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Original Article

Assessing Stock Valuation and Growth Prospects of Renewable Energy Company in Indonesia (Study Case: PT Kencana Energi Lestari Tbk)

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Abstract: *This study evaluates the stock valuation of PT Kencana Energi Lestari Tbk (KEEN) and its growth potential, focusing on its critical role in the rapidly growing renewable energy industry in Indonesia. In order to achieve global acceleration for sustainable energy and the Indonesian government's ambitious energy-shifting targets, KEEN's financial performance was meticulously analyzed using various financial methodologies, including Discounted Cash Flow (DCF) and Weighted Average Cost of Capital (WACC). The research finds that KEEN is strategically positioned to capitalize on Indonesia's renewable energy initiatives, leveraging its robust financial health and operational efficiency to drive promising growth and profitability. The study provides comprehensive recommendations for investors, emphasizing KEEN's potential as a viable long-term investment. Additionally, future research directions are proposed, highlighting the necessity for continuous evaluation of regulatory impacts and market expansion opportunities to ensure KEEN remains at the forefront of the renewable energy transition in Indonesia.*

Keywords: *Stock Valuation, Financial Analysis, Growth Prospect, Renewable Energy.*

I. INTRODUCTION

The global energy landscape is shifting to fight climate change by reducing dependence on fossil fuels that cause carbon footprint. Renewable energy is key to promoting sustainable and environmental protection (Luo et al., 2022). Hydropower, a reliable power-generating technology for over a century, accounted for about 1.1% of global electricity in 2022, making it the most widely used renewable source with high efficiency (around 90%) with low operational costs despite high initial investment (Anundt, 2020).

Indonesia is one of the fastest-growing economies in decades faces unique energy challenges. To meet rising energy demand and environmental sustainability goals, a roadmap designed by the National Energy Council (DEN) aims for carbon neutrality in 2060 (DEN, 2020). The Government Electricity Supply Venture Plan (RUPTL 2021-2030) projects that 52% of energy demand will be met by renewables by 2030, with hydropower contributing 10,391 MW (26% of new development). By the end of 2022, Indonesia's Energy Ministry reported 6,688.9 MW of installed hydropower capacity, with bioenergy at 3,086.6 MW.

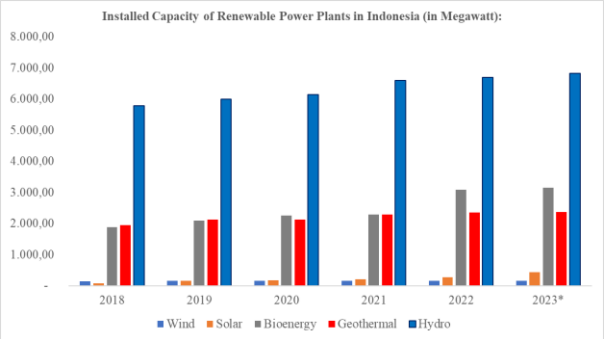

Fig. 1 Installed Capacity of Renewable Power Plants in Indonesia in Megawatt

PT Kencana Energi Lestari Tbk's initial public offering of 733,262,500 shares, each with a par value of Rp100, was conducted on the Indonesian Stock Exchange at Rp396 per share on September 2, 2019, approximately raising IDR 290.37

billion. As of May 20, 2024, the company's market capitalization at Rp2.82 trillion, with each share priced at Rp770, reflecting the current total market value of the company's equity.

The future potential valuation of PT Kencana Energi Lestari Tbk (KEEN) is evaluated for investors who are aiming to profit while supporting renewable energy development. The increasing demand for renewable energy sources and KEEN's strategic positioning in this market are emphasized. Investors are interested in understanding KEEN's financial viability and future growth prospects to make informed investment decisions aligned with financial returns and sustainability goals.

II. LITERATURE REVIEW

A) Discounted Cash Flow

Discounted Cash Flow (DCF) is a widely used technique for valuing investments that generate cash. This technique forecasts an investment's future cash flows and uses a discount rate to reduce them to the present value in order to calculate the investment's future worth (Damodaran, 2006). DCF analysis helps determine the fair current value of assets, projects, or companies by considering factors such as inflation, risk, and cost of capital, and by evaluating future performance projections.

In a detailed DCF analysis, it's important to include calculations for Equity Value and Terminal Value, which are crucial for a complete valuation. The Gordon Growth Model, which assumes a corporation will expand at a steady pace eternally, is frequently used to compute the Terminal Value. The Weighted Average Cost of Capital (WACC), which gives the discount rate needed to determine the current worth of future cash flows, is an essential component in DCF analysis. Here's a breakdown of why WACC is essential in DCF analysis

B) Research Design

The research design is structured to facilitate valuation using the Discounted Cash Flow (DCF) method, enabling the author to explain the flow of research conducted from beginning to end. Here is a detailed explanation of the research design:

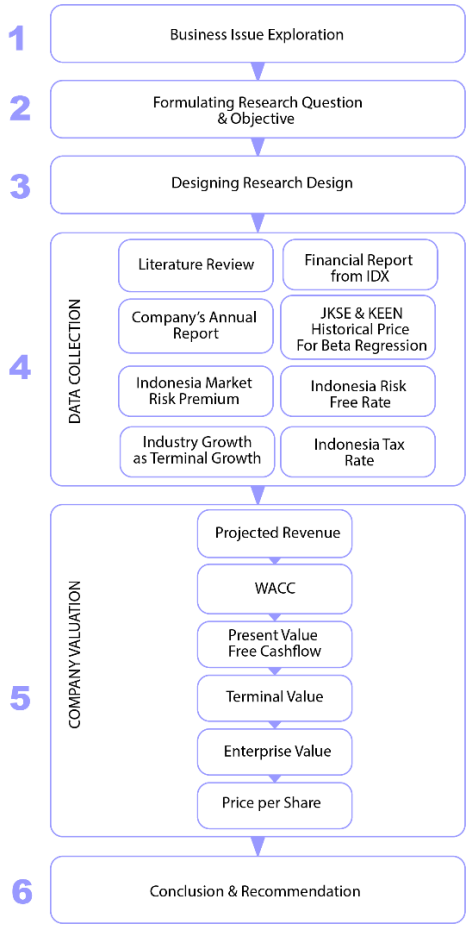

Fig. 2 Research Design

Start with the exploration of business issues and the formulation of relevant research questions and objectives. Incorporating a literature review and analysis of financial reports from the Indonesia Stock Exchange (IDX), alongside regression analysis using historical prices for beta calculation taken from Yahoo Finance. Data is collected by examining annual company reports, market risk premiums, industry growth rates, and national economic indicators such as the risk-free rate and tax rate in Indonesia. The valuation process utilizes these inputs to project company revenue, calculate the Weighted Average Cost of Capital (WACC), and determine metrics such as the present value of free cash flow, terminal value, enterprise value, and ultimately, the price per share. A comprehensive analysis and recommendations are concluded based on these financial valuations.

III. RESULTS AND DISCUSSION

A) The Weighted Average Cost of Capital (WACC)

To conduct valuation using the Discounted Cash Flow (DCF) model, the Present Value of Free Cash Flow (PV of FCF) must be calculated. This calculation uses WACC as the discount rate, reflecting the combined costs of equity and debt, thus adjusting future cash flows to their present value. Here, the WACC calculations are done using various variables.

Table 1: WACC Variable (in thousand IDR)

VARIABLE	VALUE	SOURCE
Inflation Rate	3,50%	Average 10 Years Recorded Inflation Rate by Bank Indonesia
Tax Rate	22%	Indonesian Corporate Tax Rate 2024
Risk-Free Rate	6,65%	
Implied Market Risk Premium	9,23%	Damodaran Equity Risk Premium December 2023
Implied Market Return	15,88%	
Beta	1	Regression JKSE & KEEN from Yahoo Finance
Total Debt	2.541.358.122,10	Company's Balance Sheet
Net Debt	2.391.232.511,30	Company's Balance Sheet
Total Equity	2.890.219.103,70	Company's Balance Sheet
Weight of Debt	47%	Company's Balance Sheet
Weight of Equity	53%	Company's Balance Sheet

B) Cost Of Equity (Ke)

The cost of equity is considered a component for calculating a company's cost of capital, and the Capital Asset Pricing Model (CAPM) is often employed for this calculation.

$$Cost\ of\ Equity\ (\mathrm{Ke}) = Rf + \beta\ levered\ x\ [E(Rm) - Rf]$$

$$Cost\ of\ Equity\ (\mathrm{Ke}) = 6{,}65\% + 1\ x\ [7{,}27]$$

$$\boldsymbol{Cost\ of\ Equity\ (re) = 15{,}88\%}$$

C) Cost of Debt (Kd)

The cost of equity, computed at 15.88%, is determined by applying the risk-free rate to the product of beta and the market risk premium. This rate is used as one of the components in assessing WACC.

Cost of Debt (Kd)

Cost of Debt (Kd) = 6,65% + 3,96%

Cost of Debt (Kd) = 10,61%

The cost of debt for the company has been determined to be 10.61%, calculated by adding the estimated default spread of 3.96% to the risk-free rate of 6.65%.

D) WACC

The WACC can be calculated after all the required data, such as the cost of equity, cost of debt, tax rate, weight of equity, and weight of debt, have been gathered.

$$WACC = (Wd)x\ K_e + (We)x\ K_d\ x\ (1 - T)$$
$$WACC = 47\%\ x\ 15{,}88\% + 53\% x\ 10{,}61\%\ x\ (1 - 22\%)$$

WACC = 12,32%

The company's WACC has been calculated at 12.32%. This figure is derived by weighing both the cost of equity and the cost of debt according to their respective proportions in the overall capital structure.

E) Revenue Projection

The assumption table for PT Kencana Energi Lestari Tbk includes various financial metrics to forecast the income statement. Revenue is projected using CAGR, reflecting market growth, while COGS is estimated using Moving Average Growth. Operating expenses, net interest, minority interest earnings, capital expenditure, depreciation and amortization, and net working capital are calculated as percentages of net sales. This ensures alignment with revenue changes, maintaining financial consistency as the company expands into renewable energy.

Table 2: Assumption used for Revenue Projection

INCOME STATEMENT	ASSUMPTION
Revenue	*CAGR*
COGS	*Moving Average Growth*
OPEX	*In % of Net Sales*
Net Interest Expenses	*In % of Net Sales*
Tax Rate	*Tax Rate*
Minority Interest Earnings	*In % of Net Sales*
Capital Expenditure	*In % of Net Sales*
Depreciation & Amortization Expense	*In % of Net Sales*
Net Working Capital	*CAGR*

With some of this growth assumption, the author projects future revenue based on historical revenue performance and increasing using the assumption percentage from the table above.

Table 3: Revenue forecast for future 5 years (in thousand IDR)

FORECAST						
	2024E	2025E	2026E	2027E	2028E	CAGR 2019-2023A
Revenue	869.058.915	1.012.884.656	1.170.384.130	1.340.670.295	1.522.325.707	*17,5%*
Growth, %	17,5%	16,5%	15,5%	14,5%	13,5%	
COGS	-382.014.742	-420.342.300	-480.212.421	-546.172.461	-636.794.089	
GROSS PROFIT	487.044.173	592.542.356	690.171.709	794.497.834	885.531.618	
Gross Profit Margin, %	56,0%	58,5%	59,0%	59,3%	58,2%	
OPEX	92.741.629	104.625.940	99.806.169	115.797.787	135.215.524	
In % of Net Sales	10,7%	10,3%	8,5%	8,6%	8,9%	
TOTAL COSTS	-289.273.113	-315.716.360	-380.406.253	-430.374.674	-501.578.565	
EBITDA	579.785.803	697.168.296	789.977.878	910.295.621	1.020.747.142	
Margin, %	66,7%	68,8%	67,5%	67,9%	67,1%	
Net Interest Expenses	-147571300	-167088035	-179905264	-205879095	-237346293	
In % of Net Sales	17,0%	16,5%	15,4%	15,4%	15,6%	
EBT	432.214.503	530.080.261	610.072.614	704.416.526	783.400.849	
Tax Rate	22%	22%	22%	22%	22%	
Tax Expense	-95.087.191	-116.617.657	-134.215.975	-154.971.636	-172.348.187	
In % of Net Sales	10,9%	11,5%	11,5%	11,6%	11,3%	
Net Income to Company	337.127.312,08	413.462.603,23	475.856.638,82	549.444.890,18	611.052.661,99	
In % of Net Sales	27,4%	27,4%	27,4%	27,4%	27,4%	
Minority Interest Earnings	-39.355.648	-48.266.896	-55.550.665	-64.141.228	-71.333.211	
In % of Net Sales	11,7%	11,7%	11,7%	11,7%	11,7%	
Net Income to Stakeholder	297.771.664	365.195.708	420.305.974	485.303.662	539.719.451	
Capital Expenditure	-4.317.378	-4.897.888	-6.629.458	-8.593.644	-10.209.326	
In % of Net Sales	-0,50%	-0,5%	-0,6%	-0,6%	-0,7%	
Depreciation & Amortization Expense	8.676.827	10.239.390	10.898.345	12.311.848	14.382.274	
In % of Net Sales	1,0%	1,0%	0,9%	0,9%	0,9%	
Net Working Capital	-28.974.060	21.817.907	-16.429.215	12.371.449	-9.315.889	-175,3%
Growth, %	-175%	-175%	-175%	-175%	-175%	
Increase in Net Working Capital	-67.451.450,53	50.791.966,82	-38.247.122,54	28.800.664,23	-21.687.337,64	
Free Cash Flow	**234.679.661,74**	**421.329.176,67**	**386.327.737,92**	**517.822.530,01**	**522.205.061,34**	

F) Discounted Cashflow

a. Present Value of Free Cash Flow

The Present Value of Free Cash Flow (PV of FCF) is determined by discounting the expected future cash flows back to their current value using the WACC, with discount periods ranging from 1 to 5 years.

$$\text{PV of FCF} = \frac{\text{FCF}}{(1+r)^t}$$

Table 4: Present Value of Free Cashflow

	2024E	2025E	2026E	2027E	2028E
FCF	**234.679.661,74**	**421.329.176,67**	**386.327.737,92**	**517.822.530,01**	**522.205.061,34**
WACC	12,32%	12,32%	12,32%	12,32%	12,32%
Discount Period	1,0	2,0	3,0	4,0	5,0
PRESENT VALUE OF FREE CASH FLOW	**208.934.534**	**333.957.412**	**272.621.573**	**325.326.954**	**292.088.835**

b. Terminal Value

The Terminal Value (TV) is calculated using the Perpetuity Growth Model. This calculation involves the Terminal Year Free Cash Flow and applies a perpetuity growth rate of 3.55% based on industry growth (Mordor Intelligence, 2024).

$$\text{TV} = \frac{\text{Terminal FCF x } (1+\text{g})}{Wacc - g}$$

$$\text{TV} = \frac{522.205.061\text{x } (1 + 3{,}55\%)}{12{,}32\% - 3{,}55\%}$$

$$\mathbf{TV = 6.164.352.794}$$

c. PV of terminal Value

The Present Value of the Terminal Value (PV of TV) is determined by applying the discount factor to the Terminal Value (TV). The formula used is:

$$\text{PV of Terminal value} = \text{TV} \times \text{Discount Facto}$$

$$\text{PV of Terminal value} = 6.164.352.794 \times \frac{1}{(1+12{,}32\%)^5}$$

PV of Terminal value = 3.447.953.232

Table 5: Present Value of Terminal Value

TERMINAL VALUE	
Terminal Year Free Cash Flow	522.205.061
Terminal Growth Rate	3,55%
Terminal Year EBITDA	1.020.747.142
Terminal Value	6.164.352.794
Implied Exit Multiple	*6,4x*
Discount Period	5,0
Discount Factor	0,56
PRESENT VALUE OF TERMINAL VALUE	**3.447.953.232**
% of Enterprise Value	*71%*

Enterprise Value (EV) is calculated by adding market capitalization (shares x share price) to net debt (total debt - cash). This comprehensive valuation metric incorporates both equity and debt, enabling comparisons of companies with different capital structures.

$$\text{EV=Total PV of FCFs + PV of TV}$$

$$\text{EV} = 1.432.929.309 + 3.447.953.232$$

EV = 4.880.882.541

Table 6: DCF Valuation

DCF-VALUATION	
Enterprise value ("EV") (Thousand IDR)	**4.880.882.541**
Less: Total Debt	2.541.358.122
Plus: Cash and Cash Equi.	151.125.611
Net Debt negative *number equals net cash position*	2.390.232.511
Equity Value market *cap* (Thousand IDR)	2.490.650.029
Outstanding Shares	3.666.312.500
Price Per Share	**Rp679,33**
Market Price per Share (20/06/2024)	Rp 695,00
PBV	1,02

IV. CONCLUSION

PT Kencana Energi Lestari Tbk, with a WACC of 12.32% means it faces a relatively high cost of capital, reflecting higher perceived risk and higher expected returns by investors. This affects the company's ability to invest in projects, as only those generating returns above 12.32% would be considered value-adding.

Future Income statement projections indicate this company have significant growth prospects with 5 years of CAGR growth, showing the company can generate 1 trillion IDR in terminal EBITDA and 522 billion as terminal free cash flow significant amount in the next 5 years revenue. However, due to higher risk caused by higher capital costs, PT Kencana Energi Lestari Tbk is weak in points of advantage for investment.

Investing in renewable energy like PT Kencana Energi Lestari Tbk stock is attractive due to its concern for the environment. But with the current valuation comes high financial risks. Investors should conduct deeper research, especially regarding PT Kencana Energi Lestari Tbk's cost of capital change in future. High net debt reduces future enterprise value, lowering its equity value. This results in a projected share price of Rp 679.33, compared to the current price in the stock market of Rp 695, indicating low potential for capital gain.

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