

ID Concern [reg.]	Category / Element	Risk Short Title	Description	Desired Outcome	Current Situation	Proposed Strategy	Risk (three-part) Statement			Current Risk			Response	Mitigating Action / Response				Manageability	Residual Risk	Risk Owner	Target Review Date	Close Date	Last Review Date		
							Cause	Risk Event [uncertainty]	Consequence	Probability	Impact	Score (Pxl)		ID	Action	Action Owner	Due Date							Close Date	Notes
C00006	R8 Political / Government	Political Risks Affecting Energy Sector Projects	Changes in government policies or shifts in political leadership pose a significant risk to energy projects. Such changes can result in altered sector priorities, redirection of funding, or delays in project approvals. Additionally, political lobbying by stakeholders in the traditional energy sector may create opposition, slowing progress or influencing public perception against innovative energy solutions like the proposed project.	Ensure project continuity and funding regardless of changes in political or policy environments while addressing and mitigating opposition from vested interests effectively. Could Go Wrong? Policy changes or political shifts may reduce funding or stall approvals. Lobbying from traditional energy sector stakeholders could sway decisions, creating opposition that undermines the project.	The project is currently aligned with the existing political and policy frameworks, and no significant opposition has been formally identified. However, lobbying and potential political shifts remain latent risks.	1. Develop strong government and stakeholder engagement plans to maintain alignment with policy priorities. Establish coalitions with industry allies to counter opposition. 2. Prepare contingency plans to adjust project goals and secure alternate funding if necessary.	Changes in government policies or political leadership.	Shifts in energy sector priorities or increased opposition.	Disruption to project continuity, funding, or public support.	3	5	15	Mitigate	#1	Compile Stakeholder Engagement plan.	Harakat, Abubakr	13Mar25	Open	5	10	David, Winter	30Aug25	Open	12Jan25 Changes in government policies or political leadership could lead to shifts in energy sector priorities, which may affect the project's continuity or funding. The project could face opposition due to political lobbying from vested interests in the traditional energy sector.	
C00008	R8 Political / Government	Impact of Corruption on Project Governance and Execution	Corruption in government institutions or procurement processes poses a significant challenge to the successful implementation of large-scale initiatives, such as integrating power generation projects with modular refineries and minigrids. These practices can lead to inefficiencies, compromised quality, and budget overruns, which ultimately undermine project objectives and stakeholder trust.	To establish transparent, accountable governance structures and implement rigorous monitoring mechanisms that minimize opportunities for corruption, ensuring timely and efficient project execution. Could Go Wrong? Unchecked corruption could result in widespread inefficiencies, delays, increased costs, and the deployment of substandard materials or equipment, reducing the credibility and sustainability of the project.	Instances of corruption, favoritism, and misallocation of resources have historically hindered development projects. Presently, the project is in its planning phase, where these risks must be proactively addressed through robust policies and engagement with ethical partners.	Develop a comprehensive anti-corruption framework embedded within the PHC Service, including stakeholder training, real-time audits, transparent procurement practices, and a whistleblower protection program. Collaborate with international watchdogs to foster integrity and align with global best practices.	The presence of weak institutional frameworks and lack of oversight mechanisms facilitates corruption in procurement and resource allocation.	Corrupt practices during the procurement process or allocation of contracts lead to delays, inflated costs, and substandard implementation.	Project efficiency and credibility are compromised, potentially derailing objectives and damaging stakeholder confidence.	5	4	20	Mitigate	#1	Develop anti-corruption framework.	David, Winter	13Mar25	Open	4	16	David, Winter	25Apr26	Open	12Jan25 Corruption in government institutions or during the procurement process may lead to delays, inflated costs, or substandard materials and equipment. Misallocation of resources or favoritism in awarding contracts could negatively affect project efficiency and credibility.	
C00010	T2 Design / Eng.	Key Technology and Maintenance Risks in Modular Refineries and Minigrids Integration	The project to integrate power generation assets with modular refineries and minigrids in Nigeria relies heavily on the efficiency and reliability of key technologies such as renewable energy systems, grid management software, and smart meters. Additionally, maintaining operational consistency in modular refineries and minigrids is crucial for the project's success. These elements are fundamental for ensuring the seamless distribution of power, meeting national grid demands, and achieving export goals.	To establish a robust, technology-driven power network that mitigates risks of system failures and ensures continuous energy supply. Effective maintenance protocols will ensure modular refineries and minigrids operate efficiently to support urban, rural, and cross-border energy needs without significant interruptions. Could Go Wrong? Key technology failures or inadequate maintenance could lead to power interruptions, delays in project timelines, and reduced performance, undermining stakeholder confidence and project goals.	The project is in its planning phase, with significant emphasis placed on technological integration and infrastructure development. Existing challenges include potential equipment failures, insufficient maintenance plans, and the need for comprehensive monitoring systems. Stakeholders have identified risks but require a detailed mitigation framework.	1. Conduct a detailed feasibility study to assess technological vulnerabilities. 2. Implement predictive maintenance programs for all modular refineries and minigrids. 3. Establish a centralized PHC dashboard for real-time monitoring and risk assessment. 4. Train local teams in advanced maintenance techniques and system troubleshooting. 5. Introduce pilot programs to test and refine technology integration strategies.	Reliance on advanced but unproven renewable energy systems and the complexity of integrating modular refineries and minigrids with the national grid.	A critical system failure occurs, either due to equipment breakdowns or insufficient maintenance, resulting in disruptions to power supply.	Power outages and delays in project milestones lead to reduced reliability, increased costs, and potential loss of stakeholder support. This may jeopardize the project's ability to meet energy distribution and export goals.	3	3	9	Mitigate	#1	Make a feasibility study to assess technological vulnerabilities.	Inyang, Etido	13Mar25	Open	3	6	David, Winter	28Mar26	Open	12Jan25 Failure of key technologies, such as renewable energy systems, smart meters, or grid management software, could delay project implementation or reduce performance. Equipment breakdowns or lack of proper maintenance in modular refineries or minigrids could cause power interruptions or system failures.	

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C00015	R6 Approvals / Permits / Licenses	Land Acquisition and Resettlement Challenges for Mini-Grids and Grid Infrastructure	Delays in acquiring land for the construction of mini-grids and grid infrastructure could arise due to legal disputes, ownership ambiguity, or inadequate compensation for stakeholders. Similarly, resettling populations affected by energy infrastructure projects might lead to conflicts or delays if the processes lack transparency, fairness, and adequate engagement with communities.	To ensure smooth land acquisition and resettlement processes by implementing equitable, transparent, and community-focused strategies that prevent delays and foster positive relationships with stakeholders.	Initial assessments indicate a high risk of disputes stemming from land acquisition and resettlement activities in identified project areas. Legal frameworks for resolving ownership issues exist but are cumbersome, often requiring prolonged resolution. Communities affected by resettlement remain skeptical about the fairness of compensation and relocation strategies.	1. Conduct comprehensive land assessments to identify potential legal and ownership issues early. 2. Engage legal experts to streamline resolution processes for disputes. 3. Develop a clear, transparent, and equitable resettlement framework that includes fair compensation and adequate community involvement. 4. Establish grievance redressal mechanisms to handle disputes efficiently. 5. Facilitate community meetings to build trust and ensure alignment with local stakeholders.	Ineffective planning and lack of stakeholder engagement in the processes of land acquisition and population resettlement.	Delays in acquiring land or executing resettlement due to disputes over legal ownership, compensation, or perceived unfairness in the process.	Prolonged project timelines, increased costs, and potential loss of community support, jeopardizing the project's successful implementation.	4	3	12	Mitigate	#1	Conduct land assessments register.	Asibong, lme	13Mar25	Open	4	9	David, Winter	21Feb26	Open	12Jan25 Delays in acquiring land for the mini-grids or grid infrastructure may occur due to legal disputes, ownership issues, or compensation concerns. Resettling affected populations in areas where new energy infrastructure is to be built could lead to conflicts or delays if not handled transparently and fairly.	
C00023	C2 Market/Product	Impact of Global Energy Market Dynamics on Modular Refinery Project Viability	The profitability of modular refineries may be significantly influenced by fluctuations in global energy prices, especially in the oil and gas sectors. These changes can affect the cost of raw materials, the price of refined products, and the overall return on investment. Simultaneously, rapid shifts in renewable energy markets and advancements in green technology could reduce the long-term competitiveness and sustainability of the project. Such unpredictability presents a dual challenge: maintaining profitability in volatile oil markets while addressing the increasing global demand for renewable energy solutions.	To mitigate the impact of global energy price volatility and shifts in renewable energy markets, ensuring the modular refinery project remains profitable and attractive to investors while incorporating strategies to align with long-term sustainability goals.	The global energy market is characterized by high volatility, driven by geopolitical tensions, technological advancements, and shifting consumer preferences. While oil and gas prices have recently seen fluctuations, renewable energy markets are gaining traction with increasing adoption rates. The modular refinery project is currently in the planning stage, with profitability projections based on current market trends. Investor interest remains moderate, with concerns about long-term sustainability and profitability.	1. Conduct market analysis to monitor energy price trends and predict future shifts. 2. Develop flexible pricing models to adapt to energy market fluctuations. 3. Integrate renewable energy options into refinery operations, such as solar or biomass energy, to enhance sustainability. 4. Build strategic partnerships with investors aligned with both traditional and renewable energy sectors. 5. Implement risk mitigation strategies, such as insurance or hedging against price volatility.	Global energy prices are subject to volatility due to geopolitical, economic, and environmental factors.	Fluctuations in oil and gas prices and advancements in renewable energy technologies alter the energy market landscape.	Reduced profitability of modular refineries and diminished attractiveness to investors.	4	4	16	Mitigate	#1	Conduct market analysis of price trends.	Asibong, lme	13Mar25	Open	2	8	David, Winter	20Mar26	Open	12Jan25 Changes in global energy prices, particularly oil and gas, could affect the profitability of the modular refineries and reduce the attractiveness of the project for investors. Unpredictable changes in renewable energy markets could impact the project's competitiveness and long-term sustainability.	
C00026	C2 Market/Product	Challenges in Cross-Border Energy Trade and Grid Interoperability in West Africa	Disputes over pricing models, contractual terms, and operational standards between Nigeria and other West African countries pose significant risks to cross-border energy trade agreements. Additionally, infrastructure-related challenges, such as the lack of interoperability or non-harmonized grid standards, threaten to delay Nigeria's integration with neighboring energy networks. These issues can undermine efforts to develop a unified regional energy market, impacting energy security, economic growth, and regional cooperation.	Nigeria establishes fair, transparent pricing and contractual frameworks that are acceptable to all parties while achieving harmonization of grid standards to enable seamless cross-border energy trade. The result is a robust, interconnected energy market in West Africa that fosters energy access, economic development, and regional stability.	Nigeria is actively working on expanding its energy production and regional trade capabilities but faces challenges with neighboring countries in agreeing on terms and harmonizing technical standards. Existing grid infrastructure shows gaps in compatibility, and current negotiations with regional partners have highlighted differences in priorities and expectations.	1. Convene multilateral discussions focused on creating transparent and mutually beneficial pricing and operational agreements. 2. Establish a regional task force to address grid interoperability issues and develop common standards. 3. Leverage partnerships with international energy organizations to mediate disputes and provide technical expertise. 4. Invest in modernizing Nigeria's grid infrastructure to ensure compatibility with neighboring systems. 5. Pilot small-scale cross-border energy projects to build trust and demonstrate feasibility.	Divergent national priorities and lack of alignment on energy pricing models, contractual terms, and operational protocols.	Delays or breakdowns in cross-border energy trade agreements and grid integration projects.	Missed opportunities for regional energy collaboration, economic losses, and reduced progress toward energy security in Nigeria and West Africa.	4	4	16	Mitigate	#1	Meet with energy clients for mutual beneficial pricing agreements.	Asibong, lme	13Mar25	Open	5	8	David, Winter	27Jun26	Open	12Jan25 Disagreements over pricing, contractual terms, and operational standards with other West African countries may reduce the success of cross-border energy trade agreements. Issues related to infrastructure interoperability or harmonization of grid standards could cause delays in connecting Nigeria's energy network to neighboring grids.	