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VALUATION ANALYSIS OF GREEN ENERGY SECTOR ISSUERS USING THE DISCOUNTED CASH FLOW METHOD

Wiji Saputra [1*] , Mangasi Sinurat [2] , Willy Cahyadi [3]
Sekolah Tinggi Ilmu Ekonomi Bina karya, Tebing Tinggi
Email: wijisyahputra2002@gmail.com[1*], mangasisinurat621@gmail.com[2], Bkcahyadi@gmail.com[3]

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Abstract

This study aims to analyze the intrinsic value of green sector issuers. energy listed on the Indonesia Stock Exchange using the Discounted method Cash Flow (DCF) with Free approach Cash Flow to Firm (FCFF). The study used a descriptive quantitative method with a sample of four companies, namely PT Pertamina Geothermal Energy Tbk (PGEO), PT Barito Renewables Energy Tbk (BREN), PT Arkora Hydro Tbk (ARKO), and PT TBS Energi Utama Tbk (TOBA). The data used were secondary data in the form of annual financial reports for the period 2023–2025, while the assessment was carried out through FCFF calculations, cash flow projections, Weighted Average Cost of Capital (WACC), Terminal Value , and intrinsic value of shares. The results show that PGEO has an intrinsic value of Rp2,274 per share, higher than the market price of Rp1,055, so it is categorized as undervalued . Conversely, BREN and ARKO have intrinsic values of Rp1,134 and Rp1,210 per share, respectively, which are below the market price, so they are categorized as overvalued . Meanwhile, TOBA cannot be adequately valued using the DCF method because it produced a negative FCFF in the last year of observation. This study shows that the DCF method is more effective when applied to companies that have positive and stable FCFF, so it can provide a more representative estimate of intrinsic value as a basis for investment decision making.

Keywords: Discounted Cash Flow (DCF); Free Cash Flow to Firm (FCFF); Green Energy; Intrinsic Value; Stock Valuation.

INTRODUCTION

Climate change and rising greenhouse gas emissions have become global issues, prompting various countries to shift to more environmentally friendly energy sources. The energy transition is a key strategy for achieving sustainable development and the net-zero emission targets set by many countries . (Rismanto, 2024) . In Indonesia, the commitment to renewable energy development is reflected in various government policies aimed at increasing the mix of new and renewable energy (EBT) and reducing dependence on fossil fuels. (Ahsan, 2021) . This situation encourages the growth of companies operating in the green energy sector, such as geothermal energy, solar power, hydropower, and other renewable energy sources.

The development of the green energy sector has attracted not only the attention of the government and the public, but also investors in the capital market. Issuers operating in the green energy sector are considered to have promising growth prospects, amid the increasing demand for clean energy and stronger regulatory support. This is reflected in the increasing investment activity in renewable energy companies listed on the Indonesia Stock Exchange (IDX). (Hidayah et al., 2026) . However, high investor interest in this sector often causes stock prices to move in ways that do not always reflect the company's true intrinsic value.

In making investment decisions, investors need to know whether a company's share price is undervalued, fairly valued, or overvalued. (Ganefi et al., 2023) . This assessment can be conducted through stock valuation analysis, which aims to estimate the company's fair value. Information regarding the fair value of shares is crucial because it can help investors minimize investment risk and increase potential future profits. (Hisam, 2024) . One of the methods widely used in assessing a company's intrinsic value is the Discounted Cash Flow (DCF) method. (Natalia, 2021) . This method estimates a company's value based on its ability to generate future cash flows, which are then discounted to the present value using a rate of return appropriate to the company's risk. The advantage of

the DCF method lies in its ability to consider a company's fundamental factors, allowing the valuation results to better reflect the company's economic condition and operational performance than relying solely on market price movements. Research on stock valuation using the Discounted Cash Flow (DCF) method has been widely conducted in various industrial sectors and shows that this approach is capable of producing intrinsic value estimates that reflect the fundamental condition of the company. (Putra, 2025) . In addition, research (W. Sari, 2024) applied the DCF method to analyze investment decisions on shares in the Islamic banking sub-sector and showed that the method was able to provide estimates of intrinsic value as a basis for investment decision making. However, most previous research has focused on companies in the banking and transportation sectors, as well as companies with relatively stable cash flows. Meanwhile, research specifically examining the valuation of green energy issuers in Indonesia using the Free Cash Flow to Firm (FCFF) approach is still relatively limited. This is despite the fact that companies in the green energy sector have distinct characteristics, such as high capital expenditure requirements , long payback periods, and a transition to low-carbon energy, which can potentially impact the company's ability to generate free cash flow. These differences in characteristics can lead to differences between intrinsic value and stock market price. Therefore, there is still a research gap regarding the application of the DCF method with the FCFF approach to assess the fairness of stock prices of green energy issuers in Indonesia. This study seeks to fill this gap by analyzing the intrinsic value of several green energy issuers listed on the Indonesia Stock Exchange as a basis for investment decision-making . Based on the above description, this study was conducted to analyze the intrinsic value of green energy sector issuers listed on the Indonesia Stock Exchange using the Discounted Cash Flow (DCF) method. The results are expected to provide information on the fairness of company share prices, thus providing investors with a basis for consideration in making investment decisions and adding to the academic literature on company valuation in the green energy sector in Indonesia.

LITERATURE REVIEW

Stock Valuation Theory

Stock valuation is the process of determining the intrinsic value of a stock based on the company's fundamentals (Rahmawantari & Puspitaningtyas, 2019) . Intrinsic value reflects the true value of a company, obtained through an analysis of its financial performance, growth prospects, business risks, and future cash flow generation. According to (N. Sari et al., 2024) , the primary objective of valuation is to compare intrinsic value with market price so that investors can identify stocks that are undervalued , fairly, and undervalued. valued , or overvalued .

In practice, there are three main approaches to company valuation, namely the asset - *based* approach valuation), market approach (relative valuation), and income approach (income - based valuation) (Irawan & Ekapradana, 2020) . The income approach is one of the most widely used methods because it considers a company's ability to generate future economic benefits. One method included in this approach is Discounted Cash Flow (DCF) .

Intrinsic Value of Stock

The intrinsic value of a stock is the fair value of a stock calculated based on the company's fundamentals without being influenced by short-term market sentiment (Husain, 2017) . Intrinsic value is used as a basis for investment decisions because it reflects the company's ability to create economic value for shareholders.
The comparison between intrinsic value and market price produces three conditions, namely:

1. Undervalued , if the intrinsic value is greater than the stock market price.
2. Fairly Valued , if the intrinsic value is the same or close to the stock market price.
3. Overvalued , if the intrinsic value is less than the stock market price.

The concept of intrinsic value is important because stock prices in the market often deviate due to investor psychology, economic conditions, and market speculation. Therefore, intrinsic value analysis can help investors make more rational investment decisions.

Discounted Cash Flow (DCF)

Discounted Cash Flow (DCF) is a valuation method that determines a company's value based on estimated future cash flows discounted to their present value using a rate of return appropriate to the company's risk (Putra, 2025) . This method is based on the concept of the time value of money , which means the current value of money is higher than the value of money received in the future. According to (Damodaran, 2012) , the company's value

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through the DCF approach is obtained by adding the present value of all projected cash flows over a certain period plus the terminal value (terminal value).
In general, the DCF model can be formulated as follows:

$$\text{Enterprise Value} = \sum \frac{\text{FCFF}_t}{(1+\text{WACC})^{\text{t}}} + \frac{TV}{(1+\text{WACC})^{\text{n}}}$$

Information:
FCFF = Free Cash Flow to Firm
WACC = Weighted Average Cost of Capital
TV = Terminal Value
n = Projection period

The DCF method is considered capable of providing a more comprehensive estimate of company value because it focuses on the company's ability to generate cash flows in the future, so it is very relevant for use in assessing green energy sector companies that have long-term investment characteristics.

Free Cash Flow to Firm (FCFF)

Free Cash Flow to Firm (FCFF) is the cash flow available to all capital providers, including creditors and shareholders, after the company has met operational and investment needs (Alhazami, 2020) . FCFF is often used in DCF models because it reflects a company's ability to generate cash that can be distributed to all investors.
The FCFF formula used in this study is:

$$\text{FCFF} = \text{EBIT}(1-\text{T}) + \text{Depreciation} - \text{CapEx} - \Delta\text{NWC}$$

Information:
EBIT = Earnings Before Interest and Taxes
T = Tax rate
Depreciation = Depreciation expense
CapEx = Capital Expenditure
ΔNWC = Change in Net Working Capital

FCFF components play a crucial role in describing a company's operating condition. EBIT after tax reflects net operating profit, while depreciation is added back because it doesn't result in a cash outflow. Furthermore, capital expenditures and changes in working capital are subtracted because they represent the company's investment needs to maintain and grow its business operations.

Weighted Average Cost of Capital (WACC)

The Weighted Average Cost of Capital (WACC) is the minimum rate of return expected by capital providers on investments made in a company (Sholiha et al., 2025) . WACC describes the weighted average cost of a company's funding sources, including equity and debt. In the Discounted Cash Flow (DCF) model, WACC is used as a discount rate to convert future cash flows to their present value, thus estimating the company's intrinsic value.
In general, WACC can be formulated as follows:

$$\text{WACC} = \left(\frac{E}{V} \times Re\right) + \left(\frac{D}{V} \times Rd \times (1-T)\right)$$

Information:
E = Market value of equity
D = Market value of debt
Re = Cost of equity
Rd = Cost of debt
T = Corporate tax rate

The higher the company's risk level, the higher the WACC value used. An increase in the WACC value will lower the present value of future cash flows, thus reducing the company's value generated by the DCF method.

In this study, the WACC value was obtained from the Alpha Spread platform, which provides estimates of a company's cost of capital based on its capital structure, cost of equity, and after-tax cost of debt. The use of WACC data from Alpha Spread aims to obtain an estimate of the cost of capital that takes into account market conditions and the characteristics of each company. The WACC value is then used as a discount rate in the stock valuation process using the *Discounted Cash Flow* (DCF) method to calculate the intrinsic value of the *green energy sector issuers* being studied.

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Terminal Value (TV)

Terminal Value (TV) is an estimate of the value of a company or asset at a specific point in the future , beyond a specific projected cash flow period that can be estimated .

Terminal Value formula is :

$$TV = \frac{FCFF_{n+1}}{WACC - g}$$

Information :

TV = Terminal Value
FCFFn+1 = FCFF year after period projection
WACC = Weighted Average Cost of Capital
g = Growth rate term long

METHOD

This research is a quantitative study with a descriptive approach that aims to determine the intrinsic value of shares of green energy sector issuers listed on the Indonesia Stock Exchange using the Discounted Cash Flow (DCF) method with the Free Cash Flow to Firm (FCFF) approach. This approach was chosen because it is able to estimate the company's value based on the company's ability to generate free cash flow in the future which is then discounted using the Weighted Average Cost of Capital (WACC). Unlike the relative valuation method that relies on market price comparisons, the DCF method assesses companies based on fundamental conditions so it is considered suitable for green energy sector companies that have long-term investment characteristics and relatively high capital expenditure needs.

The population in this study is all energy sector companies listed on the Indonesia Stock Exchange (IDX). The sampling technique used in this study is Non-Probability Sampling with a Purposive Sampling approach. Sample selection is based on certain criteria or considerations to obtain a comprehensive picture of the renewable energy sector in Indonesia. The selected issuers cover a variety of ownership (state-owned and private) and operational sub-sectors, namely geothermal, hydro, and fossil-based companies transitioning to clean energy. The following is a list of companies included in this study sample, which can be seen in Table 1.

Table 1. Sample

NO	Stock Code	Company name
1	PGEO	PT Pertamina Geothermal Energy Tbk
2	BREN	PT Barito Renewables Energy Tbk
3	ARKO	PT Arkora Hydro Tbk
4	TOBA	PT TBS Energy Utama Tbk

The data used is secondary data obtained from the annual reports and audited financial statements of each company for the period 2023–2025. In addition, the study also utilized market data in the form of stock prices, number of shares outstanding, cash and cash equivalents, total debt, and the Weighted Average Cost of Capital (WACC) value obtained from the Alpha Spread platform. The use of WACC data from Alpha Spread aims to obtain an estimate of the cost of capital that takes into account capital structure, cost of equity, cost of debt, and market conditions so that it can be used as a discount rate in the DCF model. Other supporting data was obtained from the Indonesia Stock Exchange (IDX), Yahoo Finance, and Investing.

The valuation model used is enterprise valuation with the Free Cash Flow to Firm (FCFF) approach. In this model, company value is obtained by discounting the projected FCFF using the WACC, then adding the terminal value to obtain the Enterprise Value. Next, the Enterprise Value is adjusted for cash and total debt to obtain the Equity Value, then divided by the number of outstanding shares to obtain the intrinsic value per share. This intrinsic value is then compared with the market price to determine whether the stock is undervalued, fairly valued, or overvalued.

Research Analysis Stages

The first stage involved collecting financial data from the company's annual reports and financial statements for the 2023–2025 period. The data used included Earnings Before Interest and Taxes (EBIT), tax rates, depreciation expense, Capital Expenditure (CapEx), changes in Net Working Capital (ΔNWC), cash and cash equivalents, total debt, number of shares outstanding, and stock market price. This data served as the basis for the DCF valuation process.

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The second step is to calculate each company's Free Cash Flow to Firm (FCFF). FCFF is used to describe a company's ability to generate cash flow available to all capital providers after meeting operational and investment needs. The third stage is to project Free Cash Flow to Firm (FCFF) for the upcoming period. In this study, FCFF projections are based on a 4% growth rate assumption, based on Indonesia's Gross Domestic Product (GDP) growth. This growth rate is based on the assumption that the long-term performance of green energy companies will develop in line with national economic growth. The 4% growth assumption was also chosen to maintain conservatism in estimating future cash flows and avoid overly optimistic projections. Furthermore, this growth rate is used to project the FCFF value as the basis for calculating the company's value using the Discounted Cash Flow (DCF) method.

The fourth step is determining the discount rate used in the DCF model. This study uses the Weighted Average Cost of Capital (WACC) value obtained from the Alpha Spread platform. WACC is used to reflect the rate of return required by investors and creditors on capital invested in a company.

The fifth stage is to calculate the terminal value using the Gordon method. Growth Model . This calculation aims to estimate the company's value after the projection period ends, assuming a long-term growth rate of 4%.

The sixth step is to calculate Enterprise Value by discounting all projected FCFF and terminal value using the WACC. This calculation reflects the overall value of the company available to shareholders and creditors.

The seventh stage is to calculate the equity value by adjusting the Enterprise The value is calculated against the company's cash position and total debt. The equity value is then divided by the number of shares outstanding to obtain the intrinsic value per share.

The final step is to compare the intrinsic value obtained with the stock's market price on the research date. This comparison is used to determine whether the stock is undervalued . fairly valued , or overvalued . Shares are categorized as undervalued if the intrinsic value is higher than the market price, fairly valued if the relative intrinsic value is the same as the market price, and overvalued if the intrinsic value is lower than the market price.

RESULTS AND DISCUSSION

The intrinsic value assessment of shares in the green energy sector for the 2023–2025 period was conducted using the Discounted Cash Flow (DCF) method with the Free Cash Flow to Firm (FCFF) approach. This method is used to estimate the fair value of shares based on the company's ability to generate future cash flows discounted using the Weighted Average Cost of Capital (WACC) rate. The results of the intrinsic value calculation are then compared with the stock market price to identify whether the shares are undervalued, overvalued, or fairly valued. The results of the intrinsic value calculation stages for each issuer are presented below.

Free Cash Flow to Firm (FCFF) Calculation Results

Table 2 below shows the results of the FCFF calculation for green energy sector issuers for the 2023–2025 period.

Year	PGEO	BREN	ARKO	TOBA
2023	$-96,885,678	$179,871,984	Rp. 214,953,209,780	$23,406,332
2024	$376,146,588	$361,862,448	Rp -627,706,856,166	$32,131,360
2025	$196,721,599	$306,929,016	Rp. 264,142,968,570	$ -149,045,656

Source: Data processed by researchers (2026)

Based on the calculation results, FCFF PGEO showed significant improvement during the study period. In 2023, the company recorded a negative FCFF of -96,885,678. This condition was primarily influenced by high working capital requirements (ΔNWC), which reached 370,939,000, thereby reducing the company's free cash flow. Although the company was still able to generate good operating profits, investment and working capital requirements caused FCFF to be in a negative position. In 2024, FCFF increased drastically to 376,146,588. This increase was driven by changes in working capital efficiency and the company's continued strong ability to generate operating profits and cash flow from business activities. This condition indicates that the company successfully managed investment needs without reducing its ability to generate cash. In 2025, FCFF decreased to 196,721,599. This decrease was influenced by a decrease in EBIT from the previous year and an increase in working capital requirements. However, FCFF remains at a positive level, indicating that PGEO still has the ability to generate sufficient free cash flow to support the company's future growth.

BREN exhibits a relatively stable and positive FCFF trend throughout the study period. FCFF increased from 179,871,984 in 2023 to 361,862,448 in 2024. This increase occurred because the company was able to increase operating profit while benefiting from reduced working capital requirements. In 2025, FCFF decreased slightly to 306,929,016. Despite the decrease, this value still demonstrates the company's ability to generate strong

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free cash flow. The stability of BREN's FCFF indicates that the company has a good capacity to fund operational and investment needs using internal cash flow. Overall, the positive FCFF trend indicates that BREN has sufficiently strong operational fundamentals to support long-term company value creation.

ARKO exhibited significant FCFF fluctuations during the study period. In 2023, the company generated positive FCFF of 214,953,209,780. This value was influenced by changes in working capital, which provided significant additional cash flow for the company. However, in 2024, FCFF turned negative at -627,706,856,166. This very significant decrease was primarily due to a significant increase in working capital requirements, which absorbed a large portion of the cash generated from the company's operational activities. Furthermore, the company's operating profit also decreased compared to the previous year. In 2025, the company's condition improved again with a positive FCFF of 264,142,968,570. This improvement was driven by an increase in EBIT and changes in working capital, which again contributed positively to the company's free cash flow. These results indicate that ARKO's cash flow generation ability is still heavily influenced by changes in working capital requirements and the characteristics of investments in long-term hydropower projects.

TOBA exhibits a downward trend in FCFF during the study period. In 2023, FCFF was recorded at 23,406,332 and increased to 32,131,360 in 2024. This increase indicates that the company is still able to generate positive free cash flow despite being in a business transformation phase towards more sustainable energy. However, in 2025, FCFF turned negative at -149,045,656. This decline was primarily due to negative EBIT, which reduced the company's ability to generate operational cash flow. Although the company still recorded significant depreciation expenses, the operating loss condition caused FCFF to be negative. Negative FCFF in 2025 indicates that the company faces challenges in generating sustainable free cash flow. This condition can also affect the DCF valuation results because the company's value is highly dependent on its ability to generate future cash flow.

Weighted Average Cost of Capital (WACC) value

Table 3 below shows the WACC values of green energy sector issuers for the 2023–2025 period.

Stock Code	WACC
PGEO	7.44%
BREN	7.48%
ARKO	9.94%
TOBA	7.69%

Source: Data taken from Alpha Spread

on the results obtained From Alpha Spread , PT Pertamina Geothermal Energy Tbk (PGEO) has a WACC of 7.44%, while PT Barito Renewables Energy Tbk (BREN) has a WACC of 7.48%. Both companies have a relatively low cost of capital, resulting in a lower discount rate on future cash flows. This condition results in a higher present value of the FCFF projection and contributes positively to the formation of the company's intrinsic value in the DCF model.

PT Arkora Hydro Tbk (ARKO) has a WACC of 9.94%, the highest among the entire study sample. A high WACC indicates that investors require a higher rate of return to compensate for the investment risks faced by the company. Consequently, the discounting process results in a lower present value of cash flows, contributing to ARKO's lower intrinsic value compared to its market price.

Meanwhile, PT TBS Energi Utama Tbk (TOBA) has a WACC of 7.69%, which is still within the range of PGEO and BREN's cost of capital. This value indicates that TOBA's cost of capital is relatively low compared to other companies in this study. However, the DCF valuation results are not only influenced by the WACC value, but also by the company's ability to generate free cash flow (FCF). Despite having a relatively moderate WACC, TOBA recorded a negative FCFF in 2025, making the future cash flow projections less representative for use in the DCF model. This condition causes the estimate of TOBA's intrinsic value to be unable to adequately reflect the company's fundamental value. Therefore, in this study, TOBA is categorized as having limitations in the application of the DCF method, because the model is more suitable for companies with positive and relatively stable FCFF.

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Results of Calculation of Intrinsic Value of Shares

Table 4 below shows the results of the calculation of the fair value of green energy sector issuers for the period 2023–2025.

Code	Fair Value in 2026	Market Value on April 1, 2026	Condition
PGEO	2,274	1,055	undervalued
BREN	1,134	5,500	overvalued
ARKO	1,210	6,700	overvalued
TOBA	-	605	Model limitations

Source: Data processed by researchers (2026)

The valuation results using the Discounted Cash Flow (DCF) method indicate that the intrinsic value of PGEO shares is IDR 2,274 per share, while the market price at the research date was IDR 1,055 per share. These results indicate that the intrinsic value is higher than the market price, thus PGEO shares are categorized as undervalued. Undervalued conditions indicate that the market has not fully reflected the company's fundamental value. This result is in line with PGEO's FCFF performance, which showed significant improvement during the research period. After recording negative FCFF in 2023, the company managed to generate positive FCFF in 2024 and 2025. The ability to generate positive free cash flow is a major factor driving the company's high intrinsic value. Furthermore, as a company engaged in geothermal energy, PGEO has good growth prospects along with the increasing demand for renewable energy and government support for the national energy transition. Therefore, PGEO shares have the potential to be a long-term investment alternative for value-oriented investors.

The valuation results show that BREN's intrinsic value is Rp1,134 per share, while the market price is Rp5,500 per share. Therefore, BREN's stock is overvalued because the market price far exceeds the intrinsic value obtained from the DCF calculation.

Although the company demonstrated the ability to generate positive and relatively stable FCFF during the study period, the high share price in the market resulted in the resulting intrinsic value being unable to offset the valuation assigned by investors. This condition indicates that market expectations regarding BREN's growth prospects are very high. High investor interest in the renewable energy sector is likely one factor driving BREN's share price increase. However, based on a fundamental approach using DCF, the company's current share price is above its fair value, so investors should consider the risk of future price corrections.

Based on the DCF calculation, the intrinsic value of ARKO shares is IDR 1,210 per share, while the market price is recorded at IDR 6,700 per share. These results indicate that ARKO shares are overvalued. The relatively lower intrinsic value compared to the market price is influenced by significant fluctuations in FCFF during the study period. In 2024, the company even recorded negative FCFF before returning to positive FCFF in 2025. These fluctuations indicate that the company's ability to generate free cash flow is still heavily influenced by investment needs and changes in working capital. Nevertheless, ARKO still has good growth opportunities because it operates in the hydroelectric power sector, which is an important part of renewable energy development in Indonesia. However, based on the results of the fundamental valuation, the stock price formed in the market has exceeded its fair value.

In contrast to the other three issuers, this study did not produce an adequate intrinsic value estimate for TOBA, thus categorizing it as a model limitation. This condition is caused by a negative FCFF value in the final year of observation. In the DCF method, a company's value is determined based on its ability to generate future free cash flow. When FCFF is negative, the cash flow projection process becomes highly sensitive to growth assumptions and discount rates, potentially resulting in a valuation that does not accurately reflect the company's fundamental condition. Furthermore, TOBA is currently undergoing a business transformation phase from a conventional energy-based company to a more sustainable energy source. This transition requires significant investment, potentially suppressing free cash flow in the short term. Consequently, the DCF method using the FCFF approach has limitations in reasonably estimating TOBA's intrinsic value. Therefore, the results of this study indicate that the DCF method is more effective for companies capable of generating positive and relatively stable FCFF compared to companies still in the transition phase and experiencing negative free cash flow.

CONCLUSION

This study aims to analyze the intrinsic value of green energy sector issuers listed on the Indonesia Stock Exchange using the Discounted Cash Flow (DCF) method with the Free Cash Flow to Firm (FCFF) approach, and to determine whether the company's shares are undervalued, fairly valued, or overvalued. The results show that the

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intrinsic value generated varies for each issuer because it is influenced by the company's ability to generate free cash flow, the level of capital costs, and the business characteristics of each company. Based on the valuation results, PGEO shares have an intrinsic value of Rp2,274 per share, which is higher than the market price of Rp1,055 per share and are therefore categorized as undervalued. Meanwhile, BREN and ARKO shares have intrinsic values of Rp1,134 and Rp1,210 per share, respectively, lower than their market prices and are therefore categorized as overvalued. Meanwhile, TOBA cannot be adequately valued using the DCF method because the company recorded negative FCFF in the last year of observation, so the valuation results have the potential to not accurately reflect the company's fundamental condition.

The research also shows that the DCF method is more effective when applied to companies with positive and relatively stable FCFF. The ability to generate sustainable free cash flow has been proven to be a key factor in determining a company's intrinsic value. Therefore, investors should not only pay attention to growth trends in the renewable energy sector but also consider the company's fundamental condition through intrinsic value analysis before making investment decisions. Based on the results of this study, PGEO has more attractive investment prospects compared to other issuers because it is still trading below its fair value. For future research, it is recommended to use a longer observation period, increase the number of samples of companies in the renewable energy sector, and combine the DCF method with other valuation methods and sensitivity analysis to provide a more comprehensive fair value assessment result that can reflect various possible market conditions.

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