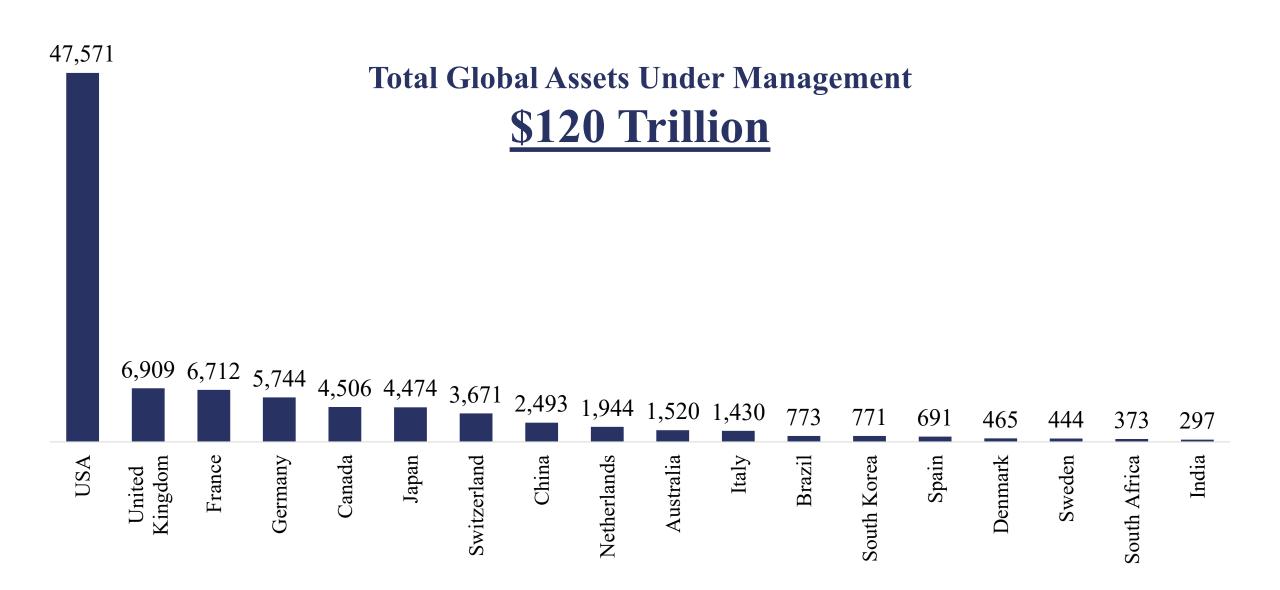


Mobilizing Institutional capital in Infrastructure

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Global Assets Under Management by Country (\$B)



Who are Institutional Investors?

Limited Partners (LPs)

Sovereign Wealth Funds, Pension Funds, Insurance Funds, Endowments etc.

Invest directly (limited) or through GPs

- Small investment teams
- Less involved in investments management
- Prefer minority stake in investing

General Partners (GPs)

Fund Managers, Asset Management Companies etc.

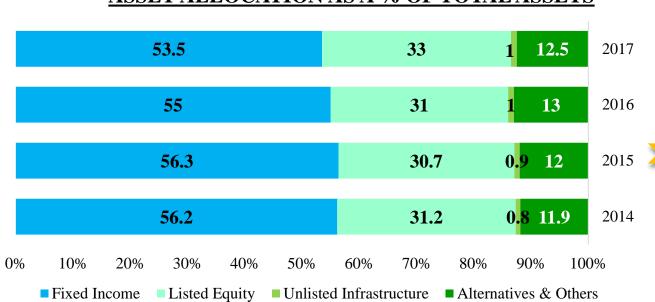
Raise money from LPs

- *Mandate based investing*
- Money raised for Limited term
- *Minority / Majority Stake but mostly active management*

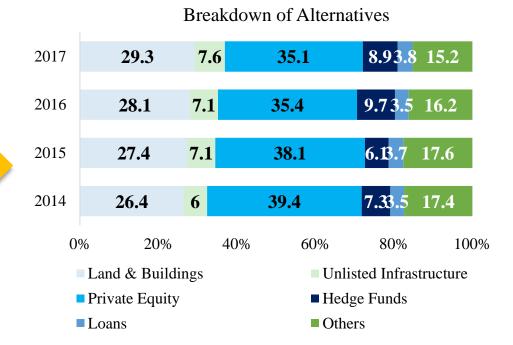




Where do Institutional Investors invest?

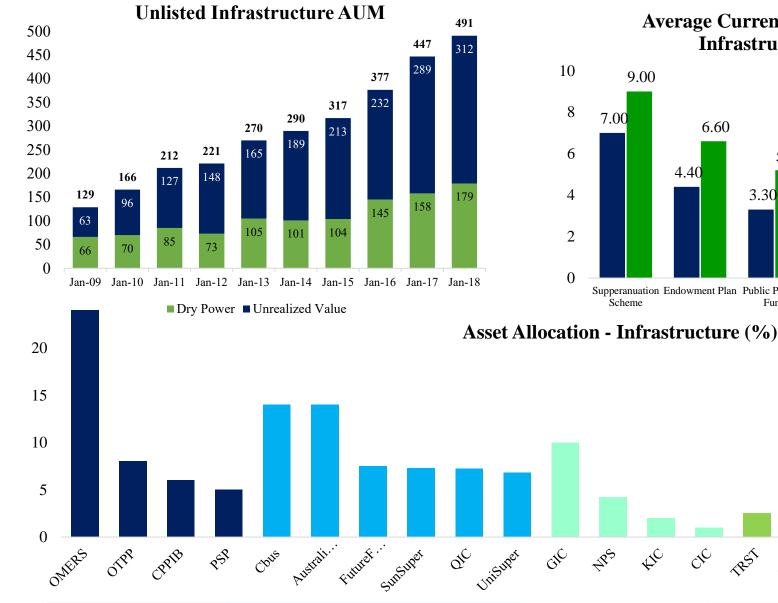


ASSET ALLOCATION AS A % OF TOTAL ASSETS



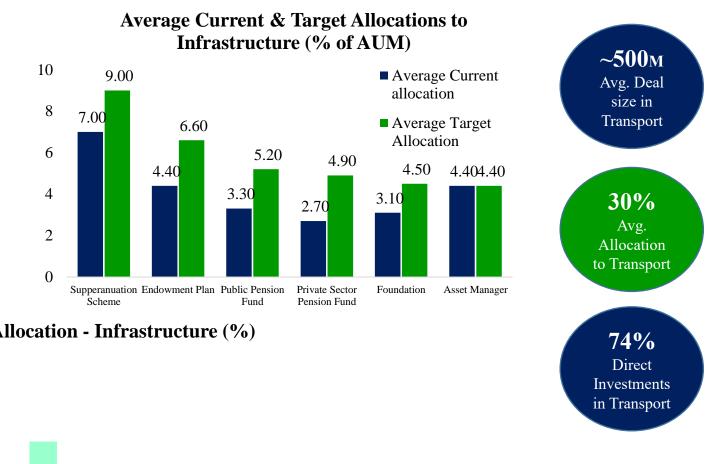
	Global Fixed Income	Global equities	Alternatives	Unlisted Infrastructure
Challenges	• Prolonged low yields	 High Volatility Low Global Growth Heightened Political Risks 	Inflated valuationsInfrequency of value appraisal	 Inflated valuations Stringent regulations Non Availability of assets

Infrastructure – A rising Asset Class



Australia

Canada



Oregon

USA

Alaska

World... Calstra Callers BCCM

Br...

ABP

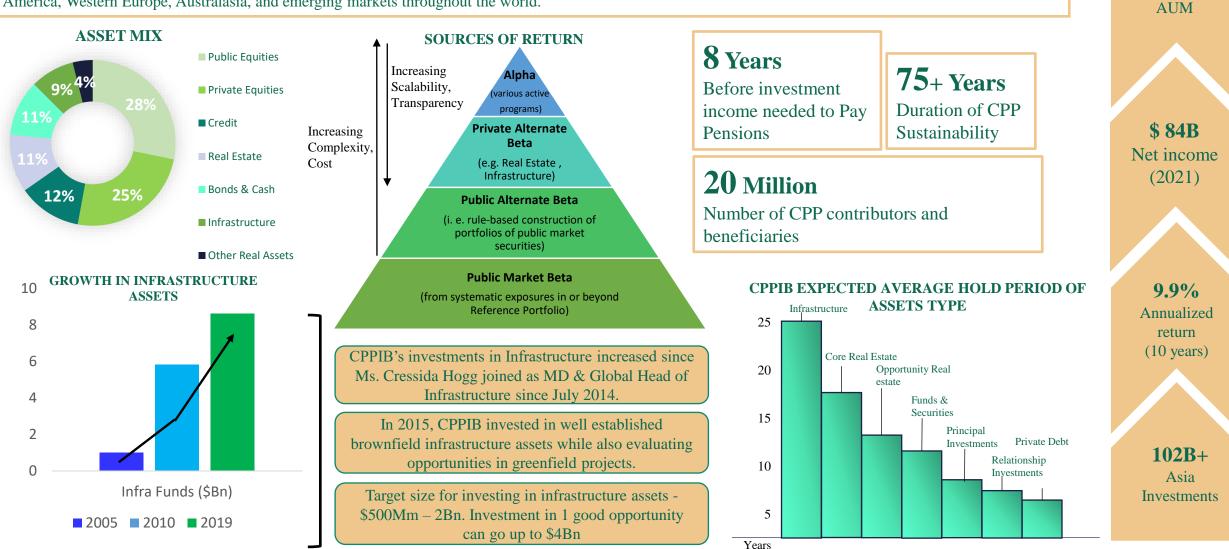
ARG

Europe

CPP INVESTMENT CANADA PENSION PLAN INVESTMENT BOARD

OVERVIEW

CPPIB is a state owned pension fund sponsor which invests in public equity, fixed income, and alternative markets across the globe. The firm also invests in private equity, real estate and infrastructure projects, and energy and natural resources. The target investment size for infrastructure investments is between C\$500 million (\$465 million) to C\$2000 million (\$1863 million) and depending upon the investment opportunity the firm might also invest C\$4000 million (\$3,727.24 million) in a single investment. The geographical focus has been international markets with strong regulatory frameworks, typically in North America, Western Europe, Australasia, and emerging markets throughout the world.`



\$540Bn

CPP INVESTMENT CANADA PENSION PLAN INVESTMENT BOARD

Roads	Renewable	Energy & Res.	Others
407 ETR	🌔 canterra	CALPINE"	awg
Canada 50% C\$7.1Bn 2010	Canada 99% C\$260 Mn 2014	USA \$900 Mn 2017	UK 32% C\$1.05Bn 2006 (Water)
TEN	CESP Companhia Energiètica de São Paulo	Williams.	
Mexico 29% C\$748Mn 2016	Brazil 20% R\$975 Mn 2018	USA 35% \$1.3 Bn 2019	Australia 86% 2009 (Telecom)
Chicago SKYWAY	Votorantim Energia		grupo Gas Natural Fenosa
US 33.33% \$560Mn 2016	Brazil 50% R\$664 Mn 2018	Canada 99% C\$1.7Bn 2015	Spain 86% E 900Mn 2009 (Gas)
GRUPO COSTANERA	MAPLE POWER		tgp
Chile 49.99% C\$1.14Bn 2012	UK 50% 2019	Canada 99% C\$260 Mn 2014	Peru 49.9% \$ 1.4Bn 2013 (Gas)
🕞 L&T IDPL		TEINE ENERGY	ASSOCIATED BRITISH PORTS
India \$332 Mn 2014	NA & EU \$2.25 Bn 2018	Canada C\$1.3Bn 2011	UK 34% £1.62 Bn 2015 (Ports)

BOARD CPP INVESTMENT INVESTMENT IN ASSOCIATED BRITISH PORTS

	Associated British Ports Holdings Ltd owns and operates 21 ports in the United Kingdom,	21 Ports
BRITISH PORTS	managing around 25 per cent of the UK's sea-borne trade. The company's activities cover transport, haulage and terminal operations, ship's agency, dredging and marine consultancy.	• Ayr
	transport, naulage and terminal operations, sinp's agency, dredging and marine consultancy.	• Port of Barrow
		Barry Docks
1947	Nationalized by Labour Govt. post Second World War	Fleetwood
		Port of Garston
1962	British Transport Docks Board (BTDB) setup to manage Nationalized Ports	 Goole Bort of Crimebu
	Diffusit Hunsport Doeks Dourd (DTDD) setup to intuitage Hunohunded Forts	 Port of Grimsby Hams Hall
1981	Limited company actus and renamed to Aggaziated Dritich Danta	Port of Hull
1901	Limited company setup and renamed to Associated British Ports	 Port of Immingham
1002		• Port of Ipswich
1983	Listed on London Stock Exchange	King's Lynn
		Port of Lowestoft
2006	Goldman Sachs and Other Companies acquired the company for £ 2.8Bn & delisted from LSE	Newport Docks
		• Plymouth
2015	Anchorage Ports (CPPIB) acquired 33.3% (£1.62 Bn) from Consortium	Port of Port Talbot
1		• Silloth
Current		 Port of Southampton Port of Swarzan
	33.3% OMERS 10% (الهيئة العامة للإستثمار 23% GIC 33.3% CPP INVESTMENT 23% BOARD	 Port of Swansea Toignmouth
Holding	v i BOARD	TeignmouthTroon
		110011

OVERVIEW

Brookfield is a global alternative asset manager with approximately \$560 billion in assets under management. It has over a 120-year history of owning and operating assets with a focus on property, renewable energy, infrastructure and private equity. It manages one of the largest portfolios of premier office properties and renewable energy generating facilities as well as long-life infrastructure assets that include utilities, transport and energy and timberlands in North and South America, Australasia and Europe. Brookfield is publicly listed on the NYSE, TSX and Euronext Amsterdam.

INVESTMENT GUIDELINES

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 \geq

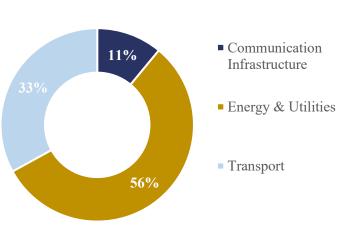
thinking

our cost of capital

Value Based asset acquisition

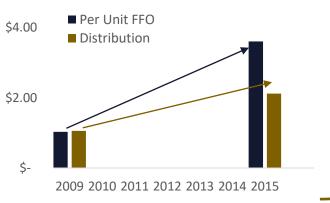
Superior returns often require **contrarian**

Invest where **competitive advantage**

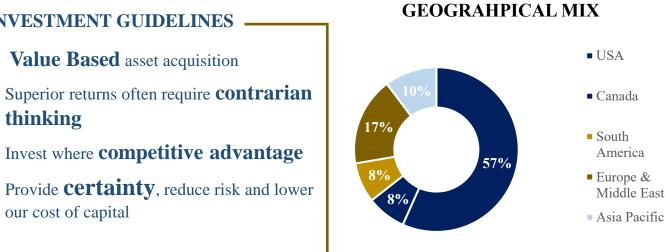


ASSET MIX

FFO & DISTRIBUTION



FUND STRATEGY **Optimize cash** Opportunistic flows and Recycling of value capital Expansion through Accretive acquisitions Access various Conservative markets for Low Investmentcost capital grade



CASHFLOW MANAGEMENT

Hedge ~75% of expected FFO generated in foreign currencies

90% high quality cash flows; regulated or contracted

70% cash flows indexed to inflation; 60% cash flows with no volume risk

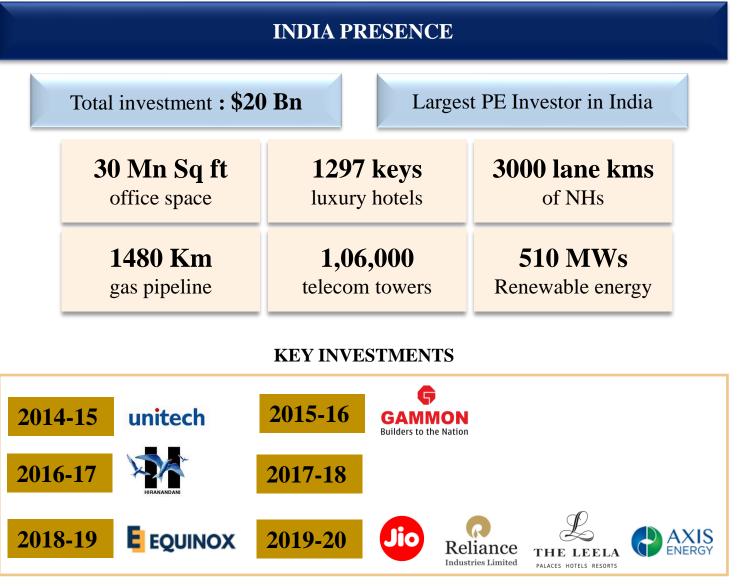


Payout growth

target

\$725 Bn





Utilities	Transport	Energy	Data Infra
6.6 million Electricity And Gas Connections	32,300 km Rail operations	16,500 km Natural gas pipeline	9,100 Multipurpose towers and active rooftop sites
2,700 km Regulated natural gas pipeline	4,000 km Toll roads	600 bcf Natural gas storage	20,000 km Fiber backbone
2,000 km Electricity transmission lines	13 Ports	1.6 million Residential infrastructure customers	52 Data centers

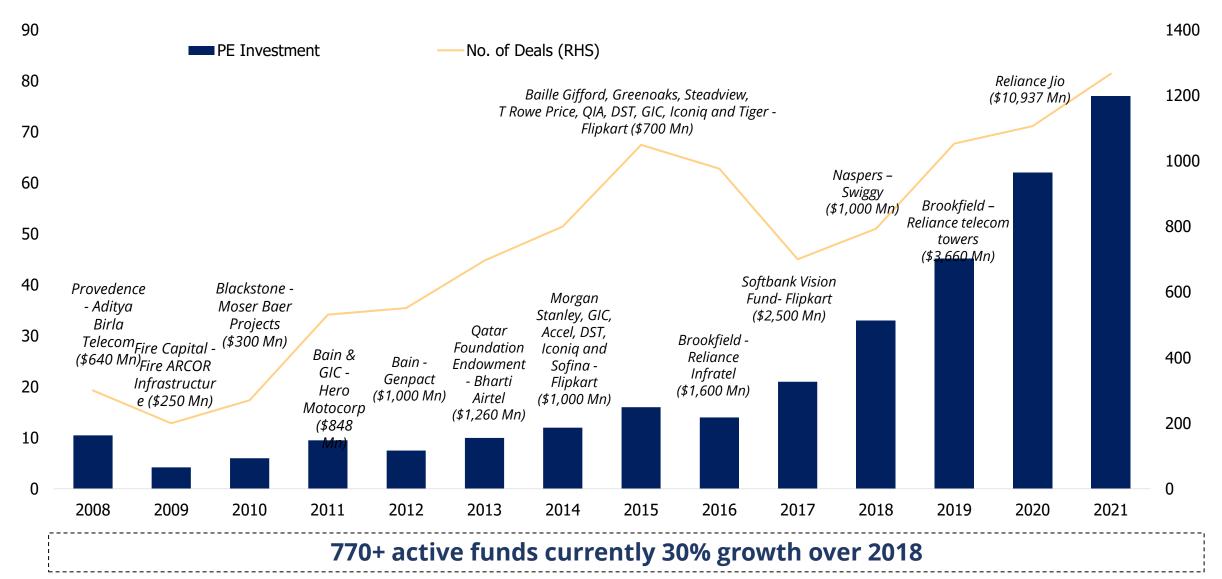
VL

VLI offers logistics solutions to integrate ports, railways and terminals, with capacity to meet, with increasing efficiency, the demand of the main players that move the economy of the country. The company encompasses the Norte Sul (FNS) and Centro Atlântica (FCA) railroads, as well as integrating terminals, which link loading and unloading of products to rail transport, and the operation of port terminals located in strategic axes of the Brazilian coast, such as Santos (SP), São Luís (MA), Barra dos Coqueiros (SE), São Gonçalo do Amarante (CE) and Vitória (ES).

		\$	2007	Vale (one of the world's largest mining companies incorporated VLI by acquiring 2 privatized railroad assets for R\$ 1.5Bn
more than 7.500 employees	3 own ports	more than 9 billion invested by 2019		
			2014	Vale concluded the sale of 20% and 15.9%, respectively, to Mitsui and Investment Fund of the Seniority Guarantee Fund (FI-FGTS)
8 intermodal terminals	5 logistic corridors	North-South Railroad Central-Atlantic Railroad	2014	Brookfield Asset Management acquired 26.5% of the company, taking control away from Vale.
	2-2	2-		
	of the second se	ST.	2014-19	Brookfield & Others undertook R\$9 billion in expansion projects
present in more than 300 municipalities e 10 states	volume of ports in 2016: 25.540 million tonnes	volume of railways in 2016: 48.115 million tons		

Institutional Investments in India

PRIVATE INSTITUTIONAL INVESTMENTS



Source : Grand Thornton , VCCircle, Venture Intelligence, EY, Bain

LP INDIA INVESTMENT EXPERIENCE

ADIA دھاڑ آبو ظبیں للاستقصار Abu Dhabi Investment Authority	Energy Housing Highways ^{Mi Mi Mi}	Railways Retail Consumer goods	Growth capital in existing platforms
FAIRFAX FINANCIAL HOLDINGS LIMITED	Airports Logistics Financial Services M M SM	Infrastructure Retail Consumer goods	Controlling stake in operational assets
CPP INVESTMENT BOARD	Real Financial Estate Services Logistics M M SM	Healthcare ^{Financial} Retail Services	Co-investments in M&A deals
TEMASEK	Financial Logistics Energy Services _{Mi} Mi Mi	Healthcare Natural Consumer Resources goods	New platform creation with experienced operators
CDPQ	Renewables Logistics Real Estate M M M	Financial Healthcare Services Retail	Indirect investments through GPs
INVESTISSEMENTS INVESTMENTS	Highways M	Energy Telecom	Mi Minority hold M Majority hold SM Significant Minority hold

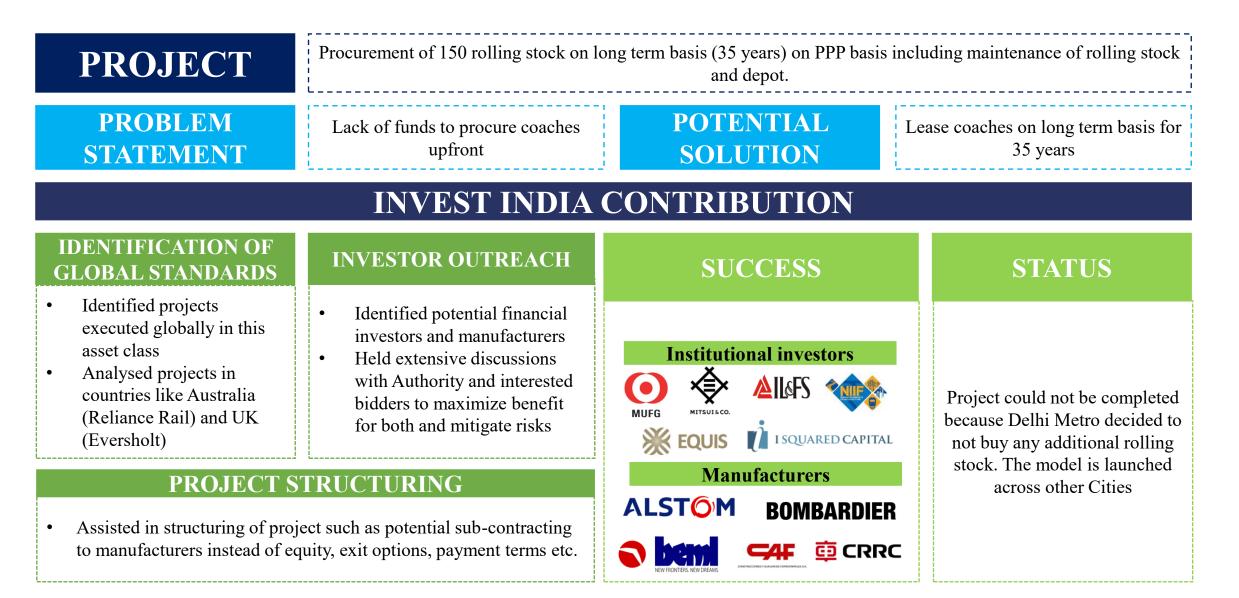
PARTICIPATION OF PRIVATE INVESTORS

ASSET MONETISATION	 Monetization of existing, operational, and revenue generating assets 11 asset classes for monetization include power transmission lines, highways, major ports, and PSU non-core assets <i>Success: Highway monetization by Macquarie (\$1.5 Bn - 9 roads); Cube Highways (\$699 Mn - 9 roads)</i>
DISINVESTMENT	 Marquee government entities with sizeable brand value and market share available for acquisition Disinvestment target for FY 2022-23: \$8 Bn Air India Disinvestment Completed 10 Strategic Disinvestments – <i>Shipping corporation of India, Container corporation of India, Bharat Petroleum, Air India etc</i>
REITs & InvITs	 New and easier means of investment opportunities for a wider range of retail investors Public Sector Undertakings to launch REITs/ InvITs for asset monetization Success: 15 SEBI registered InvITs; 3 Public Listed InvITs: India Grid Trust, IRB InvIT Fund, Powergrid InvIT
INVESTMENT AVENUES	 NIIF setup as a collaborative investment platform for investors in infrastructure and other sectors India Infrastructure Finance Company setup to provide long term finance to viable infrastructure projects; raises funding from domestic and international sources Over 5 years, benchmark indices NSE NIFTY delivered 26% return, and BSE SENSEX delivered 29% return

NHAI Toll-Operate-Transfer

PROJECT	Toll-Operate-Transfer of 9 Highways of National Highways Authority of India for 30 years against an upfront Statement				
PROBLEM STATEMENT	Pilot Project with Limited Investor Reach	POTENTIAL SOLUTION	Thorough Promotion of TOT Model across major platforms		
OUR CONTRIBUTION					
INVESTOR IDENTIFICATION	INVESTOR OUTREACH SUCCESS		STATUS		
• Invest India Team conducted a detailed analysis of over 200 funds on their risk-return profiles and investment methodology	 Mega outreach to all major funds through events, influencers Development of monthly newsletter 1x1 India strategy development with top funds 	Australian fund Macquarie bid \$1.45 Bn for the bundle against Government floor price of \$950 M	5 Bundles of ToT Roads released.		

Delhi Metro Rolling Stock Procurement



National Monetization Pipeline

Public Assets worth USD 81 Billion to be monetized between 2022 and 2025





Brownfield operational assets with a steady revenues to attract patient long-term capital

PORTFOLIO	20+ asset classes across 12+ sectors			
Roads	Railways	Power	Gas Pipelines	
USD 21.7 B	USD 20.7 B	USD 11.5 B	USD 3.3 B	
Telecom	Warehousing	Mining	Aviation	
USD 4.7 B	USD 3.9 B	USD 3.9 B	USD 2.8 B	
Ports	Urban Real Estate	Stadiums	Other Pipeline	
USD 1.7 B	USD 2.0 B	USD 1.6 B	USD 3.06 B	

Conclusion based on our learnings!

- Understand the Institutional Investors
- Greenfield is very difficult
- Asset recycling is attractive
- Copy don't create
- Risk allocation has to be globally best and better
- Identify sectors/models where certain risks don't exist
- Perception matters immensely over long term
- First few projects are expensive
- Creating good experience is key
- ➢ Know the things which we will not be able to address

Thank you Rahul Agarwal, CFA, FRM <u>Rahul Agarwal@investindia.org.in</u> +91-9582322075