \$42.5 bn. BEAD Program. Funding to be primarily used to deploy last mile fiber networks for rural reach.
- UK Project Gigabit 5 bn pound **Investment** to connect hard to reach UK areas

Demand of Fiber Networks and OFC shall grow continuously

#### Advent of 5G and densification of small cells



#### 10X Faster than 4G | 16X Cell Density as compared with 4G



16X Fibre would be required to roll out 5G and meet the Bandwidth and Latency requirement

### **APAR Foraying into Telecom Solutions landscape**



#### Grow by Innovation and Creating Customer Value



#### **Market Dynamics**

- Connected world with near zero latency
- Cloud shift from hyperscale to edge
- O Blockchain shaping web 2.0 to web 3.0

Massive digital transformation across industries



#### **Focus Areas**

- Converged networks and Data centres
- Rural Connectivity
- 5G,IOT & M2M

Multiple investments coinciding in next 5-7 years



#### **Solutions Portfolio**

- OFC solutions
- LAN & 5G solutions
- Convergence solutions
- Network services



#### **Competitive advantage**

- Largest product range for evolving market needs
- Readily available NABL LAB for extensive testing
- Capability to provide customised solutions with innovation mindset
- Experience in exporting to more than 140 countries

#### **APAR Telecom Solutions**



#### Creating Value by enabling environmentally sustainable connectivity solutions

Across Telecom, Energy Infrastructure, Defence and Transportation sectors

Uniflex - acquired 2008

Since 2017

Starting FY2024

Starting FY2024

Starting 2025

Business Portfolio



**Optical Fiber** 

**Cable Solution** 

Manufacturer in India for

**OFC & Speciality Cables** 

Powerline Telecom Solution

Evolving with Market Partnerships



Tower & IOT Connectivity
Solution

Evolving with strategic partners capability



Enterprise / DC Solutions

Evolving with Market Partnerships



Fiber Network Services

Market Entry with Telco's

Customers Categories



Telecom



Railways



Defence



**Power & Energy** 



Industrial

### **Customer Centric Strategy**



#### **Strategic Priorities FY24** Initiatives KAM Structures to address and access global markets Grow Increased Focus on Global Customer Approvals and qualifications **Optical Fiber** of regional standards-UL/CPR etc. **Cable Portfolio** Brand Positioning in focused markets of growth: India, Europe, MEA **Value Creation** Innovative & Customized Solutions to stay relevant and higher customer **Solutions** retention Design & Knowledge lead discussions, capturing customer mind share Offerings Local availability of products in global markets with partnerships Augmenting team & Processes to address global markets Capability Strategic partnerships with Fiber Suppliers **Augmentation** Building E2E service capability to build telecom networks



### Using customer centric innovations to capture future markets



# Innovation on individual product level

APAR Micro Cables and Fire Resistant products opened up global markets to deliver customer centric approach with desired solutions for the specific applications.



# Creating new products to drive TCO benefits

APAR hybrid cable is a unique solution combining fiber and copper enabling customer with faster and cheaper deployment of networks across multiple use cases



# Crafting full solutions – deployment ready solutions

APAR solutions for Wind-mills is an evolved pre-connectorised solution enabling customer to avoid technical issues on the field with First Time Right installation and reduction of time in project completion.



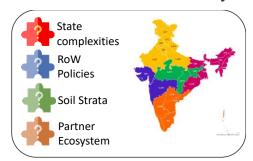
### **Beyond Products - Building Network Services for Passive Solutions**

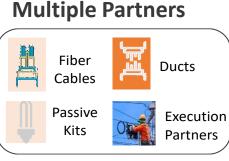


#### **Multiple Applications**

- **Intracity Networks**
- **Intercity Networks**
- **FTTH Networks**
- **Rural Connectivity**
- **Border Connectivity**

#### **Execution Variability**





### **Addressing Challenges**

Reliability Increased N/W Life

**Digital View** of Network Deployed

> Integrated **Approach**

**Predictable CAPEX** 

**Sustainable Delivery** Requirements

#### **APAR Value**

**Process Design** & People

**Tech- Tools** & Platforms

**Innovative Products** & Services

> Firm Service **Pricing Model**

**Partners Management System** 

**2X Impact** 

Solution to **Faster Network Build** with E2E Responsibility









INVESTOR DAY PRESENTATION

**Financial Overview** 

Mr. Ramesh Iyer - CFO

### **Customer mix profile**



Particulars Particulars Particulars Particulars Particular Particu	12MFY23
Exports	48.7%
Industries/Corporate	16.7%
Specific industry groups	8.6%
OEM's	6.5%
EPC - Transmission companies	4.8%
Utilities - Transmission companies	7.1%
Renewables	2.7%
Utilities - Electricity Distribution Boards (Govt. + Pvt.)	1.6%
EPC - Diversified customer base across other verticals	0.6%
Others	2.7%
Total	100.00%

Industries/Corporates includes Cosmetics, Pharma, Rubber, Plastics, Lubricants etc.

Specific industry groups includes Rail, Defence, Shipping, Mining, Telecom etc.

With change in customer mix, there is limited exposure to State owned electricity distribution boards

# **Quality of Receivables FY23**



Particulars Particulars Particulars Particulars Particular Particu	% of Total
Secured under various means	52.7%
Government Transmission and sector specific companies	19.5%
Others (of which 63% are with entities where APAR is having business relationship with over 3 years)	27.8%
Total	100.0%

### Risk Management - Commodity Risks



#### **Hedgeable commodities – Aluminium and Copper**

- 100% metal hedging against underlying contracts based on price formula
- No metal variation exposure on the company

#### Non-hedgeable major materials, services (excluding oil)

- Short duration contracts to mitigate volatility
- Price variability clause included for long duration contracts



### Risk Management - Currency Risks



- Natural hedges across divisions
- O Synergy across divisions: Surplus position in one division offset against shortage in another division
- O Cross currency hedges for non-dollar denominated currency



## Risk Management - Customer Risks



- O Credit evaluation before order acceptance
- O Internal risk committee for review of medium & large contracts
- Insurance, channel financing, factoring to improve liquidity and mitigate credit risks



## **Consolidated: P&L Metrics**



Particulars	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Revenue from operations (Rs crores)	7,964	7,462	6,388	9,317	14,352
EBITDA post-open period forex (Rs crores)	475	468	435	561	1,291
EBITDA Margin (%)	6.0%	6.3%	6.8%	6.0%	9.0%
PAT (Rs crores)	136	135	161	257	638
PAT Margin%	1.7%	1.8%	2.5%	2.8%	4.4%
EPS (Rs)	35.6	35.3	41.9	67.1	166.6
ROE (%)	11.8%	11.5%	12.6%	16.5%	32.3%
ROCE (%)	15.1%	12.0%	13.6%	18.7%	37.5%

### **Consolidated: Balance sheet metrics (Rs crores)**



Particulars Particulars	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Closing Working Capital (Refer Note 1)	497	536	717	1,108	1,458
Surplus cash > 12m	187	0	60	31	54
Fixed Assets (net block)	812	939	907	920	1,050
Capital employed	1,496	1,475	1,684	2,059	2,562
Working Capital (Days)	31	25	36	36	33
Capex expenditure	208	145	56	130	248
Debt /Equity Ratio	0.21	0.27	0.19	0.17	0.14

- Effective working capital management over the years
- Consistent Low Debt-Equity Ratio

# **Consolidated: Cash Flows (Rs crores)**



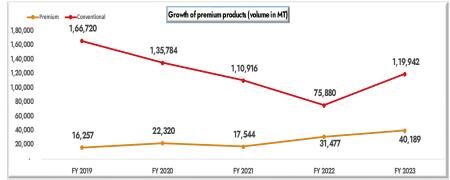
Particulars Particulars	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Profit before Tax	216	169	208	342	855
Non-cash adjustments	185	292	189	207	338
Movement in Working capital	231	(367)	(73)	(305)	(495)
Cash flows from operating activities	632	94	324	244	698
Cash flows from investing activities	(388)	45	(111)	(91)	(269)
Cash flows from financing activities	(249)	(101)	(167)	(70)	(127)
Dividend paid	(44)	(87)	(O)	(36)	(57)
Net increase/ (decrease) in cash	(49)	(49)	46	47	245

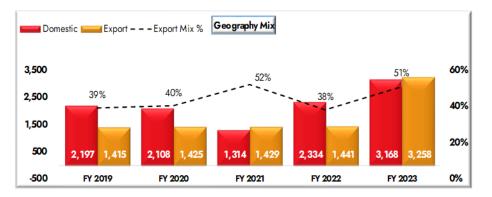
### **Conductor: Premiumisation and Exports driving growth**



- The volume growth over 5 year period is low because of change in product portfolio as the metric tonnes required per km has reduced over the years
- O Strategic initiative to introduce premium portfolio has worked for the division
- O Exports mix up from 39% to 51% over last 5 years
- O Premium products largely for Indian markets and non-premium products in Export market





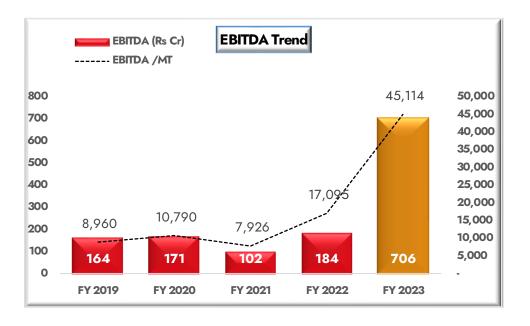


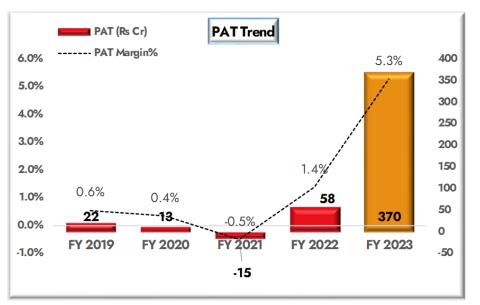
Figures are net of eliminations

### Conductor: Optimal product mix driving higher margins in FY 23



- FY 23 witnessed a high profitability due to premiumisation of product portfolio and high margin exports further aided by macro & geo-political factors
- Export market saw multiple opportunities due to macro-economic factors viz., Renewables, Infra spending etc. coupled with geopolitical favourable situations, pent-up covid demand, freight one-offs.

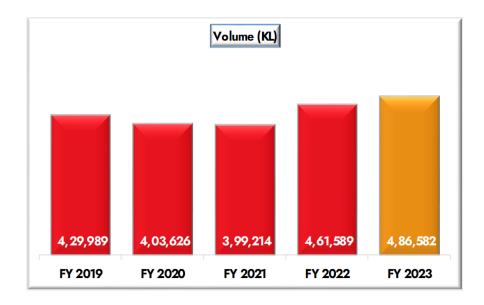


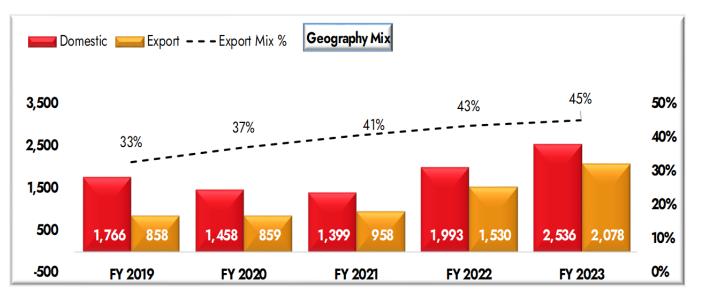


### Oil: Improved quality of oil customers



- Post FY19, strategically the business reduced volumes to customers where credit risk were high. Accordingly, the volumes fell but the quality of customers improved
- Exports mix up from 33% to 45% over last 5 years



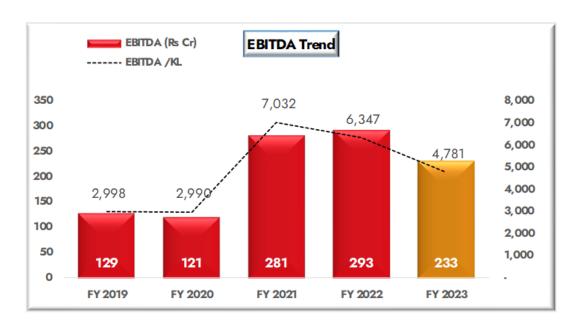


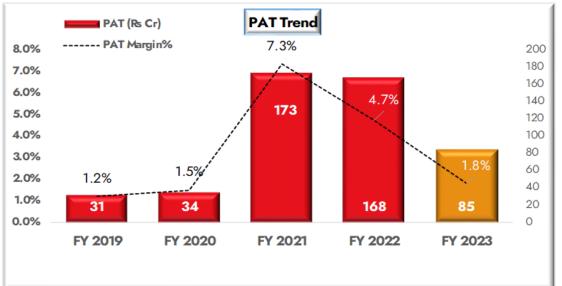
Figures are net of eliminations

### Oil: Continued focus on per unit profitability



O FY21 & 22 were high on margins due to favourable oil prices

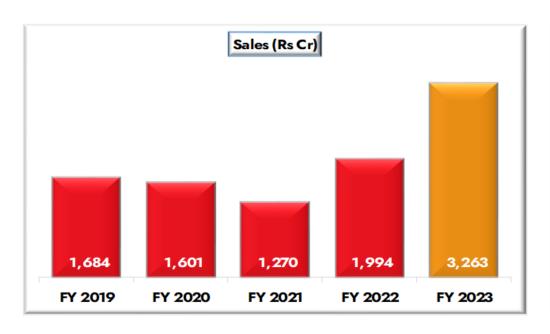


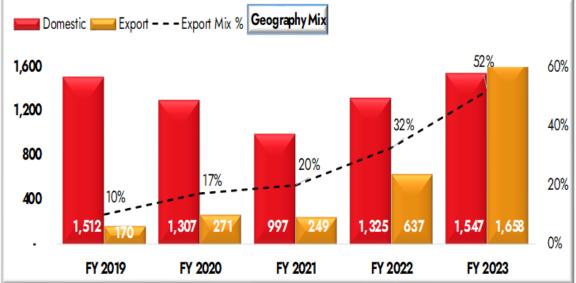


### Cable: Strategic expansion into export market



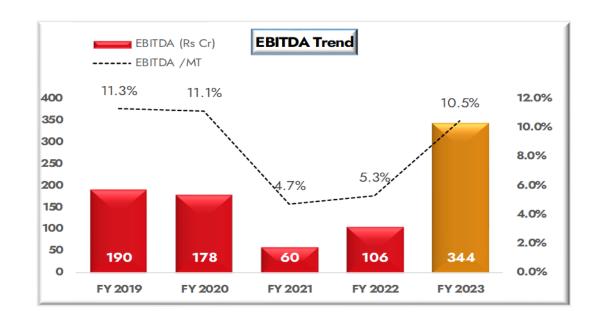
- Exports mix up from 10% to 52% over last 5 years
- Ouring FY 23 we were the No.1 exporter of cable & wires from India (Source: Volza.com)

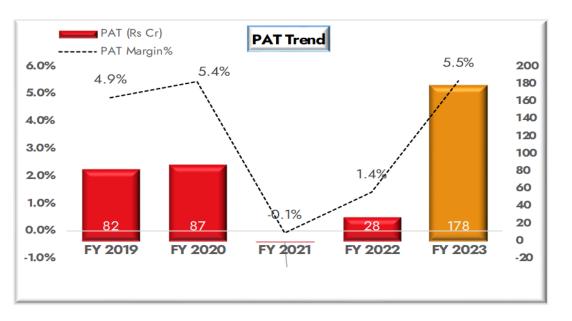




# Cable: Volume growth and product mix leading to better margins













INVESTOR DAY PRESENTATION

**ESG** and Sustainability

Mr. Suyash Saraogi – President Strategy & Projects

### Stakeholders' demands on APAR





### Stakeholders' demands on APAR





# We are working on all these fronts to meet stakeholders' demand, including:

- Transition to renewable energy as demanded by suppliers/ partners
- o Climate-risk management as demanded by Shareholders
- Water security & employment for Local Communities
- Compliance with all disclosure & reporting requirements by Regulators
- Low carbon products for Customers
- o Inclusive work environment & work-life balance for our Employees

# Sustainability Governance structure @ APAR ..



Three- tier Governance Architecture is adopted @ APAR for Sustainability Development program:



Decision making & oversight

Business Segment – provide subject matter expertise

Execution – drive initiatives & ensures best practices

# Our actions are aligned with UN SDGs ..





# **Environment: Carbon Footprint**



Our **organisational boundary** covers all our manufacturing plants, offices, go-downs, and all such emission sources under our **operational control**.

#### Our manufacturing plants in India

Gujarat : Khatalwada & Umbergam

Maharashtra: Rabale

Orissa: Jharsuguda & Sambalpur

Dadra and Nagar Haveli: Silvassa & Athola

#### Our manufacturing plant in UAE

Sharjah : Hamriyah

#### **Operational Boundary**

#### **Scope-1: Direct emissions**

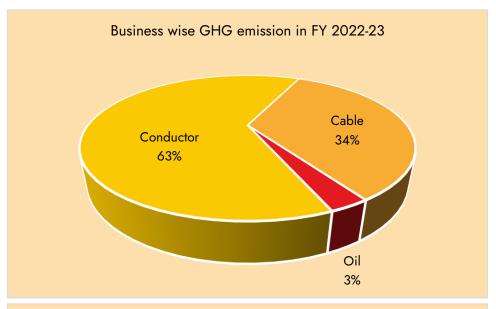
Direct GHG emissions come from sources that the APAR owns or controls. It includes emissions due to the use of Diesel, Furnace Oil (used at 3 of our 4 conductor plants), LPG, PNG & Refrigerant etc. Diesel is mainly used in the forklift for material handling, for DG sets, and for company owned vehicles.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

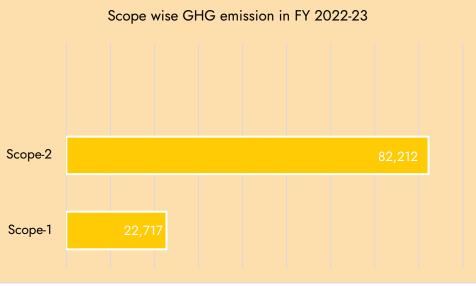
#### Scope-2: Emissions from purchased electricity

APAR is using the location-based method for Scope-2 emission computation. It reveals what we are physically putting (actual consumption of electricity) into the air.

104,928 tCO<sub>2</sub>e

was the GHG emission
@ APAR
during FY 2022-23
(Scope 1 + Scope 2)

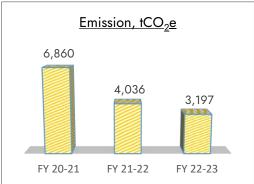


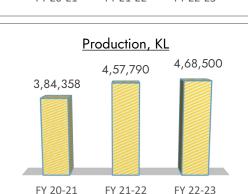


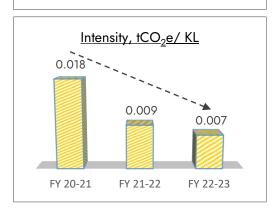
# **Environment: Carbon Footprint (business wise)**



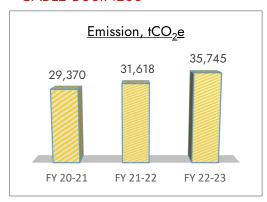
#### **OIL BUSINESS**

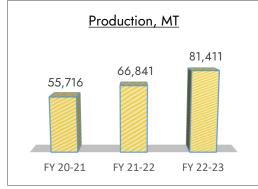


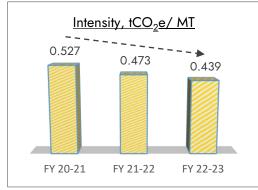




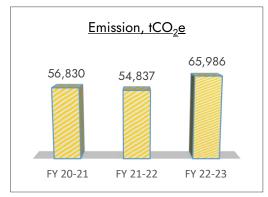
#### **CABLE BUSINESS**

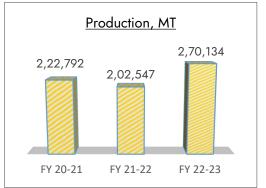


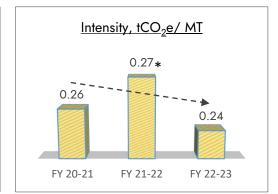




#### **CONDUCTOR BUSINESS**







# GHG emission intensity has gone down in all the three business.

We have been continuously working towards reducing the GHG emission (and intensity) across all our plant locations. These include:

- Working to reduce Energy Intensity through various productivity measures, six sigma trainings, efficiency improvement initiatives etc.
- Focusing on electrification shifting away from fossilfuel based energy
- Increasing the share of RE (Renewable Energy) through roof-top solar installations & commissioning of wind-solar hybrid renewable energy project.
- Reduction of wastes plastic waste management through EPR, and minimizing waste, re-cycling of waste, and safe disposal through proper channels.

\* The emission intensity increased marginally due to change in product mix. However, had we kept the product mix similar as the previous year (FY 2020-21), like to like comparison, the intensity would have reduced from 0.255 tCO<sub>2</sub>e/ MT to 0.236 tCO<sub>2</sub>e/ MT

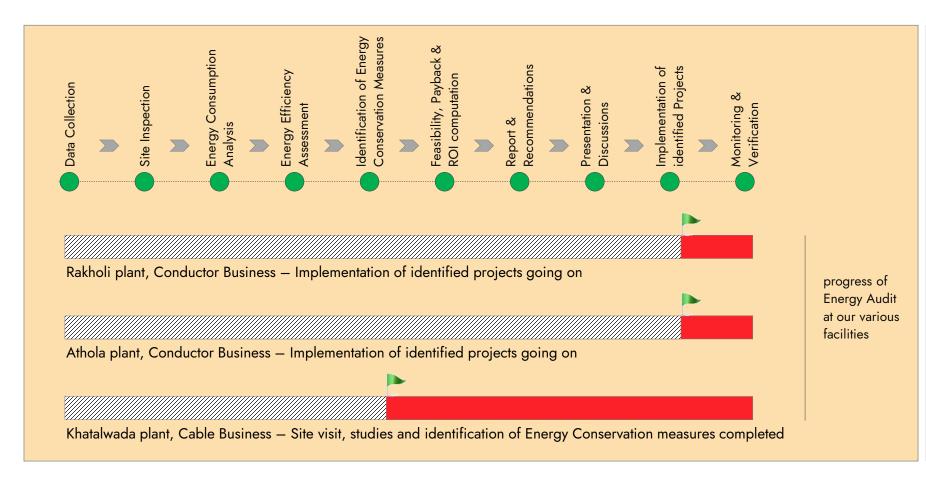
# **Environment: Energy Audits**



APAR has partnered with leading institutions for comprehensive assessment and analysis of the energy usage and efficiency of machines & equipment at our manufacturing facilities.







The primary objectives Energy Audits @ APAR are as follows:

- Identify Energy Inefficiencies identify areas where energy is not used efficiently.
- Reduce Energy Consumption and Costs
- Enhance Energy Performance and Sustainability: gain insights into our energy performance metrics and set achievable energy-saving targets
- Ensure Regulatory Compliance
- Improve Equipment Maintenance and Reliability
- Foster Energy Awareness and Culture

# **Environment: Renewable Energy**



#### Wind-Solar Hybrid

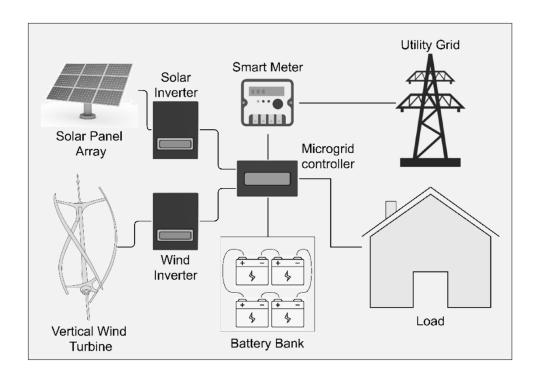
3.30 MW Wind Turbine

2.80 MWp Solar Energy



5.13

MW Roof-top Solar



#### **WIND-SOLAR HYBRID**

- Successfully commissioning of wind-solar hybrid project in partnership with M/s Clean Max Enviro Energy Solutions Private Limited on 18th June 2023.
- o It comprise of 3.30 MW wind-turbine and 2.80 MWp solar energy.
- This project is expected to generate approx. 15 million units annually, and help in GHG emission reduction of over 10,000 tCO2e per year.

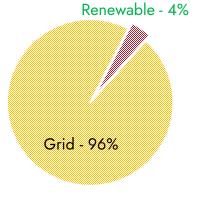
#### **ROOF-TOP SOLAR**

 Out of Roof-Top solar of 5.13 MW, 1.2 MW was commissioned in July 2023.

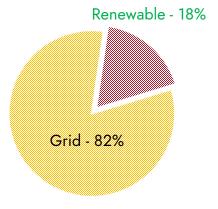
# **Environment: Renewable Energy status**



As on 31st Mar 2023



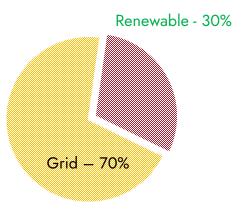
During FY 2023-24



#### scenario:

- o first turbine (wind-solar hybrid) commissioned, and
- o 1.2 MWp solar commissioned in Orissa

End of FY 2023-24



#### scenario:

 Additional turbine (wind-solar hybrid) (planned by 31st Mar 2024)

For the purpose of this illustration, we have assumed that there is no increase in electricity consumption in FY 23-24 as compared to FY 22-23

# **Environment: Low carbon products**



Low carbon products and services are those that minimize greenhouse gas emissions throughout their life cycle, from design and development to use and disposal.

Customers are demanding low-carbon products (lower embedded carbon) to meet their product-carbon footprint

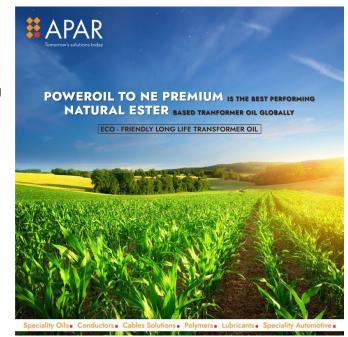
Few examples of our low carbon products are (a) ACCC conductor and (b) POWEROIL NE/POWEROIL NE Premium

## ACCC conductor

Aluminium Conductor Composite Core (ACCC) have higher current carrying capacity (CCC) compared to conventional ACSR or AAAC, and thereby upgrade transmission networks with minimal infrastructural impact. These are more energy efficient for power transmission as they generally have lower resistance (lower I<sup>2</sup>R losses). This leads to lower carbon emission on account of lower energy loss.

## POWEROIL NE/ POWEROIL NE Premium

POWEROIL NE/ POWERLINE NE PREMIUM - APAR's POWEROIL range of products has a range of specially formulated transformer oils that are environment friendly, having excellent cooling characteristics, higher oxidation stability, lower gassing tendencies and stable insulating properties over its useful life. These are natural ester-based transformer oils that are formulated from plant-based feedstocks, having very low embedded carbon (as compared to mineral oil-based feedstock) and biodegradable.





# **Environment:** water footprint



328,325 KL



was the Water Footprint @ APAR during FY 2022-23

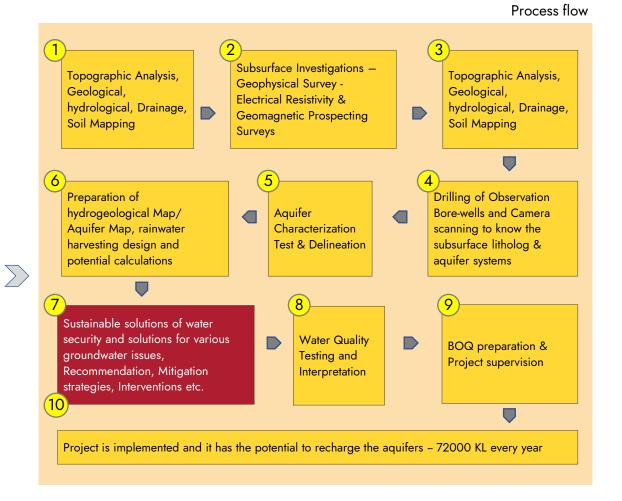
- a) We are committed to reduce the water footprint intensity by 12% within FY 2023-24, and we will continue to keep on taking fresh targets every year.
- b) To achieve the same, we are managing our water footprint through focus on both the :
  - o demand side (through re-cycling and waste reduction) and
  - o supply side, through Rain Water Harvesting (RWH) projects

We have implemented RWH project at our Khatalwada Cable plant (which is biggest in terms of size), and it will save 72,000 KL water per year. The process is depicted on the right hand side.

#### We are working towards making our Khatalwada plant 'water-neutral' by FY 2024-25

For all the new plants under construction, the RWH is embedded in the plant-design itself, so that water footprint would be significantly low from day-one.

- c) All our plants are ZLD (Zero Liquid Discharge).
- d) 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.



# Social: employee engagement



## Employee engagement survey

 Employee Engagement reflects the degree to which employees are emotionally connected and committed to their organization and their role, and to which they will exert discretionary effort for the betterment of the organization.



**1511** Total sample size

1397 Number of respondents

**92%** Survey response rate

- 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.

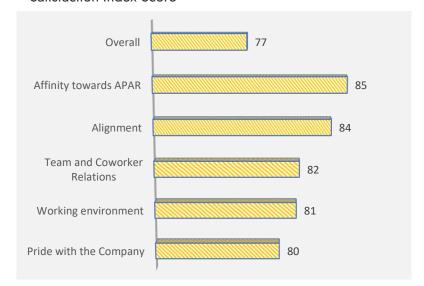


Highest engagement scoring on 2 key questions:

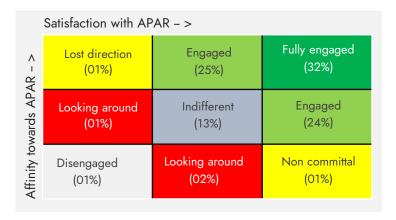
#### Questions

- 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

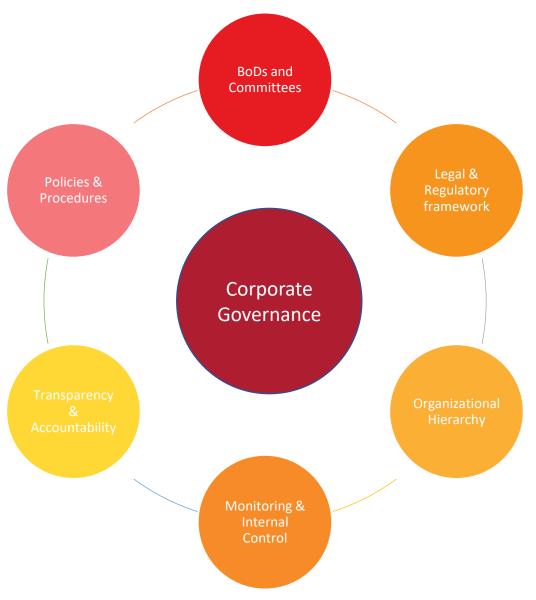




## Corporate Governance



- 1) Board Commitment in managing APAR in a transparent manner with the objective of maximizing long-term shareholder value. It ensures the following:
  - a) Equitable treatment of all shareholders and provision of relevant and material information to them on a timely and regular basis.
  - b) Approval and conduct of related party transactions in a manner that ensures proper management of conflict of interest, protecting the interests of the company and its shareholders.
  - c) Timely and accurate disclosure on all material matters, including the financial situation, performance, ownership and governance.
- 2) The composition of the Board reflects the industry experience that APAR requires, with an appropriate complement of qualified and independent directors.
- 3) The Board also ensures the APAR has a well running sustainability function with proper oversight.
- 4) The Board also assesses its own performance and that of individual directors, and takes corrective actions where due.



## Corporate Governance

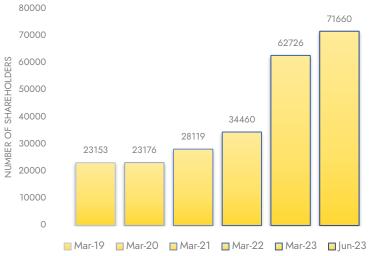


#### Key highlights

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

• The number of shareholders increased from 34,460 as on March 31, 2022 to 71,660 as on June 30, 2023





 All the Resolutions proposed to the shareholders, since inception, were voted in favour and passed with requisite majority.

- Listing of shares of the Company
  - on BSE 1991
  - on NSE 2004
- Investor grievances are redressed promptly on real time basis.

#### INVESTOR COMPLAINTS SUCCESFULLY REDRESSED



- No complaints pending from the investors, as on date, which is reported in SEBI SCORES as well as in BSE and NSE records.
- There were no penalties or strictures imposed on the Company.

## **CRISIL** rating



- o CRISIL had started ESG rating of top listed Indian companies since 2021. First such rating was done last year, and the report was released in June 2021.
- o 2<sup>nd</sup> such rating was done in 2022 for 586 top Indian companies, and report was released on 19<sup>th</sup> May 2022
- o APAR's name has found a place in the CRISIL ESG rating in 2022.
- The rating was done as per the documents available (ESG report and other documents) in the public domain.

APAR's ESG Score		Environment	Social	Governance
59		56	48	68



#### Scoring band:

Leadership: > 70 Strong: 61-70

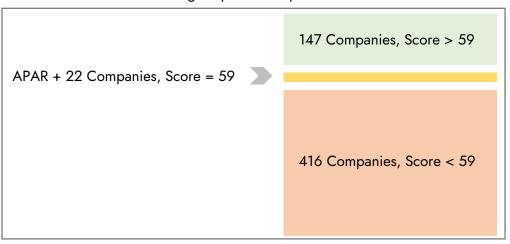
Adequate : 46-60

Below average: 30-45

Weak : < 30

APAR is at the upper end of 'Adequate' level

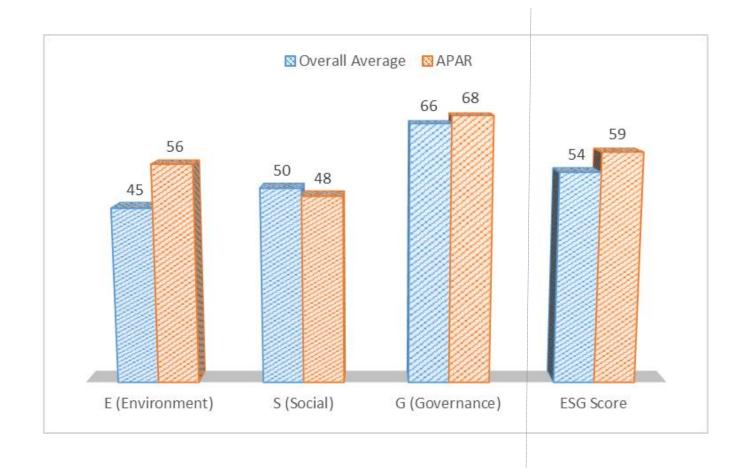
#### APAR was ranked 148th amongst top 586 companies



In 'Industrial' segment, there were 42 companies, and APAR was ranked no. 3

## What does APAR's ESG score of 59 mean?







#### APAR's score

- We performed well in the Environment category, as is evident from the score.
- Our performance in Social category were slightly below average (various actions have been taken to improve the same).
- o Our Governance related disclosures were better than the averages.

# Major milestones ..





## **TCFD Report**

We prepared our first TCFD (Task force on Climate related Financial Disclosures) report which can be accessed through the link – https://apar.com/tcfd-report/



## **ESG** rating by CRISIL

APAR's name has found a place in the CRISIL ESG rating this year. APAR scored 59, and was ranked 148th amongst top 586 companies



## 3rd party certification

GHG emissions (Scope-1 and Scope-2) and intensities are validated and certified by independent 3<sup>rd</sup> party assurance provider, DNV – every year



#### **CDP** disclosure

We disclose our climate related emissions to CDP (Carbon Disclosure Projects). APAR was awarded a score of 'B' in Dec 2022 by CDP.



#### Disclosure to EcoVadis

Sustainability related disclosure is done 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.



## Wind-Solar hybrid plant

Commissioned Wind-Solar hybrid (3.30 MW wind-turbine and 2.80 MWp of solar energy) project in partnership with a leading supplier. This project is expected save 10,000 tCO<sub>2</sub>e GHG emission per year.



## Scope - 1,2,3 GHG emission

Internal capacity building and computation of GHG emissions. Scope-3 emission computed for the relevant categories for the first time.



## Product carbon footprint

We have successfully developed and published the Environmental Product Declaration (EPD) on EPD HUB for our various products. Details are provided at our website.

## Let's sum it up ..



We have traversed a long way in the last two and half years (since we started our formal sustainability journey)

- We are measuring, disclosing, and reducing our carbon emissions, water footprint and waste reduction
- o Big thrust on renewable energy achieved from 0% to 4% in first year, 18% in 2nd year, and will reach 30% by FY 2023-24
- o Partnered with the leaders in this sector including TERI, Veolia, DNV, Urdhvam etc.
- o ESG reports, TCFP, and EPD (Environment Product Declaration) are publically available at our website
- o All the compliance requirements including voluntary submission to CDP, EcoVadis, BRSR are up to the date
- APAR's name has found a place in the CRISIL ESG rating in 2022. We scored 59, and were ranked 148th amongst top 586 companies (rated 3<sup>rd</sup> in Industrial Sector)
- o Rated 'B' score by CDP which is considered as very good (on a 9 tier scaling range in CDP: A, A-, B, B-, C, C-, D, D-, F) for first year evaluation
- o Customers are demanding low-carbon product, and we are already getting a competitive edge because of our various efforts & progress in sustainability
- The GHG emission reduction projects undertaken by us are not only good for the environment but also profitable for the Company. We are also focusing on Scope-3 emissions (emissions from our value chain).

Revenue growth is good ...

Profitable growth is better ..

Profitable growth that advances ESG priorities is best!

Please refer to 'sustainability' section of our website for more details: <a href="https://apar.com/sustainability-initiatives/">https://apar.com/sustainability-initiatives/</a>





# APAR INDUSTRIES LIMITED INVESTOR DAY 2023

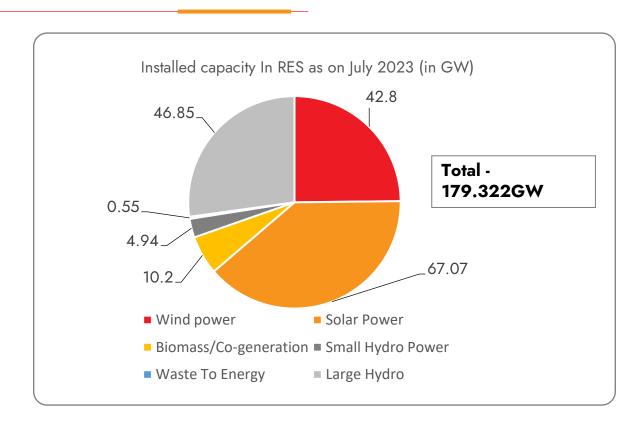


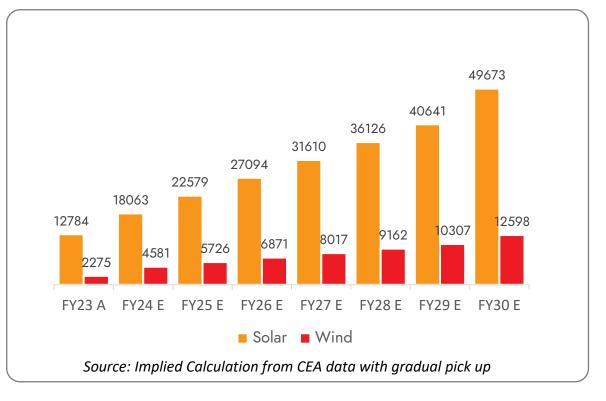


# India Renewable Energy: Installed capacity for Solar & Wind set to grow

APAR
Tamorrow's solutions today





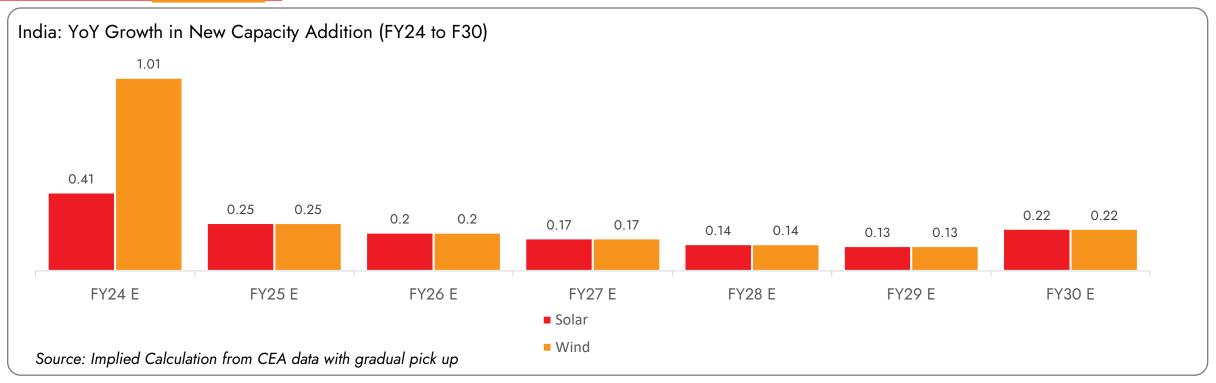


## **India: Capacity Addition Plan in MW (FY23 to F30)**

	Likely Installed capacity (MW) in FY30	Under Construction/bid out Capacity 2022-30
Solar	2,92,566	92,580
Wind	99,895	25,000

## India Renewable Energy (Continued)



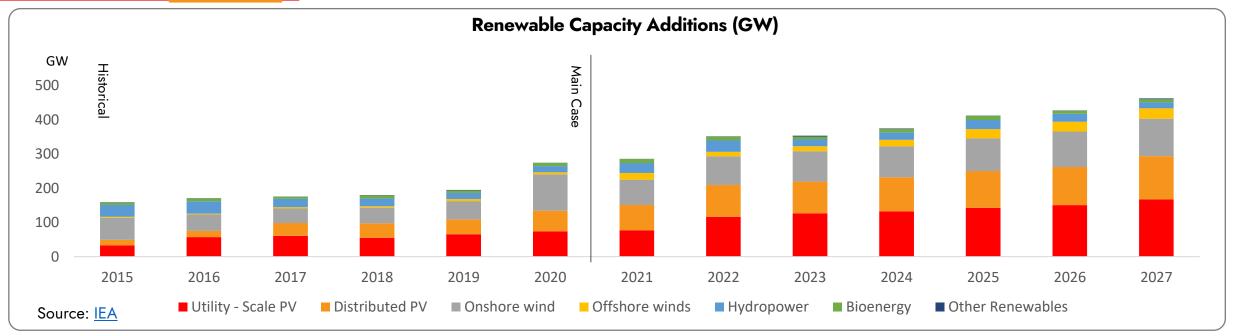


## Why These Targets Are Realistic?

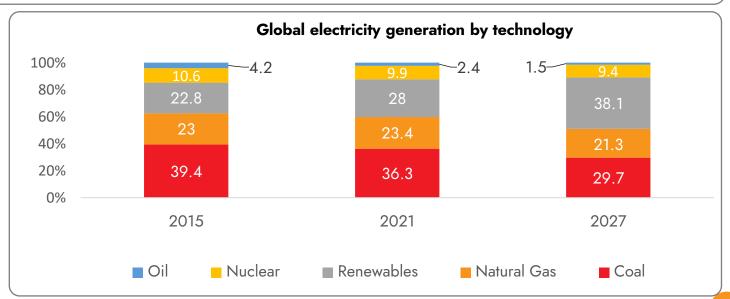
- Thriving: India's \$40B clean tech by 2040 (IEA)
- o In 5 years, India added 5,459 to 13,910 MW solar capacity, surpassing past growth.
- o India aims 500 GW clean energy by 2030, inviting 50 GW bids yearly for 5 years.
- India aims 45% less carbon, 50% renewables by 2030, net-zero by 2070.
- India targets 5M tonnes green hydrogen, 125 GW renewables by 2030.
- o India approves 57 Solar parks with capacity of 39.28 GW solar, eyes 30 GW offshore wind by 2030.

# Globally, Renewable Energy share to increase from 28% to 38%



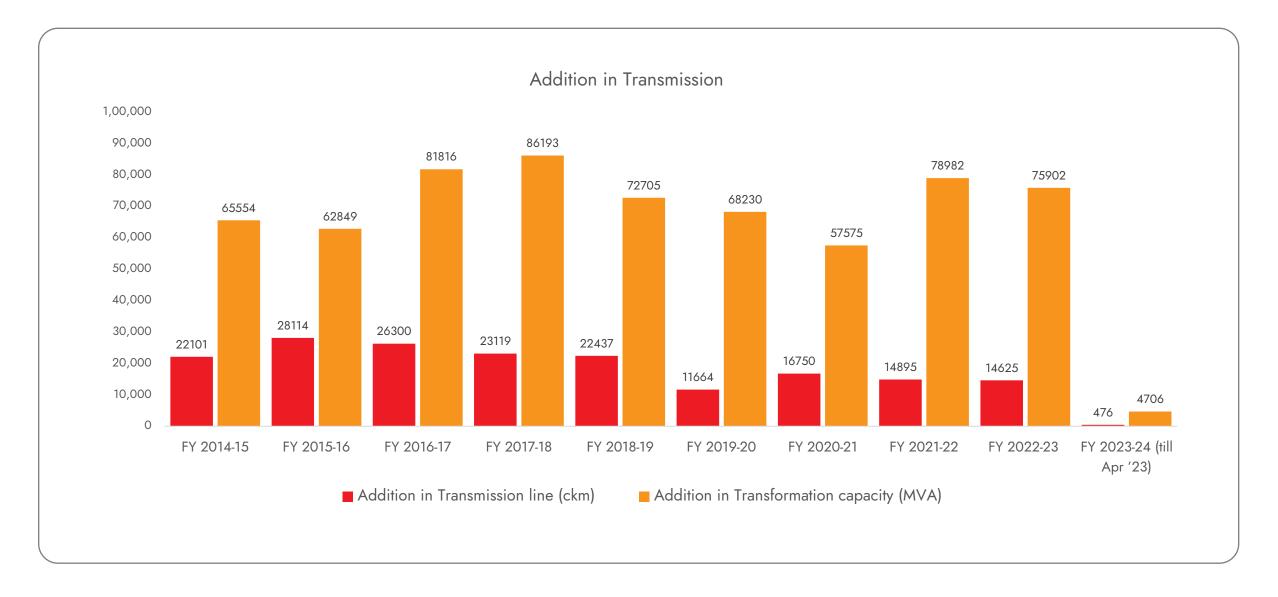


- Energy crisis fuels global renewables growth, 2,400 GW expected 2022-2027. With expected 400 to 500 GW annually.
- Global renewables to rise: 28% (2021) to 38% (2027), curbing coal, gas, stabilizing emissions, lowering CO2 intensity.



# Significant addition in Indian T&D over the years





## New transmission system to cater to Renewable energy demands

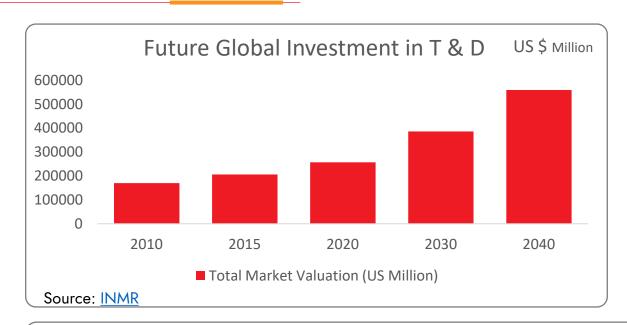


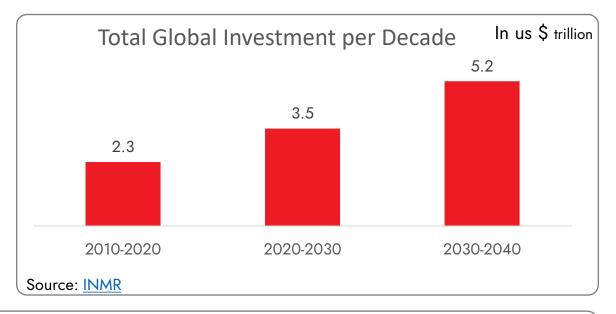
As a significant step towards successfully achieving the planned Renewable Energy capacity by 2030, transmission system has been planned for about 537 GW of Renewables based generation capacity.

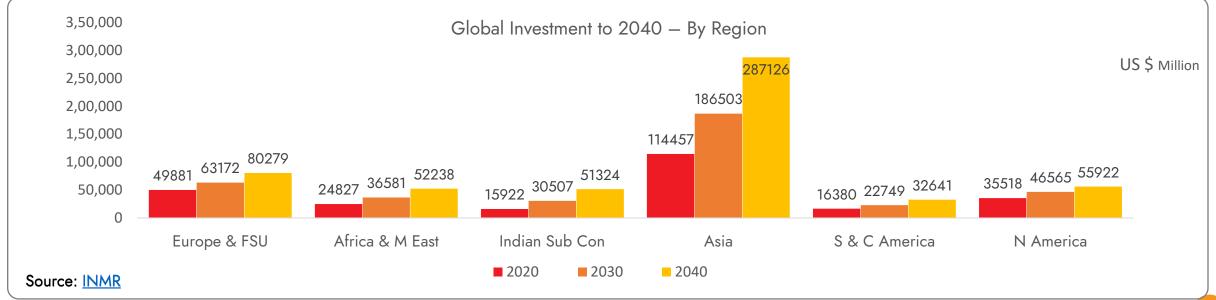
Category	Capacity (MW)
RE Capacity already Commissioned (as on 31.10.2022)	1,65,943
66.5 GW RE capacity to be integrated to ISTS network (8.861 GW RE capacity already commissioned and included in SI. No. 1 above)	57,639
Additional RE capacity totaling to 236.58 GW (55.08 GW + 181.5 GW) to be integrated to ISTS network	2,36,580
Margin already available in ISTS sub-stations which can be used for integration of RE capacity	33,658
Balance RE capacity to be integrated to intra-state system under Green Energy Corridor - I (GEC-1) Scheme	7,000
RE capacity to be integrated to intra-state system under Green Energy Corridor - II (GEC-11) Scheme	19,431
Additional Hydro Capacity likely by 2030	16,673
Total (RE)	5,36,924

## Global T&D Investments to grow







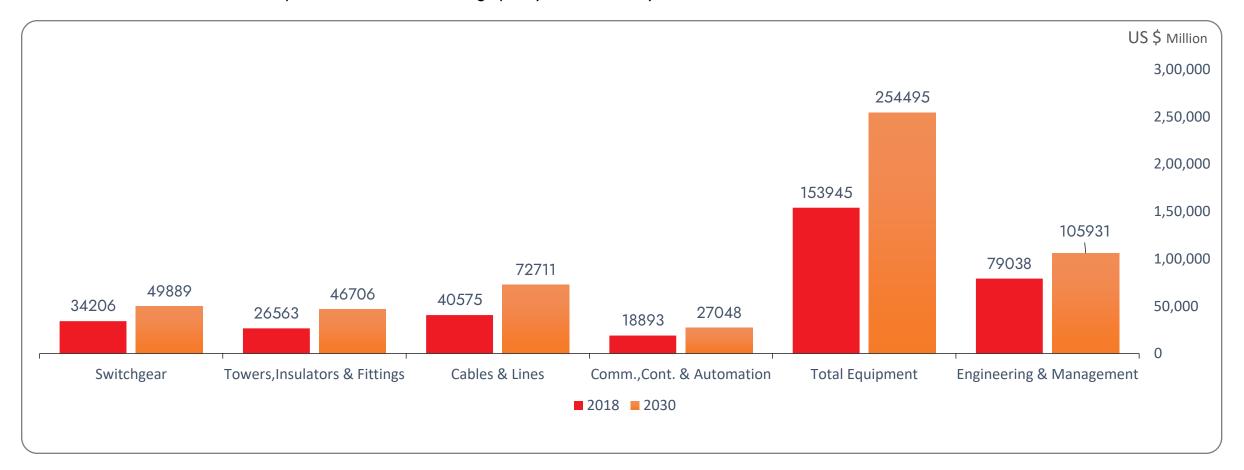


## T&D: Global (Cont.)

Source: INMR



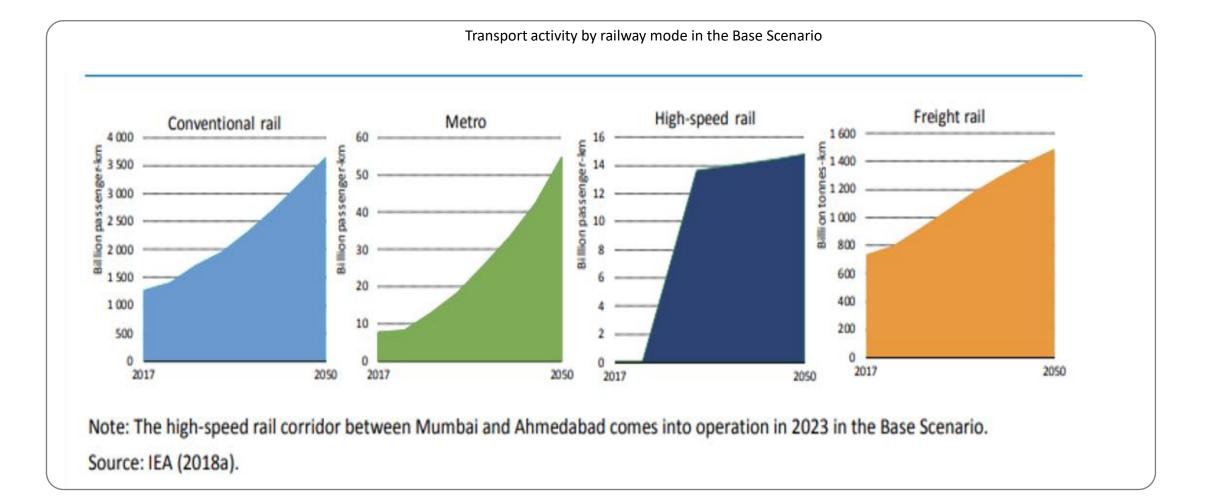
This is how the T&D investment are organized. The number of companies capable of supplying the equipment necessary is decreasing and there is sufficient business for all the companies which are offering quality and reliability.



- o In the US, the investments in T&D systems by major utilities has risen over the last two decades to \$51 bn annually, but this figure needs to increase significantly more.
- More EVs mean higher electricity demand and T&D infrastructures must be prepared to handle the load.

# Mobility - Indian Railway, Metro & High-speed rail to grow exponentially

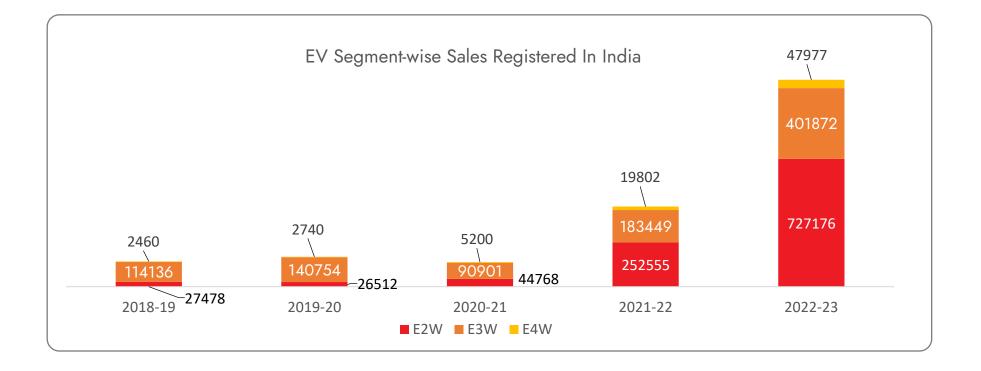




# **Indian Mobility (Cont.)**



- o India targets 30% electric vehicles by 2030 to curb emissions and oil imports.
- The EV market is projected to grow by 49% CAGR from 2021-2030, exceeding 17M units by 203.
- The nation's rapid EV sector growth, driven by policies, air quality concerns, and fuel prices, could position it as a \$200B EV investment opportunity by 2030.



## India Mobility (Cont.)



## **Indian Railway Developments**

- Of the 64,689 kms of Broad Gauge route, 45,881 kms (about 28509.13 mi) has been electrified and the remaining 18,808 kms route is yet to be electrified.
- About Rs. 21,000 crore (US\$ 2.8 billion) is estimated to be spent on electrification of the remaining Broad Gauge routes.
- Under the Union Budget 2023-24, capital outlay of Rs. 2.40 lakh crore (US\$ 29 billion) has been allocated to the Ministry of Railways, which is the highest ever outlay and about nine times the outlay made in 2013-14.
- o 100 PM-GatiShakti Cargo Terminals for multimodal logistics facilities will be developed over next three years. In addition, redevelopment of 508 stations with 25000 crore investment is also planned.
- Oovt of India focuses on metro rail transformation to deal with issues of rapid urbanization. Before 2014 only 5 cities in India had 229 km rail network and by April 2023, 860 km of metro rail network is operational in 20 cities.
- The Indian railways is building the country's first bullet train from Ahmedabad, Gujarat to Mumbai, Maharashtra over 508-kilometer route. The high-speed train will run at top speed of 350 kms per hour. The govt is targeting August 2026 for running first bullet train. The goal is to run the bullet train on a larger section in 2027

## **Mobility - Indian Railway (Cont.)**



FAME scheme launched in 2015 to promote electric vehicles, with two four-year phases. (1st Phase run 4 yrs. until 2019)

The second phase (FAME II) is a 3-year subsidy programme. It aims at supporting the electrification of public and shared transportation by:

- o 7000 Electric and Hybrid Buses.
- o 5,00,000 electric 3 wheelers
- 55,000 electric four wheeler passenger cars
- 1 Million electric 2 wheeler

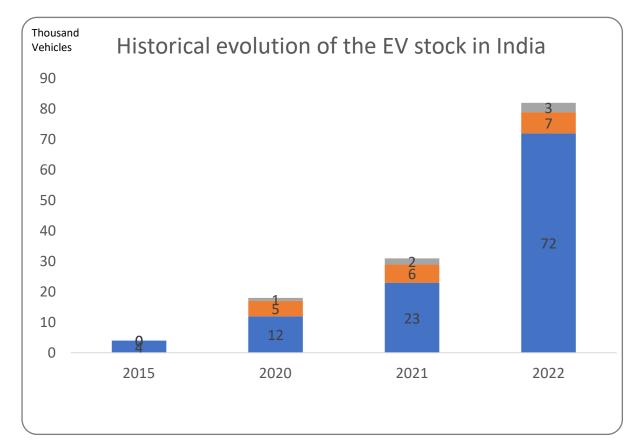
The programme also finances charging infrastructures.

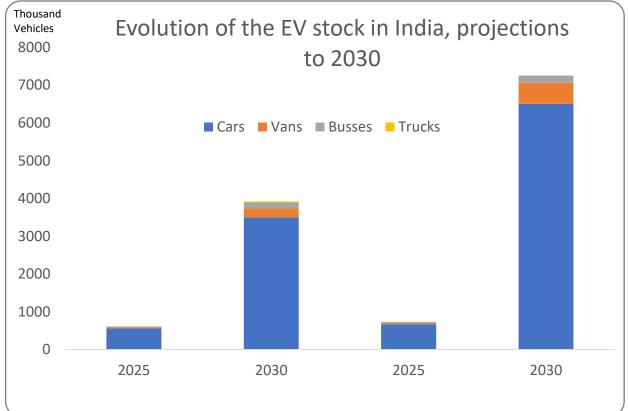
## **Charging Station**

The EV-to-public-charging ratio in India is over 125 vehicles per charging station. This is very low compared to the global average of 6 to 20 vehicles per charging station

# **India Mobility (Cont.)**

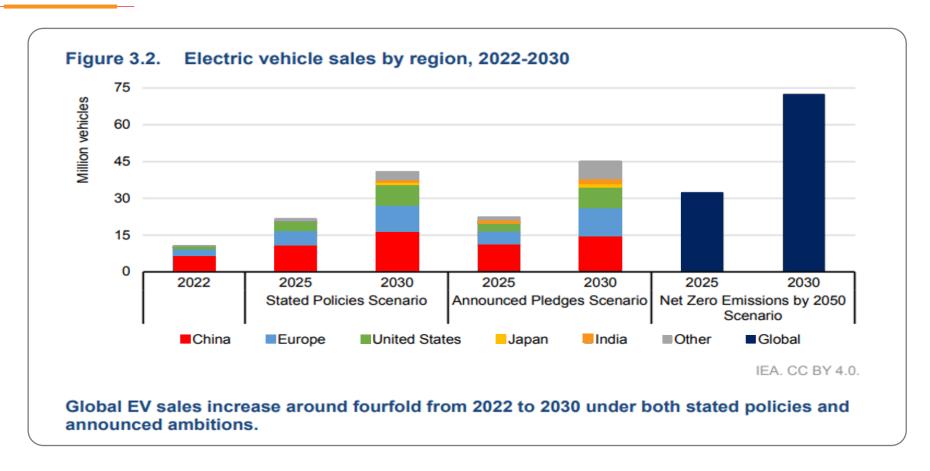






## **Global Mobility**

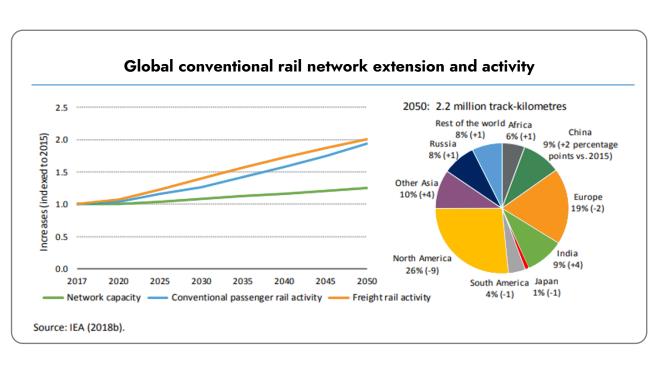


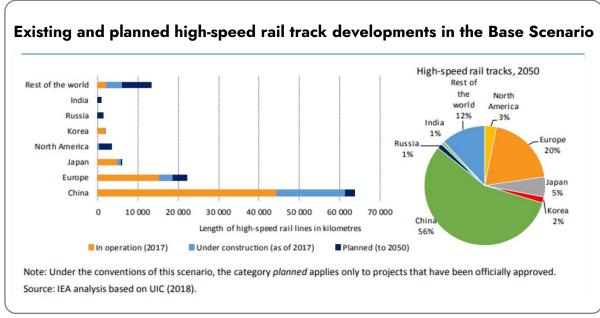


- Electric cars are seeing exponential growth as sales exceeded 10 mn in 2022. The momentum expected to continue through 2023.
- o Market trends and policy efforts in major car markets are supporting a bright outlook for EV sales.
- The global outlook for the share of electric car sales based on existing policies and firm objectives has increased to 35% in 2030, up from less than 25% in the previous outlook.

# Mobility - Global Railway (Cont.)

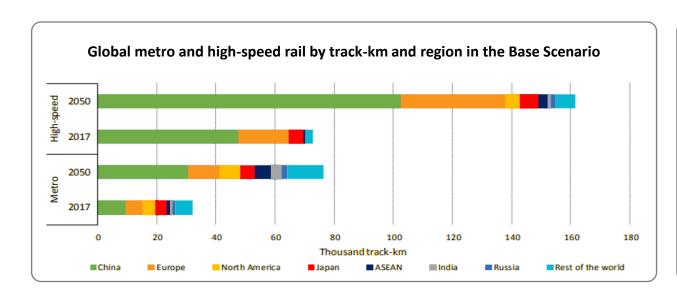


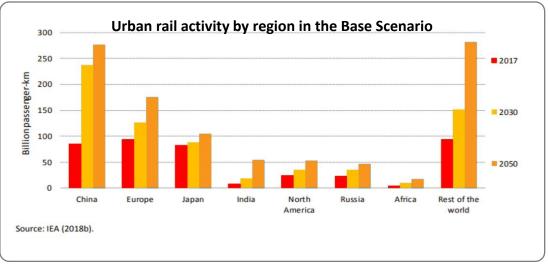




# Mobility - Global Railway (Cont.)



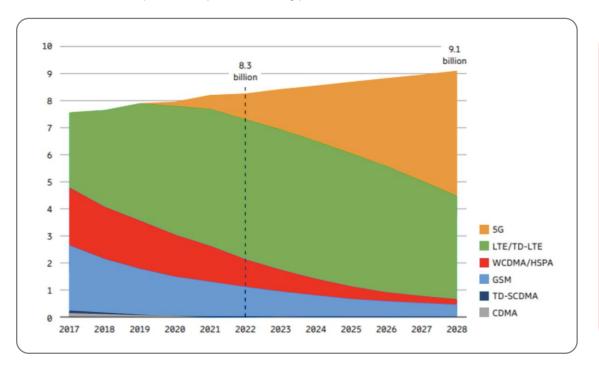




## Global Telecom - 5G mobile subscriptions to reach 1.5 billion by the end of 2023



Mobile subscriptions by technology (billion)



The monthly global average usage per smartphone is expected to exceed 20 GB at the end of 2023.

**20**<sub>GB</sub>

Revenue is rising for service providers in the top 20 5G markets, increasing by 7 percent in the last 2 years.

**7**%

More than 100 service providers are now offering Fixed Wireless Access services over 5G.

100

5G mobile subscriptions are set to reach 1.5 billion globally by the end of 2023.

1.5<sub>bn</sub>

## **Forecast**

5G is growing fast – total 5G subscriptions are projected to pass the 1.5 billion mark this year, growing by 500 million in just 1 year.

## **Global Telecom (Cont.)**



- North America's 5G surges: 41% penetration (2022), 250M subscriptions (2023), projected 91% penetration (2028), leading globally.
- Western Europe shifts: 4G wanes, 5G surges (2023 onwards), 143M subscriptions (2023), 88% penetration (2028)

## Other Markets - 5G subscriptions rising in every region

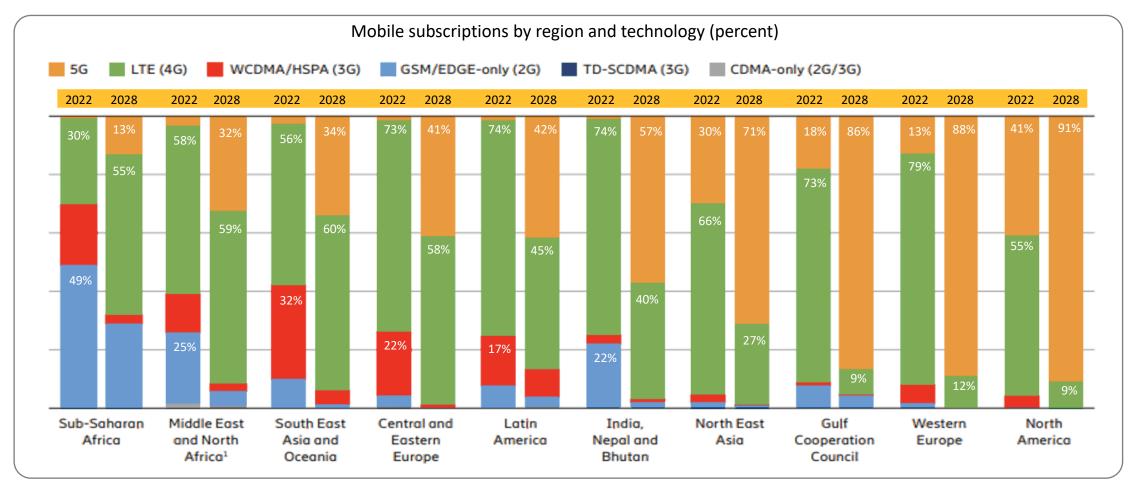
- Sub-Saharan Africa:
  - 10 Sub-Saharan African countries launched 5G; more planned. 5G subscriptions may reach 13% by 2028.
- Middle East and North Africa:
  - o 5G subscriptions to reach 32% in 2028 with expanding licenses and network investments globally.
- Oulf Cooperation Council (GCC):
  - 5G subs to soar: 13M to 70M (2022-2028), 86% total by period end.
- North-East Asia:
  - o 5G booms: +240M subs in 2022, only growing type, likely 1.1B by late 2024.

# Global Telecom - 5G subscriptions rising in every region



## **India, Nepal and Bhutan**

- 5G subscriptions reach around 10 million by the end of 2022. Pan-Indian availability of 5G networks by the end of 2023/early 2024 will further fuel growth.
- 5G subscriptions are expected to reach 700 million and are estimated to account for 57 percent of mobile subscriptions in the region by the end of 2028.



## Indian Telecom - PSU Revival Package



- Outlay approved of ₹1.39 lakh crore for BharatNet, the government's project for last-mile connectivity across 6.4 lakh villages in the country.
- BharatNet is one of the biggest rural telecom projects in the world.
- BSNL connects the most remote parts of India and powers many government-run facilities. Also, BSNL plays a vital role in advancing the government's rural broadband agenda.
- Likely to create a significant opportunity for us and this will be an important driver of growth in this segment.

## Industrialisation and Automation



#### **Primary activities**

- Automated Material Handling Solutions are driving growth in market. This includes activities such as automated transport of materials or commodities within a manufacturing unit.
- GST application forced the companies to consolidate their warehouses for tax benefits and business efficiency. This encouraged industries to deploy
  mobile automated vehicles (AGVs).
- The Indian manufacturing industry is constantly inviting newer robotics applications in its processes. For instance, autonomous mobile robots
  (AMRs) offer secure, error-free delivery, short time to market, reduced costs, and end-to-end trackability.
- The growing trend toward automation encouraged various market players to develop new and advanced automated storage and retrieval systems (AS/RS).

#### Case Study: The Automotive Industry has the Fastest Growth in the Market

- The production facilities of various automakers are automated to maintain accuracy and efficiency. Moreover, the growing trend of replacing conventional vehicles with EVs is expected to augment the automotive industry's demand further.
- Furthermore, companies use automated automotive assembly lines to manufacture components such as motors, gearboxes, fuel systems, and pumps.
- Robotics and vision are best suited for creating ergonomic and efficient product lines that protect the human workforce from hazardous
  conditions while completing assembly quickly. Hence, the safety factor is also driving the automation in India's automotive industry.
- Several players are introducing new product lines and, to cater to that, are upgrading their production facilities.

## **Industrialisation and Automation**



The India Industrial Automation Market size is expected to grow from USD 13.23 billion in 2023 to USD 25.76 billion by 2028, at a CAGR of 14.26% during the forecast period (2023-2028).

## The primary factors behind this growth are as follows;

- o Industrial automation is fast becoming the mandatory next step after mechanization in the scope of industrialization.
- The Industrial Internet of Things and Industry 4.0 is at the center of the latest technological approaches for the evolution, production, and management of the complete logistics chain.
- All these activities combined are smart factory automation and are dominating the trends in the industrial sector with machinery and devices being connected via the internet.

## Improvement in Road Infrastructure



- Total length of the national highways in the country increased by about 59% in the last nine years. As a result of this
  expansion, India now has the second largest road network, after the US.
- Road transportation has gradually increased over the years with improvement in connectivity between cities, towns and villages in the country.
- There has been a steady growth in road mobility due to the fast-rising economy, automobile availability, and improved road connectivity.
- o In line with the government's commitment to a sustainable future, Minister Mr. Gadkari unveiled a vision for increased Electric Vehicle adoption over the next five years, promoting clean energy and reducing carbon emissions.`