

# WELCOME TO THE 92<sup>ND</sup> ANNUAL GENERAL MEETING

TATA POWER ON A MULTI-FOLD GROWTH PATH



**TATA POWER**



# Presentation for the Annual General Meeting

Anil Sardana  
Managing Director

24 August 2011

Lighting up Lives!



# Agenda

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- Overview of Tata Power
- Sustainability Strategy
- Fuel De-risking Strategy
- Generation Business
- Projects in pipeline
- Transmission & Distribution Business
- Other Businesses
- Financials
- Industry Overview



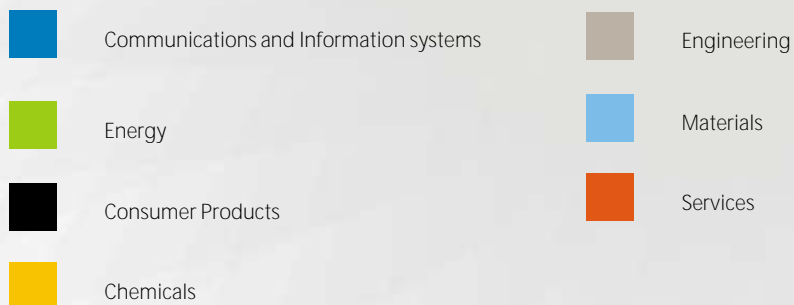
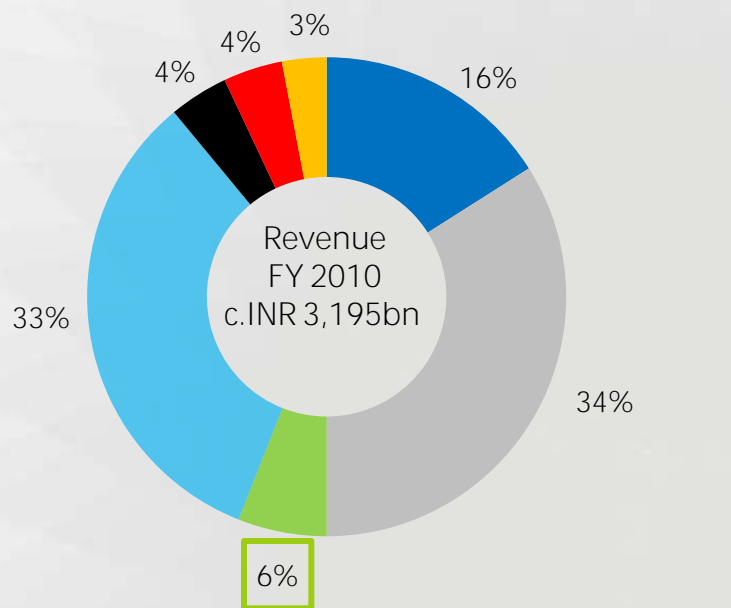
# Company Overview



# Tata Power is the fourth largest company (by market capitalisation) in the Tata Group



Revenue by business segments



Listed Companies	Mkt Cap (\$ bn) <sup>2</sup>	Promoter Shareholding (%) <sup>1</sup>
Tata Consultancy Services	51.8	74.1
Tata Motors	14.4	34.8
Tata Steel	12.4	30.6
<b>Tata Power</b>	<b>6.6</b>	<b>31.8</b>
Titan	4.5	53.5
Tata Chemicals	2.1	31.2
Tata Communications	1.4	76.2
Indian Hotels	1.4	33.6
Tata Global Beverages	1.3	35.2
Voltas	1.2	30.6
Rallis	0.4	50.7
Tata Elxsi	0.2	45.1
Trent	0.5	31.3

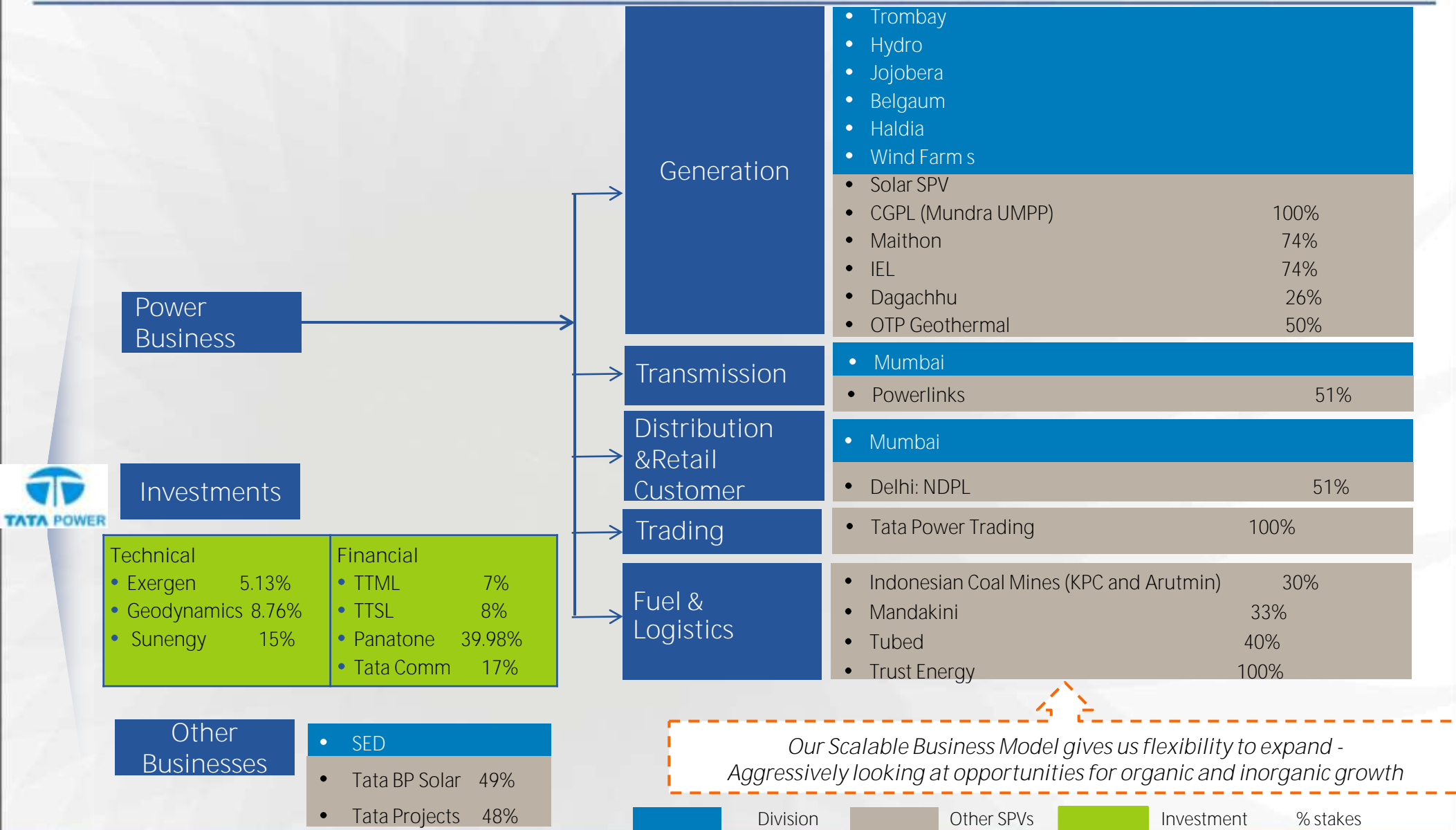
Notes:

1 As of 31 March 2011. Source: BSE website

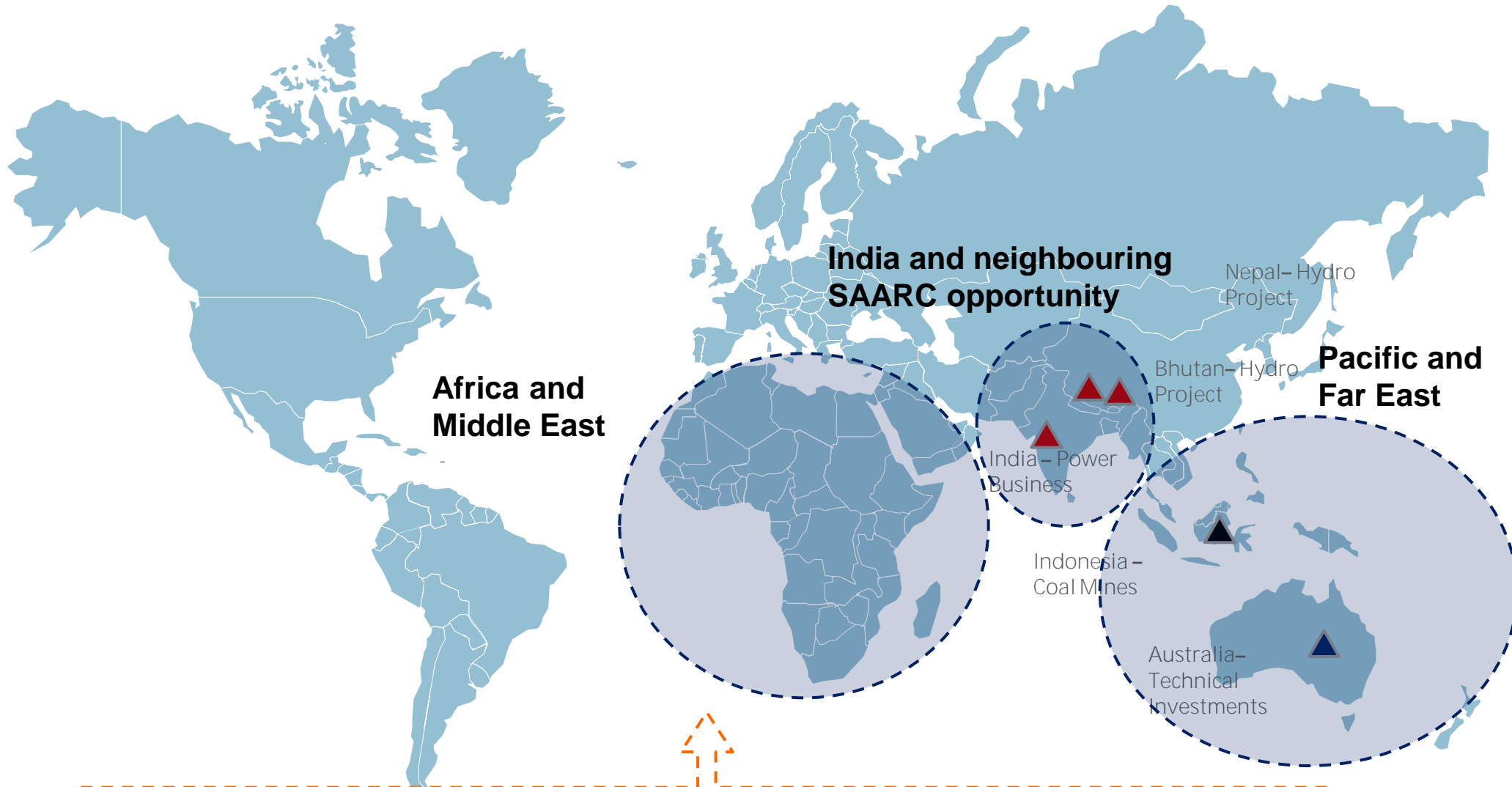
2 As of 09 June 2011; Conversion rate of 1US\$ = INR 44.74. Source: Tata group website



# Tata Power is now emerging as a group of businesses in the Energy sector, covering the entire value chain



While your Company largely been India focussed, it is now foraying into selected global markets to add value



*Growth plans in select international geographies chosen to align differentiators and tactical advantages. Plans to grow in specific opportunity turfs covering MENA (Middle East and Africa), Pacific and Far East*



# Tata Power today has a developed core strength in key areas of the relevant Value Chain



- 30% equity interest in Indonesian coal mines, KPC and Arutmin
- Domestic mines under development
  - 33.3% stake in Mandakini (7.5 MTPA)
  - 40% stake in Tubed (6.0 MTPA)
- 2 capesize vessels owned
- 3 long term charters signed

- 3,176 MW of operational capacity
- 5,341 MW of capacity under implementation

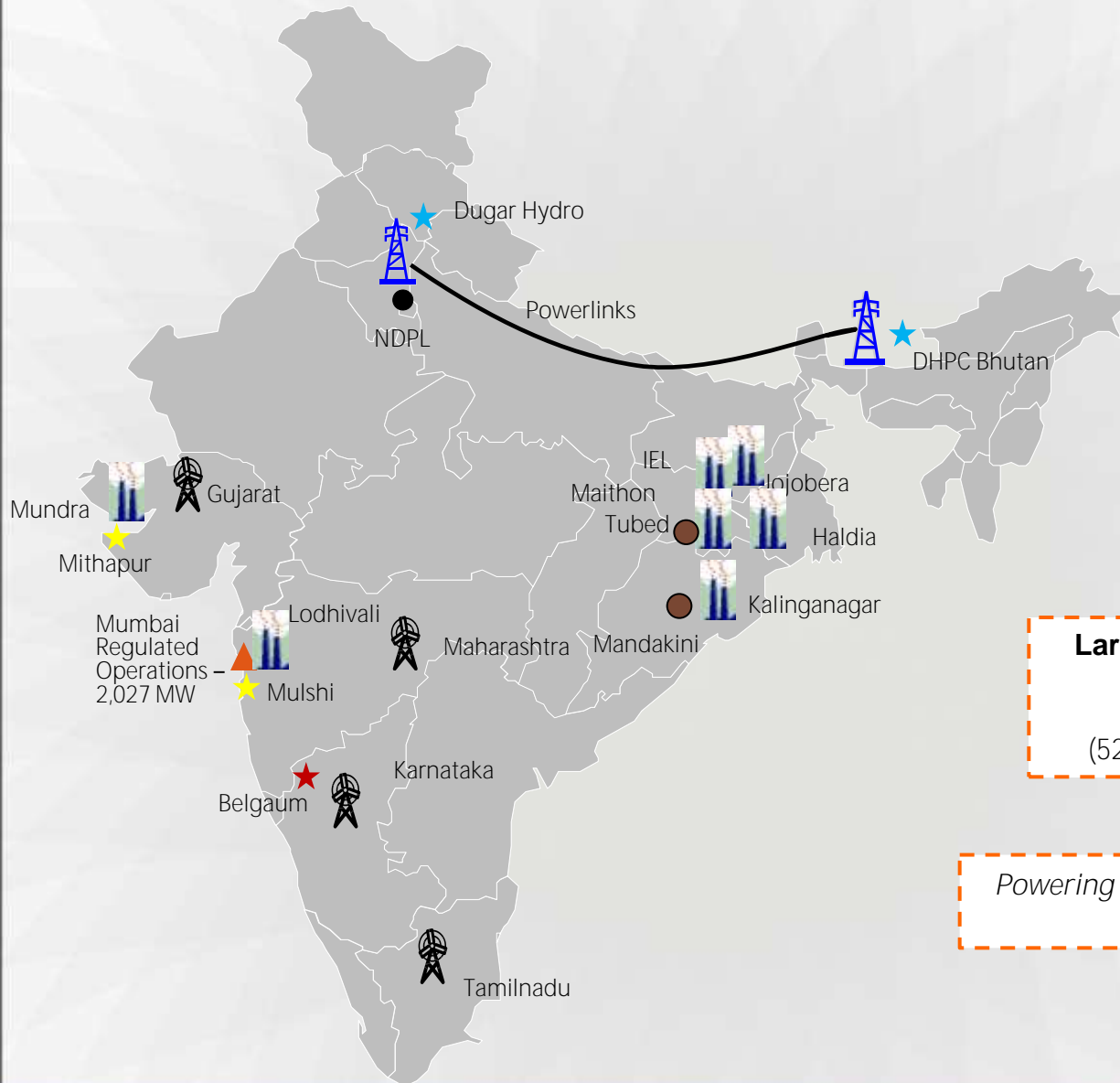
- Mumbai Transmission network
- 51:49 JV between Tata Power and Powergrid Corporation of India Ltd

- New business vistas utilizing customer interface management
  - DDG solutions
  - Open Access
- Mumbai distribution network
- 51:49 JV between Tata Power and Govt. of Delhi for distribution in Delhi

***Integrated Lifecycle Management from Fuel to Retail –  
Strong presence across the value chain***



# In India, your Company has evolved with stronger Mumbai play, to wider presence across the country



## Power generation capacity (MW)

### Operational

	Thermal	2,974 MW
	Hydro	447 MW
	Wind	283 MW
	Solar	3 MW
	Transmission	
	Distribution	

### Under Execution

	Thermal	4,565 MW
	Hydro	126 MW
	Wind	100 MW
	Solar	35 MW
	Coal mines	13.5 MT

**Largest, Most Reliable and Efficient Private Sector Energy Major -**  
 Tata Power commissions Unit#1  
 (525 MW) of the 1,050 MW Maithon Mega Power Project

*Powering Expansion – Delivered projects speak more than delivered words*



# Commitment to sustainability



# Tata Power has undertaken a number of initiatives on Sustainability as a part of 'Leadership with Care'



## Care for environment

- Growth through renewables, clean / green energy
- Efficient technologies, investments in energy startups
- Emission and waste reduction
- Carbon footprint reduction
- Green buildings
- Bio-Diversity conservation
- Resource conservation

## Care for community

- Principles of community engagement
- Programs on livelihood, infrastructure and natural resources
- Helping communities become self-reliant and empowered
- Participatory development
- Carbon neutral village clusters

## Care for customers

- Energy clubs
- Customer care centers
- Demand side management, energy audits
- Going beyond mere transactions

## Care for people

- Safety and health
- Organizational transformation
- Employee learning & development
- Developing managers that are stewards of the environment and society, are deeply customer centric, across domains/ functions
- Buildings and interiors that are friendly, and help create the right culture

***Giving back is the 'sustainable and affirmative' means towards progression***



# Greenolution

Greenolution is Tata Power's intent to lead the efforts towards a greener world not just internally but also externally through education, engagement and ensuring participation. Key programs that run under Greenolution:

- Implementation of 100% recycled paper usage in office
- Tree plantation at all our plants and site locations
- Saving water at our plants, office and site locations
- Saving fuel through carpooling and other initiatives
- Waste Management at our offices
- Energy conservation and efficiency initiatives at all our locations and outside
- Reducing air travel and using webcast/video conferencing facilities
- Participation in 'Clean your city' drives and campaign

*Powering a Greener World*

A **TATA POWER** initiative  
**Green**  **olution**  
Powering A Greener World



# Snapshots of your Company's community initiatives

## Tata Power Introduces 'Project Sujaan' in Gujarat

- Enters into an agreement with 'Hole-in-the-Wall Education Ltd' (Hiwell), a JV of NIIT Ltd. and International Finance Corporation (IFC)
- Sets up 'Learning Stations' for a period of 3 years in 4 villages across 2 blocks
- Community program is a 'First' of its kind in the State of Gujarat
- The programme will cover more than 1,000 students in the schools of villages Tunda, Vandh, Nana Badhiya and Mota Kandagra. Apart from this, the facility can also be accessed by the adult population of these villages, numbering more than 2,500 persons.

## Tata Power's Unique Community Initiative Beats the Heat for Nirsa Maithon area

- Provides drinking and domestic water supply through tankers around its project site during summer of 2011
- Renovates 6 existing ponds during the year in the surrounding villages

## Tata Power Provides Increased Income Generation Opportunity to Farmers in Lonavala

- Distributes 1500 kg of high yielding paddy seeds to 150 farmers
- Per acre yield of paddy increased by 1.5 times in comparison to previous year

## Tata Power Creates Income Generation Avenues for Womenfolk in Dehrand and Shahapur at Maharashtra

- 10 new Self Help Groups (SHG) formed and 33 existing SHGs reactivated
- Specialized training on accounting imparted to over 98 women from nearby villages
- Raigad District Cooperative Bank announces exclusive services to SHGs and women of Dherand and Shahapur

## Tata Power Launches "My Mumbai, Green Mumbai!" Program for its Customers to Encourage Energy Efficiency

- Partners with leading Consumer Brands to offer energy efficient products at large discounts under its Demand Side Management (DSM) efforts
- Introduces Consumer Appliance Exchange Programme to facilitate 30% to 50% reduction in monthly power bills for its customers
- Continues to drive "5 POINT" program under its DSM efforts

## Tata Power Unveils The Second Compendium of its Bio-diversity - "Wild Orchids Of Northern Western Ghats"

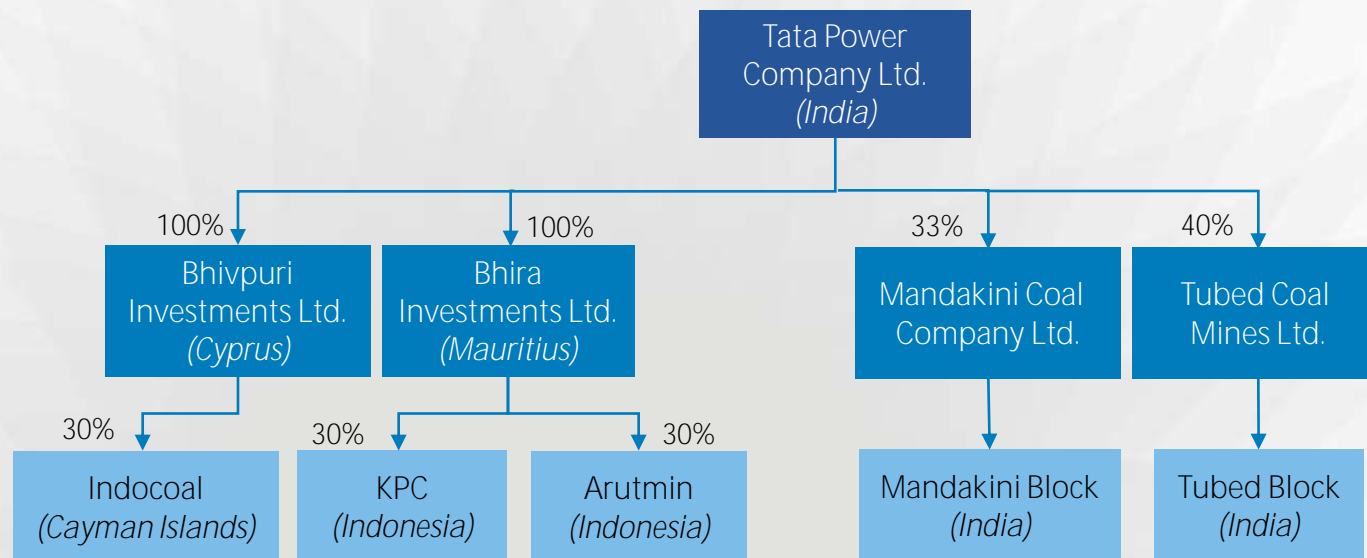
- Compilation of over 100 species flora and fauna; book includes recorded and endemic species present in the Ghats of Maharashtra, Belgaum and Goa



# Fuel de-risking strategy



# To guard against risks on fuel supply, your Company has made Strategic Investments in 'Coal' resources



## Indonesian Coal entities

- A 75% majority is required for corporate restructuring actions, constitutional amendments, changes in board, material transactions and dividend or other distribution declarations
- Right to appoint 2 out of 5 members of the boards of both the commissioners and directors and also management committees to handle certain special functions
  - CFOs at KPC & Arutmin nominated by Tata Power
- Overall rights adequately protected through the Shareholders' Agreement

## Operating Performance

Operating Performance	CY '10	CY '09	CY '08
Quantity mined (MT)	~60	~63	~53
Average Selling Price (FOB USD/ton)	~71	~63	~73

- Total estimated coal production to reach 100 mn tonnes by 2013

*Our strategic investment ensures complete fuel security in upcoming 4,000 MW imported coal project and your Company will aspire to pursue more of such opportunities.*



# Captive Coal Blocks - Mandakini

## Project Outline:

- 7.5 MTPA (jointly allotted with Jindal Photo Film and Monnet Ispat & Energy - each JV Partner having a share of 2.5 MTPA) at Dist. Angul, Orissa
- Project cost expected to be ~Rs. 6 bn
- Coal mined planned to be utilised in large capacity in Orissa

## Project Status:

- Mining plan approved by MoC
- Received Environment Clearance from Ministry of Environment and Forest, GOI and Consent to Establish from Odisha State Pollution Control Board.
- Land acquisition for the coal block is expected by end 2011 - 6(i) notification has already been issued for 8 villages. Rs. 800 mn deposited with IDCO based on demand notice received for acquisition of private land



# Captive Coal Blocks - Tubed

## Project Outline:

- 6 MTPA [Jointly allocated with Hindalco at Latehar, Jharkhand – Hindalco (60%) 3.6 MTPA & Tata Power (40%) 2.4 MTPA]
- Project cost expected to be ~Rs. 5.6 bn
- Coal mined planned to be utilised in large project in Jharkhand

## Project Status:

- Mining plan has been approved by MoC.
- Public hearing completed successfully. Environmental Clearance expected shortly from Ministry of Environment and Forest, GoJ
- Land acquisition activities for the coal block are in early stages - 4(1) notification is under issue

*Low cost fuel ensures flexibility across generation business models*





# Generation Business



# Existing Presence across business models

Business Structure / Model	Capacity (MW)	% of overall capacity	Returns
Regulated returns	1,927	61%	Fixed return on equity
Regulated tariff mechanism (renewables)	277	9%	Fixed tariff + PLF driven
Captive power plant	668	21%	PPA driven (14-19%)
Merchant	200	6%	Market driven
MoU/Bilateral	20	1%	PPA driven
Case II (for project)	81	3%	Bid driven

*Stable cash flows from existing portfolio of regulated business*

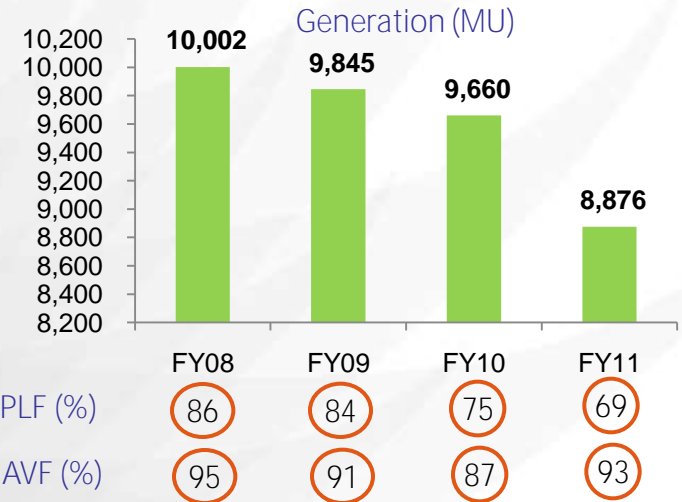


# Mumbai Regulated Operations

## Thermal



Unit	Capacity	Fuel
Unit 4	150 MW	Oil & Gas
Unit 5	500 MW	Coal
Unit 6	500 MW	Oil & Gas
Unit 7	180 MW	Gas
Unit 8	100 MW	Coal
Total	1430 MW	

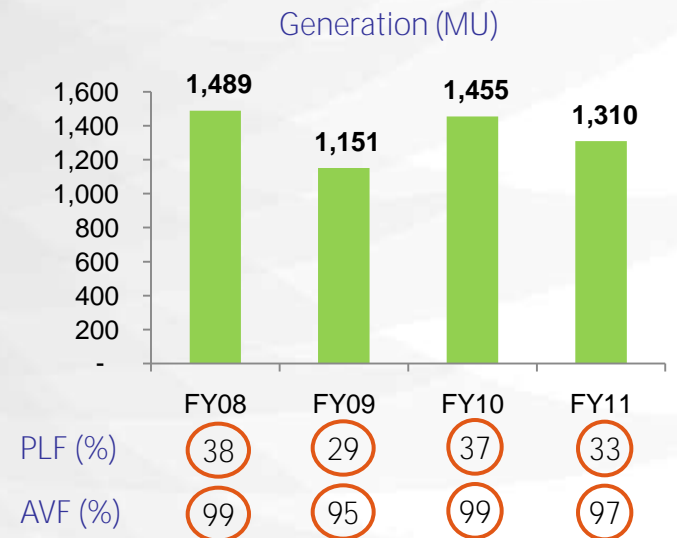


**Due to high 'Oil' price, dispatch of power is restricted from these units. Your Company is working on alternatives.**

## Hydros



Location	Capacity
Khopoli	72 MW
Bhivpuri	75 MW
Bhira	300 MW
Total	447 MW



**Mumbai Power is Tata Power – Unmatched uninterrupted power supply**

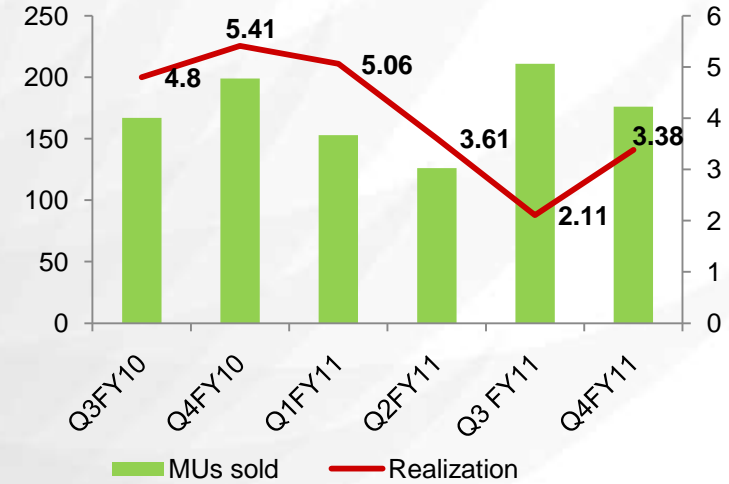


# Merchant Capacity

## Haldia



- Capacity ■ 100 MW
- Fuel Type ■ Production gases (Hot flue gases from Hoogly Metcoke)
- Customer ■ PPA with Tata Power Trading
- Model ■ Merchant

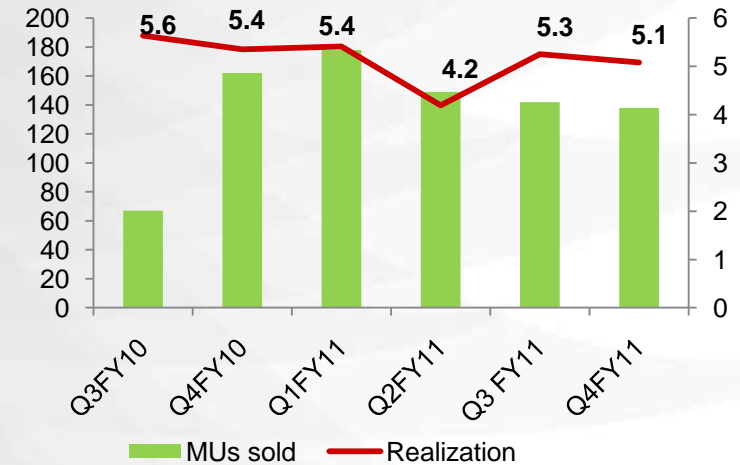


\* Remaining 20 MW in Haldia under PPA to WBSEDCL; MUs sold include 20 MW

## Trombay Unit 8



- Capacity ■ 100 MW
- Fuel Type ■ Imported Coal
- Customer ■ PPA with Tata Power Trading
- Model ■ Merchant



**Upside from presence in merchant market**

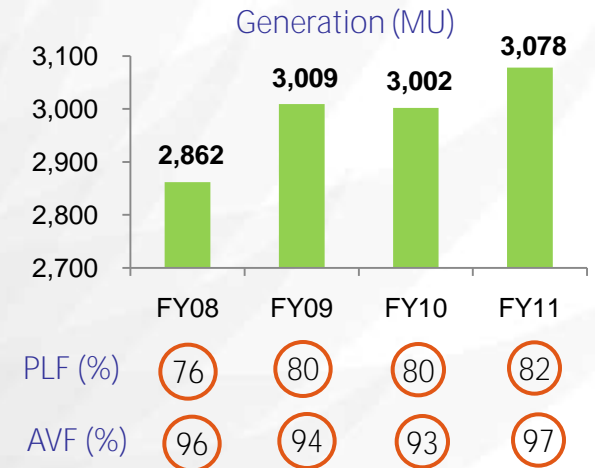


# Jojobera & Belgaum

## Jojobera



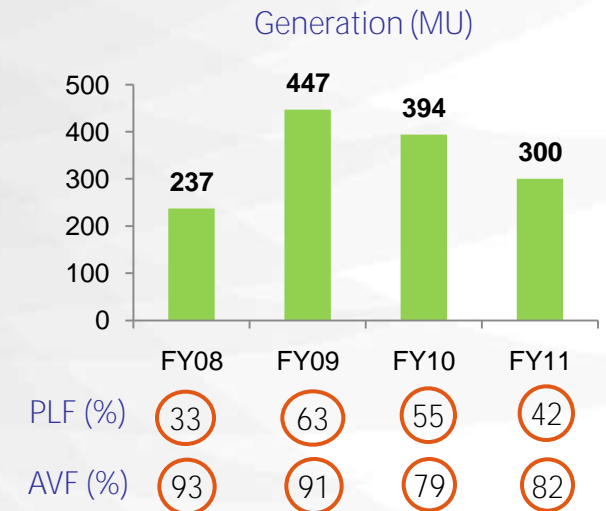
- Capacity
  - 428 MW
  - Unit 1: 67.5 MW, Unit 2-4: 120 MW each
- Fuel Type
  - Domestic Coal
- Customer
  - Tata Steel
  - 20 year PPA till 2017
- Model
  - Fuel and Interest are a pass through
  - Other expenses on normative basis



## Belgaum



- Capacity
  - 81 MW
- Fuel Type
  - Heavy Fuel Oil
- Customer
  - KPTCL – 12 year PPA till 2012
- Model
  - Fuel charge is a pass through
  - Fixed Charge has been recovered consistently



# Industrial Energy Limited (IEL)



IEL – PH6



- |               |   |
|---------------|---|
| Capacity /COD | ▪ 120 MW, Aug 2009 (PH-6)   |
| Fuel Type     | ▪ Production gas (Furnace / Coke Oven Gases of Tata Steel)                      |
| Customer      | ▪ Tata Steel  |
| Model         | ▪ Fuel and Interest costs are a pass through, other expenses on normative basis |
| Generation    | ▪ FY10 - 563 MU, FY11 - 738 MU  |

IEL – Unit#5



- |               |   |
|---------------|---|
| Capacity /COD | ▪ 120 MW, Mar 2011 (Unit #5)  |
| Fuel Type     | ▪ Domestic Coal   |
| Customer      | ▪ Tata Steel  |
| Model         | ▪ Fuel and Interest costs are a pass through, other expenses on normative basis |
| Generation    | ▪ 10 MU as of 31 Mar 2011. COD declared on 27 March 2011                        |

***High returns from captive business***



# Significant presence in 'Renewables'

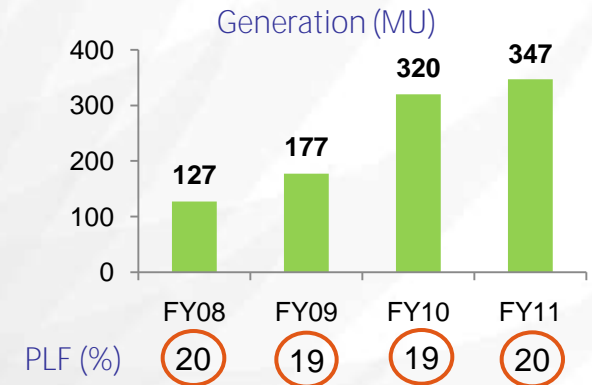
## Wind



- Capacity ■ 283 MW
- Customer ■ Maharashtra: TPC-D 100 MW  
3rd Party 21 MW
- Karnataka: BESCOM 50 MW
- Gujarat: GUVNL 50 MW
- Tamilnadu : TANGEDCO 49.5 MW

Tariff Structure	FY11 Tariff* (Rs / kwh)	Annual Escalation
Maharashtra	3.95	Rs 0.15 till 2020
Karnataka	3.40	Nil
Gujarat	3.37	Nil
Tamilnadu	3.30	Nil

\* Effective tariff currently for wind assets is Rs. 3.55/ kwh



## Solar - Mulshi



- Capacity/ COD ■ 3 MW , Mar 2011
- Customer ■ TPC -D
- PPA signed with TPC-D for 25 years
- Generation ■ 0.35 MU as of 31 Mar 2011

**Utility company with largest wind portfolio**

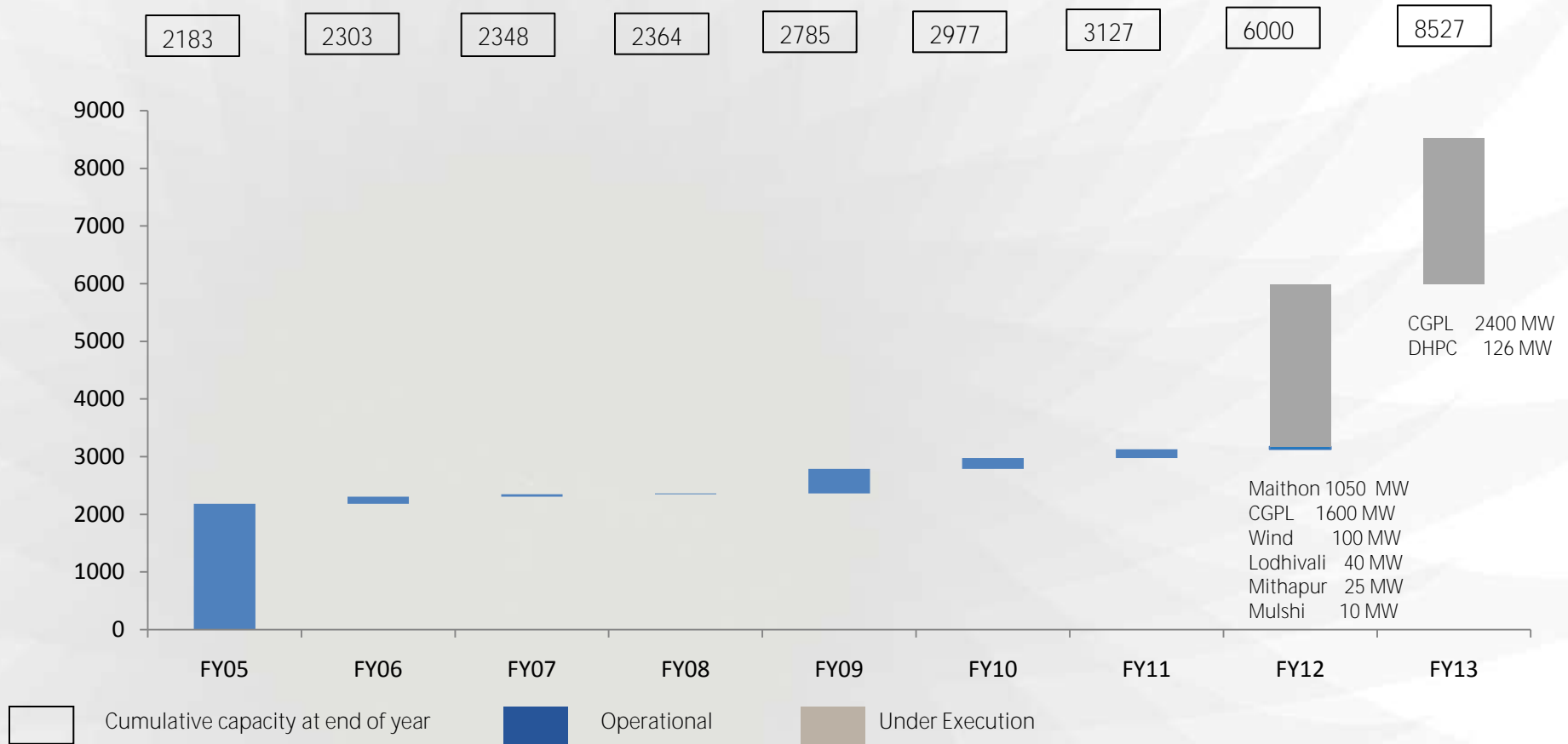




# Projects



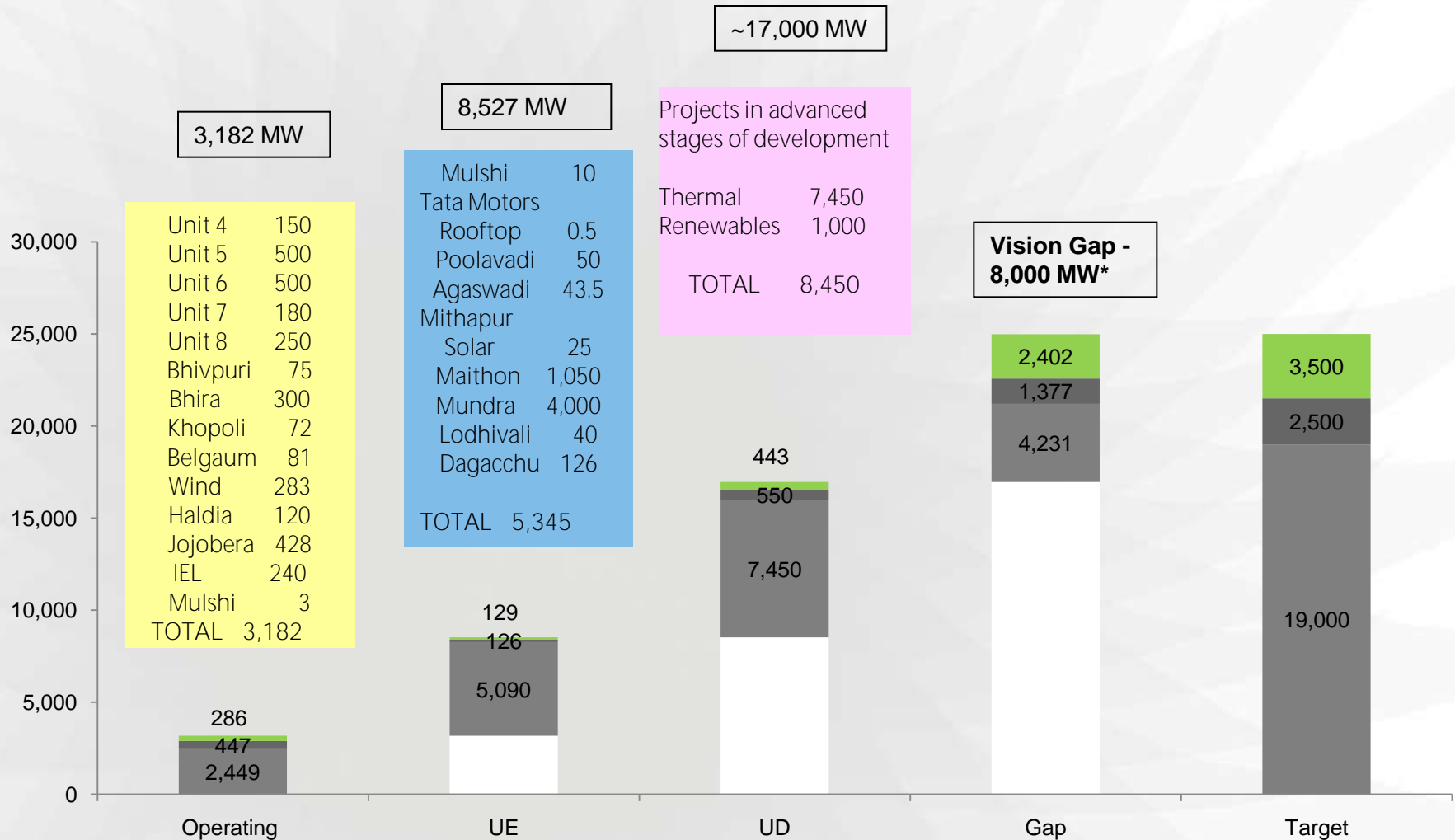
# Your Company is moving to significantly add to its capacity in FY12 and FY13



**Growing to 3x capacity by FY13 –  
All projects in advanced stage of construction**



# Vision – 25,000 MW by 2017



UE – Under Execution, UD – Under Development  
 \* Gap would be reduced if Phase II projects and possible domestic coal based UMPP come online

**Poised for fascinating growth**



# Your Company is pursuing various options to address the challenge posed by change in law in Indonesia



- To de-risk the fuel, your Company had entered into a Coal Supply Agreement (CSA) with Indonesian Coal Mines for a substantial portion of fuel requirement
- Tata Power had quoted tariff and got coal supply contract aligned to the tariff structure for initial 5 years
- In the period between the bidding and now, the cumulative CERC escalation factor is at about 17% while the actual price escalation in market prices is over 150%. This will have a price impact of about \$ 40 per ton
- To compound matters, there has been a change in law in Indonesia, that prescribes the procedure for Setting Mineral and Coal Benchmark Selling Price
- The major highlight of this law is that it forces sellers to sell coal by referring to the benchmark price which is the prevailing market rate
- It also mandates that the pre-existing contractual arrangements to get re-aligned with the new regulations
- This change in law has created a situation that could not have been foreseen by any developer
- Similar changes have been made by other two large Coal exporting nations. The compensation of use of imported coal is an issue the Government needs to address as local coal cannot meet the growth needs of the Power Sector
- Your Company is engaging with the stakeholders in the Government of India as well as Indonesia to work out a sustainable solution to the issue



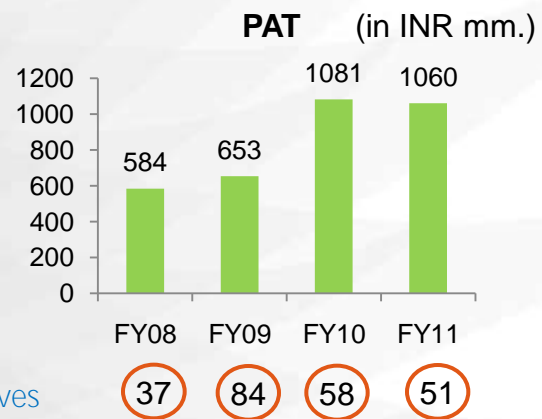
# Transmission and Distribution Business



# Powerlinks Transmission Ltd.

- India's first private sector inter-state transmission project on a BOOT basis
- Implemented through a JV between Tata Power (51%) and Powergrid (49%)
- Powerlinks Transmission Limited has been formed primarily to evacuate power from the Tala Hydro Project in Bhutan and to carry surplus electricity from the North Eastern States to the North Indian belt
- POWERLINKS developed the 1166 km EHV Transmission Line at a cost of Rs.1560 Cr (approved cost Rs. 1612 Cr)

- Capacity
- 1200 km 400 kV double-circuit transmission lines
- Incentive Structure
- As a percent of equity on availability above Target of 98%
- Dividend (FY11)
- 21%



**Successful public private partnership**

Incentives



transforming dreams into real solutions for all

Regulated Equity: Rs 4.64bn

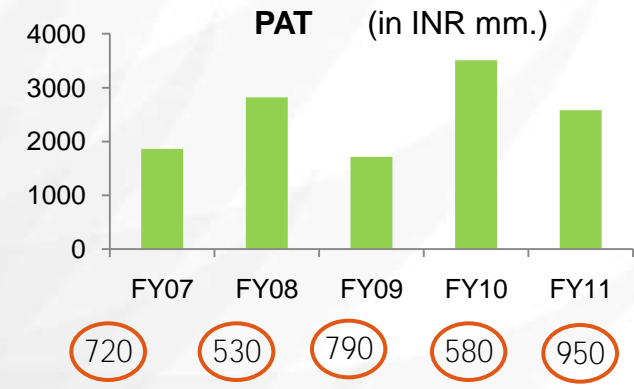
RoE: 15.5%



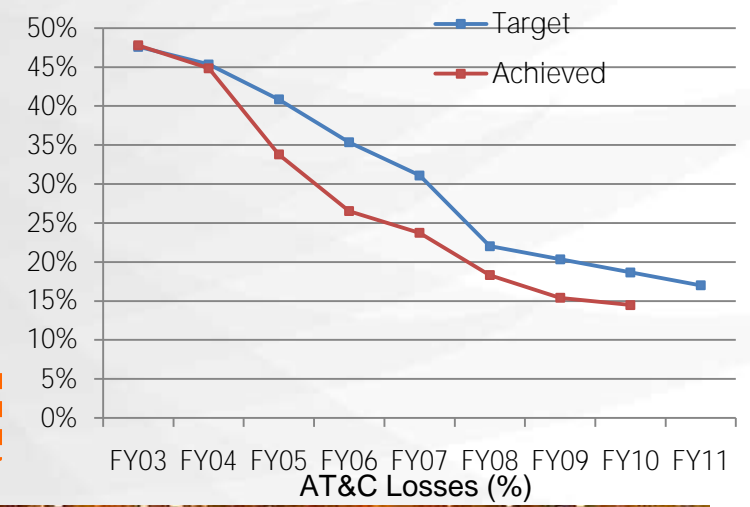
# North Delhi Power Limited (NDPL)

North Delhi Power Limited (NDPL) is a 51:49 joint venture between Tata Power Company and the Government of NCT of Delhi

- Customer base
  - >1 million customers with ~7000 MUs of consumption
- FY11 Revenues
  - Rs 39.88bn
- FY11 Regulated Equity
  - Rs 8.33 bn
- ROE%
  - 16% on capitalized asset base
- Incentive Structure
  - Upto 15% of AT&C losses: retain 50% of additional revenue
  - Further, retain total revenue



Incentives

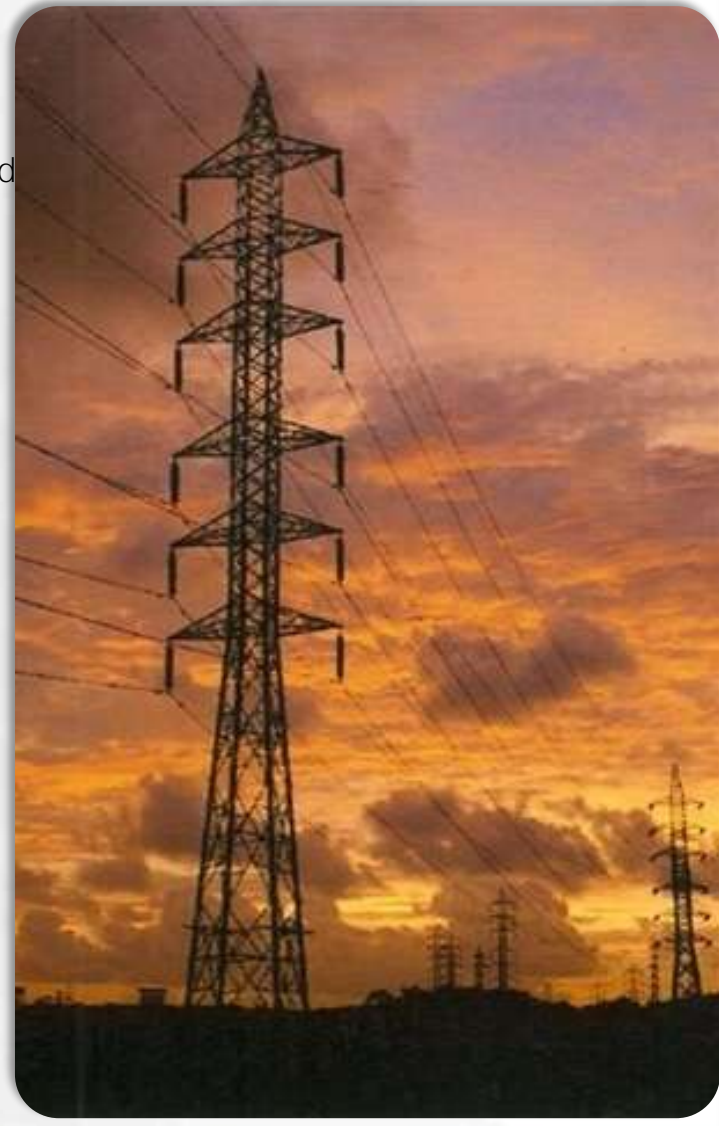


**PPP in Distribution -  
Exemplary performance in reducing AT&C losses**



# Mumbai Transmission

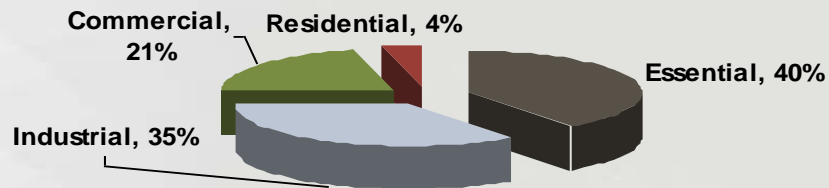
- Tata Power (TPC-T) is amongst the 3 Transmission Licensees that transmits power into Mumbai
- The TPC-T transmission network comprises of about 1,100 CKm of 220 kV / 110 kV lines and 17 high-voltage receiving stations
- Two Extra High Voltage (EHV) lines capacity augmented (170 MVA to 350 MVA) by **replacement of the conductor with new technology "High Ampacity conductors"**
- Network upgrade and capacity expansion projects are being carried out to meet the load growth in Mumbai



# Mumbai Distribution and Retail Customer Business

- Among 3 private distribution licensees viz. Tata Power, BEST & R-Infra in Mumbai
- After MERC allowed changeover of customers from R-Infra to Tata Power in Oct 2009, TPC-D has added over 143,000 changeover customers to build about 200,000 retail customer base
- Regulator has introduced a 5 yr MYT from April 2011 with pre-agreed parameters to set annual tariffs

Customer Profile by Sales in MU



Top 10 Customers (~40% of capacity)

- |                   |                        |
|-------------------|------------------------|
| 1. Railway        | 6. Mahindra & Mahindra |
| 2. RCF Ltd        | 7. Godrej & Boyce      |
| 3. HPCL           | 8. Ordnance Factory    |
| 4. BARC           | 9. BMC Bhandup Complex |
| 5. Mumbai Airport | 10. Mumbai Port Trust  |

***Aspires to be largest distributor of power in Mumbai in MU terms, soon***





# Other Businesses



# Other Businesses

## Shipping Subsidiaries

- Trust Energy Resources Pte Ltd incorporated in Singapore for owning ships to meet shipping requirements and trading in fuels, Energy Eastern Pte Ltd incorporated for chartering of ships
- Shipping requirement for Mundra - 6 vessels going up to 8 vessels by FY13
- To be met through a combination of long term charters and out right purchases of cape size vessels – 3 LT charters signed, 1 under final stages of negotiation and 2 Korean build vessels purchased for delivery in 2011

## Tata BP Solar

- 51:49 JV between BP Solar and Tata Power setup to manufacture mono and poly-crystalline cells and modules
- Solar Cell Manufacturing Facility with installed capacity of 84MW; Module Manufacturing Facility with installed capacity of 125MW
- Initially focused on exports, currently increasing focus on domestic sales
- Generated revenues of INR 9.08bn in FY11

## Strategic Electronics Division (SED)

- Division of Tata Power originated as an internal R&D unit for power electronics; designs and develops electronic devices
- SED was recently awarded the prestigious order to modernise Airfield infrastructure for the Indian Airforce
- Fast emerging as a prime contractor to Ministry of Defense (MoD) for indigenous products
  - Completed delivery of air defense systems to 16 designated sites. Installation and commissioning done at 13 sites
  - Does not manufacture ammunition or explosives of any kind, including cluster bombs and anti personnel mines
- Generated revenues of INR1,407 mn in FY11



# Detailed Financial Statements



# Standalone Financials

Figures in ` Crores	FY11	FY10
Operating Income	6,918	7,098
Operating Expenditure	(5,328)	(5,220)
Operating Profit	1,591	1,879
Interest & Finance Charges	(462)	(423)
Depreciation	(510)	(478)
Other Income	494	282
Profit Before Tax	1,112	1,259
Provision for Taxes	(171)	(321)
Profit After Tax	941	939

Note: Figures may not add up due to rounding error



# Consolidated Financials

Figures in ` Crores	FY11	FY10
Operating Income	19,451	18,986
Operating Expenditure	(14,854)	(15,133)
Operating Profit	4,596	3,853
Interest & Finance Charges	(868)	(782)
Depreciation / Impairment	(981)	(893)
Other Income	411	589
Profit Before Tax	3,157	2,767
Provision for Taxes	(976)	(629)
Profit Before Minority Interest	2,182	2,139
Minority Interest/ Associates	(122)	(172)
Profit After Minority Interest/Associates	2,060	1,967

Note: Figures may not add up due to rounding error



## Q1 FY12 Performance - Standalone

Figures in ` Crores	Q1 FY12	Q1 FY11
Operating Income	1,921	1,868
Operating Expenditure	(1,476)	(1,412)
Operating Profit	445	456
Interest & Finance Charges	(130)	(85)
Depreciation	(133)	(127)
Other Income	248	128
Profit Before Tax	430	372
Provision for Taxes	(148)	(103)
Profit After Tax	282	269

Note: Figures may not add up due to rounding error



# Q1 FY12 Performance - Consolidated

Figures in ` Crores	Q1 FY12	Q1 FY11
Operating Income	5,825	5,185
Operating Expenditure	(4,354)	(4,040)
Operating Profit	1,470	1,145
Interest & Finance Charges	(310)	(328)
Depreciation / Impairment	(272)	(235)
Other Income	124	(61)
Profit Before Tax	1,013	643
Provision for Taxes	(509)	(289)
Profit Before Minority Interest	504	354
Minority Interest/ Associates	(74)	(36)
Profit After Minority Interest/Associates	430	318

Note: Figures may not add up due to rounding error



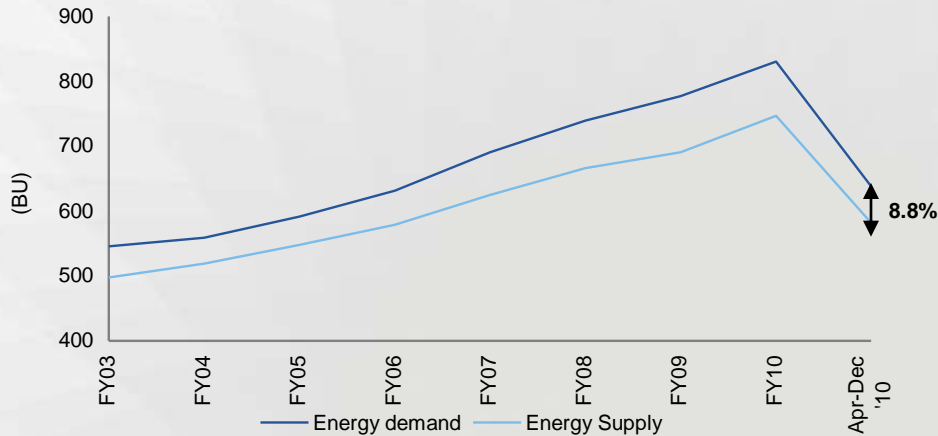
# Industry Overview



# Favorable Industry Dynamics

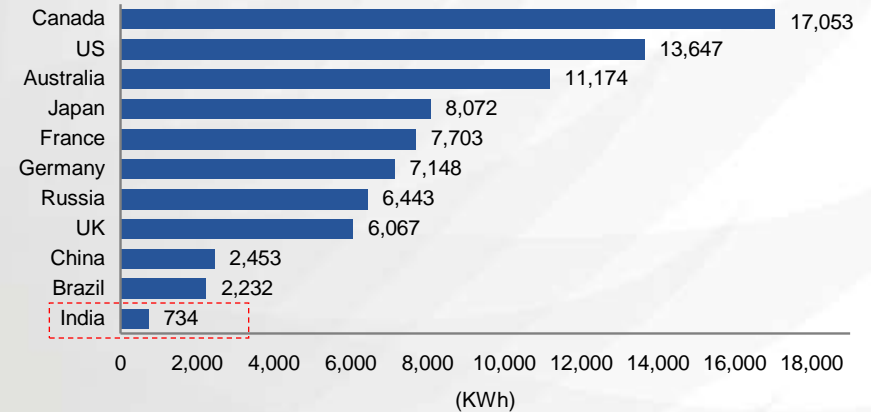
High GDP growth in India, power shortages, rising per-capita consumption and projected capacity addition results in a large potential for growth in the power sector

India suffers from an energy deficit



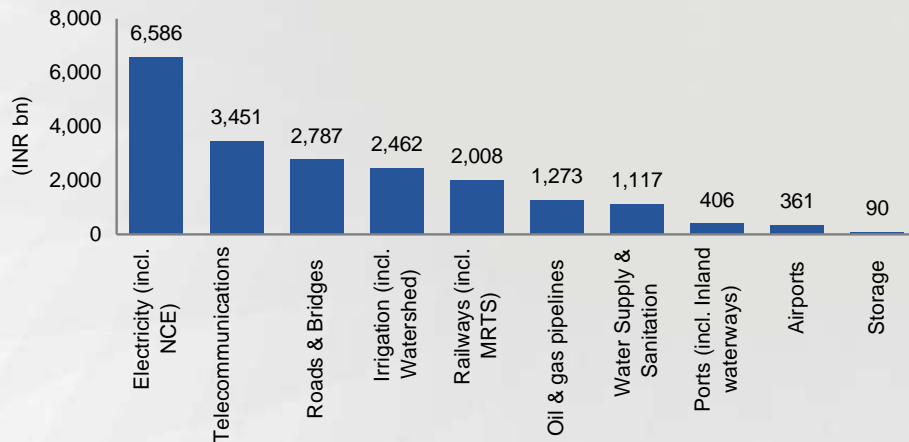
Source: CEA, Power Scenario at a glance, January 2011

Low per capita consumption of electricity (2008)



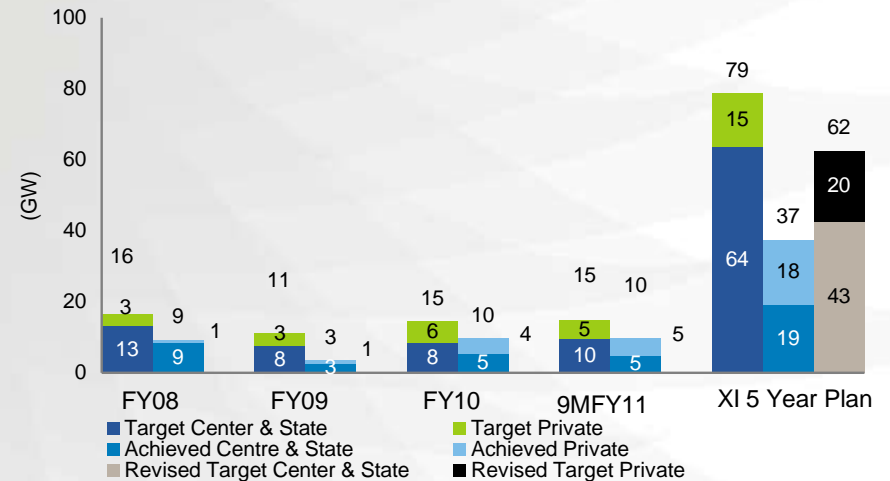
Source: IEA, Key World Statistics 2010 (RoW), CEA (India)

Proposed investment during the XIth five-year plan – 32% towards electricity



Source: Planning commission

Projected capacity addition in the coming years

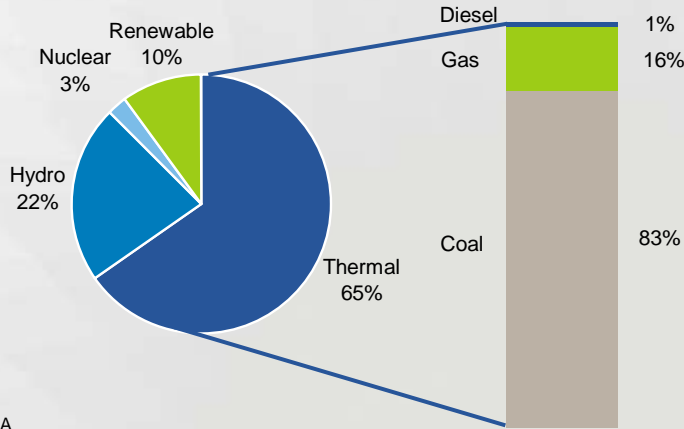


Source: CEA, Mid-Term Appraisal of the Eleventh Five Year Plan

# Favorable Industry Dynamics

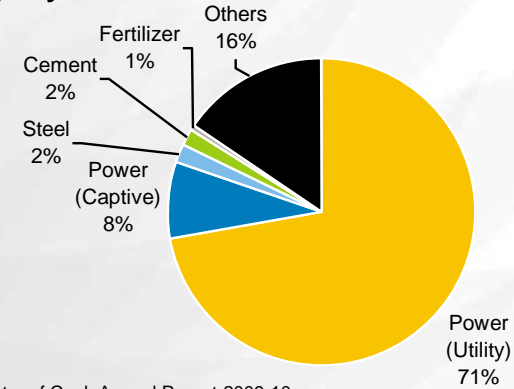
India currently has and is projected to have a deficit in coal with the shortfall being filled by imported coal

## Current installed capacity – large requirement for coal



Source: CEA

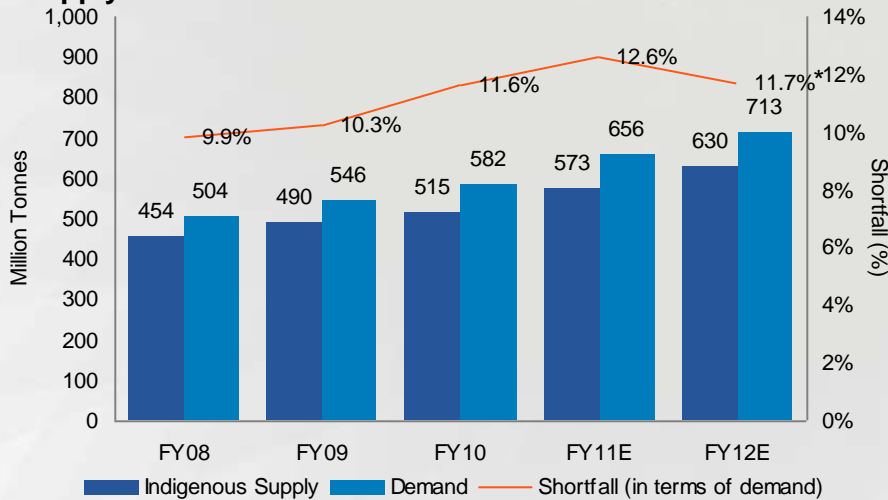
## Coal usage by sector in India



Source: Ministry of Coal, Annual Report 2009-10

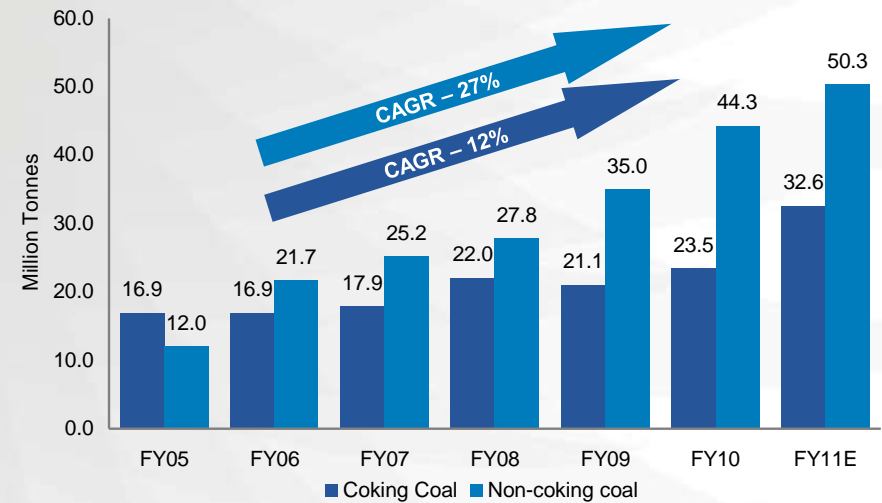
Note: Power (Utility) includes coking and non-coking coal feed to washery and Bina deshaling plant Steel includes coking coal to feed washeries, direct feed, blendable to steel plants, coke ovens, private cokeries and NLW coke to cokeries

## Coal supply and demand



Source: Ministry of Coal, Annual Plan 2010-11  
\* Analyst estimates for shortfall increases in CY12 to about 110 MT (20%)

## Growth in imported coal in India



Source: Ministry of Coal, Annual Report 2009-10