Tata Power

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1) Introduction and Overview

Tata Power Company Limited is an Indian multinational electric utility company and part of the Tata Group, one of India's largest and oldest conglomerates. The company primarily operates in the power generation, transmission, and distribution sectors. Its product range includes conventional and renewable energy sources such as coal, gas, hydroelectric, solar, and wind power. The Company constructs and operates independent power plants, as well as specializes in transmission, distribution, and supply electricity. Tata Power Company delivers its products and services primarily in India (markets.ft.com, n.d.).

With over 100+ years of presence in the Indian power sector, Tata Power currently distributes electricity to over 12.4 million consumers. Tata Power competes by offering good prices, dependable service, and environmentally friendly practices with over 39% clean energy portfolio this means that about 40% of the energy, they produce comes from renewable sources like the sun and wind, showing they're serious about reducing pollution. They believe in 6 values which is SCALE: Safety, Care, Agility, Learning and Ethics. Even though the company believes that Safety is their highest priority, I believe that Ethics is their highest priority (VENTURES PRIVATE LIMITED, n.d.).

Indian cities are growing fast, more factories are being built, and people need more electricity. The market for electricity has been getting bigger because the economy is growing, and the government is making efforts to make sure everyone has access to electricity. Hence the market capitalisation of Tata Power has been steadily growing since the past years. The current market capitalisation of Tata Power is \$17.1 Billion which makes Tata Power the world's 1058th most valuable company by market cap (companiesmarketcap.com, n.d.).





a) Here is graph for the market cap history of Tata Power from 2005 to 2024 (companiesmarketcap.com, n.d.).

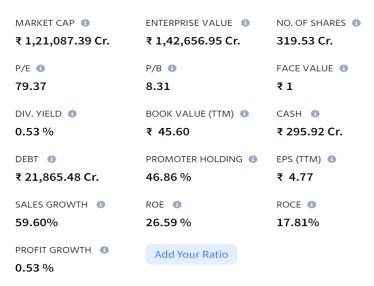
The main competitors of Tata Power include other Indian utility companies such as NTPC (National Thermal Power Corporation, Adani Power, and JSW Energy. These competitors compete on factors such as pricing, reliability, and sustainability, with some also focusing on specific segments like renewable energy (www.livemint.com, n.d.).

Name	Latest Price	Change	% Change	52W High	52W Low	Mkt. Cap
Power Grid Corporation Of India	301.65	7.95	2.71	298.95	172.54	2,80,552.71
Adani Power	612.55	17.10	2.87	647.00	214.00	2,36,256.79
Tata Power	449.10	1.00	0.22	451.50	199.35	1,43,576.90
Adani Energy Solutions	1,064.65	4.00	0.38	1,250.00	686.90	1,18,760.93
JSW Energy	629.75	26.65	4.42	651.55	240.00	1,03,312.77

b) Top competitors of Tata Power

Tata Power serves a diverse customer base, including residential, commercial, industrial, and institutional customers. Its wide range of products and services caters to various segments of society, from individual households to large-scale industries. The energy market size of India is projected to be 1.89 KWh in 2024 while Tata Power has a generation capacity of 14690 MW, and the overall market is growing at the rate of 8.09% (Ventures, 2023). Tata Power stands at a prominent position in the Indian power sector, including its diversified portfolio of energy sources (coal and wind), strong brand reputation, and extensive distribution network all over India. However, challenges such as regulatory constraints like change in any policy by the government can make things difficult, infrastructure limitations as the energy sector ranks 3rd all over the world, and competition from both traditional and renewable energy players pose significant threats (Enerdata.net, 2019). Here are some of the company essentials.

Company Essentials



2) Financial Analysis

Financial analysis is like taking a close look at a company's money situation to understand how well it's doing financially. We do this to see if the company is making enough money, managing its debts properly, and overall, if it's in good financial health (Kaufmann, Gadmer and Klett, 2001).

One important tool we use in financial analysis is financial ratios. These are basically little math equations that help us compare different aspects of a company's finances (Barnes, 1987). For example, we might look at a ratio that compares how much money the company owes to how much money it owns. This helps us see if the company is borrowing too much or if it's managing its debts well. Financial ratios help us get a clearer picture of a company's financial strengths and weaknesses. They can also help us compare different companies in the same industry to see which ones are doing better financially. Overall, financial analysis and ratios are important because they give us valuable insights into how a company is performing financially, which helps investors, managers, and other stakeholders make better decisions.

These Financial Ratios are generally divided into:

- 1. Profitability.
- 2. Activity.
- 3. Liquidity.

This report consists of the in-depth analysis of these ratios. Before starting here is the table which consist of:

1) Profit & Loss Statement (in Crs) 1Cr = \$133,514 = £95,569

Years	2023	2022	2021	2020	2019
Total Revenue	56,547.10	43,735.63	32,907.34	29,698.98	30,267.21
Total Revenue Growth	29.29	32.91	10.8	-1.88	10.98
(%)					
Total Expenses	55,213.61	42,285.72	32,295.75	28,320.84	29,699.05
Total Expenses Growth (%)	30.57	30.93	14.04	-4.64	11.34
Profit after Tax (PAT)	3,336.44	1,741.46	1,127.38	1,017.38	2,356.19
PAT Growth (%)	91.59	54.47	10.81	-56.82	-2.16
Operating Profit Margin (%)	10.35	12.39	14.23	20.15	15.85
Net Profit Margin (%)	6.05	4.06	3.47	3.49	7.88
Basic EPS (₹)	10.43	5.36	3.17	3.12	8.08

Years	2023	2022	2021	2020	2019
Total Assets	1,28,349.04	1,12,884.59	98,851.23	89,748.15	84,162.93
Total Assets Growth (%)	13.7	14.2	10.14	6.64	2.63
Total Liabilities	94,144.92	86,856.13	73,601.67	67,850.09	63,690.76
Total Liabilities Growth	8.39	18.01	8.48	6.53	0.15
(%)					
Total Equity	34,204.12	26,028.46	23,749.56	20,398.06	18,972.17
Total Equity Growth (%)	31.41	9.6	16.43	7.52	12.16
Total Debt to Equity (x)	1.7	2.12	1.85	2.47	2.68
Contingent Liabilities	14,327.21	9,372.21	7,161.25	6,282.82	5,218.16

Table 1: P&L Statement and Balance Sheet of Tata Power (Economic Times, n.d.).

Profitability Ratios

Profitability ratios are financial metrics used to evaluate a company's ability to generate profits relative to its revenue, assets, equity, or other financial measures (Beaver, 1968). These ratios provide insights into the company's efficiency in managing its operations and resources to generate profits. In simpler terms, profitability ratios help assess how effectively a company is making money from its business activities. These profitability ratios include **Return on Capital Employed (ROCE)**, **Return on Equity (ROE)**, and **Net Profit Margin (NPM)** are analyzed.

Let's start with **ROCE** (**Return on Capital Employed**), it is a financial metric used to measure the profitability of a company relative to the capital it has invested in its operations (Camelia, 2013). It calculates the percentage return a company generates on the capital employed, which includes both equity and debt. In other words, ROCE assesses how effectively a company utilizes its capital to generate profits, providing insight into its operational efficiency and financial performance. A good ROCE should basically be above the inflation rate which is 4% in 2024 (IMF, n.d.).

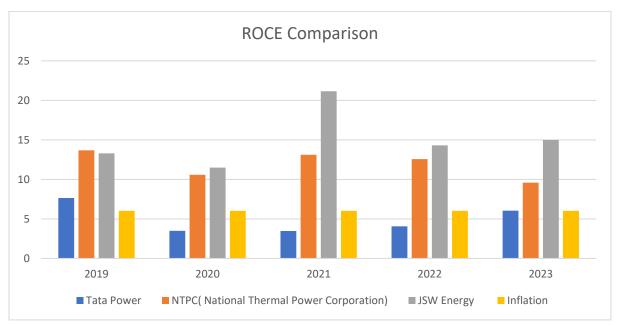


Figure: Comparison of the ROCE (%) of Tata Power and JSW Energy with the average inflation rate.

Looking at the bar plot Tata Power's average ROCE may be lower than its competitors, but it's still higher than the inflation rate. This is because the company is making significant investments in its future growth. These investments are aimed at achieving important milestones, which contribute to the company's consistent ROCE over the years. (Power, n.d.).

ROE measures the profitability of a company relative to the equity invested by shareholders. It is a financial metric used to measure the profitability of a company relative to the equity of the shareholders it has invested in its operations. It indicates how efficiently the company is using shareholder equity to generate profits. ROE is calculated by dividing net income (after tax) by shareholder equity. (www.proquest.com, n.d.).

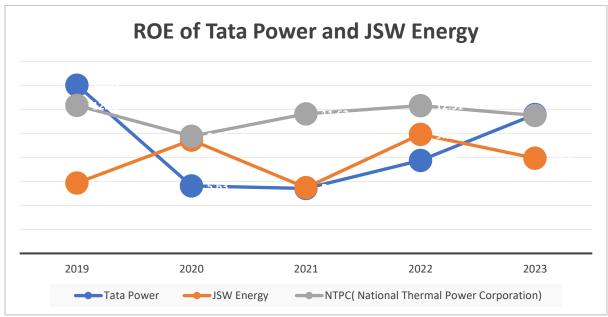


Figure: ROE of Tata Power and JSW Energy

From the above graph Tata Power's ROE saw a significant drop after 2019, mainly due to the COVID-19 pandemic. Like many companies worldwide, Tata Power faced challenges as the pandemic led to market collapses and business disruptions. With global shutdowns impacting operations and share prices, Tata Power's ROE took a hit during this period. However, as the situation gradually improved in the years following the pandemic, Tata Power's ROE started to recover. As economic activities resumed and market conditions stabilized, Tata Power saw a gradual increase in its ROE, reflecting the company's resilience and adaptability in navigating through challenging times. NTPC and Tata power show a similar trend, but the average ROE is better for NTPC than Tata Power.

On the other hand, JSW Energy experienced a different trend in its ROE. Starting from a low point in 2019, JSW Energy's ROE showed a significant increase in 2020, resembling a mountain shape. This increase could be attributed to various factors, including improved operational performance or strategic initiatives undertaken by the company. However, JSW Energy's ROE dipped again in 2021, returning to a similar level as in 2019. Despite this setback, the company managed to bounce back, with its ROE rising again to the peak reached in 2020. Although experiencing slight fluctuations in the latest year, JSW Energy's overall trajectory suggests resilience and the ability to recover from challenges.

Overall Tata Power's ROE is way more than JSW's and this suggests that Tata Power is more efficient in generating profits relative to the equity invested by its shareholders.

The third ratio is known as the **Net Profit Margin** (**NPM**), it shows how much profit a company makes from its total revenue after deducting all expenses. It's like looking at the percentage of each dollar of sales that turns into profit after accounting for all costs, including the cost of goods sold,

operating expenses, taxes, interest, and other expenses (Budiyanta, 2021). A higher net margin indicates that a company is more efficient at turning its revenue into profit, which is generally a positive sign of financial health. It gives a clearer understanding to the potential shareholders about the financial performance of the company than Gross Profit Margin.

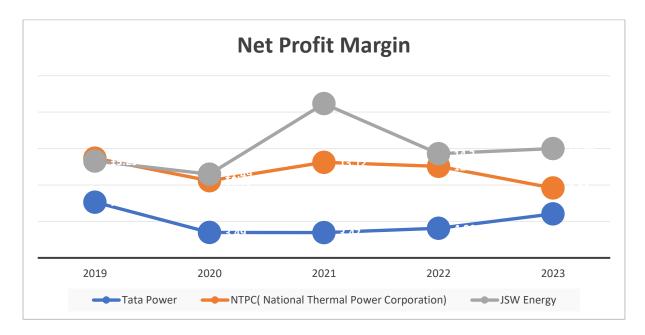


Figure: Comparison of Net Margin (%) of Tata Power and JSW Energy

JSW Energy has a higher average net profit margin over the past five years compared to Tata Power, indicating that JSW Energy generates more profit relative to its revenue. NTPC shows similar trend as JSW but in the last fiscal year the net profit margin drops by a significant amount. However, when we look at the trend over time, we see that Tata Power's net profit margin has been consistently growing, while JSW Energy's net profit margin fluctuates, going up and down.

Liquidity Ratio

Liquidity ratios are financial metrics that measure a company's ability to meet its short-term financial obligations using its liquid assets. These ratios provide insight into a company's ability to pay off its debts and cover its expenses in the short term. Liquidity ratios are essential for investors, creditors, and management because they help assess the financial health and stability of a company (Rashid, 2018). A strong liquidity position indicates that the company is well-prepared to handle unexpected expenses or downturns in the business environment, while a weak liquidity position may raise concerns about the company's ability to meet its financial commitments.

In this report we are going to talk about:

- 1. Current Ratio.
- 2. Debt-to-Equity Ratio.
- 3. Interest Cover.
- 4. Quick Ratio

Starting with **Current Ratio**, it is a financial metric that measures a company's ability to pay off its short-term liabilities with its short-term assets. It's calculated by dividing a company's current assets by its current liabilities (Utami, 2017).

In simple terms, the current ratio tells us whether a company has enough short-term assets (like cash, inventory, and accounts receivable) to cover its short-term debts (like accounts payable and short-term loans). It helps investors and creditors gauge a company's short-term financial health and its ability to manage its day-to-day operations effectively.

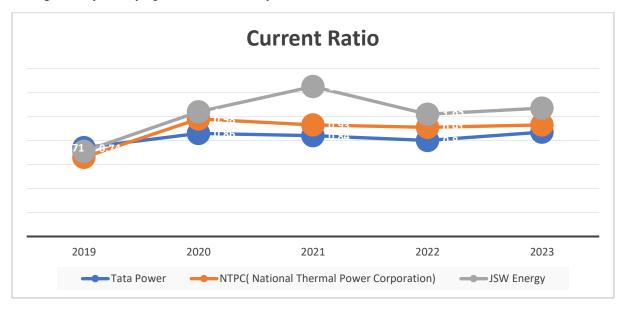


Figure: Current Ratio Line Graph of Tata Power and JSW Energy

Looking at the graph it indicates that Current Ratio of Tata Power with value of 0.87 has insufficient current assets to pay off short-term debt obligations whereas its main competitor JSW Energy has a current ratio close to 1.1 which is considered safe and has also crossed the 1.2 mark in 2021. Even though a good current ratio is considered between 1.2-1.8 this data suggests that JSW is better in paying off short term debt obligation compared to Tata Power (www.topstockresearch.com, n.d.). In terms of Current Ratio both NTPC and Tata Power showed poor performance where as JSW started with both companies in 2019 but it improved its performance over time.

The **Debt-to-Equity** ratio is a financial metric that compares a company's total debt to its total equity. It shows how much of a company's financing comes from debt compared to equity. It tells us how much a company relies on borrowing money (debt) versus using its own funds or funds from shareholders (equity) to finance its operations and investments. The debt-to-equity ratio helps investors and creditors assess a company's financial leverage and risk profile. It provides insight into how a company is funded and its ability to manage debt effectively (Kurniawan, 2021).

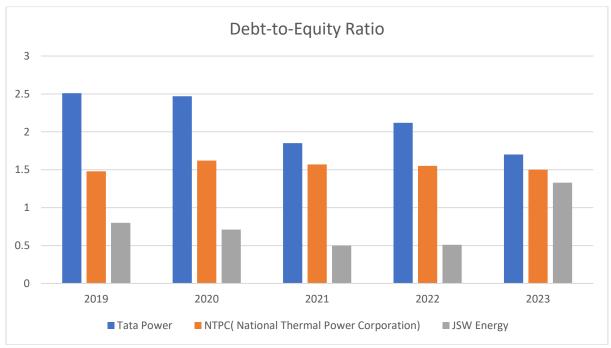


Figure: Debt-to-Equity Ratio Bar Graph of Tata Power and JSW Energy

The figure indicates that Tata power's overall Debt to equity ratio is decreasing in the last 5 years whereas the debt-equity ratio of JSW Energy has seen a sudden spike in the latest FY23. This indicates that Tata Power is relying less on debt financing and JSW energy is relying more on it which indicates financial stability and lower risk. In the case of NTPC, it has shown a consistent stability in terms of Debt-to-Equity Ratio. Debt-to-Equity ratio less than 3 is advisable and all the companies have made sure that their Debt-to-Equity ratio is less than 3.

The third ratio that we are going to discuss about is **Interest Coverage Ratio** (**ICR**). It is a financial metric that measures a company's ability to pay its interest expenses on debt using its operating income. It's calculated by dividing a company's earnings before interest and taxes (EBIT) by its interest expenses (Meryana and Setiany, 2021). The interest coverage ratio is helpful because it provides insight into a company's financial health and its ability to manage its debt obligations.

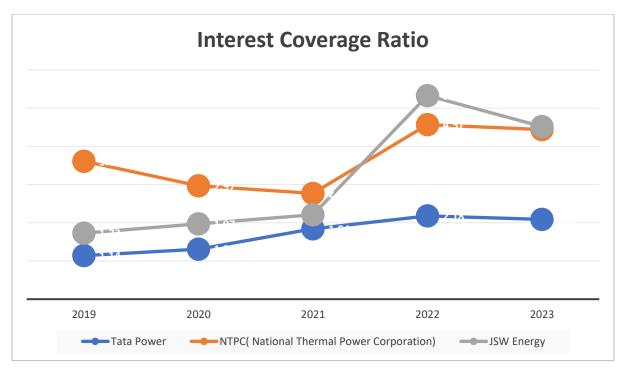


Figure: Interest Cover Ratio Line Graph of Tata Power and JSW Energy

The graph above indicates that JSW has a high ICR than Tata Power and NTPC hence it is financially strong and can easily manage its debt. On the other hand, Tata power's ICR is gradually increasing since the past five years which is a sign of positivity whereas we see a decline of ICR for JSW Energy in the latest year. Whereas we see a decline in ICR for NTPC in the start but since the last two years it has increased significantly.

The last ratio is the **Quick Ratio** which is a financial metric that measures a company's ability to meet its short-term liabilities using its most liquid assets, excluding inventory. It's calculated by dividing a company's quick assets (such as cash, marketable securities, and accounts receivable) by its current liabilities. This ratio is helpful because it provides a more conservative measure of a company's short-term financial health compared to the current ratio (Lutfi, 2020).

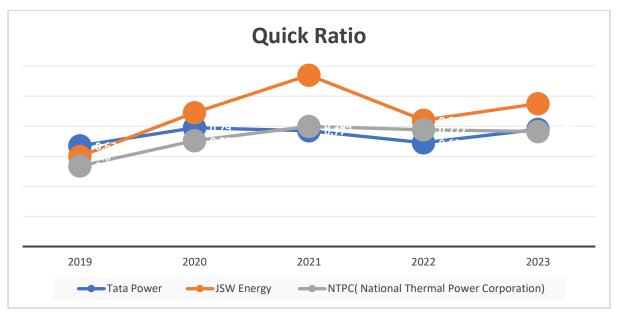
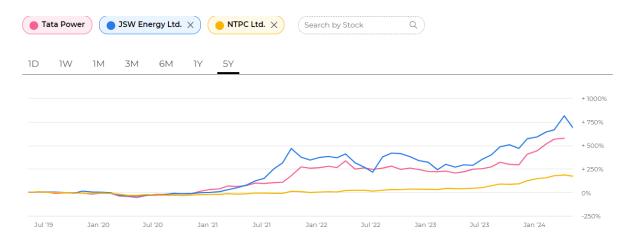


Figure: Comparison of Quick Ratio of Tata Power and JSW Energy

A higher quick ratio suggests that a company is more capable of meeting its short-term financial obligations without relying on inventory sales. JSW sees its peak in 2021 after increasing significantly since 2019 and since then it as slightly decreased for the next two years whereas Tata Power is consistent with its quick ratio. Overall performance of NTPC is better and consistent since the past five years.

Stock Performance.



This is the graph of the overall performance of the two companies JSW Energy and NTPC compared with Tata Power (https://ticker.finology.in/, n.d.). The stock return for Tata Power is 542.08% which is more than NTPC and less than JSW. Tata Powers stock has seen a consistent growth whereas JSW has fluctuated a lot since the 5 Years (www.topstockresearch.com, n.d.).

Suggestions

According to the results, Tata Power should work on making smarter investments, getting better at handling unexpected problems, managing profits better, having enough money for short-term needs, deciding wisely on borrowing money, keeping up with rivals in terms of quick access to cash, and making its stock more attractive to investors. This will help Tata Power do better financially and make its shareholders happier.

3) Part A: Change to existing product.

In this section we are going to talk about one of the value chains which I think has immense potential to make this company even more successful and valuable than what it is now. This is the EV Charging Infrastructure.



A valuable change for Tata Power could be to improve how quickly and effectively electric cars can be charged at their charging stations. This would mean investing in DC charging station and make it a mandatory method of charging instead of Level 1&2 charging which are the slower version of charging vehicles. By doing this, more electric cars could be charged in a day, which would encourage more people to use electric cars instead of traditional ones like those that run on petrol or diesel. This change would make it easier for people to switch to electric cars, ultimately helping Tata Power make more money from their charging stations and contributing to a cleaner environment. Many energy sector companies have developed a DC (Direct Current) fast charging option which is new in India, but it takes 1/12 of the time to charge a vehicle (Point, 2024). Tata power should focus primarily in expanding this option in various parts of India which has large amounts of electric car.

How it adds value:

- a. **Faster charging**: By developing DC technology, Tata Power can reduce the time required to charge an electric car from hours to minutes, making EV charging as convenient and quick as refuelling with gasoline or diesel. This would encourage more people to switch to EVs by alleviating concerns about long charging times.
- b. **Increased profitability**: With faster charging technology, Tata Power can serve more customers in a shorter amount of time, leading to higher revenue from EV charging services. Additionally, increased adoption of EVs would lead to greater demand for charging infrastructure, creating new revenue streams for Tata Power.
- c. **Environmental benefits**: Accelerating the adoption of EVs can contribute to reducing greenhouse gas emissions and improving air quality, aligning with Tata Power's sustainability goals, and enhancing its brand reputation.
- d. **Market leadership:** By investing in research and innovation to develop faster EV charging technology, Tata Power can position itself as a leader in the EV charging market, gaining a competitive edge, and attracting more customers.

Implementation:

- a. **Research and development**: Tata Power would need to invest in research and development efforts to explore new technologies and techniques for faster EV charging, such as high-power charging stations, advanced battery technologies, and smart charging algorithms.
- b. **Pilot projects**: Tata Power could launch pilot projects to test and validate new charging technologies in real-world settings, gathering data and feedback to refine and optimize the technology before full-scale deployment.
- c. **Infrastructure deployment**: Once proven effective, Tata Power would deploy the faster charging technology across its network of EV charging stations, upgrading existing infrastructure and installing new charging stations at strategic locations.
- d. Collaboration and partnerships: Tata Power may collaborate with automotive manufacturers, technology companies, and government agencies to accelerate the development and adoption of faster EV charging technology, leveraging expertise and resources from various stakeholders. They can also collaborate with leading automotive manufactures like Tata Motors (a company owned by parent company of Tata Power) and Mahindra to make batteries that can increase the time to recharge the batteries.

Cost:

The initial investment required for research and development, pilot projects, and infrastructure deployment could be significant. However, the potential for increased revenue from EV charging services and the long-term benefits of market leadership and environmental sustainability are likely to outweigh the upfront costs. The average cost to deploy a charging station is around \$40,000-\$50,000 in

India and with a fast-charging station it can double the Return on Investment (ROI) (carandbike, n.d.). According to Confederation of Indian Industry (CII) India may need upto 1.32 million charging units. Even if we consider acquiring half of the market share due to this advanced technology it would cost (CII Blog, 2023):

Cost: 0.66 * (\$45000) = \$29,700,000,000.

To expand the number of EV charging stations, Tata Power can attract potential franchisees by highlighting the opportunity presented by the growing EV revolution in India and not change the price of the deployment of charging station. By demonstrating the potential return on investment (ROI) that comes with investing in this new technology, Tata Power can make a compelling case for franchisees to join their network.

Potential ROI:

If the initial investment = \$35000, Let's assume Vehicles charging daily = 100

Per person cost = \$2 Monthly Revenue: \$6000, Gross margin: 30% (\$1800), Net margin: 40% (\$720)

This is an idea about the potential Roi which is (25% - 30%) yearly of investing in a charging station (www.tataaig.com, n.d.). The Indian vehicle market, including electric vehicles (EVs), was worth \$586 million in 2023. Experts predict that by 2030, this market could skyrocket to approximately \$5.6 billion, growing at an impressive rate of 39.1% annually. Given Tata Power's leading position in EV charging manufacturing and the rapid growth of the EV market, it's essential for Tata Power to secure a significant portion of this expanding market which is around 30% (\$1.68 billion) (www.nextmsc.com, n.d.). The cost of manufacturing is a lot and hence we can also expand this by raising funds which we will look into the in the next section.

4) Part B: Expansion Plan

For financing an ambitious expansion plan to expand charging stations with DC technology, Tata Power could consider three options:

Franchisee Partnerships: Tata Power could seek out franchisees who are willing to invest in the equity needed to build and operate charging stations. These franchisees would be educated and supported by Tata Power with all the necessary information and resources. This option allows Tata Power to leverage the expertise and capital of local entrepreneurs while expanding its network of charging stations efficiently. (Shane, 1996)

Collaborations with Automobile Companies: Tata Power could collaborate with automobile companies that are heavily investing in electric vehicle (EV) manufacturing. By partnering with these companies to build charging stations, Tata Power can tap into their resources and customer base. This option not only helps in expanding the charging infrastructure but also fosters strategic partnerships within the EV ecosystem, leading to mutual benefits and shared profits. (Kumar, 2012)

Manufacturing its Own Charging Stations: While this option presents the highest risk, it also offers the potential for the highest reward. By manufacturing its own charging stations, Tata Power can have full control over the design, production, and distribution process. This vertical integration could lead to cost efficiencies and innovation in charging technology. However, it requires substantial investment in manufacturing facilities, R&D, and marketing. Therefore, Tata Power should carefully assess the market demand and competitive landscape before pursuing this option (Bang and Joshi, 2010)

Saudi Aramco Sustainability Fund.

One potentially beneficial source of funding for Tata Power is the Aramco Ventures Sustainability Fund. This fund specializes in providing equity investments and typically invests between \$500,000 and \$100 million in companies across various stages of development, from seed to established businesses.

What makes the Aramco Ventures Sustainability Fund particularly attractive for Tata Power is its focus on sectors aligned with the company's goals and initiatives. These sectors include carbon management, renewables and energy storage, energy efficiency, and digital solutions, among others. Additionally, the fund seeks companies that contribute to achieving net-zero operational emissions by 2050 and develop new lower-carbon fuel businesses, which aligns well with Tata Power's commitment to sustainability and environmental objectives. Furthermore, the Aramco Ventures Sustainability Fund invests globally, providing Tata Power with the opportunity to access funding for its expansion plans and initiatives beyond the domestic market. This global reach can facilitate Tata Power's growth strategies and help it establish a stronger presence in key markets worldwide.

Global Founders Capital.

Tata Power may benefit from considering investment from Global Founders Capital (GFC), managed by Rocket Internet. This fund has a strong track reco5rd, having made over 305 investments since January 2011. It primarily provides equity funding, supporting companies at various stages of development, from seed to established businesses.

One reason why Tata Power should prioritize GFC as a source of funding is its sector-agnostic approach. This means that GFC is open to investing in companies across different industries, including the energy sector where Tata Power operates. Additionally, GFC looks for businesses with exceptional management teams, which aligns well with Tata Power's reputation for leadership and expertise in the energy industry. GFC invests globally, providing Tata Power with access to capital and resources beyond its domestic market. This global reach can support Tata Power's expansion plans and help it establish a stronger presence in key markets worldwide.

Another advantage of GFC is its flexibility in terms of funding type and amount. While the specific investment range is not disclosed, GFC offers equity funding for companies of all sizes, from micro to large companies. This flexibility allows Tata Power to tailor the funding arrangement to its specific needs and growth objectives.

Ace & Company

Tata Power may find significant benefits in considering investment from ACE & Company's Private Equity and Venture Capital fund. ACE & Company has a strong track record, having made at least 43 investments since August 2010. This fund primarily provides equity funding and supports companies at various stages of development, from seed to established businesses.

One compelling reason for Tata Power to prioritize ACE & Company as a source of funding is its focus on sectors relevant to the company's goals and initiatives. ACE & Company seeks investments in companies operating in sectors such as Energy Transition, DeepTech Breakthrough, and the Future of Work. Given Tata Power's position in the energy sector and its commitment to innovation and sustainability, this alignment makes ACE & Company an attractive partner. ACE & Company invests globally, providing Tata Power with access to capital and resources beyond its domestic market. This global reach can support Tata Power's expansion plans and help it establish a stronger presence in key markets worldwide. Another advantage of ACE & Company is its flexibility in terms of funding type and amount. While the specific investment range is not disclosed, ACE & Company offers equity funding for companies of all sizes, from micro to large companies. This flexibility allows Tata Power to tailor the funding arrangement to its specific needs and growth objectives.

Expansion Funding Comparison Table & Suggestions.

Funding Source	Aramco Ventures Sustainability Fund	Global Founders Capital (GFC)	ACE & Company
Investment Status	Green	Green	Unspecified
Investment Track Record	Equity, \$500k - \$100m	Over 305 investments	At least 43 investments
Investment Focus	Sustainability sectors	Sector-agnostic	Energy Transition, DeepTech, Future of Work
Global Reach	Yes	Yes	Yes
Funding Type	Equity	Equity	Equity
Flexibility in Funding Type and Amount	Flexible	Flexible	Flexible
Alignment with Tata Power's Objectives	Sustainability and environment	Various industries	Relevant sectors
Support for Growth and Expansion	Global expansion support	Global access to resources	Global access

Considering Tata Power's expansion plans, including franchisee partnerships, collaborations with automobile companies, and potentially manufacturing its own charging stations, the Aramco Ventures Sustainability Fund emerges as the most favourable source of funding. This fund specializes in equity investments across various stages of development, making it well-suited for supporting initiatives ranging from establishing charging stations through franchisee partnerships to collaborating with automobile manufacturers to install infrastructure. Moreover, the fund's focus on sustainability sectors, including renewables and energy storage, aligns closely with Tata Power's objectives in promoting cleaner transportation solutions. If Tata Power opts to manufacture its own charging stations, the Aramco Ventures Sustainability Fund could provide the necessary financial support while also offering opportunities for collaboration and innovation in energy efficiency and digital solutions. Overall, leveraging the Aramco Ventures Sustainability Fund's expertise and global reach could accelerate Tata Power's expansion efforts and contribute to its leadership in the EV charging infrastructure market.

Reference list

Bang, V.V. and Joshi, S.L. (2010). Market expansion strategy–performance relationship. *Journal of Strategic Marketing*, 18(1), pp.57–75.

Barnes, P. (1987). The Analysis and Use of Financial Ratios: A Review Article. *Journal of Business Finance & Accounting*, [online] 14(4), pp.449–461. doi:https://doi.org/10.1111/j.1468-5957.1987.tb00106.x.

Beaver, W.H. (1968). Market Prices, Financial Ratios, and the Prediction of Failure. *Journal of Accounting Research*, 6(2), p.179. doi:https://doi.org/10.2307/2490233.

Budiyanta, W.A. (2021). A Literature Review of Net Profit Margin. *Social Science Studies*, 1(2), pp.115–128. doi:https://doi.org/10.47153/sss12.2262021.

Camelia, B. (2013). *ANALYSIS MODEL FOR RETURN ON CAPITAL EMPLOYED*. [online] Available at: https://www.utgjiu.ro/revista/ec/pdf/2013-01/10_Burja%20Camelia.pdf.

carandbike. (n.d.). What Is The Cost Of Setting Up An EV Charging Station in India. [online] Available at: https://www.carandbike.com/news/what-is-the-cost-of-setting-up-an-ev-charging-station-in-india-2749450 [Accessed 7 May 2024].

CII Blog. (2023). *India's Booming Electric Vehicle Industry*. [online] Available at: https://ciiblog.in/indias-booming-electric-vehicle-industry/#:~:text=It%20is%20a%20clear%20indication [Accessed 9 May 2024].

companiesmarketcap.com. (n.d.). *Tata Power (TATAPOWER.NS) - Market capitalization*. [online] Available at: https://companiesmarketcap.com/tata-power/marketcap/ [Accessed 2 May 2024].

Economic Times (n.d.). *Tata Power Share Price Today*(05 Apr, 2023) - *Tata Power Share Price Live NSE/BSE*. [online] The Economic Times. Available at: https://economictimes.indiatimes.com/tata-power-company-ltd/stocks/companyid-12918.cms.

Enerdata.net. (2019). *Electricity Production Data | World Electricity Statistics | Enerdata*. [online] Available at: https://yearbook.enerdata.net/electricity/world-electricity-production-statistics.html.

https://ticker.finology.in/. (n.d.). *Tata Power Company Ltd. Share Price Today, Market Cap, Price Chart, Balance Sheet*. [online] Available at: https://ticker.finology.in/company/TATAPOWER.

IMF. (n.d.). World Economic Outlook. [online] Available at:

https://www.imf.org/en/Publications/WEO#:~:text=Global%20inflation%20is%20forecast%20to%20 rise%20from%204.7%20percent%20in.

Kaufmann, R., Gadmer, A. and Klett, R. (2001). Introduction to Dynamic Financial Analysis. *ASTIN Bulletin*, 31(1), pp.213–249. doi:https://doi.org/10.2143/ast.31.1.1003.

Kumar, T.P.P. (2012). *Collaborative Strategy - The Way Forward in Alliances and Joint Ventures: A Concept Note. | IUP Journal of Business Strategy | EBSCOhost.* [online] openurl.ebsco.com. Available at:

https://openurl.ebsco.com/EPDB%3Agcd%3A13%3A1120109/detailv2?sid=ebsco%3Aplink%3Asch olar&id=ebsco%3Agcd%3A78120151&crl=c [Accessed 10 May 2024].

Kurniawan, A. (2021). ANALYSIS OF THE EFFECT OF RETURN ON ASSET, DEBT TO EQUITY RATIO, AND TOTAL ASSET TURNOVER ON SHARE RETURN. *Journal of Industrial Engineering & Management Research*, [online] 2(1), pp.64–72. doi:https://doi.org/10.7777/jiemar.v2i1.114.

Lutfi, A.M. (2020). The Effect of Quick Ratio and Debt to Ratio Assets Against Return on Assets. *JASa (Jurnal Akuntansi, Audit dan Sistem Informasi Akuntansi)*, [online] 4(1), pp.23–30. Available at: http://journalfeb.unla.ac.id/index.php/jasa/article/view/1341.

markets.ft.com. (n.d.). *Tata Power Company Ltd, TATAPOWER:NSI profile - FT.com*. [online] Available at: https://markets.ft.com/data/equities/tearsheet/profile?s=TATAPOWER:NSI.

Meryana and Setiany, E. (2021). The Effect of Investment, Free Cash Flow, Earnings Management, and Interest Coverage Ratio on Financial Distress. *Journal of Social Science*, [online] 2(1), pp.67–73. doi:https://doi.org/10.46799/jsss.v2i1.86.

Point, M.E. (2024). 5 Things to Know About DC Fast Chargers in India. [online] Medium. Available at: https://medium.com/@myevpoint/5-things-to-know-about-dc-fast-chargers-in-india-53888722d423 [Accessed 9 May 2024].

Power, T. (n.d.). *Power and Energy Companies in India - Tata Power*. [online] www.tatapower.com. Available at: https://www.tatapower.com/know-us/overview.aspx.

Power, T. (n.d.). *Tata Power Integrated Annual Report 2022-23*. [online] www.tatapower.com. Available at: https://www.tatapower.com/investor-relations/tata-power-2023/investors.html#:~:text=Our%20financial%20capital%20is%20powered [Accessed 20 Feb. 2024].

Rashid, C.A. (2018). (PDF) Efficiency of Financial Ratios Analysis for Evaluating Companies' Liquidity. [online] ResearchGate. Available at: https://www.researchgate.net/profile/Chnar-Rashid/publication/325870971_Efficiency_of_Financial_Ratios_Analysis_for_Evaluating_Companie s.

Shane, S.A. (1996). Why franchise companies expand overseas. *Journal of Business Venturing*, 11(2), pp.73–88. doi:https://doi.org/10.1016/0883-9026(95)00110-7.

Utami, W.B. (2017). Analysis of Current Ratio Changes Effect, Asset Ratio Debt, Total Asset Turnover, Return On Asset, And Price Earning Ratio In Predictinggrowth Income By Considering Corporate Size In The Company Joined In LQ45 Index Year 2013 -2016. *International Journal of Economics, Business and Accounting Research (IJEBAR)*, 1(01). doi:https://doi.org/10.29040/ijebar.v1i01.253.

VENTURES PRIVATE LIMITED, F. (n.d.). *Tata Power Company Ltd. Share Price Today, Market Cap, Price Chart, Balance Sheet.* [online] https://ticker.finology.in/. Available at: https://ticker.finology.in/company/TATAPOWER [Accessed 20 Feb. 2024].

Ventures, C. (2023). *The Tata Power Business Model. Decoding the Structure of Tata Power - Work Theater*. [online] Work Theater Favicon Small. Available at: https://worktheater.com/the-tata-power-business-model/#:~:text=Electricity%20sales%3A%20The%20company%20earns [Accessed 12 Feb. 2024].

www.livemint.com. (n.d.). *Tata Power Share Price Today - Tata Power Stock Price Live NSE/BSE*. [online] Available at: https://www.livemint.com/market/market-stats/stocks-tata-power-share-price-nse-bse-s0003067 [Accessed 2 May 2024].

www.nextmsc.com. (n.d.). *India EV Charging Market Size and Share | Statistics - 2030*. [online] Available at: https://www.nextmsc.com/report/india-electric-vehicle-ev-charging-market#:~:text=India%20Electric%20Vehicle%20(EV)%20Charging%20Market%20was%20valued %20at%20USD [Accessed 10 May 2024].

www.proquest.com. (n.d.). Ratios and Indicators That Determine Return on Equity - ProQuest. [online] Available at:

https://www.proquest.com/openview/649ca0979ce59d249a82ee2a591599fc/1?pq-origsite=gscholar&cbl=2026366&diss=y.

www.tataaig.com. (n.d.). *How to Set Up EV Charging Stations in India*. [online] Available at: https://www.tataaig.com/knowledge-center/car-insurance/how-to-set-up-ev-charging-stations-in-india [Accessed 10 May 2024].

www.topstockresearch.com. (n.d.). *Current Ratio analysis of Tata Power Co. Ltd., FY Ratio 0.872 - Not Good Current Ratio.* [online] Available at:

https://www.topstockresearch.com/rt/Financial/TATAPOWER/CurrentRatio#:~:text=Current%20Ratio%20of%20Tata%20Power [Accessed 7 May 2024].

www.topstockresearch.com. (n.d.). *Stock Analysis of Tata Power Co. Ltd. (TATAPOWER) - Birds Eye View.* [online] Available at:

https://www.topstockresearch.com/rt/Stock/TATAPOWER/BirdsEyeView.

Appendix



Figure: Mutual Fund Ownership in Tata Power.

NAME		P/E (X)	P/B (X)	ROE %	ROA %	REV CAGR [3YR]	ОРМ
Tata Power		38.24	4.00	11.42	2.64	24.08	14.35
JSW Energy	×	63.85	5.60	8.26	2.95	18.39	36.59
NTPC	×	17.48	2.26	11.50	3.79	16.39	19.69

Figure: Comparison of different Ratios

Tata Power News & Analysis



Figure: Recent News about Tata Power