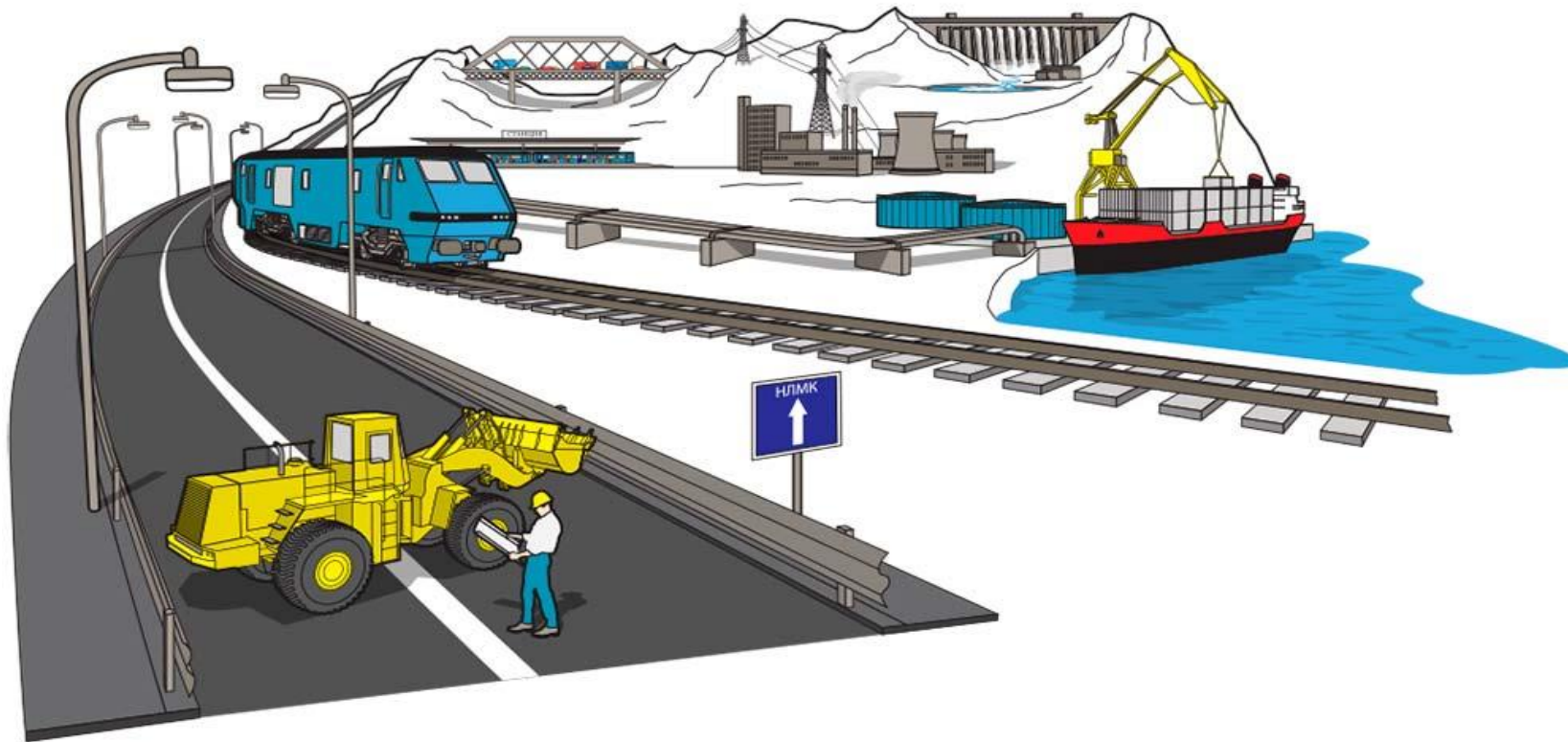




GA

ADVISORY



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- Sector Wise Annual CAPEX in Infrastructure
- Key Highlights of Union Budget 2021-22
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# QUOTES FROM PROMINENT LEADERS



“Mr. Nitin Gadkari says National Monetization Plan and National Master Plan "Gati Shakti" will lead to holistic and integrated development of infrastructure generating immense employment opportunities”



In the Budget speech, Nirmala Sitharaman recently said, "Monetizing operating public infrastructure assets is a very important financing option for new infrastructure construction. A 'National Monetization Pipeline' of potential brownfield infrastructure assets will be launched. An Asset Monetization dashboard will also be created for tracking the progress and to provide visibility to investors.”



On 15<sup>th</sup> Aug, 2021, PM Narendra Modi announced that India would launch a \$1.35 trillion national infrastructure plan that would boost the country's economy.

Narendra Modi quoted “It will help local manufacturers turn globally competitive and also develop possibilities of new future economic zones in the country,”

# INFRASTRUCTURE PUSH – NEED OF THE HOUR

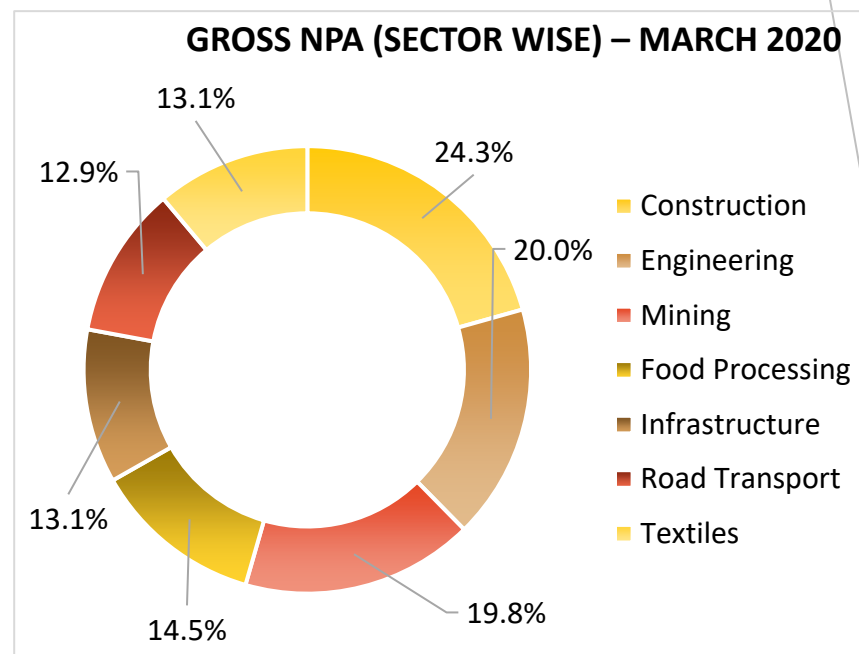
## INFRASTRUCTURE PUSH – A NECESSITY

- Infrastructure Sector is crucial for faster economic growth & alleviation of poverty in the country.
- Adequate infrastructure is also needed for integration of the Indian Economy with other economies of the world.
- China has spent heavily on infrastructure in the past & are reaping its benefits now. India needs to spend 111 lakh crores in the next 5 years to become a \$5 trillion economy.

## DEFICIT IN INDIAN INFRASTRUCTURE

- Poor infrastructure is one of the biggest hurdles facing GOI's ambitious program, "Make in India," which aims to enhance the manufacturing capabilities and support higher growth for generating employment.
- Corporate growth and investments is lacking as a result of infrastructure deficit by GOI.
- In addition, transportation infrastructure is enormously facing capacity constraints.

**KEY TAKEAWAY** – A strategy for implementing infrastructure projects using the PPP model will be sustainable and less taxing on the government's financial resources. Although the private sector is profit-driven, it can be beneficial to the government, the private sector, and the nation provided it is properly governed.

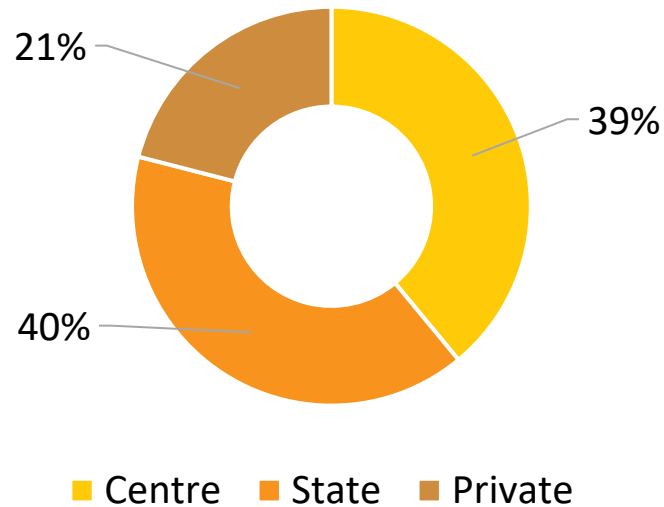


# GOVERNMENT INVESTMENTS FOR 2019-25

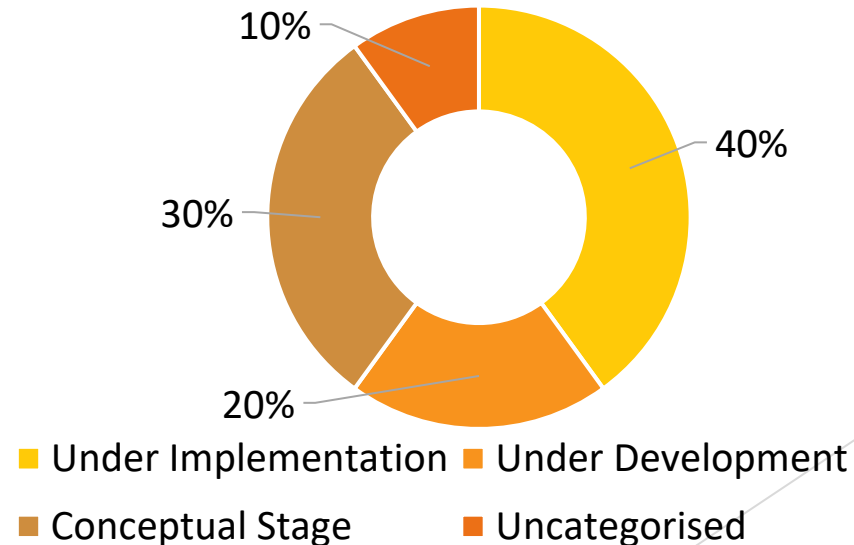
For FY 2019-25, the Indian government has set aside **Rs. 111 lakh crore** for the National Infrastructure Pipeline. Energy, highways, urban, and railway infrastructure projects account for over 71 percent of India's expected infrastructure investments.

As of December 2020, projects worth Rs. 44 lakh crore (40%) are in the execution stage while projects worth Rs. 22 lakh crore (20%) are in the development stage.

SHARE OF NIP (RS 111 LAKH CRORE)

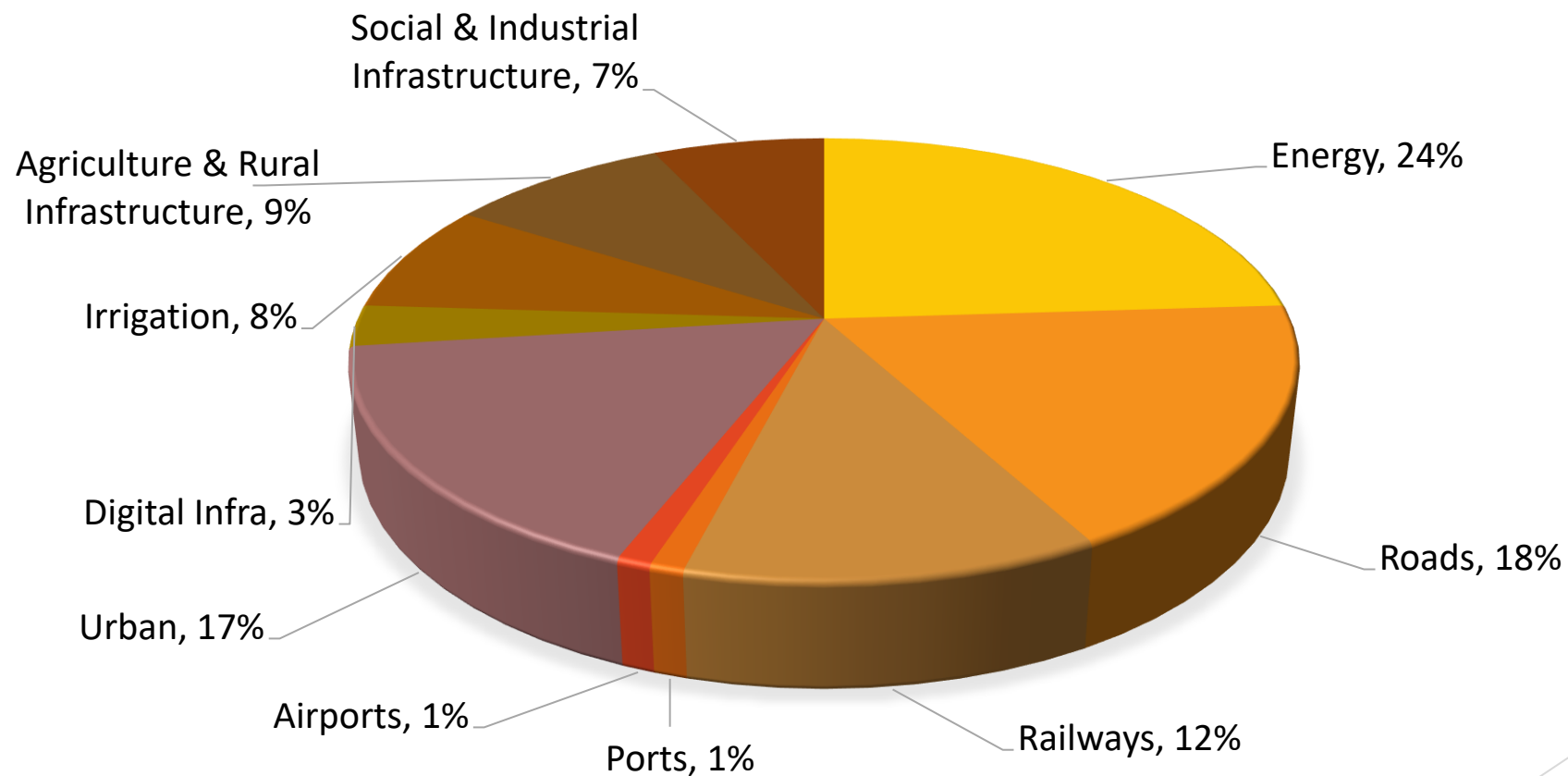


STAGE OF IMPLEMENTATION (RS 111 LAKH CRORE)



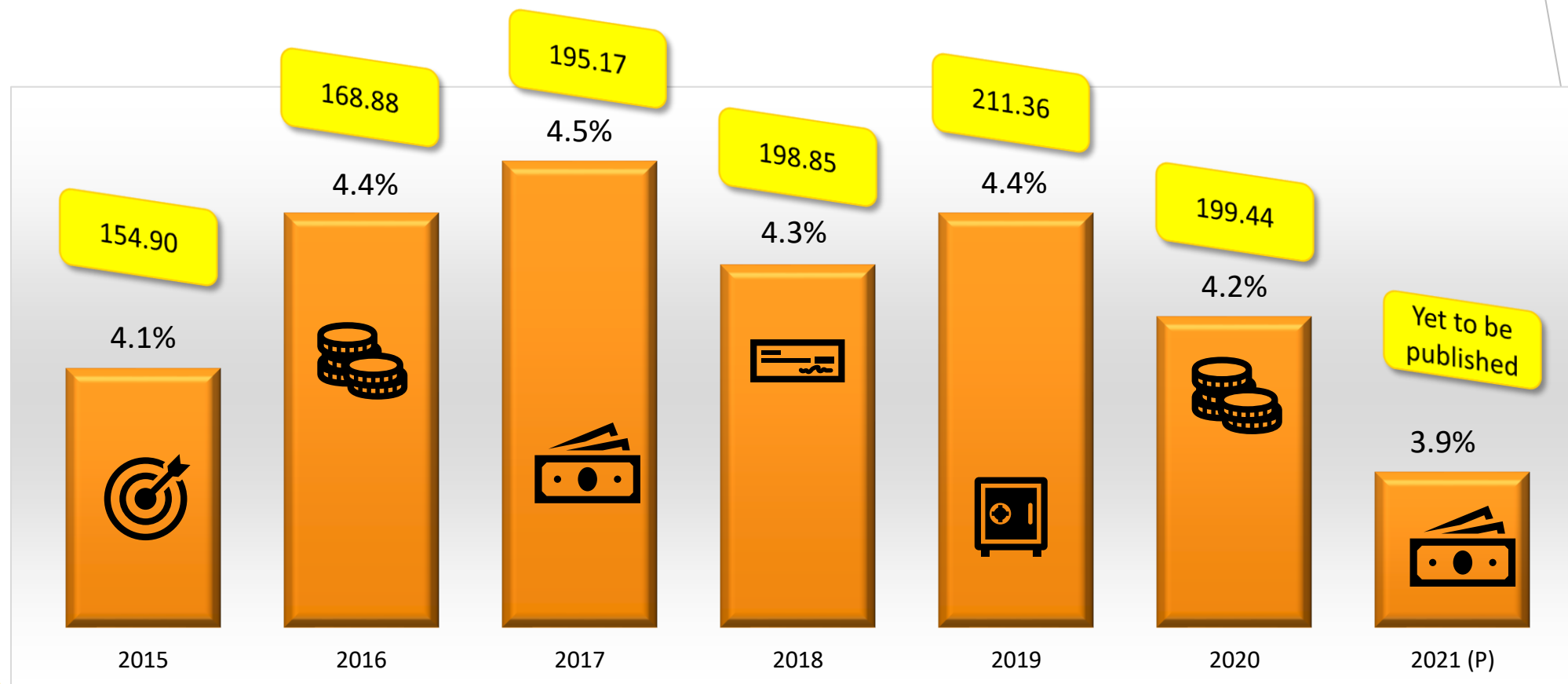


# SECTOR-WISE BREAK-UP OF CAPITAL EXPENDITURE OF RS 111 LAKH CRORE



*Source: PPP In India (Department of Economic Affairs)*

# INVESTMENTS IN INFRASTRUCTURE AS A SHARE OF INDIA'S GDP



SPENDING TO GDP - %

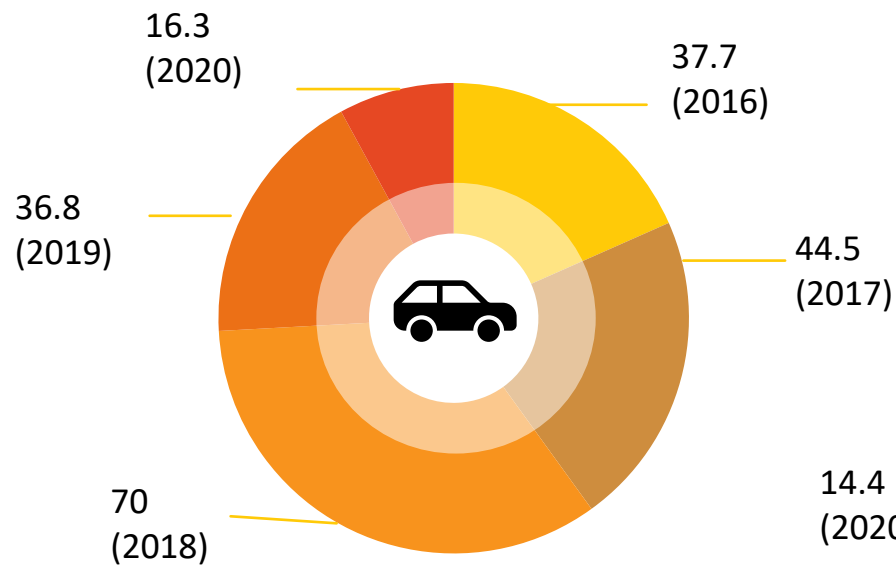
INVESTMENTS - INR TRILLION



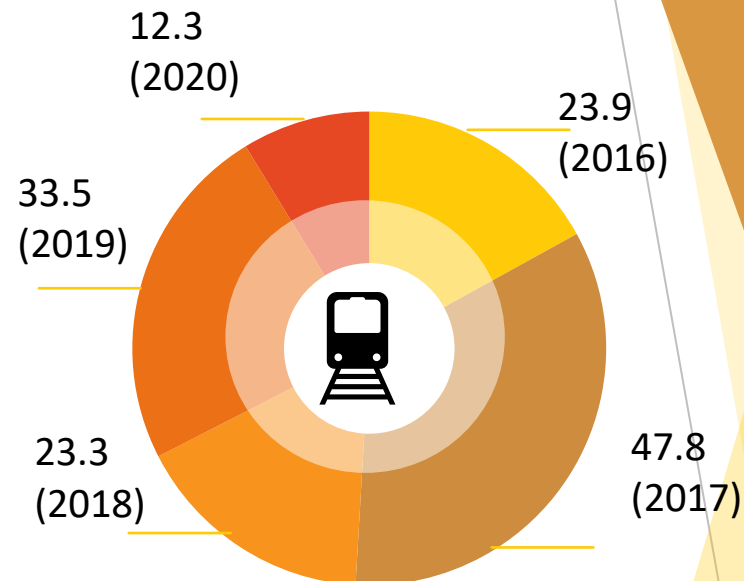
# INVESTMENTS IN INDIAN INFRASTRUCTURE (1/2)

**US\$ Billion**

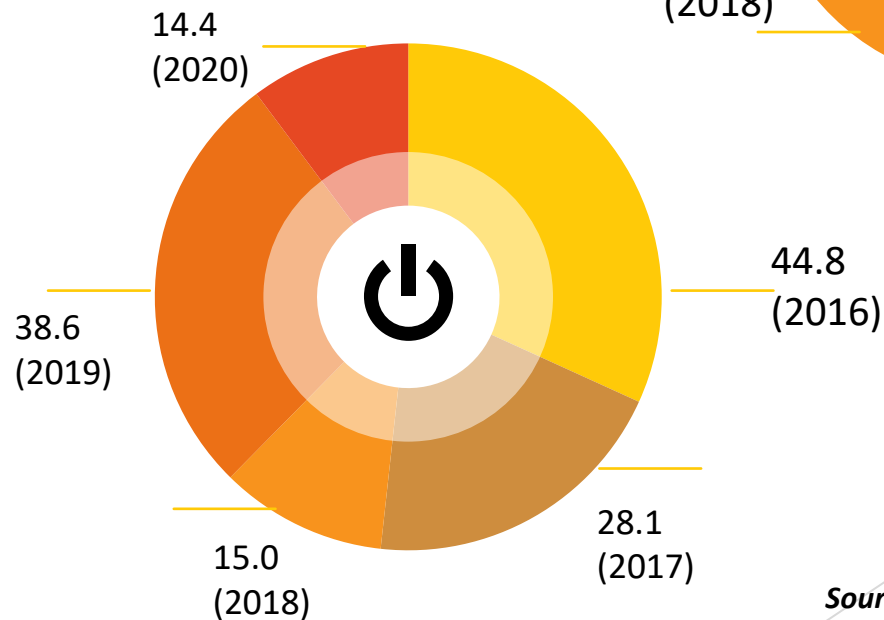
## ROADS



## RAILWAYS



## POWER & POWER DISTRIBUTION

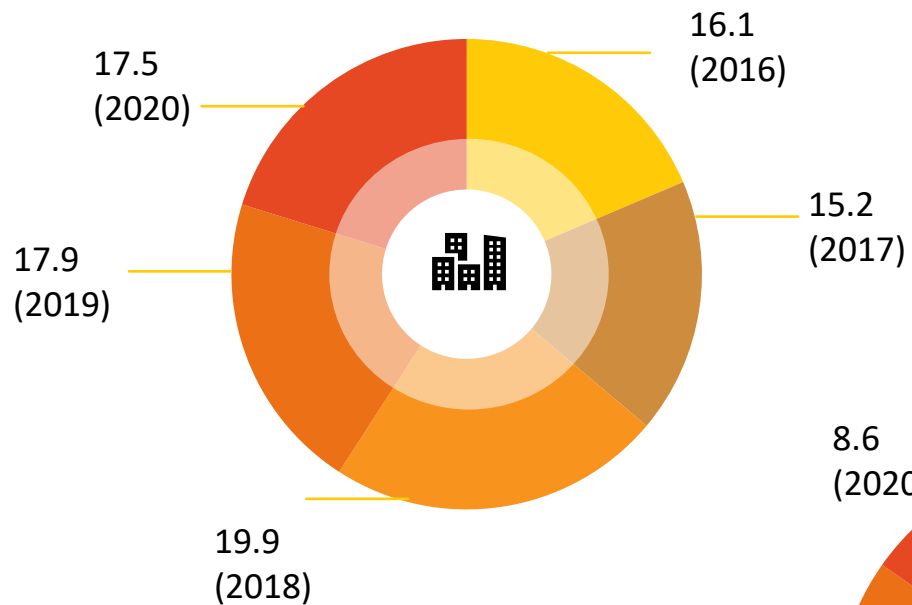


Source: IBEF Reports

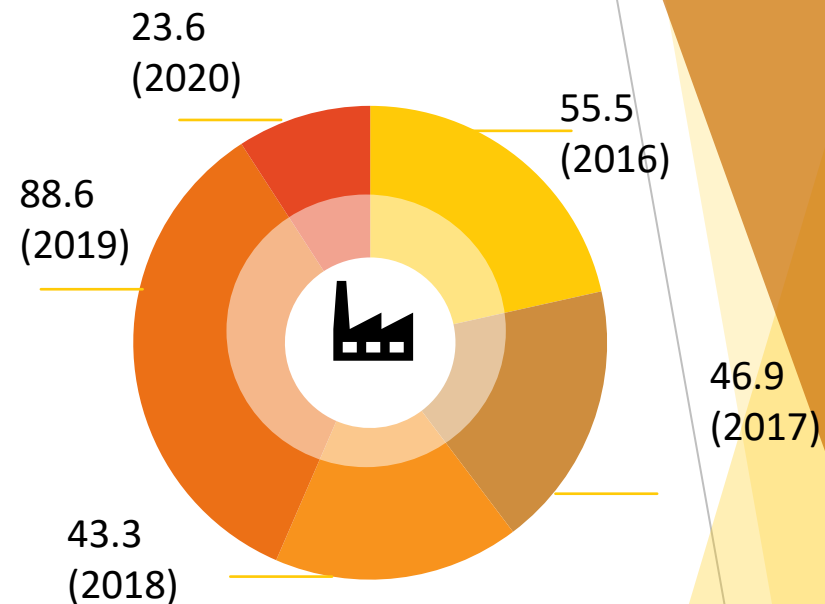
# INVESTMENTS IN INDIAN INFRASTRUCTURE (2/2)

*US\$ Billion*

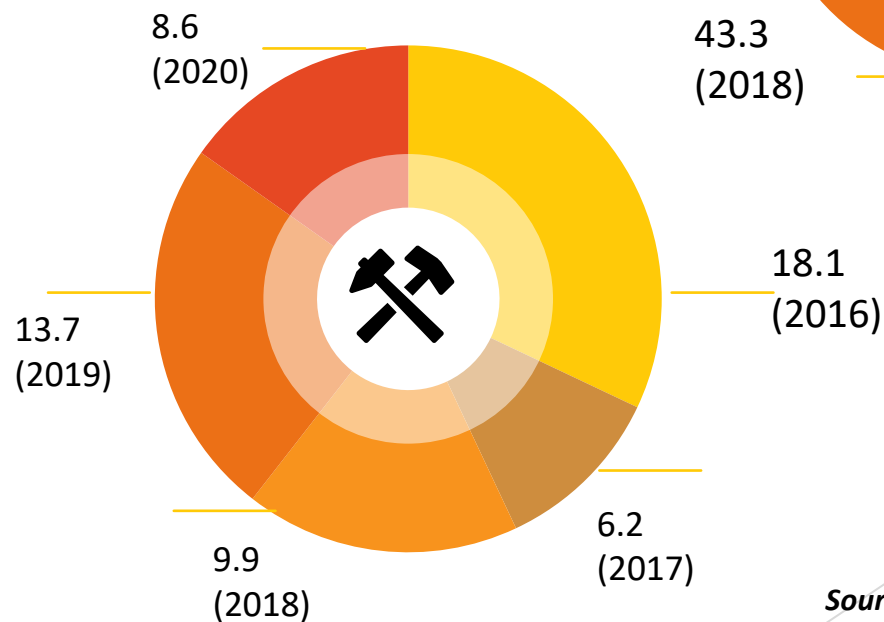
## REAL ESTATE



## MANUFACTURING

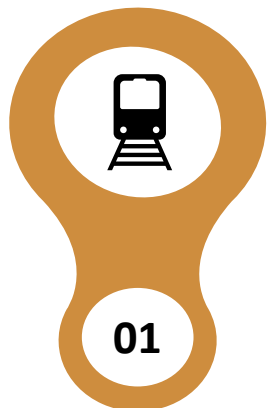


## MINING



*Source: IBEF Reports*

# PUBLIC PRIVATE PARTNERSHIP DISTRIBUTION – SECTOR WISE



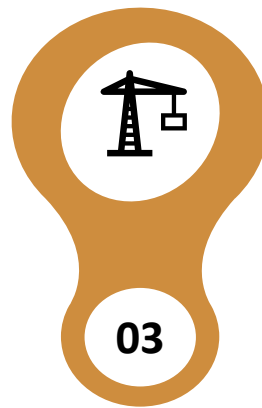
## RAILWAYS

Indian **RAILWAYS** issued a 'Request for Qualification (RFQ)' in February 2021 for a public-private partnership to renovate New Delhi railway station, with a project cost of Rs. 5,000 crore.



## AIRPORT

In the next five years, the Airports Authority of India expects to invest Rs. 25,000 crore in **AIRPORT** facilities & infrastructure. Between 2018-2023, India's airport infrastructure is estimated to see investment of Rs 42,000-45,000 crore.



## PORTS

In FY 22, the principal **PORTS** are slated to complete seven public-private partnership projects worth over Rs. 2000 crore.



## ROAD

Numerous private firms have entered the market for **ROAD** transportation infrastructure projects through the PPP model. In FY21, India had 125 public-private partnerships (PPPs) for a total of US\$ 23.25 billion.

# INDIAN INFRASTRUCTURE RANKING ON A GLOBAL LEVEL

COUNTRY	2017	2018	2019	2020	2021
Switzerland	1	2	2	3	1
Sweden	3	5	4	1	2
USA	2	1	1	5	6
Canada	10	7	12	8	8
United Kingdom	15	10	14	12	13
China	25	19	16	22	18
Australia	18	16	17	18	23
Russia	36	35	37	42	38
<b>India</b>	<b>60</b>	<b>56</b>	<b>55</b>	<b>49</b>	<b>49</b>
Brazil	51	52	54	53	52
South Africa	56	57	60	61	61

\*RANKING ON THE BASIS OF COMPILATION OF 64 COUNTRIES

*Source: IMD World Competitive Index*

# MAJOR PUBLIC/PRIVATE PLAYERS



# KEY INFRASTRUCTURE PROJECTS

Agra Lucknow Expressways, Hyderabad Growth Corridor, Nagpur Mumbai Express Way, Pune Metro Package 1 & 2, Nagpur Metro, Chennai Metro, Delhi Metro, 4 Lane Elevated Highway Project on NH-7 in Bangalore City

PNC Infratech, in collaboration with SPML Infra, has been awarded six new EPC projects from the State Water Supply & Sanitation Mission, Namami Gange & Rural Water Supply Department in Uttar Pradesh, including survey, design, DPR preparation, construction, commissioning, and O&M for a total of 2475 villages across six districts.



Major projects: NH6 Dhankuni to Kharagpur, NH4 Belgaum Dharwad, NH-3 Pimpalgaon - Nashik - Gonde Road (JV with L&T), Chennai Outer Ring Road, Wainganga Bridge, Ahmednagar Aurangabad Road

Rehabilitation and upgradation of NH-209 of Dindigul-Bangalore Road to four lane with paved shoulder in the State of Tamil Nadu under NHDP – IV on EPC basis. Four Laning of Hubli - Hospet Section of NH-63 in the state of Karnataka on EPC Mode.

# GOVERNMENT INITIATIVES

## ROADS & AIRPORTS

- The government budgeted Rs. 60,241 crore for road development and Rs. 57,350 crore for National Highways in the Union Budget 2021.
- By March 2022, the government intends to complete an 8,500-kilometer road project. Furthermore, by March 2022, an additional 11,000 km of National Highway routes will be constructed.

## RAILWAYS & METRO RAIL

- Indian Railways has planned the highest-ever total plan capital expenditure of Rs. 2,15,058 crore for FY21.
- The Union Budget for 2021 has allotted Rs. 110,055 crore to the Ministry of Railways.



## TELECOM, ENERGY & POWER

- A total of Rs. 9,000 crore has been allocated in the Union Budget 2021 to build and improve the country's telecom infrastructure. In addition, the energy sector received Rs. 42,824 crore in the Budget 2021.
- The government announced Rs. 3,05,984 crore (over five years) in the Budget 2021 for a revised, reform-based, and outcome-linked new power distribution sector scheme.

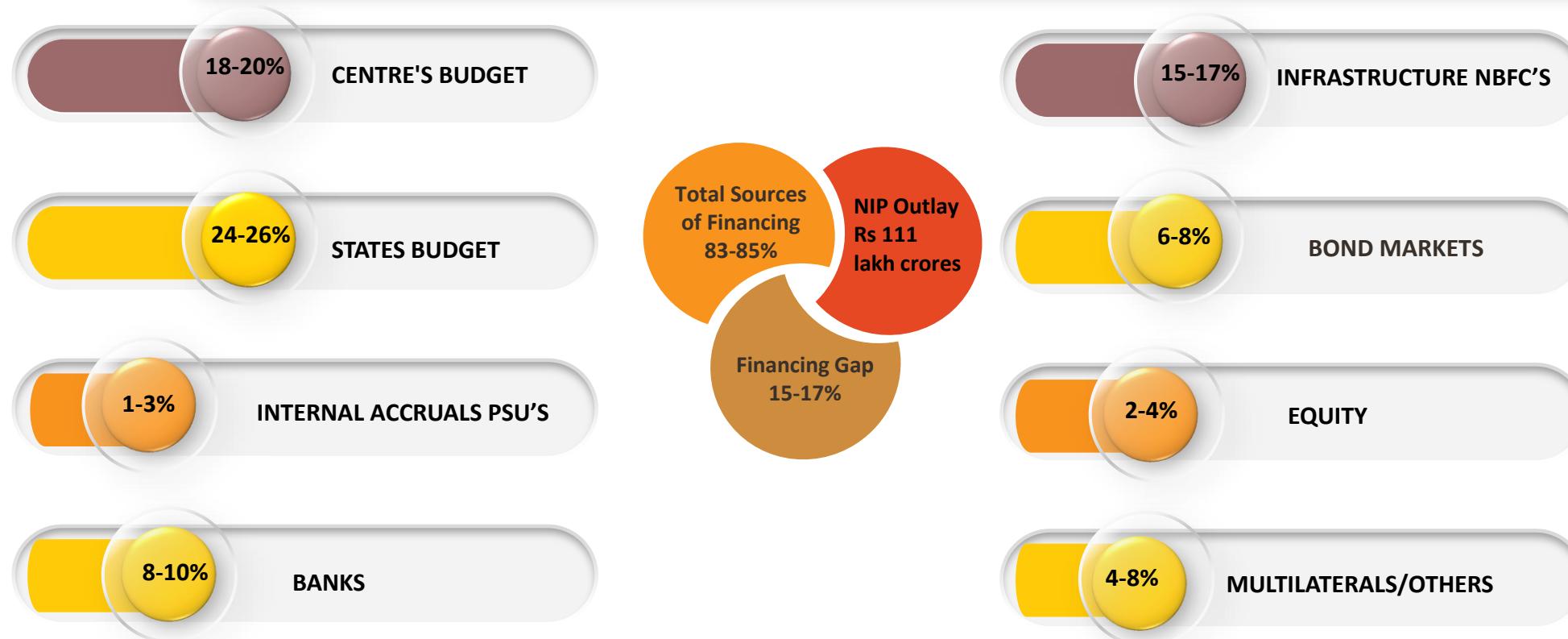
## URBAN

- In the Union Budget 2021, GOI proposed to spend Rs. 54,581 crore to the Ministry of Housing & Urban Affairs
- In addition, GOI announced Rs. 13,750 crore to AMRUT (Atal Mission for Rejuvenation & Urban Transformation) & Smart Cities Mission



# SOURCES OF FUNDING

## IMPORTANCE OF INVITS & REITS



**Importance of INVITS/REITS in Financing Gaps** - InvITs are collective investment vehicles which allow direct investment of money from individual and institutional investors in infrastructure projects to earn a small portion of the income as return. REITs and InvITs help attract private money into infrastructure and real estate industries by addressing concerns including finance, long-term capital, optimal leverage, limited exit alternatives, and corporate governance.

InvITs play a significant role in the monetization of existing projects in industries, including roads and highways, conventional power, renewable energy, airports, trains, digital infrastructure etc. It assist government's infrastructure ambitions & help in asset monetization plans which would also benefit banks achieve their capitalization requirements.

*Source: PPP In India (Department of Economic Affairs)*

# SECTOR WISE ANNUAL CAPITAL EXPENDITURE IN INFRASTRUCTURE (Rs Trillion)

MINISTRY / DEPARTMENT	2020	2021	2022	2023	2024	2025	No phasing	2020-25
Energy	2.34	4.42	4.42	4.88	4.98	4.67	1.40	26.90
Roads	3.33	3.83	3.57	2.53	2.41	3.33	1.35	20.34
Railways	1.34	2.62	3.09	2.74	2.21	1.68	-	13.68
Ports	0.13	0.18	0.21	0.16	0.08	0.10	0.35	1.21
Airports	0.19	0.22	0.25	0.21	0.25	0.05	0.26	1.43
Urban*	2.98	4.62	4.04	2.35	2.17	1.60	1.43	19.19
Digital Communication	0.78	0.62	0.55	0.39	0.38	0.38	-	3.10
Irrigation	1.14	2.01	1.76	1.37	1.15	0.70	0.81	8.94
Rural & agriculture infrastructure	1.44	1.81	2.14	1.14	1.08	0.28	1.54	9.43
Social & industrial infrastructure	0.76	1.21	1.30	0.91	0.69	0.36	1.85	7.08
<b>TOTAL</b>	<b>14.42</b>	<b>21.54</b>	<b>21.32</b>	<b>16.47</b>	<b>15.41</b>	<b>13.15</b>	<b>8.99</b>	<b>111.30</b>

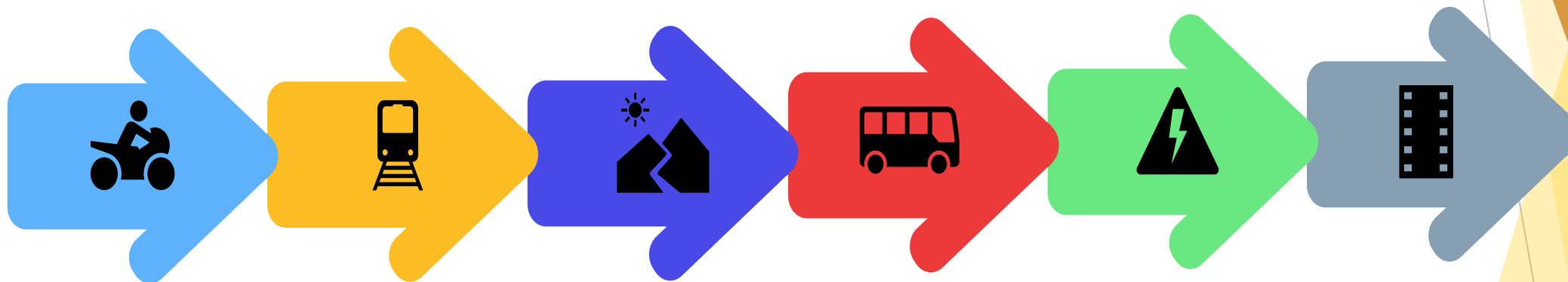
\*Urban includes Atal Mission for Rejuvenation and Urban Transformation, Smart Cities, MRTS, Affordable Housing, Jal Jeevan Mission

# KEY HIGHLIGHTS OF UNION BUDGET 2021-22

The **Indian Railways** received Rs. 1,10,055 crore, with Rs. 1,07,100 crore allocated for capital expenditure.

The government has set aside Rs 18,998 crore for **Metro Projects**

The Mega Investment **Textile Parks** programme was created with the goal of creating world-class textile infrastructure and seven textile parks in three years.



The government has given the infrastructure industry a major boost by providing Rs. 233,083 crore for **transportation**.

**Road transport and highways** have been granted Rs. 1,18,101 crore.

The government has allocated Rs. 305,984 crore over the next five years for a revamped, reform-based, and outcome-driven new **power distribution** sector scheme.

# CHALLENGES IN INFRASTRUCTURE FINANCING

## FINANCING & STRESSED ASSETS

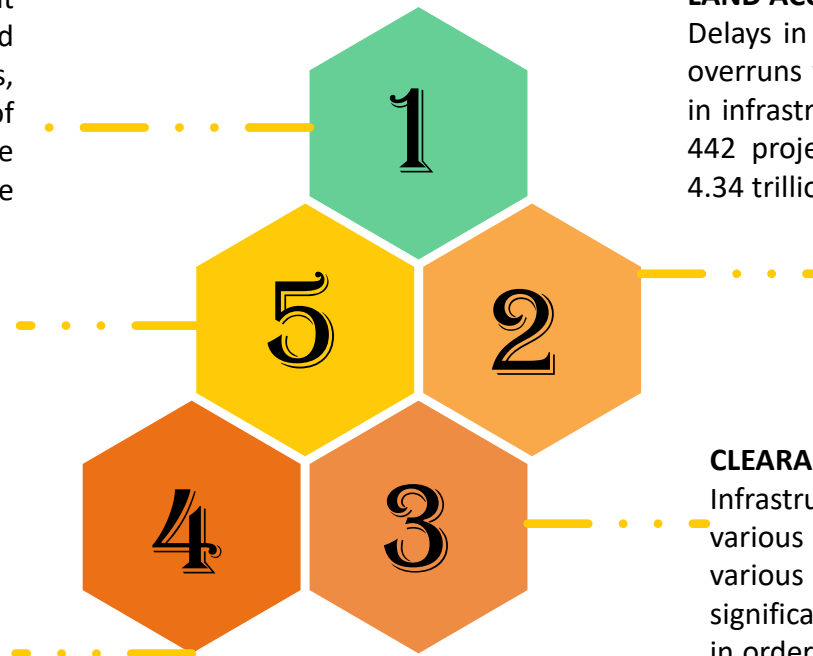
The infrastructure sector is facing significant challenges in terms of finance availability to fund new projects. Traditional infrastructure lenders, such as banks and NBFCs, have a significant level of exposure to stressed assets in the infrastructure sector. As per RBI, around 18% of infrastructure related loans in India are NPA's.

## ENVIRONMENTAL IMPACT ASSESSMENT

Environmental controls and norms have been identified as one of the primary causes of infrastructure project delays, particularly in the power sector. While new projects must adhere to these laws, existing projects may be required to adhere to amended standards as the project progresses.

## PRE-CONSTRUCTION PLANNING

The pre-construction phase of infrastructure projects is lengthy due to the existing negative impact of many obstructions such as land acquisition, legislative permissions, delayed financial closing, and so on. As a result, project commissioning and completion are delayed.



## LAND ACQUISITION

Delays in land acquisition leads to increase in cost overruns which discourages private sector to invest in infrastructure development projects. As many as 442 projects saw cost overruns amounting to Rs 4.34 trillion as a result of delay in acquisition.

## CLEARANCES FROM NUMEROUS AGENCIES

Infrastructure projects require clearances at various levels of government. At each stage, various approvals are required, which significantly delays infrastructure projects. GOI in order to ease of doing business has launched a single-window clearance mechanism for investors to attract foreign investment. The single-window portal would integrate the existing clearance systems of various central and state departments.

# KEY GROWTH DRIVERS



**TECHNOLOGY** – In a virtual world, infrastructure providers and governments will have to pay much greater attention to how they deliver and manage projects. More businesses will turn to technology to increase operational efficiency, project monitoring, and construction supervision. Customer access and engagement will be a driving force for technology adoption across industries.

**MULTILATERAL AGENCIES** – Financially burdened governments will have less capacity to invest in infrastructure to stimulate economic growth. Hence, we see multilateral agencies like the Asian Development Bank, Asian Infrastructure Investment Bank and World Bank playing a significant role in catalyzing sector reforms and helping develop the pipeline of economically viable as well environmentally sustainable projects.

**CAPITAL RECYCLING** – Brownfield projects will likely be offered to the private sector to manage and operate, freeing up funding for greenfield development. While institutional finance is available for low-risk operational brownfield projects, investor interest for riskier greenfield projects remains sluggish. This will not only free up risk money, but it will also help establish a successful precedent for PPP's in infrastructure operations.

**INCREASED FDI INVESTMENTS AND PARTNERSHIPS** – Investors looking for emerging market exposure in Southeast Asia are likely to explore for joint venture and partnership options with local businesses. Foreign players are likely to show substantial interest in renewable energy projects and the logistics sector. Many nations, notably India and Indonesia, are considering privatizing old assets in order to reinvest in new projects.

# FUTURE ROADMAP

**INVESTMENTS:** In the coming years, the Indian government intends to establish a National Infrastructure and Investment Fund with an initial investment of INR 200 billion to increase investment in infrastructure projects.

**ROADS:** By 2022, 200,000 kms of national highways are projected to be finished. The National Highway Authority of India (NHAI) would be able to raise Rs. 1 lakh crore yearly from tolls and other sources during the next five years.

**RAILWAYS:** The Indian Railways launched the Vision 2024 National Rail Plan to accelerate the implementation of critical projects such as multitrack congested routes, achieve 100 percent electrification, and increase the speed to 160 kmph on the Delhi-Howrah and Delhi-Mumbai routes by 2024.

**POWER & PORTS:** The Indian government has released a roadmap to reach 227 GW of renewable energy capacity by 2022 (including 114 GW of solar power and 67 GW of wind power). Domestic waterways have found to be a cost-effective and environmentally sustainable mode of freight transportation. The government aims to operationalize 23 waterways by 2030.

*Source: IBEF, Indian Chamber*

## VALUATION

### BUSINESS & BUSINESS INTERESTS

- Business & Equity Valuation
- Valuation of Start-up / IPO / REIT / M&A, Leverage Buyout Valuation
- Valuation of ESOPs and Sweat Equity
- Valuation for Tax, Capital Gain, Transfer Pricing
- Valuation for Financial Reporting, Fairness Opinion, Purchase Price Allocation (PPA) for M&A
- Determination of Swap Ratio under Merger and Demerger
- Valuation of Inventory / Stocks and Debentures / Receivables
- Litigation and Dispute Support

### INTANGIBLE ASSETS

- Valuation of Brands, Goodwill, Trademark, Copyright, Patents, Other Intangible Assets & Intellectual Property
- Valuation for Financial Reporting, Fairness Opinion, Purchase Price Allocation (PPA) for (M&A)
- Impairment Studies of Intangible Assets

### FINANCIAL INSTRUMENTS

- Valuation of Financial Securities, Instruments & Derivatives
- Valuation for M&A Transaction, under Insolvency & Bankruptcy Code

### IMMOVABLE ASSETS (REAL ESTATE)

- Valuation of Land, Building Residential / Commercial / Industrial Estates
- Valuation of Infrastructure Assets, Expressways / Toll Ways & Specialized Assets
- Valuation for Capital Gain Tax, Stamp Duty, Impairment Studies for Financial Reporting, PPA, Cash Generating Units
- Mines, Mineral Advisory and Valuation
- Valuation under Insolvency & Bankruptcy Code (IBC)
- Movable Assets (Plant & Machinery)
- Valuation of Industrial Assets and Plant & Machinery
- Valuation of Infrastructure Assets & Specialized Assets, Power Plants
- Fairness Opinion, Purchase Price Allocation for M&A
- Impairment Studies for Financial Reporting, Cash Generating Units
- Valuation under Insolvency & Bankruptcy Code (IBC)

### TRANSACTION ADVISORY

- Buy side due diligence and closing due diligence
- Vendor due diligence and vendor assistance
- Sale Purchase agreement (SPA) and
- Business Transfer Agreement (BTA)
- Assistance in deal negotiation



## RISK CONSULTING

### STRATEGIC & RISK ADVISORY SERVICES

- Techno Economic Feasibility Studies
- Economic Viability & Financial Appraisal
- Business Plan Review

### TECHNICAL SUPPORT SERVICES

- Lender's & Investor's / Independent Engineer Services
- Technical Due Diligence, Technical Opinions
- Chartered Engineers Opinion & Certification
- Project Cost Investigations
- Project Appraisal & Monitoring

### AGENCY FOR SPECIALIZED MONITORING (ASM)

- Term Loan Monitoring
- Working Capital Monitoring
- Cash Flow Monitoring

### FINANCIAL & TREASURY RISK ADVISORY

- Assessment Of Credit Risk, Market Risk & Interest Rate Risk
- Assets Quality Review & Stress Testing
- Assessment of Expected Credit Loss
- Assessment of Asset Liability Management & Liquidity Risk

## RISK CONSULTING (CONT....)

- M&A Advisory:
  - Sell Side, Buy Side
  - Domestic & Cross Border
- Partner, Joint Venture & Strategic Alliances
- Government Disinvestment & Privatization
- Fund Raising – Equity, Mezzanine, Structure Finance & Debt
- Distress Investment Banking – One – Time Settlement, Priority and Interim Funding, Rescue Financing and Buyouts

## DISPUTE & LITIGATION SUPPORT

- Valuation Services
- Damages & Loss of Profit Assessment
- Independent Expert Testimony
- Anti – Trust & Competition Advisory
- Post – Acquisition Disputes, Joint Venture & Shareholder Disputes
- Civil & Construction Disputes, Real Estate Disputes
- Intellectual Property Rights Dispute

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EXECUTIVE  
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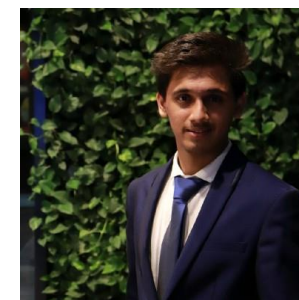
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