

# NATIONAL THERMAL POWER CORPORATION

MARKET CAP

**₹ 3,67,409 CR**

CURRENT MARKET PRICE

**₹ 378.35**



By- **Sambhav Lalwani**  
Junior analyst  
Pee Aar Securities

# ABOUT THE COMPANY



Established in 1975, NTPC is steering ahead to be India's largest integrated power company and targets to become a 130 GW firm by 2032. NTPC has comprehensive Rehabilitation & Resettlement and CSR policies well integrated with its core business of setting up power projects and generating electricity.

NTPC generates electricity using coal, gas, liquid fuel, hydro, and other renewable sources. As of May 2024, NTPC operates 55 power stations, including 24 coal, seven combined cycle gas and liquid fuel, two hydro powered, one wind turbine, and 11 solar projects.

NTPC also offers construction management, environment engineering and management, consultancy, e-mobility solutions, project management and supervision, coal mining blocks, energy trading, oil and gas exploration, power professional training, rural electrification, and ash utilization.

NTPC has comprehensive Rehabilitation & Resettlement and CSR policies well integrated with its core business of setting up power projects and generating electricity.

# HISTORY

## Formation and Early Years (1975-1980s)

- 1975: NTPC was founded on November 7, 1975. It was established by the Government of India to accelerate the country's power development and increase the power generation capacity.
- 1976: The construction of the first thermal power plant began in Singrauli, Uttar Pradesh.

## Expansion and Growth (1980s-1990s)

- 1986: NTPC became a Navratna company, giving it greater autonomy and decision-making power.
- 1990: The company diversified into hydroelectric power and began exploring other sources of energy.

## Modernization and Diversification (2000s)

- 2005: The company was renamed NTPC Limited, reflecting its diversified operations beyond thermal power generation.

## Recent Developments (2010s-Present)

- 2010s: NTPC continued to expand its capacity and diversify its energy portfolio. The company began exploring renewable energy sources, such as solar and wind power.
- 2016: NTPC was conferred with the status of a Maharatna company, giving it even more financial and operational autonomy.
- 2020s: NTPC has been actively working towards increasing its renewable energy capacity and aims to become one of the largest renewable energy producers in India.



## Achievements and Milestones

- NTPC is the largest power company in India and one of the largest in the world.
- The company has won numerous awards for its operational efficiency, environmental performance, and corporate social responsibility

## Vision and Future Plans

- NTPC aims to achieve a significant share of its energy generation from renewable sources by 2032.
- The company is exploring new technologies and innovations in power generation to improve efficiency and reduce environmental impact.

# MEET OUR TEAM



Gurdeep Singh is the Chairman & Managing Director of NTPC Limited since 2016. Prior to joining NTPC, he was Managing Director of Gujarat State Electricity Company Limited.

He has an illustrious career spanning over three decades in the power sector. He started his career in 1987 as an Engineer Trainee with NTPC and has worked his way through various ranks in public and private sector including MNCs.

He graduated in mechanical engineering from NIT Kurukshetra and has undergone Management Education Program from IIM Ahmedabad.



Shri Ravindra Kumar (DIN: 10523088) has taken charge as Director (Operations), NTPC on 26th February 2024.

Shri Ravindra Kumar completed B.Sc. (Engineering) in Mechanical engineering from BIT Sindri in 1988. Prior to joining as Director (Operations), NTPC Limited, he was OSD (Officer on Special Duty) to Director (Operations), NTPC Limited.

Shri Ravindra Kumar joined NTPC Limited as Graduate Engineer Trainee officer in 1989 and has more than 34 years of diverse and versatile experience in Commissioning, O&M, Engineering and Project management.



Shri Jaikumar Srinivasan (DIN. 01220828) has taken charge as Director (Finance), NTPC on 21.7.2022. He is a Commerce Graduate and an Associate Member of the Institute of Cost Accountants of India.

Shri Jaikumar Srinivasan has more than 30 years of experience in Power and Mining sector in State and Central PSUs in the field of Finance. Accounts, Taxation, Commercial, Electricity regulation, Renewables, IT, Project development etc. with 8 years Board level exposure.

Before his appointment as Director (Finance), NTPC Limited, he has served as Director (Finance) of NLC India Limited.



Shri Shivam Srivastava, a Mechanical Engineering graduate from Kamala Nehru Institute of Technology, Sultanpur (Avadh University), Post Graduate in Business Management from MDI Gurgaon, had joined NTPC as 13th batch executive trainee in 1988. He has also undergone a Leadership Management course from Harvard Business School, Boston (USA). In his professional career, he has accumulated over 34 years of experience with outstanding contribution in areas of Fuel Handling, Fuel management, Safety, plant operation & maintenance and in coal mining projects.



Shri Piyush Singh (DIN: 07492389) aged 45 years, is a 2000 Batch IAS officer from Maharashtra Cadre. Shri Piyush Singh has done B. Tech (Civil) from IIT Delhi. He worked in various capacities in District Administration, Department of Social Justice & Empowerment and Department of health & family welfare, Government of Maharashtra. He also served in Uttarakhand in Planning department, Dehradun. He has wide experience in the area of Public Administration and Planning.



Shri K. Shanmugha Sundaram (DIN: 10347322) has taken charge as Director (Projects), NTPC on 1st December, 2023. Shri K. Shanmugha Sundaram is a 1988 batch Electronics and Communication Engineering graduate from Govt. College of Technology, Coimbatore with PGDM from MDI Gurgaon in the area of Strategy & Finance. Prior to joining as Director (Projects), NTPC Limited, he was ED to CMD, NTPC Limited. Shri K. Shanmugha Sundaram joined NTPC Limited as Graduate Engineer Trainee officer in 1988 and has more than 35 years of diverse and versatile experience in Project as well as Commissioning stage

# INDUSTRY OVERVIEW

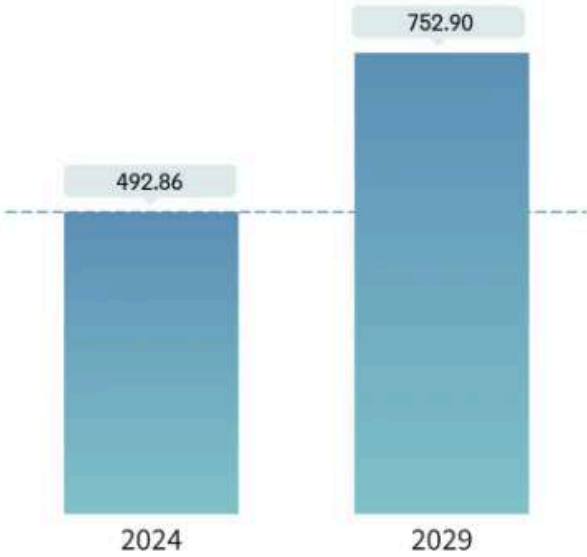
**The India Power Market size in terms of installed base is expected to grow from 492.86 gigawatt in 2024 to 752.90 gigawatt by 2029, at a CAGR of 8.80% during the forecast period (2024–2029).**

- Over the medium period, factors such as supportive government policies, rising electricity demand due to infrastructural activities, and rising population are expected to drive the market during the forecasted period.
- On the other hand, huge investment is required to set up and modernize power generation, transmission & distribution networks, and weak private sector investments are expected to hinder the growth of the Indian power market.
- Nevertheless, India has abundant availability of solar irradiance and receives solar energy throughout the year. This has created enormous opportunities to exploit solar energy from the sunniest sites in the country, especially Rajasthan, Gujarat, and Andhra Pradesh. The factor above, clubbed with foreign investment and extensive power projects, provides an opportunity to grow the power market in India.

## MARKET STRUCTURE

- **Public Sector:** Dominated by companies like NTPC (National Thermal Power Corporation), NHPC (National Hydroelectric Power Corporation), and others.
- **Private Sector:** Significant contributions from companies like Tata Power, Adani Power, and Reliance Power.
- **Renewables:** Increasing participation from companies specializing in solar, wind, and biomass energy.

**India Power Market**  
 Installed Base in Gigawatt  
 CAGR 8.80%

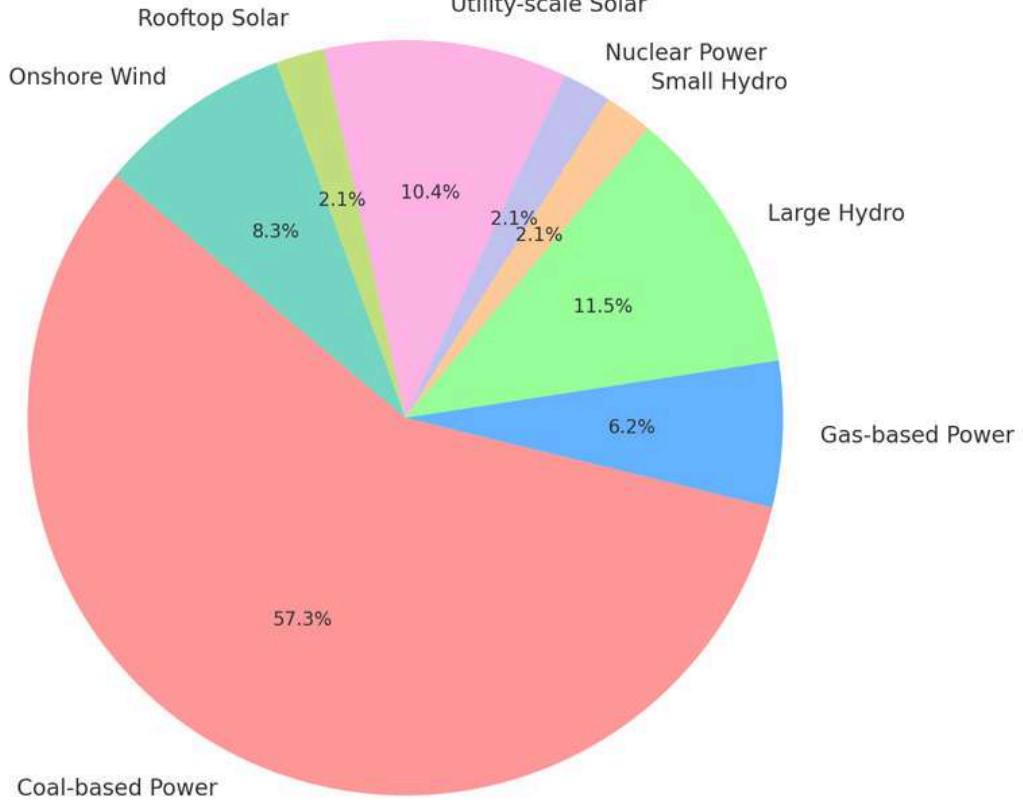


Study Period	2020 - 2029
Base Year For Estimation	2023
Market Volume (2024)	492.86 gigawatt
Market Volume (2029)	752.90 gigawatt
CAGR (2024 - 2029)	8.80 %
Market Concentration	Medium

**Major Players**



**Indian Power Market by Major Product Types**



**Organized Sector: ~90%**

This includes large-scale thermal, hydro, nuclear, utility-scale solar, wind power, and centralized transmission and distribution.

**Unorganized Sector: ~10%**

This covers small hydro projects, rooftop solar installations, distributed generation, and local microgrids.



# MARKET SHARE

As of June 27, 2024, the compound annual growth rate (CAGR) of NTPC is **12.48%**

NTPC has been operating its plants at high efficiency levels. As on 31.03.2023 the company has **17% of the total national capacity** and, it contributes **25% of total power generation of India** due to its focus on high efficiency.

List of NTPC's products and offerings:

- **Conventional Power Generation-**

- 1.Coal-based Power
- 2.Gas based power
- 3.Hydropower
- 4.Nuclear power

- **Renewable Energy-**

- 1.Solar power
- 2.Wind power
- 3.Biomass and Waste-to-Energy

- **Emerging Technologies-**

- 1.Energy storage
- 2.Green hydrogen

- **Other Products & Services-**

- 1.Consultancy services
- 2.Coal mining
- 3.Equipment manufacturing

NTPC has a large number of subsidiaries, both wholly-owned and joint ventures. Here's a breakdown of the different types of subsidiaries NTPC has:

### **Wholly-owned Subsidiaries:**

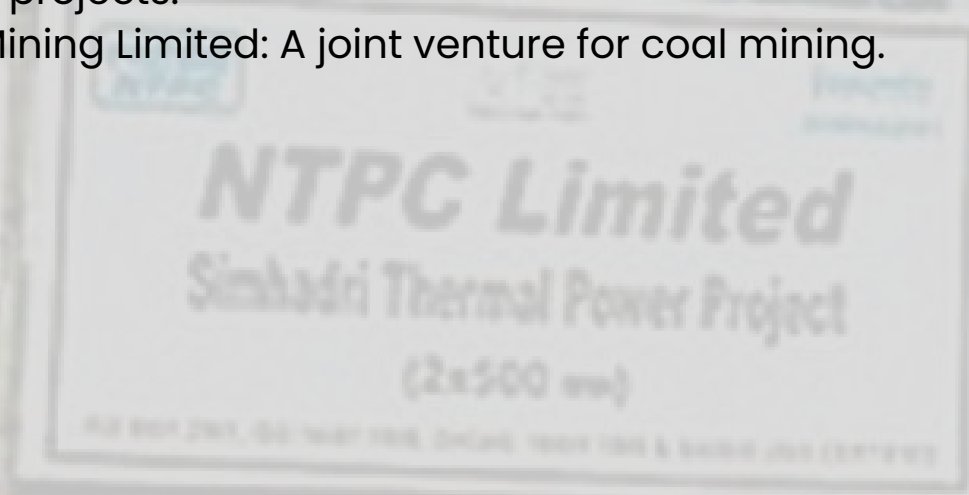
These are companies in which NTPC owns 100% of the equity. Some examples include:

- NTPC Vidyut Vyapar Nigam Limited: Established for power trading and ash utilization.
- NTPC Electric Supply Company Limited: Involved in power distribution.
- Kanti Bijlee Utpadan Nigam Limited: Focuses on power generation.
- NTPC Renewable Energy Limited: Manages NTPC's renewable energy business.

### **Joint Ventures:**

These are companies formed by NTPC in partnership with other entities. Some examples include:

- THDC India Limited: A joint venture with the Government of India for hydropower generation.
- NTPC Green Energy Limited: A joint venture for developing renewable energy projects.
- NTPC Mining Limited: A joint venture for coal mining.



Project / Stations	NO. OF PLANTS	GROSS CAPACITY (MW)
<b>NTPC Owned</b>		
Coal	27	53,850
Gas/Liquid Fuel	7	4,017
Hydro	1	800
Small Hydro	1	8
Solar PV	16	493
<b>Total (NTPC Owned)</b>	<b>52</b>	<b>59,168</b>

### Owned By JVs/Subsidiaries

Coal	9	8,344
Gas/Liquid Fuel	4	2,494
Hydro	8	2,925
Small Hydro	1	24
Solar PV	16	2,880
Wind	4	213
<b>Total (JVs/Subsidiaries)</b>	<b>42</b>	<b>16,880</b>
<b>TOTAL (NTPC Group)</b>	<b>94</b>	<b>76,048</b>

# MAJOR CLIENTS

- State Electricity Boards (SEBs) and Distribution Companies (Discoms):

Maharashtra State Electricity Distribution Co. Ltd (MSEDCL)

Uttar Pradesh Power Corporation Ltd (UPPCL)

Tata Power Delhi Distribution Limited (TPDDL)

BSES Yamuna Power Limited (BYPL)

BSES Rajdhani Power Limited (BRPL)

- Indian Railways:

One of the largest consumers of electricity, Indian Railways sources power from NTPC for its extensive rail network.

- Bulk Industrial Consumers:

Large industrial entities and manufacturing units with high power demands.

- Government Entities:

Various central and state government departments and organizations.

- Export Markets:

NTPC has been exporting electricity to neighboring countries such as Bangladesh and Nepal, making them significant clients.



HINDUSTAN ZINC



© BCL 2023. ALL RIGHTS RESERVED.



**MAHA**GENCO  
Maharashtra State Power Generation Co. Ltd.



**BSES**  
BSES Yamuna Power Limited

# SWOT ANALYSIS

## Strengths of NTPC

Strengths are the positive factors of NTPC which help the company stay at the top in the market. The following are the strengths identified in National Thermal Power Corporation's (NTPC):

1. **Workplace culture and personnel practice**—NTPC provides its employees with a favorable condition to work in and also gives them personnel practices that are favorable to employees. Thus making them efficient in their work towards the company.
2. **Plant production procedure**—NTPC uses an efficient production process in the company that helps it to get more output
3. **Project management system**—NTPC has a fully integrated project management system that helps the company to manage things properly and efficiently. Project completion is efficient and timely, and all of the company's projects are well-planned and executed on time.
4. **Decades of expertise**—NTPC has decades of experience in the industry which makes it creditable in the market.

## Weaknesses of NTPC

Weaknesses are the flaws that a company has. These are the internal factors that affect the company's growth. NTPC needs to take care of such flaws and try to eliminate them as soon as possible. Following are some of the weaknesses of NTPC:

1. **Depleting raw material** – The raw material used in the business are non-renewable and are now depleting. Thus affecting the production process and capacity of the company due to the increasing prices.

2. **Government action**-The frequently changing government actions can cause activities to be disrupted in the business which can lead to a lot of wastage in the production process.

3. **Electricity Act**-In India, the prices of electricity are determined by the electricity act which all the companies need to follow thus creating a cut in the profit of the business than the desired returns.

### **Opportunities for NTPC**

Opportunities are the external factors that help NTPC grow in the market by capturing the potential places where it can expand its business. NTPC needs to use these opportunities properly and make them their strengths. The following are the opportunities identified for (NTPC) National Thermal Power Corporation:

1. **A huge demand**-There is a large demand in the market due to the decrease in the supply. Thus NTPC needs to arrange sources from the production and be the one capturing the market with their products.

2. **Energy consulting service**-As the need in the economy increases people are more interested in knowing about things thus NTPC can enter the energy consulting services which will help them create more customers for their products.

3. **Strong online presence**-As most people are going online now it is very important for businesses to go online to keep their customers engaged and aware of their products and services. This can create a good relationship between the customers

## Threats for NTPC

Threats are the factors that can be can create a negative effect in the processing of the NTPC these are the external factors that a company needs to take care of and be aware of so that they can take proper precautions. Following are some of the threats for NTPC:

**Growing production costs** - The cost of production is growing as the raw material prices are increasing. This can result in the customer shifting to another company

**Competitors** - There is large-scale rivalry from emerging private-sector businesses. Every new business comes with innovative marketing techniques or new services. Resulting in the customers shifting their preferences.





## SWOT Analysis of NTPC



### STRENGTHS

- Workplace culture and personnel practice
- Plant production procedure
- Project management system
- Decades of expertise



### WEAKNESSES

- Depleting raw material
- Government action
- Electricity act



### OPPORTUNITIES

- Huge Demand
- Energy consulting service
- Strong online presence



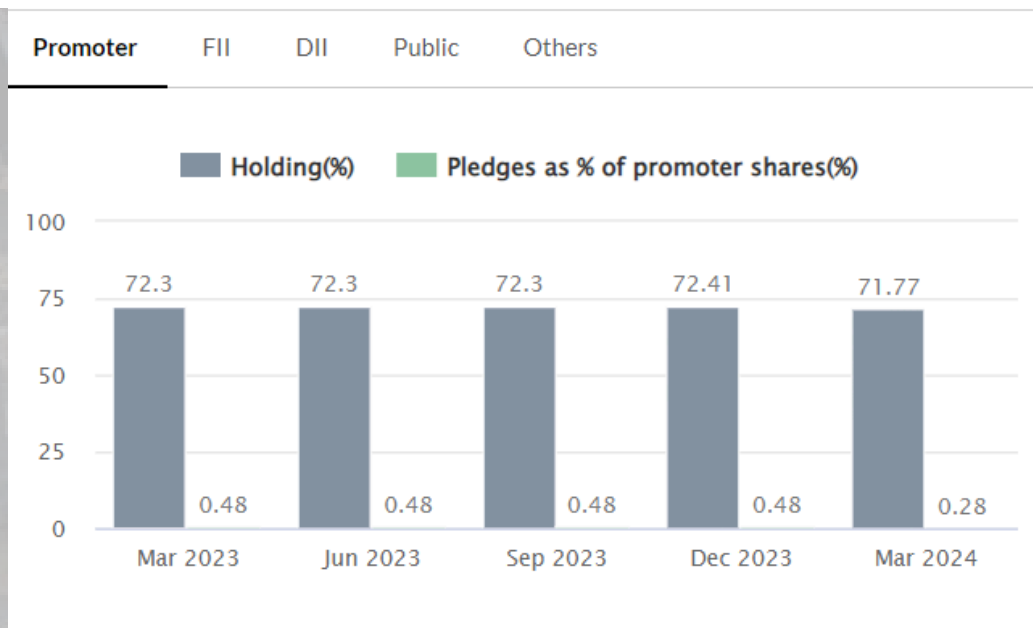
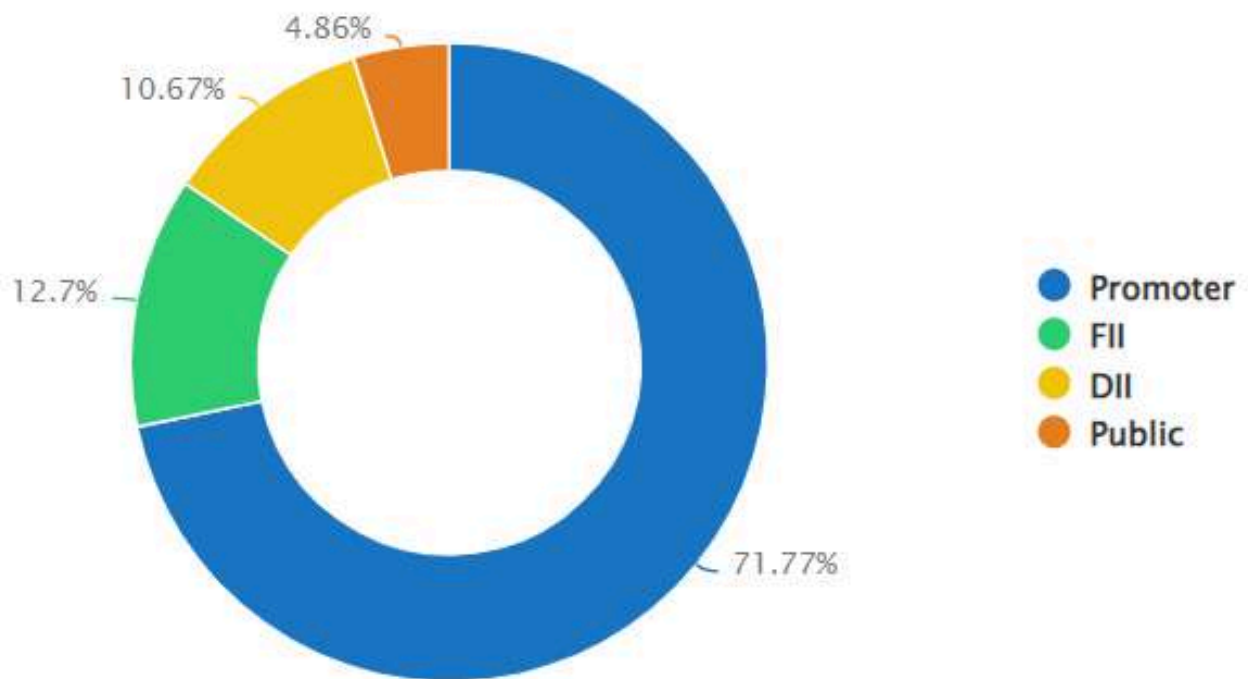
### THREATS

- Growing production costs
- Competitors

# KEY RATIOS

Market Cap	₹ 3,66,873 Cr.	Current Price	₹ 378	High / Low	₹ 395 / 185
Stock P/E	17.6	Book Value	₹ 166	Dividend Yield	1.92 %
ROCE	10.4 %	ROE	13.5 %	Face Value	₹ 10.0
Sales	₹ 1,78,501 Cr.	Sales Qtr	₹ 47,622 Cr.	Qtr Profit Var	26.9 %
EPS	₹ 21.5	Promoter holding	51.1 %	Profit after tax	₹ 20,812 Cr.
PAT Qtr	₹ 6,169 Cr.	Price to Earning	17.6	Return on assets	4.61 %
Change in Prom Hold	0.00 %	Qtr Sales Var	7.61 %	Price to book value	2.28
Debt to equity	1.48	Debt	₹ 2,37,131 Cr.	Pledged percentage	0.00 %

# SHAREHOLDING



# PROFIT & LOSS


	Mar 2020	Mar 2021	Mar 2022	Mar 2023	Mar 2024
Sales +	109,464	111,531	132,669	176,207	178,501
Expenses +	77,876	77,487	92,307	128,612	127,408
<b>Operating Profit</b>	<b>31,589</b>	<b>34,044</b>	<b>40,362</b>	<b>47,595</b>	<b>51,093</b>
OPM %	29%	31%	30%	27%	29%
Other Income +	8,206	5,021	4,809	2,562	5,301
Interest	8,189	9,224	9,376	11,447	12,048
Depreciation	10,356	12,450	13,788	14,792	16,204
<b>Profit before tax</b>	<b>21,250</b>	<b>17,390</b>	<b>22,007</b>	<b>23,917</b>	<b>28,142</b>
Tax %	44%	14%	23%	28%	24%
<b>Net Profit +</b>	<b>11,902</b>	<b>14,969</b>	<b>16,960</b>	<b>17,121</b>	<b>21,332</b>
EPS in Rs	11.72	15.09	17.20	17.44	21.46
Dividend Payout %	27%	41%	41%	42%	36%

# BALANCE SHEET

	Mar 2020	Mar 2021	Mar 2022	Mar 2023	Mar 2024
Equity Capital	9,895	9,697	9,697	9,697	9,697
Reserves	108,945	116,042	125,677	137,326	151,013
Borrowings +	202,984	210,208	210,707	221,626	237,131
Other Liabilities +	55,746	62,075	69,751	76,648	82,356
<b>Total Liabilities</b>	<b>377,569</b>	<b>398,022</b>	<b>415,831</b>	<b>445,297</b>	<b>480,197</b>
Fixed Assets +	187,803	203,245	224,923	240,424	259,005
CWIP	98,508	97,506	91,126	89,179	87,593
Investments	9,307	10,589	10,626	13,935	15,885
Other Assets +	81,951	86,681	89,156	101,759	117,714
<b>Total Assets</b>	<b>377,569</b>	<b>398,022</b>	<b>415,831</b>	<b>445,297</b>	<b>480,197</b>

# FINANCIALS

- As of March 2024 , company promoters held **71.77%** stake in NTPC, with no shares having been pledged.
- Over the last one year, NTPC share price has moved up from Rs.**193.4** to Rs.**369.75** registering a gain of Rs.176.35 which is around 94.61%
- EBITDA stands at Rs.**38,554** Cr in March 2024 which is up by 21.36% from Rs.**34,293** Cr in March 2023
- Net profit has increased from Rs.**17,121** Cr in March 2023 to Rs.**21,332** Cr in March 2024 which is a gain of approximately . This was due to a number of factors including-
  - 1.Higher Power Generation and Sales: Increased electricity production and higher demand can boost revenue.
  - 2.Lower Fuel Costs: Reduction in the cost of coal, gas, or other fuels used for power generation can decrease expenses and improve margins.
  - 3.Government Policies and Subsidies: Supportive government policies, incentives, or subsidies can enhance profitability.
- Debt to equity ratio is **1.48** which shows ability of a company's shareholder equity to pay its debt obligations in a tough time. The debt-to-equity ratio of 1.48 can be considered reasonable and typical given the capital-intensive nature of the industry.
- Return on capital employed is **10.4%** means the company is able to generate favourable amount of returns on the investment done in business activities for this sector.

- 
- A large group of men, likely employees of NTPC, are standing in a line outdoors. They are wearing light blue shirts and blue caps. The image is semi-transparent, serving as a background for the text.
- Fixed assets has increased from Rs.**2,40,424** Cr to Rs.**2,59,005** Cr. Intangible assets has increased from Rs. 0 to Rs. 581 Cr which means NTPC has acquired a asset that is gonna provide them future economic benefit according to their accounting policy.
  - Short term borrowings has increased by Rs. **13,000** Cr which means that the company is not able to cover its current obligations by the amount of money present in its bank account.
  - EPS has increased from Rs. **17.44** to Rs **21.46** means the company has become more profitable.

# PEER COMPARISON

Name	CMP Rs.	P/E	Mar Cap Rs.Cr.	Div Yld %	NP Qtr Rs.Cr.	Qtr Profit Var %	Sales Qtr Rs.Cr.	Qtr Sales Var %	ROCE %
NTPC	378.35	17.63	366873.36	1.92	6490.05	26.91	47622.06	7.61	10.37
Power Grid Corpn	330.95	19.76	307803.48	3.34	4166.33	-3.62	11978.11	-2.33	12.98
Adani Green	1788.80	224.34	283351.73	0.00	310.00	-70.67	2527.00	-2.73	9.81
Adani Power	718.60	13.30	277159.63	0.00	2737.24	-47.79	13363.69	30.48	32.25
Tata Power Co.	440.60	40.81	140786.66	0.45	1045.58	12.21	15846.58	27.24	11.13
JSW Energy	734.50	77.46	128373.59	0.27	345.27	26.91	2755.87	3.22	8.59
Adani Energy Sol	997.35	106.19	111253.66	0.00	381.29	-7.19	4706.85	40.18	9.00
Median: 25 Co.	236.17	38.17	13432.78	0.0	113.94	6.66	1514.83	5.42	8.18

- NTPC tops the peer comparison list and is financially more healthy as compared to its peers
- Sales of NTPC is Rs. 47,622 Cr in the previous quarter as compared to Power Grid Corpn which has almost the same market cap and its sales was 11,978.11 Cr.
- Quarterly profit var% is 26.91 compared to power grid which is -3.62 and Adani Green which is -70.76. It means the company is generating increasing profits each passing quarter whereas the peers profits are declining.
- It has the highest net profit in the quarter which is 6490.05 Cr whereas Power grid has a net profit of 4166.33 Cr and Adani green which a net profit of 310 Cr.



# CONCLUSION

- A separate listing of the green energy business has the potential to significantly enhance the perceived worth of the assets and thus support valuation of the parent company NTPC.
- NTPC is increasing its green energy portfolio. It aims to have 60 GW of renewable energy capacity by 2032 as against 3.36 GW now.
- The company is actively considering awarding thermal power projects of about 16 GW in the near term in addition to its under-construction projects of about 10 GW of thermal capacity. Besides, it is aiming to commission 3.6 GW of new thermal capacity in FY24 and 5.2 GW in FY25. This will ensure the company's growth in the near term and provide support to earnings.
- With the listing of the green energy business, it expects to mobilise more funds and thus achieve higher scale in the coming months.
- The upcoming plans and improving financial health of the company signifies it will give good returns to its investor in future,

