



# Risk Management

## Risk Management Policy and Plan

BCPG has implemented the COSO ERM 2017 risk management framework to prevent and address any potential obstacles that could hinder the organization from reaching its objectives. This approach aligns with the company's vision, mission, and corporate strategies, as well as the Environmental, Social, and Governance Policy, which may be updated periodically to reflect market conditions. To support these commitments, BCPG has established a comprehensive risk management system, allocated sufficient resources and budgets, and involved executives and employees at all levels. Additionally, the enterprise-wide Risk Management Committee oversees the entire process to ensure successful business outcomes.

## Business Risk Factors

### 1. Enterprise-wide Risk Management

The key corporate risks encompass six scopes, spanning both internal and external factors: strategic, operational, financial, environmental, reputational, and sustainable risks. These risks are meticulously managed through a target-oriented risk management process, involving comprehensive risk identification and assessment protocols. Additionally, thorough analyses of emerging risks, fraud, and corruption risks are conducted to gauge their likelihood and impact, utilizing Key Risk Indicators and adhering to predefined risk assessment criteria. Robust risk management plans are then implemented to mitigate these risks, ensuring they are maintained at acceptable levels or preemptively curtailed.

In 2023, the Company conducted a comprehensive assessment of key risks in alignment with corporate strategies, objectives, and targets, as well as in accordance with Environmental, Social, and Governance (ESG) guidelines, outlined as follows:

Risk Classification	Description	Mitigation Plan
<b>(1) Strategic Risk</b>		
1.1 Risks stemming from fluctuations in public policies regarding energy in the Company's invested countries.	The power plant business of BCPG is heavily reliant on the public energy policies of each country. Any changes to these policies or investment requirements have the potential to impact power purchase agreements and future business plans. In 2023, there was a decrease in feed-in tariffs (FIT) due to government policy changes. Additionally, the price of natural gas, a primary fuel for power production, declined, subsequently affecting the cost of power purchases and the operational results of the Group.	<ul style="list-style-type: none"> <li>- Remain vigilant in staying abreast of evolving public policies and energy plans, both domestically and internationally.</li> <li>- Conduct thorough analysis and define tailored strategies to align with new project investments.</li> <li>- Foster and strengthen relationships with government regulators and other relevant entities to facilitate seamless investment processes.</li> </ul>
1.2 Risk associated with the inability to secure planned new projects.	In the current landscape, business expansion or the acquisition of new investment projects may face challenges in meeting targets due to regulatory amendments and increased market competition.	<ul style="list-style-type: none"> <li>- Identifying growth opportunities aligned with the Company's business and investment plans, including:               <ol style="list-style-type: none"> <li>1) Investing in the clean energy sector.</li> <li>2) Implementing innovative energy management technologies to drive revenue growth, such as battery storage systems or smart energy solutions.</li> <li>3) Participating in related infrastructure projects.</li> </ol> </li> <li>- Formulating investment plans and implementing rigorous investment monitoring procedures.</li> <li>- Recruiting and developing personnel in accordance with future business and investment strategies.</li> <li>- Collaborating with business partners and engaging consultants to optimize project execution.</li> <li>- Regularly considering or presenting investment plans to the Board of Investment and the Board of Directors for review and exploration of potential business opportunities.</li> </ul>
1.3 Risk stemming from changes in technological innovations.	Technological advancements and innovations significantly impact the energy industry, shaping BCPG's business landscape. While these developments often lead to cost reductions, they also intensify competition in pricing for goods and services, potentially yielding returns below initial expectations.	<ul style="list-style-type: none"> <li>- Conducting comprehensive studies and proficiently monitoring electricity management systems using both existing and emerging technologies.</li> <li>- Collaborating with government bodies to provide input on policies and requirements pertaining to technological advancements, such as battery technology, with the aim of jointly innovating energy storage systems.</li> <li>- Partnering with key stakeholders and accounts to facilitate Peer-to-Peer (P2P) Energy Trading initiatives and contribute to the development of smart city solutions.</li> </ul>

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1.4 Risk related to the reliability of contracting nations in foreign investments.	<p>The fluctuation of a country's credit rating poses an investment risk, as these ratings are indicative of economic health, financial stability, national reserves, and debt capacity.</p> <p>For instance, when a credit rating agency downgraded the rating of Lao PDR due to concerns about its financial stability, the Company experienced delays in settling electricity bills of government entities.</p>	<p>For investments in power plants in the Lao PDR:</p> <ul style="list-style-type: none"> <li>- Collaborate with local partners to establish strong relationships with government bodies, ensuring support and timely payment of electricity bills.</li> <li>- Expedite the establishment of a joint venture for the development and construction of electrical transmission lines to distribute electricity from the Lao PDR to Vietnam, a country with a favorable credit rating, by the end of 2023.</li> <li>- Conduct a comprehensive study of guidelines for managing accounts receivable.</li> <li>- Explore investment opportunities in countries with robust credit ratings, such as Taiwan, the United States, and others.</li> </ul>
<b>[2] Operational Risk</b>		
2.1 Risk stemming from the operational performance of power plants in which the Company has investments.	In the power generation process, several factors can influence the efficiency and stability of electricity production. These factors include equipment deterioration, losses during the production process, adverse weather conditions, and interruptions in business operations due to internal or external factors. These variables directly impact the quantity of electricity generated and the Company's revenue.	<ul style="list-style-type: none"> <li>- Utilize computerized systems and artificial intelligence (AI) technology to track and inspect the performance of power generating equipment, enabling the creation of proactive maintenance or replacement plans.</li> <li>- Secure guarantees for production volume and electricity availability from contractors for each project.</li> <li>- Collaborate with the Electricity Authority to ensure the stability of the electrical distribution system.</li> </ul>
2.2 Risk stemming from management of projects that are in the development and construction phases.	The development and construction of domestic and overseas power plants hinge on numerous factors, including obtaining licenses, securing funding, acquiring land, constructing electrical transmission lines, and complying with power purchase agreements. Delays or complications in any of these aspects may hinder projects from being commercially launched as planned, potentially impacting the returns on investment.	<ul style="list-style-type: none"> <li>- Implement rigorous follow-up procedures, closely monitor and inspect project progress at regular intervals.</li> <li>- Collaborate closely with seasoned partners to expedite schedules.</li> <li>- Conduct thorough reviews of return rates and analyze project sensitivity (Sensitivity Analysis) to ensure they are maintained at optimal levels for success.</li> </ul>
2.3 Risk associated with recruitment or development of personnel in line with strategic plans.	The Company is committed to ongoing business expansion, both domestically and internationally. However, existing personnel recruitment and development plans may not always align promptly with the growing demands.	<ul style="list-style-type: none"> <li>- Collaborate with relevant departments to develop manpower plans aligned with corporate strategic objectives.</li> <li>- Assess individual knowledge and capabilities in accordance with the expectations outlined in each development plan.</li> </ul>

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2.4 Risk associated with seasonal volatility or natural disasters.	Given the Company's core focus on generating electricity from renewable sources such as solar, wind, and hydropower, it is important to acknowledge the inherent variability and climate-related uncertainties associated with these energy sources. Natural disasters, in particular, pose a significant risk to operations and may impact electricity production levels.	<ul style="list-style-type: none"> <li>- Engage external experts to analyze and assess climate conditions, comparing findings to 10-year statistical data, and regularly monitor weather forecasts to inform operational planning.</li> <li>- Secure comprehensive business interruption insurance covering property damage and third-party liability.</li> <li>- Develop robust business continuity management plans outlining procedures for recovery in the event of a natural disaster.</li> </ul>
2.5 Risk associated with safety, occupational health and the environment.	The Company prioritizes safety, occupational health, and environmental management across its entire supply chain, encompassing both employees and contractors involved in each project. The overarching goal is to achieve zero lost-time injuries, fatalities, and prevent any recurrence of safety incidents.	<ul style="list-style-type: none"> <li>- Enhance and regularly monitor the workplace environment, ensuring the implementation of standard security systems and regular training on annual safety plans.</li> <li>- Continuously monitor, control, and report any instances of lost-time injuries or fatalities involving employees or contractors, with a focus on refining work plans for improvement.</li> <li>- Establish an ISO 45001 occupational health and safety management standard system and an ISO 14001 environmental management system for the Company's power plants, with annual inspections.</li> <li>- Offer employee welfare and health initiatives, including access to sports equipment, visual acuity tests, exercise activities, and other relevant programs.</li> </ul>
<b>[3] Financial Risk</b>		
3.1 Risk stemming from exchange rate fluctuations	The Group's investments in power plants span both domestic and international markets, resulting in income, expenses, and loans denominated in various foreign currencies such as the US dollar and yen. Fluctuations in exchange rates consequently affect the Company's operating results.	<ul style="list-style-type: none"> <li>- Natural Hedge: Given the inherent characteristics of the Company's projects, both income and expenses will be denominated in the same currency. Likewise, funding sources will match the currency of income and cash flow generated by these projects.</li> <li>- Continuously monitor exchange rates to assess their impact on net assets and liabilities, ensuring they are at an acceptable level and aligned with relevant policies.</li> <li>- Employ suitable financial instruments such as forward contracts and cross-currency swaps to effectively manage exchange rate risk when necessary.</li> </ul>

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3.2 Risk stemming from interest rate fluctuations	The recent uptick in interest rates set by central banks across different countries has led to higher borrowing costs, particularly for loans with floating interest rates. This has the potential to impact the Company's operating results and financial standing.	<ul style="list-style-type: none"> <li>- Provide loans while maintaining a balanced ratio of fixed and floating interest rates, adjusted according to prevailing market conditions.</li> <li>- Vigilantly monitor interest rate trends to proactively manage rate risks as circumstances evolve.</li> <li>- Employ suitable financial instruments such as forward contracts and cross-currency swaps to effectively manage exchange rate risk when necessary.</li> </ul>
<b>(4) Environmental and Corporate Reputation Risks</b>		
4.1 Risk associated with complaints lodged by communities or stakeholders	The development of the Company's projects often entails acquiring land for the construction of power plants, which can lead to complaints from neighboring communities. This may result in legal liabilities for damages, as mandated by law, or reputational harm that cannot be quantified monetarily.	<ul style="list-style-type: none"> <li>- Conduct a public hearing prior to project commencement to assess environmental and safety impacts on the local community.</li> <li>- Enhance community engagement and foster positive relationships by conducting feedback and/or expectation surveys, which will serve as valuable guidelines for addressing community needs and concerns.</li> <li>- Collaborate with local agencies to support initiatives aimed at enhancing the quality of life and well-being of community members, fostering self-reliance and sustainability.</li> </ul>
4.2 Risks associated with sustainable business developments in line with corporate strategic plans.	In conducting its operations, the Company prioritizes environmental, social, and governance (ESG) factors to foster sustainable growth and deliver long-term value to stakeholders. Within the sustainability management framework, the Company ensures that key business decisions are made with careful consideration of these factors and through meaningful engagement with stakeholders. In 2023, the Company maintained its high ESG ratings, achieving an 'A' rating from MSCI ESG Research and an 'AA' rating from the Stock Exchange of Thailand's SET ESG Ratings. However, any significant changes in assessment criteria that prevent the Company from adjusting accordingly could potentially lead to a downgrade in credibility ratings, thereby impacting corporate reputation.	<ul style="list-style-type: none"> <li>- Review and align policies and goals for sustainable business development with operational plans to ensure consistency.</li> <li>- Continuously track and report performance results to enhance and refine the sustainability management system.</li> <li>- Transparently disclose sustainability performance results in accordance with public reporting standards to foster trust and confidence among stakeholders.</li> </ul>

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4.3 Risk stemming from amendments to pertinent laws, regulations, rules and Company's regulations.	Revisions to pertinent laws and regulations, or shifts in interpretation from existing standards, can introduce compliance gaps that may expose the Company to penalties or license revocation. In severe cases, this could entail temporary or permanent closure of power plants, significantly impacting both the Company's operations and reputation.	<ul style="list-style-type: none"> <li>- Ensure stringent adherence to existing laws and regulations while vigilantly monitoring any amendments or updates.</li> <li>- Regularly review company policies and regulations, and effectively communicate them to all stakeholders to ensure comprehensive compliance.</li> </ul>
<b>(5) Emerging Risks</b>		
5.1 Risk stemming from climate change.	<p>The impacts of global climate change, including increasing average temperatures and disruptions to biodiversity ecosystems, have underscored the urgent need for action. In response, the Paris Agreement was established under the United Nations Framework Convention on Climate Change (UNFCCC). The 28th annual meeting (COP28) convened in Dubai, United Arab Emirates, in December 2023, with a specific emphasis on the following priorities:</p> <ol style="list-style-type: none"> <li>1) Transitioning to clean energy sources to achieve a significant reduction in greenhouse gas emissions by 2050.</li> <li>2) Providing financial support to impoverished nations and fostering agreements in developing countries.</li> <li>3) Addressing the impacts of climate change on both natural ecosystems and human populations.</li> <li>4) Ensuring comprehensive coverage of a wide range of issues during the meeting.</li> </ol> <p>Despite facing criticisms regarding the continued use of fossil fuels, the Company remains steadfast in its commitment to advancing its carbon neutrality roadmap by 2030 and net zero goals by 2050. Recognizing the imperative to address climate change, failure to adapt could potentially jeopardize corporate reputation and hinder progress towards achieving the net zero objective.</p>	<ul style="list-style-type: none"> <li>- Set out the Group's carbon neutrality and net zero goals to achieve by 2030 and 2050, respectively, with a corporate greenhouse gas reduction plan.</li> <li>- Monitor changes in government policy to reduce greenhouse gas emissions.</li> <li>- Create and review greenhouse gas reduction targets in the short-medium-long term to be in line with the scope it set.</li> </ul>

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5.2 Risk associated with cyber threats	The information technology system serves as the backbone for data storage, enabling the Group to analyze, control, and reference information critical for efficiency planning. In the event of a cyber threat, the potential loss of vital data or disruption to business operations could significantly impact business continuity, credibility, image, and corporate reputation.	<ul style="list-style-type: none"> <li>- Review information security policies and practices, as well as measures to prevent data leakage according to the information security management standard (ISO 27001).</li> <li>- Provide training for internal personnel to ensure they are aware of cyber threats and preventive measures to mitigate potential impacts, on an annual basis.</li> <li>- Launch a cyber threat assessment test to ensure employees are always aware of its importance and proactively prevent the incidents before they happen.</li> </ul>
5.3 Risks associated with personal data protection	The increasing prevalence of personal data threats poses a significant concern in today's digital landscape. Personal information, being identifiable and linked to numerous transactions, is susceptible to potential breaches. This raises the risk of unauthorized exploitation of personal data for personal or marketing gains, often without the consent of the individuals involved. Such infringements not only compromise the rights and freedoms of data subjects but also have detrimental effects on corporate reputation and image.	<ul style="list-style-type: none"> <li>- Maintain regular updates on announcements from relevant government bodies.</li> <li>- Conduct an annual review of the Company's personal data protection policy and disseminate updates to stakeholders through various communication channels.</li> <li>- Establish a dedicated working group and appoint personal data protection officers with clearly defined duties and responsibilities in accordance with the Personal Data Protection Act. This ensures efficient collection, storage, and processing of personal data belonging to employees, partners, and stakeholders, while aligning with the Company's data protection policy.</li> <li>- Provide comprehensive training and communication initiatives to enhance awareness of personal data protection practices among all personnel.</li> <li>- Robustly monitor complaints related to personal data breaches.</li> </ul>
<b>(6) Corruption Risk</b>		
6.1 Risk stemming from corruption	At various stages of business operations, interactions with government entities may be necessary to rectify errors or facilitate continuity. However, this could inadvertently result in facilitation payments being made in the form of entertainment, gifts, donations, or sponsorships. Such practices, while aimed at expediting processes, may ultimately tarnish the reputation and image of the Company.	<ul style="list-style-type: none"> <li>- Have disbursement procedures in place and clearly document evidence of disbursement, and ensure it is trackable and verifiable.</li> <li>- Review corporate governance policy, anti-corruption guidelines, and non-bribery practices, by communicating them to stakeholders for their awareness and strict compliance.</li> <li>- Provide a complaint channel on the Company's website and follow up on the number of whistleblowing reports or complaints while also reporting the results to the Audit Committee.</li> <li>- Become a member of Thailand's Private Sector Collective Action Coalition Against Corruption, or CAC.</li> </ul>

## 2. Investment Project Risk Management

Investment project risk management is important and essential in business operations. The analysis must be clear and systematic to ensure that each project will be successful and aligned with the goal or objectives. Risks will be considered based on project phases as follows:

1. Business & Commercial Risk
2. Development & Construction Risk
3. Operation Risk
4. Environmental & Safety Risk
5. Fraud and Corruption Risk

Hence, the Company mandates investment project owners to conduct comprehensive risk assessments and provide budgets or investment cost analyses for thorough evaluation. Risk management plans will be tailored to project implementation timelines, with careful consideration of resource costs. Prior to submission to the Board of Directors, these risk management plans must obtain approval from the Enterprise-wide Risk Management Committee.

## 3. Business Continuity Management

The Company acknowledges the paramount importance of proactive readiness to address potential crises that may disrupt business operations. As a proactive step, in 2023, the Company instituted a comprehensive Business Continuity Management (BCM) policy that encompasses the operations of the entire Group. The principal aims of this policy are to ensure business continuity, minimize losses, mitigate impacts, and expedite a swift return to normal operations. These objectives are pursued through the following initiatives:

1. Develop and enhance the Business Continuity Management System in alignment with relevant international standards, meticulously defining scope, objectives, roles, duties, responsibilities, and allocating internal and external resources accordingly.
2. Establish robust business continuity strategies alongside incident and crisis response structures, ensuring the prompt recovery of critical processes.
3. Task all departments, overseeing both major and supporting processes, with the preparation, execution, and regular revision of documents pertaining to business continuity management. This ensures the accurate, comprehensive, and up-to-date utilization of data.
4. Foster a culture where executives and employees across all levels understand the significance of business continuity management. Encourage support, promote diligent actions, and ensure active participation in policy execution to fulfill the Company's objectives.