



THAIFOODS GROUP PUBLIC COMPANY LIMITED

Task Force on Climate- Related Financial Disclosures

TCFD Report 2024

Contents

01 Introduction

3

02 TCFD Framework

4

03 Governance

6

07 References

36

04 Strategy

12

05 Risk management

26

06 Metrics & Targets

34

Introduction

THAIFOODS is a food production company that prioritizes environmental safety throughout the production process, from initial surveys through stringent environmental effect reporting. There is a system in place, as well as operational law, to ensure that the ecosystem in and around the region is not harmed.

As a result, it encourages all personnel to participate in knowledge-based environmental stewardship training, as well as a focus on resource efficiency for maximum profit, all while considering the environmental effects and putting in place steps to prevent and mitigate any consequences.

Core Elements of Recommended Climate-Related Financial Disclosures



Governance

The organization's governance around climate-related risks and opportunities.

Strategy

The actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy and financial planning.

Risk Management

The processes used by the organization to identify, assess and manage climate-related risks.

Metrics and Targets

The metrics and targets used to assess and manage relevant climate-related risks and opportunities.

Governance

Governance

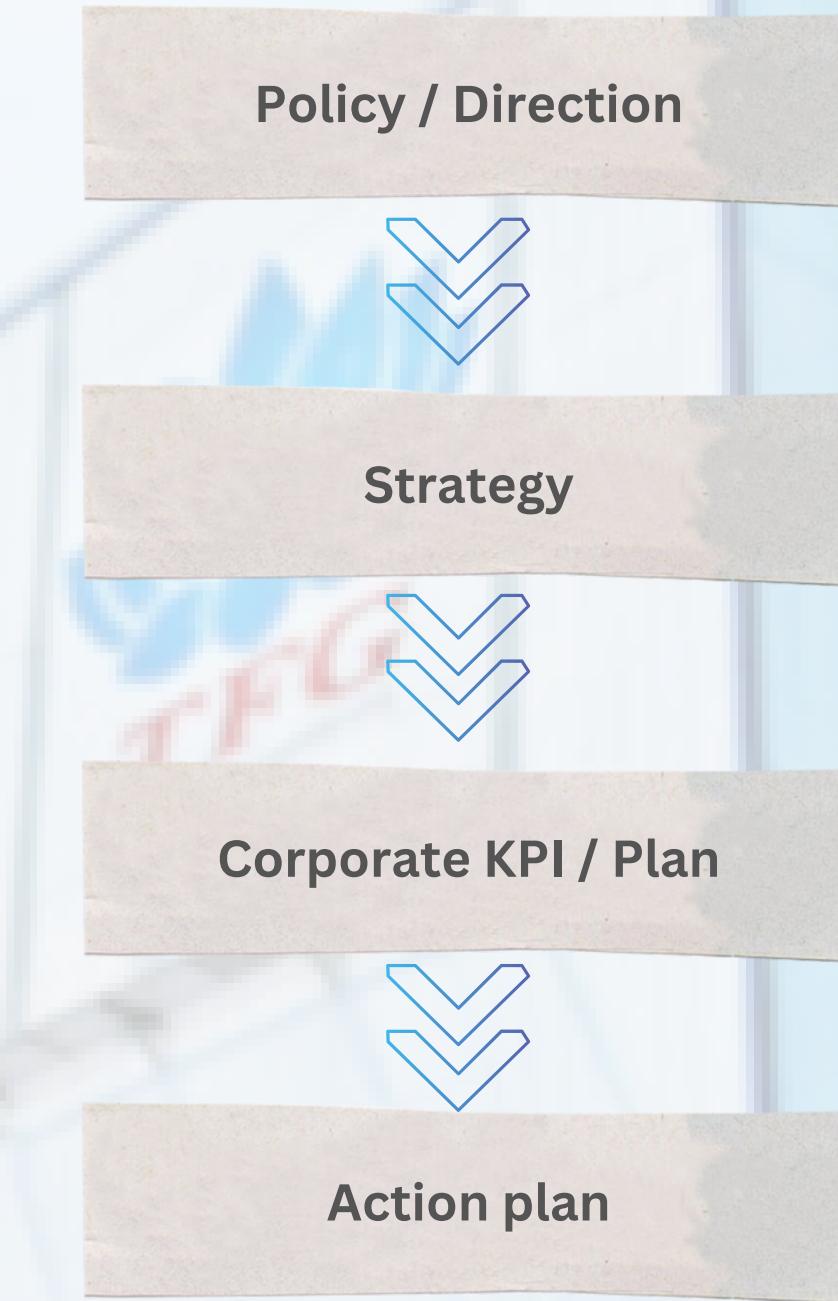
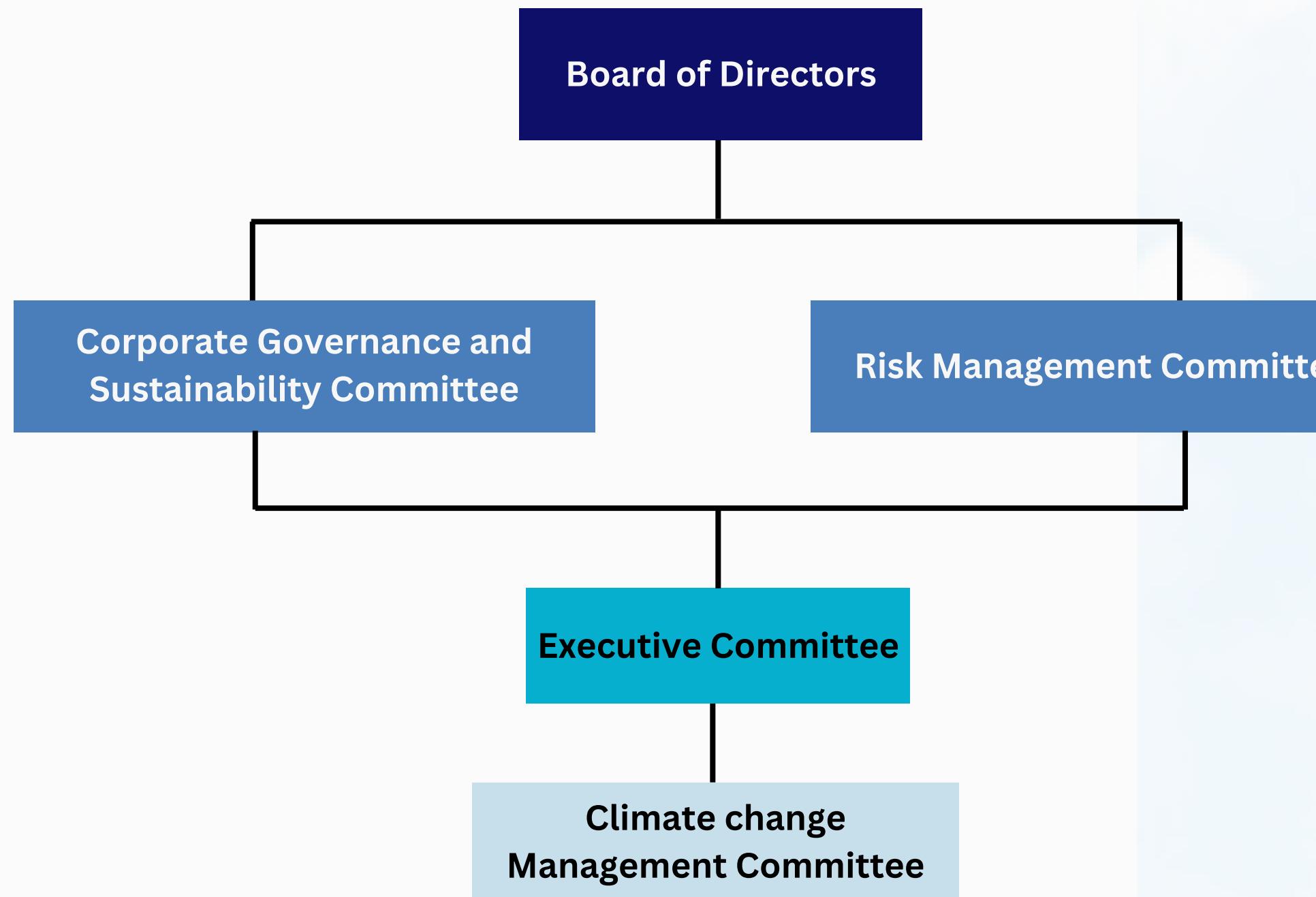
The company has designed a structure for risk management under the supervision of the Board of Directors, who are in charge of overall Risk Management including Climate-related risk. This is carried out through the Risk Management committee appointed by the Board of Directors, which is responsible for setting policies and the operational framework, reviewing risk management plans, monitoring, and providing comments or recommendations for risk management.

The executive committee and management are responsible for consistently implementing the risk management policy. The Risk Management is tasked with the risk management plan, analyzing, evaluating, measuring, and monitoring the risk management process to provide regular reports as required.

The organization chart of the company



Organizational Structure of Climate Governance



Governance

Role	Responsibilities	Meeting Frequency
Board of Directors	<p>Ensuring that the business has a clear picture of its exposure to climate-related risks and opportunities associated with the transition towards a low carbon economy and the physical impacts of climate change on the organization. This is reflected through Corporate Governance's vision, missions, directions, and operational strategies which is endorsed by the board. The Board of Directors is also responsible for reviewing the performance of executives under an efficient performance monitoring and evaluation system. The Board of Directors oversees the Corporate Governance and Sustainability Committee and the Risk Management Committee and governs the decision-making on climate-related issues.</p>	Quarterly
Corporate Governance and Sustainability Committee	<p>The Corporate Governance and sustainability Committee reports directly to the Board of Directors in accordance with the duties and responsibilities assigned to them. Climate-related issues affect the whole company, including energy efficiency, alternative raw material sourcing, GHG mitigation, and GHG reduction targets, are evaluated and reviewed by the Corporate Governance and sustainability Committee.</p>	Quarterly
Risk Management Committee	<p>Monitoring and providing recommendations on the management of risks towards the achievement of Corporate Governance's strategic and business goals and responsible for defining comprehensive key risk management policies and practices, which include climate-related risks. The Risk Management Committee assesses and reviews risks, considering both internal and external factors, which may affect the achievement of our goals in order to ensure that appropriate measures are in place to address climate changes that align with the company's business context.</p>	Quarterly

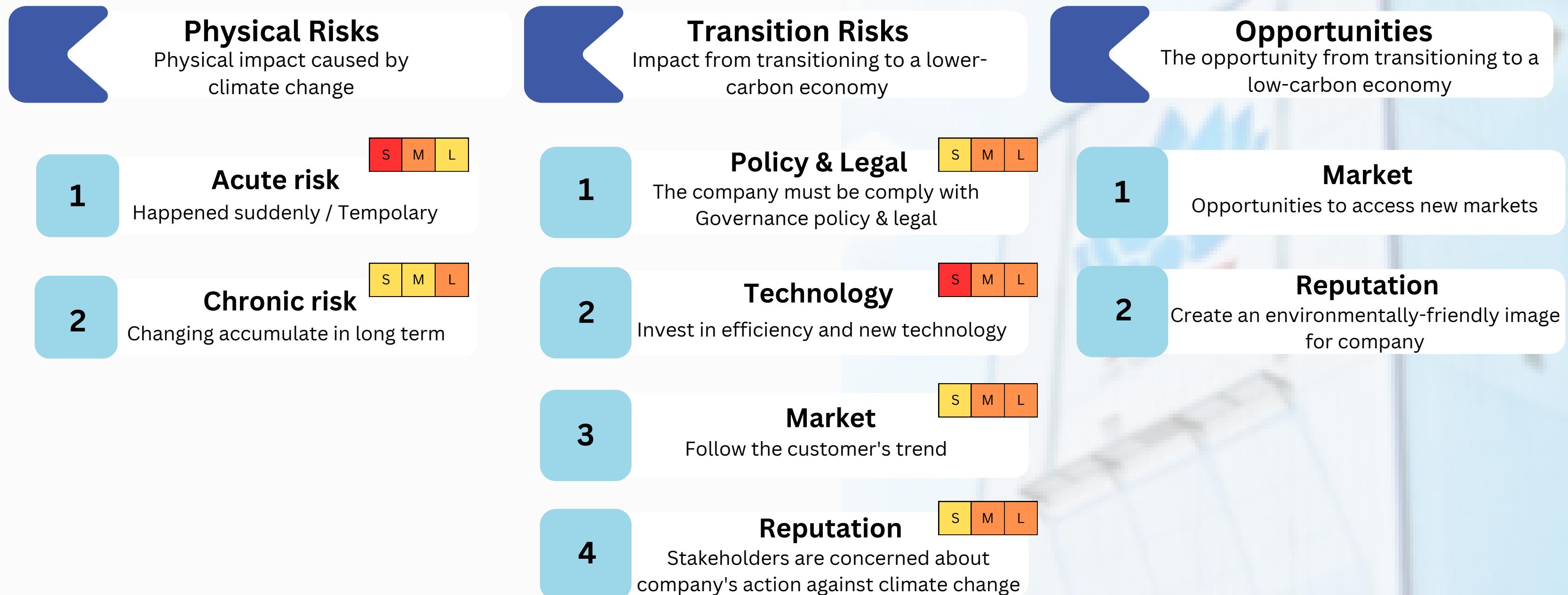
Governance

Role	Responsibilities	Meeting Frequency
Executive Committee	<p>Reviewing climate related risk/opportunity management performance and providing recommendations on further strategy or action plans. The Executive Committee also oversees the establishment and revision of sustainable development policies, approaches, goals, and operating guidelines according to Corporate Governance's sustainability strategy framework which include climate change management and circular economy management. The Executive Committee also supports the Corporate Governance and Sustainability Committee in its duty to shape Corporate Governance's sustainability strategies and directions.</p>	Monthly
Climate change Management Committee	<p>Operate by following plan and policies as assigned, report progressive to the Executive Committee in action associated with policies, approaches, goals, and operating guidelines according to Corporate Governance's sustainability strategy framework which includes climate change management and circular economy management.</p>	Monthly

Strategy

Strategy

The company has assessed the climate-related risks and opportunities by identify as following detail :



S = Short-Term (2-5 year) M = Medium-Term (6-10 year) L = Long-Term (over 10 year)

Severe High Medium Low

Scenario Analysis of Physical Risks

Scenario	Risk	Impact
IPCC RCP 2.6	Acute	<p>In cases where activities in various industries are rapidly transitioning to a low-carbon economy, and the global average temperature is increasing only moderately, with natural changes occurring but not suddenly or extremely severely, such as flood or seasonal water scarcity in the company's area, it is anticipated that this will affect the company's regular operations. However, since natural changes do not occur suddenly or extremely severely, they can be predicted in advance.</p> <p>Currently, the company has emergency response plans in place for incidents such as natural disasters, epidemics, and earthquakes. These plans include emergency notification channels, crisis management, and the roles and responsibilities of those involved in emergency response. The plans also outline the steps for post-incident management.</p>

Scenario Analysis of Physical Risks

Scenario	Risk	Impact
IPCC RCP 8.5	Acute	<p>In the event of continuous carbon emissions by various industries, will inevitably affect the overall climate in the future. This will lead to an increase average temperature, impacting the global climate cycle, rising sea levels, and affecting biodiversity, precipitation, and seasonal variations. All of these factors may lead to more frequent and severe natural disasters.</p> <p>If such a situation occurs, it will have an impact on the company's operations. For example, if flood occurs in the factory area, the company may not be able to operate as usual, leading to problems in transporting goods. Additionally, it may affect the cost of agricultural raw materials used in animal feed production.</p> <p>The company has implemented planning measures starting from the selection of factory locations, where natural disaster factors are considered. Currently, there is a team that monitors the natural disaster situation in the factory area every week. Furthermore, the company has a price forecasting system that the procurement department uses to predict data related to animal feed raw materials, which serves as a preliminary preparedness measure.</p> <p>However, in the event of a severe and sudden natural disaster, it is anticipated that the company's production processes may be impacted.</p>

Scenario Analysis of Physical Risks

Scenario	Risk	Impact
IPCC RCP 2.6	Chronic	<p>In cases where various industries are rapidly transitioning to a low-carbon economy, and greenhouse gas accumulation in the atmosphere is limited, resulting in a relatively moderate increase in the average global temperature, the company is aware that this temperature increase can still have an impact on our business as food industry. Controlling the temperature of the product is important to maintaining product quality to meet standards.</p> <p>Additionally, the changing temperatures may lead to the spread of diseases in animals. It is anticipated that the company will need to develop operational processes and technology to help control temperatures in our operational areas to meet standards. We should also prepare observation plans to monitor the occurrence of disease outbreaks in animals.</p>

Scenario Analysis of Physical Risks

Scenario	Risk	Impact
IPCC RCP 8.5	Chronic	<p>In the event of continuous carbon emissions by various industries leading to the accumulation of greenhouse gases in the atmosphere, increasing average temperature, it will indeed impact the company's operations, especially in the part of the factory that requires temperature control to preserve the quality of animal products. Additionally, it will also affect animal farming, as higher global temperatures or fluctuating weather conditions can lead to the emergence of diseases in animals, including both recurrent and new diseases. Currently, the company's factory has a person in charge who is responsible for maintaining the temperature control systems consistently to prevent temperature-related issues that could affect product quality.</p> <p>Concerning about animal diseases, the company has veterinarians with expertise in monitoring and managing disease outbreaks both within and outside the factory area. In cases of recurrent diseases, the company has established guidelines for dealing with them. However, in the event of new diseases, it is anticipated that the company may face significant challenges and impacts at a higher level.</p>

Scenario Analysis of Transition Risks

Scenario	Risk	Impact
IEA STEPS		<p>In cases where business operations proceed as usual and risk is assessed based on existing laws and regulations, it will be found that Thailand does not have clear laws or regulations that require industries to reduce carbon emissions resulting from their operations. There is only a policy supporting carbon reduction, and it is anticipated that this will have a minimal impact on business operations. Company can continue our operations as usual.</p>
IEA NZE 2050	Policy & Legal	<p>From the statement of the Prime Minister of Thailand at COP26, where it was announced that Thailand aims to achieve carbon neutrality by the year 2050 and net-zero greenhouse gas emissions by the year 2065, it is expected that the government will need to establish laws and regulations that enforce emissions reductions for both the public and private sectors in order to meet these goals. Aside from regulations in Thailand, the company may face impacts from regulations imposed by other countries. For example, the company might lose the market in the EU due to measures to restrict the import of products that emit high levels of GHG. The estimated financial impact is approximately 1,491 million THB or 2% of the company's total revenue (estimated from revenue data in 2024).</p> <p>The company has been actively monitoring changes in environmental legislation and in the event that the government announces additional regulations in the future, the company is prepared to comply and adjust our operational practices accordingly.</p>

Scenario Analysis of Transition Risks

Scenario	Risk	Impact
IEA STEPS		<p>Since there are no laws or regulations that require businesses to reduce carbon emissions resulting from their production activities, the company can continue our operations as usual without being compelled to change its technology to reduce carbon emissions from its production processes. However, the company may choose to invest in technology that enhances production efficiency and reduces production costs in the long term.</p>
IEA NZE 2050	Technology	<p>If there are changes in the law to achieve carbon neutrality and reduce greenhouse gas emissions, the company may need to adapt its operations with modern technologies to increase efficiency while simultaneously reducing emissions that contribute to climate change. Currently, the company has been developing technologies that help mitigate the impact of climate change. This includes the installation of solar cells on rooftops, floors, and floating platforms. Additionally, there are plans to invest in systems for electricity production from BIOGAS. These technological changes are expected to require an investment of approximately 800 million THB in the short-term plan spanning 3-5 years. However, since technology evolves continuously, long-term investment planning for 6-20 years can be challenging. The company will consider a flexible investment plan to adapt to changing technological conditions in the future.</p>

Scenario Analysis of Transition Risks

Scenario	Risk	Impact
IEA NZE 2050	Market	<p>The changing of weather conditions is a global issue that all countries in the world must collaborate to address, not just at the governmental level by enacting laws, regulations, and controls on activities that impact the climate, but also in the normal lives of individuals who are global citizens and must participate in reducing the impact. Therefore, the trend in the lifestyles of individual people is moving towards greater consideration of the impact on the climate.</p> <p>The changes in individual behavior that are visible and have an impact on companies include the demand for products with the lowest environmental impact in their production processes. This also extends to individuals who want to invest in companies that incorporate environmental factors into their decision-making processes. Therefore, companies need to demonstrate their commitment to the environment to consumers, even though greenhouse gas emissions from our business operations may not be the largest compared to other industries. However, due to the growing awareness of climate change among consumers and investors, it is expected to affect the way companies operate and adapt to consumption trends.</p>

Scenario Analysis of Transition Risks

Scenario	Risk	Impact
IEA NZE 2050	Reputation	<p>Climate change, it is considered a global issue, and both the public sector and private organizations worldwide give it significant importance. If any sector or organization does not prioritize or engage in activities that are conscious of this issue, it may be seen as not contributing to addressing the global problem, which reflects poorly on that organization.</p> <p>Company are acutely aware of this risk and anticipate a relatively high impact, particularly because our factory locations are near communities. Some of the individuals in these communities are consumers of the company's products and can easily observe the company's operations. If a company conducts itself inappropriately, it can have consequences for various aspects of the community, including the environment and climate change.</p> <p>In response, companies are actively engaging with communities and regularly seeking community feedback. We use this feedback to develop and adapt our operations to align with the lifestyles of the community members. We are also working on improving our operational methods to minimize our overall environmental impact.</p>

*NZE - Net Zero Emissions by 2050 Scenario

Scenario Analysis of Opportunities

Scenario	Opportunity	Impact
IEA STEPS	Market	<p>Even though there may not be laws and regulations from the government or authorities requiring industries to reduce carbon emissions, however the changes in climate conditions are a global issue that every country must work together to address. Consumers, as global citizens, recognize the importance of their role in reducing carbon emissions and have a growing desire to purchase products with minimal environmental impact.</p> <p>From this perspective, company see an opportunity to develop our production processes and our product offerings to meet the changing consumer demands. This opens up the possibility for companies to enter the low-carbon product market, gaining access to new markets and positioning ourselves favorably for the shift towards a low-carbon society in the future.</p>
	Reputation	<p>Even though there may not be laws and regulations from the government or authorities requiring industries to reduce carbon emissions, if company develop our business processes and products with a focus on reducing carbon emissions from production processes, it is anticipated that this will create opportunities to enhance the organization's reputation regarding its awareness of climate change, which is a global issue. Having a positive reputation can help promote or create opportunities for global business.</p>

Environmental Management

The company operates a food production business that takes into account the safety of the environment in every process through a survey and rigorous environmental impact reporting. There is a system and operating regulations that do not affect the environment inside and around the area. We also provide knowledge promotion and training on environmental stewardship for all personnel, as well as give importance to promoting the efficient use of resources for maximum benefits while taking into account the impact on the environment. The measures are formulated to prevent and systematically mitigate potential impacts. The Company has formulated a policy for environment and environmental management that clearly describes the direction and rules for environmental management. THAI FOODS is aware of and has planned for any impacts that may occur, particularly during the manufacturing process that may influence natural resources and the environment.

Environmental Management

At the same time, it is not an obstacle to business development to keep the balance of biodiversity and make use of it beneficially and fairly based on ecologically responsible business growth, including preserving the environment and using resources appropriately and efficiently to reduce the impact on the environment in the aspects of environmental quality, prevention, protection, and restoration, enhancement of sustainable use of natural resources and the environment, management of climate change and natural disasters, appropriate water management, and health and safety in the working environment, For all environmental management to be as effective as possible, the Company, therefore, prescribes that THAIFOODS Group's business operations must be based on sustainable environmental management.

Integration of climate-related Risks and opportunities in corporate strategy

The company's activities

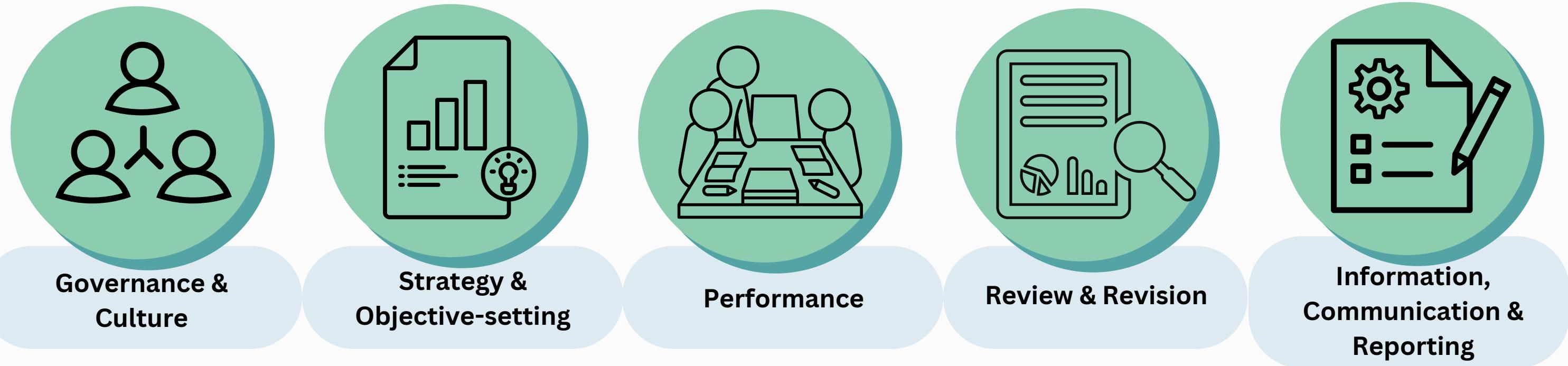
Use of renewable resources Management of efficient use of resources Promote the consumption of clean energy in the production process Climate change.

- Solar energy : The company has already started using solar cells in some of our factory areas and plans to expand this usage to other factory locations.
- Biogas : Plan to develop biogas to convert the gas into electricity for use.
- Water management : Reduce and reuse water and upgrade the management system.
- Packaging : Reduce and optimize packaging.
- Smart farm
- Smart factory : Automation and technology.
- Electric Vehicles (EV) : Switch from gasoline-powered vehicles to electric vehicles, starting with company's personal car, and then expanding to transport vehicles in the production process.

Risk Management

Risk Management

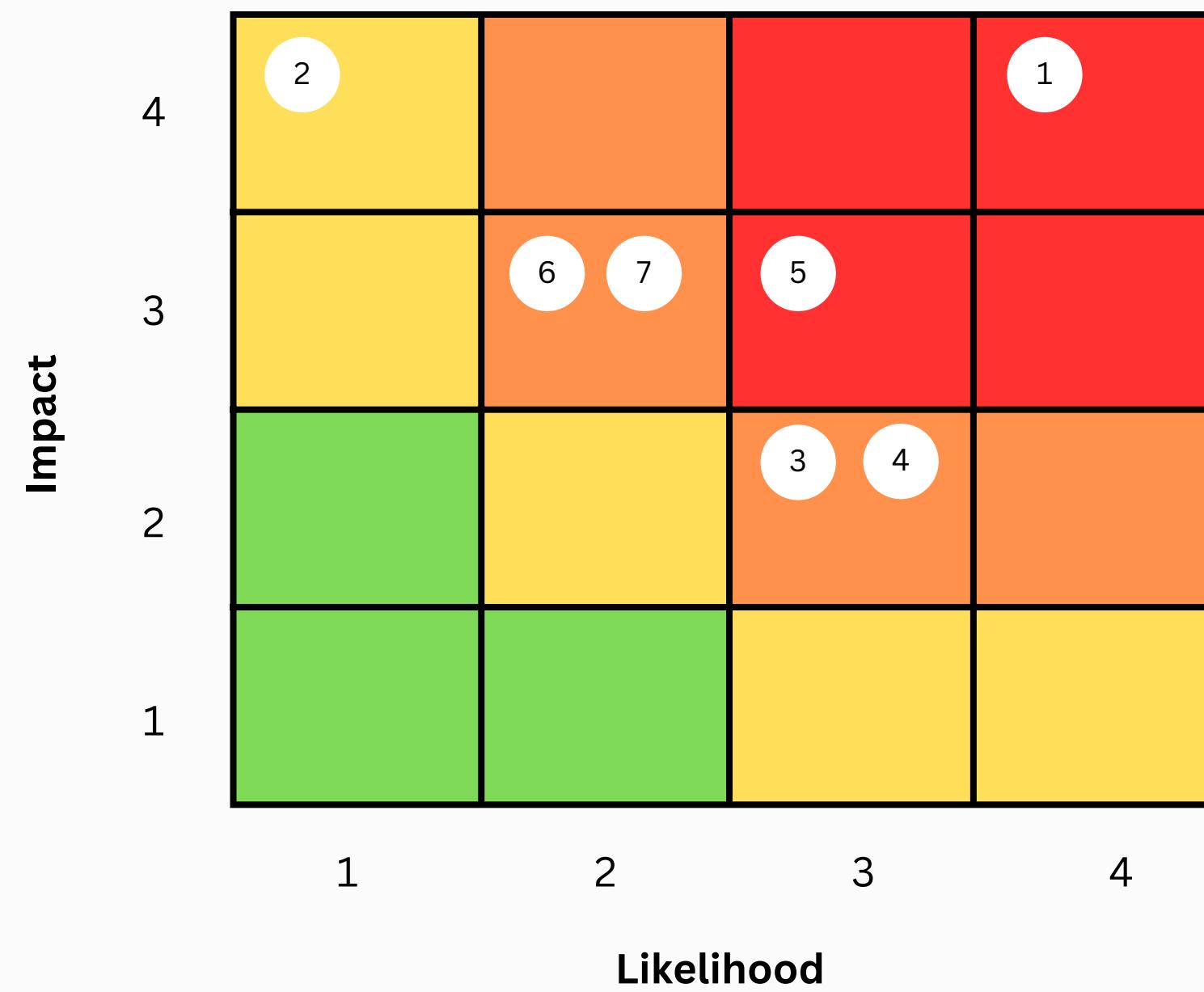
The company has implemented a risk management policy by utilizing the The Committee of Sponsoring Organizations of the Treadway Commission - Enterprise Risk Management - Integrated Framework (COSO - ERM) risk management approach in accordance with the organizational context.



This will be used as a framework for risk management which determine the Company's risk management plan and principles, ensuring that the Company's risks are manageable and that it has faith in its ability to carry out the intended tasks in line with the stated goals.

Risk Management

Same as ESG risk, company assess climate-related risks by assessing impact and likelihood as shown in the table below.



Company's climate-related risks :

1. Water scarcity
2. Flood
3. Increase in temperature
4. Policy & Legal
5. Technology
6. Market
7. Reputation

● Severe ● High ● Medium ● Low

Risk Management Process

The company assigns all risks that affect the achievement of the company's objectives. Major operational risks must be subject to the following process :



Identify
risk
timely and
comprehensive.

Assess
the risk's
likelihood of
arising and its
consequences.

Select
strategy
and risk
management strategy,
considering the costs
and benefits expected
from risk management.

Monitor
and
report
risk
consistently. Risks to the
organization must be assessed
at least once a year with
quarterly reporting to the
Board of Directors and the Risk
Management Committee.

Risk Management

How the company processing to identifying, assessing, and managing climate-related risks.

Identified Risk	Assess	Select strategy	Monitor and report
Water scarcity	Severe 	Short-Term : Using water pumping as an alternative water source during water scarcity months. Long-Term : Planning to set up a water pumping station and Developing reuse water technology in the production process.	There are staff responsible for monitoring water scarcity situations, coordinating with public sector, and providing weekly reports to the management.
Flood	Medium 	Short-Term : Regularly inspect and maintain the rainwater drainage system, including checking the work area and surrounding areas during heavy rainfall. Long-Term : Monitor flood situations in the area and always review business continuity plans in the event of a flood.	There are staff responsible for monitoring flood situations, coordinating with public sector, and providing weekly reports to the management.

Risk Management

How the company processing to identifying, assessing, and managing climate-related risks.

Identified Risk	Assess	Select strategy	Monitor and report
Increase in temperature	High	<p>Short-Term : Repair and maintain the main temperature control system to meet the standard.</p> <p>Long-Term : Invest in new technology in order to improve the quality of temperature control systems.</p>	<p>The company monitors and regular maintenance of temperature control systems. We also have ongoing patrol and reporting of temperature-related risks that could impact disease outbreaks in animals on their various farms for every quarter.</p>
Policy and Legal	High	<p>Short-Term : Continuously monitor and comply with announcements/policies from the government.</p> <p>Long-Term : Develop products and processes to be environmentally friendly and in compliance with internationally accepted standards.</p>	<p>There are staff responsible for monitoring policy and legal changing situations and providing reports to the management.</p>

Risk Management

How the company processing to identifying, assessing, and managing climate-related risks.

Identified Risk	Assess	Select strategy	Monitor and report
Technology	Severe 	<p>Short-Term : The company has already implemented some technological initiatives, such as using solar energy in projects like the Solar Floating, Solar Car Park and Solar Roof.</p> <p>Long-Term : Expand the technology investment plan and present it as part of the budget in each year.</p>	<p>The company will survey and analyze areas or departments where technology can be implemented to improve efficiency and reduce carbon emissions. Plans for the development of such technologies will be presented in the annual budget report.</p>
Market	High 	<p>Short-Term : Monitor consumer demands and adjust operations to align with the current needs of consumers.</p> <p>Long-Term : Develop production processes, products, and packaging in response to a market that prioritizes sustainability.</p>	<p>The research and development department will monitor the demands of consumers and incorporate them into the company's future production process improvements.</p>

Risk Management

How the company processing to identifying, assessing, and managing climate-related risks.

Identified Risk	Assess	Select strategy	Monitor and report
Reputation	High	<p>Short-Term : The company has begun in reporting and disclosing greenhouse gas emissions data as well as in environmental management.</p> <p>Long-Term : The company will expand the scope of disclosing information related to our greenhouse gas reduction and other environmentally friendly activities. This is to ensure that people can access to this information and to increase opportunities for building a positive reputation for the company.</p>	<p>The company has a public complaint channels, providing the company to become aware of the impacts of our operations, including environmental concerns. This allows the company to monitor our reputation.</p> <p>Additionally, the company has a compliance division responsible for handling received complaints and send the issues to the relevant departments, ensure they are acknowledged, and work to find solutions.</p>

Metrics & Targets

Metrics & Targets

TFG greenhouse gas (GHG) emissions 2023

Scope 1 : 76,689 tonCO2-eq

Stationary Combustion

(e.g. Fuel for power generation or boilers)

Mobile Combustion

(e.g. Fuel consumption by company vehicles)

Fugitive Emissions

(e.g. Refrigerant leakage, fire suppressants)

Wastewater treatment

Scope 2 : 178,247 tonCO2-eq

Electricity purchased and consumed

Scope 3 : 1,245,504 tonCO2-eq

Purchased goods & services

Fuel and energy related activities

Upstream transport & distribution

tonCO2-eq

1,400,000

1,200,000

1,000,000

800,000

600,000

400,000

200,000

0

Scope 1

Scope 2

Scope 3

*Greenhouse gas emission 2023 is the data that the company submitted to TGO.

Metrics & Targets

Company's Target for GHG Reduction and removal



Reduce emissions to Net Zero

Near-Term 2022-2026 (2-5 Years)

- Already started using solar cells in some of our factory areas and plans to expand this usage to other factory locations.
- Plan to develop biogas to convert the gas generated from business operations into electricity for use.
- Transitioning to LED lighting and using inverter technology for air conditioning systems.
- Manage travel time and the number of employees for work outside transportation to minimize energy consumption.

Medium-Term 2027-2031 (6-10 Years)

- Switch from gasoline-powered vehicles to electric vehicles, starting with company's personal car, and then expanding to transport vehicles in the production process.
- Developing the company's products in preparation for Carbon product certification.

Long-Term 2032-2065 (Net Zero)

- Searching for new technologies for use in the production process that can help reduce greenhouse gas emissions.
- Use a transportation company that operates with a focus on environmental sustainability for the import of raw materials by the company.
- Planting trees to offset carbon emissions in the remaining scope.

*Reduce emissions by approximately 8% in near-term and 18% in medium term and we will reach Net zero by 2065.(This target has been approved by the company's BoD.)

**For other targets by using renewable energy, the company has already started using it, and aim to use 100% renewable energy by 2065.

***The Company will update the target every 3-5 years to ensure the updating of new technology, policy changing, society, and the market trends.

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THAIFOODS GROUP PUBLIC COMPANY LIMITED

Thank You