



NTPC Limited **Investor Presentation**

August 2014



NTPC: VISION AND CORE VALUES

To be the world's largest and best power producer,
powering India's growth

Core Values



OUTLINE

About NTPC

Recent Financial Highlights

Opportunities and Sectoral Growth Drivers

Competitive Position

Risks and Mitigants

Growth and Capex Plans

Sustainability Initiatives

NTPC: SNAPSHOT



1. Power Generation	<ul style="list-style-type: none"> ✓ As of July 31, 2014 total installed power generation capacity of 43,128MW* (including 6,001 MW* through other group companies) ✓ 22,414 MW of capacity, under construction ✓ 1st Hydro project to be commissioned by the end of current financial year ✓ Solar PV capacity to cross 100 MW by year end -95 MW commissioned, 15 MW under construction ✓ Global footprint in Sri Lanka and Bangladesh through JVs, contributed seed capital to both international JVs
2. Power Trading	<ul style="list-style-type: none"> ✓ Subsidiary NNVN is the prominent power trader in India-traded 9.322 Bus in last fiscal ✓ Also appointed for power supply to Bangladesh and nodal agency for trading power with Bhutan
3. Mining and Oil Exploration	<ul style="list-style-type: none"> ✓ 10 coal mining blocks allotted by GoI, work under progress for 5 coal blocks ✓ Production potential of ~100 MTPA from coal mines, Total Geological Reserves of over 5 billion tons ✓ Awarded oil exploration blocks
4. Manufacturing Power Equipment	<ul style="list-style-type: none"> ✓ 3 JVs for manufacturing power equipments- castings, forgings, high voltage equipment and BoP
5. Others	<ul style="list-style-type: none"> ✓ Electricity distribution business through its subsidiary NESCL ✓ Consultancy services to State Electricity Boards, state generating companies and other private companies

NTPC Group has 21 JVs and 4 Subsidiary Companies

*capacity of gas stations based on rated operating capacity

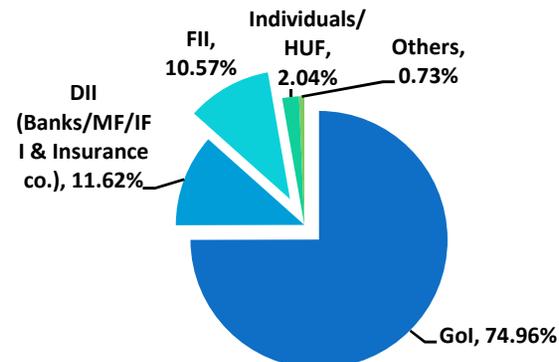
- ✓ Incorporated as a Government company in 1975; amongst 7 Maharatna GoI companies, empowered to make its own investment decisions
- ✓ NTPC Group accounts for 17.7% of India's total installed capacity and 25.9% of All India Thermal Capacity as on 31.03.2014

1835 MW capacity Commissioned during FY14
2675 MW capacity declared commercial during FY14

- ✓ NTPC (Stand-alone) generation 233.28 BU and group generation 250.626 BU in FY14
- ✓ Achieved a Coal PAF of 91.79% in FY 14 against 87.63% in FY13
- ✓ Achieved a Coal PLF of 84.29% in Q1FY 15 against 79.12% in Q1FY14
- ✓ Ranked as the No.1 IPP and Energy Trader Globally by Platts 2013
- ✓ Ranked 424th largest company in the world in the Forbes Global 2000 list 2014
- ✓ Long term corporate plan of having 128 GW of Installed Capacity by 2032

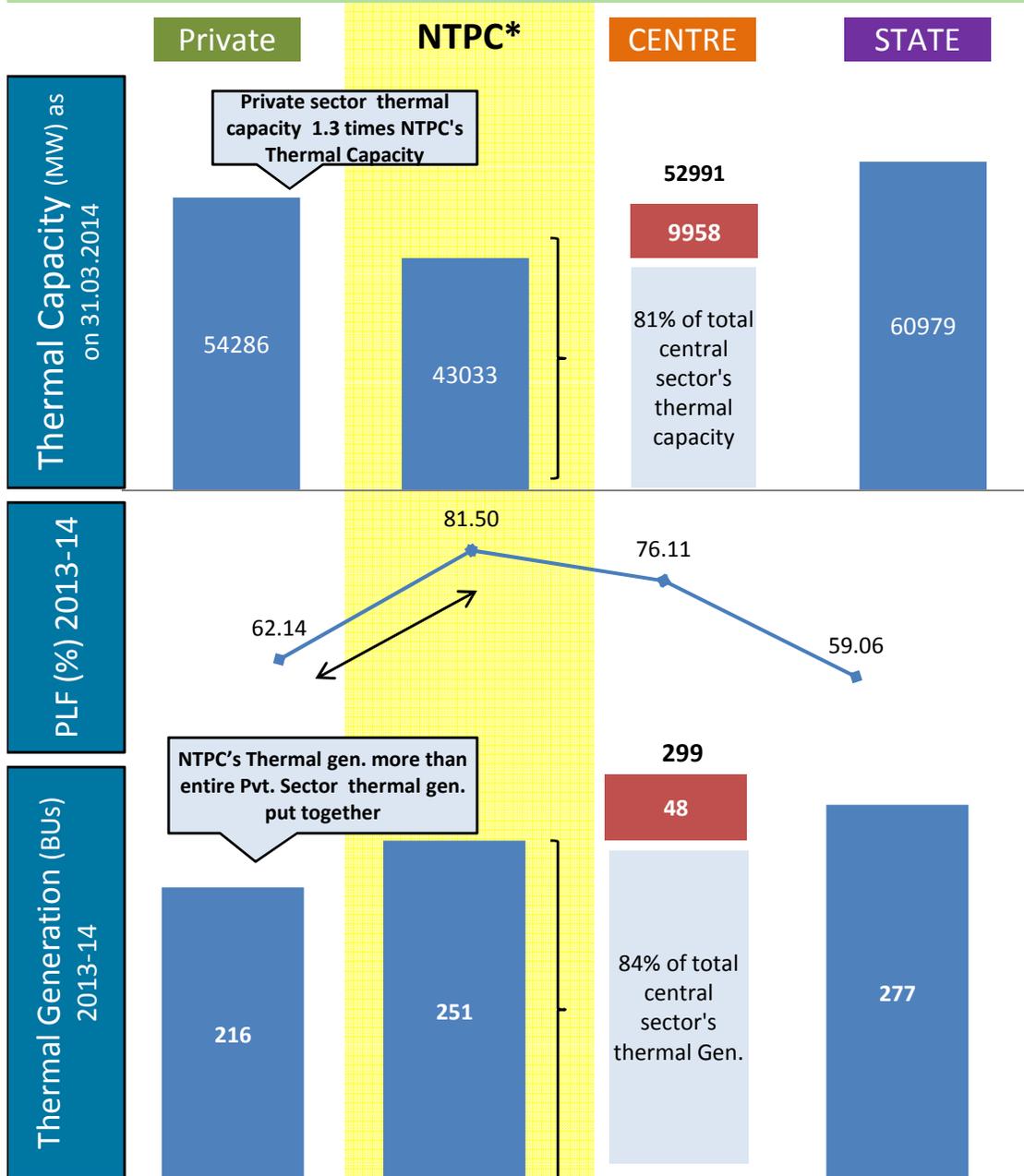
FY14 Key Financials

P&L	(Rs. Crore)		Balance Sheet	(Rs. Crore)	
	Consol	Stand-alone		Consol	Stand-alone
Revenue	87,003	74,708	Total Debt	81,021	67,170
EBITDA	22,459	20,453	Cash & Bank Bal.	17,051	15,311
PAT	11,403	10,975	Net Debt	63,971	51,859

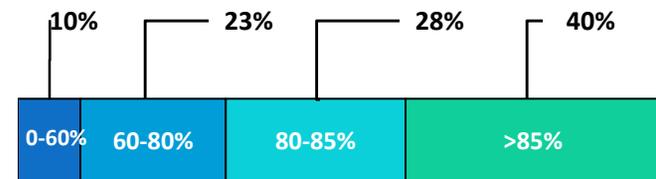


Shareholding pattern as on 30th June 2014

NTPC THE LONE STAR PERFORMER



- NTPC sustains its leadership position in past 2 decades
- Contributes to 81% of central installed capacity and 84% to corresponding generation
- NTPC has made the **single largest thermal capacity addition** in the country during the first two years of 12th Plan.
- The average PLF of private sector is 19 ppt lower than NTPC's average PLF for 2013-14.
- During 2013-14, approx. 68% of NTPC's total commercial coal capacity operated at a PLF of more than 80% and only ~10% less than 60%.



Entire private sector's generation is lower than that of NTPC's despite 1.3x capacity

Note : PLF figures represent coal PLF, *NTPC Group ; NTPC's capacity and generation includes captive

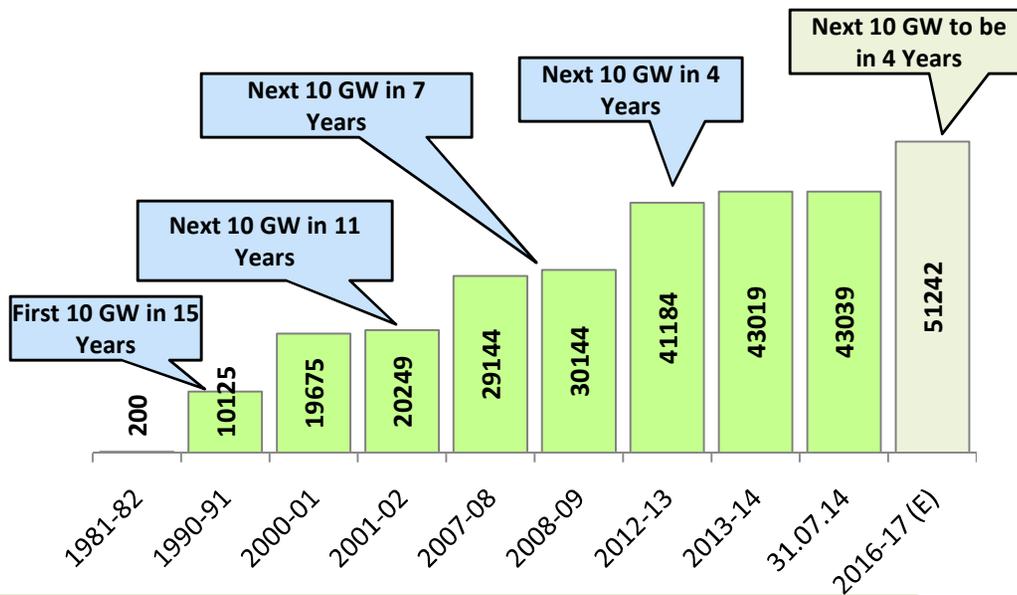
Source: CEA "Energywise Performance Status", excludes certain capacity for which PLF has not been captured by the report.

MARKET LEADER

Financial & Physical Dominance

Rs Crore	एनटीपीसी NTPC	Reliance Power	Tata Power	Adani Power	JSW Energy
Market Cap as on 31.03.2014	98,863	19,664	23,036	13,958	9,717
Installed Capacity(GW) as on 31.03.2014	43.1	3.8	8.56	7.9	3.1
FY14 Assets	179554	20736	30539	38779	19244
FY14 EBITDA	20453	192	2947	4129	2268

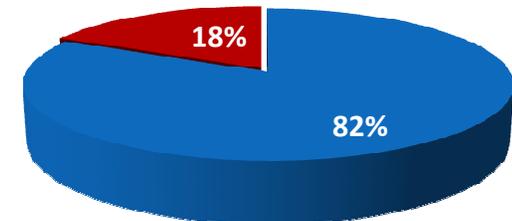
Capacity Addition Pace



Accelerated pace of project execution

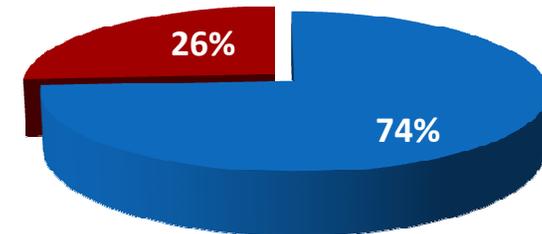
NTPC's share in all India Capacity and Generation

Share of Installed Capacity
(as on 31st March 2014)



■ Rest of India 199921 MW
■ NTPC (Group) 43108 MW*

Share of Electricity Generated
(for FY 2013-14)



■ Rest of India 716.52 BU
■ NTPC (Group) 250.63 BU

WHAT WE PROMISED ... IS WHAT WE DELIVERED IN FY14

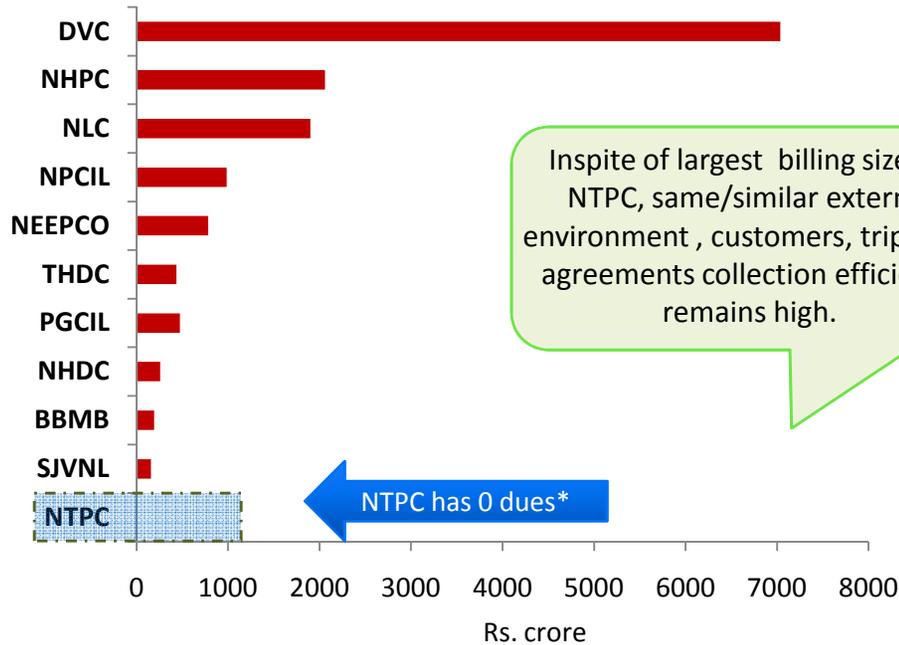
Actual Performance Against Commitments Made to Investors for FY14

	Guidance	Performance
1	✔ Target PAF (Coal)(FY14) : 89%+	✔ PAF (Coal) 91.79%
2	✔ Commissioning of 1875 MW capacity	✔ 1835 MW commissioned
3	✔ Capex (standalone) Target of Rs.20200 crore in FY14	✔ Capex incurred Rs. 21797 crore.
4	✔ Planned to award 5000 MW in FY14	✔ Investment Approval of 4150 MW (Rs.30756 crore): ✔ 500 MW Unchahar STPP (Rs. 3363 crore) ✔ 1600 MW Daralipali STPP (Rs.12532 crore) ✔ 1980 MW at North Karanpura STPP (Rs. 14367 crore) ✔ 70 MW of Solar PV (Rs.494 crore)
5	✔ Starting of mining	✔ Local law and order problem has become impediment but Management committed to deliver, mining to start in FY15-16
6	✔ Fuel Supply Agreement for all new capacities	✔ FSAs signed for all commissioned capacities except for Barh II where coal to be supplied from captive mines. Pending start of mines, coal will be arranged through short term measures

Awarded investment approval to projects worth Rs. 1,16,464 crore* during FY12 to FY14

UNPARALLELED COLLECTION EFFICIENCY

Outstanding dues of power utilities (principal and surcharge) payable to Central Public Sector Undertakings (CPSUs) as on 30.04.2014 (Source : CEA Report)

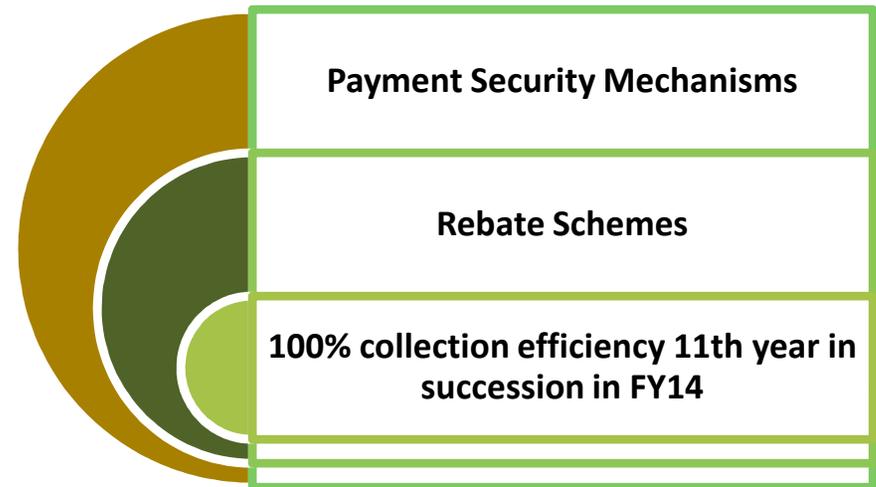
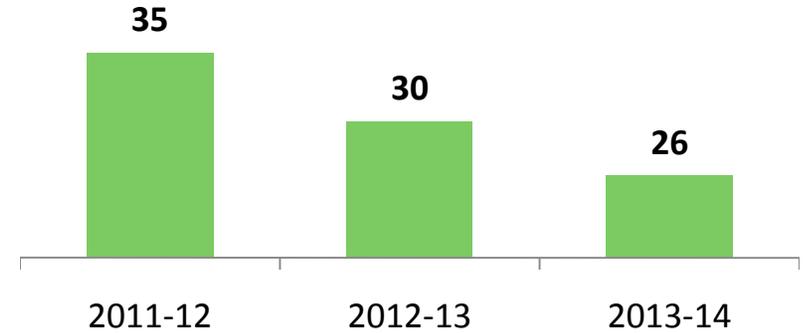


Inspite of largest billing size of NTPC, same/similar external environment, customers, tripartite agreements collection efficiency remains high.

← NTPC has 0 dues*

- DVC :Damodar Valley Corporation ;
- NHPC :National Hydro Power Corporation
- NLC :Nyveli Lignite Corporation
- NPCIL : Nuclear Power Corporation of India Ltd.
- NEEPCO :North Eastern Electric Power Corporation Ltd
- PGCIL :Power Grid Corporation of India Ltd
- SJVNL :Satluj Jal Vidyut Nigam Ltd
- THDC :Tehri Hydro Development Corporation
- BBMB :Bhakra Beas Management Board

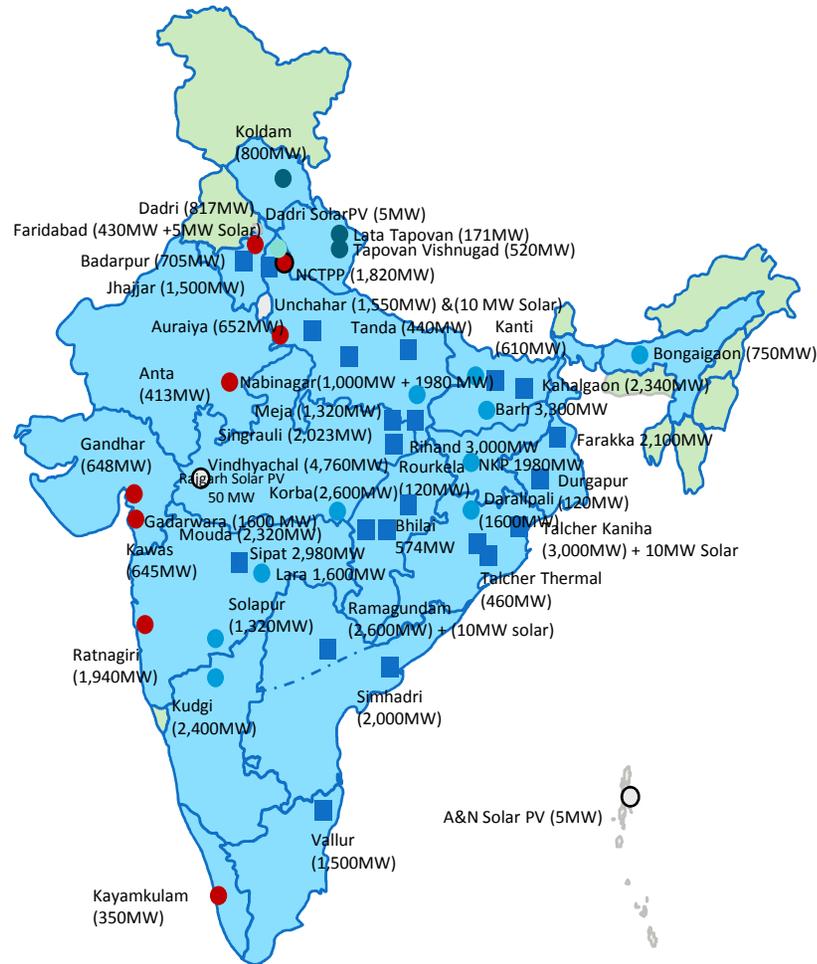
Average Debtor Days*



*excluding unbilled revenue and net of provisions for doubtful debts

*outstanding for a period higher than 90 days

NTPC GROUP: PAN INDIA PRESENCE

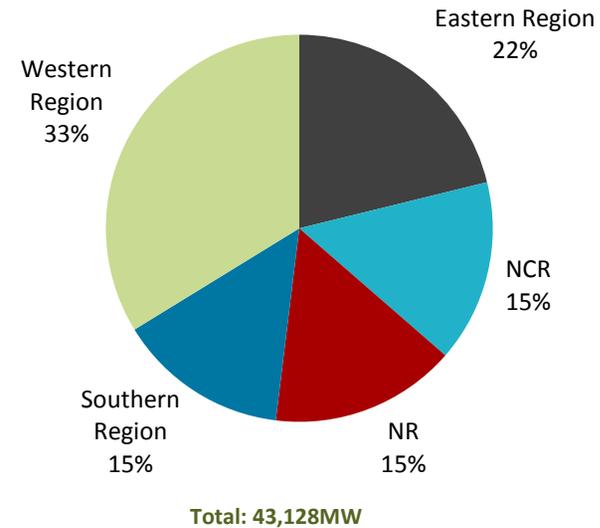


Map not to scale. Includes capacity of under construction plants

- Coal Power Station
- Ongoing Hydro Power Projects
- Gas Power Stations
- Ongoing Thermal Projects
- Solar PV

NTPC Group currently has projects across 20 Indian States including coal mining projects

Geographical Spread of NTPC Group Capacity (As on 31.07.2014)



Fuel Mix	No. of Plants	Capacity (MW) ¹	% Share
NTPC Owned			
Coal	17	33,015	76.55%
Gas/Liquid Fuel	7	4,017	9.31%
Solar	7	95	0.22%
Sub-total	31	37,127	86.09%
Owned by JVs and Subs			
Coal	6	4,034	9.35%
Gas	1	1,967	4.56%
Sub-total	7	6,001	13.91%
Total¹	38	43,128	100.00%

1. As of July 31, 2014

RECENT FINANCIAL HIGHLIGHTS

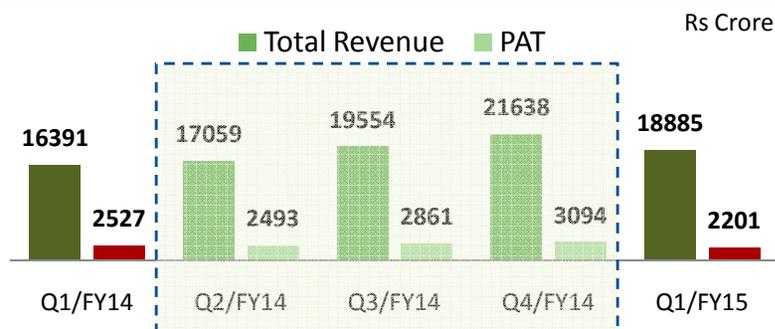


FINANCIAL HIGHLIGHTS Q1/FY15 (UNAUDITED)

Position Statement Q1FY15

Quarter Ended	Q1/FY15	Q1FY14	% change
Key Balance Sheet Highlights			
Fixed Assets incl. CWIP	128,465.03	110,283.15	+16.49%
Investments	12,606.51	10,950.85	+15.12%
Cash & Bank Balance	13,859.72	18,622.04	-25.57%
Other Assets	27,932.63	27,127.79	+2.97%
Total Assets	182,863.89	166,983.83	+9.51%
Net Worth	88,011.06	82,914.53	+6.15%
Total Debt	68,482.71	60,139.98	+13.87%
Other Liabilities	26,370.12	23,929.32	+10.20%
Total of Liabilities	182,863.89	166,983.83	+9.51%

Q-o-Q Revenue and PAT



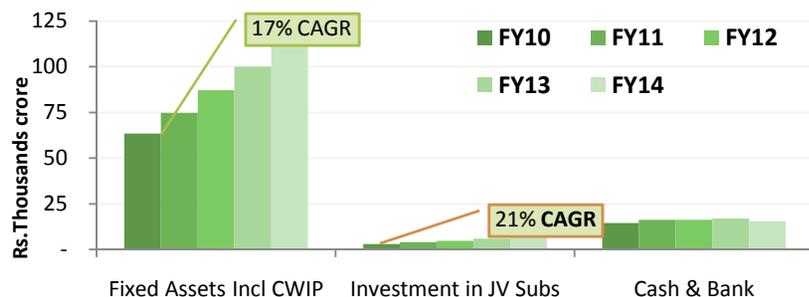
All financial figures in Rs. Crore except where specified

Income Statement Q1FY15

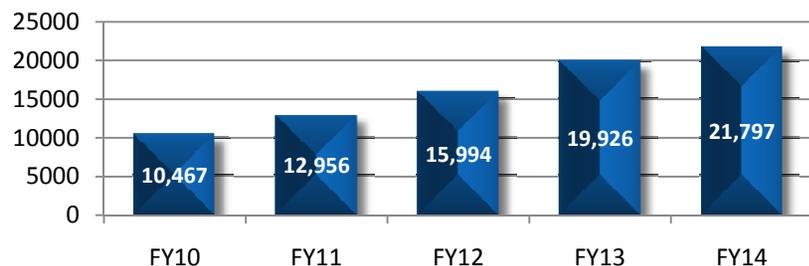
Quarter Ended	Q1/FY15	Q1/FY14	% change
Earnings Highlights			
Revenue from Operation	18,336.75	15,694.07	+16.84%
Other Income	548.39	696.93	-21.31%
Total Revenue	18,885.14	16,391.00	+15.22%
Expenses			
Fuel Cost	12,765.13	9,425.83	+35.43%
Employee benefit exp	934.24	948.74	-1.53%
Depreciation	1,115.47	942.33	+18.37%
Generation & Other Costs	1,118.75	1005.26	+11.29%
Finance Cost	667.91	617.41	+8.18%
Profit Before Tax	2,283.64	3,451.43	-33.83%
Tax Expense	82.44	924.41	-91.08%
Profit After Tax	2,201.20	2,527.02	-12.89%
Other Financial Highlights			
EPS (Rs.)	2.67	3.06	-12.89%
Book Value Per Share (Rs.)	106.74	100.56	+6.15%

FINANCIAL HIGHLIGHTS 2013-14 (AUDITED)

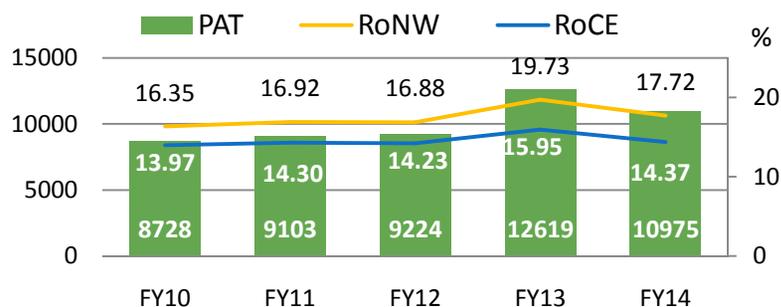
Assets Growth



Capex Growth



Margin Growth



All financial figures in Rs. Crore except where specified

RoNW- Return on Net Worth, RoCE- Return on Capital Employed

Financial Year 2014

Rs. crore			
Year	FY14	FY13	%Change
Key P&L Highlights			
Total Revenue	74,707.82	68,855.81	+8.50%
Profit Before Tax	13,904.65	16,578.63	-16.13%
Profit After Tax	10,974.74	12,619.39	-13.03%
Key Balance Sheet Highlights			
Total Assets	179,554.18	161,116.46	+11.44%
Capital WIP+ cap adv	53,532.61	44,036.73	+21.56%
Investments (non-current)	8,120.90	9,137.64	-11.13%
Year end Cash Balance	15,311.37	16,867.70	-9.23%
Net worth	85,815.32	80,387.51	+6.75%
Total Debt	67,170.22	58,146.30	+15.52%

Other Highlights

Operating Cash Flows	15,732.18	15,495.17	+1.53%
Book Value Per Share (Rs.)	104.08	97.49	+6.76%
Dividend per Share (Rs.)	5.75	5.75	0.00%
EPS (Rs.)	13.31	15.3	-13.01%
Dividend yield at year end*	4.80%	4.05%	+75bps
Price/Book at year end*	1.15	1.46	-

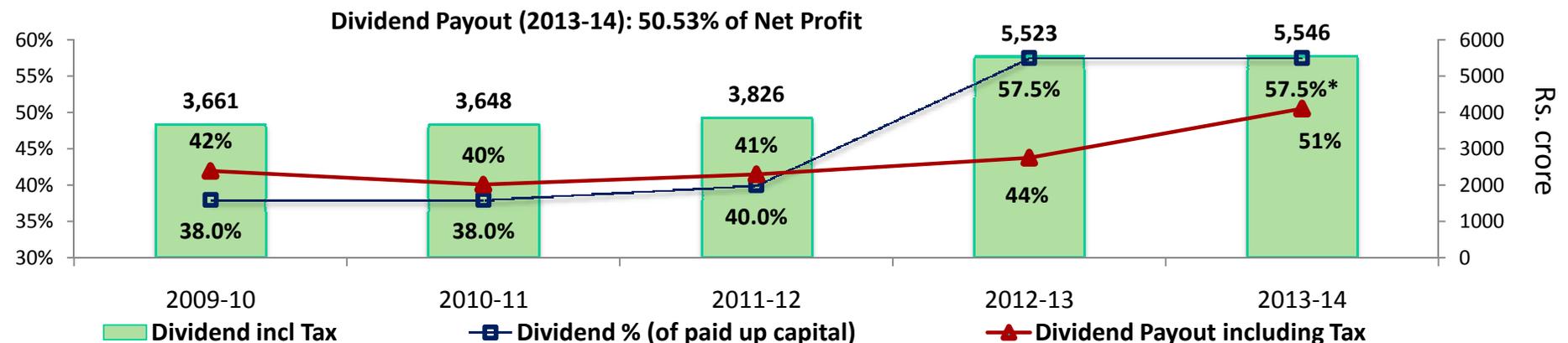
*Based on year end share price of Rs.119.75 and Rs.141.95 as on 31.03.2014 and 31.03.2013 respectively

KEY 5 YEAR FINANCIAL HIGHLIGHTS

Rs. crore

Particulars	2013-14	2012-13	2011-12	2010-11	2009-10	CAGR
EBITDA	20,453	20,216	16,830	15,956	14,641	9%
Profit before tax	13,905	16,579	12,326	12,050	10,885	6%
Profit after tax	10,975	12,619	9,224	9,103	8,728	6%
Dividend	4,741	4,741	3,298	3,133	3,133	11%
Total Fixed Assets (Net block)	117,000	100,046	87,086	74,731	63,459	17%
Investments (Non-current)	8,121	9,138	9,584	10,533	11,212	-8%
Net-worth	85,815	80,388	73,291	67,892	62,437	8%
Total Debt	67,170	58,146	50,279	43,188	37,797	15%
Value added	25,966	22,999	19,738	19,140	17,331	11%
Debt to equity(times)	0.78	0.72	0.69	0.64	0.61	

High Dividend payouts



Paying dividend for last 21 years

*including proposed dividend 2013-14 of 17.5%

OPPORTUNITIES AND SECTORAL GROWTH DRIVERS



POWER DEMAND SUPPLY

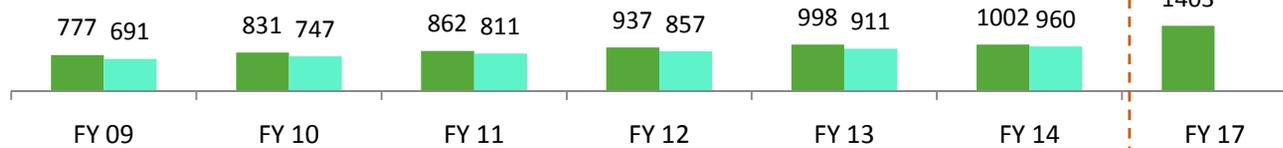
Peak Power Supply Position (GW)



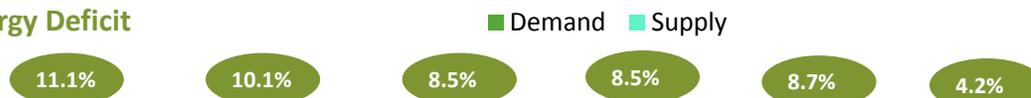
% Peak Deficit



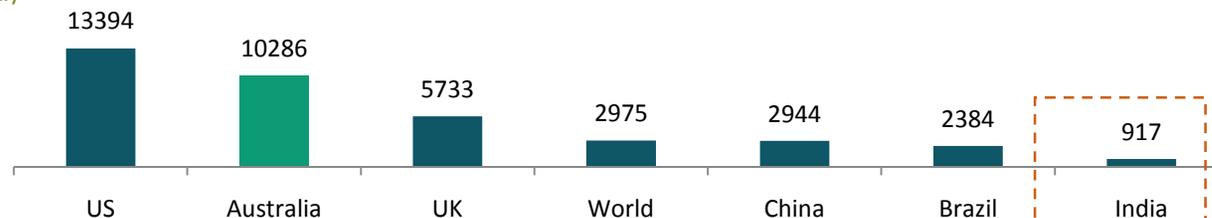
Energy Deficit Scenario (BU)



% Energy Deficit



Per Capita Consumption (kWh/Year)



There was sustained peak and energy deficit in past

Although FY14 peak and energy deficit numbers are lower but this is due to weak financial positions of discoms rather than reduction in demand

Notwithstanding sustained demand, India continues to be among the lowest per capita consumers of electricity globally, lagging Brazil and China by ~3:1

Per capita consumption c.29% of the world average

Massive investments of Rs.17,47,323 crore are planned in 12th plan¹

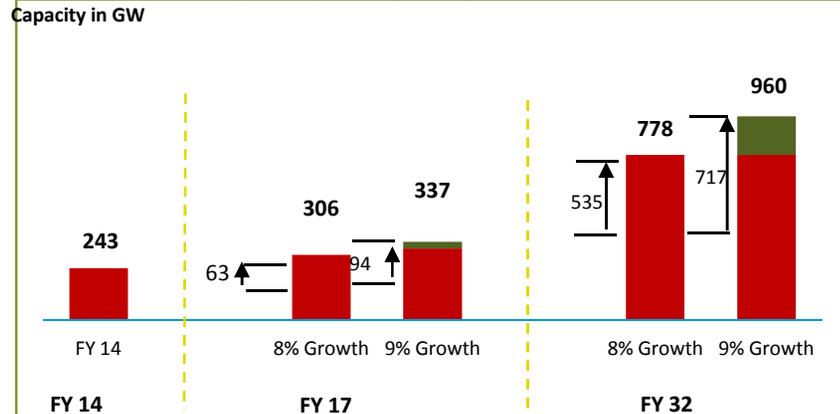
Source: CEA Report, Gol Economic Survey.

1. Report on financing of infrastructure – Planning commission.

2. World Bank indicator EG.USE.ELEC.KH.PC (web site) except India data for 2010 and India's data as on 31.03.2014 (source CEA)

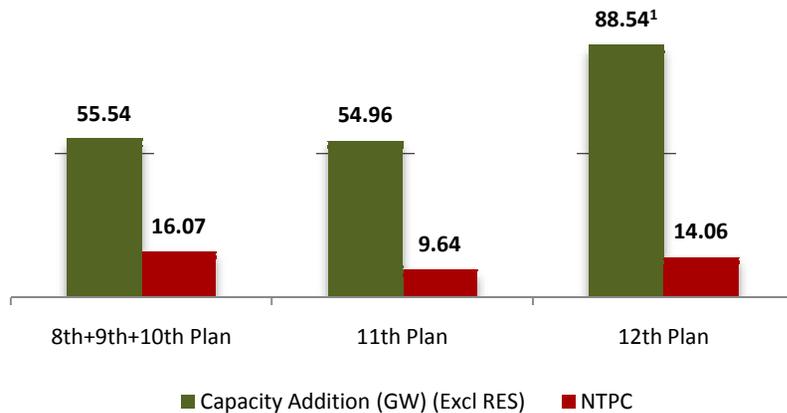
12TH PLAN

India has a Large Capacity Requirement ...



- 26% of existing capacity needs to be added by FY17 to achieve 8% GDP growth
- Average annual capacity addition of ~21 GW required till FY17

Capacity Expansion Plans (GW)

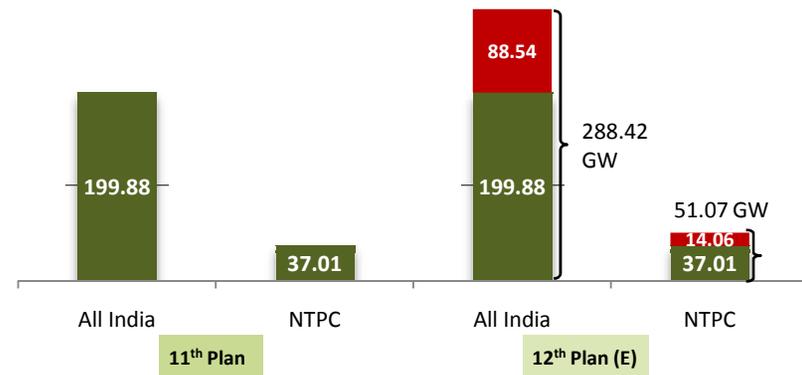


... with Significant Investments Planned in the Sector

12 th Plan (2012–17)	
Capacity excl. RES (MW) ¹	88,536.6
Expected Investments in Power Sector (Rs. Crore) ²	14,99,914
Expected Investments in Non-Conventional Energy (Rs. Crore) ²	2,47,409

Cumulative Capacity (GW)

(12th Plan capacity does not include Renewable Energy Source (RES) capacity addition)



12th Plan NTPC Own Capacity Addition: 11,168 MW, Through JVs/Subs: 2,890 MW, Total Capacity Addition: 14058 MW

Pan India Capacity Addition: 38447.81 MW, NTPC Capacity Addition 6005 MW in first two years of 12th Plan.

1. Draft 12th Plan revised the earlier target of 75785 MW. 2. Report on financing of infrastructure – Planning Commission

COMPETITIVE POSITION

Key Competitive Strengths



Leadership Position in the Indian Power Sector

Long-term Fuel Security

High Operational Efficiency

Ability to Turn Around Underperforming Power Stations

Low Cost Power Producer

Prudent Off-take Policy

Strong Balance Sheet

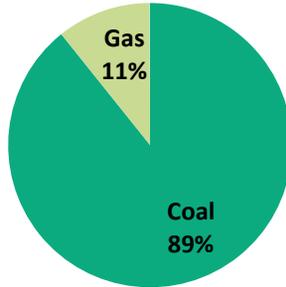
Competent and Committed Workforce

Integrated Business Model - de-risks main business

LONG-TERM FUEL SECURITY

Current Capacity Break-up

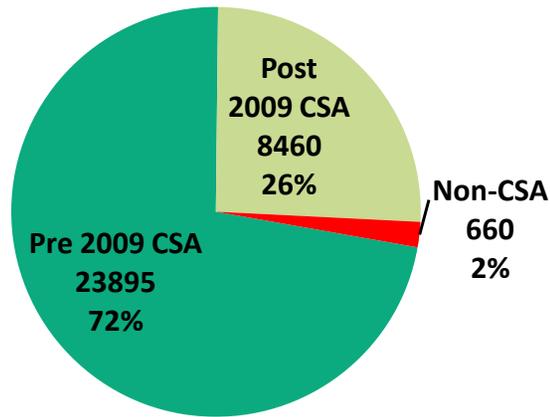
Capacity Break-up (By Fuel)¹



- ✓ NTPC implements projects only upon establishing availability of fuel
- ✓ 'Maharatna' status provides very high level of autonomy with regards to investments in backward integration and new fuel sources
- ✓ By 2032, NTPC will substantially reduce dependence on fossil fuels

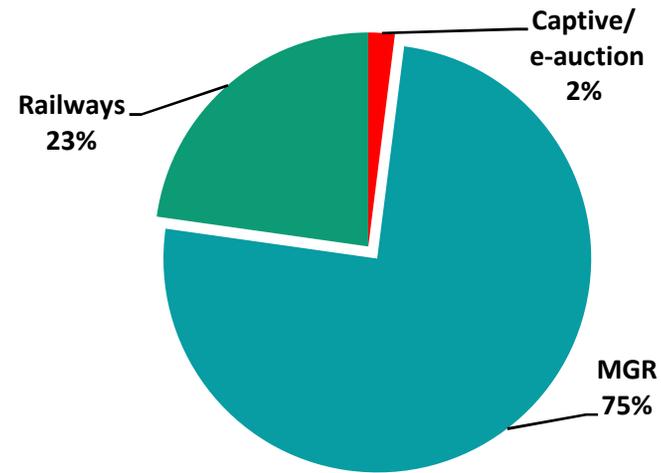
Coal: Long-term Fuel Security

CSAs signed(MW)
Commissioned Standalone Capacity



■ Pre 2009 CSA ■ Post 2009 CSA ■ Non-CSA

Coal Transportation
(Standalone Commissioned Capacity)

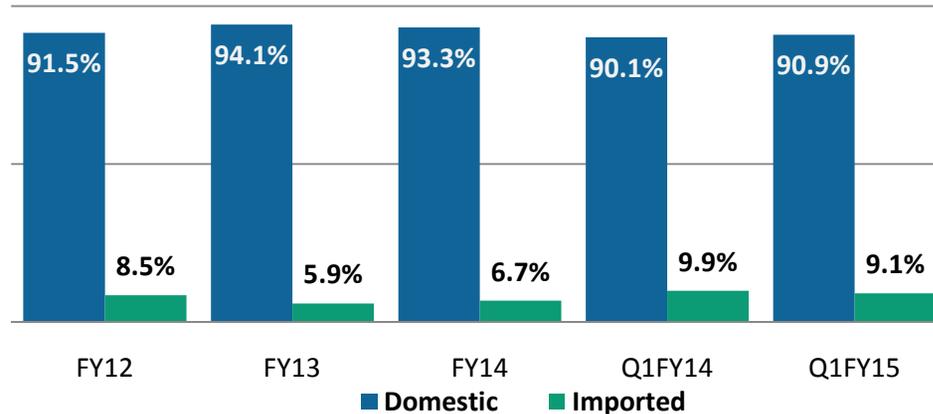


■ Captive/ e-auction

- Standalone Capacity of 32,355 MW is covered by long term Coal Supply Agreements (CSA) which have been signed with CIL & SCCL.
- Additionally, CSA for 1160 MW yet to be commissioned projects have been signed.
- **75%** of coal capacity is linked by own merry go round rail system/belt conveyor system to coal mines representing 10 out of 17 coal plants.
- For group companies, CSAs for 4,390MW have been signed in

LONG-TERM FUEL SUPPLY (CONT'D)

Coal Supply (For NTPC Own Plants)



(In MT)	FY 2012	FY 2013	FY 2014	Q1FY14	Q1FY15
Domestic	129.0	145.9	149.8	34.6	36.0
Import	12.0	9.1	10.8	3.8	3.6
Total	141.0	155.0	160.6	38.4	39.6

2.7% increase in domestic coal supply in FY14 vs. FY13

4.1% increase in domestic coal supply in Q1FY15 vs. Q1FY14

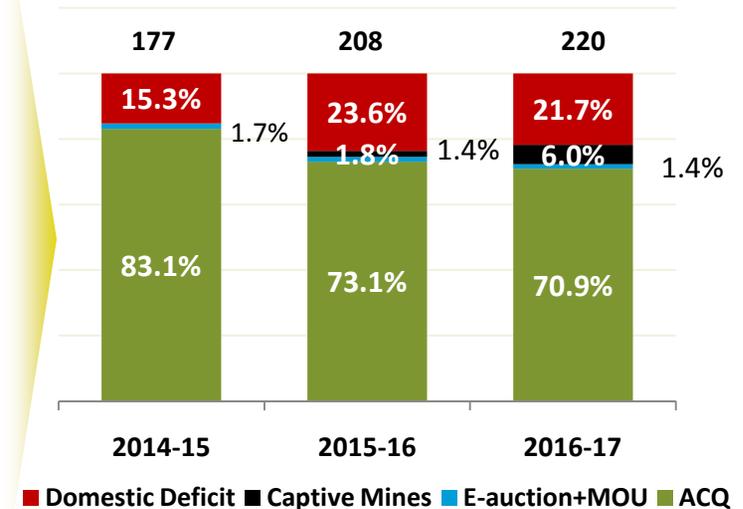
Equivalent Imports (MT)

17

29

28

Coal Requirements FY15E to FY17E (In MT)



■ Domestic Deficit ■ Captive Mines ■ E-auction+MOU ■ ACQ

- ✓ 96% materialisation under ACQs during 2013-14, 85.6% materialisation in Q1 FY14-15
- ✓ Imported coal receipts during FY13-14 10.63 MT accounting for 6.7% of total coal supply during FY 2014.
- ✓ NTPC Board awarded approval for import upto 17 MT of imported coal during 2014-15
- ✓ Coal transport through inland waterways on east coast already started for Farakka STPS.
- ✓ Total Coal stock at NTPC stations as on 31.03.2014 is 6.02 MT as compared to 4.22 MT as on 31.03.2013
- ✓ Coal linkage from CCL for North Karanpura STPP (1980 MW) has been restored.

CAPTIVE COAL BLOCKS FOR LONG-TERM FUEL SECURITY (CONT'D)

6 coal mining blocks allocated to NTPC

- Pakri Barwadih, Talaipalli, Dulanga, Kerandari, Chatti Bariatu and Chatti Bariatu (South)
- Estimated geological reserves of over **3.7BT**
- Incurred cumulative Capex of Rs.2174 crore till FY14
- Peak production capacity of these mines is 53 MT, end use of coal mines will depend upon requirements of projects

	Geological Reserves (MT)	Mining Capacity	Status				Production Plans				
			EC	FC	Acquisition Notice	MDO	FY16	FY17	FY18	FY19	FY20
Pakri Barwadi	1436	15	Yes	Yes	Yes	in process	2.3	5.2	8.5	9.5	10.0
Chatti Bariatu	194+354	7	Yes	Yes	Yes	Yes		1.0	3.0	5.0	7.0
Kerandari	285	6	Yes	1st Stage	Yes	in process		2.0	4.0	6.0	6.0
Talaipalli	1267	18	Yes	Yes	Yes	in process		1.0	2.5	4.5	7.0
Dulanga	196	7	Yes	1st Stage	Yes	in process	1.5	4.0	8.0	13.0	18.0
Total	3732	53					3.8	13.2	26.0	38.0	48.0

4 new coal mining blocks allocated to NTPC

- Banai (Chhatisgarh), Bhal muda (Chattisgarh), Chanrabila (Odisha), Kudanali-Laburi (Odisha)
- Estimated geological reserves of ~ **2BT**
- Estimated Capacity : 39.9 MTPA

	Geological Reserves (MT)	Mining Capacity	End use*
Banai	629	12.6	Barethi-I (2640 MW)
Bhal muda	550	11	Kudgi-I (2400 MW)
Chanrabila	550	11	Gadarwara-I (1600 MW) Unchahar-IV, (500 MW) Bilhaur-I (1320 MW)
Kudanali- Laburi	266	5.3	Bilhaur-I (1320 MW)(Also partly to J&K Govt.)
Total	1995	39.9	

Production from newly allocated 4 blocks to start by the end of 13th five year plan. * end use of coal mines will depend upon requirements of projects

LONG-TERM FUEL SECURITY (CONT'D)

Gas: Long-term Fuel Security

- Long-term gas supply agreements with GAIL under APM for supply of gas to all directly-owned gas power stations at regulated pricing under Government orders
- Domestic natural gas (KG-D6) supply agreements on a long-term basis at prices approved by GoI for four plants
- Gas and R-LNG from public and private sector companies on a spot, short and/or long-term basis
- All owned gas plants strategically located along major gas pipelines

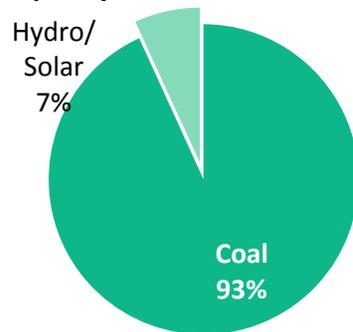
Details of Gas/RLNG tie ups for NTPC Existing Gas Stations

Gas Type	Source/Supplier	Contracted Quantity (MMSCMD)	Contract Valid Till
APM / PMT Gas	ONGC / GAIL	14.48	2021/2019
Non-APM Gas	ONGC / GAIL	0.82	2016
KG D6 Gas	RIL / Niko / BPEAL	2.30	2014
RLNG-Long-term	GAIL	2.0	Dec 2019
Spot/Fallback RLNG	Domestic suppliers	Based on demand from time to time	On reasonable endeavour basis

Diversifying Fuel Mix

Under-construction Capacity Breakup (by Fuel)¹

Capacity Under Construction



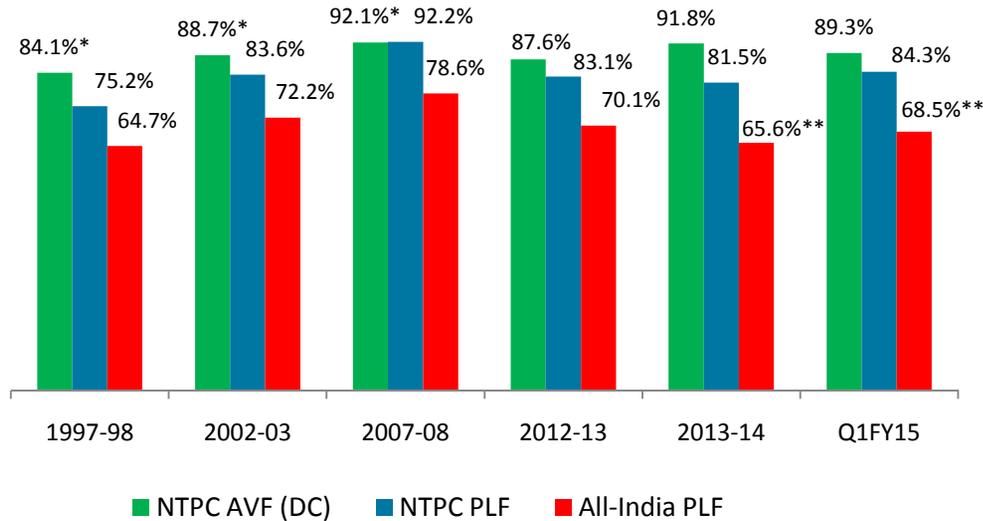
Total: 22,434 MW

- Planning to reduce its carbon footprint and reduce dependence on existing fuel sources
- 95 MW Solar PV projects under operation
- 1,499 MW hydroelectric and 15MW Solar PV projects under construction
- 120 MW of hydro capacity currently under bidding
- Formed JV with Nuclear Power Corporation of India in January 2011 with the objective of setting up a nuclear power project -Planning to set-up 1,400MW PWRH nuclear power plant

1. For NTPC Group as of March 31, 2014.

HIGHLY EFFICIENT PLANT OPERATIONS

Proven Operational Excellence



*AVF on bar ** All India PLF (tentative)

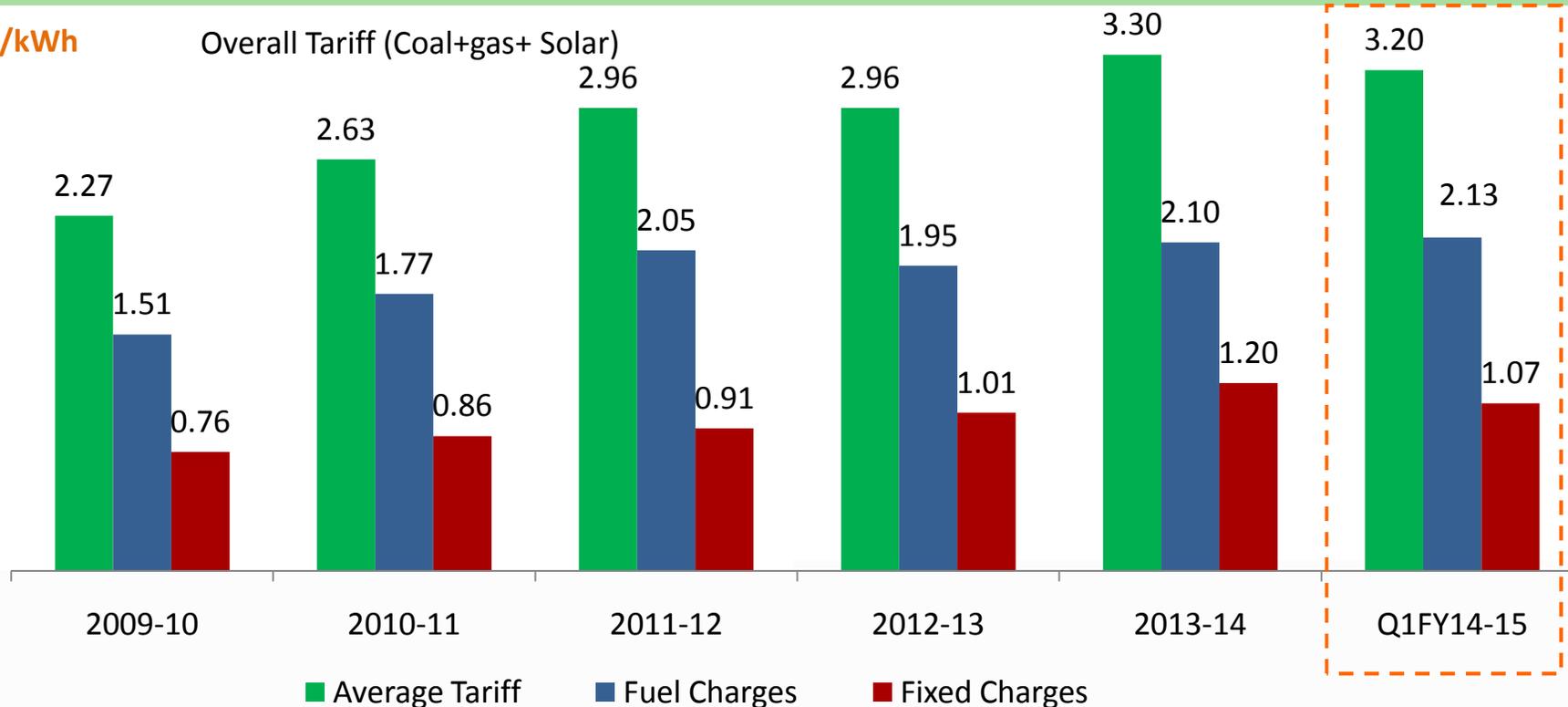
- Successful in growing and achieving high PLF despite fuel shortage concerns in India
- On forefront of adopting latest and most efficient technology—commissioned its first super-critical project at Sipat in 2011
- Market leader in terms of setting up of projects based on super-critical technology
- Maintenance practices and real-time monitoring system ensure high availability and efficient operations
- Implementing Perform Achieve Trade (PAT) Scheme under National Mission on Enhanced Energy Efficiency at 22 power stations.

- Talcher Thermal (440 MW) station was highest ranked station in the country in terms of PLF (95.02%) during 2013-14
- 12 out of 25 top performing stations of the country belong to NTPC Group.
- In FY14, 7 coal based stations out of 16 achieved PLF of more than 85%
- Opportunity loss due to coal shortage has fallen down from 4.811 BUs in Q1FY14 to 0.813 BUs in Q1FY15
- Through in-depth engineering, renovation and management capabilities has turned around sick plants across India
- Experience of operating and managing power plants with varied fuel sources and technologies

Sustaining its Status of Competitive Cost Power Producer

Rs./kWh

Overall Tariff (Coal+gas+ Solar)



Average Coal Based Power Cost (Rs./kWh)

	2010-11	2011-12	2012-13	2013-14	Q1FY14-15
Fixed Charges	0.85	0.89	0.98	1.14	1.04
Variable Charges	1.61	1.89	1.73	1.99	2.01
Average Coal tariff	2.46	2.78	2.71	3.13	3.05

Coal Based Plants Close to Pit Head Stations Ensure Competitive Variable Cost of Generation

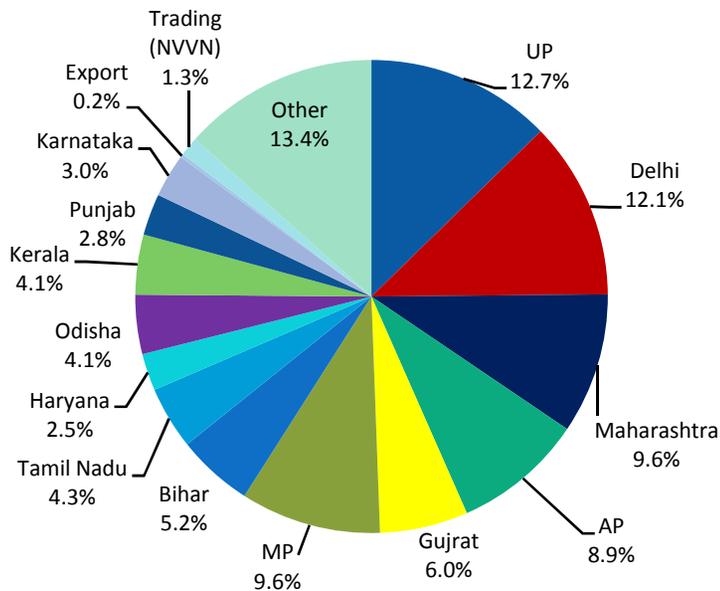
1. Based on NTPC stand-alone data.

PRUDENT OFF-TAKE POLICY

Secured Off-take

- ✦ PPAs have been signed for all operating and under construction projects
- ✦ Policy of securing PPAs for all new plants before approval is given for investment
- ✦ Entire power output of NTPC power stations has been contracted under PPAs
- ✦ NTPC does not presently sell any power in the merchant market- revenues are immune to volatile merchant power prices

Geographically Diversified Customers¹



1. Based on billing for FY14.

Regulated Pricing Mechanism

- ✦ Tariffs based on Regulations notified by CERC. Regulatory mechanism assures Returns balancing Risk -reward Ratio.
- ✦ Regulations for the period 2014–2019 notified. No uncertainty on Return on Equity.

... and Coupled with High Collection Efficiency



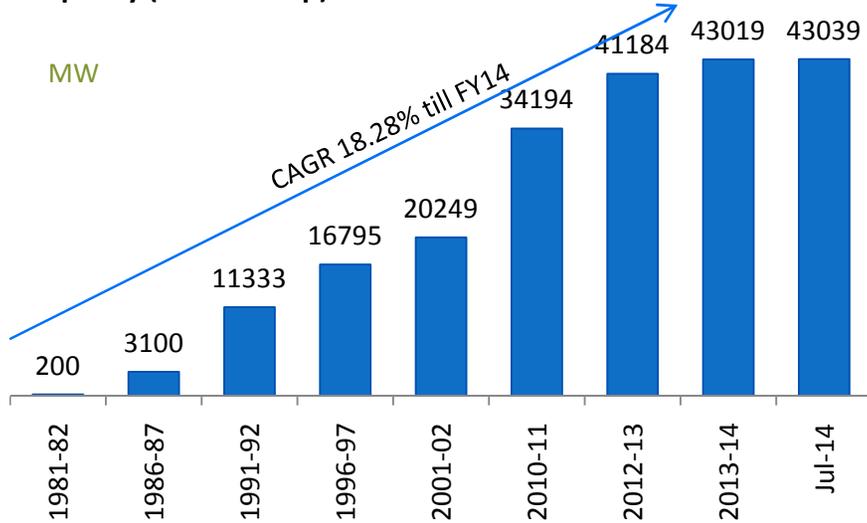
- ✦ 100% collection efficiency 11th year in succession in FY14- collected ~Rs.71000 crore during 2013-14
- ✦ Payment Security Mechanisms
 - LC coverage from SEBs adequate to cover monthly billing
 - Tripartite Agreements between Government, RBI and each state in terms of the Scheme for One Time Settlement of SEB dues valid till October 31, 2016
 - Recourse to Reserve Bank of India (RBI) in case of default in making payment
 - Supplementary agreements signed with all discoms for first charge over State utilities' receivables after 2016

CERC Tariff Regulations 2014-19

	Description	Tariff Regulations 2014-19	Tariff Regulations 2009-14
1	NAPAF (Normative Annual PAF)	Recovery of Fixed Charges allowed at NAPAF of 83% for all thermal plants till 01.04.2017. The provision shall be reviewed thereafter.	NAPAF for Thermal Plants at 85% except of TTPS and BTPS for which NAPAF was fixed at 82%.
2	Incentive	Incentive on Scheduled Generation at the rate of Rs. 0.50 per unit for excess energy delivered beyond the normative annual PLF of 85%.	Incentive linked to Availability (DC). Fixed charges increase/decrease in proportion to actual Availability compared to NAPAF
3	Income Tax Recoverable from Customers	Recovery of Income Tax on Return on Equity grossed up at actual effective tax rate. Effective tax rate considered on the basis of actual tax paid	Recovery of Income Tax on Return on Equity grossed up at applicable tax rate for the company.
4	Special Allowance	Special Allowance in lieu of R&M increased to 7.5 Lakh/MW/year for 2014-15, thereafter escalated at 6.35%.	Special Allowance in lieu of R&M @ Rs. 5 lakh/MW/year in 2009-10 and thereafter escalated @ 5.72% p.a
5	Water charges and capital spares	Water charges and capital spares excluded from the O&M expenses and allowed separately.	Water Charges and Capital Spares not allowed separately.
6	Sharing of Financial Gains due to Controllable parameters with the Beneficiaries	Sharing between generating company and beneficiaries in the ratio of 60:40 on monthly basis with annual reconciliation. (Controllable Parameters: Heat Rate, Sec Fuel Oil Cons, Auxiliary Power Consumption (APC)).	The savings only on account of secondary fuel oil consumption to be shared with beneficiaries in the ratio of 50:50.
7	Energy charges	To be calculated on the GCV on "as received basis".	To be calculated on the GCV on "as fired basis".

ROBUST FINANCIALS- PROVEN ALL ROUND TRACK RECORD

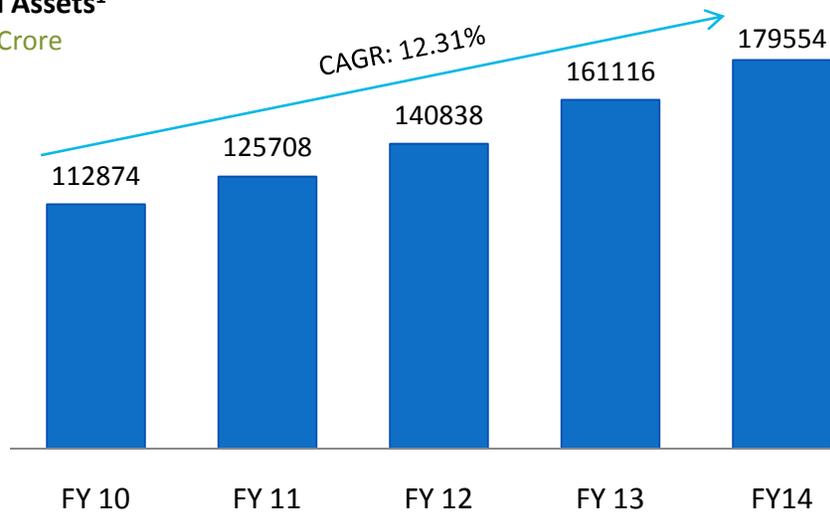
Capacity (NTPC Group) *



*excluding rating difference of 89 MW in case of gas stations

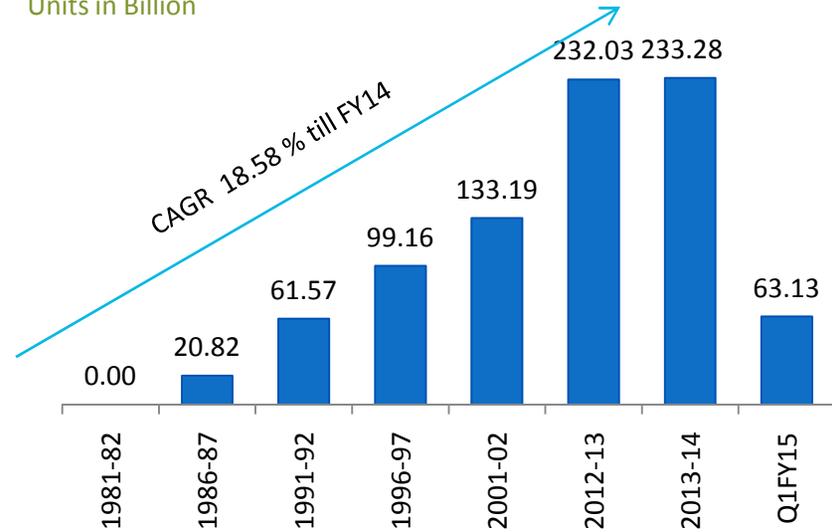
Total Assets¹

Rs. Crore



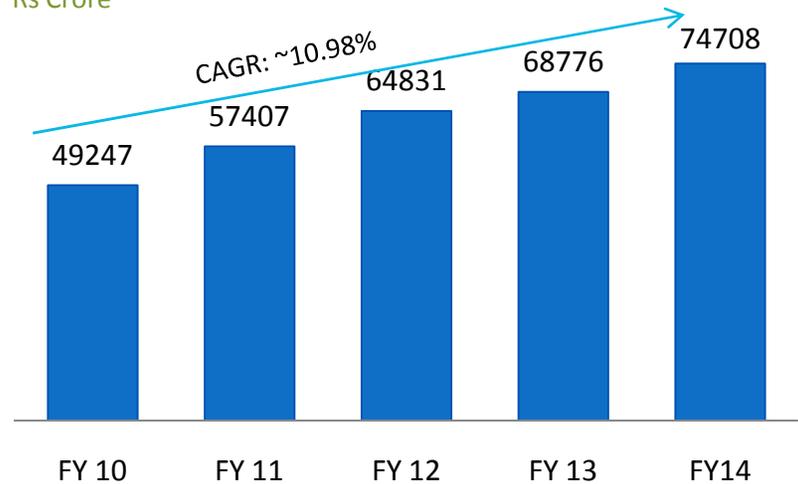
Generation (NTPC Standalone)

Units in Billion



Total Revenue¹

Rs Crore



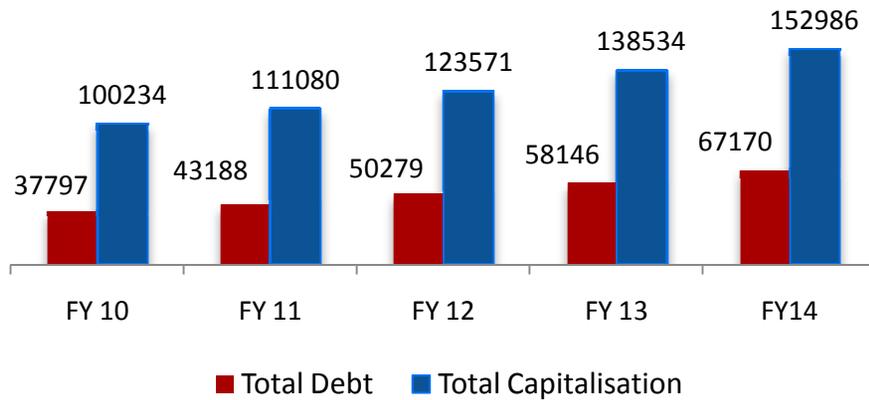
Note:

1. Based on stand-alone NTPC numbers.

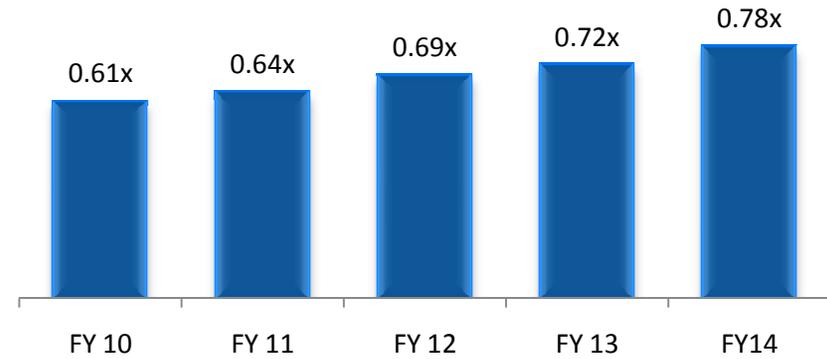
ROBUST FINANCIALS CONTD..

Total Debt and Capitalization¹

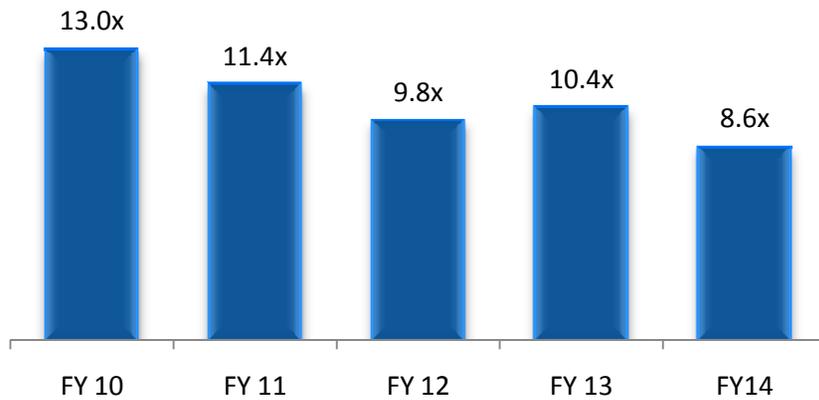
Rs. Crore



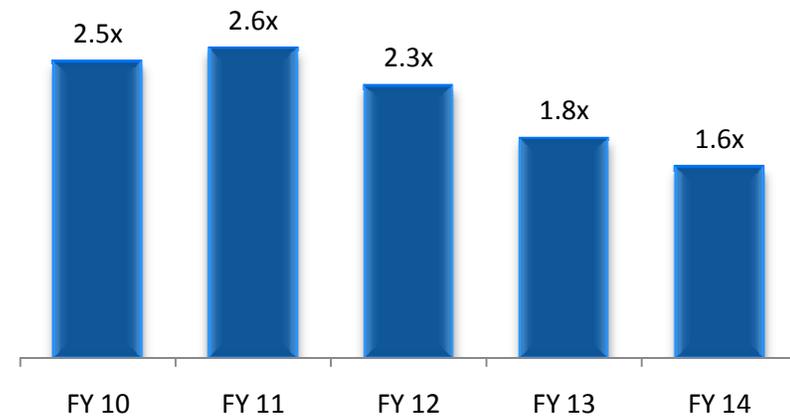
Debt/Equity



Interest Service Coverage Ratio¹



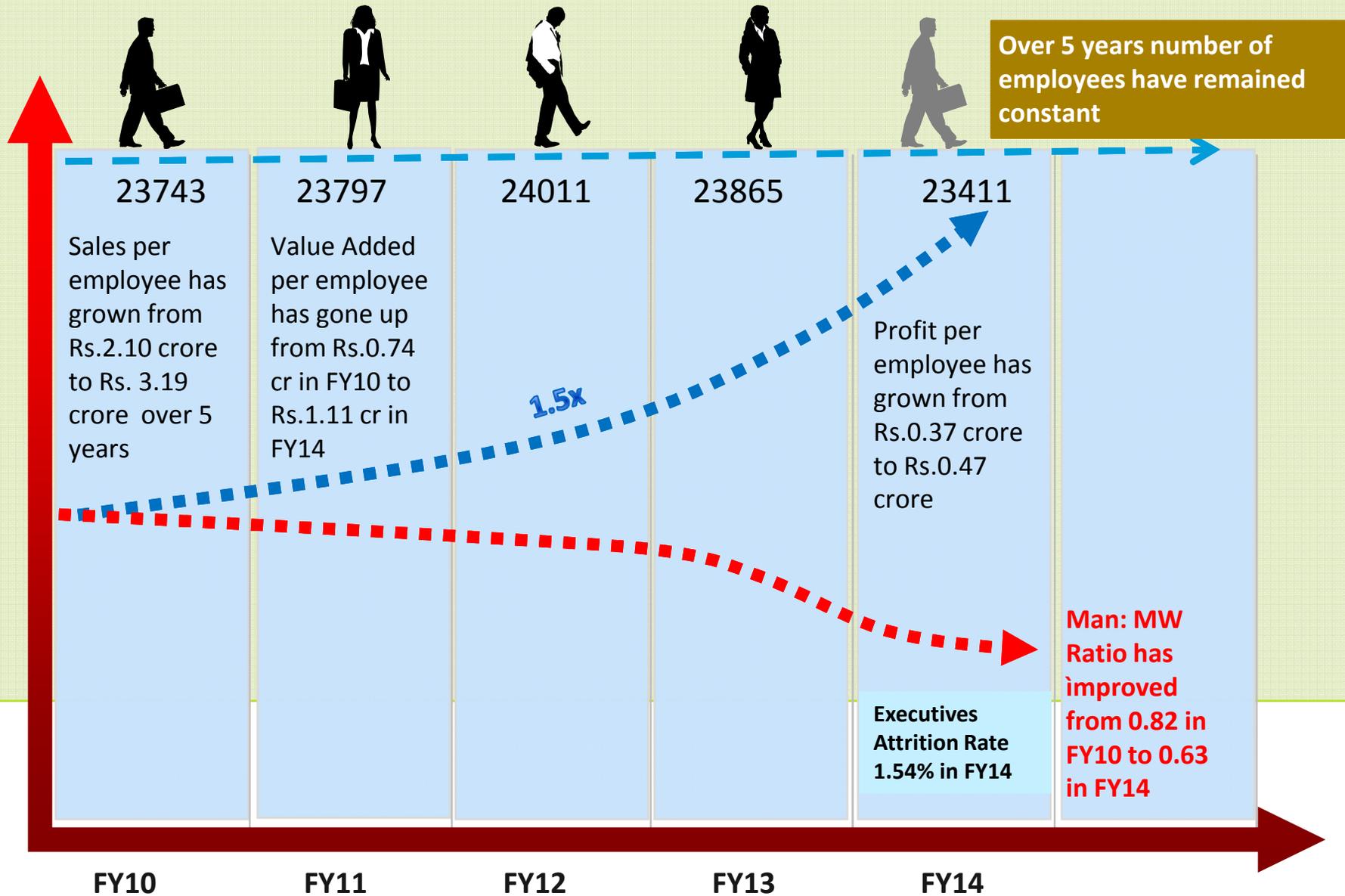
Current Ratio¹



Strong Credit Metrics Ensure Debt at Optimal Cost

1. Based on stand-alone NTPC numbers.

HUMAN RESOURCE METRICS



Awarded 1st in the Public Sector Category and 1st in Energy Gas and Oil Sector at the India's Best Companies to Work for 2014 by Great Place to Work Institute

PRESENCE ACROSS THE POWER VALUE CHAIN

Integrated Business Model – Within the Business and Across the Value Chain

Coal Mining & Exploration

- ✓ 10 coal mining blocks awarded directly to NTPC by GoI with GR of over 5 BT
- ✓ Aim to meet ~ 6% of its coal requirement from its captive mines by 2017
- ✓ Awarded 1 oil exploration block by GoI with a 100% interest and 3 oil exploration blocks to separate consortiums in which NTPC holds a 10% interest

Equipment Manufacturing

- ✓ NTPC has formed JVs with BHEL and Bharat Forge Ltd.
- ✓ JVs for manufacturing power equipment, castings, forgings, high voltage equipment and Balance of Plant (BoP) equipment for Indian and international markets
- ✓ Also acquired a stake in Transformers and Electricals Kerala Ltd. (TELK) for manufacturing and repair of transformers

Power Generation

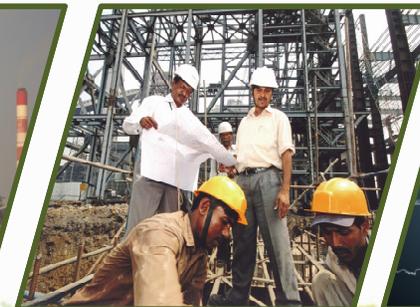
- ✓ Total installed power generation capacity of 43,128MW
- ✓ 22,414MW of capacity under construction
- ✓ 1st Hydro project to be commissioned by the current fiscal year end
- ✓ Also developing other renewable energy projects, such as wind and solar, as well as nuclear power projects
- ✓ Global footprint in Sri Lanka and Bangladesh through JVs

Power Distribution/ Consultancy Services

- ✓ NTPC has forayed into the power distribution business through its subsidiary NESCL
- ✓ NESCL actively engaged in rural electrification
- ✓ NTPC also offers consultancy services to State Electricity Boards, State generating companies and other private companies both in India and abroad

Power Trading

- ✓ NTPC's wholly owned subsidiary 'NTPC Vidyut Vyapar Nigam Ltd.' (NVVN) is prominent power trading company in India. It traded over 9.322 BU of electricity in FY14 as against 8.382 BU in FY13, an increase of 11% over previous year
- ✓ NVVN has also been appointed as nodal agency for trading power with Bangladesh and Bhutan



GLOBAL FOOTPRINT



Map not to scale.



Sri Lanka (Trincomalee)

- ✓ 2x250MW coal based power project in Trincomalee through a JV Co. "Trincomalee Power Co. Ltd." with Ceylon Electricity Board (CEB)
- ✓ Sampur site in Trincomalee region is identified for the project. All agreements have been signed and project is on fast track mode.



Bangladesh

- ✓ 1320MW imported coal based power plant at Khulna
- ✓ Being Developed through a 50:50 JV Co. with BPDB on BOO basis. A JV Co. 'Bangladesh-India Friendship Power Company (Pvt.) Limited' incorporated. PPA signed for the same. Work started on site. Land filling has been completed. Target schedule of commissioning in 2018
- ✓ Consultancy Agreement with EGCB for providing O&M services for 2x120MW Gas based power plant. This is the largest single international order received by NTPC
- ✓ NVVN appointed for supplying 250 MW Power to Bangladesh, power supply from NVVN commenced w.e.f. 05.10.2013. From Oct13- March14, 861MUs supplied to Bangladesh



Bhutan

- ✓ Agreement with Royal Govt. of Bhutan for preparing DPR for 620MW Amochhu Reservoir based HEP
- ✓ NVVN appointed as the nodal agency for trading power from Bhutan

RISKS AND MITIGATION

KEY RISKS AND MITIGATION

Risk	Mitigation
Coal and Gas Supply Constraints	<ul style="list-style-type: none"> ✓ Long term Fuel Supply Agreements signed with CIL for supply of coal for a period of 20 years for stations set up prior to March 2009 – ACQ supply tied up ~124.9MT, ✓ FSA of 39.67 MT signed for post 2009 stations for 9.6 GW capacity ✓ 6 captive coal blocks with reserves of ~3.7BT, target production of ~13MT by FY17, 4 new blocks allotted ✓ Long Term APM/PMT Gas Supply Agreement with GAIL for supply of 14.48 MMSCMD gas upto 2021/2019 ✓ Long term Agreement with GAIL for supply of 2.5 MMSCMD of RLNG till 2019 ✓ Fallback agreements with GAIL BPCL,IOC and GSPL for supply of gas on Reasonable Endeavour basis ✓ Govt. allocated 4.46MMSCMD from KG-D6 for NCR projects
SEB Financial Distress	<ul style="list-style-type: none"> ✓ Tripartite agreement in place with RBI <ul style="list-style-type: none"> – SEB's required to issue LCs covering 105% of the average monthly billing – Realized 100% payment of bills from customers for 10 years in succession ✓ FRP Implementation and tariff revision by majority SEB's during 2012–2013 & 2013-14
Land Acquisition Uncertainty	<ul style="list-style-type: none"> ✓ Progressive R&R Policy, focus on consultation and participation, negotiated settlement ✓ Institutional mechanisms like Village Development Advisory Committees and Public Information Centers ✓ Project head in place at site well in advance to expedite land acquisition ✓ Appointed Chief Forest Officer for expeditious forest clearance ✓ Land acquisition cell created at corporate centre to support the activities at site
Accelerated Capacity Addition	<ul style="list-style-type: none"> ✓ Multi-pronged strategy developed and enhanced delegation of power for quick decision making ✓ Total 22,414 MW already under construction.
Consistent RoE	<ul style="list-style-type: none"> ✓ Capex intensive model delivering consistent earnings and dividends ✓ Upsides from PLF incentives ✓ Supplementary agreements signed for first charge over state utilities' receivables after 2016
Competition from Private Players	<ul style="list-style-type: none"> ✓ Relatively robust business model with regulated returns ✓ Govt ownership ✓ Strong management expertise and high standards of corporate governance
Funding Requirements for New Projects	<ul style="list-style-type: none"> ✓ Strong balance sheet and healthy leverage ratios ✓ Easy access to domestic and overseas debt market; mobilized debt on most optimal rates from both domestic and international markets due to low gearing and healthy coverage ratios ✓ 12th Plan outlay Rs.1,52,341 crore to be funded by debt equivalent of Rs.1,01,406 crore . Debt of Rs. 23,888 crore already deployed during FY13 & FY14, Debt of Rs.11,670 Crore already tied up and yet to be drawn as on 31.03.14
Environmental Laws and Regulations	<ul style="list-style-type: none"> ✓ Excellent track record ✓ Environmental clearances for all under construction projects received ✓ Strong focus on sustainability and fuel diversification- 95 MW solar plants commercialized, 15MW under construction

GROWTH AND CAPEX PLANS

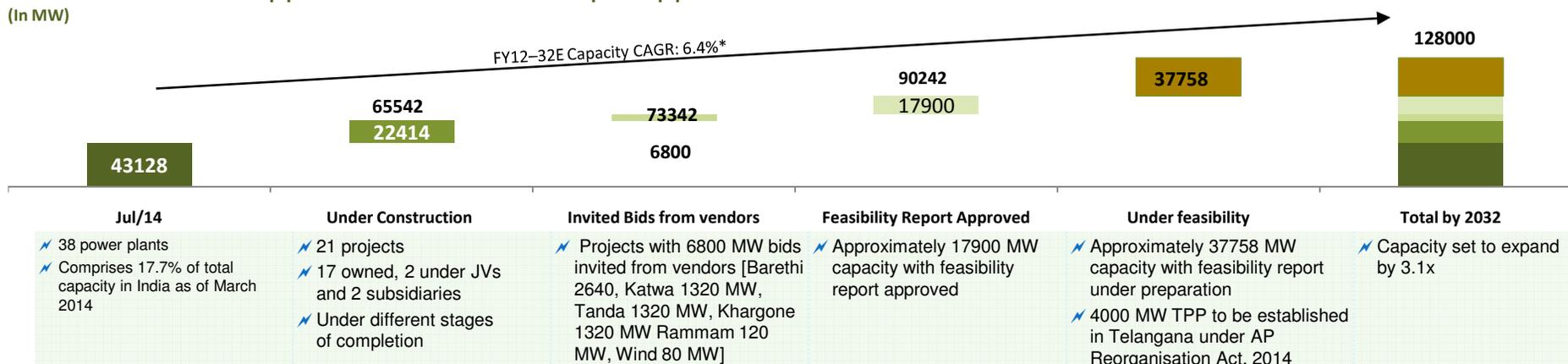


GROWTH VISIBILITY

NTPC takes the decision to proceed with a new project only once it is satisfied on the availability of land, water, fuel, off-take arrangements and environmental clearances.

Vision to maintain leadership position in India...Current development pipeline of ~ 47GW

(In MW)



NTPC's Projects Under Construction

Projects	Fuel	Capacity (MW)	Expected Commissioning	Technology	Land	MoEF Clearance		NTPC/JV
						Environmental Clearance	Forest Clearance	
Koldam	Hydro	800	FY15, FY16	-	Yes	Yes	Yes	NTPC
Barh I	Coal	1,980	FY16, FY17	Super-Critical	Yes	Yes	Yes	NTPC
Tapovan Vishnugad	Hydro	520	FY17+	-	Yes	Yes	Yes	NTPC
Bongaigaon	Coal	750	FY15, FY16, FY17	Sub-Critical	Yes	Yes	Yes	NTPC
Barh II	Coal	660	FY15	Super-Critical	Yes	Yes	Yes	NTPC
Singrauli Hydro	Hydro	8	FY15	-	Yes	Yes	Yes	NTPC
Solapur	Coal	1,320	~FY17	Super-Critical	Yes	Yes	Yes	NTPC
Mouda II	Coal	1,320	~FY16, FY17	Super-Critical	Yes	Yes	Yes	NTPC
Vindhyachal V	Coal	500	FY16	Sub-Critical	Yes	Yes	Yes	NTPC
Kudgi	Coal	2,400	FY17, FY17+	Super-Critical	Yes	Yes	Yes	NTPC
Unchahar	Coal	500	FY17	-	Yes	Yes	Yes	NTPC
Singrauli Solar	Solar PV	15	FY15	-	Yes	Yes	Yes	NTPC
Lara	Coal	1,600	FY17+	Super-Critical	Yes	Yes	Yes	NTPC
Gadarwara	Coal	1,600	FY17+	Super-Critical	Yes	Yes	Yes	NTPC
Daralipali	Coal	1,600	FY17+	Super-Critical	Yes	Yes	Yes	NTPC
North Karanpura	Coal	1,980	FY17+	Super-Critical	Yes	Yes	Yes	NTPC
Lata Tapovan	Hydro	171	FY17+	-	Yes	Yes	Yes	NTPC
Nabinagar (BRBCL)	Coal	1,000	FY16, FY17	Sub-Critical	Yes	Yes	Yes	Sub
Nabinagar (JV with BSEB)	Coal	1,980	FY17+	Super-Critical	Yes	Yes	Yes	JV
Kanti	Coal	390	FY15, FY16	Sub-Critical	Yes	Yes	Yes	Sub
Meja	Coal	1,320	FY17+	Super-Critical	Yes	Yes	Yes	JV
Total		22,414						

*NTPC Group YE FY12 capacity was 37,014MW. And 41184 MW as at FY13 end

CAPACITY ADDITION SCHEDULED IN 12TH PLAN (FY13 TO FY17)

Commissioned

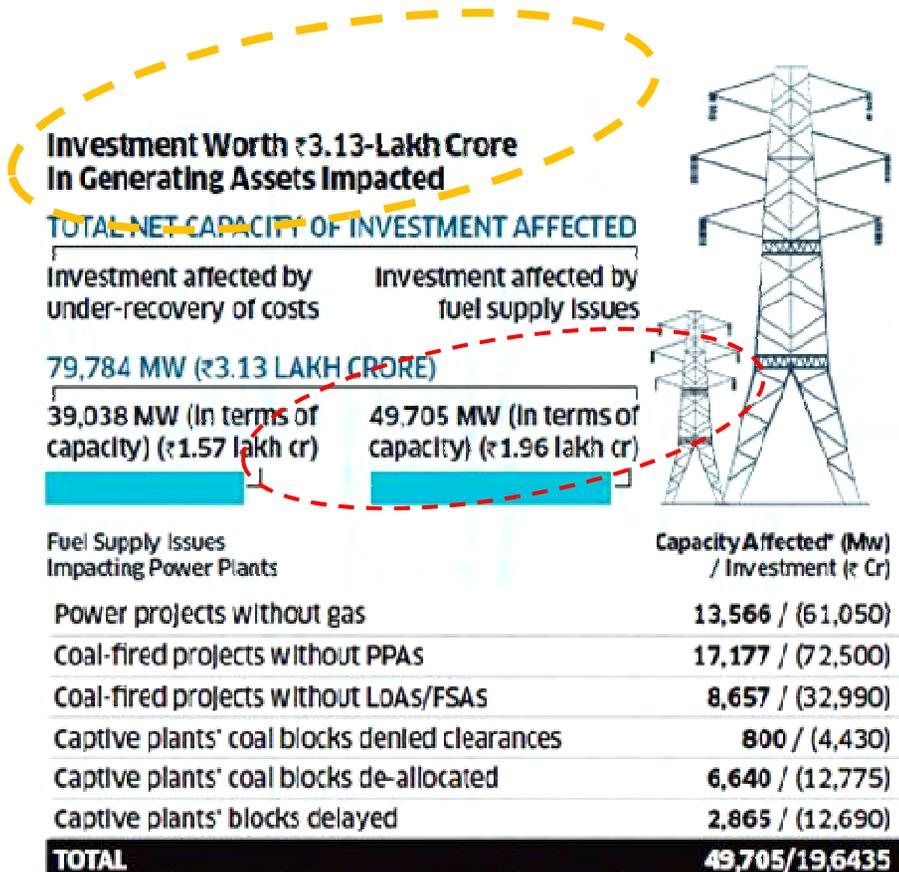
Year	Project	Target MW
FY13	Sipat	660
	Indira Gandhi STPP JV	500
	Mouda – I, Unit - 1	500
	Vindhyachal – Unit 11	500
	Rihand – III	500
	Vindhyachal – Unit 12	500
	Mouda – I, Unit- 2	500
	Vallur – I JV	500
	Solar PV (A&N, Dadri)	10
	Total FY 13	4,170
FY14	Rihand – III	500
	Barh-II	660
	Solar PVs	65
	Vallur – I JV	500
	Kanti- Subsidiary (195 MW spilled over to FY15)	110*
	Total FY 14	1,835
	Total (FY12-14)	6,005

Target –FY15-17

Year	Project	Target MW
FY15	Rajgarh (Solar PV)	20
	Bongaigaon (Unit#1)	250
	Barh-II (Unit#5)	660
	Koldam- Hydro (U#1 &2)	400
	Singrauli Hydro	8
	Nabinagar (BRBCL) (Unit#1)	250
	Kanti – Subsidiary (Unit #3)	195
	Singrauli (Solar PV)	15
	Total FY 15	1798
FY16	Barh- I (Unit#1)	660
	Vindhyachal (Unit #3)	500
	Koldam (Unit #3&4)	400
	Bongaigaon (Unit #2)	250
	Nabinagar (BRBCL) (Unit#2)	250
	Kanti – Subsidiary (Unit #4)	195
	Total FY 16	2255
FY 17	Barh I (Unit#2&3)	1320
	Bongaigaon (Unit #3)	250
	Nabinagar (BRBCL) (Unit#3)	500
	Kudgi (Unit#1 &2)	1600
	Unchahar (Unit#6)	500
	Total FY17	4170
	Total capacity to be commissioned in FY15-17	8223
	Capacity Commissioned in FY13 &14	6005
	Total Capacity Target FY13-17	14228

Commissioned

INORGANIC GROWTH – ENHANCING THE PACE OF CAPACITY ADDITION



*Already commissioned and due to be completed by March 2017

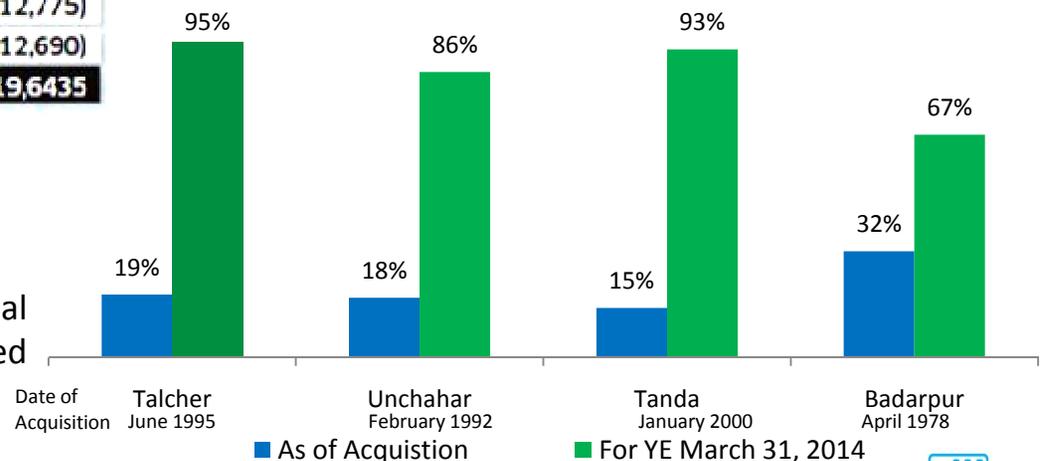
Source : Economic Times July 14, 2014

Company contemplating acquisitions

Expression of Interest invited for Coal Based Thermal Power Projects in India and abroad for stranded projects.

- Many of the other players in the power sector are plagued with problems of fuel and under recovery of costs.
- NTPC's entire capacity is on cost plus basis hence there is least risk of under-recovery of costs.
- Fuel Supply is secured by FSAs and off Take Secured by PPAs.
- NTPC takes the decision to proceed with a new project only once it is satisfied on the availability of land ,water , fuel, off-take arrangements and environmental clearances.

Turnaround at Acquired Plants PLF (%)

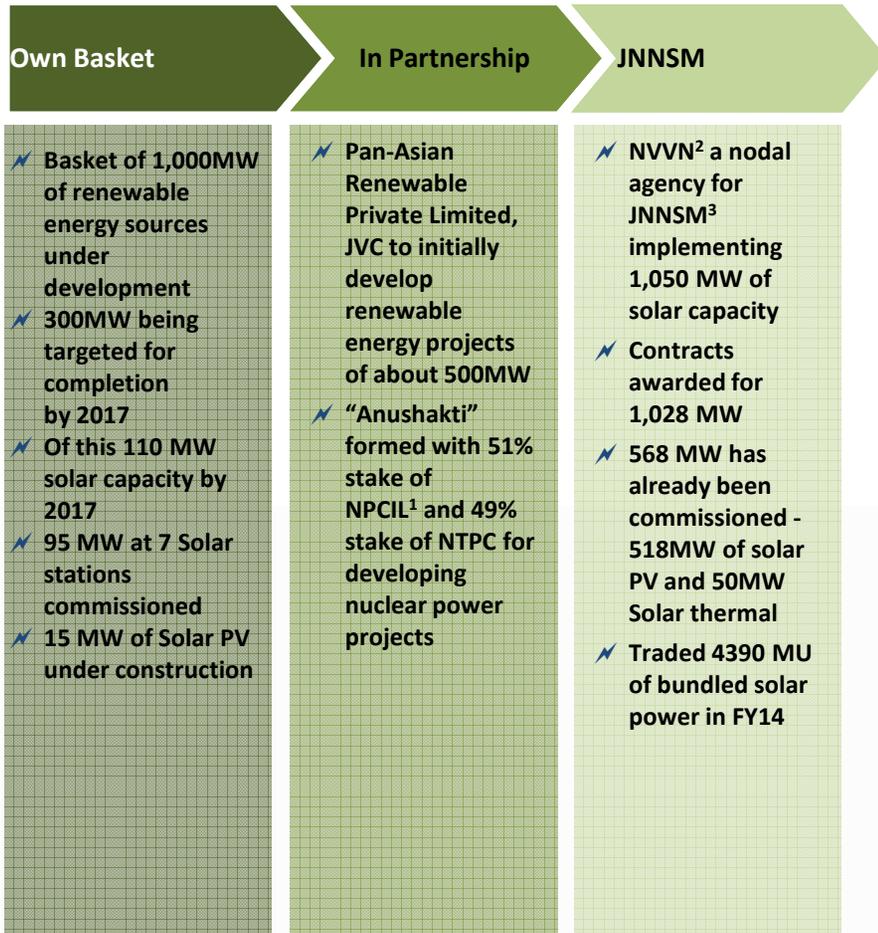


SUSTAINABILITY INITIATIVES

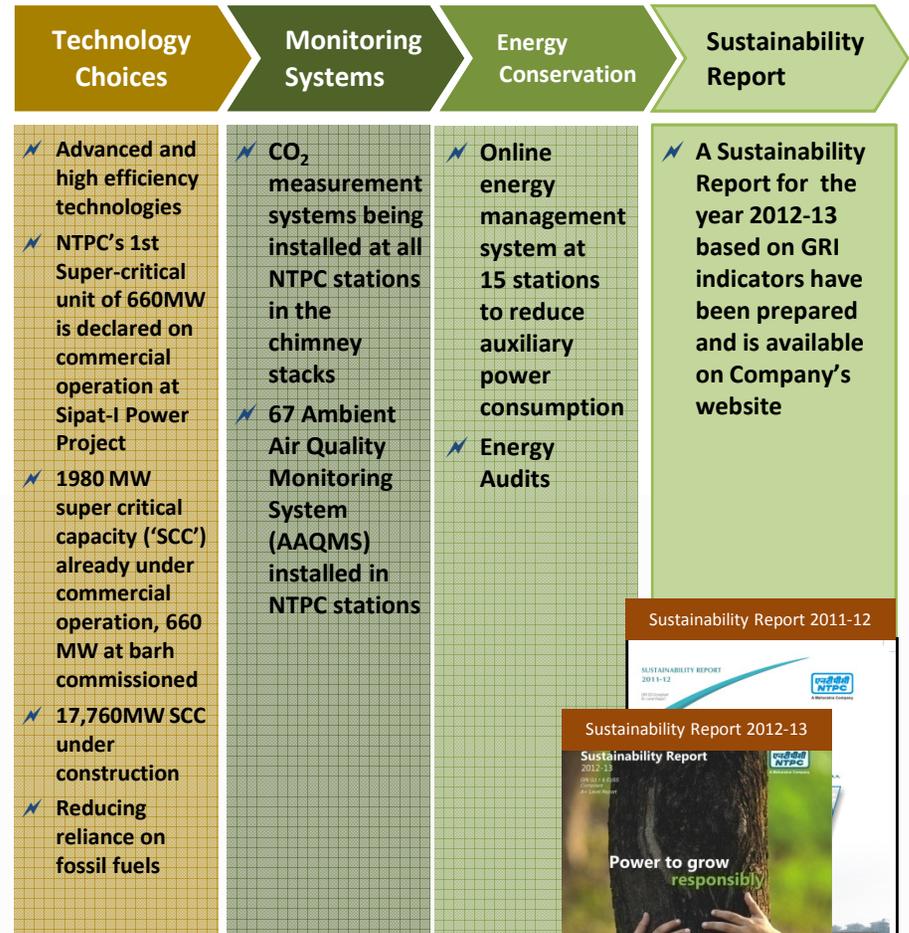


SUSTAINABILITY INITIATIVES

Renewable and Nuclear Energy—Reducing Carbon Footprints



Environmental Initiatives—More Than 37 Million Tons of CO₂ has been Avoided in NTPC



Sustainability Report 2011-12



2.3 Million Tons CO₂ Avoided in 2013-14

Created green wealth of ~21 million trees at and around stations

1. Nuclear Power Corporation of India.
 2. NTPC Vidyut Vyapar Nigam.
 3. Jawaharlal Nehru National Solar Mission.

TECHNOLOGY PROGRESSION—INCREASED EFFICIENCY AND GREATER ENVIRONMENTAL PROTECTION

Leader in introducing new technologies in the power sector.

Technologies Introduced

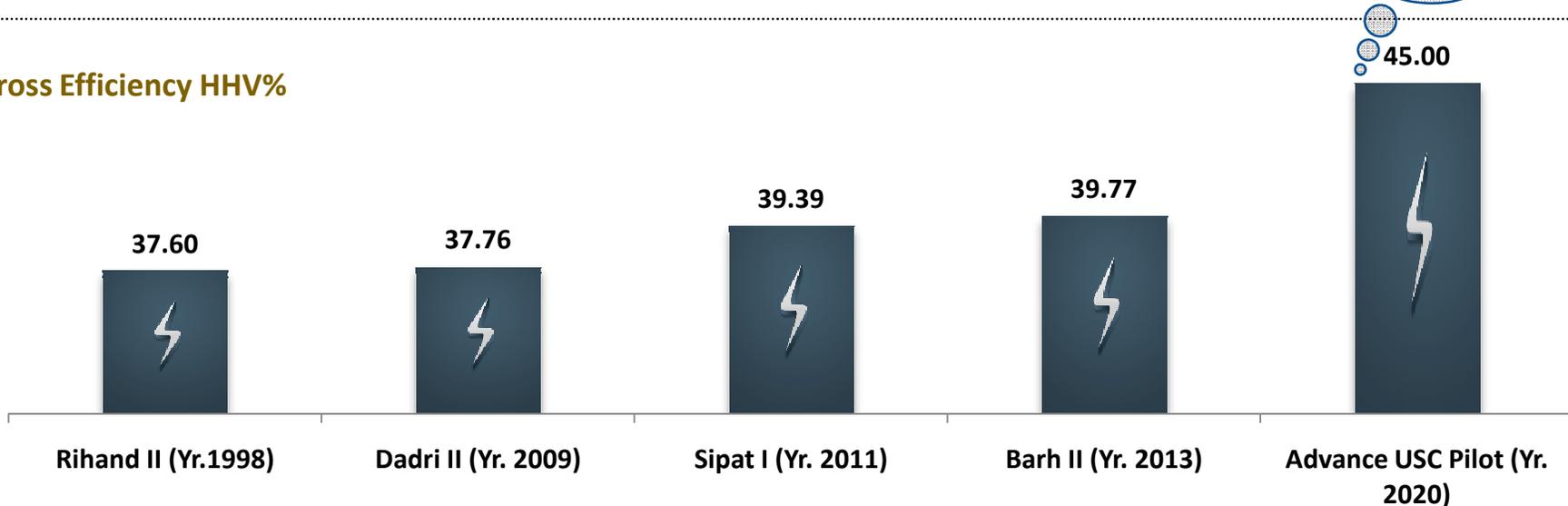
- ✦ Adoption of super critical parameters for higher efficiency
- ✦ Higher size units of 660 and 800MW
- ✦ Adoption of high reheat parameters for smaller units
- ✦ 765KV AC switchyard
- ✦ State of art automation technologies for C&I and Electrical systems
- ✦ Tunnel Boring machines
- ✦ Flue gas desulphurisation
- ✦ High concentration slurry disposal system & Dry Ash extraction and disposal system

Technologies Under Development

- ✦ Development of IGCC suitable for Indian coal
- ✦ Development of Adv Ultra supercritical power plant along with IGCAR and BHEL for inlet steam temperature in the range of 700°C
- ✦ Use of advanced technologies in the renovation and modernization of aging power stations

Every 1% increase in efficiency yields 2.5% CO2 reduction

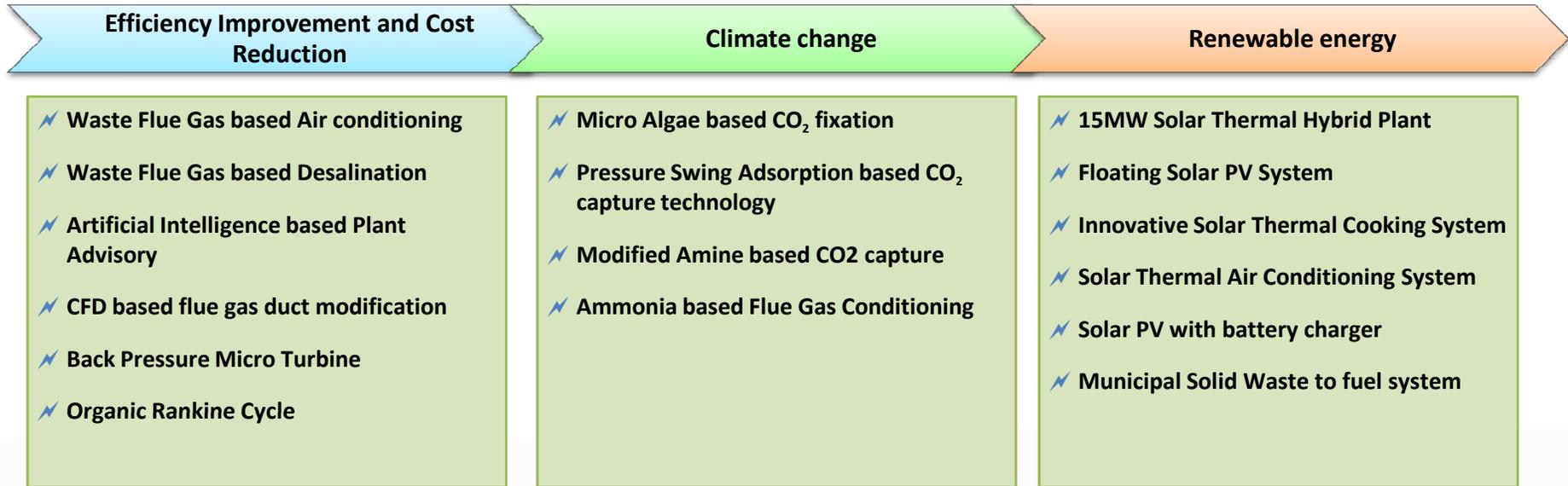
Gross Efficiency HHV%



Constant endeavor to reduce CO2 emissions- steps to increase cycle efficiency

R&D- NETRA

Committed to invest up to 1% of distributable profit for R&D Activities and Climate Change Technologies.



- ✓ **Infrastructure:** 18 number of Labs in place, 2 more in offing
- ✓ **Manpower:** 118 Executives including 16 PhD's and 29 M.Tech's
- ✓ **Networking:** R&D Collaboration with 12 national and 2 international institutions
- ✓ **IPR:** 22 Patent Applications Filed, one patent granted, several more in pipeline
- ✓ **Membership:** NETRA is a member of (1) IEA GHG R&D Program, France; (2) CSLF France (3) IERE Japan (4) GCCSI Australia

NETRA: NTPC Energy Technology Research Alliance.

Extensive Engagement with Society

NTPC has committed to contribute 2% of Net Profit towards CSR from FY 2014-15 onwards.

Spent Rs. 128.35 crore on CSR & sustainable development activities during the year 2013-14

<p>Social Inclusiveness</p>	<ul style="list-style-type: none"> Land acquisition through a participatory process Progressive R&R and CSR policies Compensation and R&R entitlement finalized through consultative process with stakeholders Efforts for negotiated settlements Focus on capacity building Intensive community and peripheral development activities 	<p>Skill Creation</p>	<ul style="list-style-type: none"> Adopted 17 ITIs and creating 7 new ITIs. Solapur Power Training Institute in Maharashtra. Information and Communication Technology Centre for physically and visually challenged students at Delhi University, Guwahati University and Devi Ahilya Vishwa Vidhyalaya at Indore by NTPC Foundation. Skill up gradation & vocational training for rural youth & women for employability
<p>Stakeholder Engagement</p>	<ul style="list-style-type: none"> Information sharing through Public Information Centers ('PIC') Multi Stakeholder Engagement mechanisms like Village Development Advisory Committees Socio Economic Surveys / Audits / Evaluation through independent agency/ academic institute of repute Grievance redressal mechanisms Effective institutional set up 	<p>Education</p>	<ul style="list-style-type: none"> IIIT at Raipur, Engg colleges in Chhattisgarh, Jharkhand and Madhya Pradesh. Setting up/Supporting Medical College cum Hospitals in Odisha and Chhattisgarh. Two polytechnics in Uttarakhand and one Jharkhand. Education through 20 schools for community children.
		<p>Health & Sanitation</p>	<ul style="list-style-type: none"> Operation of Mobile Health Clinics and Free Medical Camps & surgeries during Camps Construction of Girl's toilets in schools, Individual & Community Toilets in villages. DOTS Cum DMC Centers for Tuberculosis treatment and Disability Rehabilitation Centres by NTPC Foundation.
		<p>Drinking Water</p>	<ul style="list-style-type: none"> Installation of hand pumps, bore wells, RO plant & piped water supply schemes for providing potable water.

Initiatives like Social Infrastructure creation, Women Empowerment, Animal Healthcare, Culture and Heritage, Promotion of sports etc.



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