

Intrinsic Valuation of Nifty Energy Index Companies Using P/E Multiple Approach

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Abstract- This study evaluates the intrinsic valuation of companies listed under the Nifty Energy Index using a price-earnings (P/E) multiple-based relative valuation framework. The research examines 40 energy-sector companies across four sub-sectors—Renewables, Power Generation, Oil & Gas, and Utilities—to identify overvalued, undervalued, and fairly valued stocks. Secondary data were collected from NSE, BSE, company annual reports, and financial databases for the period FY 2021–22 to FY 2024–25, with market prices as of April 30, 2025. Intrinsic values were computed by applying sector-specific benchmark P/E multiples to trailing twelve-month earnings per share. The findings reveal significant valuation disparities within the index, with approximately 70 percent of companies trading above their intrinsic values, driven primarily by growth expectations, policy incentives, and ESG-related sentiment. Conversely, select PSU utilities and oil & gas companies exhibit undervaluation due to stable cash flows and dividend yields. The study provides practical insights for investors, portfolio managers, and policymakers by highlighting mispricing patterns and sector-specific valuation drivers in India's energy transition.

Keywords: Intrinsic Valuation, P/E Multiples, Nifty Energy Index, Energy Sector, Relative Valuation

I. INTRODUCTION

The energy sector occupies a central position in India's economic development, industrial expansion, and sustainability agenda. Rapid urbanization, rising energy demand, and the government's commitment to renewable energy and net-zero targets have significantly reshaped the sector's investment landscape. As a result, energy stocks have attracted heightened attention from domestic and foreign investors, leading to substantial re-rating of valuations in recent years.

Valuation plays a crucial role in determining whether market prices reflect a company's underlying fundamentals. Among various valuation techniques, relative valuation using P/E multiples remains one of the most widely used approaches due to its simplicity, transparency, and ease of comparison across firms

and sub-sectors. P/E multiples capture market expectations regarding future growth, profitability, and risk, making them particularly relevant in sectoral valuation studies.

However, in growth-intensive and policy-sensitive sectors such as energy, market prices often deviate from intrinsic values. Renewable energy firms, for instance, may command high valuation premiums driven by ESG narratives and future growth prospects, while traditional utilities and oil & gas companies may trade at discounts due to regulatory constraints and perceived stagnation.

In this context, the present study aims to evaluate intrinsic values of companies in the Nifty Energy Index using a standardized P/E multiple methodology. By identifying valuation gaps and sector-wise mispricing patterns, the study seeks to assist investors in making informed allocation decisions and contribute to empirical literature on energy-sector valuation in emerging markets.

II. RESEARCH METHODOLOGY

Research Design

The study adopts a descriptive and analytical research design grounded in quantitative analysis. It relies exclusively on secondary data and employs a relative valuation framework to examine pricing efficiency within the Nifty Energy Index.

Data Sources

Secondary data were sourced from:

- Annual reports of sample companies (FY 2021–22 to FY 2024–25)
- National Stock Exchange (NSE) and Bombay Stock Exchange (BSE)
- Financial databases such as Screener.in
- Industry and policy reports from PwC, Deloitte, and the International Energy Agency

All data points were cross-verified to ensure reliability and consistency.

Sample Selection and Study Period

The sample comprises all 40 companies constituting the Nifty Energy Index as of March 31, 2025. Market prices were taken as of April 30, 2025, ensuring alignment with the latest publicly available financial information.

Variables and Measurement

The study uses the following key variables:

- Earnings Per Share (EPS – TTM)
- Price–Earnings (P/E) Ratio
- Return on Equity (ROE)
- Return on Capital Employed (ROCE)
- Debt–Equity Ratio
- Dividend Yield
- Five-year CAGR of Sales, Profit, and EPS

These variables help assess profitability, leverage, growth, and shareholder returns.

Valuation Framework

Sector-specific benchmark P/E multiples were applied as follows:

- Renewables: 70×
- Power Generation: 18×
- Oil & Gas: 20×
- Utilities: 14×

Intrinsic Value (IV) was calculated using:

$$IV = EPS \text{ (TTM)} \times \text{Sector Benchmark P/E}$$

The valuation gap was computed as:

$$IV \text{ Gap (\%)} = (CMP - IV) / IV \times 100$$

Based on this, stocks were classified as:

- Overvalued: IV Gap > +5%
- Undervalued: IV Gap < -5%
- Fairly Valued: -5% to +5%

Tools and Ethics

Microsoft Excel was used for data analysis, sensitivity testing, and classification. The study relies solely on publicly available data and adheres to ethical research standards.

III. RESULTS AND DISCUSSION

Table 1: Verdict Distribution of Nifty Energy Index Companies

Valuation Category	Number of Companies	Percentage
Overvalued	28	70.0%
Undervalued	9	22.5%
Fairly Valued	3	7.5%

Valuation Category	Number of Companies	Percentage
Total	40	100%

Discussion of Results

The findings indicate that a dominant proportion of the Nifty Energy Index is overvalued, suggesting strong investor optimism toward the sector. This overvaluation is particularly concentrated in renewable energy and private power generation companies, where high growth expectations and policy incentives have driven P/E multiples well above historical averages.

In contrast, undervalued companies are primarily concentrated in the oil & gas and utilities sub-sectors. These firms typically exhibit stable earnings, regulated revenue structures, and higher dividend yields. Despite their strong fundamentals, they trade at discounts due to limited growth perceptions and regulatory constraints.

Sector-wise analysis reveals that valuation premiums increase with growth narratives and ESG alignment rather than current profitability alone. This indicates a divergence between market sentiment and intrinsic fundamentals.

Further examination of financial ratios shows that high-dividend, low-leverage firms generally trade at negative valuation gaps, whereas zero-dividend, high-growth firms command significant premiums. This pattern reflects investor preference for future growth potential over present cash flows in India's energy transition phase.

IV. CONCLUSION

The study concludes that the Nifty Energy Index exhibits substantial valuation dispersion, with nearly 70 percent of companies trading above their intrinsic values. Renewable and power-generation firms benefit from strong growth expectations and policy support, while oil & gas and utility companies offer selective value opportunities due to stable earnings and dividend payouts. A balanced investment strategy combining undervalued defensive stocks with limited exposure to high-growth energy firms can help optimize risk–return outcomes. The study underscores the relevance of disciplined valuation frameworks in navigating sentiment-driven markets.

V. APPENDIX

The appendix contains detailed calculations of EPS, intrinsic values, valuation gaps, sector-wise benchmark assumptions, and sensitivity analysis conducted using Excel-based models. Due to space limitations, these computations are not included in the main text but are available upon request.

VI. ACKNOWLEDGMENT

The author would like to express sincere gratitude to the faculty members of Siva Sivani Institute of Management for their continuous guidance and academic support throughout the course of this research. Special thanks are extended to the project guide Dr.Jada Kameswari for valuable suggestions and encouragement that contributed to the successful completion of the study.

REFERENCES

- [1] Damodaran, A. (2012). *Investment Valuation*. Wiley.
- [2] Koller, T., Goedhart, M., & Wessels, D. (2015). *Valuation: Measuring and Managing the Value of Companies*. Wiley.
- [3] PwC India. (2023). *Renewable Energy in India: Investment and Valuation Trends*.
- [4] Deloitte. (2022). *Indian Utilities Sector: Trends and Valuations*.
- [5] International Energy Agency. (2023). *India Energy Outlook*.
- [6] Banerjee, R., & Roy, S. (2018). P/E multiples in emerging-market energy indices.
- [7] Jindal, M., & Kumar, A. (2021). Crude price volatility and valuation of oil & gas firms.
- [8] National Stock Exchange of India. (2025). Historical market data.
- [9] Bombay Stock Exchange. (2025). Equity market statistics.