

# Research Report

On

# Cables and Wire Industry



**AUGUST 2023**



Resurgent India Limited Contacts	
Mumbai	602, 6th floor, Central Plaza, 166, CST Road, Kolivery Village, Vidya Nagari, Kalina, Santacruz East, Mumbai, Maharashtra 400098
Gurgaon	903-906, 09th Floor, Tower C, Unitech Business Zone, Sector 50, Gurgaon, Haryana 122018
Kolkata	CFB F-1, 1st Floor, Paridhan Garment Park, 19, Canal South Road, Kolkata, West Bengal 700015
Bengaluru	S-605, 6 <sup>th</sup> Floor, Manipal Centre, Dickenson Road Bangalore, Karnataka 560042
Jaipur	197, Laxminath Bhawan, Church Road, M I Road, Jaipur, Rajasthan 302001

## **DISCLAIMER**

This research report has been prepared by Resurgent India Limited (RIL), based on information available in public domain and believed to be accurate and reliable and independent study conducted by RIL. Although reasonable care has been taken to ensure that the information contained herein is true, such information is provided 'as is' without any warranty of any kind and RIL, in particular, makes no representation or warranty, express or implied, as to the accuracy of any kind. All information contained herein must be construed solely as statement of opinion and RIL shall not be liable for any loss incurred by the users of this report or its contents.

RIL follows ethical practices in the discharge of its professional services and amongst others, as part of such ethical practices, it follows the general rules relating to honesty, competence and confidentiality, and attempts to provide the most current, complete, and accurate information as possible within the limitations of available time constraint and other practical difficulties relating thereto and arising as a consequence thereof.

The research report of the project by the RIL in no way shall cast any responsibility on RIL as regards compliance with various statutory rules, regulations and guidelines etc. by the firm. Further, RIL is no way responsible for justifications of actions taken by the firm in the past.

The projections presented in this research study have been prepared for the limited purpose of circulation to the Firm only and have been based on the information made available in the public domain. Under the circumstances, no assurance can be provided that the assumptions or data upon which these projections have been based are accurate or whether these business plan projections will accurately materialize. The projections, however, have been made based on reasoned judgment of RIL and on various parameters like installed capacity assessment, marketing potential - order position, selling prices and raw material costs, level of operation etc. - both present, expected and reasonably projected, performance of the plant machinery equipment and continuing adequate availability of resources (like power, skilled manpower etc.) at the proposed level of operation.

This report is prepared by Resurgent India Limited. Resurgent India Limited has taken utmost care to ensure accuracy and objectivity while developing this report based on information available in public domain. However, neither the accuracy nor completeness of information contained in this report is guaranteed. The opinion expressed in the report is not a recommendation to buy, sell or hold an instrument.

Resurgent India Limited is not responsible for any errors or omissions in analysis/inferences/views or for results obtained from the use of information contained in this report and especially states that Resurgent India Limited (including all divisions) has no financial liability whatsoever to the user of this product. This report is for the information of the intended recipients only and no part of this report may be published or reproduced in any form or manner without prior written permission of Resurgent India Limited.

By accepting a copy of this TEV report, the recipients accept the terms of this notice, which forms an integral part of this research study report.

**RESURGENT INDIA LIMITED**  
(SEBI Regd. Category-1 Merchant Banker)  
903-904, Tower- C, Unitech Business Zone,  
Nirvana Country, Sector – 50  
Gurgaon (Haryana)  
Tel: +91 124 4754550

[www.resurgentindia.com](http://www.resurgentindia.com)

### Abbreviation

Abbreviation	Full Forms
AMRUT	Atal Mission For Rejuvenation and Urban Transformation
ASEAN	Indonesia, Malaysia, Philippines, Thailand and Vietnam
Bn	Billion
BPS	Basis Points
BSE	Bombay Stock Exchange Ltd
C&W	Cable And Wire Industry
CAGR	Compound Annual Growth Rate
CFL	Compact Fluorescent Lamps
CLSS	Credit Linked Subsidy Scheme
COVID-19	Coronavirus Disease
CSO	Central Statistics Office
CY	Calendar Year
E	Estimates
EHV	Extra High Voltage
EPC	Engineering, Procurement and Construction
EWS	Economically Weaker Section
FMEG	Fast moving electrical goods
FDI	Foreign Direct Investment
FY	Financial Year
GDP	Gross Domestic Product
GFCF	Gross Fixed Capital Formation
GST	Goods And Services Tax
GVA	Gross Value Added
GW	Gigawatts
HIG	High Income Group
HT	High Tension Cables

ICI	The Index of Eight Core Industries
IIP	Index Of Industrial Production
IMF	International Monetary Fund
KEI	Kei Industries Limited
KV	Kilovolt
LIG	Low Income Group
LT	Low Tension Cables
LV	Low Voltage
MIG	Middle Income Group
MOSPI	Ministry Of Statistics and Programme Implementation
MSME's	Micro, Small and Medium Enterprises
NHB	National Housing Bank
NSE	National Stock Exchange of India Limited
OFC	Optical Fibre Cables
PBDIT	Profit Before Depreciation, Interest and Tax
PLI	Production- Linked Incentive
PMAY	Pradhan Mantri Awas Yojana
PPP	Purchasing Power Parity
RERA	Real Estate Regulatory Authority
REACH	Registration Evaluation Authorization of Chemical Substances
RoHS	Restriction of Hazardous Substances
T&D	Transmission And Distribution
TRAI	Telecom Regulatory Authority of India
TWh	Terawatt-hour
WIP	Work In Process
5G	Fifth-Generation Wireless
6G	Sixth-Generation Wireless

## Table of Contents

1. ECONOMIC OUTLOOK .....	7
2. OVERVIEW OF WIRE AND CABLE INDUSTRY .....	17
3. GROWTH & DEMAND DRIVERS OF WIRE AND CABLE INDUSTRY .....	25
4. CHALLENGES FACED BY THE INDUSTRY .....	34
5. GOVERNMENT INITIATIVES UNDERTAKEN FOR INDUSTRY .....	36
6. SWOT ANALYSIS .....	40
7. COMPETITIVE ANALYSIS & KEY INDUSTRY PLAYERS .....	41
8. OUTLOOK/CONCLUSION .....	55

## 1. ECONOMIC OUTLOOK

### 1.1 Global Economy

Global Economic growth is projected to fall from an estimated 3.5 percent in 2022 to 3.0 percent in both 2023 and 2024. While the forecast for May 2023 is modestly higher than predicted in the April 2023 World Economic Outlook (WEO), it remains weak by historical standards. The rise in central bank policy rates to fight inflation continues to weigh on economic activity. Global headline inflation is expected to fall from 8.7 percent in 2022 to 6.8 percent in 2023 and 5.2 percent in 2024. Underlying (core) inflation is projected to decline more gradually, and forecasts for inflation in 2024 have been revised upward.

Table 1: Global Growth Outlook Projections (in %)

Country/Group	2022	2023E	2024E
World Output	3.5	3.0	3.0
Advanced Economies	2.7	1.5	1.4
United States	2.1	1.8	1.0
Euro Area	3.5	0.9	1.5
Japan	1.0	1.41	1.0
United Kingdom	4.1	0.4	1.0
Canada	3.4	1.7	1.4
Remaining Advanced Economies	2.72	2.0	2.3
Developing Economies	4.0	4.0	4.1
Emerging and Developing Asia	4.5	5.3	5.0
China	3.0	5.24	4.5
India*	7.2	6.1	6.3
ASEAN**	5.5	4.6	4.5
Emerging and Developing Europe	0.8	1.8	2.2
Latin America and the Caribbean	3.9	1.9	2.2
Middle East and Central Asia	5.4	2.5	3.2
Sub-Saharan Africa	3.9	3.5	4.1

Notes:

E-Estimates

\*For India, data and forecasts are presented on a fiscal year basis, with FY 2022/2023 (starting in April 2022) shown in the 2022 column. India's growth projections are 6.6% in 2023 and 5.8% in 2024 based on calendar year.

(Source: IMF – World Economic Outlook, July 2023)



Inflation could remain high and even rise if further shocks occur, including those from an intensification of the war in Ukraine and extreme weather-related events, triggering more restrictive monetary policy. On the upside, inflation could fall faster than expected, reducing the need for tight monetary policy, and domestic demand could again prove more resilient.

For advanced economies, the growth slowdown projected for 2023 remains significant: from 2.7 percent in 2022 to 1.5 percent in 2023, with a 0.2 percentage point upward revision from the April 2023 WEO. About 93 percent of advanced economies are projected to have lower growth in 2023, and growth in 2024 among this group of economies is projected to remain at 1.4percent.

For emerging market and developing economies, growth is projected to be broadly stable at 4.0 percent in 2023 and 4.1 percent 2024, with modest revisions of 0.1 percentage point for 2023 and –0.1 percentage point for 2024. Growth in emerging and developing Asia is on track to rise to 5.3 percent in 2023, then to moderate to 5.0 percent in 2024, reflecting a modest (0.1 percentage point) downward revision for 2024. The forecast for China is unchanged at 5.2 percent for 2023 and 4.5 percent for 2024. Growth in India is projected at 6.1 percent in 2023, a 0.2 percentage point upward revision compared with the April projection, reflecting momentum from stronger-than-expected growth in the fourth quarter of 2022 as a result of stronger domestic investment.

Growth in emerging and developing Europe is projected to rise to 1.8 percent in 2023, reflecting a 0.6 percentage point upward revision since April, and to rise further to 2.2 percent in 2024. Latin America and the Caribbean is expected to see growth decline from 3.9 percent in 2022 to 1.9 percent in 2023, although this reflects an upward revision of 0.3 percentage point since April, and to reach 2.2 percent in 2024. The decline from 2022 to 2023 reflects the recent fading of rapid growth during 2022 after pandemic reopening, as well as lower commodity prices.

## **1.2 Indian Economy**

The International Monetary Fund (IMF) on 25<sup>th</sup> July (Tuesday) revised India's GDP growth forecast to 6.1% for 2023, up from 5.9% projected by the financial institution earlier this year as a result of stronger domestic investment.

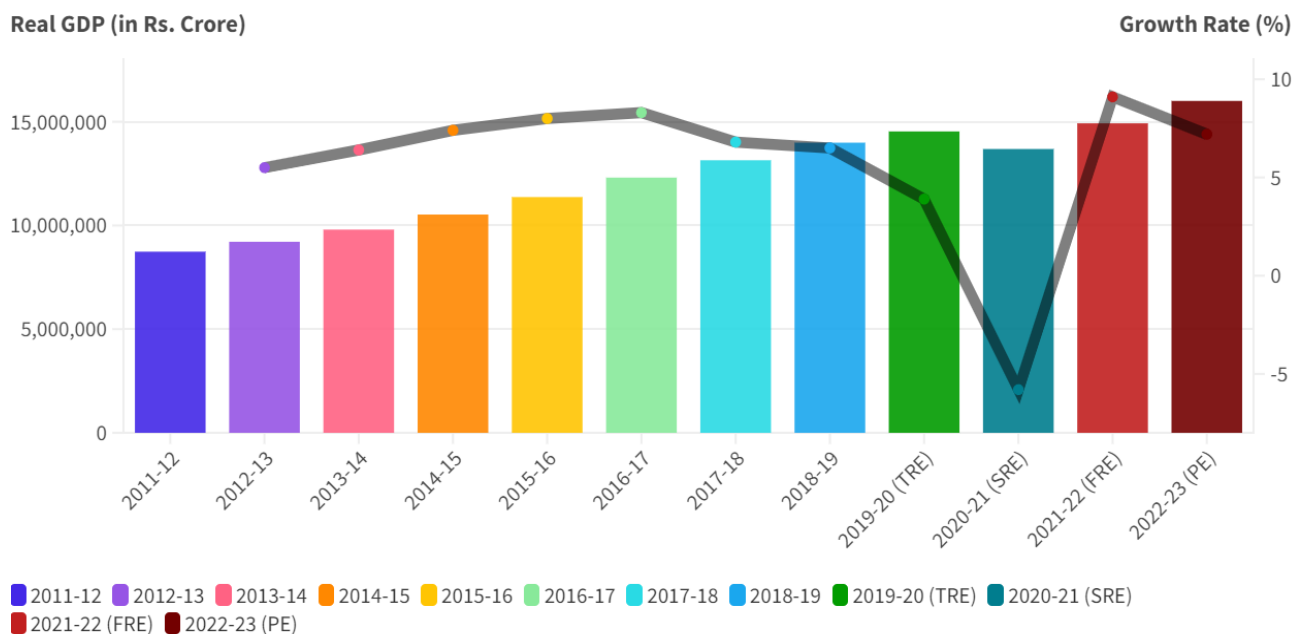
IMF said in a report that, Growth in India is projected at 6.1% in 2023 which is 0.2 percentage point upward revision compared with the April projection, reflecting momentum from stronger-than-expected growth in the fourth quarter of 2022 which is a result of stronger domestic investment.

**IMF kept the growth forecast for 2024 at 6.3%, the growth rate it had predicted in April, 2023.**

**Fitch Ratings raised its FY24 (2023-24) growth forecast for the Indian economy to 6.3%, from 6% predicted earlier.**

**The Reserve Bank of India (RBI) has projected FY24 Indian economic growth at 6.5%.**

### Annual GDP Estimates (in ₹ Crore) and Growth Rates (%) at Constant Prices (Base 2011-12)



Source: MOSPI

### 1.2.1 Index of Industrial Production

The index of industrial production in India grew by 5.2% in May 2023 from 4.2% measured in April 2023. In May 2022, the factory output, measured by the Index of Industrial Production (IIP) was at all time high-growth of 19.6%.

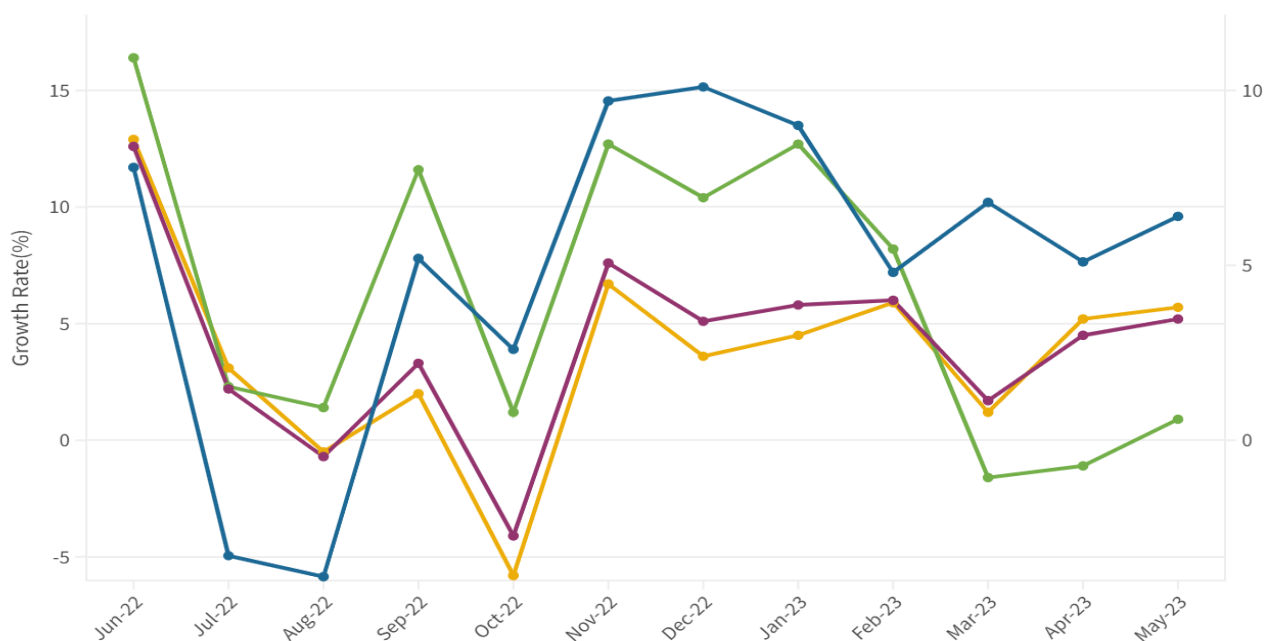
India's industrial production growth (IIP) declined to its lowest level in five months at 1.1% in March. However, the figure has been revised to 1.7%. The previous lowest growth rate was observed in October 2022 when it contracted by 4.1%.

According to data from the **National Statistical Office (NSO)**, the manufacturing sector, which contributes to more than three-fourths of the IIP, witnessed a growth of 5.7% in May up from 4.9% in April 2023.

The **power generation sector** which witnessed a decline of 1.1% in April saw a marginal growth of 0.9% in May 2023 year on year. Mining output increased by 6.4% in May from 5.1% in April.

**Table: Index of Industrial Production YoY**

■ Mining ■ Manufacturing ■ Electricity ■ General



Source: MOSPI

**Table 1: Component-wise Breakup of IIP Growth (y-o-y%)**

	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23
<b>Sectoral</b>						
Mining & quarrying	2.6	9.7	10.1	8.8	4.8	6.8
Manufacturing	-5.8	6.7	3.6	4.0	5.6	0.5
Electricity	1.2	12.7	10.4	12.7	8.2	-1.6
<b>Use-based</b>						
Primary goods	2.1	4.8	8.5	9.6	6.9	3.3
Capital goods	-2.9	20.7	7.8	10.7	10.5	8.1
Intermediate goods	-2.3	3.5	1.5	0.5	0.7	1.0
Infrastructure/construction goods	1.7	14.3	11.0	9.8	8.4	5.4
Consumer durables	-18.1	5.0	-11.2	-8.2	-4.1	-8.4
Consumer non-durables	-13.0	10.0	7.9	6.3	12.1	-3.1
<b>Industrial Output</b>	-4.1	7.6	5.1	5.5	5.8	1.1

Source: MOSPI

## 1.2.2 Sectoral Performance

- The agriculture sector clocked a growth of 5.5% in Q4 FY23 and 4% in FY23. The sector performed well despite weather-related disruptions such as uneven monsoon and unseasonal rainfall impacting yields of some major crops. As per the third advance estimate released recently, the total foodgrain production is estimated at a record high (4.7% higher than last year).
- The wheat production was revised marginally higher which implies that the impact of heat waves during March-April on the crop was limited. The IMD's forecast of a normal monsoon despite El Nino related threats bodes well for the sector's outlook but a lot will depend on the spatial and temporal distribution of rainfall. A downside risk exists in case the intensity of El Nino is significantly strong. Our study shows that, on average, an episode of a strong or moderate El Nino has led to deficient or drought-like situations affecting agricultural production adversely and resulting in lower agriculture GVA.
- The industrial sector growth picked up to 6.3% in Q4 FY23 owing to a rebound in manufacturing and good growth in the construction sector.

- Manufacturing sector grew by 4.5% in Q4 after contracting (annually) in the previous two quarters. This comes as a relief as the sector has been under pressure despite the easing of input prices due to slowing of external demand and uneven demand recovery domestically.
- Services sector maintained the momentum and supported growth on the back of robust discretionary demand. The sector recorded a growth of 6.9% in Q4 FY23 driven by trade, hotel and transportation.

For the full fiscal year, the sector grew at 9.5% compared with 8.8% growth a year ago. While it is expected that the momentum should continue, some moderation in growth could be seen next year as the pent-up demand cools and the support from the base effect fades.

#### Sectoral Growth (% y-o-y)

	Q4 FY22	Q1 FY23	Q2 FY23	Q3 FY23	Q4 FY23	FY22	FY23
<b>Agriculture, Forestry &amp; Fishing</b>	<b>4.1</b>	<b>2.4</b>	<b>2.5</b>	<b>4.7</b>	<b>5.5</b>	<b>3.5</b>	<b>4.0</b>
<b>Industry</b>	<b>2.3</b>	<b>9.4</b>	<b>-0.5</b>	<b>2.3</b>	<b>6.3</b>	<b>11.6</b>	<b>4.4</b>
Mining & Quarrying	2.3	9.5	-0.1	4.1	4.3	7.1	4.6
Manufacturing	0.6	6.1	-3.8	-1.4	4.5	11.1	1.3
Electricity, Gas, Water Supply & Other Utility Services	6.7	14.9	6.0	8.2	6.9	9.9	9.0
Construction	4.9	16.0	5.7	8.3	10.4	14.8	10.0
<b>Services</b>	<b>4.9</b>	<b>16.3</b>	<b>9.4</b>	<b>6.1</b>	<b>6.9</b>	<b>8.8</b>	<b>9.5</b>
Trade, Hotels, Transport, Communication & Broadcasting	5.0	25.7	15.6	9.6	9.1	13.8	14.0
Financial, Real Estate & Professional Services	4.6	8.5	7.1	5.7	7.1	4.7	7.1
Public Administration, Defence and Other Services	5.2	21.3	5.6	2.0	3.1	9.7	7.2
<b>GVA (at basic price)</b>	<b>3.9</b>	<b>11.9</b>	<b>5.4</b>	<b>4.7</b>	<b>6.5</b>	<b>8.8</b>	<b>7.0</b>

Source: MOSPI

### 1.2.3 Consumption and investment

- The private consumption to GDP ratio stood at 55% in Q4 FY23 and was lower than 56.7% a year ago. On a positive note, the investment rate (GFCF to GDP) jumped to 35.3% in Q4 FY23 compared with 34.3% last year in the same period.

- For the full financial year, the private consumption to GDP ratio was only marginally higher compared to the last fiscal. However, the GFCF to GDP ratio bounced to a decadal high supported by the government's continuous thrust on capital expenditure.
- High core inflation, easing of pent-up demand, weak labour market and weather-related challenges could have a bearing on private consumption. Consequently, we expect the private consumption to GDP ratio to moderate marginally in FY24.
- On the investment front, global slowdown and financial uncertainties could weigh on pick-up in the private investment cycle but the support from government capital spending will bode well for the overall investment in the economy.

#### **Growth in Consumption and Investment (% y-o-y)**

	Q4 FY22	Q1 FY23	Q2 FY23	Q3 FY23	Q4 FY23	FY22	FY23
Government Final Consumption Growth (GFCE)	11.8	1.8	-4.1	-0.6	2.3	6.6	0.1
Private Final Consumption Growth (PFCE)	4.7	19.8	8.3	2.2	2.8	11.2	7.5
Gross Fixed Capital Formation (GFCF)	4.9	20.4	9.6	8.0	8.9	14.6	11.4
<b>GDP (at constant prices)</b>	<b>4.0</b>	<b>13.1</b>	<b>6.2</b>	<b>4.5</b>	<b>6.1</b>	<b>9.1</b>	<b>7.2</b>

Source: MOSPI

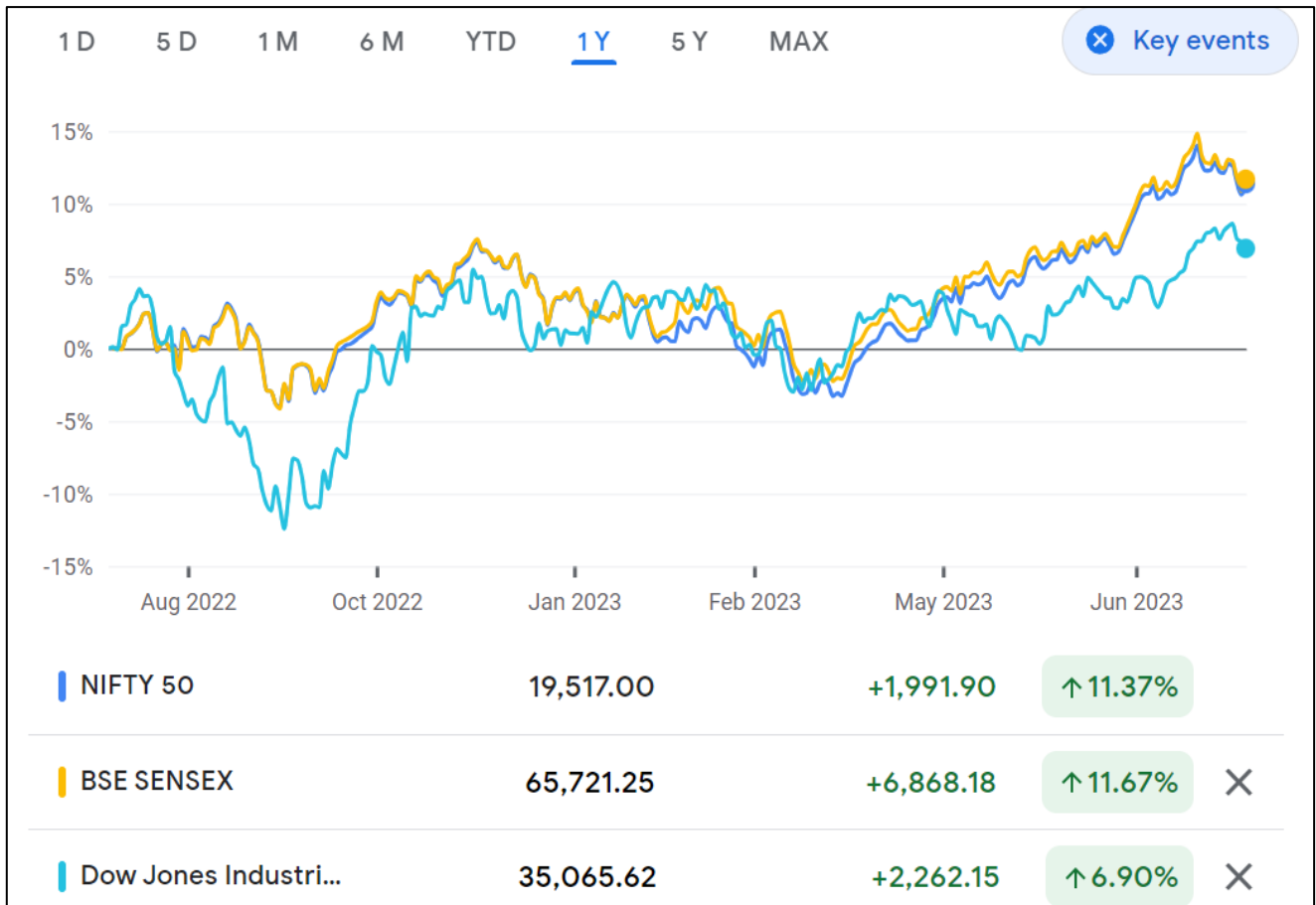
#### **1.2.4 Capital Market Performance**

The World Economy in 2023 is gripped by an economic turmoil- high inflation, geopolitical turbulence, volatility in asset prices, uncertainty in market cycles. A recession is foretold and Indian equity is expected to outperform the international markets, yet again. With global headwinds and tight monetary policies domestically, the economy has been no stranger to volatile market cycles and stagflation.

With supply constraints and higher demand in the Indian economy, RBI is expected to increase interest rates. Higher interest rates make credit more expensive, making it difficult for businesses and consumers to avail loans. A general decline in business is expected. This also makes debt an attractive asset class in 2023.

Consumption and demand are expected to increase by the second half of 2023-24, with an increase in discretionary consumer spending. The economy is expected to regain a certain level of stability towards the second half of 2023.

### Index Movement



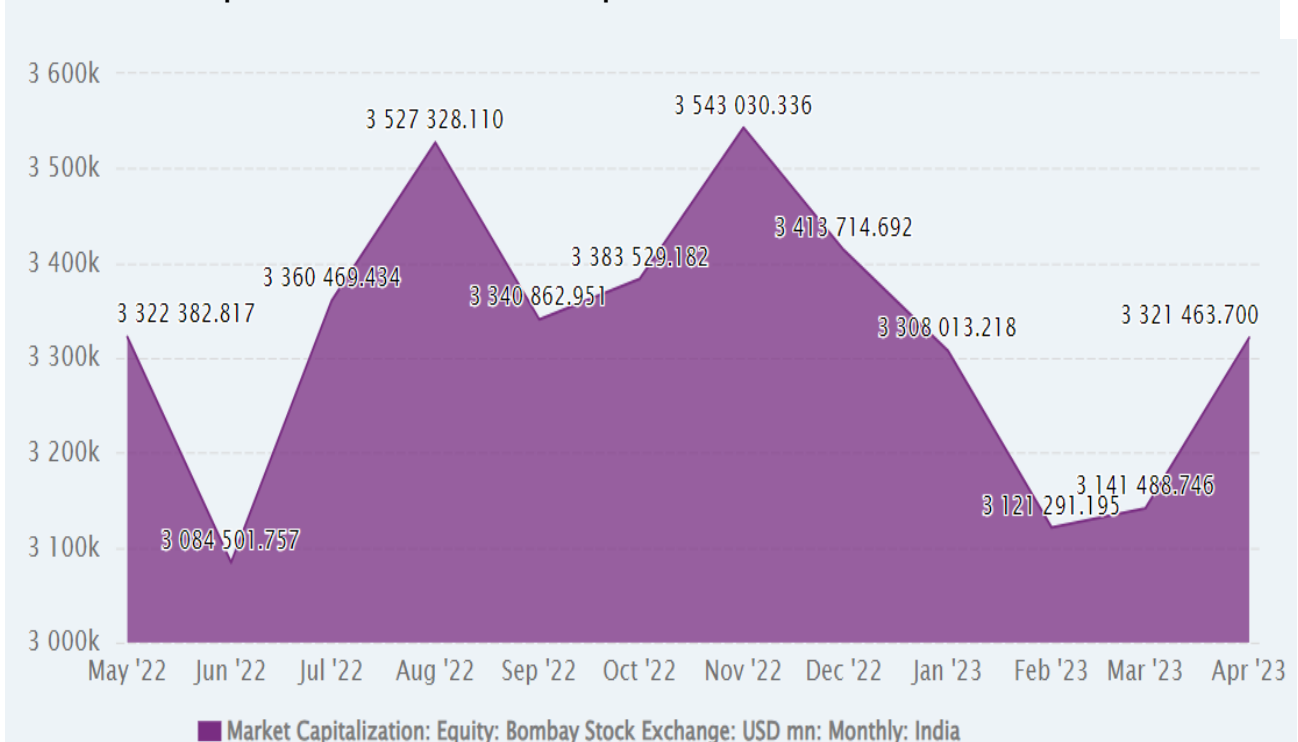
(Source-NSE )

### Market Capitalisation of India and Its Historic Trend

- India Market Capitalization accounted for 3,321.464 USD bn in Apr 2023, compared with a percentage of 3,141.489 USD bn in the previous month.
- India Market Capitalization is updated monthly, available from Jan 1993 to Apr 2023
- The data reached an all-time high of 3,575.778 USD bn in Dec 2021 and a record low of 55.322 USD bn in Apr 1993.

CEIC converts monthly Market Capitalization into USD. BSE Limited provides Market Capitalization in local currency. The Federal Reserve Board period end market exchange rate is used for currency conversions.

India's Market Capitalization from Jan 1993 to Apr 2023 in the chart:



### 1.2.5 Impact of the Russia invasion on Economy

- The war in Ukraine was a “massive and historic energy shock” to the markets, according to a November 2022 report by the OECD. The “shock” of the war was one of the main factors that had slowed economic growth in 2022 to just 3.1 percent, and this is why the OECD projected it to slow to 2.2 percent in 2023.
- The war triggered a massive shock to the global economy, especially to energy and food markets, squeezing supply and pushing up prices to unprecedented levels.



- For India, the impact wasn't felt as much as other major economies. One of the major impacts of the war was a slowdown in pace of economic growth, at a time when they were gradually looking to rise above the pandemic distress.

### 1.2.6 Outlook

India is expected to grow between 6% and 6.3% in FY2023–24 and have a stronger outlook thereafter. In fact, if global uncertainties recede, we expect India's growth to surpass 7% over the next two years.

IMF raises growth forecast for India, which is set to be fastest growing major economy in 2023. The IMF now expects India to grow 6.1% in 2023 and 6.3% in 2024. China forecasts remain unchanged at 5.2% this year and 4.5% next year. Japan is seen growing 1.4% this year and 1% next year.

The investments are expected to see a turnaround and thrust the economy into sustainable growth. India will likely grow at a moderate pace between 6.0% and 6.5% in FY 2023–24, as the global economy continues to struggle.

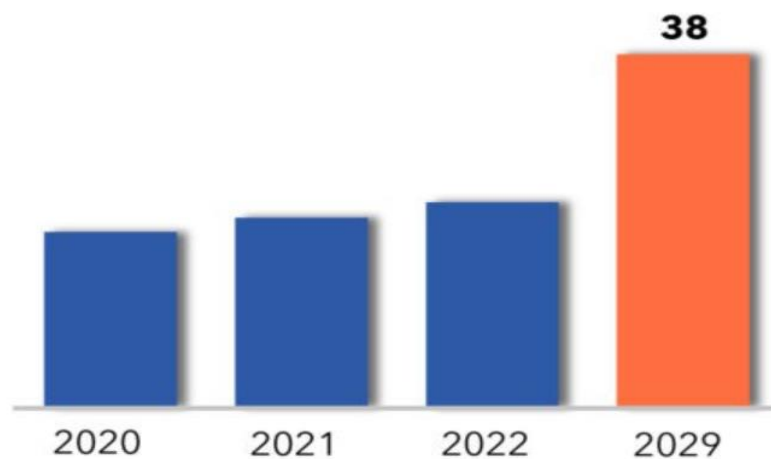
## 2. OVERVIEW OF WIRE AND CABLE INDUSTRY

### 2.1 Global Wire and Cable Market historic trends

Global wires and cables market was valued at \$191.6 billion in 2022 and is expected to reach \$351.3 billion by 2032.

The chart below shows the growth of the global wire and cables market from 2020 – 2029 in USD

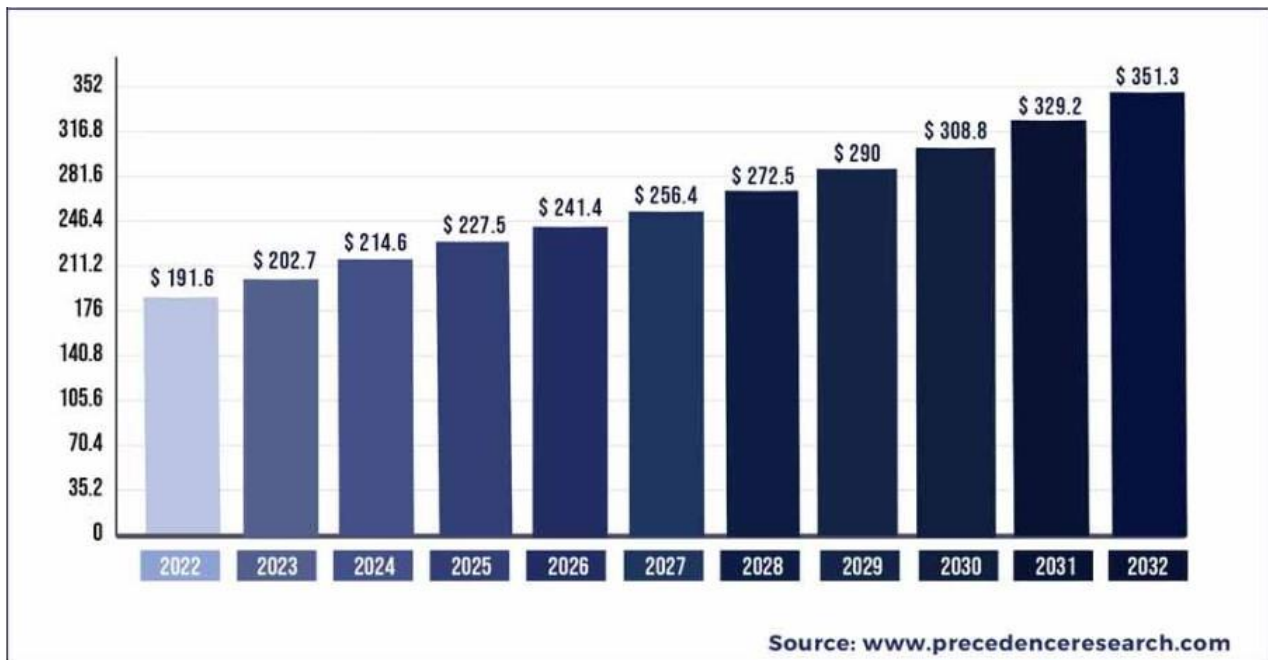
Global Wire and Cable Market, 2020-2029, in USD Billion



### 2.2 Global Wire and Cable Market Forecast Growth

The global wire and cable market was valued at \$191.6 billion in 2022 and is expected to reach \$351.3 billion by 2032 and is poised to grow at a compound annual growth rate (CAGR) of 6.30% during the forecast period 2023 to 2032.

The chart and table below show the year-on-year growth of the global wire and cables market from 2023 – 2032.



## 2.3 Indian wire and Cable Industry market

**Indian Wires and Cables Market** would grow on the back of rapidly growing investment by the government towards the development of infrastructural projects. The development of smart cities in the country along with the increase in electronic devices in the household would increase the demand for wires and cables in the Indian market. The development of manufacturing industries as a part of the Make in India initiative would also result in the growth of the wires and cables market during the forecast period.

**Indian wires and cables market** is expected to witness progressive growth in the upcoming six years backed by the growing telecommunication sector in the country. The increased number of internet subscribers due to rising internet penetration rapidly from past years is an active contributor to the **India wires and cables market growth**. On the other side, telecom operators are spending in bulk on the integration of telecom towers in rural areas and all this can be possible with the needful resources for the same and as a result, the use of wires and cables is rising in the telecom sector which tends to

ensure better signals through consistent power supply. As a result, it is estimated to strengthen India wires and cables market growth in the forthcoming years.

### WIRE & CABLE MARKET, REVENUE IN USD BILLION, INDIA, GLOBAL, 2021-2028

CAGR (2023 TO 2028): 9.5%

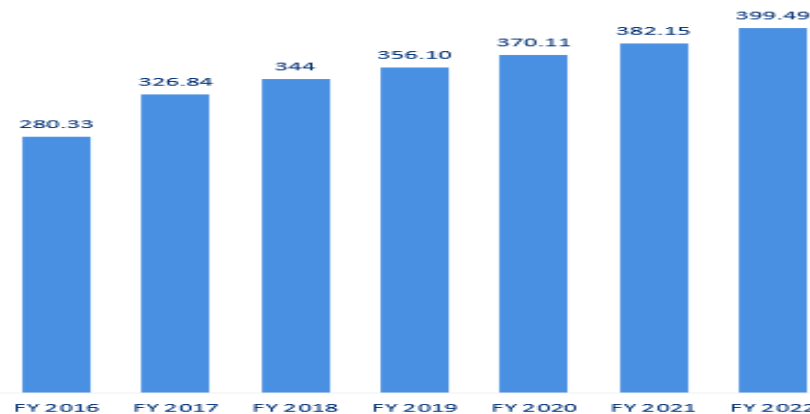


- The India segment was valued at USD 16.08 billion in 2022 and is expected to reach USD 27.80 billion by 2028, registering a CAGR of 9.5% over the forecast period.
- Wind turbines are connected with inter-array cables that transport the electricity from the wind turbine to the substation. These cables are specially designed with one or more electric conductors made of flexible aluminium, copper, and optic cables. In January 2023, according to a government decision, India aims to auction off eight gigawatts (GW) of wind power projects annually until the end of 2030 to increase renewable energy capacity. According to government data, India, one of the world's largest emitters of greenhouse gases, plans to increase renewable energy generation to 500 GW by 2030 from a current output of roughly 120 GW. Such developments would drive the studied market.
- India's low-voltage cable market is expected to see significant growth shortly due to the government's Housing for All plan and the construction of new residential buildings. Low voltage overhead lines,

which may use either bare conductors carried on glass or ceramic insulators or an aerial bundled cable system, are often used for connection between a residential or small commercial customer and the utility,

- For instance, in February 2023, the Government increased the outlay for rural housing under the Pradhan Mantri Awas Yojna (Grameen) to INR 54,487 crore, a 12% increase over the revised estimate for the current fiscal year of 48,422 crore. The urban version of the scheme, on the other hand, had its budget cut to INR 25,103 crore from the current year's revised estimate of INR 28,708 crore
- By 2025, mobile tower firms in India are anticipated to invest over INR 2 trillion. Over half of this will occur in the next two years to help telecom companies reach their goal of bringing 5G to 50% of India. Based on the information provided by the tower companies' top organization, the Digital Infrastructure Providers' Association (DIPA). The focus has been mainly on the Rs 2-3 trillion investment that telecom companies must undertake to bring out 5G, but tower companies would also need to spend that much to support high-speed services. This would create an opportunity for the studied market to grow.
- According to the government's newly announced Right of Way Rules, telecom operators won't need permission from authorities to erect cell towers or poles or lay wires over private properties. To facilitate the rollout of telecom networks, mainly 5G services, the government has announced rules for using power poles, foot over bridges, etc., for installing small mobile radio antennae or laying overhead telecom cables, along with fees. The Indian Telegraph Right of Way (Amendment) Rules, 2022, however, state that telecom operators must notify the competent government in writing before erecting a mobile tower or pole over a private building or structure. With lesser paperwork and accordance to install the small equipment in existing infrastructure, the vendors will more easily enhance their services and expansion.

**POWER GENERATION CAPACITY , IN GIGAWATTS, INDIA, 2016-2022**



- Low-voltage cables play an essential role in the deployment of smart grids. To fully leverage the benefits of smart grids, low-voltage cables are needed to establish secure and reliable communication networks that enable data transfer between smart grid components. The use of low-voltage cables in smart grids is essential for the monitoring and control of energy distribution and for ensuring that the network can cope with changing loads and power fluctuations
- India will account for 25% of the increase in global energy demand by 2040. To address this energy demand, the country invests heavily in renewable energy generation and power grid modernization. Gridspertise is ready to collaborate with India Distribution Companies (DISCOMs) to develop future-proof smart grids by providing cutting-edge solutions to strengthen revenue protection, improve power quality, improve predictive maintenance efficiency, and streamline field operations for a safe and quick response. The developments towards smart grid would drive the market.
- According to India Brand Equity Foundation, India's electricity generation capacity is expected to reach about 400 gigawatts in fiscal year 2022. As a result, the prior year's gain in generation capacity is maintained. The compound annual growth rate was more than 6% between 2016 and 2022. Such huge generation of electric generation would need regular maintenance which would create a opportunity for the studied market to grow.
- The National Optical Fibre Network (NOFN) is a project initiated in 2011 and funded by the Universal Service Obligation Fund to provide broadband connectivity to over 200,000-gram panchayats of India at an initial cost of INR 200 billion (USD 2.8 billion), which is to be achieved utilizing the existing optical fiber and extending it to the gram panchayats and Bharat Broadband Network Limited (BBNL). The

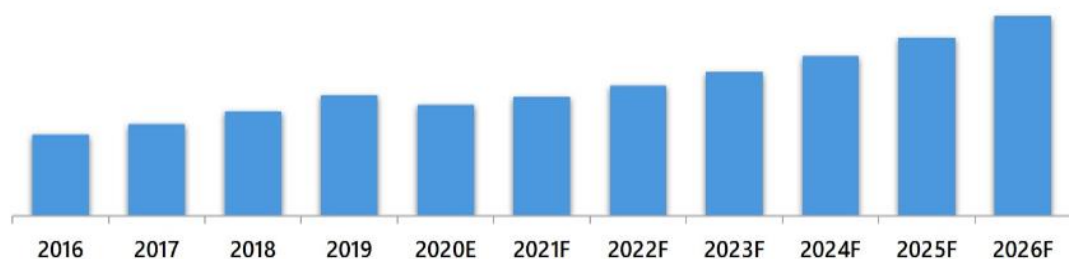
pan India average fiber-to-the-tower ratio as of November 2020 was 32% against the target of 70% by 2024, foreseen by the Department of Telecommunications (DoT), according to Towers and Infrastructure Providers Association (Taipa statistics).

- Further, in April 2023, The National Highways Authority of India (NHAI) has announced plans to build an integrated network of approximately 10,000 km of optic fiber cable (OFC) across India by the fiscal year 2025. The project will be carried out by NHAI's particular purpose vehicle, National Highways Logistics Management Limited (NHLML), which will build the OFC infrastructure by creating utility corridors along national highways. The OFC network will connect remote areas of India to the internet and aid the country's transition to contemporary telecommunications technologies such as 5G and 6G. NHAI has already designated pilot tracks for building digital highways, with the Delhi-Mumbai Motorway and the Hyderabad-Bangalore corridor included in the plan.

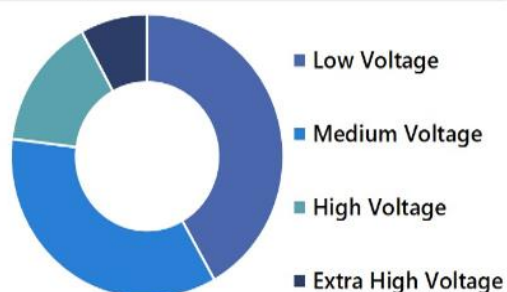
(GLOBAL WIRE & CABLE MARKET (2023-2028) Report – Mordor Intelligence)

### W&C market in revenue terms

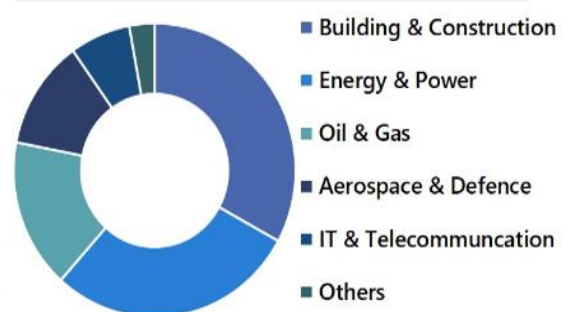
India Wires And Cables Market Revenues, 2016-2026F (\$ Million)



India Wires And Cables Market Revenues Share, by Voltage, 2019



India Wires And Cables Market Revenues Share, by End Users, 2019



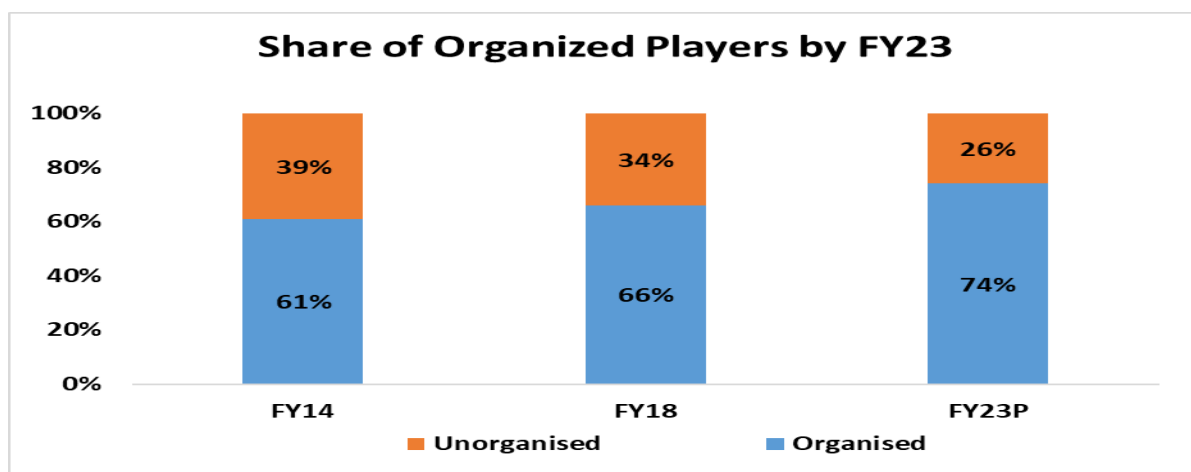
Source: Industry reports

The Global Wires and Cables Market at a CAGR of 8.2%, and it is expected to reach USD 38.33 Billion by 2029, over the forecast period.

### ▪ Growing share of organized players

The Indian cables and wires industry has been gradually moving from a largely unorganized sector comprising smaller regional players towards an organized sector comprising pan-India branded market players across all categories. Furthermore, an increase in technological and product complexities, growing marketing and branding activities by leading cable manufacturers, and the entry of newer players have all led to an increase in the proportion of the industry's revenue generated by the organized sector. The shift from unorganized to organized is more significant in specific categories such as LV power cables and building wires.

At an overall level, the organized players accounted for an ~66% share of the cables and wires industry's production in FY18. Industry expects the share of organized players to grow to ~74% by FY23E on account of GST rollout, improved efficiency and cost structure (reducing the price gap between the organized and unorganized sectors) and the economies of the pan-India distribution network.



Source: Industry

## 2.4 Covid Impact on Wire and Cable Industry

Just like every other business, wire and cable Industry also encountered challenges due to the Covid-19 pandemic. The topline of the industry took a hit during the covid as there was no business in April 20.



“For manufacturers, it was a significant impact since this period is generally a prime sales period, particularly for the wires and cables segments. As soon as the pandemic hit, industry activated a business continuity plan that placed employee safety and well-being as prime consideration. The dealers in metros faced greater challenges due to continued restriction in physical movement.

To ramp up the demand post the lockdown, industry grew its market reach in Tier-II and Tier-III cities, and continued with their branding initiatives during the year to improve brand connect.

Covid-19 halted the growth for the industry; however, revival is expected to be faster the coronavirus pandemic and the consequent lockdowns by the central and the state governments halted the growth for the wire and cable industry. The wire and cable industry is struggling domestically over the past 2-3 years on account of issues like real estate sector slowdown. The pandemic and the lockdowns accelerated the pace of decline.

### 3. GROWTH & DEMAND DRIVERS OF WIRE AND CABLE INDUSTRY

Not only in India but across the globe Industrial and domestic users are the mainstay of the cable and wire market. The industrial users mainly comprise of power, telecommunication, cement, steel, railways and Housing sectors. Most of their demand is addressed by the organized sector. However, if we talk about the household demand then it is still being met largely by un-organized sector. Though there has been a shift in the preferences and the domestic consumers too are becoming quality conscious and there is a steady shift towards high end cables thereby benefiting the organized sector.

The cable industry can be broadly segmented into extra high voltage power cables greater than 66KV, medium voltage power cables up to 33KV and Low voltage power cables up to 1 KV, instrumentation and control cables, light duty cables, fibre optic cables, copper telephone cables, elastomer rubber cables and specialty cables, each of these is an industry itself.

#### ▪ Cables and wires demand drivers

Particulars	Demand Drivers
<b>Power Cables</b>	<ul style="list-style-type: none"><li>• Investments in power transmission and distribution (~42% growth in FY19-FY23)</li><li>• Capacity addition in solar and wind energy</li><li>• Smart Cities Mission</li></ul>
<b>Building Wires</b>	<ul style="list-style-type: none"><li>• Affordable housing scheme</li><li>• Growing nuclear families</li><li>• Investments in commercial and residential infrastructure (~35% growth in FY19-FY23)</li></ul>
<b>Elastomeric and Flexible Cables / Wires</b>	<ul style="list-style-type: none"><li>• Automobile industry growth and increasing investments in railways for electrification</li><li>• Growing demand for household appliances and automobiles due to revival in per capita income</li><li>• Increased construction activity supported by growing infrastructure projects</li></ul>

<b>Control and Instrumentation Cables</b>	<ul style="list-style-type: none"><li>• Industrial capex rising across industries such as auto, steel, oil and gas, and power.</li><li>• Investment expenditure by Indian Railways and in other mass transit systems</li><li>• Increased focus on automation in manufacturing and processing to monitor and control quality</li></ul>
<b>Switchboard and telecom Cables</b>	<ul style="list-style-type: none"><li>• Service and industrial sector growth increasing the need for data cables</li><li>• Intercom and Security system penetration in residential buildings</li><li>• Smart cities project</li><li>• Surge in internet users, with internet penetration as a percentage of total households reaching 60% by fiscal 2023</li></ul>

▪ **Superior Quality product in housing wires led to higher margins for organized players**

The electrical wires segment (largely housing) has witnessed a sharp transformation over the last Several years. Involvement of customer in purchases of electricals has risen sharply. Electrical fault is one of the major causes of residential fires and its potential hazard is increasing as more electrical appliances are found in each household unit nowadays. With an increase in fire accidents caused by electrical faults, consumer preference towards branded manufacturers has been on the rise. Further, organized players have also increased their advertisement and promotional spends over the years. This has helped organized players garner higher market share and margins over the last two-three years.

**1. Housing sector:**

▪ **Tier II and III cities to drive Housing construction growth**

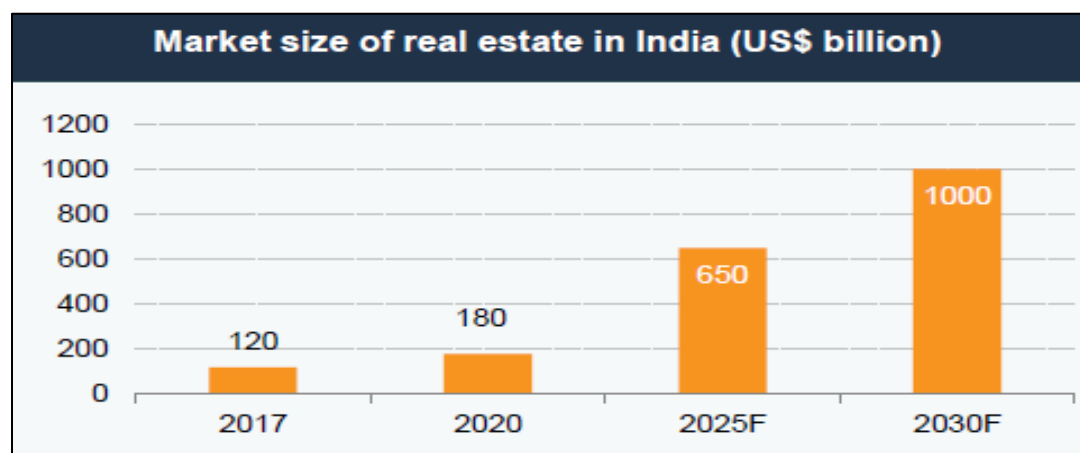
The three segments to drive growth in building construction are affordable housing (Pradhan Mantri Awas Yojana), healthcare and education. Increase building construction activity will lead to a rise in demand for cables and wires, especially in the house wires segment.

The real estate industry is in focus since the past two years, with key developments such as demonetisation, enactment of the Real Estate (Regulation and Development) Act (RERA) and the GST impacting the sector deeply.

- Real estate sector in India is expected to reach US\$ 1 trillion in market size by 2030, up from US\$ 120 billion in 2017. India's real estate market is estimated to grow at a CAGR of 19.5% during 2017-2028. The market is forecast to reach US\$650 billion, representing 13% of India's GDP by 2025.
- Atal Mission for Rejuvenation and Urban Transformation (AMRUT) and Smart Cities Mission: In Union Budget 2021, the government announced Rs. 13,750 crore (US\$ 1.89 billion) to AMRUT and Smart Cities Mission.
- In Union Budget 2022-2023, the Smart Cities Mission (SCM) (Mission for Development of 100 cities) and the Atal Mission for Rejuvenation and Urban Transformation (AMRUT)(500Cities) have bagged a higher budgetary allocation of INR 14,100 crores.
- Ministry of Housing and Urban Affairs: In Union Budget 2023-2024, the government has assigned INR 764.32 billion for improving various urban sectors, including housing, transport, sanitation, and other infrastructure.
- Tax Benefit: Under Section 24 of the Income Tax Act, an individual can claim tax deduction of the interest payment on the housing loan upto a maximum of Rs. 2,00,000.
- Increasing share of real estate in the GDP would be supported by increasing industrial activity, improving income level and urbanization.
- The Government launched 10 key policies for the real estate sector:
  - ✓ Real Estate Regulatory Act
  - ✓ Benami Transactions Act
  - ✓ Boost to affordable housing construction
  - ✓ Interest subsidy to home buyers
  - ✓ Change in arbitration norms
  - ✓ Service tax exemption
  - ✓ Dividend Distribution Tax exemption
  - ✓ Goods and Services Tax
  - ✓ Demonetization
  - ✓ PR for foreign investors

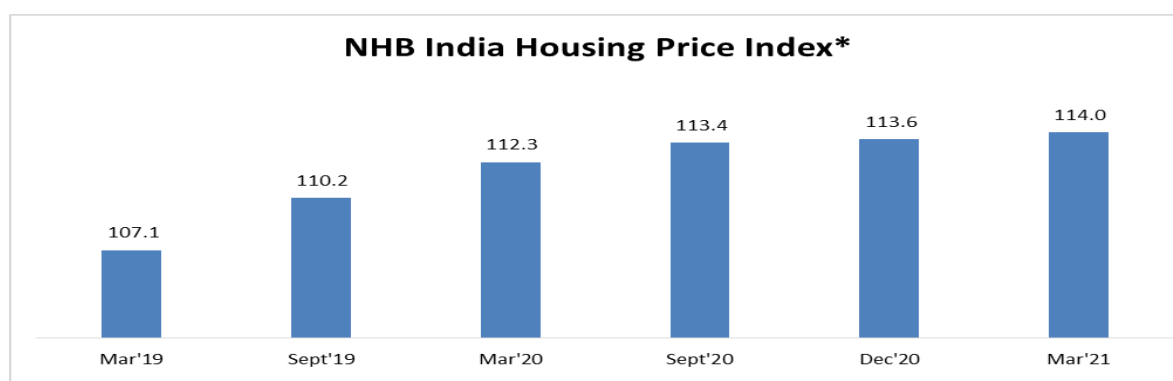
Share of the top listed developers in the Indian residential market is expected to increase to 29% in FY24, from 25% in FY21, driven by a strong pipeline for residential project launch.

- Housing sale experienced a 14% increase in the first quarter of 2023 in the top seven cities. Housing sales in India's top seven cities--Mumbai, Delhi NCR, Bengaluru, Hyderabad, Chennai, Kolkata, and Pune--in 2022 hit 215,000 units, a decadal high. In 2010, sales were at 216,762 units.
- Bengaluru, Hyderabad, Mumbai, and Pune achieved the highest sales since 2008, while Delhi NCR and Kolkata recorded the highest sales since 2014.
- Mumbai metropolitan region accounted for 33% of the total sales, followed by NCR at 16% share.
- The performance of micro-markets in the Delhi-NCR region, including Noida and Gurgaon, posted a double-digit expansion in property appreciation prices with 11% and 13%, respectively, growth.



(Source: Corporate Catalyst India Pvt Ltd, CBRE, National Housing Bank)

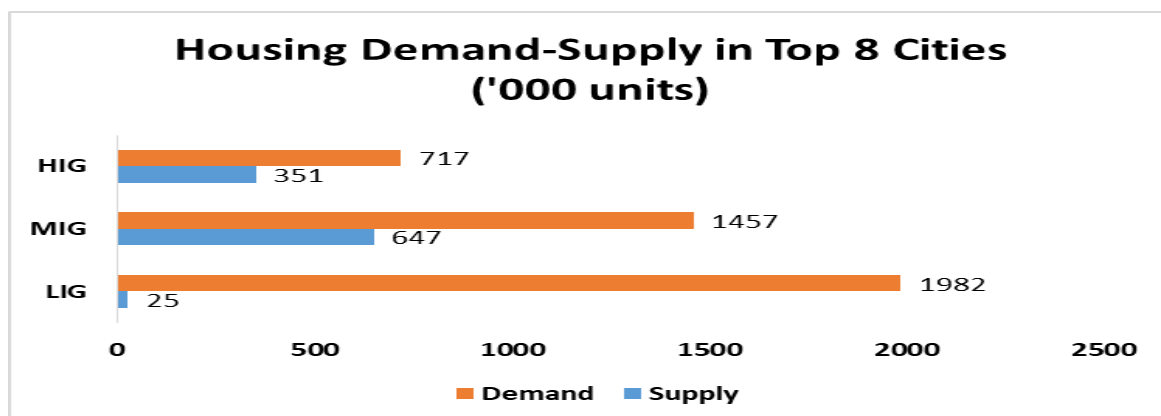
### ▪ NHB India Housing Price Index\*



Sources: NHB reports

\* Average indices of all cities

### ▪ Housing Demand-Supply Units in top 8 Cities 2016-2020



Sources: NHB reports

## 2. Infrastructure:

Infrastructure sector is a key driver for the Indian economy. The sector is highly responsible for propelling India's overall development and enjoys intense focus from Government for initiating policies that would ensure time-bound creation of world class infrastructure in the country. Infrastructure sector includes power, bridges, dams, highways, airports, logistics, and urban infrastructure development.

### ▪ Performance of eight core infrastructure industries

The growth rate of Index of Eight Core Industries for March 2023 is revised to 4.2 per cent from its provisional level 3.6 per cent. The cumulative growth rate of ICI during the quarter April to June, 2023-24 reported 5.8 per cent (provisional) as compared to the corresponding period of last year.

## 3. Power

A total of 3,16,754.86 MU of electricity has been generated from renewable energy sources during the current year 2022-23 (up to January 2023). According to the Ministry of Power, India's total power generation capacity was at 412.21 GW as on February 28, 2023.

India will meet 75.66% of electricity requirement of 1,750 billion units in fiscal 2023-24 from thermal power plants. The electricity generation programme has been fixed at 1,750 BU for the year 2023-2024.

### ▪ Industrial expansion and strong GDP growth driving power demand

Multiple drivers (industrial expansion, growing per-capita incomes) are leading to growth in power demand. This is set to continue in the coming years.

- India is set to become a global manufacturing hub with investment across the value chain.
- Power consumption of India stood at 133.26 billion units (BU), higher than 114.48 BU in June 2021. The peak power demand met, which is the highest supply in a day, rose to 223.23 GW in June 2023.
- India expects annual electricity demand to reach 1,874 billion units during the year ending March 2027, there will be an average 7.2% annual growth from demand of 1,320 billion units in 2021/22.
- Future investment will benefit from strong demand fundamentals, policy support and increasing Government focus on infrastructure.
- India's per capita electricity consumption was 1255 kWh in 2021-22, which is around one-third of the global average of per capita electricity consumption.
- The industry sector accounted for the highest share of energy consumption across India in fiscal year 2021, at 41 percent.
- Share of non-fossil fuel-based generation capacity in the total installed capacity of the Country likely to increase from 42% as of October 2022 to more than 64% by 2029-30. Indian power sector is undergoing a significant change that has redefined the industry outlook.

#### **4. Railways:**

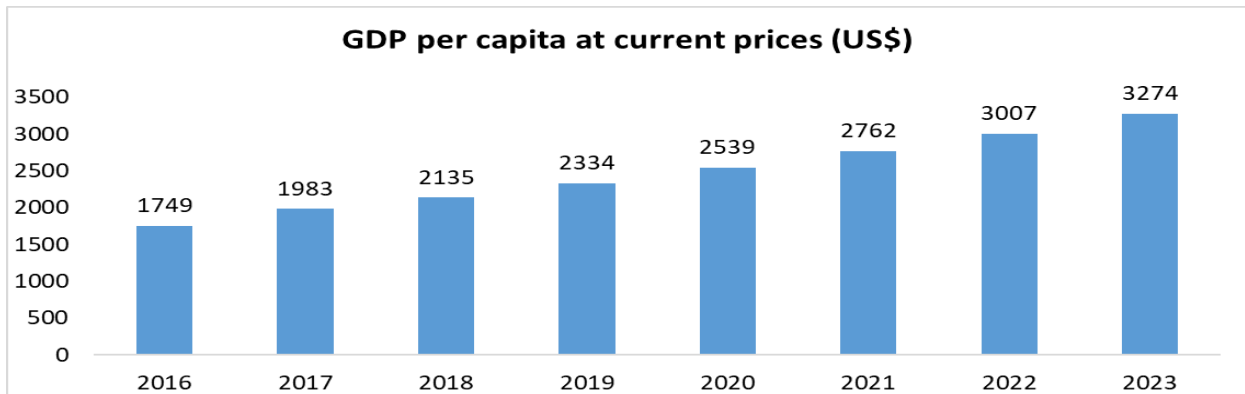
##### **1. Growing demand**

- Increasing urbanisation and rising income (both urban and rural) are driving growth in the passenger segment.
- Growing industrialisation across the country has increased freight traffic in the last decade.
- India is projected to account for 40% of the total global share of rail activity by 2050

##### **2. Policy support**

- The Government has increased the scope of PPP beyond providing maintenance and other such supporting roles. PPP is being utilised in areas such as re-development of stations, building private freight terminals and private container train operations.

- Government has allowed 100 % FDI in the railway sector.
- Rising income and urbanisation driving passenger traffic growth



**Source:** Ministry of Railways, IMF World Economic Outlook April 2023

### 3. Infrastructure development

- It is estimated that India will require US\$ 4.5 trillion of infrastructure investment by 2040 to enhance economic growth and community well-being. Under the Union Budget 2023-2024, the government allocated Rs.2.4 lakh crore to the Ministry of Railways.
- Indian Railways is planning annual capital expenditure of Rs. 2 lakh crore (US\$ 27.18 billion) until FY24 in line with the robust infrastructure upgrade envisaged for the railway network.
- Rail Land Development Authority (is working on long-term planned projects worth Rs.50 ,000 crore (US\$ 6.74 billion) for redeveloping 123 railway stations, across the country, on a self-sustainable model, which is in line with the smart city projects.

### 4. Telecommunication

#### • Second-Largest Subscriber Base

India has the second-largest telecom network in the world. In India, the total subscriber base stood at 1.17bn as of September 2022. out of 759 million 'active' internet users in India for 2022, 399 million are from rural India, while 360 million are from urban India, which indicates that rural India continues to drive the growth of the internet in the country. By 2025 the number of active internet users is expected to grow to 900 million. This is for the first time that the majority of Indians have become active internet users.



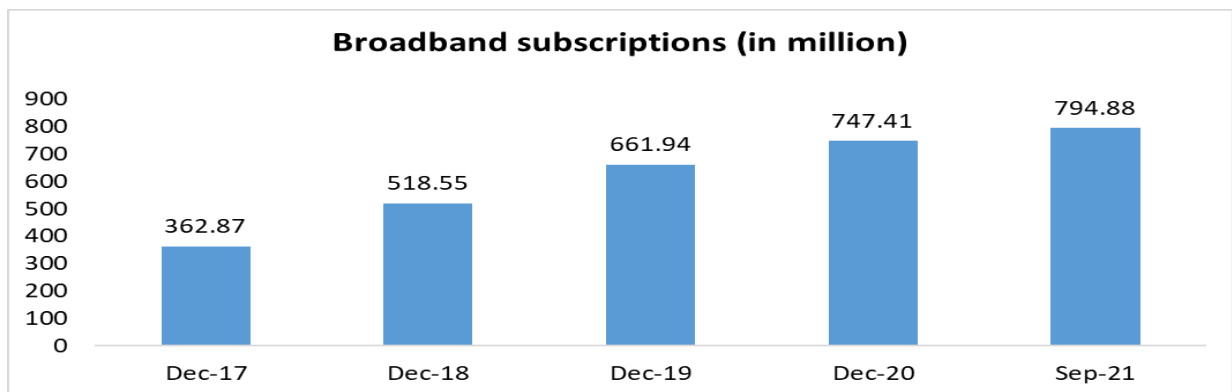
India's 5G subscriptions reached around 10 million by the end of 2022 and are estimated to account for about 57 per cent of mobile subscriptions in the country by the end of 2028, which will make it the fastest growing 5G region globally.

The government has allocated Rs 1.23 trillion for telecom and postal projects. The total allocation includes Rs 975.79 billion for the Department of Telecommunications.

In October 2021, the government notified 100 % foreign direct investment (via the automatic route from previous 49 % in the telecommunications sector.






To drive the development of 6G technology, the Department of Telecommunications (has developed a sixth generation (6G) innovation group. India's Bharat 6G Mission aims to launch the advanced 6th generation of networking or 6G by 2030, with a dual-phase rollout planned that will allow the nation to compete with giants across the world in matters of telecom and networking.

### Strong growth in broadband drives internet access revenues



**Source:** Telecom Regulatory Authority of India

### ▪ Key companies in the market

	Company	Ownership	Presence
	Mahanagar Telephone Nigam Ltd (MTNL)	Government (56.3%), Life Insurance Corporation (18.8%)	Fixed-line and mobile telephony (in Delhi and Mumbai), data and Internet
	Bharat Sanchar Nigam Ltd (BSNL)	Government (100%)	Fixed-line and mobile telephony (GSM - outside Delhi and Mumbai), data and Internet in 22 circles
	Bharti Airtel	Bharti Group (45.48%), Pastel Ltd (14.79%), Indian Continent Investment (6.65%),	Broadband and mobile (GSM) in 22 circles
	Vodafone Idea Limited	Aditya Birla Group and Vodafone Group partnership	Broadband and mobile (GSM) in 22 circles
	Reliance Jio Infocomm	Reliance Industries Limited.	Broadband and mobile

## **4. CHALLENGES FACED BY THE INDUSTRY**

### **Cyclical Market**

After facing a major decline in the demand for cables around the turn of the century, the industry has begun to see resurgence in demand in the recent years driven by growth in the telecoms and energy industries especially in emerging economies. This underlines the cyclical nature of the industry. As a result, cable manufacturers need to be agile enough to respond quickly to changing levels of demand.

### **Power shifts in the supply chain**

Cable manufacturing companies often find themselves dealing with large suppliers of raw materials on one side and large consolidated customers (e.g wholesalers, telecom and energy operators) on the other side. Further, few cable manufactures have direct interaction with end customers, giving them relatively little power in the supply chain.

Therefore, cable manufacturers need to be intelligent and creative in the ways they capture value in this arena.

### **Conversion industry and working capital**

The cable industry can be considered a conversion industry. This means that material costs determine a large part of the costs of the end product, typically over 60%. As a result, cable manufacturers need to strive for perfection in the transformation processes in the company. That's where the profits are made.

Also, a close eye needs to be kept on the working capital. The expensive raw materials and work-in-progress (WIP) can consume excessive amounts of the financial resources of a company. Finally, the large inventories of non-ferrous metals (Cu, Al) can pose a significant price variation risk on the company. This requires cable manufacturers to carefully manage the risk of volatile prices of these raw materials.

### **De-regulation lowers barriers of entry**

Until recently, the electricity and telecom markets were marked by monopoly suppliers purchasing largely from domestic cable suppliers. However, deregulation has increased customers incentives to bargain more aggressively with cable manufacturers. In addition, transportation costs are estimated at less than 5% of production costs.

The deregulation of markets, the absence of entry barriers and low transport costs have put cable manufacturers in a competitive global arena.

### **Increased Raw Material Prices**

One very common challenge is volatility in raw material prices. The rise in the prices of raw materials (copper, zinc, aluminum, and copper) carries a critical impact on profit margins. Apart from this, the wire and cable industry solely depend on imports from Russia, China, UAE and Japan. So, the exchange rate variations have a considerable impact on the industry. Delays in executing projects because of a range of approvals and clearances required, and the shortage of manpower become all major impediments to the growth of the industry.

## 5. GOVERNMENT INITIATIVES UNDERTAKEN FOR INDUSTRY

Wires and cables sector is a direct beneficiary of development of housing, Infrastructure, power and distribution, smart cities mission etc.

### 1. Housing for All

In 2015, the Indian government introduced the Pradhan Mantri Awas Yojana (PMAY) to provide affordable housing to all citizens by 2022. Through this credit linked subsidy scheme (CLSS), the government aimed to provide its beneficiaries an interest subsidy to avail loans to purchase or build a house. The scheme was launched to aid the middle-income community, economically weaker sections (EWS) and low-income groups (LIG). Depending on the areas it serves, the scheme is divided into two sections, Pradhan Mantri Awas Yojana-Urban (PMAY-U) and Pradhan Mantri Awas Yojana Gramin (Pradhan Mantri Awas Yojana Rural).

Introduced in 2016, PMAY-U aimed to provide 'Housing for All by 2022' by establishing 1.12 crore houses for urban poor across the country over the next seven years (between 2015 and 2022).

Launched in November 2016, PMAY-G was designed to support 'Housing for All by 2022 by building 2.95 crore houses for rural poor across the country by 2022.

#### Progress of PMAY:

##### Pradhan Mantri Awas Yojana-Urban (PMAY-U)

Construction of Houses	As of March, 2021
Demand	112.24 lakh
Sanctioned	112.52 lakh
Grounded	80.20 lakh
Completed	48.02 lakh
Investment Approved	Rs. 7.35 lakh crore (US\$ 98.28 billion)

##### Pradhan Mantri Awas Yojana-Urban (PMAY-U)

Construction of Houses	As of March, 2023
Demand	-
Sanctioned	118.9lakh
Grounded	112.3 lakh
Completed	76.02lakh

<b>Investment Approved</b>	Rs. 8.19lakh crore
<u>Pradhan Mantri Awas Yojana Gramin (Pradhan Mantri Awas Yojana Rural)</u>	
<b>Construction of Houses</b>	<b>As of April, 2021</b>
<b>MoRD Target</b>	20,224,136
<b>Registered</b>	20,126,884
<b>Sanctioned</b>	19,286,512
<b>Completed</b>	13,839,068
<b>Fund transferred</b>	Rs. 196,702.88 crore (US\$ 26.30 billion)

Pradhan Mantri Awas Yojana Gramin (Pradhan Mantri Awas Yojana Rural)

<b>Construction of Houses</b>	<b>As of July, 2022</b>
<b>MoRD Target</b>	2.95 crore
<b>Registered</b>	-
<b>Sanctioned</b>	2.44crore
<b>Completed</b>	1.90crore
<b>Fund transferred</b>	-

## 2. Government's Focus on improving electrification

- Power is among the most critical component of infrastructure, crucial for the economic growth and welfare of nations. The existence and development of adequate infrastructure is essential for sustained growth of the Indian economy.
- India's power sector is one of the most diversified in the world. Sources of power generation range from conventional sources such as coal, lignite, natural gas, oil, hydro and nuclear power to viable non-conventional sources such as wind, solar, and agricultural and domestic waste. Electricity demand in the country has increased rapidly and is expected to rise further in the years to come. In order to meet the increasing demand for electricity in the country, massive addition to the installed generating capacity is required.
- Government aims for 500GW of renewable energy installed capacity by 2030. India aims to produce five million tonnes of green hydrogen by 2030. This will be supported by 125GW of renewable energy capacity. 57 solar parkswith an aggregate capacity of 39.28GW have been approved in India till 31July2023.

### 3. Make in India

- Manufacturing has emerged as one of the high growth sectors in India. Prime Minister of India, Mr. Narendra Modi, launched the 'Make in India' program to place India on the world map as a manufacturing hub and give global recognition to the Indian economy. The stated objective of this scheme is to make local manufacturing globally competitive, create global champions in manufacturing, boost exports and create jobs. So far, the scheme has been rolled out for 14 sectors with an outlay of 2Lakh crore.
- The Index of Eight Core Industries (ICI) is an index reflecting the production performance of eight core industries - coal production, crude oil production, natural gas production, petroleum refinery processing, steel production, cement production and electricity generation.
- India has potential to become a global manufacturing hub and by 2030, it can add more than US\$ 500 billion annually to the global economy.

### 4. Smart Cities Mission

- **Introduction:** The 100 Smart Cities Mission in India was launched by Prime Minister Narendra Modi on June 25, 2015. Smart Cities Mission is an urban renewal and retrofitting programme launched by the Government of India to develop smart cities and make them citizen friendly and sustainable. The Union Ministry of Urban Development is responsible for implementing the mission in collaboration with state governments; this is expected to complete between 2019 and 2023.
- **Need for the Mission:** Cities accommodate ~31% of India's current population and contribute 63% to the GDP (Census 2011). By 2030, urban areas are expected to accommodate 40% of India's population and contribute 75% to the GDP. Population growth in cities leads to infrastructure management and service delivery challenges. The Smart Cities Mission in India is an initiative that aims to efficiently and effectively tackle these challenges.
- **Budget Allocation:** Central government allocated Rs 16,000 crore to SCM in Budget 2023. More than two-thirds of the total 7,804 projects under the Smart Cities Mission (SCM) have been completed thus far. [ source: Ministry of Housing and Urban Affairs (MoHUA).]

- **Status Update:**

The following table indicates the key highlights of the smart cities mission.

Items	Cost / Number
Cities	100
Total Projects	7,742
Total Cost of Projects	Rs. 1,81,561 Cr.
Completed Projects to Date	5,002
Cost Involved in Completed Projects	Rs. 92, 561 Cr.
Ongoing Projects	2,740
Cost Involved in Ongoing Projects	Rs. 89,000 Cr.

#### Current Status of Smart City Mission in India

Particulars	Numbers
Amount	Rs 2,05,018 crore
Tendered	6809 Projects / Rs189,737 crore
Work orders issued	6222 Projects / Rs 164,888 crore
Work completed	3480 Projects / Rs 59,077 crore



## 6. SWOT ANALYSIS

### 1. Strength

Cables are the backbone of the Communication, Power and Real estate Sector. Favourable demographics and increased discretionary spending drive the growth of this sector. India is the fastest growing telecom market in the world adding huge subscribers' base every month. In addition, the telecom companies are aggressively making inroads into rural markets. In addition, with the government initiatives is likely to keep the demand for telecom infrastructure, including cables to remain strong. The Indian cable industry is having strong clearly there is great potential for further expansion in India. The affordable housing segment is expected to receive a boost with the government's proposal in the Union Budget for 2023-24 to increase the outlay for Pradhan Mantri Awas Yojana (PMAY), infrastructure spending and setting up of a dedicated urban infrastructure fund in tier2 and tier3 cities.

### Weakness

The raw material prices viz; the copper and Aluminium remains volatile and the industry is fully dependent on them. The Russia-Ukraine crisis is expected to affect the copper supply side more than the demand side. Aluminium prices have remained at elevated levels in recent weeks on supply concerns after European primary aluminum smelters were forced to cut their output due to energy crisis. All this will have impact on the margins of the manufacturer.

### 2. Opportunity

The Indian government initiative of launching projects such as 100 smart cities and 'Housing for All by 2022' are also expected to immensely drive the residential construction market in the country and major focus on infrastructural sector will lead to huge opportunity for the cable and wire market growth.

### 3. Threats

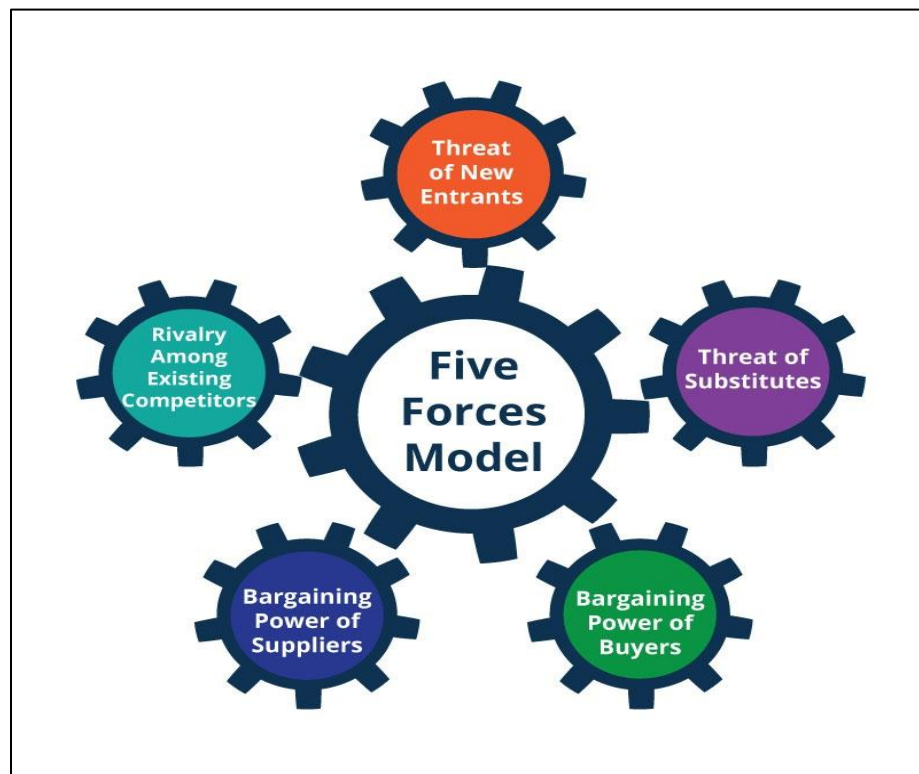
Prices of many key raw materials used in cable-making rose sharply, becoming much more volatile, with substantial fluctuations in market prices on a short timescale. Since, then the volatility has continued and prices have now risen again. The price of copper in particular is now a major talking point in the cable industry.

## 7. COMPETITIVE ANALYSIS & KEY INDUSTRY PLAYERS

### 1. Porter Five Forces Analysis

Michael Porter observed five forces that have significant impact on a firm's profitability in its industry.

Porter Five Forces is a holistic strategy framework that took strategic decision away from just analyzing the present competition. Porter Five Forces focuses on - how Wire & Cable Company can build a sustainable competitive advantage in Industrial Equipment industry.



- **Threats of New Entrants**

New entrants in Industrial Equipment Wholesale brings innovation, new ways of doing things and put pressure on other Wire & Cable Company through lower pricing strategy, reducing costs, and providing new value propositions to the customers. Wire & Cable Company has to manage all these challenges and build effective barriers to safeguard its competitive edge.

- **Bargaining Power of Suppliers**

Almost all the companies in the Industrial Equipment Wholesale industry buy their raw material from numerous suppliers. Raw material suppliers who are in dominant position has higher bargaining power which can lead to decrease in the margins of Wire & Cable Company. Powerful suppliers in this sector use their negotiating power to extract higher prices from the firms in Industrial equipment wholesale field.

- **Bargaining Power of Buyers**

They want to buy the best offerings available by paying the minimum price as possible. This put pressure on Wire & Cable Company profitability in the long run. The higher the concentrated customer base of Wire & Cable Company the higher the bargaining power of the customers and higher their ability to seek increasing discounts and offers.

- **Threats of Substitute Products or Services**

When a new product or service meets a similar customer need in different ways, industry profitability suffers. The threat of a substitute product or service is high if it offers a value proposition that is uniquely different from present offerings of the industry.

- **Competition among the Existing Competitors**

If the competition among the existing players in an industry is intense then it will drive down prices and decrease the overall profitability of the industry. Wire & Cable Company operates in a very competitive Industrial Equipment Wholesale industry. This competition does take toll on the overall long-term profitability of the organization.

### **Implications of Porter Five Forces on Wire & Cable Company**

By analyzing all the five competitive forces Wire & Cable Company strategists can gain a complete picture of what impacts the profitability of the organization in Industrial Equipment Wholesale industry. They can identify

game changing trends early on and can swiftly respond to exploit the emerging opportunity. By understanding the Porter Five Forces in great detail Wire & Cable Company's managers can shape those forces in their favor.

## 2. Manufacturing Process

### 1. Conductor









- i. Wire Drawing - The first step in manufacturing process consists of reducing the diameter of the copper wire gradually to its final diameter. The copper arrives in large coils. This copper, 8 mm in diameter, is technically known as “wire rod”. The diameter of the wire rod is reduced to 2 mm during this process. This 2 mm wire is then drawn further to reduce the diameter of the wire to the size needed for each kind of conductor.
- ii. Annealing - After the wire-drawing, all the wires undergo a heat treatment called “annealing” to increase the ductility and conductivity of the copper.
- iii. Stranding Annealing is followed by a “stranding” step in which the copper wires are grouped together to make conductors with different cross-sections, e.g. 0.5 mm<sup>2</sup> to 240 mm<sup>2</sup>, 400 mm<sup>2</sup> or even higher for larger current capacities.

2. **Insulation** - The next process in the manufacture of electrical cables is the insulation. It involves the placement of an insulating cover over the conductor to prevent current leakages. The insulating material is added by a process of extrusion at high temperature. Several insulating materials may be used: PVC, EPR, XLPE, etc. The material's insulation capacity and its thickness determine the cable's maximum service voltage.

3. **Laying Up** - The operation which allows putting together the various elements of the cable into its core, can be done in one or several steps Phase wiring is the grouping of different insulated conductors to make a multicore cable. The phases can be identified by color or by numbering them. A voltage test is also carried out on the whole length of the manufactured cable during this process.

4. **Additional Coverings** - In some cases, the cable may require additional elements in order to improve its protection or operation. Mechanical coverings, also called “armor”, protect the cable from external damage. The armor is made from steel or aluminum and can come in the form of metal strips, wires or braids. Electrical coverings, also called “screens”, insulate the signals that circulate in the cable from possible external interference.
5. **Outer Sheath** - Cables usually have an outer polymer covering for protection. This is called the “outer-sheath”. This sheath protects the conductors and their insulation from external elements including mechanical aggression, which may occur during the installation of the cable. The outer-sheath is applied like the insulation via a process of extrusion at high temperature. The sheath may be made from different materials depending on the required protection level, the final flexibility of the cable, the work environment, etc.
6. **Quality Control** - Once the cable is manufactured, company should verify the quality of all cables by carrying out rigorous checks before shipping items. In order to guarantee the high quality required by customers, extensive quality control checks in laboratories must be conducted thus, ensuring that all the cables are free from defects and are ready to be sold.

### 3. Cables & Wires Players In The Industry

Company	Campaigns
Finolex Cables	
KEI Industries	
Syska	
V-Guard	
Havells	
Polycab	
RR Kabel	
Anchor by Panasonic	

Most of the electrical players have diversified over the last five years.

Particulars	Cables	Building Wires	Fans	Lighting	Switch & SG	Pumps	Domestic Appliances
Finolex	✓	✓	✓	✓	✓		
KEI	✓	✓					
V-Guard	✓	✓	✓		✓	✓	✓
Polycab	✓	✓	✓	✓	✓	✓	✓
Plaza Cables	✓	✓	✓		✓		✓

### 1. Finolex Cables Limited

In July 1945, two brothers P.P. Chhabria and K.P. Chhabria came to Pune from Karachi and within six months, they set up a retail business selling electrical cables which became quite successful. A sizeable order in the mid 1950's from the Defence Department for wire harnesses for trucks and tanks bolstered their confidence, and hence they ventured into cable manufacture. Today, Finolex Cables is a leading manufacturer of electrical and telecommunication cables. The company started its operation with the manufacture of PVC insulated electrical cables for the automobile industry. Since then, the Company has constantly endeavoured to augment its product range to include different category of cables and wires. In 2006, it entered the electrical space by launching switches and CFL. Post 2013, it started entering other categories such as LED lighting, Fans, switchgears and Water heater. The company has manufacturing facilities at Pimpri and Urse in Pune as well as at Goa & Uttarakhand. These plants produce Electrical & Telecommunication cables, LT & HT Power & Control Cables, Electrical Switches, Compact Fluorescent Lamps (CFL's), PVC Sheets & Copper Rods. Rest of the products are outsourced.

(Rs. In crore)					
Particulars	Mar-23	Mar-22	Mar-21	Mar-20	Mar-19
Revenue From Operations [Net]	4481.11	3698.57	2722.15	2840.68	3030.07
Other Income	198.13	151.81	76.99	91.5	81.64
Total Revenue	4679.24	3919.95	2845.1	2968.8	3159.43
Total Expenses	4033.20	3393.33	2452.98	2547.86	2667.76

<b>Total Share-holders Funds</b>	3709.64	3263.79	2950.71	2718.63	2439.67
<b>Total Non-Current Liabilities</b>	53.55	42.74	50.31	54.24	68.14
<b>Total Current Liabilities</b>	320.08	293.65	250.74	238.92	261.19
<b>Total Capital and Liabilities</b>	<b>4083.27</b>	<b>3600.18</b>	<b>3251.76</b>	<b>3011.79</b>	<b>2769.00</b>
<b>Fixed Assets</b>	822.97	466.95	420.14	413.82	414.57
<b>Total Non-Current Assets</b>	871.69	802.92	908.38	942.62	1076.98
<b>Total Current Assets</b>	3211.58	2797.26	2343.38	2069.17	1692.02
<b>Total Assets</b>	<b>4083.27</b>	<b>3600.18</b>	<b>3251.76</b>	<b>3011.79</b>	<b>2769.00</b>
<b>PBDIT Margin (%)</b>	9.59	9.60	11.10	10.85	12.84
<b>Net Profit Margin (%)</b>	11.19	10.73	10.21	13.98	11.17
<b>Total Debt/Equity (X)</b>	-	-	0	0	0

(Source: Company Website, Investor Presentation, Moneycontrol.com)

## 2. KEI Industries Limited

KEI Industries Limited (KEI) was established in 1968 as a partnership firm under the name Krishna Electrical Industries, with prime business activity of manufacturing switch board cables for DOT. The firm was converted into public limited with the corporate name KEI industries Limited in December 1992. KEI entered into a technological tie-up with BRUGG KABEL A.G., Switzerland for manufacturing EHV cables ranging from 66kV to 220kV and in 2017 the company added a new line to manufacture EHV up to 400kV. Over the years, KEI has added new products to its portfolio and has transformed into one of the leading cables and wires manufacturer in India.

The company operates through cables, stainless steel wire, and turnkey projects segments. Cables segment comprises extra high voltage (EHV), high tension (HT) and low tension (LT) power cables, control and instrumentation cables, winding wires, and flexible and house wires. Stainless steel wire segment includes stainless steel wire. Its product portfolio includes EHV, MV and LV power cables, control and instrumentation

cables, specialty cables, elastomeric cables, rubber cables, submersible cables, flexible and house wires, winding wires and stainless-steel wires. Its cable products are used in oil refineries, railways, automobiles, cement, steel, fertilizers, textile and real estate sectors. It is also engaged in Engineering, Procurement and Construction (EPC) business. Its manufacturing plants are located at Bhiwadi, Chopanki, Silvassa and Pathreri.

(Rs. In crore)					
Particulars	Mar-23	Mar-22	Mar-21	Mar-20	Mar-19
Revenue From Operations [Net]	6912.33	5673.72	4124.58	4860.54	4180.49
Other Income	27.62	14.60	20.06	16.65	7.19
<b>Total Revenue</b>	<b>6939.95</b>	<b>5741.15</b>	<b>4201.6</b>	<b>4904.45</b>	<b>4238.17</b>
Total Expenses	6297.95	5233.65	3836.17	4576.59	3959.99
<b>Profit/Loss for The Period</b>	<b>477.34</b>	<b>375.98</b>	<b>273.31</b>	<b>256.3</b>	<b>180.75</b>
Total Share-holders Funds	2589.18	2135.53	1778.06	1507.21	778.05
Total Non-Current Liabilities	63.44	58.89	93.75	109.23	172.02
Total Current Liabilities	1117.55	1332.66	1142.18	1652.54	1813.71
<b>Total Capital and Liabilities</b>	<b>3770.15</b>	<b>3527.06</b>	<b>3013.97</b>	<b>3268.88</b>	<b>2763.67</b>
Fixed Assets	500.09	547.42	544.25	564.83	520.26
Total Non-Current Assets	608.82	566.00	568.39	583.08	538.7
Total Current Assets	3161.33	2961.07	2445.58	2685.8	2224.97
<b>Total Assets</b>	<b>3770.15</b>	<b>3527.06</b>	<b>3013.97</b>	<b>3268.88</b>	<b>2763.67</b>
Net Profit Margin (%)	6.90	6.56	6.53	5.22	4.30
Current Ratio (X)	2.48	1.73	1.69	1.37	1.00
Total Debt/Equity (X)	0.05	0.16	0.16	0.21	0.65

(Source: Company Website, Investor Presentation, Moneycontrol.com)

### 3. Polycab India Limited

In 1964, Late Thakurdas Jaisinghani had established 'Sind Electric Stores', which dealt in various electrical products including fans, lighting, switches, and wires. Subsequently, the family business was managed from 1968 by Girdhari T. Jaisinghani, Inder T. Jaisinghani, Ajay T. Jaisinghani and Ramesh T. Jaisinghani being sons of Late Thakurdas Jaisinghani. The family founded a partnership firm in the name of 'Thakur Industries' under the Indian Partnership Act, 1932.



Subsequently, the partners of 'Thakur Industries' entered into a lease agreement with MIDC in 1975 in respect of a parcel of land at Andheri, Mumbai for the purposes of setting up a factory for manufacturing cables and wires which was in operation until 1984.

In 1983, 'Polycab Industries', a partnership firm founded by Girdhari T. Jaisinghani, Inder T. Jaisinghani, Ajay T. Jaisinghani and Ramesh T. Jaisinghani, was registered as a small scale industrial unit by the Directorate of Industries, Government of Gujarat in respect of a factory located at Halol for manufacturing/processing activity of 'PVC insulated wires and cables, copper and aluminium and bare copper wire.

In 1996, the Company was incorporated as 'Polycab Wires Private Limited' at Mumbai as a private limited company under the Companies Act, 1956. In 1998, 'Polycab Industries' was subsequently converted into a private limited company as 'Polycab Industries Private Limited' under the Companies Act, 1956. Polycab Industries Private Limited was subsequently amalgamated with the Company in 2011.

Later, the Company was converted into a public limited company to "Polycab India Limited (Formerly Known as Polycab Wires Limited)". Polycab India Ltd is engaged in the business of manufacturing and selling wires and cables and fastest moving electrical goods under the POLYCAB brand. The business activities are carried out through Wires and cables, Fast moving electrical goods (FMEG), Copper, and other segments. It generates maximum revenue from the Wires and cables segment. Geographically, it derives a majority of revenue from India. Some of its products include Power cables, Control Cables, Instrumentation Cables, Optical Fibre Cables (OFC), Solar Cables, Building Cables, Flexible Wires, and others.

(Rs. In crore)

Particulars	Mar-23	Mar-22	Mar-21	Mar-20	Mar-19
<b>Revenue From Operations [Net]</b>	13,941.89	12,004.73	8575.82	8612.9	7826.5
<b>Other Income</b>	133.33	89.92	128.2	92.79	93.35
<b>Total Revenue</b>	14,241.10	12,293.68	9054.7	8922.8	8049.3
<b>Total Expenses</b>	12,524.59	11,175.27	7899.94	7905.4	7290.9
<b>Profit/Loss for The Period</b>	<b>1291.52</b>	<b>919.84</b>	<b>885.34</b>	<b>773.03</b>	<b>502.63</b>
<b>Total Share-holders Funds</b>	6630.86	5542.94	4753.4	3833.7	2847
<b>Total Non-Current Liabilities</b>	130.40	101.77	227.36	101.09	153.97
<b>Total Current Liabilities</b>	2626.56	1741.91	2014.6	2009.1	2618.9
<b>Total Capital and Liabilities</b>	<b>9425.48</b>	<b>7411.91</b>	<b>7014.7</b>	<b>5961.6</b>	<b>5628.3</b>

<b>Fixed Assets</b>	2313.09	2045.95	1966.4	1663.2	1468.6
<b>Total Non-Current Assets</b>	2516.73	2270.77	2242.1	1911.7	1703.2
<b>Total Current Assets</b>	6908.75	5141.14	4772.6	4049.9	3925.1
<b>Total Assets</b>	<b>9425.48</b>	<b>7411.91</b>	<b>7014.7</b>	<b>5961.6</b>	<b>5628.3</b>
<b>PBIT Margin (%)</b>	11.53	8.65	10.49	10.91	9.71
<b>Net Profit Margin (%)</b>	9.00	7.44	10.03	8.59	6.28
<b>Current Ratio (X)</b>	1.98	2.39	1.93	1.91	1.48
<b>Total Debt/Equity (X)</b>	0.02	0.02	0.05	0.03	0.07

*(Source: Company Website, Investor Presentation, Moneycontrol.com)*

#### 4. Havells India Limited

Havells India was incorporated in 1983 and is one of the largest & India's fastest growing electrical and power distribution equipment manufacturer with products ranging from Industrial & Domestic Circuit Protection Switchgear, Cables & Wires, Motors, Water Heaters, Fans, Power Capacitors, CFL Lamps, Luminaires for Domestic, Commercial & Industrial applications and Modular Switches covering the entire range of household, commercial and industrial electrical needs.

Havells owns some of the prestigious global brands like Crabtree, Sylvania, Concord, Luminance & Linolite. It has manufacturing units in India located at Haridwar, Baddi, Noida, Faridabad, Alwar, Neemrana, and plants located across Europe, Latin America & Africa. Its cables division contribute approx. 30% of the FY21 total operating revenue.

<b>(Rs. In crore)</b>					
<b>Particulars</b>	<b>Mar-23</b>	<b>Mar-22</b>	<b>Mar-21</b>	<b>Mar-20</b>	<b>Mar-19</b>
<b>Revenue From Operations [Net]</b>	16805.72	13835.45	10,447.4	9,407.1	9,982.8
<b>Other Income</b>	177.71	160.44	187.4	113.4	128.7
<b>Total Revenue</b>	17088.44	14098.92	10,644.7	9,553.7	10,202.1
<b>Total Expenses</b>	15641.38	12492.36	9207.11	8649.3	9057.94
<b>Profit/Loss for The Period</b>	<b>1071.73</b>	<b>1196.47</b>	<b>1044.31</b>	<b>735.35</b>	<b>785.54</b>
<b>Total Share-holders Funds</b>	6625.45	6002.89	5176.3	4311.56	4217.99
<b>Total Non-Current Liabilities</b>	696.45	887.21	898.58	434.99	414.74
<b>Total Current Liabilities</b>	3835.54	3633.11	2777.38	2326.9	2539.56
<b>Total Capital and Liabilities</b>	<b>11157.44</b>	<b>10523.21</b>	<b>8852.26</b>	<b>7073.45</b>	<b>7172.29</b>
<b>Fixed Assets</b>	3476.59	3180.35	3069.87	3125.23	2836.44
<b>Total Non-Current Assets</b>	4091.27	3916.65	3531.8	3592.81	3328.18

<b>Total Current Assets</b>	7066.17	6606.56	5320.46	3480.64	3844.11
<b>Total Assets</b>	<b>11157.44</b>	<b>10523.21</b>	<b>8852.26</b>	<b>7073.45</b>	<b>7172.29</b>
<b>PBIT Margin (%)</b>	7.66	10.65	12.40	8.48	10.24
<b>Net Profit Margin (%)</b>	6.37	8.60	9.96	7.68	7.86
<b>Current Ratio (X)</b>	1.58	1.51	1.53	1.32	1.38
<b>Total Debt/Equity (X)</b>	-	0.07	0.08	0	0.01

*(Source: Company Website, Investor Presentation, Moneycontrol.com)*

## 5. RR Kabel Limited

RR Kabel is part of RR Global, a conglomerate in the electrical sector with a presence in over 85 countries globally. Spread across multiple business verticals including Wires & Cables, to create best quality products using the latest advances in wire design and engineering. Company offers the widest range of premium wires and cables for various residential, commercial, industrial and infrastructure purposes.

RR Kabel is ISO 9001, ISO 14001 and OHSAS 18001 certified company. RR Kabel products are also compliant to REACH (Registration Evaluation Authorization of Chemical Substances) and RoHS (Restriction of Hazardous Substances) directives with extensive research and development by skilled professionals to make sure their products adhere to global guidelines and standards.

**(Rs. In crore)**

<b>Particulars</b>	<b>Mar-23</b>	<b>Mar-22</b>	<b>Mar-21</b>	<b>Mar-20</b>	<b>Mar-19</b>
<b>Revenue From Operations [Net]</b>	2649.60	2282.26	1,514.80	1,432.09	1,402.10
<b>Other Income</b>	6.92	6.66	2.73	3.70	3.77
<b>Total Revenue</b>	2656.51	2295.24	1,529.67	1,450.14	1,426.40
<b>Total Expenses</b>	2592.37	2223.86	1,508.83	1,433.42	1,400.91
<b>Profit/Loss for The Period</b>	<b>46.73</b>	<b>52.98</b>	<b>15.41</b>	<b>14.61</b>	<b>16.78</b>
<b>Total Share-holders Funds</b>	311.65	271.43	200.26	178.77	183.53
<b>Total Non-Current Liabilities</b>	119.40	133.24	118.77	85.35	93.61
<b>Total Current Liabilities</b>	383.48	300.22	318.62	269.87	325.46
<b>Total Capital and Liabilities</b>	<b>828.69</b>	<b>715.41</b>	<b>646.17</b>	<b>540.63</b>	<b>609.11</b>
<b>Fixed Assets</b>	148.69	156.71	160.52	165.98	168.31
<b>Total Non-Current Assets</b>	241.37	228.96	206.90	201.69	225.13
<b>Total Current Assets</b>	587.32	486.45	439.27	338.94	383.98
<b>Total Assets</b>	<b>828.69</b>	<b>715.41</b>	<b>646.17</b>	<b>540.63</b>	<b>609.11</b>
<b>PBIT Margin (%)</b>	3.22	3.87	2.51	2.77	3.62

<b>Net Profit Margin (%)</b>	1.84	2.41	0.97	1.13	1.27
<b>Current Ratio (X)</b>	1.07	1.07	0.76	0.71	0.67
<b>Total Debt/Equity (X)</b>	0.63	0.77	1.45	1.22	1.39

*(Source: Company Website, Investor Presentation, Moneycontrol.com)*

## 6. V-Guard Industries Limited

The origin dates back to 1977, when Mr. Kochouseph Chittilappilly with a passion to make a difference set out to build a robust brand in the Indian electric and electronic goods panorama. With a small manufacturing unit for voltage stabilizers, a vision and a strong make-do belief, apart from a capital of Rs. 100,000 borrowed from his father and two workers to assist him. V-Guard grew rapidly to become a name synonymous with voltage stabilizers across South India. The company soon extended their range of products to Voltage Stabilizer, Digital UPS, Inverter and Inverter Batteries, Electric Water Heaters, Solar Water Heaters, Domestic Pumps, Agricultural Pumps, Industrial Motors, Domestic Switch Gears, Distribution Boards, Wiring Cables, Industrial Cables, Induction Cooktops, Mixer Grinders, Fans, Rice Cooker, Gas Stoves & Solar Power Systems.

With stringent quality control measures, reliable products, talented people and a responsible approach to business, V-Guard continues to steadily capture market across the country. V-Guard is armed with vast network of distributors, direct dealers, retailers and service centres in its endeavour to reach every corner of the country.

<b>(Rs. In crore)</b>					
<b>Particulars</b>	<b>Mar-23</b>	<b>Mar-22</b>	<b>Mar-21</b>	<b>Mar-20</b>	<b>Mar-19</b>
<b>Revenue From Operations [Net]</b>	4126.04	3492.04	2698.69	2481.03	2569.83
<b>Other Income</b>	16.44	12.78	20.73	25.13	12.34
<b>Total Revenue</b>	4142.48	3510.95	2741.97	2528.07	2614.06
<b>Total Expenses</b>	3886.75	3216.99	2453.87	2278.49	2394.47
<b>Profit/Loss for The Period</b>	<b>189.05</b>	<b>228.44</b>	<b>201.89</b>	<b>188.25</b>	<b>168.05</b>
<b>Total Share-holders Funds</b>	1607.62	1406.96	1211.29	995.45	899.4
<b>Total Non-Current Liabilities</b>	482.63	67.80	66.25	46.91	17.77
<b>Total Current Liabilities</b>	816.69	616.40	592.72	408.9	452
<b>Total Capital and Liabilities</b>	<b>2906.93</b>	<b>2096.63</b>	<b>1874.98</b>	<b>1454.9</b>	<b>1371.68</b>
<b>Fixed Assets</b>	914.17	476.27	385.62	347.66	234.83
<b>Total Non-Current Assets</b>	1401.70	576.47	473.95	394.45	285.54
<b>Total Current Assets</b>	1505.23	1520.15	1401.03	1060.45	1086.13
<b>Total Assets</b>	<b>2906.93</b>	<b>2096.63</b>	<b>1874.98</b>	<b>1454.9</b>	<b>1371.68</b>

<b>PBIT Margin (%)</b>	5.96	8.16	9.89	8.98	7.94
<b>Net Profit Margin (%)</b>	4.42	6.52	7.37	7.46	6.43
<b>Current Ratio (X)</b>	1.49	2.32	2.21	2.38	2.28
<b>Total Debt/Equity (X)</b>	0.26	0.01	0.01	0.01	0.02

*(Source: Company Website, Investor Presentation, Moneycontrol.com)*

## 7. Plaza Wires Limited

Plaza Wires Limited is a flagship Company of Plaza Cables Group headquartered in Okhla, New Delhi, India, is a growing player in the development, design, manufacturing, marketing, and distribution of copper, aluminium wire, and cable products for the energy, industrial, specialty and house projects markets. The Brand of the Company i.e, PLAZA CABLES is recognized in the Indian wire and cable industry since last four decades.

Plaza wires limited is one of the growing manufacturer in the wires and cable industry in the northern region and provides extensive range of wire and cables in India. It is an established manufacturer of wires and cables in India and is taking steps to strengthening its brand in both wires and cables business and FMEG business. It has an extensive portfolio of wires and cables to cater to the needs of institutional and retail customers in different industries.

The manufacturing facility is based at "Unit-II", Khasra No.923/56,924/58,874/49/1, Village Katha, Tehsil Baddi, District Solan, Himachal Pradesh-173205 where it is manufacturing flexible multi-strand copper PVC insulated housing wire (building wire) as per IS 694. The plant has an installed capacity of 12,00,000 coils of standard size Per Annum.

Particulars	(Rs. In crore)				
	March23	March22	Mar-21	Mar-20	Mar-19
<b>Revenue From Operations [Net]</b>	182.49	176.77	145.38	159.14	157.74
<b>Other Income</b>	0.10	0.16	0.22	0.20	0.47
<b>Total Revenue</b>	182.59	176.93	145.59	159.34	158.21
<b>Total Expenses</b>	172.26	168.30	139.50	153.87	149.83
<b>Profit/Loss for The Period</b>	<b>7.52</b>	<b>6.03</b>	<b>4.37</b>	<b>4.00</b>	<b>7.02</b>
<b>Total Share-holders Funds</b>	53.30	45.72	39.60	35.21	31.21
<b>Total Non-Current Liabilities</b>	7.55	7.00	10.18	6.48	8.01
<b>Current Liabilities</b>	51.25	51.43	49.48	46.82	50.17

<b>Total Capital and Liabilities</b>	<b>112.10</b>	<b>104.16</b>	<b>99.28</b>	<b>88.51</b>	<b>89.39</b>
<b>Fixed Assets</b>	25.62	22.80	19.55	19.64	19.21
<b>Non-Current Assets</b>	1.10	1.50	1.31	1.49	2.12
<b>Total Current Assets</b>	85.38	79.85	78.41	67.37	68.06
<b>Total Assets</b>	<b>112.10</b>	<b>104.16</b>	<b>99.28</b>	<b>88.51</b>	<b>89.39</b>
<b>PBDIT Margin (%)</b>	5.6%	4.8%	4.2%	3.4%	5.3%
<b>Net Profit Margin (%)</b>	4.1%	3.4%	3.0%	2.5%	4.4%
<b>Current Ratio (X)</b>	1.67	1.55	1.58	1.43	1.35
<b>Total Debt/Equity (X)</b>	0.74	0.87	1.09	1.02	1.00

*(Source: Restated Audited Financial Data provided by the company)*

#### Product Profile of Plaza Cables:

Product Name	Application	Standards
<b>Home Shield FR Multistrand Single Core Unsheathed Flexible Industrial Cable</b>	Wiring of all control panels, buildings, factories, relay racks, surface mounted or embedded conduit trunking. These wires are used by control panel switch board manufacturers, municipal bodies, electrical contractors, electricians etc.	-
<b>Extra Shield FR-LSH Multistrand Single core Unsheathed Flexible Industrial Cable</b>	Plaza FR-LSH wires are ideally suited for multi-storied high-rise buildings such as hotels, schools, banks, hospitals, factories, commercial complexes, theatres, residential apartments etc.	-
<b>Ultra Shield ZHFR (Zero Halogen Flame Retardant) Multistrand Single Core Unsheathed Flexible Industrial Cables</b>	Plaza ZHFR Shield wires are ideally suited for Ships, Aircrafts, Hi-tech offices, Chemicals and Pharmaceuticals plants. Underground railways, shopping malls, IT industry, Refineries etc.	-
<b>Single &amp; Multicore Round Flexible Industrial Cables</b>	These cables are ideal for wiring in machines, power supplies, appliances, control panels etc.	ISO 9001:2015, 14001:2015 and 45001 : 2018
<b>S-CORE Flat PVC Industrial cables for Submersible Pumps &amp; Motors</b>	These flat submersible cables are used to connect the underwater submersible pump set with supply line, agriculture, irrigation, domestic Installation outer application and power supply. Submersible cable is a specialized product, and is used for submersible pumps in deep wells. The area of installation is physically restrictive and the environment is very hostile. PLAZA cables are designed and manufactured keeping in mind these factors to achieve the highest possible reliability.	-

<b>XLPE/PVC LT Power Control Cable Insulated Cables Armoured/Un Armoured</b>	The Power Cables are used under-ground as well as over-head transmission of power in power plants, industries, interconnection of process control, communication and panel control systems, projects and all other electrical installations. connection of power supply to residential, commercial & industrial units.	ISO 9001:2015, 14001:2015 and 45001 : 2018
<b>Tv Dish Antenna Co-Axial Cables Gas Injected Physical Foam Jelly Flooded Industrial Cables</b>	These cables are used for transmission of video and audio signals and are used in DTH/CATV Industry. The number of CATV channels increasing by the day. These cables are ideal for such multi-channel applications.	ISO 9001:2015, 14001:2015 and 45001 : 2018
<b>Telephone and Switch Board Industrial Cables</b>	PLAZA telephone & switchboard cables are ideal for large offices, hospitals, hotels, residential complexes etc for interconnection of telephone and intercom system, PBX and in central exchange for interconnection of distribution frames, switching and transmission equipment.	-
<b>Computer &amp; LAN Networking Cable</b>	The cables generally confirm to specifications ANSI/EIA/TIA 568 AISO/IEC 11801	-
<b>Close Circuit Television Cables</b>	PLAZA CCTV cables are widely used as an integral part of security systems in areas such as shopping complexes, hospitals, government establishments, traffic monitoring, etc.	-
<b>Solar Cables</b>	Solar cables are intended for use in photovoltaic power supply systems and similar applications as free hanging, movable, fixed installation and buried in ground in constructional covered systems. The cables can be used indoor, outdoor, in hazard explosion areas, in industry and agriculture. They are suitable for applications in equipment with protective insulation	-

**Total Revenue Contribution**

<b>(Rs. in crore)</b>					
<b>Party Name</b>	<b>FY23</b>	<b>FY22</b>	<b>FY21</b>	<b>FY20</b>	<b>FY19</b>
Total Revenue (Plaza Wires Ltd)	182.49	176.77	145.38	159.14	157.74
% of Revenue from Top 5 Customers	16.15%	18.41%	21.31%	22.08%	22.07%

(Sources: Company)

As seen from above, the global wires and cables market size was estimated at USD 202.05 billion in 2022 and is projected to grow at a compound annual growth rate (CAGR) of 4.2% from 2023 to 2030. As the industry is on growth path with lot of opportunities due various government Initiative Plaza cable will be benefitting it along with increased production capacity to cater to industry demands.



## 8. OUTLOOK/CONCLUSION

Cables play a small but significant part in infrastructure activities. On the retail side, demand for house wires continued to be firm. With strong investments proposed across sectors such as power, realty, industrial sector and telecom, the cable industry in India is slated for a strong growth going forward.

The domestic cable and wire industry is highly matured though it is characterized by the few players in the organized sector and has become a price sensitive industry that has in turn impacted the quality standards. Also, with the raw material price volatility and high fund requirement for day-to-day operations most of the players might get impacted adversely due to margin pressure. However, the industry has started showing good growth in cable export business and that may help to some extent in mitigating the margin pressure.

Recent Invasion of Ukraine will play an important role going forward in the supply side inflation which can hamper growth of the industry.

However, irrespective of the stage of the project, based on the sheer strength of order backlog in the infrastructure and power sector space, the healthy growth in the revenue of the large players given in this study and given an overall improvement in the funding scenario and with the overall economic scenario gaining accelerated momentum, robust growth over the next few years for the cable industry in India is, in our opinion, ensured.

For Resurgent India Ltd.



(Mr Pradeep Shankar)

Authorised Signatory



(Ms Monica Thakur)

Vice President



(Mrs Ritu Choudhury)

Manager - 29.8.2023



End of the report.