

Financial and Operational Performance Evaluation of Adani Green Energy Ltd (AGEL)

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Abstract

The renewable energy industry is one of the significant areas for sustainable development of an economy. The strategic significance of renewable energy in the economy is immeasurable. An important factor supporting the social economy's sustainable growth is industry's development in renewable energy. Its strategic importance to national security and the economy is immense. India's renewable energy sector is being nurtured, developed, and upgraded through a multifaceted process involving resources, technology, management, and money. A new field of public policy that will greatly affect global investors, renewable energy finance calls for creativity and investigation. Many scientists still believe that science and engineering are the key to renewable energy, but access to capital will ultimately determine the future of renewable energy. India's renewable energy market is expanding quickly and offers great potential for financial gain. Using several financial ratios, the current research article seeks to understand the financial performance of one of the major green renewable energy companies of India i.e. Adani Green Energy Company. This study examines the financial performance of Adani Green Energy Company for a period of five years starting from 2019 to 2023. There are different financial ratios like liquidity, solvency, profitability ratios were used to investigate the financial performance of one of the major renewable energy companies of India. The results showed the mixed results about the performance of Adani Green Renewable Energy Company. The liquidity and solvency position of the company was satisfactory while the profitability is area of high concern for the company.

Keywords: Financial Performance, Renewable Energy, Social Economy, Capital Structure, Green Energy

1. Introduction

Energy is essential to human welfare and a better standard of living. These days, it is a commodity that greatly affects people's life. It is strategically significant for both the economy and national security. The world energy market is now dominated by conventional energy sources. In 2017, the conventional energy sector accounted for 81.9% of the total final energy consumption, according to [Murdock et al. \(2019\)](#). The irregular supply and unreliability of these traditional energy sources make them unsuitable for a sustainable future. Additionally, using these contributes to global warming by producing significant volumes of CO₂ and other pollutants into the atmosphere and endangering the ecosystem. India is one of the most exciting global economies. The country has the fastest growing major economy and is the world's most populous nation. The country is building its infrastructure in a larger way with unprecedented capital outlays. This infrastructure needs a growing quantum of renewable energy.

Adani Green Energy Limited, is participating in India's growth story with a prudent approach. The company has made the largest investment in India's renewable energy capacity. It has aggregated possibly the largest land bank to secure our growth. The company invest in cutting-edge technologies. The company secured a large part of our renewable energy generation through multi-year contracts, providing revenue visibility. The global energy policy must be reevaluated considering environmental deterioration and its threat to human health.

promotes the creation of an alternative to conventional energy sources in order to facilitate this momentous shift in the energy industry and create a sustainable Earth. The Kyoto Protocol agreement's "joint implementation" and "clean development mechanism" approaches to reducing greenhouse gas emissions have always been incorrect (Diacore, 2016; Brand, 2015). Moreover, the Kyoto Protocol is based on the shared understanding of distinct obligations. Developed and industrialised nations are required by this convention to reduce their current emissions.

India's renewable energy sector is being nurtured, developed, and upgraded through a multifaceted process including resources, technology, management, and money. With a current project portfolio of 20,434 MW, Adani Green Energy Limited (AGEL) is one of the largest renewable enterprises in India. AGEL wants to provide India a brighter, healthier, and more environmentally friendly future. Due to long-term 25-year Power Purchase Agreements (PPAs) with federal and state governments, AGEL has increased its presence in 12 Indian states by utilising its capabilities. In its initiatives, the company uses the newest technologies. AGEL is leading India's transition to renewable energy with a portfolio of 54 completed projects and 12 in the process of building (Thambi, et al 2018).

An essential factor supporting the social economy's sustainable growth is the industry's development in renewable energy. Its strategic importance to national security and the economy is immense. India's renewable energy market is expanding quickly and offers great potential for financial gain. An essential tool for determining the amount, kind, and source of a company's equity and debt capital is its capital structure. It is directly tied to the company's future development direction, decision-making bodies, and changes in governance structure. It is not only related to the internal working environment of listed businesses, but it is also related to the rights and duties of shareholders. This study is to investigate the effects of capital structure on the financial performance of Indian renewable energy firms between 2017–18 and 2022–2023 with a focus on Adani Green Ltd. This study examines the capital structure, liabilities, and other financial situations of a listed firm by building a convolutional neural network model based on pertinent capital structure theories. In the end, it is determined that short-term liabilities can support the company's long-term growth and raise industry competitiveness, which will boost operating income. But a bad capital structure might hurt a business's bottom line (Priyavrat Bhati, 2019). The company's capital structure can be improved so that its financial condition can be sustainable and healthy by strengthening the management of operating risks, strengthening the adjustment of the financing structure of listed companies, and strengthening the corporate governance structure of listed companies. Data from Adani Green Ltd.'s yearly audited reports in India's renewable energy industry was obtained for the five-year period between 2019 and 2023.

1.2 Statement of Problem

This study focuses on investigating how renewable energy performance affects corporate financial performance in emerging markets. International policymakers made huge efforts to enact environmental regulations that would be in the best interest of countries in general and companies in specific. However, these policies must be followed and implemented by countries, and companies. However, we are faced with a problem. Countries have different regulations and social standings, and so do the firms. Many scholars (Clarkson et al., 2011; Martí-Ballester, 2017; Nelling & Webb, 2009; Shin et al., 2018) investigated how renewable energy and energy efficiency are associated with financial performance without taking into account cultural differences of countries and different structures of industries and companies. The present research attempts to fill out the gap by exploring how renewable energy performance affects financial performance. Thereby, it seeks answers to the following research questions: How does renewable energy performance affect financial performance on an economic development level? How does renewable energy performance affect financial performance on a firm level? The present study is conducted to measure the financial performance of Adani Green Renewable Energy Company.

1.3 Objectives of the Study

- To discuss about the renewable energy scenario in India.
- To study the operational efficiency and working conditions of Adani Renewable Energy Ltd.
- To examine the liquidity and solvency position of Adani Renewable Energy Ltd.
- To investigate the earning capacity of Adani Renewable Energy Ltd.
- To provide remedial measures to improve the financial performance of Adani Renewable Energy Ltd.

2. Literature review

A better world is predicated on renewable energy. It presents an opportunity for the Earth to lower carbon emissions, purify the air, and provide a more sustainable foundation for human civilisation. Additionally, it provides nations with the

opportunity to enhance their energy security and promote economic growth (Kumar et al., 2010). Greenhouse gas emissions from renewable energy sources save our planet from warming. Both human health and air quality are enhanced. Investing in renewable energy has financial benefits as well. For the past ten years, investors all across the world have been making this choice more often. Because there are no risks or natural catastrophes associated with renewable energy, it is seen as a more attractive fuel than other fuels. Energy security, economic benefits, and a decrease in carbon dioxide emissions are the three main factors driving the expansion of the renewable energy sector (Abolhosseini, 2014). According to a UNEP estimate, \$272.9 billion was invested globally in the renewable energy sector in 2018 (Inger Anderson, 2019). The renewable energy sector is expected to continue expanding and gaining traction during the next ten years in a number of nations. The more long-term and utopian goal for a sustainable world is clean and green electricity. Innovations, improved technology, and adaptability in operations are necessary (Inger Anderson, 2019). The cost restriction is a key driver of the renewable energy sector; if it is met, the energy mix will naturally shift. Reengineering technology is necessary to accomplish the aforementioned goal.

In order to meet the energy needs of its citizens and contribute to global efforts towards sustainable development and increased use of renewable energy, the Government of India (GoI) has implemented a number of policy measures aimed at reducing carbon emissions from both generation and demand-side sources. By supporting the renewable energy industry within its economy, there are plans to boost the supply and output of renewable energy. Through greater usage of solar and wind power, India projected to boost its renewable energy capacity from 80.46 GW to 175 GW by the year 2022 (India's Intended Nationally Determined Contribution, 2015). India would rank among the world's top producers of green energy if this ambitious goal is met (Year-End Review, 2018). On the demand side, initiatives are being undertaken to utilise energy effectively by raising national awareness through a variety of creative policy approaches. Ten percent of India's current energy use is to be saved. As a result, it intended to replace India's current low-efficiency household equipment with extreme control methods. By 2020, the Indian government voluntarily aims to cut its GDP's emissions intensity by 20–25% below 2005 levels (Thambi, 2018). In order to facilitate the aforementioned progress, the proportion of renewable energy in the grid capacity has been expanded sixfold, from 3.9 GW (2%) to 36 GW (13%).

By 2030, India's energy consumption will more than double overall, while the country's need for electricity will almost quadruple. Large-scale investments in the renewable energy sector will be necessary to satisfy both the nation's aggressive economic growth ambitions and to guarantee that India's expanding population has access to energy. Over the last five years, investment in India's renewable energy sector has doubled. In 2018, it exceeded capital expenditures in the thermal power industry by around USD 20 billion. Investment in the Indian renewable energy market is driven by aspirational goals, encouraging regulations, and declining technological prices (Arjun Dutt, 2019).

surpassing a number of wealthy nations with one of the biggest and most ambitious renewable energy projects in the world. India has the potential to lead the global and regional transition to renewable energy (Gielen, 2019). India would need to invest \$500–700 billion in the renewable energy sector over the next ten years in order to reach its renewable energy ambitions, according to the US-based Institute for Energy Economics and Financial Analysis (IEEFA) (Buckley, 2019). With \$12.3 billion, or nearly 5%, of the total in 2017, India had the greatest growth rate of any nation. Compared to the same amount for 2016, which was \$7.6 billion, this marked a 62% gain.

As of right moment, investing in India's renewable energy sector is associated with high risk and low returns. Financial assistance is essential for the renewable energy industry's further modernisation and optimisation. The Indian renewable energy sector is anticipated to see significant global investment influx. In the aforementioned framework, the examination of the financial performance and investor experience of India's renewable energy business is of great importance. Nonetheless, this curiosity has not led to a dearth of empirical research in India or anywhere else in the globe. It is also discovered that relatively few research have been conducted in this area in India, and that the bulk of the literature has originated in western countries. It is also important to highlight the dearth of research that thoroughly analyses the financial performance of the Indian renewable energy sector and the experiences of its investors. Therefore, it is necessary to close this gap by starting an empirical investigation of the financial performance of the renewable energy sector and the experiences of investors.

3. Methodology

The study's data came from Adani Green Renewable Energy Ltd.'s (Indian) standalone annual financial statements. The company's liquidity, solvency, profitability, and market performance were used to assess its financial performance. In order to calculate key financial ratios such as the current ratio, quick ratio, debt equity ratio, revenue from operations per share, return on capital employed, return on asset, PBDIT per share, and return on equity, five years' worth of financial statements from 2019 to 2023 were gathered from the AGEL annual reports. Various financial data were also derived from these sources. To assess Adani Green Renewable Energy Ltd.'s financial performance, the mean and standard deviation of each financial ratio are calculated. For the sake of the readers' comprehension, the financial data was

presented graphically.

4. Results, Findings and Discussion

4.1. Renewable Energy in India

India's energy demand is expected to increase more than that of any other country in the coming decades due to its sheer size and enormous potential for growth and development. Therefore, most of this new energy demand must be met by low-carbon, renewable sources. India's announcement that it intends to achieve net zero carbon emissions by 2070 and to meet 50% of its electricity needs from renewable sources by 2030 marks a historic point in the global effort to combat climate change.

The Indian renewable energy sector is the fourth most attractive renewable energy market in the world. India was ranked fourth in wind power, fifth in solar power and fourth in renewable power installed capacity, as of 2020. Installed renewable power generation capacity has gained pace over the past few years, posting a CAGR of 15.92% between FY16-FY22. India is the market with the fastest growth in renewable electricity, and by 2026, new capacity additions are expected to double (Kumar, et al 2021).

As a developing nation at the time of Independence, India relied heavily on coal to meet its energy demands. However, India has always been committed to looking for more alternative energy sources for sustainable development. The beginning was made with hydropower, with major hydroelectric power projects appearing on the scene of India's energy arena. Over the years, many policy and regulatory initiatives have promoted hydropower development and facilitated investments. Today, the country is 5th in the world regarding usable hydropower potential (Thapar, et al, 2017; Brand, 2015). India's progress in renewable energy may be attributed to the aftermath of the world oil crisis in the late 1980s. Since then, the Indian government has made a sustained effort to advance the renewable energy sector through a range of strategic policies and legislative initiatives. The federal government and provincial governments periodically formulate strategic policy efforts to develop the renewable energy industry, in light of the energy sector's constitutional standing as a concurrent item number 38 in the concurrent list. Nonetheless, the Government of India's transformational energy strategy, which aims to generate 175 GW of renewable energy by 2022, is the most current governmental push to move towards a greener energy regime. The Jawaharlal Nehru National Solar Mission's (JNNSM) unique policy statement has given solar electricity a prominent role in the renewable basket. Similar legislative efforts, including the goal of having power available nationwide twenty-four hours a day by 2019, are evident examples of the emphasis placed on renewable energy. India's Intended Nationally Determined Contributions (INDCs), which are promises to the UNFCCC on global climate change, serve to further emphasise this point. Policy-level emphasis on renewable energy are seen in the global climate commitment to source 40% of energy from renewable sources by 2040 (GoI 2015b). In addition, the country's present energy mix shows a shifting governmental focus on energy generation with a rising proportion of renewable energy sources. The installed capacity of the nation is shown by source in Figure 1 (Arjun Dutt, 2019).

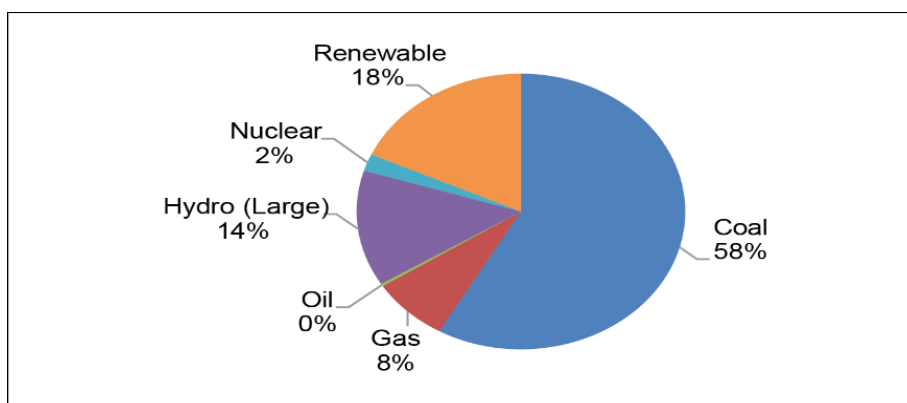


Figure 1: Energy Mix by Installed Capacity in India in 2022

Source: CEA (2022)

The aforementioned data clearly shows that the nation's capacity to generate renewable energy has hit a new high, with around 18% of the overall amount representing about 57,245 MW of capacity. A more thorough analysis of this installed capacity reveals that wind energy accounts for more than 50% of it, solar energy for around 20%, and small hydro, biomass, and waste-to-energy sources for the remaining 20%. But according to the most current trend, solar energy is starting to take up more and more area in the renewable energy market.

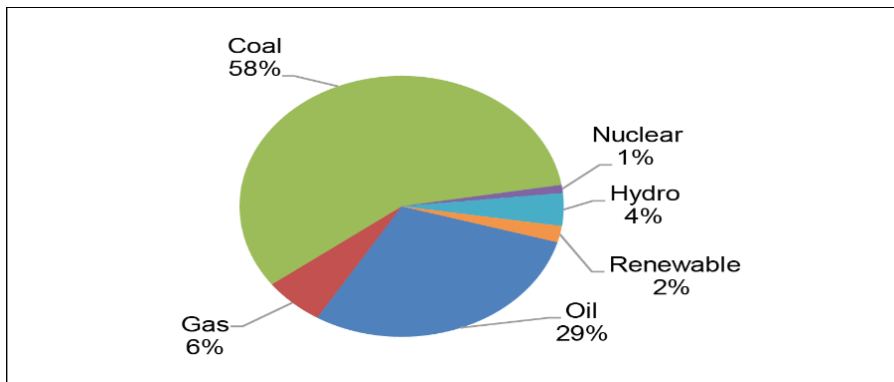


Figure 2: Primary Energy Consumption in India in 2022
 Source: Renewables (including biofuels). Source: BP (2022)

The over-reliance on biofuels and oil products is the main reason why the mapping of primary energy use does not truly indicate such a change (Figure 2). This demonstrates unequivocally that India's rural areas still mostly rely on fossil fuels for energy. This indicates that India still has a long way to go before achieving total energy transformation.

However, as a source of power, renewable energy is quickly displacing traditional energy sources in the nation. The numerous growth estimates of renewable energy made for the nation can be used to estimate it. One example of a target set by the National Action Plan on Climate Change (NAPCC) is to consume 15% renewable energy by 2020. The GOI (2014) estimates that the NITI Ayog's "heroic scenario" sets an extremely ambitious goal of 410 GW of wind and 420 GW of solar power by 2047. The IEA's New Policy Scenario contains the most significant forecasts (IEA 2015). According to this estimate, the nation's ability to generate energy will rise more than three times by 2040, growing at a compound annual average growth rate of almost 7% annually. Table 1 below displays the IEA's comprehensive predictions for the New Policies Scenario.

Table 1 Power Generation Capacity in India in the New Policies Scenario (GW)

	Shares (%)				CAAGR*		
	2014	2020	2030	2040	2014	2040	2014-2040
Fossil fuels	204	280	419	576	71	53	4.1
Coal	174	230	329	438	60	41	3.6
Gas	23	41	76	122	8	11	6.6
oil	7	9	13	15	3	1	2.9
Nuclear	6	10	24	39	2	4	7.6
Renewables	79	147	304	462	27	43	7
Hydro	45	58	83	108	15	10	3.5
Wind	23	50	102	142	8	13	7.2
Solar PV	3	28	100	182	1	17	16.4
Other	7	11	18	30	3	3	5.5
Total	289	436	746	1076	100	100	5.2

* Compound average annual growth rate. Source: IEA (2015).

Table 1 highlighted the power generation capacity in India in the new policies scenario. The total share of fossil fuels was 71 per cent in 2014 and expected to be 53 per cent in 2040. It is noticed that renewable energy plays a significant role in the total power generation situation of India. Renewable energy was around 43 per cent in total power generation. Fossil fuel was 53 per cent and coal was 41 per cent in total power generation in India.

4.2. Adani Green Energy Ltd (AGEL)

Adani Green Energy Limited (AGEL) is one of the largest renewable companies in India, with a current project portfolio of 20,434 MW. AGEL has leveraged its capabilities and expanded its presence across 12 Indian states. The Company deploys the latest technologies in its projects. With a portfolio of 54 operational projects and 12 projects under construction, AGEL is driving India on its renewable energy journey. As the world is dealing with the climate crisis, the transition to renewable energy has become a global as well as a national priority. Acknowledging the need for justified transition, the Government of India has set an objective to fulfill 50% energy requirements through renewable sources by 2030. Adhering to our core philosophy of 'nation building', we are channelizing our efforts on building our capabilities to expand the renewable energy portfolio to 45 GW by 2030. This will not only help the industry move towards cleaner sources of energy, but also contribute to India's transformation with climate resilient infrastructure. Our business focus revolves around catering to decarbonizing the energy system, a principal lever for climate change mitigation. The company

integrates Environment, Social, and Governance (ESG) parameters into our core business, thereby focusing on inclusive value creation for all our stakeholders.

Table 2 Performance of Adani Green Energy Ltd.

	2019	2020	2021	2022	2023
Total Revenue	2,131.00	2,629.07	3,599.00	5,577.00	8,633.00
Total Expenses	2,715.65	2,487.53	3,328.00	5,089.00	7,072.00
Profit after Tax (PAT)	-473.91	-23.23	210	489	974

Source: Annual Reports of Adani Green Energy Ltd. from 2019 to 2023

Table 2 exhibits the performance of Adani Green Energy Ltd from 2019 to 2023. It is noticed that total revenue of the company was Rs. 2131 crore which reached Rs. 8633 crore in 2023. The total expenditure of this company was also increased from 2715.65 crore to 7072 crore in 2023. The profit continuously increased over the study period and reached Rs. 974 crore. It is estimated that the company performed in a better way to operate its activities. The performance of the company in terms of revenue was drastically increased due to importance of renewable energy in the contemporary world.

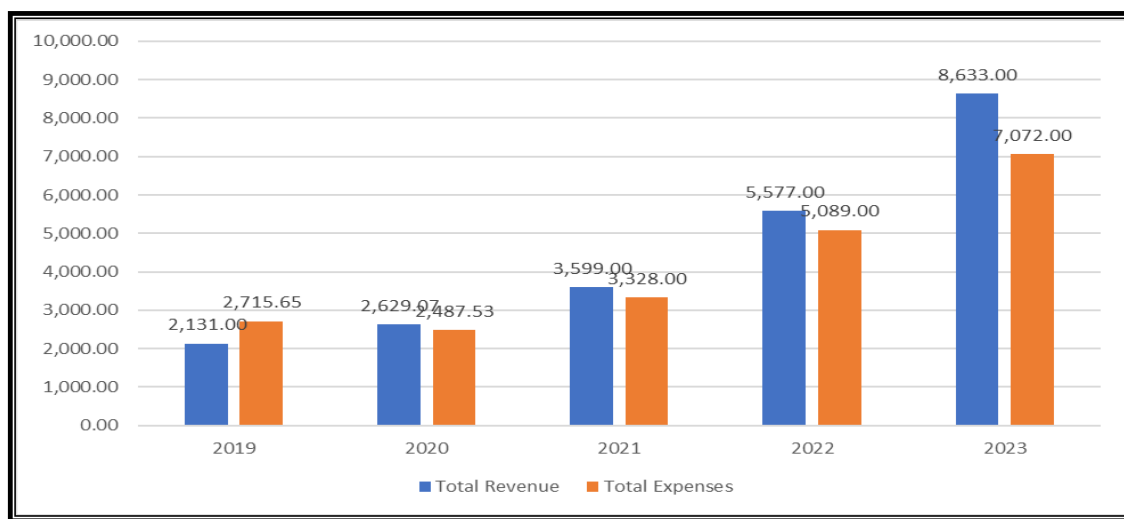


Figure 3 Performance of Adani Green Energy Ltd
Source: Annual Reports of Adani Green Energy Ltd. from 2019 to 2023

Figure 3 highlights the performance of Adani Green Energy Ltd from 2019 to 2023. The performance of the company was assessed through total revenue and total expenses. The company performed good in terms of total revenue while expenses are also similarly increased. In 2019, the expenses were more than its revenue while it was decreasing during the entire study period.

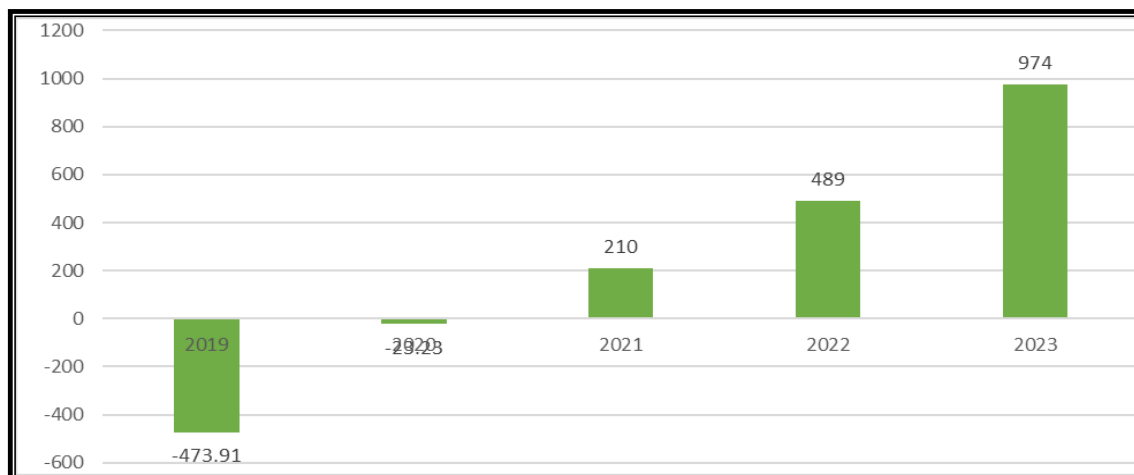


Figure 4 Profit after Tax of Adani Green Energy Ltd.
Source: Annual Reports of Adani Green Energy Ltd. from 2019 to 2023

Figure 4 presents the profit after tax of Adani Energy Ltd from 2019 to 2023. It is noticed that the profit was negative in the initial period of the study period, and it was drastically increased in the later part of the study period. Finally, the company earned Rs. 974 crore in 2023 drastically doubled from 2022.

4.3. Findings

Bank loans make up the majority of the financing structure for India's renewable energy sector. Commercial banks, venture capitalists, and private equity investors are among the financing options. This study examines the financial performance of three of India's top producers of renewable energy as well as the experiences of six significant stockbroking firms with regard to investors.

Table 3 Market Performance of Adani Green Energy Ltd.

Per Share Ratios	2019	2020	2021	2022	2023
Basic EPS (Rs.)	-0.32	0.46	1.93	-0.76	-2.47
Book Value of Share (Rs.)	9.01	9.2	11	9.72	30.98
Revenue from Operations/Share (Rs.)	2.03	7.97	15.81	68.24	48.16
Net Profit/Share (Rs.)	-0.22	0.86	2.33	-0.37	-2.07

Source: Annual Reports of Adani Green Energy Ltd from 2019 to 2023

Table 3 highlights the market performance of Adani Green Energy Ltd from 2019 to 2023. It is observed that the EPS of the company was not performing well while the value of share was increased during the study period. The revenue from the operations per share was highly increased during the study period. The net profit of the company was not satisfactory during the study period as it was mostly negative during the entire study period. The market performance of the company was drastically increased due to an emerging area of business.

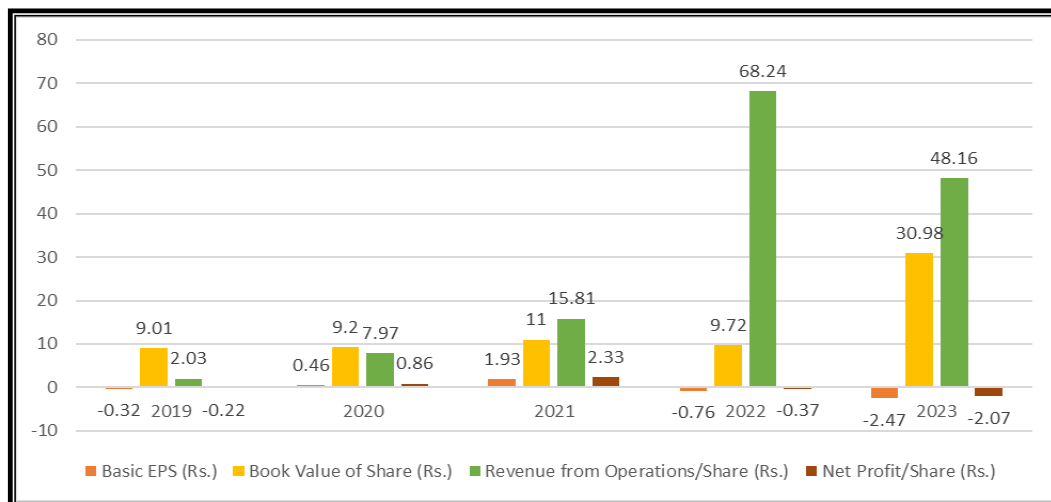


Figure 5 Market Performance of Adani Green Energy Ltd.

Source: Annual Reports of Adani Green Energy Ltd from 2019 to 2023

Figure 5 highlights the market performance of Adani Green Energy Ltd from 2019 to 2023. It is noticed that the EPS and book value of shares was highly increased during the study period. The revenue per share and net profit per share was changed slightly during the study period.

Table 4 Liquidity Position of Adani Green Energy Ltd.

Liquidity Ratios	2019	2020	2021	2022	2023
Current Ratio	2.16	1.87	0.64	0.83	0.68
Quick Ratio	1.99	1.73	0.39	0.31	0.46

Source: Annual Reports of Adani Green Energy Ltd from 2019 to 2023

Table 4 highlights the liquidity position of Adani Green Energy Ltd from 2019 to 2023. It was observed that the company maintained sound liquidity in the starting of the study period but later on it was declined during the study period. The absolute liquidity of the company was sound, but it was declined on the later period of the study. It can be said that the company has sufficient liquidity for the operational activities of the business.

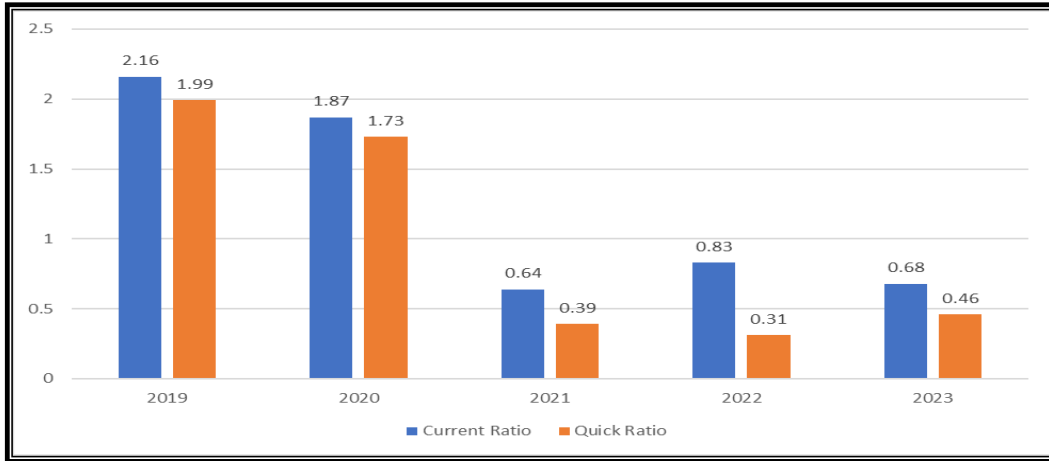


Figure 6 Liquidity Position of Adani Green Energy Ltd
Source: Annual Reports of Adani Green Energy Ltd from 2019 to 2023

The Indo Wind Energy Company had excellent financial stability and ideal/stable liquidity, as evidenced by its current ratio of 2.03 and quick ratio of 1.73 with standard deviations of 1.60 and 1.37. This ensures that its stakeholders will have enough money to cover current liabilities and working capital. Suzlon businesses, on the other hand, retained inadequate liquidity with a mean current ratio of 0.74 and a quick ratio of 0.59 with standard deviations of 0.28 and 0.27.

Table 5 Solvency Position of Adani Green Energy Ltd

	2019	2020	2021	2022	2023
Debt/Equity Ratio	1.62	1.13	3.09	11.37	2.66
Asset Turnover Ratio (%)	5.87	19.49	17.29	0.51	0.27

Source: Annual Reports of Adani Green Energy Ltd from 2019 to 2023

The solvency position of Adani Green Energy Ltd from 2019 to 2023. It is noticed that the solvency position was highly fluctuated during the study period. The company has a mixed trend of debt equity ratio while the asset turnover was highly increased in the initial period and declined during the later part of the study period. The solvency position of the company was satisfactory.

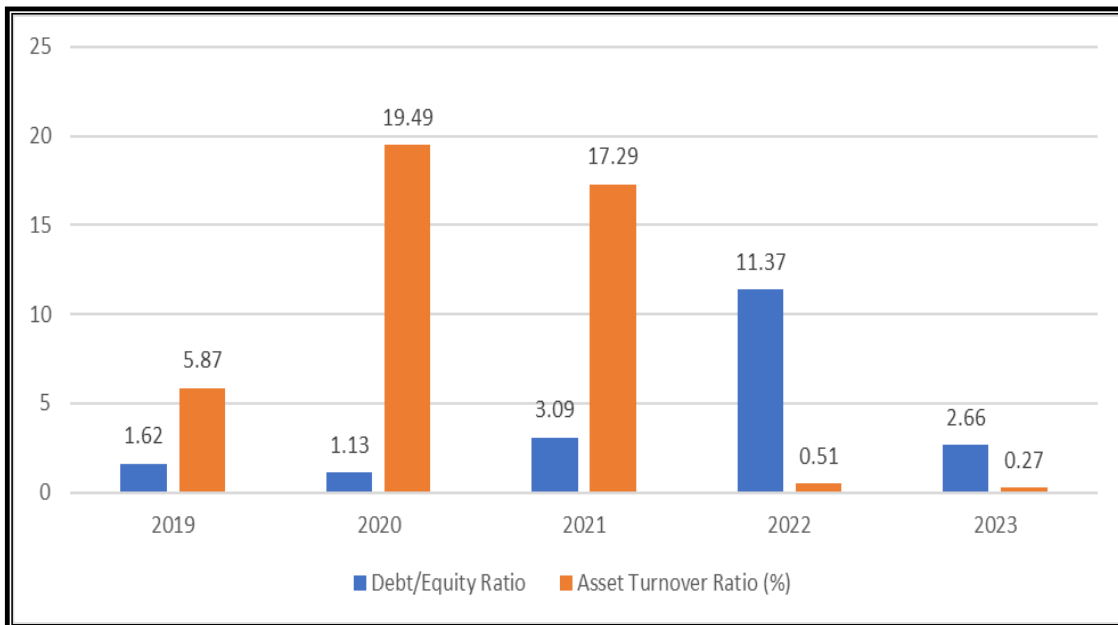


Figure 7 Solvency and Efficiency Position of Adani Green Energy Ltd
Source: Annual Reports of Adani Green Energy Ltd from 2019 to 2023

Figure 7 elucidates the solvency and efficiency position of Adani Green Energy Ltd from 2019 to 2023. The solvency position of the company was highlighted through debt equity ratio while efficiency position was indicated through asset turnover. The debt equity ratio was fluctuating during the entire study period while asset turnover was increased during the initial period of the study and declined in the later part of the study.

Table 6 Earning Capacity / Profitability of Adani Green Energy Ltd

Profitability Ratios	2019	2020	2021	2022	2023
Net Profit Margin (%)	-10.99	10.76	14.71	-0.54	-4.29
Return on Net worth / Equity (%)	-2.48	9.32	21.15	-3.81	-6.68
Return on Capital Employed (%)	6.38	8.43	12.02	3.11	2.73
Return on Assets (%)	-0.64	2.09	2.54	-0.2	-1.14

Source: Annual Reports of Adani Green Energy Ltd from 2019 to 2023

Table 6 exhibits the earning capacity of Adani Green Energy Ltd from 2019 to 2023. The profitability position of the company has mixed experience during the study period. The return on capital employed was positive while return on assets was mostly negative during the study period. The company is said to be no performing well to generate profit during the study period.

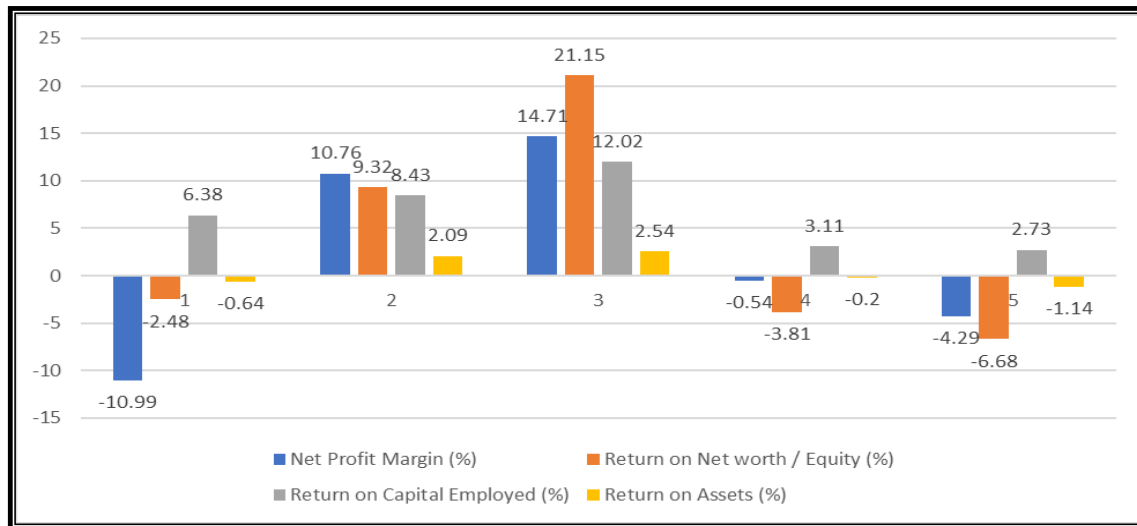


Figure 8 Earning Capacity / Profitability of Adani Green Energy Ltd

Source: Annual Reports of Adani Green Energy Ltd from 2019 to 2023

Figure 8 shows earning capacity of Adani Green Energy Ltd from 2019 to 2023. The profitability of the company was fluctuating during the entire study period as it was in negative in the initial period while in the second and third year it was positively increased in the later part of the study period.

Table 7 Market Valuation of Adani Green Energy Ltd

Valuation Ratios	2019	2020	2021	2022	2023
Enterprise Value (Cr.)	7,985.88	25,452.33	177,840.52	316,175.76	152,175.04
EV/Net Operating Revenue (X)	25.1	20.41	71.91	29.63	19.95
EV/EBITDA (X)	31.02	87.42	316.44	517.47	238.89
Market Cap/Net Operating Revenue (X)	18.31	19.27	69.84	28.04	18.31
Price/BV (X)	4.14	16.7	100.36	196.89	28.47

Source: Annual Reports of Adani Green Energy Ltd from 2019 to 2023

Table 7 shows the market valuation of Adani Green Energy Ltd. It is observed that the company has performed well during the study period. Most of the indicators show a good sign of the market performance of the company. Green energy is one of the emerging sectors of the world. Adani plays a significant role in the green energy sectors of India. The performance of the company was satisfactory during the study period.

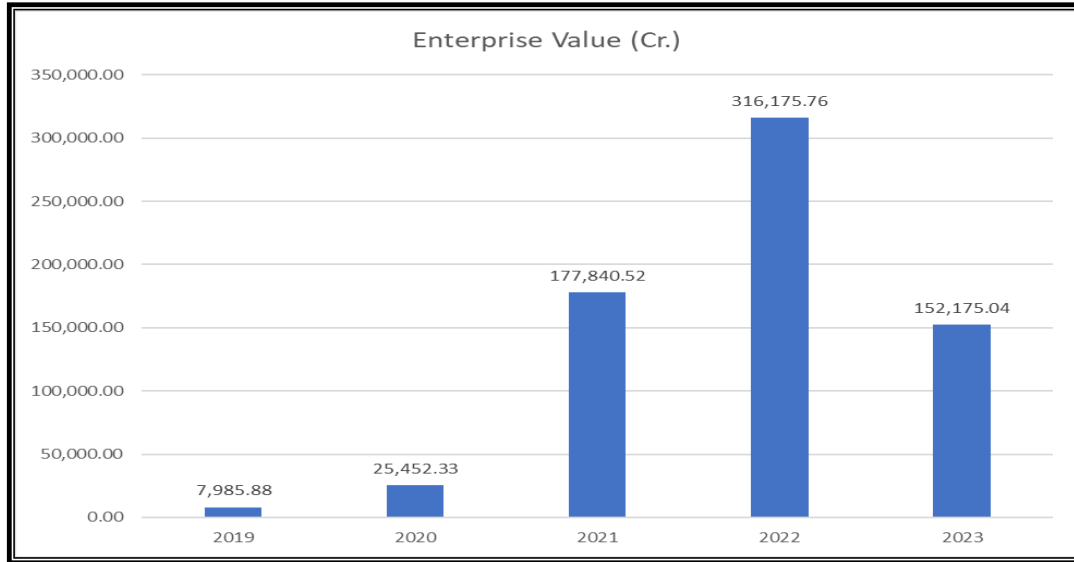


Figure 9 Enterprise Value

Source: Annual Reports of Adani Green Energy Ltd from 2019 to 2023

The above figure highlights the enterprise value of Adani Green Energy Ltd. from 2019 to 2023. It is noticed that the value of the Adani Green Energy Ltd was increased during the study period and finally stood at Rs. 152175.04 crore in 2023. It can be concluded that the value of the company grew during the study period.

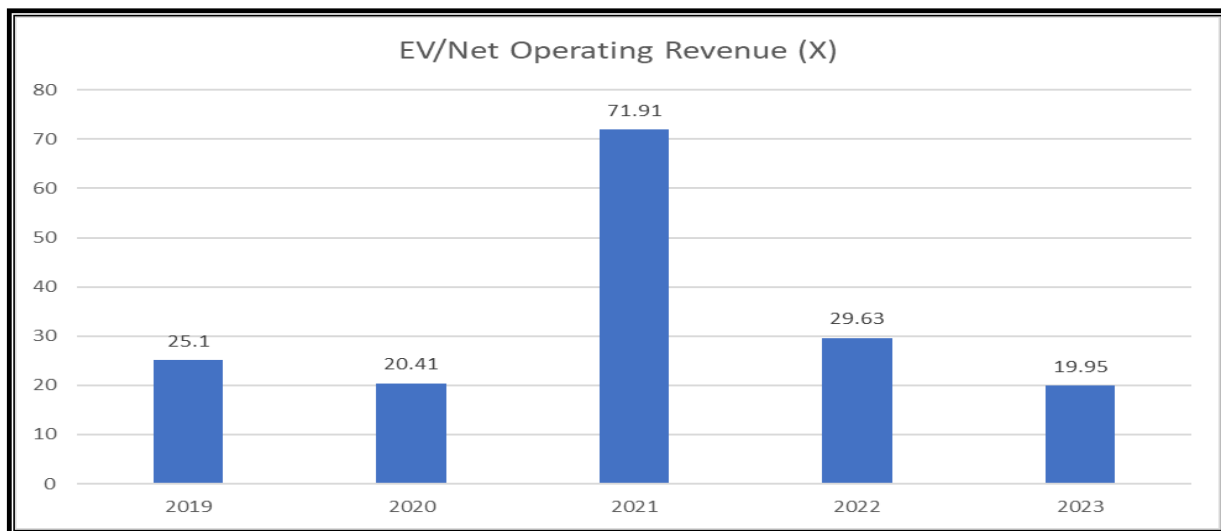


Figure 10 Enterprise Value

Source: Annual Reports of Adani Green Energy Ltd from 2019 to 2023

Investor returns on equities are extremely poor and are declining annually. Numerous small investors have moved their money from the renewable energy sector to other areas of the Indian economy, totaling N. Regarding the topic of whether or not you think there is room for development in the Indian renewable energy sector, a lot of investors have concurred that there is a bright future ahead of them and that they may anticipate more wealth and a solid return on their investment.

4.4. Discussion

Present study was conducted to examine the financial performance of one of the major renewable energy companies of India i.e. Adani Green Energy Ltd. for a period of five years ranging from 2019 to 2023. The financial performance has been investigated by considering the liquidity, solvency, profitability and market performance of the company.

The financial statement of the company was thoroughly reviewed and analyzed by applying proper financial tools and techniques and the findings of this study are discussed as follows:

- It is observed that Adani Green Energy Ltd plays a prominent role in the green renewable energy sector of India.
- The liquidity position of the company was satisfactory in the initial period of the study while it was decreased in the later part of the study. It indicated that the company did not generate sufficient funds to pay its current liabilities within time.

- The solvency position of the company was good and manageable. The combination of debt equity composition of the company was satisfactory. The company was running its operations by using external funds.
- The efficiency of the company was very good during the initial study period, but it declined in the later part of the study. The company generated sufficient funds initially but due to Covid-19 pandemic, its efficiency was affected.
- The profitability of the company has mixed performance during the study period as its net profit margin was negative in 2019 and it was good in the subsequent years while it was again negative during the later part of the study.
- The market performance of the company was satisfactory during the study period as all the selected variables indicated a positive trend during the study period. The EPS, enterprise value, value per share of the company indicated satisfactory performance of the company during the study period.
- The revenue generation capacity and enterprise value of the company were increased. The company performed good in the revenue generation and made the value increased.

5. Conclusion

Adani Green Energy Limited (AGEL) is India's largest and world's leading renewable energy company enabling the clean energy transition. AGEL develops, owns, and operates utility scale grid connected solar, wind and hybrid renewable power plants. With a locked-in growth trajectory up to 20.8 Gigawatt (GW), AGEL currently has an operating renewable portfolio of 8.4 GW, the largest in India, spread across 12 states, offsetting over 48 million tonnes of CO₂ emissions cumulatively. AGEL is credited with developing several landmark renewable energy power plants, the latest being the world's largest wind-solar hybrid power cluster of 2,140 Megawatt (MW) in Jaisalmer, Rajasthan. The company has set a target of achieving 45 GW by 2030 aligned to India's decarbonization goals. India is rapidly approaching its goal of being net-zero by 2070 amidst its unparalleled economic boom. Considering the growing emphasis on renewable energy adoption worldwide, India has set a 2030 deadline for building 500 GW of capacity. Always working to make it possible for India to embrace sustainable energy is Adani Green Energy Limited (AGEL). Being one of the biggest providers of renewable energy in India, they are dedicated to enhancing the nation's energy environment. With the goal of easing the shift to a greener economy by 2030, the corporation plans to construct a 45 GW renewable energy capacity. The commitment to creating cutting-edge technology to support exponential development supports the strategic aims. Through focused efforts on pursuing sustainable practices across operations, the company committed to 'Building a Better Tomorrow' for our country by 'Leading the Path to a Greener Future'.

The present study was conducted to examine the financial performance of Adani Green Energy Ltd from 2019 to 2023. From the analysis, the financial performance of the company was satisfactory during the study. The liquidity position of the company was satisfactory. The company maintains sufficient funds to perform its day-to-day business operations. The company is running its operations by taking capital from external sources. The profitability of the company was investigated in terms of sales and in terms of investment. It is observed that the profitability of the company in terms of sales was not satisfactory while profitability in terms of investment was comparatively good during the study period.

The debt financing model continues to support the Indian renewable energy sector, with the majority of Adani Green Energy Company's earnings going towards loan interest payments. Reviving the Indian renewable energy sector requires altering finance arrangements. A drive for stock markets is required in the renewable energy sector. Although the data suggests that the firm is having difficulty settling, it also points to a larger potential advantage in the future. As a result, it presents investors with a variety of prospective investment opportunities. Adani Green Energy Ltd was performing well in terms of liquidity and solvency of the company. The profitability of the company needs to be reviewed why the profit of the company in terms of sales was not satisfactory while profitability in terms of investment was comparatively good. The market performance of the company was good during the study period. The company has satisfactory market growth and revenue generation capacity during the study period. Overall, it can be stated that the financial performance of the company was satisfactory during the study period. The majority of the money made by the company is utilized to pay down the interest part of the debt, which is still supported by the debt financing model in India's renewable energy sector. Changes in funding policies are necessary to revitalize the performance of the company. The results indicate that while the renewable energy business in India is still in its infancy, there are more prospects for growth in the future. It thus offers a range of potential investment options to investors.

Declaration of Competing Interest

The authors declare that they are not aware of any competing financial interests or personal relationships that may have influenced the work described in this document.

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