

POWER GRID CORPORATION OF INDIA LIMITED



Corporate Presentation
July, 2013



1200kV National Test Station, Bina (MP)

Disclaimer

By attending the meeting where this presentation is made, or by reading the presentation slides, you agree to be bound by the following limitations:

- *This document has been prepared for information purposes only and is not an offer or invitation or recommendation to buy or sell any securities of Power Grid Corporation of India Limited (the "Company"), nor shall part, or all, of this document form the basis of, or be relied on in connection with, any contract or investment decision in relation to any securities of the Company.*
- *The information in this document is being provided by the Company and is subject to change without notice. The Company relies on information obtained from sources believed to be reliable but does not guarantee its accuracy or completeness.*
- *This document contains statements about future events and expectations that are forward-looking statements. These statements typically contain words such as "expects" and "anticipates" and words of similar import. Any statement in this document that is not a statement of historical fact is a forward-looking statement that involves known and unknown risks, uncertainties and other factors which may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. None of the future projections, expectations, estimates or prospects in this document should be taken as forecasts or promises nor should they be taken as implying any indication, assurance or guarantee that the assumptions on which such future projections, expectations, estimates or prospects have been prepared are correct or exhaustive or, in the case of the assumptions, fully stated in the document. The Company assumes no obligations to update the forward-looking statements contained herein to reflect actual results, changes in assumptions or changes in factors affecting these statements.*
- *You acknowledge that you will be solely responsible for your own assessment of the market and the market position of the Company and that you will conduct your own analysis and be solely responsible for forming your own view of the potential future performance of the business of the Company.*
- *This document speaks as of 31 Mar 2013. Neither the delivery of this document nor any further discussions of the Company with any of the recipients shall, under any circumstances, create any implication that there has been no change in the affairs of the Company since that date.*
- *Annual Accounts for FY2012-13 are yet to be approved by the shareholders.*
- *Conversion rate of 1US\$= ₹ 60 has been used throughout the presentation, unless otherwise stated.*



Corporate Overview

Power Sector Overview & Investment Plan

Diversifications

New Initiatives

Sustainable Development

Corporate Overview

A NAVRATNA ENTERPRISE

CENTRAL TRANSMISSION UTILITY

LISTED COMPANY

GoI Shareholding 69.42%

DIVIDEND PAYING SINCE 1993-94

CONSISTENTLY RATED 'EXCELLENT' BY GoI

Vision

World Class, Integrated, Global Transmission Company With Dominant Leadership in Emerging Power Markets Ensuring Reliability, Safety and Economy

Existing Businesses

Transmission

Grid Management

Consultancy

Telecom

International Business

New Business Opportunities

Intra-State Transmission

Green Energy Corridors

Smart Grid/ City

Energy Efficiency

Distribution (Wire Business)

CREDIT RATINGS

• AAA
• Stable
CRISIL

ICRA
• AAA
• Stable

• AAA
CARE

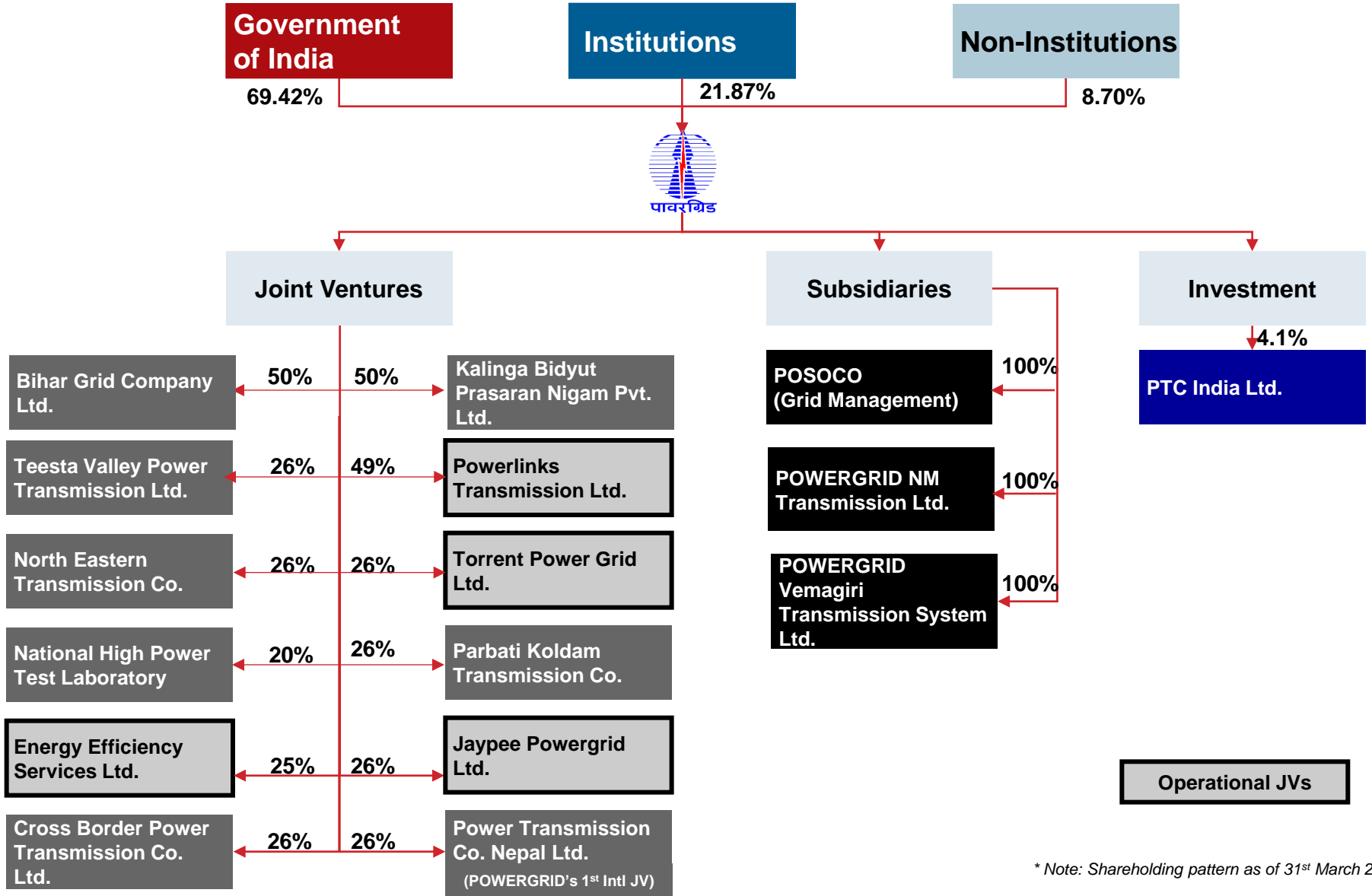
Domestic

International

• BBB (-)
• Negative Outlook
S&P

Fitch
• BBB (-)
• Stable Outlook

Corporate Overview



* Note: Shareholding pattern as of 31st March 2013

Business Overview

- Associated TS for CGS, UMPPs & IPPs incl. HCTC
- System Strengthening Schemes
- Inter-State, Inter-Regional and Transnational links

Transmission (~92%)



- Real Time Grid Operation
- Optimum Scheduling & Despatch
- Energy Accounting including settlements
- Administering RECs

Grid Management¹



1- carried out through 100% subsidiary, POSOCO

- Domestic Market
- Emerging Markets & SAARC
- Africa

Consultancy (~2%)

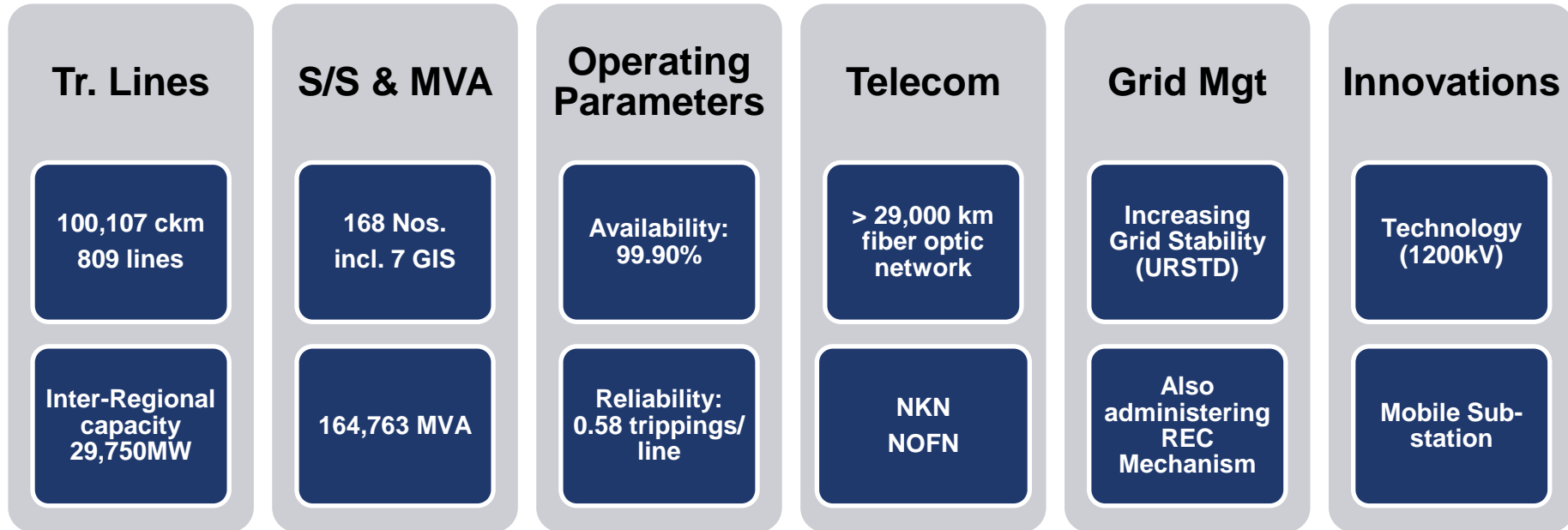


- OPGW on Tr. Lines
- ~ 29,000 km Network
- Partnering Govt in Strategic Projects (NKN, NOFN)

Telecom (~2%)



Physical & Financial Overview



Data as on 31 Mar 2013/ for the period FY12-13

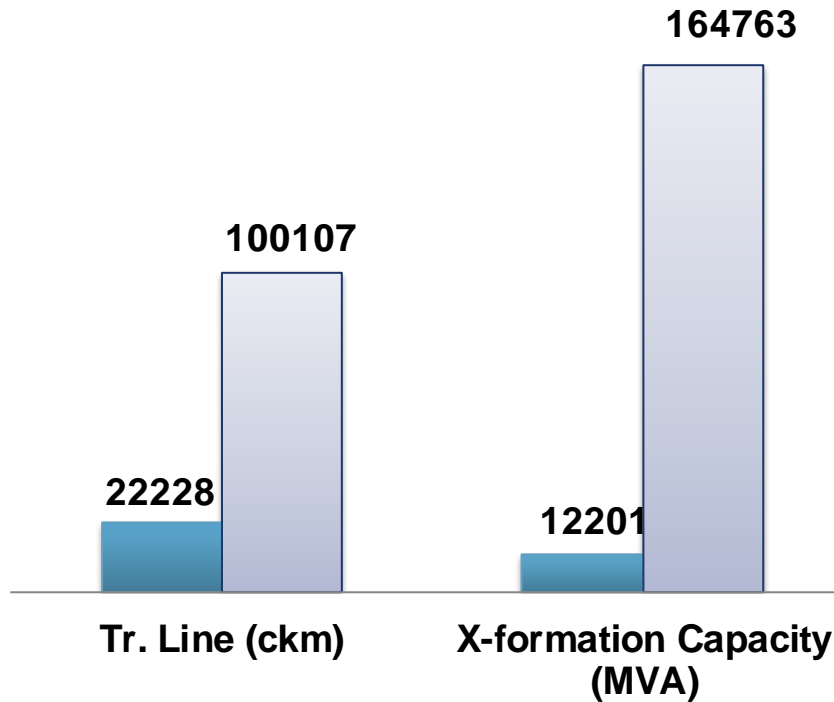


Financials for FY12-13

Growth over past two decades

Physical

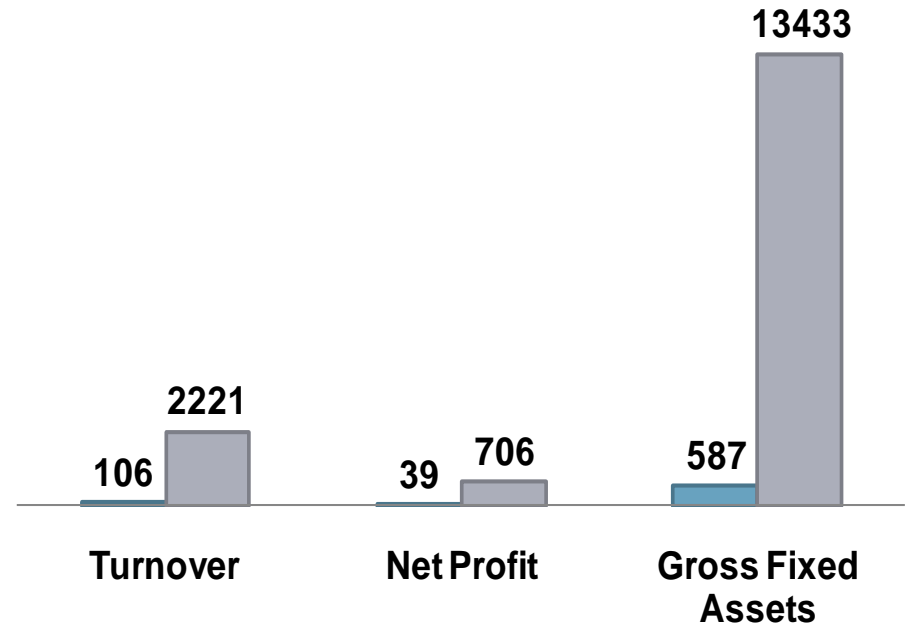
■ FY92-93 ■ FY12-13



Financial

(USD In mn)

■ FY92-93 ■ FY12-13



4.4x

13x

21x

18x

23x

Manpower 1.5x

Description	2012-13	2011-12	2010-11	2009-10	2008-09
Income					
Transmission Charges	2035	1591	1,317	1,117	887
Consultancy	53	48	50	45	36
Telecom	39	34	31	26	25
Other Income	95	125	118	63	75
Total Income	2221	1798	1517	1251	1023
Profit After Tax (PAT)	706	543	450	340	282
Earnings per Share (USD)	0.15	0.12	0.1	0.08	0.07
Book Value per Share (USD)	0.94	0.85	0.77	0.63	0.58
Gross Fixed Assets	13433	10565	8,392	7,200	6,720
Debt – Foreign Loans	3,682	2545	2,037	1,855	1,708
Debt – Domestic	7350	6356	4,777	3,881	3,036
Net Worth	4,369	3915	3,559	2,652	2,436
<i>Return on Net Worth</i>	16.15%	13.86%	12.63%	12.83%	11.57%
Debt Equity Ratio	72:28	69:31	65:35	68:32	66:34
Capitalisation of Assets	2869	2174	1190	602	622

43

Sub-stations
operated
remotely

6

Un-manned
sub-stations

Developed Repair Capabilities

- In-House repair facility for Transformer & Reactor established at Hyderabad
- On-Site Repair capability developed



Upcoming Initiatives

- **Aerial patrolling** of transmission lines
- **'National Transmission Asset Management Centre (NTAMC)** for operation and control of sub-station at central place and through Maintenance Service Hubs
- Project RUPANTAR (**ERP**)
- **Robots** for condition monitoring of conductor/ earthwire/ hardware

R&D Initiatives

World's highest voltage 1200kV UHV AC

Test Station at Bina,
MP

Field tests presently
under progress

Developed
indigenously through
PPP with 35 Indian
manufacturers in open
collaboration.



Other R&D initiatives

High
Temperature
Superconducting
Cable

Pilot Project for
400kV Phase
Shifting X-former

Use of Synthetic
Oil as X-former
Oil



Corporate Overview

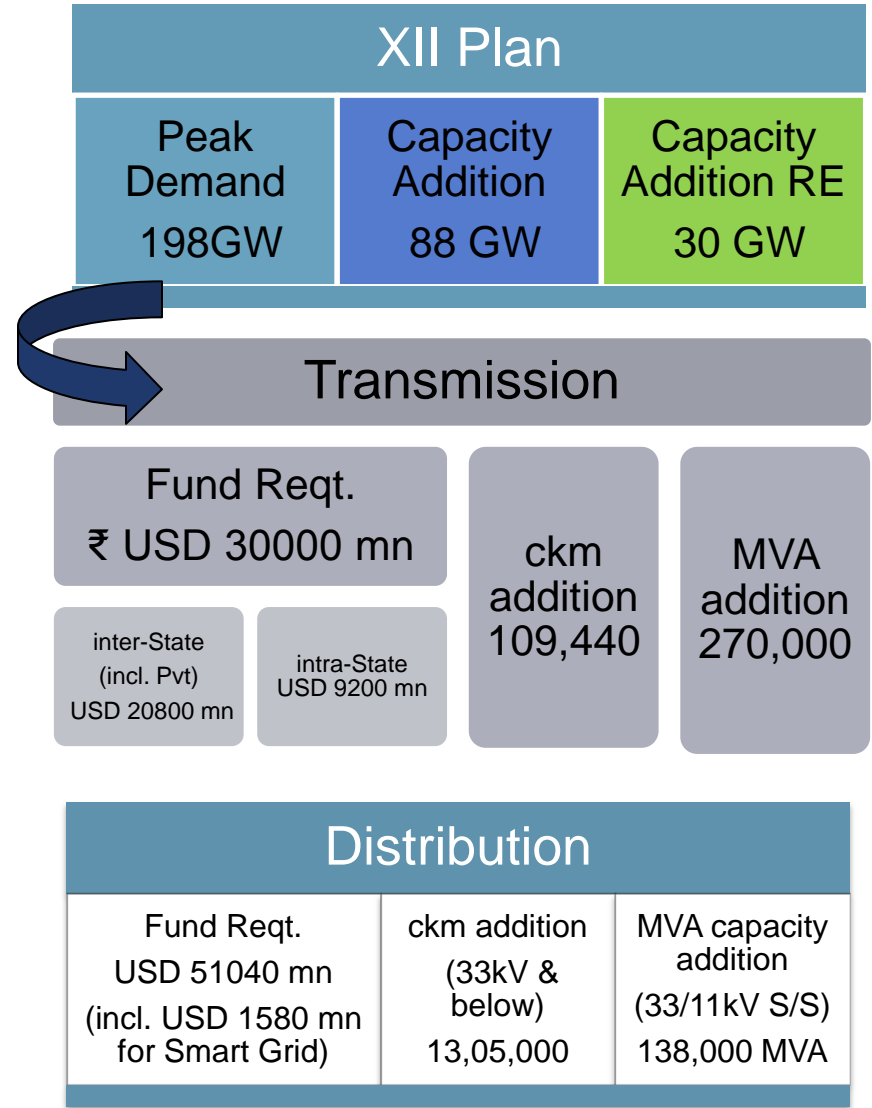
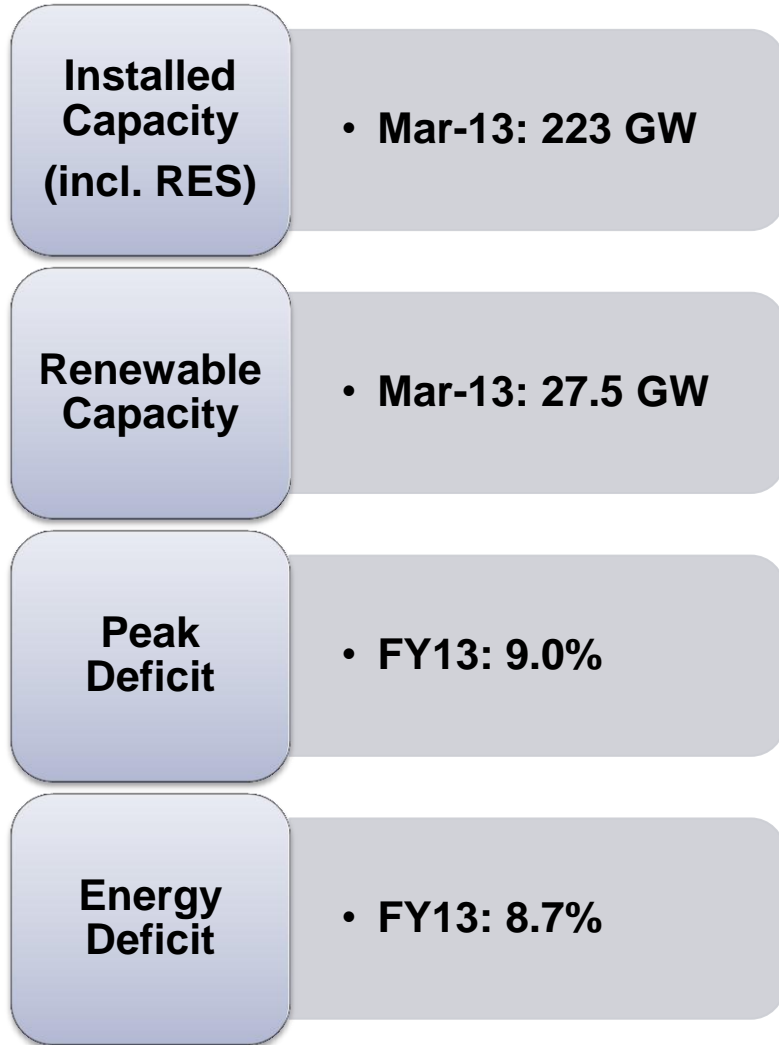
Power Sector Overview & Investment Plan

Diversifications

New Initiatives

Sustainable Development

Power Sector Overview



Source: CEA, Report of XII Plan Working Group on Power

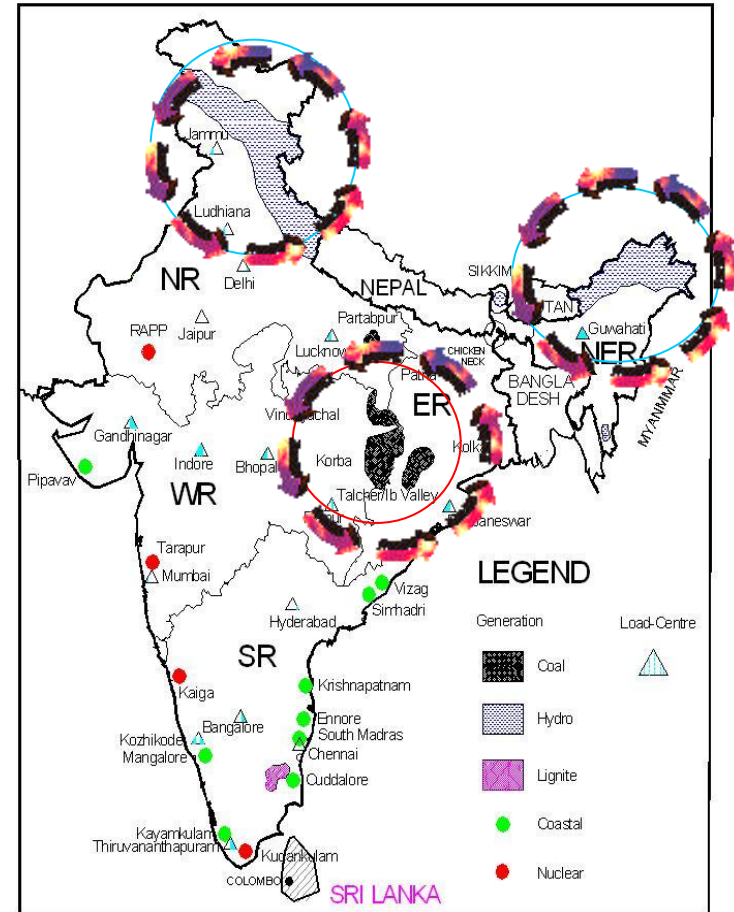
Development of National Grid

- Large pit-head stations under central as well as private sector
- Hydro projects in NER, Himachal Pradesh, J&K
- Large import coal based power projects along the sea coast
- Few load centre based generation projects
- Need for strong pan India Transmission Network



Paradigm Shift

(‘Self sufficiency at Regional level’ concept to ‘National level’)



IX Plan
5,100MW



X Plan
14,100
MW



XI Plan
27,750
MW



Today
31,850MW

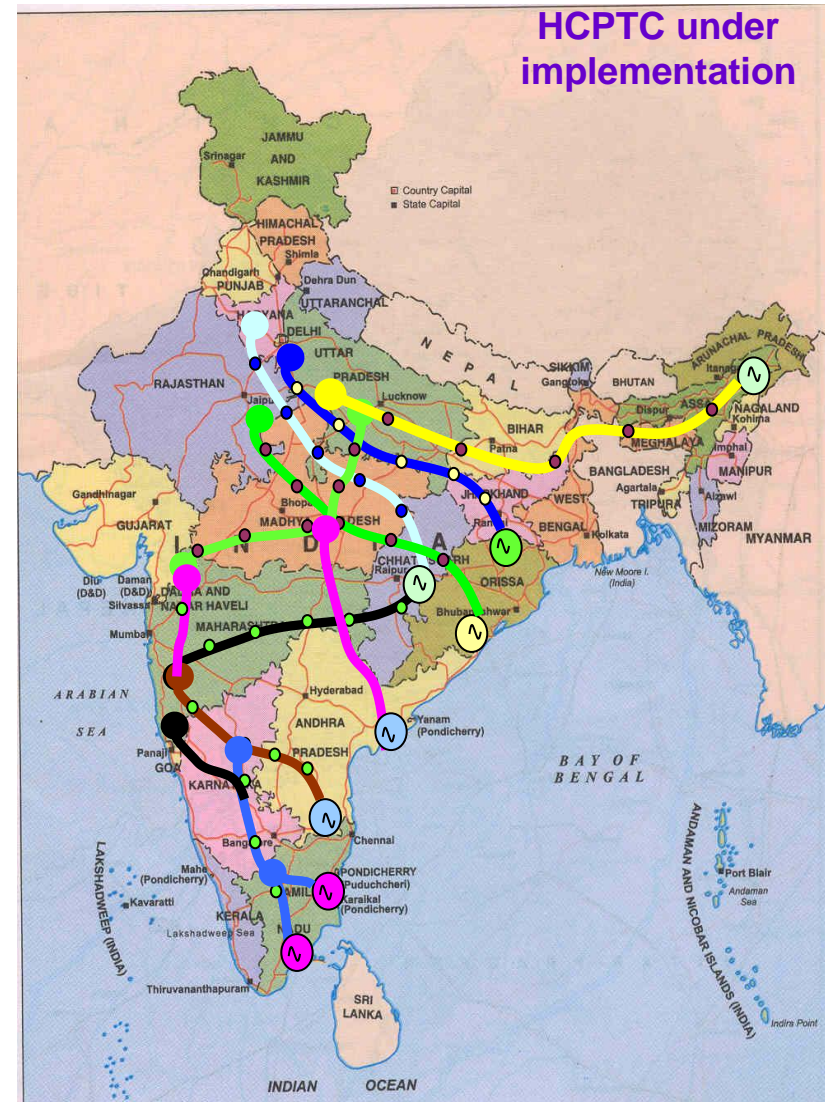


end of XII Plan
65,550MW

Development of High Capacity Trans. Corridors

□ Development of High Capacity Power Transmission Corridors (HCPTC)

- Independent Power Producers (IPPs) setting up power generation plants, mainly in resource rich areas
- Estimated cost of corridors: ~ USD 12.5 bn
 - POWERGRID Scope: ~ USD 11.0 bn
- 11 nos. of HCPTC being developed in phases
- IPPs have
 - Signed BPTA/ TSA with condition that if some of IPPs fail/delay to execute their projects, balance IPPs shall share transmission charges
 - Provided bank guarantee towards their commitment to LTA
- Regulatory approval from CERC obtained



Investment & Funding Programme

Projects/ Schemes (USD 16.7 bn.)

Additional Projects: Tariff Based Bidding Projects; Projects assigned by Gol; Green Energy Corridors; Intra-State Projects; Transnational Interconnections

IPPs:
USD 8.0 bn

CS Gen:
USD 4.2 bn

Grid
Strengthening:
USD 3.0 bn

UMPP &
Others:
USD 1.5 bn

Capital Outlay (USD 16.7 bn.)

Investment Approved - Rs. 90,500 cr; Contracts Awarded for Project Cost - Rs. 80,000 cr

FY13: USD 3.3 bn

FY14: USD 3.3 bn

FY15: USD 3.3 bn

FY16: USD 3.4 bn

FY17: USD 3.4 bn

Funding Requirement

Debt & Equity in the
ratio 70:30
USD 5.8 bn Debt
already tied up

Source of Funds:
Equity- Internal Accruals
Debt: Domestic & Intl
Borrowings (*)

(*) Domestic: Bonds & Loans; Intl – Loans from WB, ADB, Suppliers' Credit; ECB (Bonds & Loans)



Corporate Overview

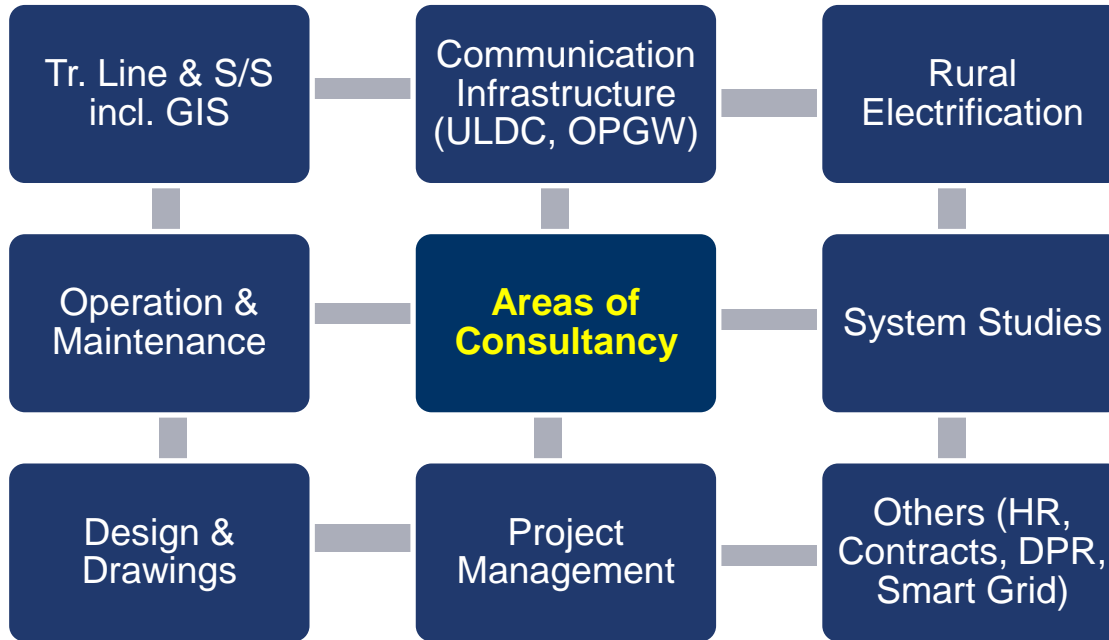
Power Sector Overview & Investment Plan

Diversifications

New Initiatives

Sustainable Development

Consultancy (Domestic)



Under execution

**124
assignments**

Clientele



State Utilities
(Govt.)



Govt.
Institutions
(Railways, Navy,
NPTI etc.)



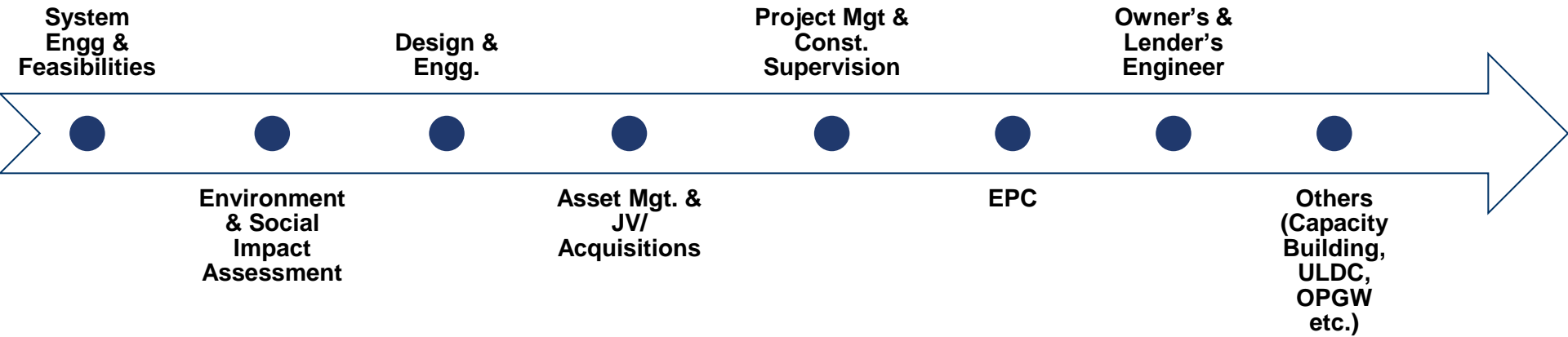
CPSUs
(Power & Metal
Sectors)



Private Sector
(Utilities, IPPs &
Corporates)

International Business

UTILITY TURNED CONSULTANT - AREAS OF CONSULTANCY



Expanding Footprints

- 11 Countries

Under Execution

- 17 Assignments



Asia



Africa



Commonwealth of Independent States (CIS)

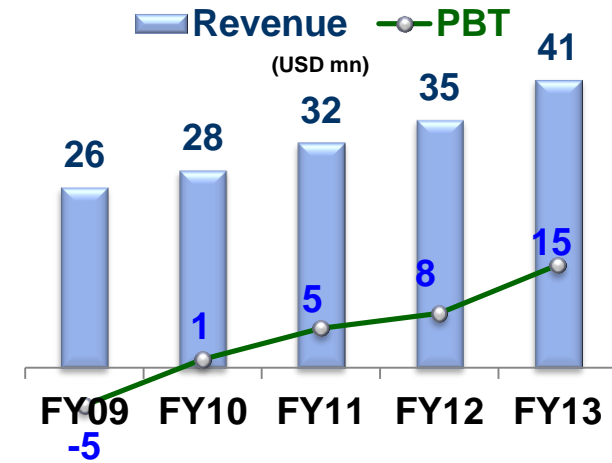
Nepal Bhutan Bangladesh Afganistan Sri Lanka Myanmar UAE Nigeria Kenya Ethiopia Tajikistan

Increasing Reach

- Fiber Optic Network: 29,279km
- Points of Presence: 290
- 26 New towns added (FY13)

Building partnerships

- Leasing of Optic Fiber
- RoW on T&D lines
- Co-location
- Infrastructure sharing



New Initiative: MPLS

Under implementation

To also run NTAMC & ERP applications

NKN

National Knowledge Network

- Project Size: USD 1000 mn
- POWERGRID Share: USD 150 mn

Major Projects

NOFN

National Optic Fiber Network

- Project Size: USD 3333 mn
- POWERGRID Share: ~ USD 667 mn



Corporate Overview

Power Sector Overview & Investment Plan

Diversifications

New Initiatives

Sustainable Development

New Initiatives

JVs for Intra-State Transmission



JV with Bihar formed

Project Cost: USD 1050 mn
Trans. License approved by BERC



JV with Odisha formed

Project Cost: USD 417 mn
Petition submitted for Trans. License

Distribution (Wire Business)

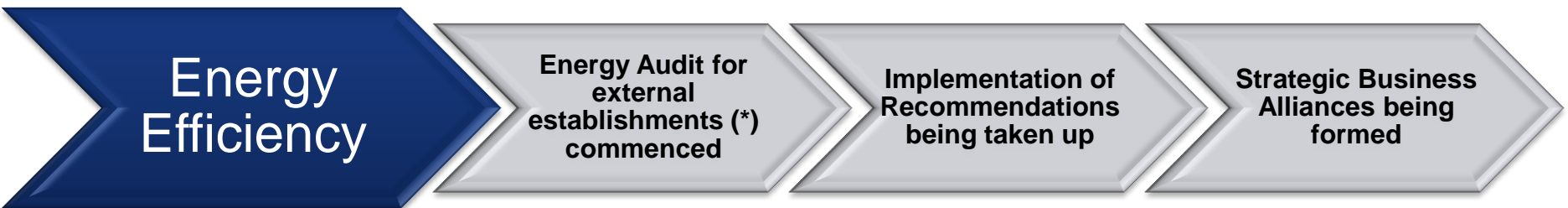
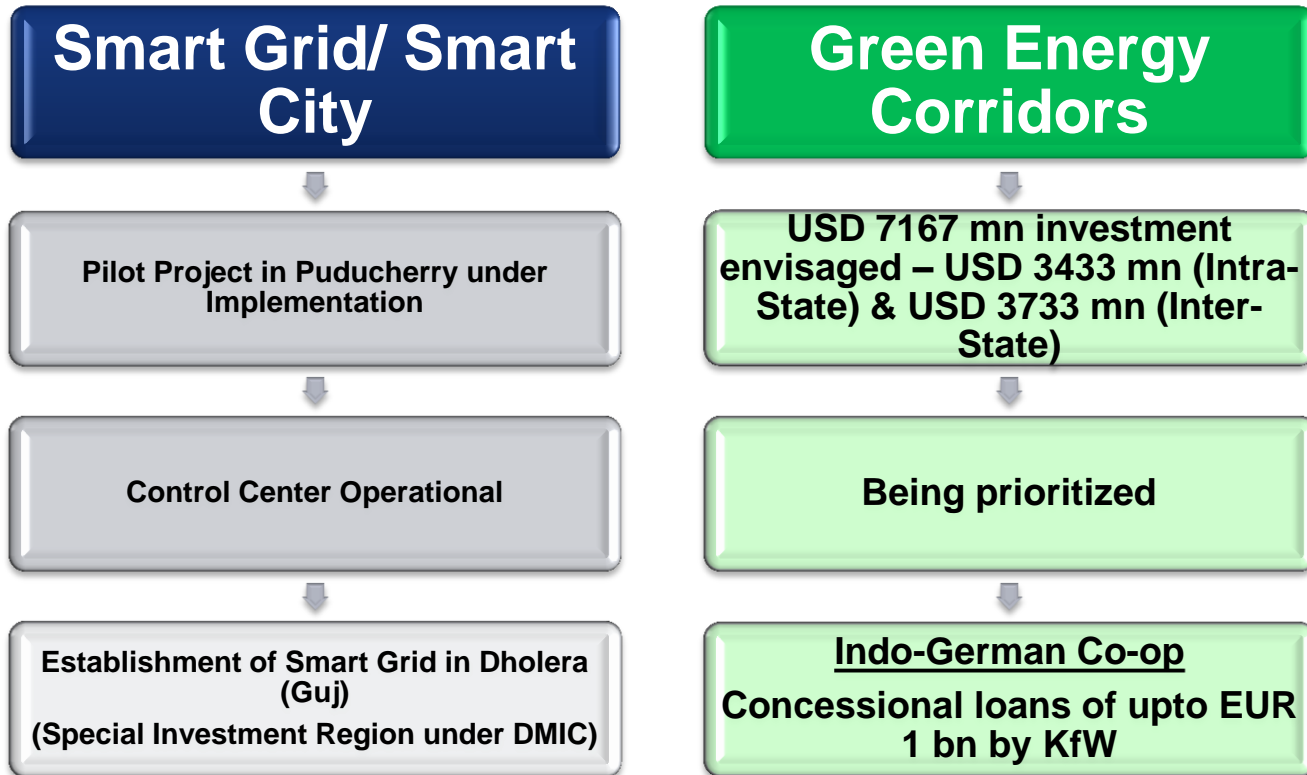


Petition submitted for license in Odisha



Hearing held.
Order awaited.

New Initiatives



(*) Utility Sub-stations, Steel Rolling Mills, Electrical establishments of Steel Plants, Lattice Structure Manufacturers, Cable, Conductor & Wire Drawing Industries

Towards New Business Opportunity



Desert
Power India
- 2050

- **Study on “Desert Power India-2050”**
 - ✓ **Assessment of renewable potential in deserts**
 - ✓ **Rajasthan, Gujarat, Himachal Pradesh and J&K**
 - ✓ **Identification of technology as well as infrastructure developmental requirements like Transmission System for evacuation of RE, in addition to Water, roads etc.**



Corporate Overview

Power Sector Overview & Investment Plan

Diversifications

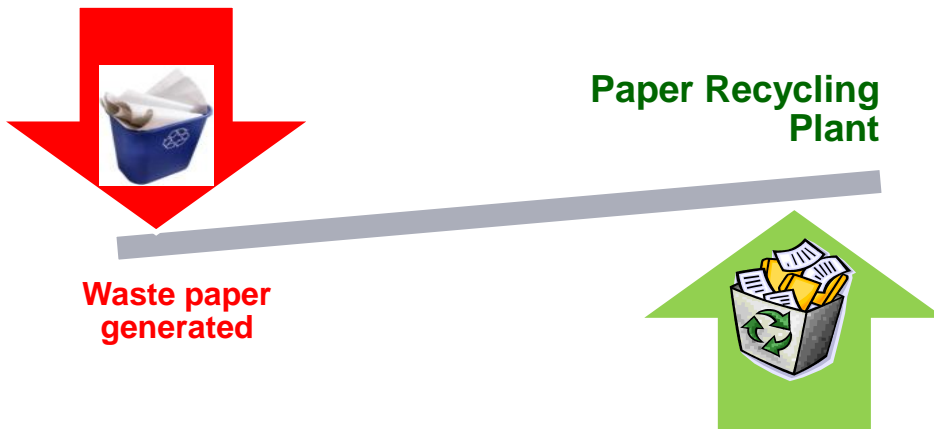
New Initiatives

Sustainable Development

Environment and Social Policy & Procedure (ESPP)

- Principles of **Avoidance**, **Minimization** and **Mitigation**
- Certified to Social Accountability Standard (SA-8001: 2008)

Waste Paper Recycling Plant set up in Haryana



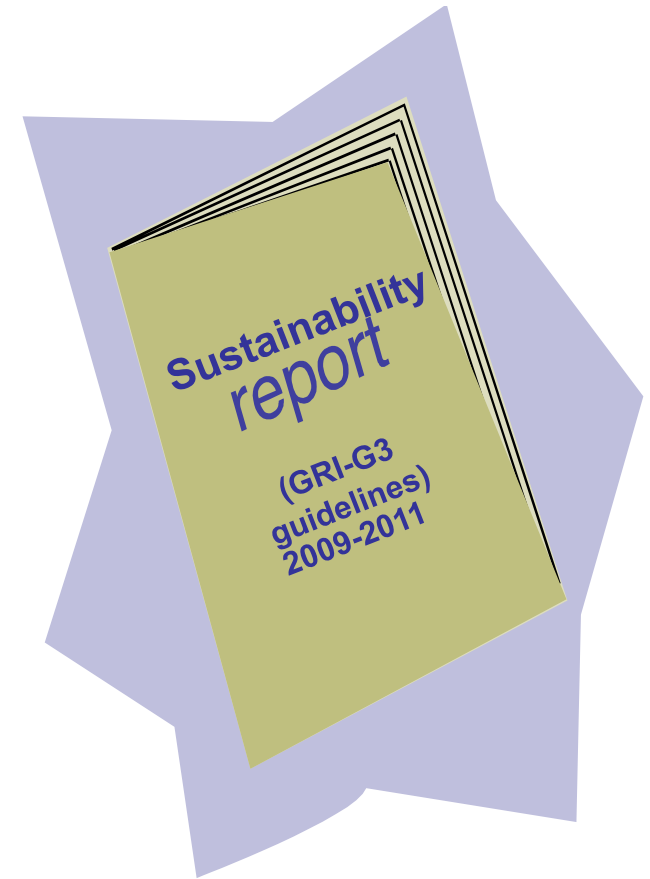
- ✓ **1st company in Asia to have a well defined Environment & Social Policy & Procedure**
- ✓ **1st company in India and 2nd in the world to be certified with a PAS based Integrated Management Section**

Corporate Social Responsibility

Corporate Social Responsibility

- As per policy, 1% of previous year Profit After Tax earmarked for CSR
- Thrust Areas:
 - ✓ Education
 - ✓ Health
 - ✓ Infrastructure
 - ✓ Livelihood
 - ✓ Tree Plantation
 - ✓ Ecology
 - ✓ Environment
 - ✓ Natural Calamities

2nd Sustainability Report released



Thank You