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Strategic Development of Taman Rejeki Group in Advancing Renewable Energy Contributions in Indonesia's Energy Transition

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Abstract:

This study examines the strategic development of Taman Rejeki Group in achieving its 500 MW renewable energy target by 2030. Using a hybrid methodology that combines PESTLE analysis, Porter's Five Forces, and scenario planning the research identifies the driving factors and uncertainties influencing the company's renewable energy strategy. The study employs backcasting to work backward from the target goal outlining strategic steps to overcome identified barriers and capitalize on opportunities. The results of this research findings key uncertainties renewable energy in Indonesia such as PPA Terms & Conditions and Political Will are explored with four potential future scenarios developed suggest that Taman Rejeki Group must adopt flexible strategies aligned with these scenarios aggressive expansion in the stark protocol scenario with favorable conditions, efficiency and cash flow protection in the wakanda shield scenario with high-risk PPA, adaptation to sudden changes in the time loop strategy scenario with volatile political climates, and a survival strategy in the dark night plan scenario with regressive policy conditions. These strategies will ensure that the company can navigate varying political, regulatory, and financial environments, driving progress toward the 500 MW target by 2030.

Keywords: *Renewable Energy, Scenario Planning, Backcasting*

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1. Introduction

The global dependence on fossil fuels continues to drive carbon emissions, significantly contributing to greenhouse gases (GHGs) and detrimental environmental impacts, including climate change (Kennedy, 2018; Sudiarta, 2022). In Indonesia, the energy sector plays a pivotal role in GHG emissions, with coal still dominating around 60% of the national energy mix (Resosudarmo et al., 2023). To address this challenge, global efforts towards decarbonization have been increasing, with the Paris Agreement as a primary initiative (Widya Yudha & Tjahjono, 2019). As a signatory country, Indonesia is committed to meeting specific emission reduction targets, supported by regulatory frameworks and financial mechanisms (Misna, n.d.; Dewi, n.d.).

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Indonesia has set an ambitious target to increase the share of renewable energy (RE) in its energy mix to 23% by 2025 (RUKN, 2024). However, by the end of 2024, the share of RE will only reach 14.1%, leaving a substantial gap of 8.89% that must be closed within a limited timeframe (Apriliyanti et al., 2024). This slow progress underscores the significant challenge of scaling up RE capacity, particularly considering Indonesia's ongoing reliance on conventional energy sources such as coal, oil, and gas (Resosudarmo et al., 2023).

The transition to RE in Indonesia faces major barriers to achieving its goals. Key factors contributing to the slow transition include limited infrastructure, financing access issues, large fossil fuel subsidies, and complex permitting processes (Budi et al., 2023; Setyawati, 2020). Investment fluctuations in the RE sector are also a major concern, with investment in 2023 reaching only USD 1.48 billion, indicating significant volatility from 2014 to 2023 (Statista, 2024). This situation suggests that from an investor's perspective, green investments in Indonesia are not yet sufficiently attractive (Susanto, 2022). Nevertheless, optimism for the development of the RE industry remains high, fueled by increasing government regulatory support, such as Presidential Regulation (Perpres) No. 112/2022, which aims to accelerate the development of RE in the electricity supply sector (Misna, n.d.; Dewi, n.d.). This regulation also establishes investment incentives and introduces green financing mechanisms, providing greater opportunities for the private sector (Budi et al., 2023).

Amidst these uncertainties, Taman Rejeki Group has emerged as a key player striving to support Indonesia's energy transition by developing renewable energy capacity. Currently, Taman Rejeki Group has contributed 268 MW of the total RE generation capacity in Indonesia, accounting for about 1.89% of the national capacity (Kartika & Medlimo, 2023). The company targets 500 MW by 2030, with 200 MW from hydroelectric power plants (HEPP) and 300 MW from solar power plants (SPP). Additionally, recent company reports indicate an increase in operational capacity to 126.8 MW and 24 MW in development stages, totaling 150.8 MW (annual report Tyro, 2023).

However, despite these targets, Taman Rejeki Group still faces significant internal and external challenges in achieving these goals. Although Taman Rejeki Group has actively implemented a comprehensive sustainability strategy, dubbed *"Better Tamaris"* (sustainability tyro, 2024), this strategy has not been entirely sufficient to overcome obstacles and achieve the ambitious 500 MW target by 2030. The *"Better Tamaris"* strategy, focusing on the pillars of Better Business, Better Communities, Better People, and Better Planet**,** demonstrates a commitment to environmental, social, and governance (ESG) principles, including a planned additional capacity of approximately 98 MW and a target of reducing emissions by an average of 518,845 tons of CO2 eq per year (sustainability tyro, 2024).

However, reports indicate significant performance challenges in 2024. Electricity sales to PLN reached only 89% of the target, with a 10% increase in sales compared to 2023. Production increased by 10.72%, and EBITDA increased by 3.99%. Net

revenue also increased by 19.16%, leading to a 124.9% increase in losses in 2024 (annual report Tyro, 2024). These results contrast with the challenges faced in 2023 due to the effect of El Niño, as more favorable weather conditions in 2024 enabled a more stable increase in electricity production (Susanto, 2022).

This situation indicates that the existing strategy, while structured, remains highly vulnerable to uncontrollable external factors (Grant, 2016; David, 2021). Internally, the company faces limitations in managing large-scale projects with high investments and operational risks (Barney, 1991). Externally, Taman Rejeki Group contends with regulatory uncertainties, price policy fluctuations, intense price competition, investment volatility, and climate risks such as El Niño, which affects water availability for HEPPs and solar energy productivity (Kennedy, 2018; Setyoko & Nurcahyo, 2023). The combination of a linear and reactive strategic approach, funding challenges, and large project complexity poses a significant concern (Evaluation of the Strategy…, 2021).

The gap between the current strategy implemented by the company and the target of 500 MW indicates that further study is needed to address these uncertainties. This study aims to identify the uncertainties and impacts of environmental conditions in the renewable energy sector—such as policy fluctuations, changing investor acceptance, and macro- and microeconomic conditions—on achieving the 500 MW target by 2030 for Taman Rejeki Group (Sudiarta, 2022; Apriliyanti et al., 2024). This study also examines the dynamics of internal and external environments in the renewable energy sector in Indonesia and provides business recommendations for Taman Rejeki Group using scenario planning to develop future scenarios from the present (Dean et al., 2019).

Additionally, this study contributes to bridging the gap in scenario planning practices and adaptation strategies for energy transition (Rino, 2023). The ultimate goal is to develop a framework that supports not only Taman Rejeki Group but also other companies in Indonesia's renewable energy sector in navigating market volatility, policy changes, and investment risks that influence Indonesia's renewable energy targets (Alghani & Noviaristanti, 2023; Yudha & Tjahjono, 2019).

2. Theoretical Background

Scenario Planning It is an approach in strategic management that aims to explore future potential in line with environmental uncertainty (Porter, 1985; David, 2021). The purpose of the scenario planning approach is to outline various possibilities that may occur in the future with the aim of navigating various possibilities that may occur in the future. It involves exploratory scenarios based on current trends and uncertainties and normative (backcasting) scenarios which plan a path to a desired future by working backward (Dean et al., 2019). This process includes stages like orientation, information gathering, uncertainty analysis, scenario construction, and strategy testing.

PESTLE analysis six macro factors—Political, Economic, Social, Technological, Legal, and Environmental—that shape business strategy. Political factors, like government policies, and Economic factors, such as inflation and interest rates, impact business operations. Social trends influence consumer behavior, while technological innovations affect operational efficiency. Legal factors are directly related to the legal basis for conducting activities in a particular area, while environmental factors are related to sustainability and climate change, which influence strategic business decisions to remain adaptive and competitive.

Porter's Five Forces Model is an approach that aims to evaluate the level of business competition within an industry as measured by five measures such as inter-company competition, threats from new entrants, substitute products, and the bargaining power of suppliers and buyers (David, 2021). These five factors measure the competitiveness of an industry to minimize threats while taking advantage of opportunities.

VRIO Analysis framework based on the Resource-Based View (RBV) is used to assess a company's internal strengths as measured by Value, Scarcity, Ease of Imitation, and Organization (Cardeal & António, 2012). Through the assessment of these four factors, companies can determine whether they are moving towards sustainable competitive advantage to strengthen their position in the market.

3. Methodology

The research methodology used in this study is a hybrid methodology through the combination of exploratory scenario planning and backcasting to formulate the Taman Rejeki Group's strategy in 2030 to achieve an energy mix of 500 MW (Wright et al., 2013; Dean et al., 2019).Scenario planning aims to identify various possible futures that may occur based on existing uncertainties, while the backcasting approach is used by working backward from desired outcomes to identify patterns and strategic steps to be taken. The scenario planning approach is carried out through six stages: Orientation, Exploration, Scenario Development, Option Evaluation, Integration, and Recommendations (Dean et al., 2019). In the Exploration phase, the author identified driving factors using the PESTLE framework and Porter's Five Forces (Porter, 2008; Grant, 2016). Scenario development aims to generate four possible future scenarios from existing scenarios, while option consideration reviews strategies based on internal capabilities using the VRIO framework (Dean et al., 2019). The recommendation phase is carried out by combining findings from the previous stages and then creating strategies that can be implemented by the company.

The data used in this study were obtained from two main sources, namely primary sources (semi-structured interviews and questionnaires) and secondary sources (company reports, policy documents, and energy market studies) to identify developments in renewable energy (Sugiyono, 2018). During the data analysis stage, thematic coding was applied to the interview transcripts to identify the primary drivers of uncertainty for Taman Rejeki Group. The PESTLE framework and Porter's Five Forces were used to categorize external environmental factors, while the most significant uncertainties were mapped using an impact-uncertainty matrix.

Backcasting was used to identify the strategic steps required by Taman Rejeki Group to achieve its 500 MW target by 2030, while VRIO analysis was employed to assess the extent to which Taman Rejeki Group's internal capabilities support the achievement of this target. (Wright et al., 2013; Dean et al., 2019).

4. Empirical Findings/Result

Findings of this study are based on the analysis of primary and secondary data collected from interviews with key stakeholders and company reports. These findings highlight the key drivers, uncertainties, and strategic opportunities for Taman Rejeki Group goal of achieving 500 MW of renewable energy by 2030.

Stage 1: Orientation
The orientation phase identified the key strategic challenge for Taman Rejeki Group achieving the target of 500 MW renewable energy capacity by 2030 amid significant uncertainties. This challenge is exacerbated by Indonesia's energy transition, where the share of renewable energy is still relatively small compared to fossil fuels and the government's regulatory framework, although supportive, has inconsistencies. Taman Rejeki Group's capacity currently at 268 MW aims for an expansion of 500 MW by 2030 focusing on hydroelectric power (PLTA) and solar photovoltaic systems (PLTS).

Stage 2: Exploration
The Exploration phase focused on identifying the key driving forces and critical uncertainties that would shape the future of Taman Rejeki Group's renewable energy projects. Using primary data from semi-structured interviews and secondary data from policy documents, company reports, and energy market literature the study utilized the PESTLE framework and Porter's Five Forces to analyze the macro-environment and industry-specific dynamics which together provide a comprehensive overview of the factors influencing Taman Rejeki Group's strategy.

Table 1. PESTLE Analysis Renewable Energy in Indonesia

PESTLE	Analysis
Political	The government supports the renewable energy landscape through policies such as Perpres No. 112 of 2022 and the RUKN, which are the main drivers of the renewable energy industry in Indonesia. However, there is a high level of uncertainty due to inconsistent regulations related to renewable energy policies, a complicated licensing process, and collective conservatism that still supports the use of fossil fuels. This uncertainty stems from ongoing political leadership changes, which add long-term uncertainty for renewable electricity producers.
Economic	Policies such as Perpres No. 112/2022 and financing schemes implemented by international financial institutions help improve the viability of renewable energy projects. However, low internal rates of return (IRR) due to large initial

PESTLE	Analysis
	investments and long payback periods make renewable electricity development less attractive to investors. Fluctuations in the exchange rate of the Rupiah and rising interest rates in Indonesia have led to increased capital costs, which simultaneously increase corporate investment. Additionally, the limited issuance of green bonds by international financial institutions indicates that the potential for green financing remains low in Indonesia.
Social	The increasing awareness of sustainability and the ESG mandate serve as a driving force for financial institutions, opening opportunities for ESG-aligned financing and partnerships. Public expectations of direct benefits from NRE projects (e.g., infrastructure and local economic improvement) can also be a driving force if met. However, critical obstacles arise from social acceptance issues and land acquisition challenges particularly for large-scale PLTA projects which often face community rejection due to environmental and socio-economic impacts. For rooftop solar high capital costs, long ROI and an unfavorable 65% export tariff hinder adoption.
Technological	Policy support for diversifying NRE technologies (Perpres 112/2022, RUKN) is a key driving force. While PLTA is a mature technology for base load, obstacles include massive initial investment and ecological impact. For PLTS, the intermittent output requires advanced storage technology, and there are concerns regarding domestic component quality and the lack of an optimal role for PLN as a system provider.
Environmental	A strong legal framework including Perpres 112/2022, is a fundamental enabler for the sector. However, critical uncertainties emerge from inconsistent regulatory implementation and low institutional quality. The complex and lengthy permitting process for PLTA projects acts as a significant bottleneck, while regulations that limit quotas for rooftop solar and an unfavorable export tariff make projects less cost-effective from a legal and economic standpoint.
Legal	The political landscape is marked by strong government support through policy frameworks like Perpres No. 112 of 2022 and RUKN which serve as essential driving forces but this is countered by the critical uncertainty of inconsistent derivative regulations complex permitting processes and a "collective conservatism" that favors fossil fuels. Fluctuation in policy stability due to changes in political leadership adds another layer of long-term uncertainty for developers.

The PESTLE analysis identifies key drivers and challenges for Taman Rejeki Group. Politically, government commitment through Perpres No. 112/2022 and NZE 2060 is crucial but inconsistent policy enforcement and fossil fuel support create uncertainty (Susanto, 2022; Sudiarta, 2022). Economically low IRR exchange rate volatility, and

a small green bond market limit investments (Grant, 2016; Budi et al., 2023). Socially ESG financing is promising, but land acquisition and high costs for PLTS Atap slow adoption (Yudha & Tjahjono, 2019). Technologically hydropower faces barriers, while solar needs better storage solutions (Rino, 2023). Environmentally AMDAL compliance and natural events like El Niño add operational risks (Sudiarta, 2022). Legally, inconsistent enforcement and complex permitting processes hinder progress (Rino, 2023).

Table 2. Industry Dinamics Renewable Energy in Indonesia

Porter's Five Forces	Analysis
Threat of New Entrants	Entering the NRE market demands substantial initial capital and long payback periods. Regulatory complexity and frequent changes create significant uncertainty. A shortage of skilled human resources and a preference for large-scale projects present technical barriers.
Threat of Substitutes	PLN acts as a monopsony, the sole electricity buyer. Government-set ceiling prices and competitive tenders give PLN significant control over pricing, impacting project viability.
Bargaining Power of Suppliers	Suppliers hold considerable influence due to reliance on imported materials and equipment, whose prices fluctuate with global economics and currency rates, impacting EPC costs. Land acquisition issues and community resistance can raise costs and delay projects. Limited global availability of specialized technology and skilled NRE professionals grants suppliers leverage.
Bargaining Power of Buyers	Dominant fossil fuels especially coal fired power plants (PLTU), remain cheaper due to subsidized domestic prices. Different NRE technologies can substitute for one another, and large-scale centralized solar projects can substitute distributed NRE solutions.
Rivalry Among Existing Competitors	Competition is intense due to industry growth and numerous participants. Competitive tender processes force companies to vie on price and technical offerings. Regulatory limitations, like quotas for Rooftop PLTS, further intensify the competition for limited opportunities.

Porter's Five Forces analysis highlights the competitive landscape in Indonesia's renewable energy sector. Industry rivalry is moderate to high with established players like PLN and a developing market that offers both opportunities and challenges. The threat of new entrants is moderate due to high capital and regulatory barriers. The threat of substitutes remains high, with fossil fuels and alternative energy technologies competing with renewables. Bargaining power of suppliers is high especially for solar technology components, which rely on imports. The bargaining power of buyers is moderate with large buyers like government and industrial clients influencing pricing and contracts.

After identifying the key driving forces from the macro-environment through the PESTLE analysis and the industry dynamics using Porter's Five Forces the next step

is to evaluate these factors based on their impact and uncertainty. This evaluation process prioritizes the most relevant and unpredictable factors that will guide the development of future scenarios. The resulting Influence-Uncertainty Matrix visually highlights the critical uncertainties that will shape Taman Rejeki Group's strategic landscape. These driving forces derived from both interviews and secondary data literature reviews, provide insights that help construct the strategic landscape. This landscape is then translated into indicators and questionnaire items, which are evaluated by experts and business practitioners

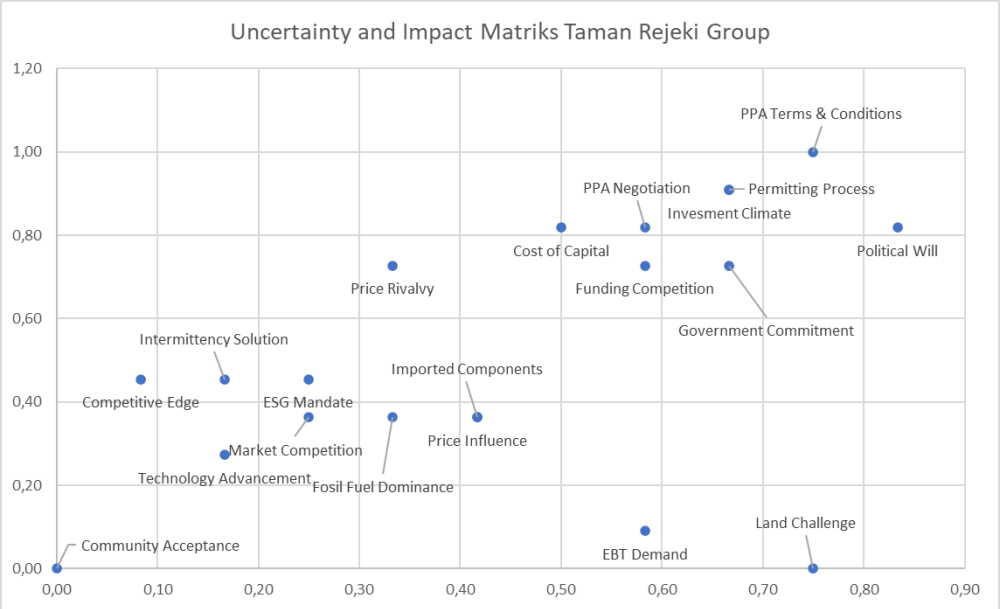

Figure 1. Uncertainly-Matriks Taman Rejeki Group

The Influence-Uncertainty Matrix identifies critical uncertainties for Taman Rejeki Group's renewable energy strategy. Two primary factors in the Critical Uncertainty Quadrant (Top Right) are Political Will and PPA Terms & Conditions both of which exhibit high impact and high uncertainty. Political Will is crucial in shaping the energy transition but is highly uncertain due to inconsistent regulatory implementation and political shifts as observed by Susanto (2022) and Sudiarta (2022)**.** The implementation of policies like Perpres No. 112/2022 and RUKN is often inconsistent, and regulations like Ministry of Energy Regulation No. 2 of 2024 on rooftop solar limit adoption and investment opportunities, exacerbating lllllll this uncertainty. Similarly, PPA Terms & Conditions have the highest impact (1.00) but also significant uncertainty (0.75), primarily due to the monopolistic position of PLN in controlling pricing and contract terms for power purchase agreements (Grant, 2016). The pricing ceiling under government regulations and competitive tender processes squeeze developer margins making renewable energy projects less attractive to investors and impeding growth.

Factors in the Key Trends Quadrant (Bottom Right) such as Investment Climate and Cost of Capital show high impact and lower uncertainty, making them key considerations for Taman Rejeki Group's strategy (Budi et al., 2023). On the other hand, Land Challenges and EBT Demand are in the Monitor quadrant (Top Left), indicating high uncertainty but low impact, meaning they should be observed but are not immediate concerns (Yudha & Tjahjono, 2019). These findings emphasize that Political Will and PPA Terms & Conditions are the most critical uncertainties for the company's renewable energy ambitions, demanding focused attention in the strategic planning process.

Stage 3: Scenario Creation

In this stage future scenarios for Taman Rejeki Group are developed based on the two critical uncertainties identified in the previous phases. These uncertainties form the foundation for constructing four potential scenarios that represent different combinations of favorable or unfavorable PPA conditions and stable or volatile political environments.

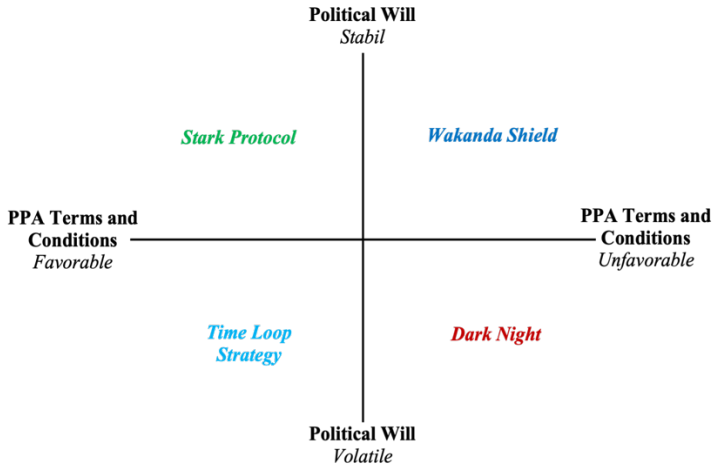

Figure 2. Scenario Creation Matriks Taman Rejeki Group
Source: 2025 processed original data

The scenario above illustrates the matrix of PPA Terms & Conditions and Political Will for the business conditions of Taman Rejeki Group facing uncertainty in the renewable energy industry in Indonesia. Scenario 1 (Stark Protocol) is characterized by favorable PPAs and stable political will that supports the company's aggressive expansion. This scenario supports rapid growth, with the potential to exceed the 500 MW target through a well-planned strategy and backcasting. However, in Scenario 2 (Wakanda Shield), while the political environment remains stable, the unfavorable PPA conditions pose a challenge. In this scenario, the group must prioritise efficiency and flexibility, exploring opportunities in hydropower and solar energy projects, such as the B2B scheme with offtakers other than PLN. In scenario 3 (time loop strategy) the political will is volatile, but the opportunity cost-benefit ratio is favourable. Although there are commercial opportunities, political instability will bring high

business risks. To overcome the challenges related to this instability, Taman Rejeki Group needs to take a highly flexible approach, such as forming a strong legal and lobbying team, with a business strategy focused on projects that are highly adaptable to regulatory changes. Examples of such projects include off-grid/hybrid projects, as well as operating lease scheme transactions. In the context of the present study, Scenario 4 (the night plan) is identified as the worst-case scenario, characterised by both unfavorable PPA and volatile political will. The dark night scenario poses a threat to Taman Rejeki Group with extreme changes, shifting its business strategy from expansion to survival through asset maintenance, implementation of non-technical resources, and extensive advocacy efforts to promote policies that are more favorable to renewable energy. These four scenarios help Taman Rejeki Group make strategic decisions based on varying levels of political stability and PPA regulations, thereby guiding the organization in navigating the uncertainties of the future.

Stage 4: Implications and Options

In this stage the study explores the opportunities, threats, and early warning signals (EWS) for each scenario. These elements provide insights into how Taman Rejeki Group can strategically respond to the evolving landscape of renewable energy development.

Table 3. Implication and Options Strategy Formulation

Scenario	Opportunities	Threats	Early Warning Signals
Stark Protocol	Access to green financing, low capital costs, competitive IRR	Focus on growth optimization	Faster PPA/permit approvals, increased EBT investment, stable component prices
Wakanda Shield	Potential for PLTA and PLTS projects with alternative financing	PPA negotiations challenging, commercial risks	High-risk PPAs, prolonged negotiations, no price revisions, high import dependency
Time Loop Strategy	Attractive PPA terms, opportunities for off-grid projects	High implementation risk, project delays	PPA terms attractive, uncertain permitting, policy changes
Dark Night Plan	Limited access to financing, high capital costs, negative IRR	Existential threat, licensing delays, financing challenges	Policy rollbacks, failed PPA negotiations, fossil fuel subsidies, canceled projects, decline in foreign investment

Stage 5: Strategy Formulation

Strategy formulation is the implementation plan is designed to adapt to the dynamics of the four future scenarios. Each scenario requires a tailored strategy to navigate the potential conditions that Taman Rejeki Group may face in achieving its 500 MW renewable energy target by 2030.

Table 4. Strategy Formulation Taman Rejeki Group

Scenario	Strategic Focus	Key Actions
Stark Protocol	Aggressive Expansion	Focus on large-scale projects, Floating PV, BESS, O&M AI; prioritize rapid project scaling.
Wakanda Shield	Efficiency and Cash Flow Protection	Diversify suppliers, revise feasibility projections, allocate capital efficiently for projects with optimal ROI, focus on B2B scheme with offtakers other than PLN.
Time Loop Strategy	Adaptation to Sudden Changes	Strengthen lobbying teams, incorporate project buffer time, focus on off-grid/hybrid projects. Explore alternative contractual schemes (PPA alignment) with PLN as offtaker.
Dark Night Plan	Survival Strategy in a Regressive Policy Climate	Implement moratorium on large projects, shift to non-construction activities (optimization O&M asset, research, education, community), exploring M&A renewable assets.

Source: 2025 processed original data

5. Discussion

This study explored the critical factors influencing Taman Rejeki Group's renewable energy strategy, particularly focusing on PPA Terms & Conditions and Political Will. The four scenarios identified Stark Protocol, Wakanda Shield, Time Loop Strategy, and Dark Night Plan offer different strategic pathways based on these uncertainties. The following summary highlights the unique conditions and implications of each scenario in greater detail.

- The Stark Protocol scenario represents the most favourable condition, where favourable PPA terms and stable political will support aggressive expansion. With abundant green financing, low capital costs, and a competitive IRR, the company is well-positioned to rapidly scale large projects such as PLTA PPP proposals, consortium-based ventures, and adopt cutting-edge technologies like Floating PV, BESS, and AI for O&M. The Early Warning Signals (EWS), such as quick PPA approvals, increased investments, consistent regulations, and stable/decreasing component prices, provide strong momentum for scaling projects, allowing Taman Rejeki Group to exceed its 500 MW target with high-impact initiatives.
- The Wakanda Shield scenario depicts a stable political situation with unfavourable PPA terms. High-risk PPAs cause electricity price negotiations between IPPs and PLN to be higher. With continued high dependence on imports for power generation, Taman Rejeki Group needs to focusing on operational efficiency and maintain healthy cash flow. The company's strategy involves diversifying suppliers, allocating capital efficiently to projects with the best ROI, and shifting to a B2B model with non-PLN off-takers, particularly for large-scale power plants. Cost control and efficient power plant operations remain priorities to achieve the 500 MW target through supplier diversification and market expansion (outside PLN).

- The Time Loop Strategy scenario describes a situation where PPA terms are attractive but political conditions are unstable. The strategy that companies need to adopt is to prepare to adapt to policy and regulatory changes that may occur suddenly. When EWS indicates attractive PPA terms but uncertainty in licensing and policy changes still exist, causing project completion schedules to be delayed. The steps the company should take include being more proactive in lobbying, adjusting project timelines with a focus on developing flexible project models such as off-grid systems and modular hybrid models. In the time loop strategy scenario, to achieve the 500 MW target, the company's investment strategy is directed toward off-grid power plants by selecting alternative project contract schemes that are more flexible to regulatory changes and have lower political risks.
- The Dark Night Plan scenario depicts the worst-case scenario with poor PPA terms and high political uncertainty. In this situation, the company's strategy is to survive by focusing on non-construction activities such as research, education, and community engagement in line with lobbying, advocacy, and public hiring efforts on renewable electricity. The EWS in this scenario is marked by policy derivatives on renewable energy that are still not in line with the presidential regulation, PPA negotiations that are still not profitable in the long term with the continued existence of fossil fuel subsidies. In these conditions, the company must postpone investment in large projects and focus on asset optimization and resource rationalization but also exploring M&A of established RE assets as lower risk growth under extreme condition. Under these conditions, the target of achieving 500 MW is very difficult to achieve. Therefore, advocacy, lobbying, demonstrations, and mass movements need to be pursued to create political will for renewable energy. On the other hand, hiring, public hearings, and focus group discusions (FGDs) need to be intensified with PLN to secure favorable PPAs as part of efforts to follow the global trend increasingly demanding renewable energy. Core renewable energy activities to weather the worst conditions.

The four scenarios above illustrate the strategic steps required by Taman Rejeki Group to achieve its target of 500 MW of renewable energy. In the Wakanda Shield scenario, the company focuses on operational efficiency, supplier diversification, and shifting to a B2B scheme with non-PLN offtakers for large-scale power plants. The Time Loop Strategy requires the company to adapt to rapid policy changes by strengthening lobbying efforts and developing flexible projects such as off-grid and modular hybrid models. Meanwhile, in the Dark Night Plan, the company must survive under current conditions through non-construction activities, strengthen advocacy and relationships with PLN to secure more favorable power purchase agreements (PPA) and exploring M&A of established RE assets.

6. Conclusions

To achieve the target of 500 MW by 2030, Taman Rejeki Group needs to implement an aggressive expansion strategy with a focus on supplier diversification, operational efficiency, and B2B schemes with non-PLN offtakers for large-scale power plants;

Adapt to policy conditions that prioritize rapid adaptation to changes in PPA pricing and regulatory frameworks through the development of flexible projects such as off-grid and modular hybrid solutions; and implement a survival strategy focused on non-construction activities, lobbying, advocacy, and asset optimization to address political and economic uncertainties. The above strategies aim to manage risks, capitalize on opportunities, and achieve the 500 MW target with a more resilient strategy. Through scenario planning and strategy adaptation, Taman Rejeki Group can overcome challenges and achieve the 500 MW target.

Further research recommendations aim to address regulatory gaps affecting hydropower and solar power projects, as well as financing models for renewable energy projects in less-than-ideal conditions like Indonesia. Research on new technologies such as Floating PV, BESS, and digitalization is needed to understand how technological adaptation can improve operational efficiency. Research related to effective stakeholder management and political strategies is needed to understand the complexities among actors in the renewable energy sector to enhance policy stability, helping Taman Rejeki Group refine its approach and adapt more effectively to the challenges of the renewable energy sector.

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