



INFRASTRUCTURE LEASING & FINANCIAL SERVICES LIMITED

Infrastructure Development in India

October 2009



Structure of Presentation

- **Section A** : **About IL&FS**
- **Section B** : **Infrastructure - Needs & Investment Environment**
- **Section C** : **Sectoral Snapshots**



Section A : About IL&FS





Overview

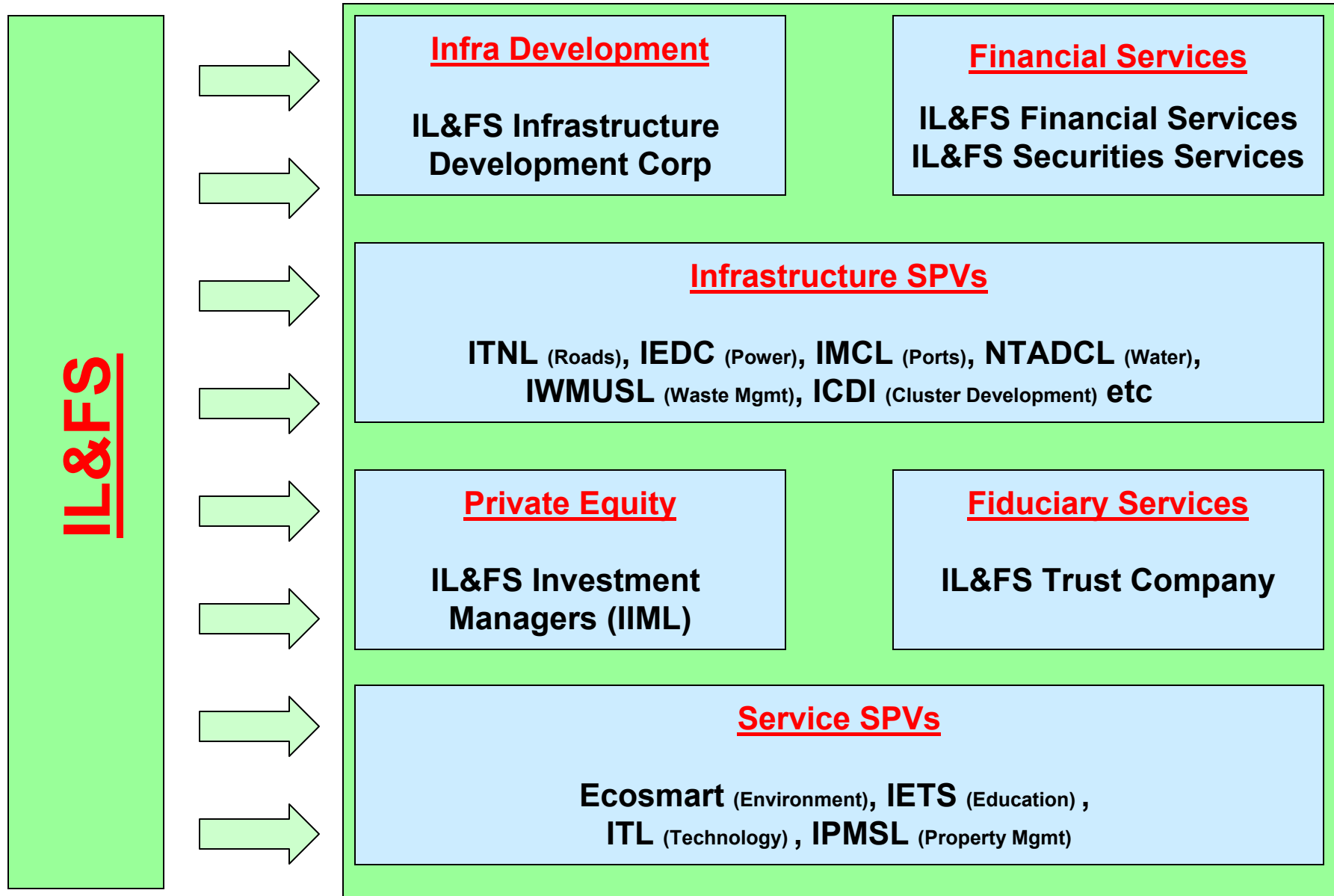
- **Formed in 1988 - One of the earliest private sector initiatives**
 - Initial participants were Indian Banks and Institutions
 - International Institutional Investors inducted over the years
 - ORIX Corporation (Japan), Abu Dhabi Investment Authority
 - Earlier stakeholders include IFC, Govt. of Singapore, HSBC

- **Unique positioning in the Infrastructure space**
 - Multiplicity of roles : A sponsor, developer, advisor, and financier of infrastructure projects
 - **Promoted over 50 sector dedicated Special Purpose Vehicle companies**
 - Developing infrastructure projects worth over \$ 30 billion
 - In-house capabilities to take projects from ‘concept’ to ‘commissioning’

- **A pioneering development role-play in India**
 - Conceptualized and promoted India’s first private sector toll road and water supply project
 - Sponsored India’s first infrastructure focused PE fund with AIG; significant foreign capital
 - One of the early entrants in niche growth areas like Education with a strong social / community orientation
 - Project development partnerships with various State Governments
 - Advisor to Central and State Governments for developing legal and policy frameworks



Group Architecture





Section B : Infrastructure - Needs & Investment Environment





Infrastructure – The Crucial Link

Doing business in India - Adverse factors



Source : World Bank, CLSA Asia-Pacific Markets



Power of Infrastructure

- **Infrastructure needs across the region are humongous**

- **Funding requirements are moving targets**
 - Infrastructure is the common denominator facilitating growth
 - Thus targets keep moving up as economy cranks into action
 - Rising income levels also means that yesterday's luxuries are today's needs
 - And users are willing to pay for improved services

- **'Home run' unlikely through public funding**
 - Catch up with the developed world within a medium term a uphill task
 - Only possible if there is significant growth in Private participation and PPP projects

"There are more mobile phones than water taps in India !!"

A Commentator on Indian Television

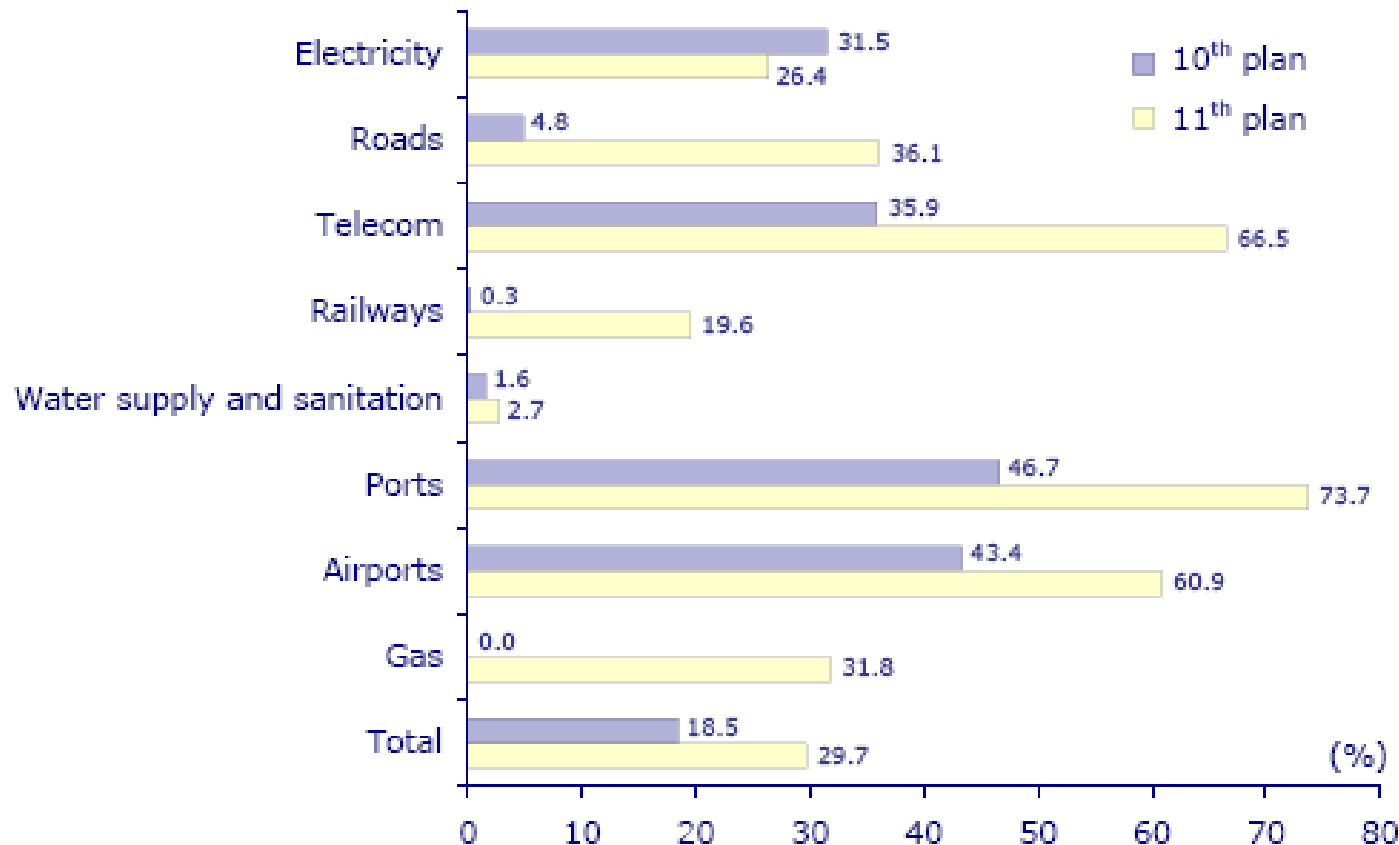
**Fact or otherwise, one may view it as a sad commentary...
Or as the transformational power of private participation in Infrastructure**



Increasing Private Participation

30% of targeted expenditure of \$ 440 bn for 11th Plan expected from Central Government; 40% from State Governments and the balance 30% from the Private Sector

Share of Private Investments in Infrastructure as % of total



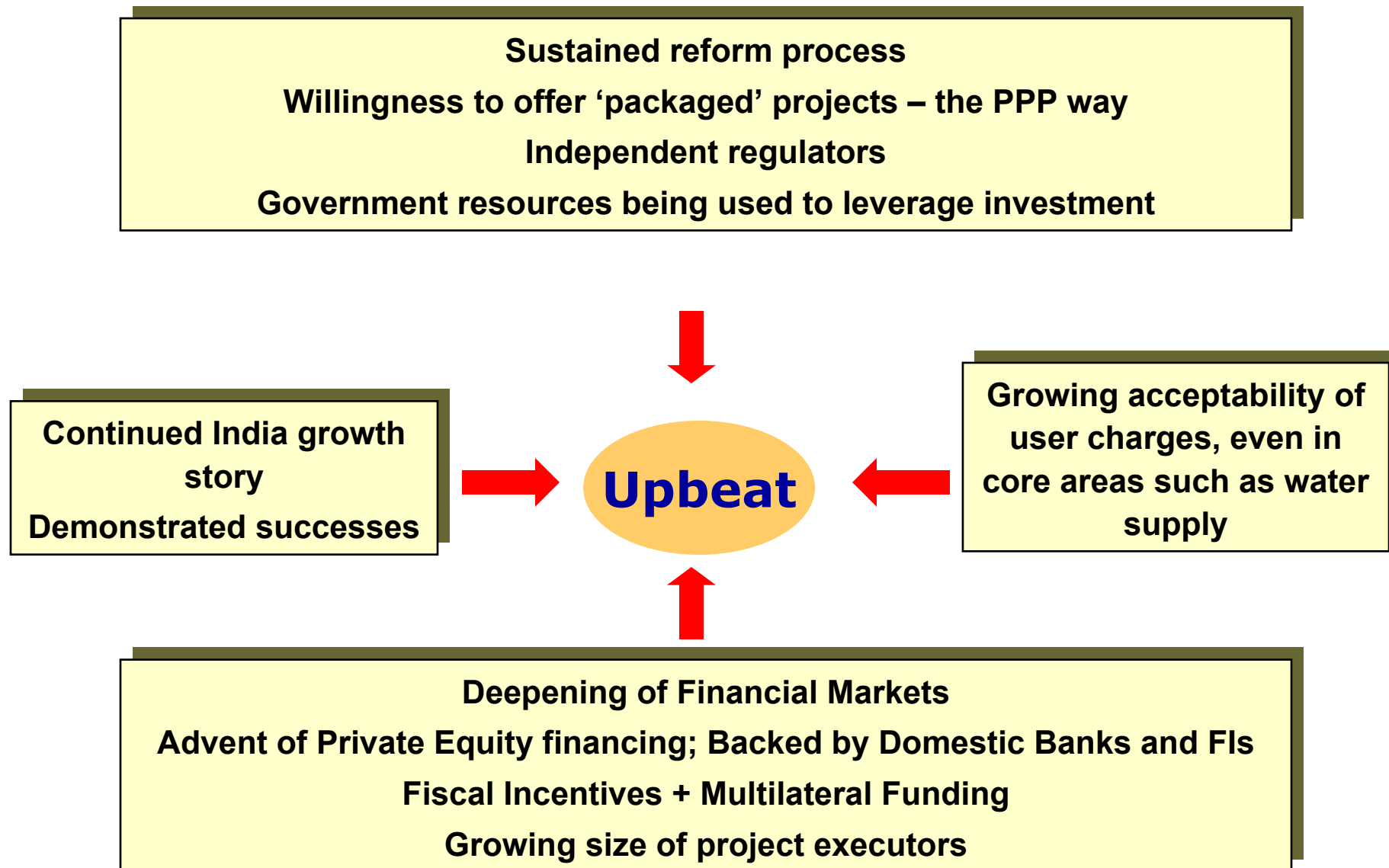


Opportunity across Sectors

	Rs billion	Sectoral Share
Electricity (Incl. NCE)	6,242	30.4%
Roads & Bridges	3,158	15.4%
Telecom	2,702	13.2%
Railways (Incl. MRTS)	2,610	12.7%
Irrigation	2,258	11.0%
Water Supply & Sanitation	2,017	9.8%
Ports	747	3.6%
Airports	353	1.7%
Others	436	2.1%
Total	20,523	100%

Source : Planning Commission

Infra Development Climate





Risk / Return – PE Experience

- **Globally, infrastructure has provided similar returns to that of equity over the last 12 years at a lower volatility**
- **Low degree of correlation between infrastructure and other asset classes**
- **Ideal portfolio diversification tool for risk reduction without impacting returns**
- **Return on IL&FS Private Equity infrastructure investments**
 - **IRR of 27.2%**
 - **Multiple of 3 times, across sectors**
 - Telecom
 - Roads
 - Power
 - Oil & Gas
 - Ports
 - Water Supply



Section C : Sectoral Snapshots





Power : A Huge Catch-up

- **Low level of per capita consumption**
 - 5th largest installed generation capacity but one of the lowest per capita consumption
 - More than 18% of villages and 45% of total households in India do not have access to power

- **Perpetual state of Energy deficit**
 - Gross Energy deficit of 10%
 - Deficits do not capture un-met demand
 - As supply increases, it will create its own demand

- **Rapid ramp-up required**
 - India needs to add capacity of 300-400 MW per week for the next 10 years

- **Post Electricity Act 2003, interest levels picked up**



Power : Enabling Participation

- **26% of US\$ 130 bn required expected from private sector in next 5 years**
 - Number of States have initiated bidding from private players for long term procurement

- **Small hydro is the low hanging fruit**
 - Potential of 15,000 MW; run of the river hydro projects to gain importance

- **Transmission (at 5.7 mn circuit Km, 3rd largest in the World – but inadequate)**
 - 37,000 MW National Grid to be setup at a cost of \$ 13 bn
 - Private sector participation estimated at \$ 4.5 bn

- **Distribution**
 - Electricity Act 2004 provides for second distribution license in the same area
 - Open access allows distributors to source cheaper power



Key Drivers Assisting Growth

- **Vertically State Electricity Boards being unbundled**
 - Focus on improving financial health/ reducing credit risk

- **Power trading and establishment of Power Exchanges**
 - Impetus to Merchant Power Plants

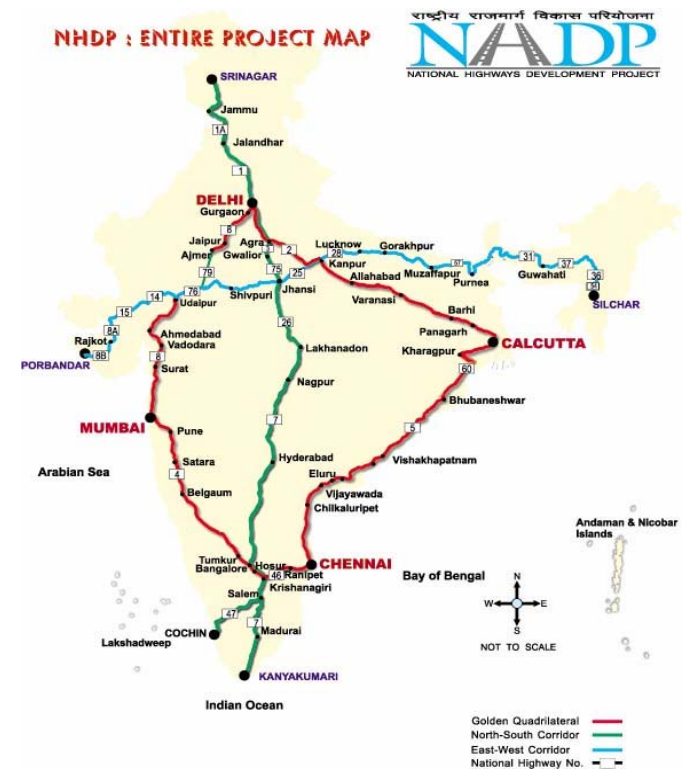
- **Open access on transmission and distribution networks**
 - Distribution in private hands only in Orissa, Delhi, Kolkata, parts of Mumbai, Ahmedabad, Surat
 - Risks – Theft, Political, Regulatory – need to be addressed

- **Opening up market for high value customers through open access**

- **100% FDI in generation (non nuclear), transmission, distribution and trading**
 - No limit on project cost / quantum of FDI

Roads

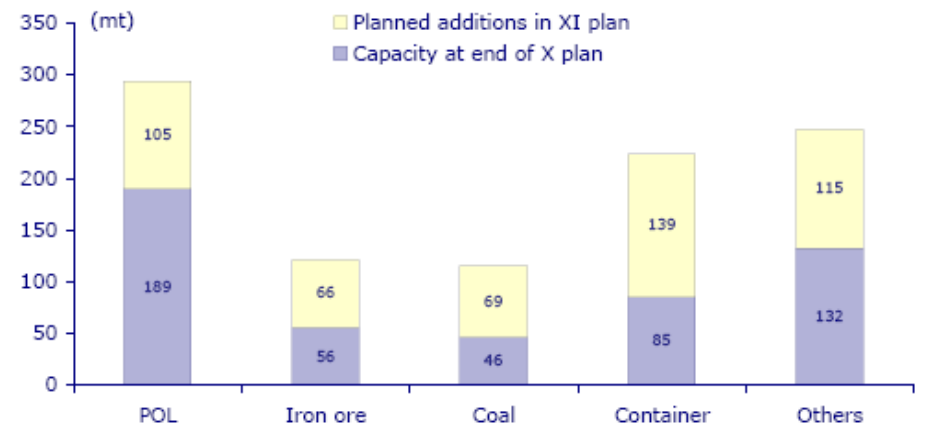
- Explosive growth; still inadequate coverage
 - 9x growth in vehicles in last 20 years
- Has seen active private participation; Clearly defined concession agreements provide comfort
 - Clear delineation in the roles of the State and the developer
 - Well established operating structures – BOO, Annuity
- NHDP, State and rural roads to be key driver
 - 80% of NHDP on PPP basis
- Development of over 33,000 Kms of NHAI roads
 - Nearly 9,000 Kms completed and 8,000 Km under implementation
 - Still another 16,000 Kms to be awarded



Ports

- **Current capacity of 750 MTPA required to double by 2012 to meet trade growth**
- **National Maritime Development Program**
 - A \$ 16 bn opportunity, largely focused on capacity creation
 - Related port infrastructure development integrated with development plans
- **Ports have attracted high degree of interest**
 - 100% FDI allowed; 10-year tax holiday
 - Global majors already present : Maersk, Dubai Ports, PSA
 - 67% of targeted investments planned through the private route
- **Key highlights going forward**
 - Corporatisation of major Ports
 - Green field projects like Mundhra Port, Pipavav Port, Karaikal Port and Dighi Port

Proposed capacity additions at major ports during 11th plan period



Source: Working group paper on 11th plan, CLSA Asia-Pacific Markets



Airports

- **Entry of low-cost carriers coupled with favourable demographics has led to the doubling of India's domestic air traffic and number of aircrafts over the last three years**
- **Big bang privatization already in place**
 - Private sector operational greenfield airports in Bangalore, Hyderabad and Kochi
 - Modernization and expansion of Delhi and Mumbai Airports by the private sector
- **11th Plan target for redevelopment of 4 Metro and 35 non-Metro Airports and construction of 7 green field Airports**
- **An \$ 5 billion opportunity for the private sector**



Logistics

- **Logistics costs in India significantly higher (10% of product cost vs 6% in the US)**
- **Inefficiencies in transportation, warehousing and consolidation**
 - **High cost structure**
 - **Lost opportunity in perishables trading, for instance**
- **Reliable, seamless supply chain solutions that offer real-time access and availability at most optimal pricing are becoming essential competitive tools**
- **Significant opportunities in**
 - **Container handling facilities - Container Freight Stations and ICDs to enhance evacuation efficiencies**
 - **Free warehousing zones for consolidation and re-distribution**
 - **Value added warehousing including port linked cold storages**



Renewable Sources

- **Installed capacity of 11,200 MW**
 - Currently 8% of India's generation capacity
 - 87% of the RE capacity from Wind and Small Hydro
 - To increase to 15 GW in next 5 years

- **Encouraging policy framework**
 - Electricity Act provides for minimum purchase from renewable sources
 - Generation / distribution in notified rural areas without licensing requirement
 - Generation based tariff incentive
 - Accelerated depreciation; Duty concessions; Tax exemption; Capital and interest subsidy

- **Emerging Opportunities**
 - Wind power well established in India – 4th largest producer in the world
 - Micro, Mini and Small run of river projects being bid out in the hilly states
 - Cost effective photovoltaic technologies - increasing importance of solar power
 - Cogeneration from biomass (sugarcane) being actively encouraged
 - Public private partnerships in funding and management (e.g. Urja Ankur)
 - Bio-fuels and Ethanol
 - Blending norms to promote ethanol offtake



Summation - Positive Transformations

- **Up until a decade ago, publicly financed infrastructure was the widely accepted norm in India**
- **It has been only in this decade that private financing has come to fore in infrastructure development**
- **The infrastructure needs of the country are humungous**
- **Private infrastructure investing has gained acceptance within a short period led by**
 - **Un-met basic demand**
 - **Willingness to pay user charges**
 - **Strong legislative support**
 - **Defined regulatory framework**
 - **Well accepted judicial system**
 - **Experienced manpower and technical expertise for implementation**
- **It is imperative that this source of funding is effectively tapped, if we want to see transformations happen in our lifetime**