



Emerging Risk 2024

1. Legal risks, government policies, and pressure related to carbon reduction (Carbon Reduction Pressure)

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| Type: | Compliance Risk Operational Risk |
| Timeframe: | Short-term risk (1–3 years) |
| Details : | <p>In response to the government's policy supporting Thailand's goal of achieving net-zero carbon dioxide emissions, national energy plans have outlined targets to reduce greenhouse gas (GHG) emissions in three phases:</p> <p>By 2030: GHG emissions to be reduced by 30%–40%</p> <p>By 2050: Achieve carbon neutrality</p> <p>By 2065: Achieve net-zero GHG emissions</p> <p>To facilitate the achievement of carbon neutrality, the government may introduce new or more stringent policies and regulations aimed at reducing GHG emissions in line with national targets. These could include measures such as the imposition of a carbon tax, restrictions on the use of fossil fuels, clearer targets for fossil fuel reduction, increased support for clean energy, limits on GHG emissions, and other stricter environmental requirements and regulations.</p> <p>The company recognizes the risks associated with potential changes in government policies and regulations related to GHG emissions. Failure to comply with these requirements could result in penalties or operational restrictions.</p> <p>Furthermore, as part of the global energy transition, many countries are increasing pressure to reduce fossil fuel consumption and shift towards clean energy sources through government-led policies and initiatives. Additionally, changing consumer behavior, with increasing environmental awareness and a growing shift toward clean energy use, is expected to impact long-term demand for oil.</p> |

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| | <p>There is also growing public and stakeholder expectation for companies to reduce carbon emissions and adopt sustainable environmental practices. If the company fails to adapt to these trends, it could lose the trust of stakeholders across all sectors.</p> |
| <p>Impact :</p> | <p>If the company emits a significant amount of carbon dioxide, contributing to greenhouse gas emissions, without implementing proper management and mitigation measures, it may negatively affect the company's reputation. This could lead to stakeholder dissatisfaction or a loss of confidence in the company. Additionally, the company may need to revise its business plans to ensure compliance and adapt to evolving government policies and regulations, which may require higher-than-expected investment in certain projects. Moreover, the company could incur increased operational costs in several areas, such as:</p> <ul style="list-style-type: none"> ● Higher management costs resulting from carbon taxes, which are key instruments used by many governments to reduce greenhouse gas emissions; ● Operational costs related to the disclosure of greenhouse gas emissions data, as required by government agencies or regulatory bodies; ● Vehicle-related taxes that are calculated based on carbon emissions; ● Potential penalties or liability claims due to non-compliance with climate-related laws and regulations. |
| <p>Mitigation Measures:</p> | <p>The company is committed to reducing carbon dioxide emissions that contribute to greenhouse gases, in order to help mitigate climate change. It has established a climate change management strategy to align with the targets outlined in the National Energy Plan, which promotes the use of clean energy and aims to achieve net-zero carbon dioxide emissions in Thailand by 2065–2070.</p> <p>As part of this commitment, the company has set a target to achieve organizational carbon neutrality by 2030. To support this goal, the company has developed the following implementation approach:</p> <ul style="list-style-type: none"> ● The company assesses climate-related risks in accordance with the framework of the Task Force on Climate-related Financial Disclosures (TCFD) and manages these risks consistently with the organization's overall risk management. It has also |

prepared a report analyzing climate-related risks and opportunities based on the TCFD principles to compile information on risks, opportunities, and potential impacts of climate change on the company's business operations, and to establish mitigation measures to address possible future scenarios.

- The company monitors updates on policy and regulatory changes from government agencies and studies the impact of the Carbon Tax.
- The company invests in new businesses that benefit from climate-related laws and focuses on increasing the gross profit proportion from non-oil businesses. It seeks partners with expertise in clean technology to jointly invest in waste management and waste-to-fuel businesses.
- The company participates in the Thailand Voluntary Emission Reduction Program (T-VER) through its solar rooftop project.
- In addition, the company has implemented various projects to help mitigate the impact of greenhouse gas emissions, such as installing electric vehicle (EV) charging stations in collaboration with the Electricity Generating Authority of Thailand (EGAT), supporting the use of clean energy in line with government policy; the Palm Complex project; the use of biodiesel for transportation vehicles; waste separation and recycling projects; mangrove reforestation for carbon credits; and projects to develop and promote sustainable cultivation of Arabica coffee and other economic crops.

2. Risks from the Impact of Artificial Intelligence Technology (AI Disruption)

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| Type: | Strategic Risk |
| Timeframe: | Short-term risk (1–3 years) |
| Details : | <p>Currently, innovation and technological changes are becoming increasingly influential because every business adopts new technologies to enhance operational efficiency in various areas and improve competitive capabilities. One technology that is increasingly impactful today is Artificial Intelligence (AI). The emergence of AI technology has had widespread effects on many sectors of society and the economy. This technology has rapidly developed in recent years and plays a significant role in transforming workflows, developing new innovations, and driving adaptation across multiple industries. Therefore, the company must prepare to face challenges and leverage opportunities for AI development appropriately. If the company implements AI in its operations, it may face various risks, including:</p> <ul style="list-style-type: none">● Business Adaptation: Changes in AI technology may affect the company's business models, such as using AI to improve logistics management efficiency, offering new products that better meet market demands, and developing intelligent systems to provide better services. If the company cannot adapt or timely develop AI applications to enhance its competitiveness, it may be disadvantaged, losing market share and customer base in rapidly adapting industries.● Data and Cybersecurity: Using AI relies heavily on large amounts of data for analysis and processing. If the company lacks sufficient data, the data used for AI development may be of inadequate quality or incomplete, resulting in inaccurate AI outcomes. Additionally, storing data and using AI to analyze customer or stakeholder information may expose the company to cybersecurity risks and personal data breaches. In the event of data leaks or cyber-attacks, the company could be legally liable and suffer all associated damages.● Technological Uncertainty: AI technology continues to develop rapidly and continuously, leading to high uncertainty. Investments in AI that may become obsolete or inappropriate in the future could result in significant business costs.● Personnel Skills: When the company undergoes technological transformation, a shortage of skilled personnel in advanced technologies, such as AI system management, digital system administration, and clean energy production |

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| | <p>technologies, could pose a long-term risk. This may delay the company's adaptation to changing conditions and markets, resulting in lost competitive opportunities.</p> <ul style="list-style-type: none"> ● Reliability: Relying solely on AI for decision-making in some areas risks erroneous decisions, as AI may be unable to process complex or unusual contexts. AI failures or undesirable outcomes could lead to inappropriate business decisions, workflow disruptions, or business damages, and may negatively impact the company's reputation. |
| <p>Impact :</p> | <p>If the development of Artificial Intelligence (AI) technology progresses rapidly, the company may not be able to adjust its business strategies and prepare for related technological advancements in time. It may also fail to respond promptly to changes in consumer behavior in the digital era. This could result in lost opportunities and diminished business competitiveness, which would impact the company's performance and growth. Additionally, the company may be held liable both legally and financially in the event of data breaches or cyberattacks.</p> |
| <p>Mitigation Measures:</p> | <p>Mitigation Measures: The company undertakes risk management to reduce the impact of Artificial Intelligence (AI) technology as follows:</p> <ul style="list-style-type: none"> ● Reviewing corporate strategies and analyzing data on new technological changes, as well as studying emerging technologies, to forecast technology strategies and guide business operations in order to keep pace with business adaptation in a changing environment. ● Considering the establishment of policies and committees to oversee the use of AI technology within the organization and setting governance for utilizing data in the AI platform in alignment with the organization's Data Hub. ● Organizing the PTG Technology DAY event to update technology trends and provide knowledge on new technologies, as well as raising cybersecurity awareness among employees through expert lectures and booths featuring technology trends that employees can apply in their work, such as modern work with AI, new communication methods, and cybersecurity threat prevention. This aims to equip employees with knowledge and enhance their ability to utilize AI technology in their tasks. ● Continuously advancing the strategy for building data analytics systems towards enterprise AI by adopting AI technology on the Dataiku platform to develop various |

business solutions that drive decision-making efficiency and create business sustainability. This technology is used to build predictive modeling integrated with a membership system of over 20 million users to calculate the Customer Lifetime Value and enhance marketing personalization, increasing efficiency and reducing marketing costs, while also saving time in model creation, which is critical for maintaining the competitive advantage of the business group.

- Procuring AI technology to assist internal organizational processes, such as implementing Robotic Process Automation (RPA) technology to create software bots for automating tasks on computer systems, assisting in payment processing and debt write-offs, and deploying Generative AI to support service desk queries to provide IT services to employees, among others.
- The company has a Personal Data Protection Office that oversees and monitors the company's personal data processing to ensure compliance with data protection laws. The company defines access rights to data and establishes procedures and systems for approving the use of critical company data, with clearly designated approvers responsible for data access requests.