



**3R MATRIX**

	+	=	-
Right Sector (RS)	✓	■	■
Right Quality (RQ)	✓	■	■
Right Valuation (RV)	✓	■	■

+ Positive = Neutral - Negative

**What has changed in 3R MATRIX**

	Old		New
RS	■	↔	■
RQ	■	↔	■
RV	■	↔	■

**Reco/View**

Reco: Buy	↔
CMP: Rs. 146	
Price Target: Rs. 170	↑

↑ Upgrade ↔ Maintain ↓ Downgrade

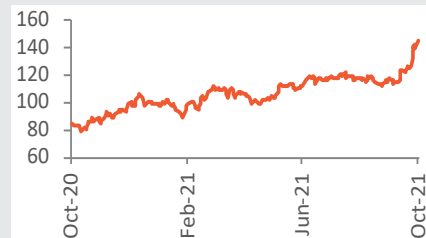
**Company details**

Market cap:	Rs. 1,41,135 cr
52-week high/low:	Rs. 149/78
NSE volume: (No of shares)	161 lakh
BSE code:	532555
NSE code:	NTPC
Free float: (No of shares)	474.2 cr

**Shareholding (%)**

Promoters	51.1
FII	13.1
DII	32.9
Others	2.8

**Price chart**



**Price performance**

(%)	1m	3m	6m	12m
Absolute	25.0	22.7	37.2	72.6
Relative to Sensex	23.3	10.6	16.6	20.4

Sharekhan Research, Bloomberg

**Summary**

- NTPC is well-placed to gain from steady earnings from thermal assets and RE expansion. A P/BV ratio of 1.5x for thermal projects gives valuation of ~Rs. 133,000 crore (close to current market capitalisation) and indicates negligible value for large renewable energy (RE) expansion plans.
- NTPC's plan to commercialise >5GW per annum to drive an 11% CAGR in standalone regulated equity; RE capacity target (NTPC won 15% of RE bids in FY21) of 15GW/60GW by FY24E/FY32E would create significant value besides addressing ESG concerns.
- Potential monetisation of renewable energy and power trading subsidiaries could unlock value for NTPC and could add to shareholders' returns in the coming years.
- We maintain a Buy on NTPC with a revised PT of Rs. 170, as valuation remains attractive at 1x its FY23E P/BV considering strong earnings visibility, likely RoE improvement and healthy dividend yield of ~4%.

**NTPC Limited's aspirations to expand its renewable energy (RE) portfolio to 15GW/60GW by FY24E/FY32E from only 1.4GW in FY21 has potential to generate a decent IRR, supported by its low cost of funding and drive re-rating given likely improvement in the Environmental, Social and Governance (ESG) score with reduction in share of large thermal power assets over the coming years. Additionally, its regulated return model for thermal power assets to drive decent 12% PAT CAGR over FY21-FY24E and improve RoE of ~14.2%. Potential monetisation of its RE and power trading subsidiaries could help unlock value.**

- **Focus on RE expansion to drive growth:** NTPC's recent aggressive bidding for RE assets is line with its strategy to expand its RE portfolio to 15GW/60GW by FY2024E/FY2032E versus ~8 GW currently (including operational/under-construction/won under new bids). NTPC has seen a tremendous success rate and has won 15% of (1,560 MW) total RE bids in FY2021. In our view, NTPC low cost of funding makes its renewable energy expansions viable and would drive the next leg of growth and re-rating for the company.
- **Regulated business model for thermal power plants – to generate steady earnings growth:** NTPC has plans to add >5GW of commercial capacities annually in the next couple of years and the management has guided that capital work in progress (CWIP) ratio would continue to decline to by 30%/27%/24% in FY2022E/FY2023E/FY2024E (from 31% in FY2021). This would free-up equity blocked in CWIP and the same would start earnings regulated returns. We thus expect standalone regulated equity to clock an 11% CAGR over FY21-24E and reach >Rs. 88,723 crore by FY24E versus Rs. 66,338 crore in FY21. With P/BV multiple of 1.5x, we arrive at a value of ~Rs. 133,000 crore for regulated equity assets and the same is close to its current market capitalisation.
- **Monetisation plan of RE/other subsidiaries to unlock value:** NTPC is planning to list its renewable energy subsidiary - NTPC Renewable Energy Ltd (NTPC REL) and its trading subsidiary - NTPC Vidyut Vyapar Nigam Limited in the coming years. Potential monetization of stake in subsidiaries could unlock value and may result in higher dividend payout.

**Our Call**

**Valuation – Maintain Buy on NTPC with a revised PT of Rs. 170:** NTPC's risk-averse regulated business model provides earnings growth visibility/RoE improvement and RE expansion would drive gradual re-rating of the stock as it would allay concern of ESG. Additionally, potential monetization of its RE and power trading arm subsidiaries could further improve shareholders returns in the coming years. A valuation of 1x FY23E P/BV is attractive given steep discount of 29% to historical average one-year forward P/BV multiple of 1.5x and a healthy dividend yield of ~4%. Hence, we maintain a Buy on NTPC with a revised PT of Rs. 170 (increase reflects higher multiple for standalone business given improving RoE profile and increase in the value of subsidiaries).

**Key Risks**

Lower-than-expected commercial capacity additions amid delay in projects due to COVID-19 and coal availability shortages could affect earnings. Moreover, any write-off related to dues from discoms could affect valuations.

**Valuation (Standalone)**

Particulars	FY21	FY22E	FY23E	FY24E
Revenues	99,207	1,16,010	1,28,138	1,41,364
OPM (%)	29.0	31.0	31.3	31.9
Adjusted PAT	14,218	15,623	17,618	20,112
% YoY growth	16.8	9.9	12.8	14.2
Adjusted EPS (Rs.)	14.7	16.1	18.2	20.7
P/E (x)	9.9	9.0	8.0	7.0
P/B (x)	1.2	1.1	1.0	1.0
EV/EBITDA (x)	10.5	8.4	7.4	6.5
RoNW (%)	12.2	12.7	13.4	14.2
RoCE (%)	7.9	9.8	10.2	10.8

Source: Company; Sharekhan estimates

## Renewable energy capacity target of 15GW/60GW by FY24E/FY32E to drive next leg of growth for NTPC

The Government of India has plans to increase India's RE capacity to 175GW/450GW by 2022/2030 versus 101GW currently. Thus, NTPC has also framed out a clear plan to increase its total RE capacity to 15GW/60GW by FY24E/FY32E versus only 1.4GW in FY2021. NTPC aims to have 50% of power generation capacity from RE projects versus only 2% as of March 2021.

NTPC has nearly 1.5 GW of operational renewable energy capacity, 3 GW of projects are in development stage and tenders have been issued for 5 GW of new capacity. Under outsourced/ developer mode, 4.7 GW is operational, and 1111 MW is under construction. The recent order wins take the company's total RE projects (operational + under-implementation) to >8GW.

### Recent RE project wins by NTPC

- Development of largest solar park (4.75GW) in Gujarat - NTPC Renewable Energy Limited (NTPC-REL is a subsidiary of NTPC) has received an approval from the Ministry of New and Renewable Energy (MNRE) to set up 4,750 MW renewable energy park at Rann of Kutch in Khavada, Gujarat. NTPC-REL plans to use this project for production of green hydrogen.
- Solar power project of 1.9GW under e-auction of CPSU Scheme-II - NTPC has won 1.9 GW of solar power project contract from Indian Renewable Energy Development Agency Limited (IREDA) in the e-auction of CPSU Scheme-II, tranche-III of 5 GW tender. NTPC has bid for a record low solar tariff of Rs. 1.99 per unit.
- Development of 325MW solar project in Madhya Pradesh - The company's subsidiary NTPC Renewable Energy Ltd has received a letter of award (LoA) for developing 325 MW projects in Madhya Pradesh's Shajapur solar park.
- NTPC plans to partner with the National Investment and Infrastructure Fund (NIIF -India's quasi-sovereign wealth fund) and (ONGC) to acquire and develop green energy assets. NTPC is focused to gradually increase RE share (target of 15GW/60GW by FY24E/FY32E) in overall power capacity.

### NTPC RE portfolio (own projects + developer mode)

Particulars	NTPC Group EPC Mode's Own Projects (8,982 MW)			Developer Mode Projects (6,743 MW)	
	NTPC	NTPC REL	THDC & NEEPCO	NTPC	
Commissioned	1,173	0	192	4,462	
Under Implementation	2,199	670	0	1,111	
Under Tendering	3,998	150	0	1,170	
LoA pending from Implementing agency		600	0		
<b>Total</b>	<b>7,370</b>	<b>1,420</b>	<b>192</b>	<b>6,743</b>	

Source: NTPC FY21 Annual Report

### NTPC RE Plan – Eyeing 60 GW by 2032

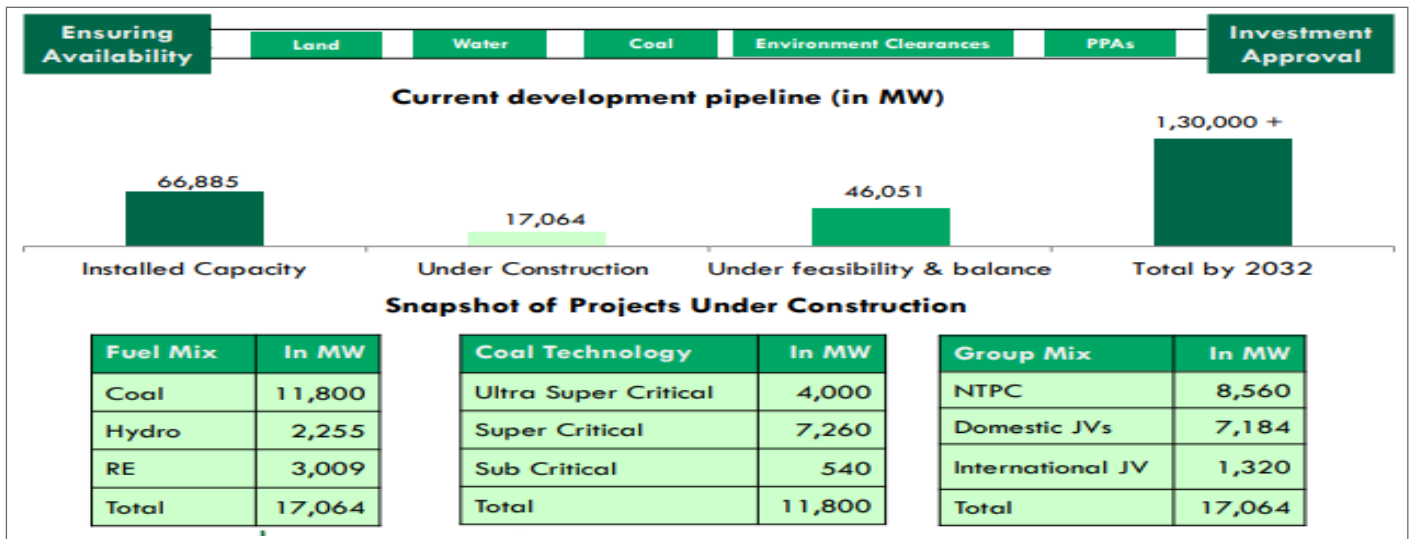
NTPC RE@PRESENT		In GW	NTPC RE@2032		In GW
Installed		1.375	NTPC RE Limited		44
Under Construction		3.009	Through Acquisitions		12
Under Tendering		4.498	NTPC Standalone		4
<b>Total</b>		<b>8.882</b>	<b>Total</b>		<b>60</b>

**Key Strides**

- Subsidiary for RE business NTPC Renewable Energy Limited incorporated in FY21
- Won 1,885 MW of TBCB contracts since FY21
- Setting up country's largest Solar Park of 4.75 GW
- Plan for development of another ~10 GW UMREPP in various stages

Source: Company; Sharekhan Research

**Capacity expansion plans**

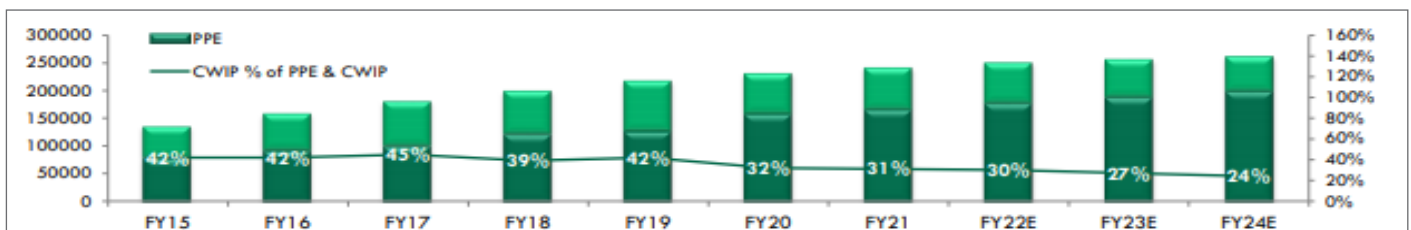


Source: Company; Sharekhan Research

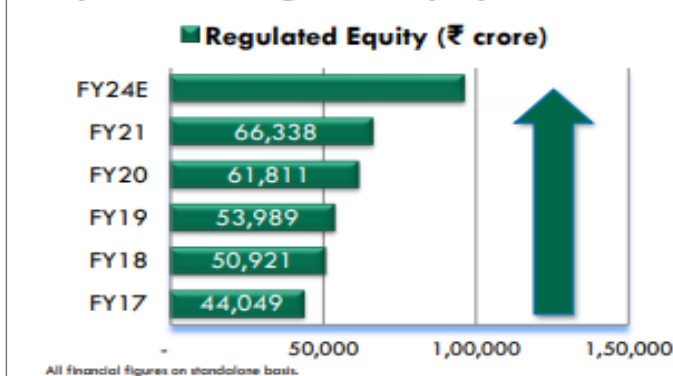
**Robust commercialisation schedule of >5GW annually; Aggregate projects 18 GW of project under implementation**

NTPC has aggregate 18 GW of new projects under various stages of implementation at the group level. Out of this, the company is targeting to commercialise new capacities of 5.5 GW in FY2022E and 6 GW in FY2023E. NTPC has plans to add >5GW of commercial capacities annually over the next couple of years and the management has guided that CWIP ratio would continue to decline to 30%/27%/24% in FY2022E/FY2023E/ FY2024E (from 31% in FY2021). This would free-up equity blocked in CWIP and the same would start earnings regulated returns. We thus expect standalone regulated equity to clock 11% CAGR over FY21-24E and reach >Rs. 90,000 crore by FY24E versus Rs. 66,338 crore in FY21.

**Reversal in CWIP ratio to drive growth**



**Expansion in Regulated Equity**



- FY20 marked beginning of Reversal in CWIP ratio and this will continue due to accelerated commercialization
- Fall in CWIP ratio will lead to ROE expansion as the equity blocked in CWIP starts earning
- Growth will continue and the turnaround from CWIP to PPE would be quicker in Renewable energy projects

Source: Company; Sharekhan Research

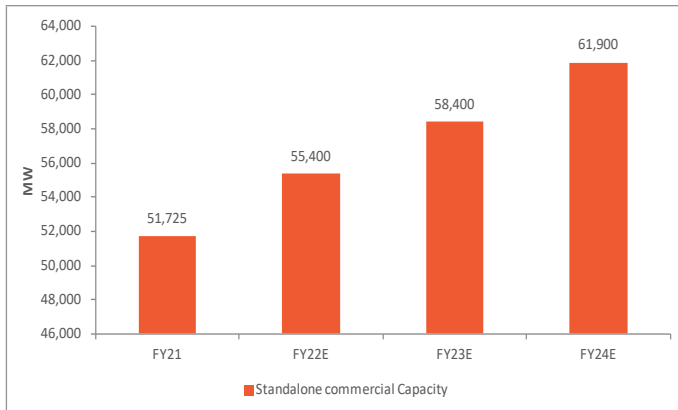
**Projects under commissioning aggregate to 18GW**

<b>Details of ongoing projects</b>	<b>In MW</b>
<b>Coal-based projects</b>	
Barh-I, Bihar (3x660 MW)	1,980
Darlipalli-I, Odisha (2x800 MW)	800
North Karanpura, Jharkhand (3x660 MW)	1,980
Telangana Phase-I, Telangana (2x800 MW)	1,600
Barauni St.-II, Bihar (2x250 MW)	250
<b>Total coal-based projects</b>	<b>6,610</b>
<b>Hydro Electric Power Projects (HEPP)</b>	
Tapovan Vishnugad, Uttarakhand (4x130 MW)	520
Lata Tapovan, Uttarakhand (3x57 MW)	171
Rammam Hydro, West Bengal (3x40 MW)	120
<b>Hydro Electric Power Projects</b>	<b>811</b>
<b>Renewable Energy Projects</b>	
Ramagundam, Solar F, AP	100
Simhadri, Solar F, AP	25
Kayamkulam, Solar F, Kerala	22
Kayamkulam, Solar F, Kerala	70
Jetsar, Solar G, Rajasthan	160
Rihand, Solar G, UP	20
Auraiya, Solar F, UP	20
CPSU-I: Shimbhoo Ka Burj, Solar G	250
CPSU-I: Devikot, Solar G, Rajasthan	150
CPSU-I: Shimbhoo Ka Burj, Solar G	300
PSU-II: Nokhra, Solar G, Rajasthan	300
CPSU-II: Fatehgarh, Solar G, Rajasthan	296
CPSU-II: Navalakhapatti, Solar G	230
CPSU-II: Devikot, Solar G, Rajasthan	90
CPSU-I: Gandhar, Solar G, Rajasthan	20
Kawas Solar G/F	56
Anta Solar G	90
Bilhaur, Solar, Uttar Pradesh	15
<b>Renewable Energy Projects</b>	<b>2,214</b>
<b>Total Standalone</b>	<b>9,635</b>
<b>Projects under JVs and Subsidiaries</b>	
<b>Coal-Based Projects</b>	
Nabinagar- JV with Railways (BRBCL), Bihar, (4x250 MW)	250
Nabinagar (NPGCL), Bihar (3x660MW)	660
Patratu Expansion, JV with JBVNL	2,400
Rourkela, JV with SAIL (NSPCL), Odisha	250
Durgapur, JV with SAIL (NSPCL), West Bengal (2x20MW)	40
Khulna, JV with BPDB (BIFPCL), Bangladesh (2x660MW)	1,320
THDC - Khurja (2x660 MW)	1,320
<b>Coal-Based Projects</b>	<b>6,240</b>
<b>Hydro Projects</b>	
THDC - Tehri PSP, Uttarakhand	1,000
THDC – Vishnugad Pipalkoti, Uttarakhand	444
<b>Hydro Projects</b>	<b>1,444</b>
<b>Renewable Projects</b>	
Chattargarh, Solar G	150
Bhensara, Solar G	320
Surendernagar, Solar G	200
<b>Renewable Projects</b>	<b>670</b>
<b>Total JV and Subsidiaries</b>	<b>8,354</b>
<b>Total Ongoing Projects as on March 31, 2021</b>	<b>17,989</b>

Source: Company; Sharekhan Research

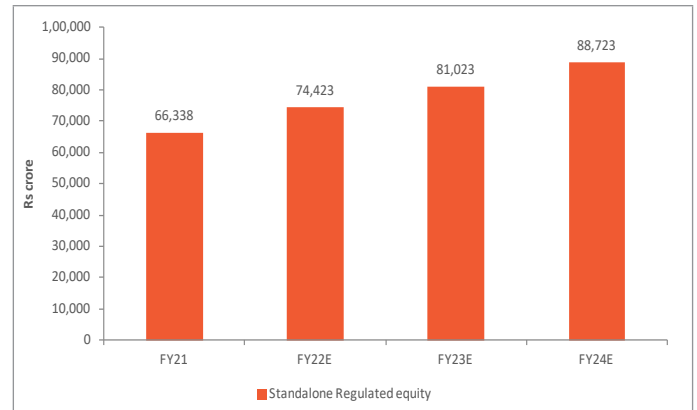
## Financials in charts

### Commercialisation to remain strong over FY22-24E



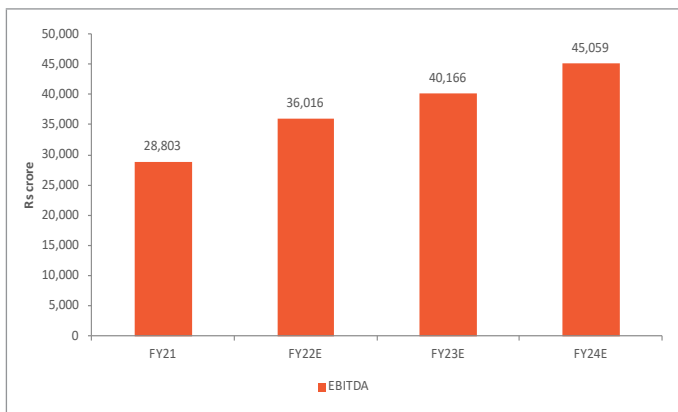
Source: Company, Sharekhan Research

### Regulated equity base to improve



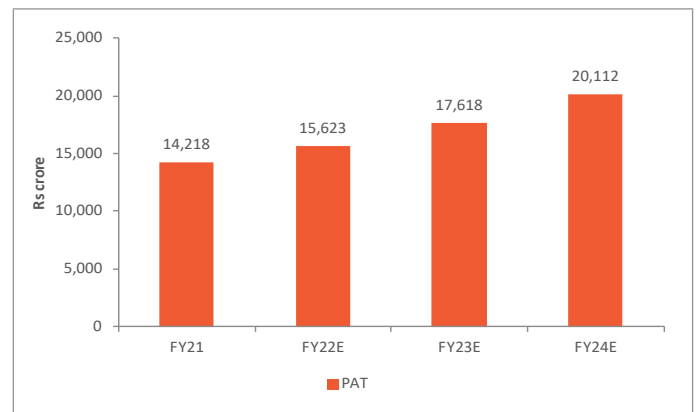
Source: Company, Sharekhan Research

### EBITDA trend



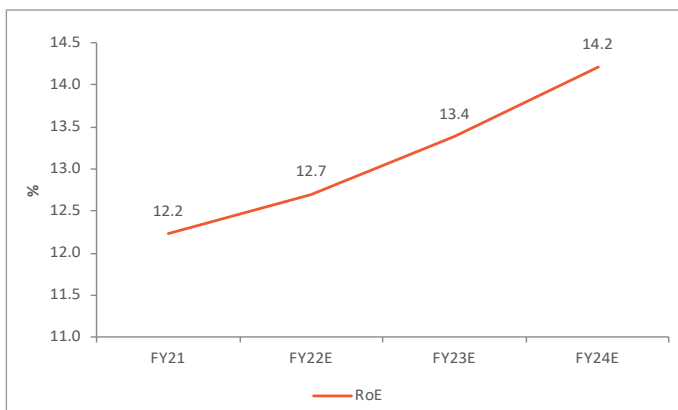
Source: Company, Sharekhan Research

### PAT to clock 12% CAGR over FY21-FY24E



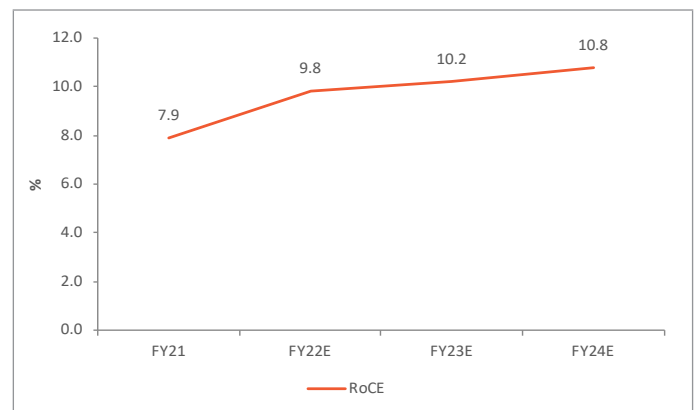
Source: Company, Sharekhan Research

### RoE to improve considerably



Source: Company, Sharekhan Research

### RoCE trend



Source: Company, Sharekhan Research

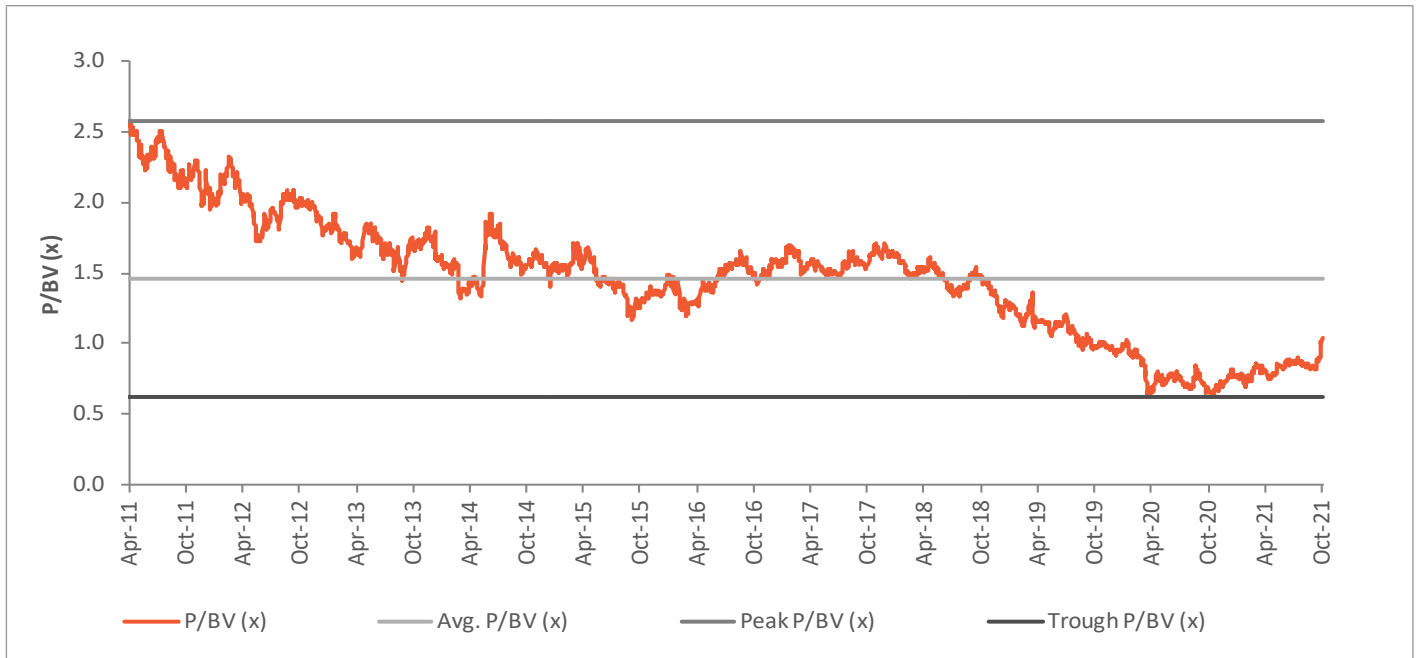
## Outlook and Valuation

■ **Sector outlook – Regulated tariff model provides earnings visibility; power sector reforms to strengthen companies’ balance sheets:** India’s power sector is regulated by the CERC with an availability-based earnings model (fixed RoE on power generation assets) and, thus, the regulated tariff model provides strong earnings visibility for power-generation companies. Additionally, with improved coal stocks at thermal power plants, plant availability factor (PAF) has improved and, thus, we expect fixed cost under-recoveries to decline for power companies. Moreover, the government’s power sector package of over Rs. 3 lakh crore in the Budget would help power discoms clear dues of power generation and transmission companies. This would reduce power sector’s receivables and strengthen companies’ balance sheet.

■ **Company outlook – Strong commercialisation target to drive 12% CAGR in PAT over FY2021-FY2024E:** NTPC aims to add more than 5 GW of new commercial capacities annually over next couple of years, which we believe would drive decent 10%/12% CAGR in regulated equity/PAT base of the company. The management has guided for robust growth in regulated equity, which makes us optimistic about strong earnings growth for NTPC over the next couple of years. Moreover, a potential reduction in overdue amount (Rs. 9,021 crore as of June 2021) from discoms would strengthen NTPC’s balance sheet.

■ **Valuation – Maintain Buy on NTPC with and a revised PT of Rs. 170:** NTPC’s risk-averse regulated business model provides earnings growth visibility/RoE improvement and RE expansion would drive gradual re-rating of the stock as it would allay concern of ESG. Additionally, potential monetization of its RE and power trading arm subsidiaries could further improve shareholders returns in the coming years. A valuation of 1x FY23E P/BV is attractive given steep discount of 29% to historical average one-year forward P/BV multiple of 1.5x and a healthy dividend yield of ~4%. Hence, we maintain a Buy on NTPC with a revised PT of Rs. 170 (increase reflects higher multiple for standalone business given improving RoE profile and increase in the value of subsidiaries). . .

One-year forward P/BV (x) band



Source: Sharekhan Research

## About company

NTPC, established in 1975, is India's largest power generation company in India with an installed capacity of 66,885 MW currently. NTPC accounted for 17% and 23% in India's installed power capacity and generation, respectively. The company plans to add ~20 GW of power capacity in the next five years. NTPC also provides consultancy services to entities in the power domain and is engaged in power trading through its subsidiary.

## Investment theme

NTPC is expected to commercialise new capacities of >5 GW annually over the couple of years and the same is expected to drive double-digit CAGR in regulated equity base. Thus, we expect strong earnings growth momentum to continue as NTPC earns 15.5% RoE on regulated equity. Moreover, with improvement in PAF of coal-based power plants, the company's fixed cost under-recoveries are expected to decline in FY2022. NTPC is trading at an attractive valuation and offers a healthy dividend yield.

## Key Risks

- ◆ Lower-than-expected additions to commercial capacity.
- ◆ Coal shortage could affect earnings.
- ◆ Any write-off related to dues from discoms could impact valuation.

## Additional Data

### Key management personnel

Gurdeep Singh	Chairman and Managing Director
Anil Kumar Gautam	Director – Finance
Chandan Kumar Mondol	Director – Commercial

Source: Company Website

### Top 10 shareholders

Sr. No.	Holder Name	Holding (%)
1	Life Insurance Corp of India	11.0
2	ICICI Prudential Asset Management Co. Ltd	6.4
3	HDFC Asset Management Co. Ltd	4.5
4	Nippon Life India Asset Management Ltd.	3.3
5	Vanguard Group Inc/The	1.5
6	BlackRock Inc	1.4
7	SBI Funds Management Pvt. Ltd	1.3
8	T. Rowe Price Group Inc.	1.0
9	T. Rowe Price Int Stock F	1.0
10	Franklin Resources Inc.	1.0

Source: Bloomberg

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## Understanding the Sharekhan 3R Matrix

Right Sector	
Positive	Strong industry fundamentals (favorable demand-supply scenario, consistent industry growth), increasing investments, higher entry barrier, and favorable government policies
Neutral	Stagnancy in the industry growth due to macro factors and lower incremental investments by Government/private companies
Negative	Unable to recover from low in the stable economic environment, adverse government policies affecting the business fundamentals and global challenges (currency headwinds and unfavorable policies implemented by global industrial institutions) and any significant increase in commodity prices affecting profitability.
Right Quality	
Positive	Sector leader, Strong management bandwidth, Strong financial track-record, Healthy Balance sheet/cash flows, differentiated product/service portfolio and Good corporate governance.
Neutral	Macro slowdown affecting near term growth profile, Untoward events such as natural calamities resulting in near term uncertainty, Company specific events such as factory shutdown, lack of positive triggers/events in near term, raw material price movement turning unfavourable
Negative	Weakening growth trend led by led by external/internal factors, reshuffling of key management personal, questionable corporate governance, high commodity prices/weak realisation environment resulting in margin pressure and deteriorating balance sheet
Right Valuation	
Positive	Strong earnings growth expectation and improving return ratios but valuations are trading at discount to industry leaders/historical average multiples, Expansion in valuation multiple due to expected outperformance amongst its peers and Industry up-cycle with conducive business environment.
Neutral	Trading at par to historical valuations and having limited scope of expansion in valuation multiples.
Negative	Trading at premium valuations but earnings outlook are weak; Emergence of roadblocks such as corporate governance issue, adverse government policies and bleak global macro environment etc warranting for lower than historical valuation multiple.

Source: Sharekhan Research



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