

ABSTRACT

This research aims to analyze the optimal Dividend Payout Ratio (DPR) policy for PT Bukit Asam Tbk (PTBA) using the Residual Dividend Policy (RDP) approach to support corporate sustainability amid the challenges of the energy transition toward renewable energy (RE). The study utilizes secondary data, including PTBA's financial statements, historical stock price data, and investment requirements for energy transition during the 2020–2023 period. Dividend policy modeling is conducted using Monte Carlo simulation to project optimal DPR scenarios for the next five years, taking into account variables such as net income, capital expenditure (CAPEX), and strategic investment needs. The simulation results indicate a progressive optimal DPR, starting at 15% in the first year and gradually increasing to 30% by the fifth year. This scheme allows PTBA to retain most of its profits for strategic investments, particularly in RE projects, without sacrificing dividend attractiveness to investors. Model validation is performed using a 95% confidence interval and benchmarking with peer companies in the energy and mining sector, strengthening the reliability of the simulation results. The implications of this policy include strengthening PTBA's financial position, accelerating business diversification into renewable energy, and maintaining competitiveness and corporate sustainability amidst coal industry volatility and global decarbonization demands. This research provides both theoretical and practical contributions to the development of adaptive and sustainable dividend policy strategies in the energy sector.

Keywords: *PT Bukit Asam, Dividend Payout Ratio, Residual Dividend Policy, Monte Carlo simulation, energy transition, renewable energy, corporate sustainability, net income, capital expenditure.*