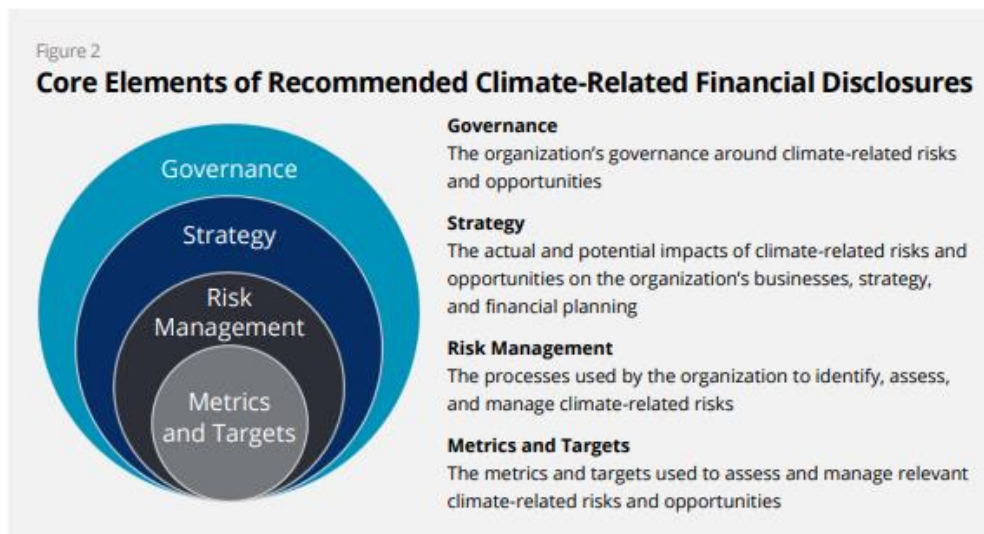




# **Carabao Group TCFD Report 2022**

# TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (TCFD) 2022

Adopting the TCFD framework is a valuable step for Carabao Group (CBG) to address climate-related risks and capitalize on emerging opportunities. By integrating climate considerations into its governance, strategy, risk management, metrics, and disclosure practices, CBG can enhance its resilience, transparency, and long-term value creation. Embracing the TCFD framework is not only an ethical imperative but also a strategic move that positions CBG for success in a sustainable future.



## Disclosure Aligned with Force on Climate Related Financial Disclosure (TCFD) Framework

Recommendation Disclosure	Disclosure Source
<b>Governance</b>	
a) Describe the Board's oversight of climate-related risks and opportunities.	Page 3-5
b) Describe management's role in assessing and managing climate-related risks and opportunities.	

## Strategy

a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.

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b) Describe the impact of climate related risks and opportunities on the organization's business, strategy, and financial planning.

c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.

## Risk Management

a) Describe the organization's processes for identifying and assessing climate-related risks.

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b) Describe the organization's processes for managing climate-related risks.

c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.

Metrics and Targets	
a) Describe the metrics used by the organization to assess climate related risks and opportunities in line with its strategy and risk management process.	Page 21
b) Describe Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.	
c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	

## GOVERNANCE

### a) Describe the Board's Oversight of Climate-related Risks and Opportunities

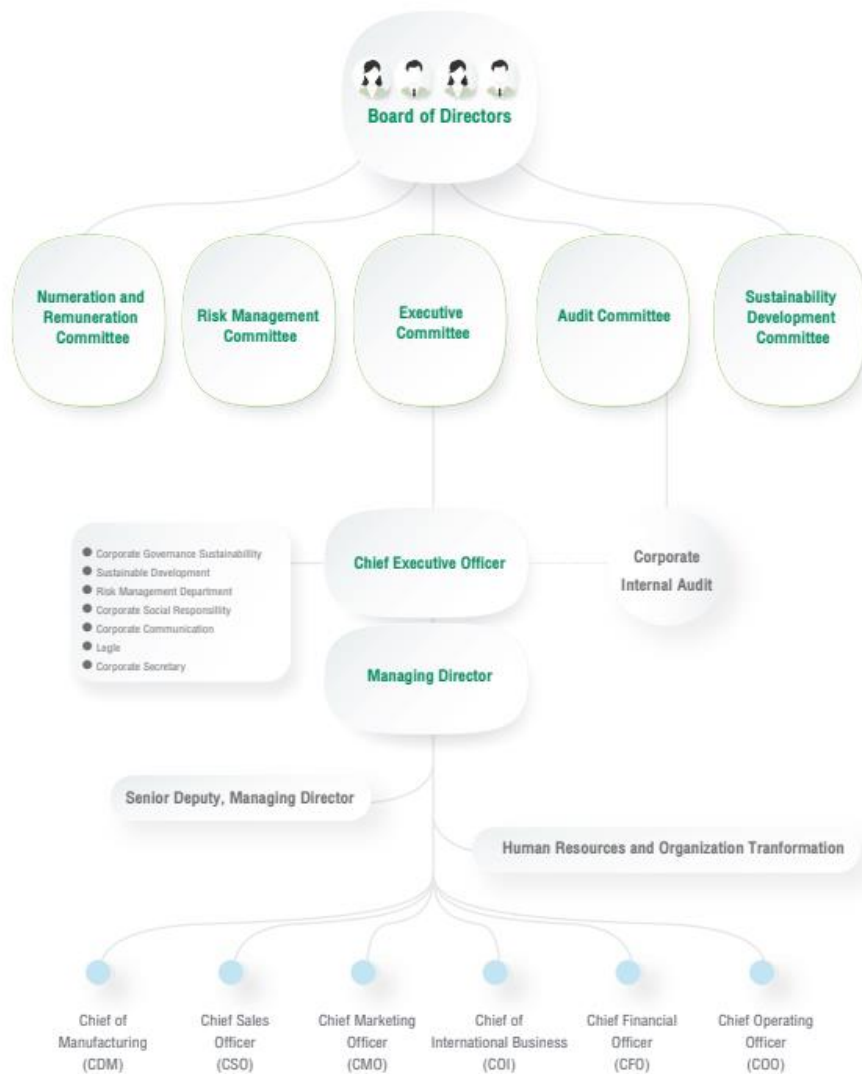
Governing Body	Roles and Responsibilities	Meeting Frequency
Board of Directors	The Board of Directors set the goals, strategy, business plan, and budget yearly and controls the overall business operation accordingly. They also consider any proposals from executives that need the Board's approval. The Board oversees climate-related issues and considers climate-change related matters raised by SDC and RMC for the best solution for the company.	4 times per year
Sustainability Development Committee (SDC)	SDC set the policy and action-needed operation regarding Sustainability Development for the company. SDC also supports the sustainability culture throughout the company, follow-up on sustainability issues, and considers the climate-related risks and opportunities.	4 times per year

Risk Management Committee (RMC)	RMC considers and identifies any significant risks and opportunities for the company in every aspect of operation, sets the mitigation plans, and keeps track of the progress.	4 times per year
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b) Describe Management's Role in Assessing and Managing Climate-related Risks and Opportunities

Governing Body	Roles and Responsibilities	Meeting Frequency
Executive Committee (Ex-Com)	CEO and top executive managements review climate-related risks and opportunities, which might affect the operations. Each risk and opportunity get explore and decide on action plan and mitigation plan.	4 times per year
Sustainability Development Committee (SDC)	SDC assesses climate-related risks and opportunities, which were identified through sustainability work throughout the company. After assessing and prioritizing its materiality, SDC can focus on those materiality and work out details on mitigation plan to propose to the Board.	4 times per year
Risk Management Committee (RMC)	RMC audits and assesses all areas of operation to find risks of any aspect. Risks will be prioritized and sorted into ESG category and set mitigation plans for each risk. Those plans will be discussed with SDC and Board Meeting to find the best solutions.	4 times a year

## Organizational Structure of Climate Governance



## STRATEGY

### 2.1 Short, Medium, and Long-term of Climate-related Risks and Opportunities

CBG has assessed the climate-related risk and opportunities according to TCFD recommendations. The scope of assessment covered the whole supply chain, with a focus on CBG's production plants in Bangpakong, Chachoengsao Province. Climate-related risks and opportunities that CBG identified, analyzed, and evaluated into physical risks, transitional risks and opportunities, which were useful in its business planning and preparation for the future.

Scope of Assessment	Identification of Risk and Opportunity	Prioritization Risk and Opportunities
Own Operation in Thailand - Glass Manufacturing - Packaging Manufacturing - Can Manufacturing - Bottling Plant - Warehouse and logistics - Energy - Water - GHG	Identified as - Physical Risk - Transitional Risk - Opportunity	- Data collection of those identified climate-related risks and opportunities to gauge the likelihood and financial impact for short, medium, and long term
Upstream and Downstream - Suppliers - Customer		

### 2.1.1 Climate-related Risk Assessment

#### Physical Risk:

Drought, Flood, Extreme Weather and Temperature were the risks that happened globally, which CBG used four physical indicators to evaluate under two climate scenarios (2°C or below 2°C scenario and High Carbon Scenario). The assessment was also conducted based on short (2030), medium (2040), and long-term (2050).

#### Transition Risk:

Changes in legislation and policy are considered as transition risk while the world gradually shifts towards green economy. Assessment of transition risk also based on short (2030), medium (2040), and long-term (2050) to consider for indirect and direct impact. The evaluation will be analyzed under World Energy Outlook (WEO) scenarios recommended by IEA.

Term	IPCC Scenario – Physical Risk	Aspect of Impact of Transitional Risk	Scenario – Transitional Risk
Short term - 2030	2°C or below 2°C scenario: Global temperature well below 2°C	Direct impact: Focusing on financial impact of carbon tax  Thailand's Excise Department is planning to impose a carbon tax on energy, transport, and industrial sectors to help the country reach	NGFS Current Policy Scenario  Thai government announced the current policy, which was implemented in 2015 after COP21.
Medium term 2031-2040			

		carbon neutrality by 2050 and net zero greenhouse gas emissions by 2063. The tax study is underway and will be completed by the end of 2023.	
Long term 2041-2050	High Carbon Scenario: Global temperature rising above 4°C	Indirect impact: Higher price of electricity due to the rising cost, strict policy, and regulation	<p>SDS: Sustainable Development Scenario</p> <p>Carbon tax will become a major factor putting on electric sector, resulting in the higher costs of fossil fuels used for generating electricity. Though alternative energy technologies may help subsidizing the cost, the increasing price would be significant.</p>

### 2.1.2 Overview of Physical Risks

Risk Type	Description	Impact on Business
Drought	<ul style="list-style-type: none"> <li>- A prolonged period of abnormally dry weather or precipitation deficiency, leading to a shortage of water supply in a specific region or ecosystem.</li> <li>- Dedicated Water Monitoring Team was setup between CBG and supplier focusing on water quality and quantity, which communicate daily (or more frequent if needed) to prevent and resolve any problems on water supply.</li> </ul>	<p>Upstream</p> <ul style="list-style-type: none"> <li>- Raw material (sugar and others) shortage due to the decreasing of yield.</li> <li>- Rising cost of raw materials</li> </ul> <p>Own operation</p> <ul style="list-style-type: none"> <li>- Increasing cost of water.</li> <li>- Water shortage might cause the interruption of production.</li> <li>- Total production cost of products might increase and impact the product pricing.</li> </ul> <p>Downstream</p> <ul style="list-style-type: none"> <li>- Risk of products not available in the market.</li> </ul>



Flood	<ul style="list-style-type: none"> <li>- The overflowing or inundation of normally dry land with water. They occur when there is an excessive amount of water in each area, often caused by heavy rainfall, snowmelt, dam failure, or a combination of these factors.</li> <li>- The scientific study of floods involves understanding their hydrological processes, analyzing precipitation patterns, river discharge data, and hydraulic modeling to assess flood risk, and developing strategies for flood forecasting, early warning systems, and flood management practices to mitigate their impacts on human populations and the environment.</li> </ul>	<p>Upstream</p> <ul style="list-style-type: none"> <li>- Raw material (sugar and others) shortage due to the decreasing of yield.</li> <li>- Rising cost of raw materials</li> </ul> <p>Own operation</p> <ul style="list-style-type: none"> <li>- Flood might cause the interruption of production and damage the production lines.</li> <li>- Total production cost of products might increase and impact the product pricing.</li> </ul> <p>Downstream</p> <ul style="list-style-type: none"> <li>- Risk of products not available in the market.</li> </ul>
Increasing Temperature	<ul style="list-style-type: none"> <li>- Increased temperatures can affect production processes. Some manufacturing processes require specific temperature conditions, and rising temperatures can disrupt or limit production capabilities. Heat stress can also affect the performance of machinery and equipment, leading to operational challenges.</li> </ul>	<p>Upstream</p> <ul style="list-style-type: none"> <li>- Raw material (sugar and others) shortage due to the decreasing of yield because of heat stress and water demand.</li> <li>- Rising cost of raw materials</li> </ul> <p>Own operation</p> <ul style="list-style-type: none"> <li>- Increased temperatures can affect industrial production processes. Heat stress can also affect the performance of machinery and equipment, leading to operational challenges.</li> <li>- Higher temperatures can impact energy production and consumption. Increased cooling requirements for air conditioning during hot</li> </ul>

		<p>periods can strain electricity grids. Heat waves can affect the efficiency of power generation systems, particularly for thermal power plants reliant on cooling water sources.</p> <ul style="list-style-type: none"> <li>- Higher evaporation of raw water and other liquids.</li> </ul> <p>Downstream</p> <ul style="list-style-type: none"> <li>- Heat stress can cause distribution vehicles overheat and disrupt the delivery dates.</li> <li>- Higher cost for cooling the products for customers.</li> </ul>
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### 2.1.3 Overview of Transition Risk

<b>Transitional Risk</b>	<b>Description</b>	<b>Impact on Business</b>
Legislation and Policy	<ul style="list-style-type: none"> <li>- Financial and operational risks that company face because of changes in laws, regulations, and government policies aimed at transitioning to a low-carbon and sustainable economy.</li> </ul>	<p>Upstream</p> <ul style="list-style-type: none"> <li>- Rising cost of raw materials</li> </ul> <p>Own operation</p> <ul style="list-style-type: none"> <li>- Increase the cost of production improvement to be in accordance with the law.</li> <li>- Electricity Vehicle (EV) will become the norm of transportation in the plant and on logistics.</li> <li>- Energy and GHG regulations maybe enforced and there will be charges on emission.</li> <li>- EU (and other countries) enforces on CBAM, which requires its products to be certified on its CFP and keep its carbon footprint as low as possible.</li> </ul> <p>Downstream</p> <ul style="list-style-type: none"> <li>- Product price might be affected.</li> </ul>
Technology	<ul style="list-style-type: none"> <li>- Improvements or innovations that drive towards the transition to lower-carbon, energy efficiency operation.</li> <li>- Adapting new technology might</li> </ul>	<p>Upstream</p> <ul style="list-style-type: none"> <li>- Higher cost of raw materials and fuel that geared toward cleaner and greener energy.</li> </ul> <p>Own operation</p> <ul style="list-style-type: none"> <li>- Fossil fuel technologies might face the problems, such as increasing price or insufficient volume.</li> </ul>

	cause some issues replacing old systems.	<ul style="list-style-type: none"> <li>- Higher cost of installing new technology and machines</li> <li>- Shifting from fossil fuel to green power fuel might cause disruption to the systems an operation.</li> </ul> Downstream <ul style="list-style-type: none"> <li>- All investment might cause the bottom line and affect the product price.</li> </ul>
Market	<ul style="list-style-type: none"> <li>- Shifts in market dynamics and investor preferences associated with the transition to a low-carbon and sustainable economy.</li> <li>- Changes in consumer preferences and demand for environmentally friendly products and services.</li> </ul>	Upstream <ul style="list-style-type: none"> <li>- Suppliers must comply to ESG and sustainable methods and receive standard certifications to be able to do business with their customers.</li> </ul> Own operation <ul style="list-style-type: none"> <li>- Higher cost in research and development of low-carbon products</li> <li>- Higher demand from customers for waste packaging solution</li> </ul> Downstream <ul style="list-style-type: none"> <li>- Higher demand from customers for greener and more circular economy of products</li> </ul>
Reputation	<ul style="list-style-type: none"> <li>- Customers perceptions on brands shift toward more circular economy, lower-carbon products, and sustainability brand.</li> </ul>	Upstream <ul style="list-style-type: none"> <li>- Suppliers must comply to ESG and sustainable methods and receive standard certifications to be able to do business with their customers.</li> </ul> Own operation <ul style="list-style-type: none"> <li>- Move toward circular economy and promote it to consumers.</li> <li>- Solve waste packaging issue effectively.</li> </ul> Downstream <ul style="list-style-type: none"> <li>- Customers give credit to more sustainable brand and select their products first.</li> </ul>

## 2.1.4 Overview of Opportunity

Transitional Risk	Description	Impact on Business
Renewable energy	<ul style="list-style-type: none"> <li>- Renewable energy presents significant opportunities for businesses and economies in the transition to a sustainable future.</li> <li>- The use of solar cell, biomass, and bio-fuel is the way forward to answer to legislation and customers' expectation.</li> </ul>	<p>Upstream</p> <ul style="list-style-type: none"> <li>- Upstream businesses may be subject to regulations related to emissions reductions or sustainability targets. Investing in renewable energy can help meet regulatory requirements and ensure compliance.</li> </ul> <p>Own operation</p> <ul style="list-style-type: none"> <li>- Adopting renewable energy sources, such as solar panels, for on-site power generation can help businesses reduce energy costs over the long term, particularly as renewable energy prices continue to decline.</li> <li>- Transitioning to renewable energy can significantly reduce CBG's carbon footprint, enhancing sustainability credentials and aligning with environmental targets and initiatives.</li> <li>- Generating renewable energy on-site provides a degree of energy independence, reducing reliance on grid electricity and mitigating risks associated with energy price fluctuations or supply disruptions.</li> <li>- Embracing renewable energy technologies often drives innovation and efficiency improvements within CBG's own operation.</li> </ul> <p>Downstream</p> <ul style="list-style-type: none"> <li>- Incorporating renewable energy into products can offer a unique selling point and differentiate itself from competitors, appealing to environmentally conscious customers.</li> <li>- Renewable energy is increasingly sought after by consumers who prioritize sustainability, which might increase customer loyalty.</li> <li>- Encouraging suppliers to adopt renewable energy or meet certain sustainability criteria, thereby contributing to broader renewable energy adoption.</li> </ul>

<p>Low-carbon Products</p>	<ul style="list-style-type: none"> <li>- Products that have a reduced carbon footprint compared to conventional alternatives throughout its lifecycle, including production, use, and disposal. These products are designed to minimize greenhouse gas emissions, energy consumption, and resource depletion while maintaining or improving performance and functionality. Low carbon products often utilize sustainable materials, energy-efficient technologies, renewable energy sources, and eco-friendly manufacturing processes.</li> </ul>	<p>Upstream</p> <ul style="list-style-type: none"> <li>- Low carbon products often require changes in the supply chain, such as sourcing sustainable raw materials or components. Upstream businesses may need to work closely with suppliers to ensure the availability and traceability of low carbon inputs.</li> <li>- Regulations related to emissions reductions and sustainability may influence the upstream sector. Businesses that produce or source low carbon products can position themselves to meet regulatory requirements and demonstrate compliance.</li> <li>- Adopting low carbon products in the upstream sector can enhance a company's reputation and improve stakeholder engagement, particularly among environmentally conscious customers and investors.</li> </ul> <p>Own operation</p> <ul style="list-style-type: none"> <li>- Integrating low carbon products into a company's own operations expands the product portfolio and offers new revenue streams. By providing sustainable alternatives to customers, businesses can capture a growing market demand for environmentally friendly options.</li> <li>- Low carbon products are often associated with energy efficiency improvements. Implementing energy-saving measures and using energy-efficient technologies in own operations can enhance sustainability, reduce costs, and improve operational efficiency.</li> <li>- Adopting low carbon products helps businesses reduce their own carbon footprint. This contributes to meeting sustainability goals and addressing environmental concerns, enhancing the company's environmental performance.</li> <li>- Embracing low carbon products often requires innovation and research and development efforts. Companies that successfully develop and offer low carbon</li> </ul>
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		<p>solutions can differentiate themselves from competitors and drive industry innovation.</p> <p>Downstream</p> <ul style="list-style-type: none"> <li>- Offering low carbon products in the downstream sector can differentiate a business from competitors, attracting environmentally conscious customers and capturing market share in the growing sustainability-focused consumer segment.</li> <li>- Producing and marketing low carbon products positions companies to meet sustainability regulations and comply with relevant standards.</li> <li>- Producing and marketing low carbon products positions companies to meet these regulations and comply with relevant standards.</li> <li>- Collaborate with suppliers and partners to create a low carbon value chain. This collaboration can lead to joint initiatives, knowledge sharing, and innovation that supports the development and adoption of low carbon products.</li> </ul>
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## 2.2 The impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning

Climate-related risks and opportunities have a significant impact on an organization's business, strategy, and financial planning. Risks such as physical impacts, regulatory changes, and reputational damage can disrupt operations and result in financial losses. Conversely, opportunities such as adopting renewable energy, developing climate-resilient products, and embracing sustainable practices can drive innovation, enhance competitiveness, and attract investors. Effective identification, assessment, and integration of climate-related risks and opportunities into business strategies and financial planning are critical for long-term resilience and success.

The Company classifies risks into five categories: strategic risks, operational risks, financial risks, compliance risks, and sustainability risks. The sustainability risks include climate-related risk and opportunity assessments which affect its business and strategy and integrated into the Company's centralized enterprise risk management program.

## 2.2.3 Climate Risk Analysis

### 2.2.3.1 Physical Risk Scenario Analysis

Type of Physical Risk	Physical Risk Scenario Analysis
Drought	<ul style="list-style-type: none"> <li>• RCP 2.6: there could be scenarios of more manageable drought conditions compared to higher emission scenarios. While water scarcity may still be a concern, the impact on agriculture, water resources, and ecosystems might be relatively moderate.</li> <li>• High Carbon Scenario represents a high-emission scenario, which could result in more severe drought conditions in Thailand. Water scarcity and impacts on agriculture, water resources, and ecosystems may be more pronounced, leading to greater challenges in managing water supplies and maintaining agricultural productivity.</li> </ul>
Flood	<ul style="list-style-type: none"> <li>• RCP 8.5: The frequency and intensity of flood events may be reduced compared to higher emission scenarios, resulting in a lower risk of flooding in certain areas. However, localized heavy rainfall events can still occur, necessitating attention to local drainage systems and infrastructure.</li> <li>• High Carbon Scenario projects an increased risk of intense rainfall events and higher flood occurrences in Thailand. This could lead to more frequent and severe flooding, posing significant risks to infrastructure, communities, and the economy.</li> </ul>
Increase Temperature	<ul style="list-style-type: none"> <li>• RCP 2.6: Temperature rise and heatwave occurrences may be limited, leading to relatively lower risks associated with heat stress and its impacts on ecosystems, public health, and energy demand.</li> <li>• High Carbon Scenario implies a substantial temperature rise, resulting in increased heatwaves, heat stress, and associated impacts on human health, ecosystems, and energy demand. The risks of heat-related illnesses and energy consumption for cooling purposes may be higher under this scenario.</li> </ul>

## 2.2.3.2 Transition Risk Scenario Analysis

Type of Transition Risk	Transition Risk Scenario Analysis
Carbon Tax	<ul style="list-style-type: none"> <li>• NGFS (2°C and below scenario) represents a scenario with stringent mitigation efforts, aiming to limit global warming well below 2 degrees Celsius above pre-industrial levels by the end of the 21st century. <ul style="list-style-type: none"> <li>- Low-carbon economy and Energy transition will be more gradual, allowing CBG more time to adapt and potentially minimize economic disruptions.</li> <li>- With greater focus on research and development of clean technologies, carbon tax can encourage innovation and deployment of these technologies.</li> </ul> </li> <li>• High Carbon Scenario represents a high-emissions scenario with no significant climate policy, resulting in a pathway that leads to a potential increase in global warming of around 4 degrees Celsius or more by the end of the century. <ul style="list-style-type: none"> <li>- High-emissions trajectory and the abrupt introduction of carbon tax could lead to more significant economic shocks and disruptions to adapt rapidly to additional policies and regulations.</li> <li>- Lack of significant policy support and incentives may limit technological innovation and hinder the transition to a low-carbon economy, reducing the effectiveness of the carbon tax.</li> </ul> </li> <li>• IEA STEPS framework allows for a comprehensive analysis by considering various aspects such as economic implications, technological advancements, and policy changes. With this approach, decision-makers can evaluate different scenarios based on varying levels of carbon pricing and their corresponding impacts on different sectors. By quantifying the potential risks and uncertainties, stakeholders can make informed decisions to mitigate negative consequences and optimize pathways towards a low-carbon economy. Furthermore, incorporating scientific research and expert opinions through scenario analysis enhances the credibility of the outcomes and provides valuable insights for designing effective policies that align with sustainability goals. This methodology enables policymakers to ensure a just transition towards decarbonization without undermining economic stability or neglecting social considerations.</li> </ul>

## 2.3 Physical Climate Risk Adaptation



Physical climate risks pose significant challenges that require adaptation measures to mitigate their impacts. Here are some considerations for adapting to these climate risks:

<b>Responses</b>	<b>Description</b>	<b>Implementation Timescale (Baseline 2022)</b>
Drought	<ul style="list-style-type: none"> <li>- Implement efficient water management strategies, including water conservation measures, smart irrigation systems, and water reuse/recycling programs.</li> <li>- Develop alternative water sources, such as rainwater harvesting, desalination, and groundwater management, to reduce reliance on rainfall-dependent sources.</li> <li>- Enhance monitoring systems to detect drought conditions and establish early warning systems to facilitate timely response and preparedness.</li> </ul>	Within 2 years
Flood	<ul style="list-style-type: none"> <li>- Design and construct buildings and critical infrastructure with flood-resistant features, such as elevated foundations, flood barriers, and flood-proofing techniques.</li> <li>- Improve flood forecasting capabilities and emergency response mechanisms to ensure timely evacuation, early warning communication, and effective rescue operations.</li> </ul>	Within 5 years
Increase Temperatures	<ul style="list-style-type: none"> <li>- Preserve and restore natural ecosystems, such as forests and wetlands, as they provide vital cooling services, regulate local climate, and support biodiversity that contributes to overall resilience.</li> <li>- Implement planning strategies that promote green spaces, reflective surfaces, energy-efficient building design.</li> <li>- Energy-efficiency operations at plant to reduce GHG.</li> </ul>	Within 5 years

The Company has processed physical climate risks adaptation covering 100% of its existing operations.

## Risk Management

- a) Describe the Organization's Processes for Identifying and Assessing Climate-related Risks.

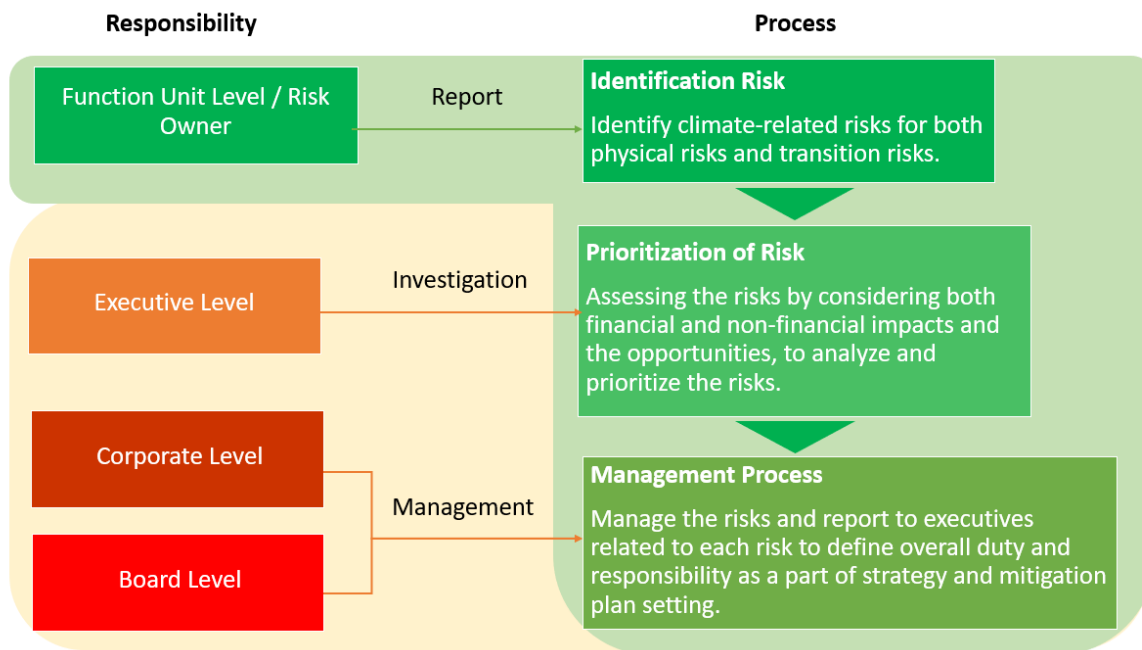
1. Identification Process	2. Assessment Process	3. Process Applied to Physical Risks and Transition Risks
Risk owner identifies all climate-related risks that might affect the company's ability to reach its targets and the stakeholders' expectations, such as risk of water scarcity caused by drought, risk of operation disruption caused by natural disasters, etc., which the company also classified risks into short, medium and long-term risks.	Risk owner responsible in analyzing and assessing the risks, by considering both financial and non-financial impacts which might impact the company's targets and its probability to prioritize those risks and setup appropriate mitigation plan on each risk.	Risk Management Committee sets the policies and framework of risk management, which each department will deploy to identify and assess risks across the company. RMC follows up on the progress of Risk Management every quarter, covering both Physical Risks and Transition Risks. The risk assessment process will consider positive and negative impact on the company, and setup short, medium, and long-term mitigation plans to minimize the impacts and prepare for the coming changes. This will help the company to be more resilience and further its competitiveness.

- b) Describe the Organization's Processes for Managing Climate-related Risks.

The Company has set its risk management systematically according to the international standard of The Committee of Sponsoring Organization of the Trade way Commission or "COSO" by setting its risk management policy, risk management manual, including climate-related risks, to create understanding and knowledge of risk management, and raise awareness in the importance of risk management.

The Company encourages risk management culture on all levels of staffs continually and communicate to the staffs across the company to get every department to improve their risk management strategies. Also, Risk Management Committee has setup workshop with executives from those risk-related departments every quarter to assess and follow-up the progress of risk management strategies.

- c) Describe how Processes for Identifying, Assessing, and Managing Climate-related Risks are Integrated into the Organization's Overall Risk Management.



## Metrics and Targets

CBG has begun its Net Zero Pathway in 2021, while aimed to meet the targets set by Thai Government as to become Carbon Neutral within 2050 and Net Zero Emission within 2065. CBG works continuously to become a greener company by collecting ESG data extensively to set baseline in 2022 and proceed from that baseline. Data collecting becomes more detailed and provides more accurate and clearer understanding of CBG's operation on Scope 1, 2, and 3 GHG emissions.

CBG continues its journey on Carbon Footprints for Organization certification, which started in 2022. With the expansion to Carbon Footprints for Products certification for 5 products in 2023 and aiming for more in the next few years, CBG will be able to manage its GHG emissions better.

Regarding its solar rooftop panels, CBG proceeds on to the next phase of expansion as planned. CBG also looks at other alternative energy sources to further explore the possibilities.

### Climate-Related Management Incentives

2022 Targets	2022 Results	The person is entitled to benefit from this incentive
<b>• Energy Consumption Reduction (CBD Plant)</b>		
Reduced electricity consumption of No 1 & 2 chiller water pumps of the can production plant by 175,000 kWh/year, which is equivalent to a reduction cost of 602,000 Baht/year.	The factory installed INVERTER (VSD) Chiller pump (2 sets) to control the chiller motor on the can side to adjust the motor frequency from 50HZ to 40HZ to reduce the electricity consumption of the water pump motor. The factory reduced energy consumption by 180,096 kWh/year, which is equivalent to a reduction cost of 729,388.80 Baht/year.	<ul style="list-style-type: none"> <li>- Chief Executive Officer (CEO)</li> <li>- Other Named Executive Officers</li> <li>- Business Unit Managers</li> <li>- Employee</li> </ul>
Reduced electricity consumption of No.1 & 2 chillers by adjusting chillers No.1 & 2 temperature from 1 to 2 degrees Celsius by 384,000 kWh/year, which is equivalent to a reduction cost of 1,320,960 Baht/year.	A project was set up to reduce the electricity consumption of chillers No.1 & 2 by increasing the cooling temperature of the chillers from the operating temperature of 1 to 2 degrees Celsius. Energy consumption was reduced by 491,745 kWh/year and accounted for reduced expenses of 1,991,567.25 Baht/year.	<ul style="list-style-type: none"> <li>- Chief Executive Officer (CEO)</li> <li>- Other Named Executive Officers</li> <li>- Business Unit Managers</li> <li>- Employee</li> </ul>
<b>• Energy Consumption Reduction (ACM Plant)</b>		
Reduced energy consumption by 480 cu.m./month for reducing the temperature of IBO oven from 215 degrees Cels. to 212 degrees Cels.	Reduced natural gas by 501 cu.m./month, equivalent to a reduction of natural gas costs of up to 8,272.72 Baht/year.	<ul style="list-style-type: none"> <li>- Chief Executive Officer (CEO)</li> <li>- Other Named Executive Officers</li> <li>- Business Unit Managers</li> <li>- Employee</li> </ul>
Reduced the energy consumption by adjusting the damper/blower that should be working at more than 80% (Control Air Flow) by 10,500 kWh/month to control the appropriate frequency (Baseline: 40-50 HZ),	Reduced energy consumption by 11,047 kWh/month, equivalent to a reduction of 262,899 Baht/year.	<ul style="list-style-type: none"> <li>- Chief Executive Officer (CEO)</li> <li>- Other Named Executive Officers</li> <li>- Business Unit Managers</li> <li>- Employee</li> </ul>

## Low Carbon Products

In 2022, Asia Can Manufacturing Co., Ltd. has implemented a project to reduce the thickness of aluminum cans from 0.27 mm. to 0.26 mm. Previously, the 0.27 millimeter aluminum resulted in 35,469,136 cans. By changing to 0.26 millimeter thickness, the production increased up to 36,880,555 cans, an increase of 1,411,420 cans, equivalent to a 4 percent increase. The percentage of total revenues from "climate change" products is 0.0001 percent and reduced emissions by 4,504.12 Ton. CO<sub>2</sub>e.

Year	Thickness of aluminum cans (mm.)	Weight of aluminum cans (g)
2021	0.27	9.80
2022	0.26	8.93

