

Taskforce on Climate-Related Financial Disclosures (TCFD) Report 2023

Fraser's Property Thailand's Approach
to Climate Change and Net Zero
Emissions

About This Report

Frasers Property (Thailand) Public Limited Company (FPT), a subsidiary of Frasers Property Group, is a leading integrated real estate platform with multi-asset class expertise. FPT has its subsidiary, e.g. Frasers Property Industrial (Thailand) Company Limited, Golden Land Property Development Company Limited, etc. to operate in industrial, residential, commercial and hospitality property in Thailand.

FPT is also the sponsor and manager of Thailand’s largest industrial REIT, Frasers Property Thailand Industrial Freehold & Leasehold REIT (FTREIT), which is focused on industrial and logistics properties in Thailand. Meanwhile, Golden Land Property Development Company Limited is a sponsor and property manager of Golden Ventures Leasehold Real Estate Investment Trust (GVREIT), a REIT focused on commercial properties. The above-mentioned REITs are listed on the Stock Exchange of Thailand (SET).

Our Company structure comprises three businesses which are Residential Property Business, Industrial Property and Investment in Related Businesses, and Commercial Property Business. We are dedicated to establishing effective sustainable pathways to achieve our climate challenges. Moreover, we have pledged our commitment targeting to become a net zero carbon organization by 2050. To attain this goal, we are passionate to conduct climate strategy and robust risk management methods to manage climate-related risks and opportunities in line with Taskforce on Climate-Related Financial Disclosure (TCFD) recommendations.

In this report, the analysis of climate related risks and opportunities has been conducted in Fiscal Year 2023, covering the own operation in Thailand. We could identify potential physical risks based on our business environment, whilst transition risks are identified by considering many different influencing factors, such as national and international policies and regulations. To conduct scenario analyses, we have selected scenarios by considering the Paris Agreement Goals, the new scientific updates on the latest IPCC Assessment Report (AR6) and the TCFD’s recommendations. In addition, the selected scenarios used in our scenario analysis were aligned with the recommended characteristics proposed by Taskforce on Climate-Related Financial Disclosure (TCFD) recommendations, which are plausible, distinctive, consistent, applicable, and challenge which meet the recommended characteristics established by TCFD.

In the next section, in alignment with TCFD recommendations, we have structured this report by four core pillars: governance, strategy, risk management, and metrics and targets.

Content

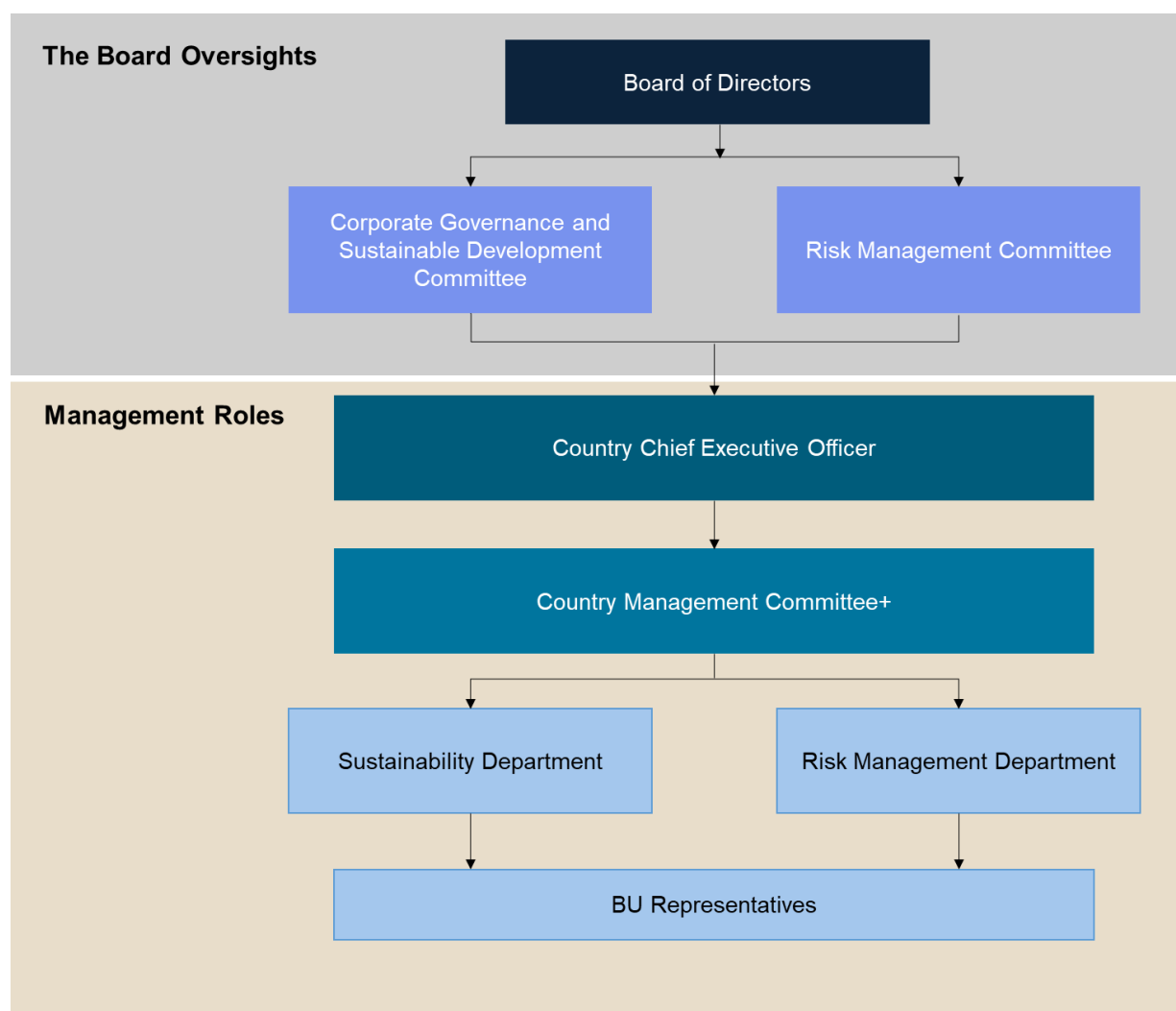
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Part I: Governance

The Board places great importance on addressing climate change as a crucial governance and strategic concern. It consistently features discussions related to strategy, portfolio evaluations, investment choices, oversight of risk management, and the assessment of performance against commitments. Additionally, the Board actively engages with stakeholders, including shareholders, through annual general meetings to communicate updates on sustainability progress and impacts. The Corporate Governance & Sustainable Development Committee plays a pivotal role in supporting the Board's oversight of the Frasers Property Group's ("Group") climate change performance and governance responsibilities. Meanwhile, the Risk Management Committee and Sustainability Committee assist the Board in supervising climate-related risk management. The governance structure below shows the Board and management level structure with their delegated authority.

Governance Structure on Climate related Risks and Opportunities



The Board's Oversight on Climate Related Risks and Opportunities

The Board of Directors (BODs)

The Board of Directors consists of nine members which are eight non-executive directors and one executive director. Each director possesses extensive qualifications and expertise in various areas such as Legal, Economics, Information Technology and Digital, and Environmental Management and Sustainability, aligning with the Global Industry Classification Standard (GICS) for the real estate sector.

The Board of Directors has a vital role in promoting the long-term sustainability of the Company by providing strategic direction for ESG policy, targets, and practices to create value for all stakeholders towards sustainable development. To determine the most effective direction, the Board considers the impact of ESG factors on stakeholders and changes in the factors affecting the business and stakeholders. The Board is also responsible for overseeing management and allocating essential resources for actual implementation.

In terms of climate change, the Board has set a goal to achieve net zero emission by 2050 along with the commitment to SBTi on carbon reduction based on science-based target by 2030. To achieve this goal, the Board oversees the climate practices and provides recommendations for further actions to minimize climate impacts and extend its opportunities in the market. In the meantime, the Board communicates the sustainability progress and impacts to all stakeholders on an annual basis.

To stay abreast of the upcoming sustainable developments and climate change actions, the Board of Directors are equipped with the climate knowledge through several trainings. In 2023, the Board participated in the National Director Conference 2023: Delivering 'Net Zero' Together, organized by the Thai Institute of Directors. This event provided insights into climate change strategies, sustainable management, and future investments. It emphasized the Board's role in guiding organizations toward achieving net-zero emissions targets, contributing directly to their ability to address climate change risks.

Corporate Governance & Sustainable Development Committee (CGSDC), Risk Management Committee (RMC)

The Board has established two sub-committees to strengthen sustainability efforts and improve climate-related risk management. The Corporate Governance and Sustainable Development Committee (CGSDC), consisting of three directors, is responsible for developing comprehensive guidelines, policies, and frameworks that address ESG-related issues and promote sustainable development. The CGSDC is also responsible for directing climate actions of each business unit and quarterly reporting its performance to the Board.

At the same time, the Risk Management Committee (RMC), consisting of four directors, provides essential sustainability insights and considerations to support the CGSDC actions. The RMC is responsible for reviewing and approving policies, objectives, and the Enterprise Risk Management (ERM) framework, aligning them with corporate strategies. Additionally, the RMC oversees climate-related risk assessments, including identifying, evaluating, monitoring, and reporting climate-related risks and opportunities. The committee reports its performance findings to the Board of Directors every quarter.

In 2024, Frasers Property Thailand has a plan to integrate the Corporate Governance Sustainable Development Committee (CGSDC) and the Risk Management Committee (RMC) as a Sustainable Risk Management Committee (SRMC). This committee is expected to oversee and govern all functions and working team regarding corporate governance, enterprise risk management, and sustainable development by considering potential and actual risks, sustainability performance, and risk management that may affect the business operation.

Management Roles on Climate Related Risks and Opportunities

The effective management of climate-related risks and opportunities is critical to any organization's success. Frasers Property Thailand recognizes this and has established a team of dedicated professionals to drive action on sustainability and risk management. At the forefront of this effort are Country Chief Executive Officers and Executive Management, who work in tandem with the Sustainability and Risk Management Departments and BU Representatives. To ensure that sustainability initiatives are in line with the Group aspiration and framework and implemented effectively, the Group Sustainability Team (GST), which is based at Frasers Property Group, delivers ESG themes to the Chief Executive Officers and Executive Management, empowering them to lead ESG activities in each country. The GST provides guidance on specific ESG initiatives, identifying strategies and opportunities to integrate ESG activities into business processes and operations.

To further support these efforts, members of the FPT sustainability team are part of this ESG-related Taskforce to conduct ESG activities in each country. The GST provides technical guidance and feedback on proposed ESG initiatives across respective markets that align with the Group's ESG strategy. Moreover, the GST provides a cohesive platform for identifying synergies, facilitating knowledge sharing across business units, and supporting the implementation of our Group ESG Goals. Our collective efforts in managing climate-related risks and opportunities will not only help us achieve our sustainability objectives but also create a positive impact on the global community.

Country Chief Executive Officers & Executive Management

Executive Management refers to the first four executives who follow the CEO, as well as any person holding a position equivalent to the fourth-level executive. The executive management team is authorized to execute tasks delegated by the Board of Directors in accordance with the Company's rules, regulations, and Articles of Association.

In order to achieve net zero emission by 2050, the CEO is responsible for overseeing the assessment of climate risks, management of sustainability, and taking action to promote sustainability within the organization. With guidance and targets set by the Board, the CEO monitors the progress of sustainability and climate-related plans, projects, and their implementation across all functions of the Company. To ensure that the company is aligned with the sustainability plan and target, in addition, bi-monthly meetings are conducted to communicate sustainability and climate-related performance. Additionally, the CEO reports the results and performance to the sub-committee and the Board on a quarterly basis.

Country Management Committee+ (CMC+)

The Country Management Committee+ (CMC+) is chaired by the CEO and comprises top management executives. Their responsibility is to ensure business operations align with sustainability policies and operational directions, as well as allocate strategies and initiatives to Sustainability Department and Risk Management Department to mitigate risk of the business. In order to comprehensively enrich the capacity of CMC+, in 2023, 55 people from the CMC+ and relevant support functions attended a 2-hour training session on ESG risks. The training focused on sustainability-related risks that are based on international standards and peer benchmarks. This training session not only provided a clear picture of risks related to ESG matters, but also provide valuable input for executives of each business unit to conduct the 2024 risk management plan involving ESG risks.

Sustainability Department, Risk Management Department, and BU Representatives

The Sustainability and Risk Management Departments are responsible for managing the day-to-day operations of the Company. The Sustainability Department oversees sustainability actions and initiatives and monitors the sustainability performance of every business function. The Company has assigned BU representatives as key drivers for sustainability practices. The ESG BU representatives work with the building management team in each project to promote energy conservation and environmental management, as required by relevant regulations including electricity, water, air, waste etc. They also prepare energy management reports for relevant governmental agencies.

On the other hand, the Risk Management Department is responsible for enterprise risk management, including identifying, assessing, monitoring, and mitigating the risk of each business unit. The Company

has designated BU representatives as risk owners to identify risks and develop mitigation plans. Additionally, the Company has established a Crisis Management Team to be responsible for managing emergencies and minimizing the impact or damage to the Company's operations, especially in unforeseen events, such as IT system breakdowns, natural disasters, and climate-related matters. In 2023, the team is in the process of developing a Business Continuity Plan (BCP), aligning with the principles and requirements from ISO 22301:2012 standard. This plan entails systematic steps for business continuity planning, impact analysis, and risk assessment to prepare for diverse emergencies that could potentially disrupt the Company's operations. To ensure progress towards the Company's sustainability goals, both departments will report performance and progress to the CEO annually, and to the Board and sub-committee quarterly.

Part II: Strategy

In accordance with the Paris Agreement aims to limit global warming to well below 2°C from pre-industrial levels and pursue efforts to further limit warming to 1.5°C, Frasers Property Thailand has set the goal to be a net-zero carbon corporation by 2050.

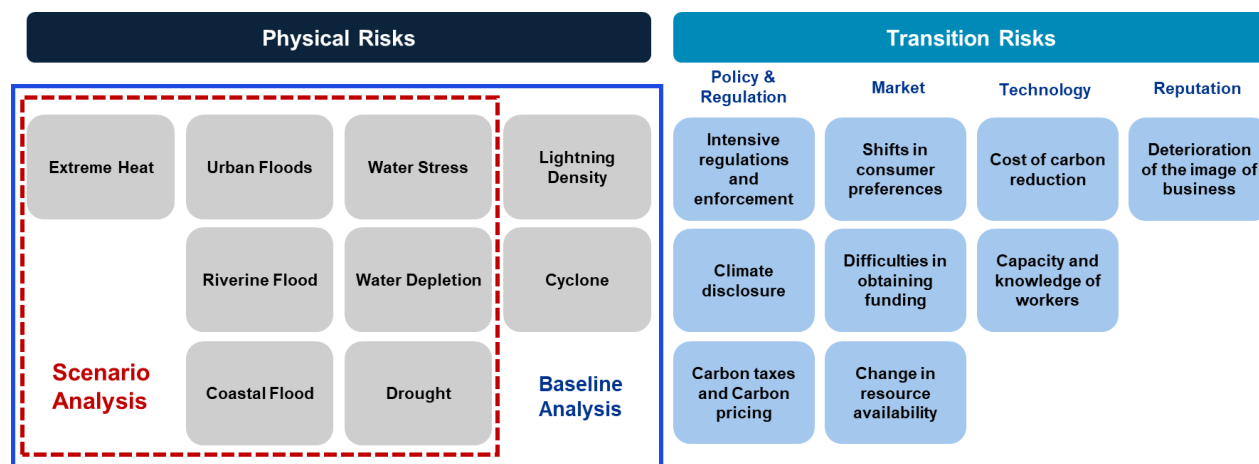
In 2023, Frasers Property Thailand has comprehensively assessed and identified climate-related risks and opportunities throughout our own operations across different time horizons by 2030 (short term), 2040 (medium term), and 2050 (long term). To comprehensively understand potential impacts of climate change on the business's contexts, we conducted two levels of scenario analyses which are the high-emission scenario as our business-as-usual (BAU) scenario (above 2°C) and the low carbon future scenario posed by global commitment (2°C or below 2°C). In addition, physical risks and transition risks identified were included in line with those analyses as presented below:

Climate-Related Risks	High Emission Scenario (Above 2°C)	Low Emission Scenario (Well below 2°C)
Physical Risks	<i>Aligned with SSP5-8.5 (IPCC):</i> Considering the global temperatures are projected to increase by 3.3°- 5.7°C in the 21st century. This scenario embodies a "worst-case" from business-as-usual situation, wherein the escalation of physical climate risks becomes notably more distinctive.	<i>Aligned with SSP1-2.6 (IPCC):</i> Considering the global temperature increases significantly less than 1.3°- 2.4°C, highlighting the threshold for understanding the minimal impact of climate change on businesses in the future. This scenario underscores the prioritization of transitioning to a low-carbon economy.
Transition Risks	<i>Stated Policy Scenario (IEA: STEPS)</i> reflects current policy settings by evaluating sector-specific and country-specific policies currently in effect. It considers the specific policies that are already implemented and those that have been announced by governments globally.	<i>Net Zero Emission Scenario (IEA: NZE2050)</i> reflects a clear pathway for the global energy sector to attain net zero CO2 emissions by 2050. This strategy is designed to accomplish its objectives without relying on emission reductions from sectors outside of energy. Notably, it prioritizes achieving universal access to electricity and clean cooking by 2030.
Time horizons	2030, 2040, 2050	2030, 2040, 2050

Identified Climate-Related Risks and Opportunities

In 2023, the first year of analysis, Frasers Property Thailand identified all potential climate-related physical risks and transition risks based on context of our own operations. We used historical data to conduct the baseline analysis to develop the existing situation. Meanwhile, the climate drivers, including surface temperature, precipitation, and sea level, were used to estimate forecasted data, and included in the scenario analyses to reflect the future situation.

Considering the data availability and business context, nine physical risks were identified as a baseline out of which seven physical risks were analyzed in scenario analysis to evaluate the risk exposure in different time horizons. At the same time, nine transition risks were evaluated through scenario analysis by considering the different influencing factors, e.g., national & international policy, IEA data prediction, and real estate sustainability trends. The summary of physical and transition risks is illustrated as below:



Remark: Lightning is not directly linked to climate change but from the damage of the earth's atmosphere layers. Cyclone is impacted by the global rotations along with the land and sea temperature. Due to the data limitation, there is no specific cyclone forecast data in the public scenario.

Physical Risks Assessment

Physical Risks – Baseline Analysis

The baseline analysis has been conducted to demonstrate the most likely or typical situation without considering any specific interventions or changes. The existing situation regarding physical risks resulting from climate change can be event-driven (acute) risks, including extreme heat, lightning, cyclone, urban flood, riverine flood, and coastal flood, and long-term shifts (chronic) risks, including drought, water stress, and water depletion, in climate patterns.

Regarding the overall results from our baseline analysis, the highest physical risk is lightning since over 50% of all properties are in extremely high-risk areas. Followed by the risk from water stress where over 40% of all properties are also in extremely high-risk areas. Furthermore, over 50% of all properties are in high-risk areas and may face the impacts from cyclone, drought, extreme heat, and riverine flood. However, most properties are in medium-low and low risk areas and are rarely impacted from water depletion and coastal flood. The following table illustrated the number of properties for each business unit and physical risks by province:

Risks by province:

Legend:

Extremely High

High

Medium High


































Medium Low

Low

Location	No. of properties per BUs						Risk Level (Baseline)								
	FPH (79)	FPIT (27)	FTREIT (30)	GVREIT (2)	FPCT (11)	Total	Water stress	Water depletion	Drought	Lightning density	Extreme heat	Cyclone	Coastal flood	Riverine flood	Urban flood
Bangkok	34	1	1	2	10	48									
Chachoengsao	1	1	1	N/A	N/A	3									
Chiang Mai	2	N/A	N/A	N/A	N/A	2									
Chiang Rai	2	N/A	N/A	N/A	N/A	2									
Chon Buri	4	7	13	N/A	N/A	24									
Khon Kaen	1	1	N/A	N/A	N/A	2									
Lamphun	N/A	1	N/A	N/A	N/A	1									
Nakhon Ratchasima	2	N/A	N/A	N/A	1	3									
Nonthaburi	8	N/A	N/A	N/A	N/A	8									
Pathum Thani	9	1	1	N/A	N/A	11									
Phra Nakhon Si Ayutthaya	1	4	6	N/A	N/A	11									
Prachin Buri	N/A	2	2	N/A	N/A	4									
Rayong	N/A	2	2	N/A	N/A	4									
Samut Prakarn	7	6	4	N/A	N/A	17									
Samut Sakhon	7	1	N/A	N/A	N/A	8									
Udon Thani	1	N/A	N/A	N/A	N/A	1									

Above-mentioned table indicates that all properties in the northern regions of Thailand, including Chiang Mai, Chiang Rai and Lamphun, are in medium-high risk areas while the remaining are mostly in high-risk areas. Moreover, there are no extremely high-risk areas identified in Chiang Rai and Udon Thani. The highest risks across all areas are presented in Bangkok and Samut Prakan due to the risky areas from Lightning density in Bangkok and the risky areas from Riverine flood in Samut Prakan. In addition, more than 50% of all areas in Chachoengsao, Pathum Thani, Phra Nakhon Si Ayutthaya, Prachin Buri, and Samut Sakhon are presented as high-risk level. The summary of physical risks and tools used in our baseline analysis are summarized as follows:







Legend:  Extremely High  High  Medium High  Medium Low  Low




Risk Types	Risk Level	Overview	Description/Impacts	Tools
Acute: Lightning 	High 		Lightning strikes occur due to atmospheric conditions during thunderstorms, leading to fires, structural damage, and electrical system disruptions in buildings.	VAISALA Xweather
Acute: Cyclone 	Medium High 		These storms form over warm ocean waters due to atmospheric conditions, resulting in high winds, heavy rainfall, storm surges, and flooding.	ThinkHazard!
Acute: Urban Flood 	Medium Low 		These floods occur due to factors like heavy rainfall, inadequate drainage systems, urban development, and extreme weather events linked to climate change. As a result, properties face functionality issues, posing risks to real estate investments.	
Acute: Riverine Flood 	High 		These floods occur due to factors such as heavy rainfall, overflowing rivers, inadequate infrastructure, and climate change-induced extreme weather events.	
Acute: Coastal Flood 	Medium Low 		These floods occur due to factors such as storm surges, rising sea levels, inadequate coastal defenses, and extreme weather events linked to climate change.	
Chronic: Extreme Heat 	High 		Extreme heat, stemming from greenhouse gas accumulation, affects businesses by posing risks to health, ecosystems, and infrastructure. This leads to operational disruptions, increased energy needs, and changing consumer demands.	ThinkHazard!
Chronic: Drought 	High 		Droughts stem from altered climate patterns, including rising temperatures and changes in precipitation, requiring businesses to adapt to water scarcity and its associated risks.	
Chronic: Water Stress 	High 		Water stress results from altered climate patterns, like changed precipitation and prolonged droughts, impacting water availability necessary for construction and property functionality.	
Chronic: Water Depletion 	Medium High 		Water depletion is caused by various factors exacerbated by climate change, such as over-extraction, pollution, and altered precipitation patterns.	

Physical Risks – Scenario Analysis

The climate drivers, including extreme temperature, precipitations, and sea level rise, are used to conduct scenario analyses separated into short term (2030), medium term (2040), and long term (2050). According to IPCC's the Sixth Assessment Report (AR6), the climate models used was Representative Concentration Pathways (RCPs) coupled with Shared Socioeconomic Pathways (SSPs), including more robust “storylines” of factors such as population growth, urbanization, technologic advancements to mitigate climate change. This SSP + RCP combination allows covering climate, emissions, vulnerability, environmental and socioeconomic scenarios. Additionally, it is updated versions from the concerns of IPCC AR5 that considers only emission. In this regard, the Company has conducted two scenarios, namely SSP1-2.6 to illustrate the below 2°C scenario with moderate challenges to mitigation and adaptation, and SSP5-8.5 to display above 2°C scenario with great challenges for mitigation and few challenges for adaptation.

The key indicators and tools for each risk used in our analyses are summarized in the following table:

Climate Drivers	Physical Risks	Key Indicators	Scenario	Time Horizon	Description/Criteria	Tools
Extreme Temperature 	Extreme Heat	Number of hot days (> 35°C)	SSP 1-2.6 SSP 5-8.5	2030 2040 2050	<ul style="list-style-type: none"> The higher number of hot days represent the high-risk area, while the lower number of hot days represent the low-risk area. The projection of number of hot days was conducted by CMIP6 in Thailand. 	
Precipitations 	Urban Flood	Precipitations	SSP 1-2.6	2030 2040 2050	<ul style="list-style-type: none"> The precipitation refers to the flood situation (urban & riverine flood) for properties. The high level of precipitation can impact the drainage capability in each zone. The projection of precipitation was conducted by CMIP6 in Thailand. 	
	Riverine Flood		SSP 5-8.5	2030 2040 2050		
	Drought	SPEI Drought Index	SSP 1-2.6 SSP 5-8.5	2030 2040 2050	<ul style="list-style-type: none"> SPEI reflects the impacts of drought will be reflected in a specific criterion from extremely dry to extremely wet. The projection of SPEI Drought Index conducted by CMIP5 in Thailand. 	
	Water Stress	World Resources Institute (WRI)	SSP 1-2.6	2030 2050 2080	<ul style="list-style-type: none"> The precipitation reflects the floods situation (urban & riverine flood) for properties. The high precipitation can impact the drainage capability in each zone. The projection of Water Stress and water depletion conducted by global climate system (GCM) of IPCC. 	
	Water Depletion		SSP 5-8.5	2030 2050 2080		
















Climate Drivers	Physical Risks	Key Indicators	Scenario	Time Horizon	Description/Criteria	Tools
Sea Level Rise 	Coastal Flood	Land below water & Sea level rise	SSP 1-2.6 SSP 5-8.5	2030 2040 2050	<ul style="list-style-type: none"> Land below water reflects all areas below water level. This includes areas potentially protected by levees, natural ridges, or other features. The analysis is based on global climate system (GCM) of IPCC. It is used to focus the potential floods areas from sea level rise. The projection of sea level rise is conducted by CMIP6 in Thailand from water measuring station. It reflects the projection and uncertainties for 'Total Sea Level Change'. 	 













Remark: According to the data sources, the water depletion was analyzed by 2030, 2050, and 2080.




Physical Risk Impact Assessment

Legend: Extremely High High Medium High Medium Low Low

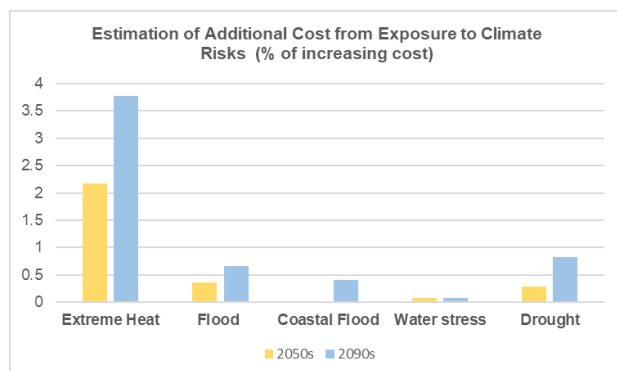
Risks	Scenario	Risk Level	Vulnerable Area	Scenario Interpretation	Potential Impacts to Frasers Property Thailand
Extreme Heat	SSP 1-2.6	2030	<ul style="list-style-type: none"> Samut Prakan Khon Kaen Nakhon Ratchasima Pathum Thani Phra Nakhon Si Ayutthaya Prachin Buri 	<p>In both scenarios, the risk of extreme heat is expected to increase every decade. However, the risk from extreme heat is not that severe as the humidity can potentially absorb the heat.</p> <ul style="list-style-type: none"> SSP1-2.6: The risk is only medium low to medium high level. SSP5-8.5: The risk from extreme heat is same level as SSP1-2.6 however the risk level is expected to be more severe (reaching high level) in 2050. <p>Rayong is the only place with low risk throughout the period, this could be because there is a high precipitation therefore the risks from extreme heat can be low.</p>	<p>Property Value Fluctuations: Property values may decrease in heat-prone regions due to damage or higher cooling costs.</p> <p>Increased Operating Costs: Higher temperatures lead to increased energy consumption, raising operating costs for property owners.</p> <p>Property Damage: Intense heat can cause damage to buildings, roofs, and landscaping, requiring additional maintenance.</p> <p>Insurance Costs: Increased heatwave frequency could lead to higher insurance premiums for properties in affected areas, as insurers cover heat-related risks.</p>
		2040			
		2050			
	SSP 5-8.5	2030			
		2040			
		2050			

Risks	Scenario	Risk Level		Vulnerable Area	Scenario Interpretation	Potential Impacts to Frasers Property Thailand
Urban Flood & Riverine Flood	SSP 1-2.6	2030		<ul style="list-style-type: none"> Rayong Bangkok Chachoengsao Chon Buri Nakhon Ratchasima Nonthaburi Pathum Thani Phra Nakhon Si Ayutthaya Prachin Buri Samut Prakan Samut Sakhon 	<ul style="list-style-type: none"> SSP1-2.6: The risk is expected to be in the same level throughout the periods, except for Chiang Mai, Pathum Thani, Samut Prakan and Samut Sakhon where the risk in 2050 is expected to be lower than the risk level in 2040. SSP5-8.5: The risk is expected to be in the same level throughout the periods expect for Chiang Mai where the risk level is escalated to medium high level in 2040 and 2050. Similarly, the risk in Pathum Thani is expected to increase to high level in 2050. 	<p>Property Damage and Devaluation: Floods cause severe damage to buildings and infrastructure, decreasing property values and affecting real estate marketability in flood-prone areas.</p> <p>Increased Insurance Costs: Properties in flood-prone areas face higher insurance premiums due to flood risks, impacting affordability and attractiveness to buyers or rent seekers.</p> <p>Disruption of Property Usage: Floods can render properties unusable, leading to financial losses for owners and affecting revenue streams for real estate investors.</p> <p>Health and Safety Concerns: Floods bring risks like mold growth, water contamination, and structural damage, impacting habitability and property attractiveness.</p> <p>Regulatory Constraints and Building Codes: Governments impose stricter building codes and regulations for flood-prone areas, increasing costs and limiting design options for real estate projects.</p>
		2040				
		2050				
	SSP 5-8.5	2030				
		2040				
		2050				
Coastal Flood	SSP 1-2.6	2030		<ul style="list-style-type: none"> Bangkok Chonburi Nonthaburi Pathum Thani Phra Nakhon Si Ayutthaya Prachin Buri Rayong Samut Prakan Samut Sakhon 	<p>In both scenarios, the risk of coastal flood is expected to low level over the periods.</p> <ul style="list-style-type: none"> SSP1-2.6 & SSP5-8.5: The risk is expected to be in the low level throughout the periods. <p>While the projected sea level rise may not directly affect the properties, it's essential to factor in the potential consequences of urban floods and riverine floods triggered by increased precipitation.</p>	
		2040				
		2050				
	SSP 5-8.5	2030				
		2040				
		2050				
Water Stress	SSP 1-2.6	2030		All Areas	<ul style="list-style-type: none"> SSP1-2.6: The risk is expected to be in the same level throughout the periods, except for Chiang Rai where the risk is expected to be medium high level in 2050 and 	<p>Decreased Property Values: Properties in areas experiencing water scarcity or drought conditions may face decreased demand and property values due to</p>
		2050				
		2080				

Risks	Scenario	Risk Level		Vulnerable Area	Scenario Interpretation	Potential Impacts to Frasers Property Thailand
	SSP 5-8.5	2030			then expected to increase in the same level in 2080.	concerns about water availability for residential or commercial use.
		2050			○ SSP5-8.5: The risk level in 2050 and 2080 are expected to be in the same level. However, in 2030, Bangkok, Nonthaburi, Pathum Thani, Samut Prakan, and Samut Sakhon are expected to be in medium high level.	Increased Operating Costs: Real estate owners and managers may face rising operational costs due to higher expenses associated with water procurement, conservation measures, and landscaping maintenance during water shortages.
		2080				Limited Development and Usage: Drought conditions might restrict new construction and property development due to water-use restrictions and limitations imposed by local governments. Existing properties may also face limitations on water usage for landscaping or other purposes.
Water Depletion	SSP 1-2.6	2030		<ul style="list-style-type: none"> Chachoengsao Chiang Mai Chon Buri Khon Kaen Lamphun Nakhon Ratchasima Pathum Thani Phra Nakhon Si Ayutthaya Prachin Buri Rayong 	○ SSP1-2.6: The risk is increased in 2050 and dropped in the same level in 2080, especially in Bangkok and its vicinities. Meanwhile, the risk become lower from 2030 to 2050 and 2080 in Chiang Mai, Chiang Rai, Khon Kaen, and Lamphun. For the other locations, there is no change in risk level throughout the period.	Regulatory Compliance and Restrictions: Governments may impose strict regulations and restrictions on water usage, affecting property development and usage. This can limit landscaping options, building designs, and overall property usage.
		2050				
		2080				
	SSP 5-8.5	2030			○ SSP5-8.5: Bangkok and its vicinities are expected to get higher risk in 2080. Meanwhile, Phra Nakhon Si Ayutthaya is expected to reach high risk level in 2050 and 2080. However, the risk level in Chiang Rai is expected to be lower in 2050 and 2080.	
		2050				
		2080				
Drought	SSP 1-2.6	2030		All Areas	The risk of drought is expected to be more severe in SSP1-2.6 than SSP5-8.5	Market Perception and Demand: Buyers and renters may prefer properties equipped with water-efficient features such as low-flow fixtures, water-saving appliances, and drought-resistant landscaping. Properties without these features may experience reduced demand.
		2040			○ SSP1-2.6: In 2040 and 2050, the risk in Bangkok, its vicinities, Chonburi and Chachoengsao	
		2050				

Risks	Scenario	Risk Level		Vulnerable Area	Scenario Interpretation	Potential Impacts to Frasers Property Thailand
	SSP 5-8.5	2030			increased to high level. Meanwhile, the risks in northern region, like Chiang Mai, Chiang Rai, and Lamphun is expected to lower.	
		2040				
		2050			<ul style="list-style-type: none"> SSP5-8.5: there is no significant change of risk level throughout the period, except for Lamphun where the risk is increased in 2040 and dropped in same level in 2050. Also, the risk in Chiang Mai will be in medium low level in 2050. 	

Estimation of Additional Cost from Exposure to Climate Risks



Climate-related hazards pose serious financial risks to businesses, investors, and the economy. A severe drought, for example, could devastate a vineyard, while leaving a nearby office building relatively unscathed. These risks alter the financial assessment of businesses, ultimately influencing banks, insurers, and investors. According to S&P Global, the real estate sector could suffer additional cost from exposure to climate risk approx. 3% and 6% annually in 2050 and 2090 respectively. Hence, climate risks are projected to contribute to the additional cost from exposure to climate risk across most sectors, with other hazards becoming increasingly significant in the long term. Extreme heat is expected to have the most impact thus additional cost from exposure to climate risk, followed by drought, floods, coastal flooding, and water stress. It is clear that businesses must take climate-related risks seriously and take action to mitigate them, or risk significant financial losses in the long run.

Remark:

- Additional cost includes all costs of asset value such as operational cost, maintenance cost, and others cost to recover the buildings to the same condition.
- This cost will be added to the current cost in each business with the assumption that there is no action to deal with the risks.
- The survey has been taken from S&P Global 1200 which is an index that covers the largest companies across North America, Europe, Asia, Australia and Latin America, capturing approximately 70% of global market capitalization.
- Source: [Quantifying the financial costs of climate change physical risks for companies | S&P Global \(spglobal.com\)](https://www.spglobal.com/climate/quantifying-the-financial-costs-of-climate-change-physical-risks-for-companies)

Potential Responses to Physical Risks

The climate-related scenario analysis enables the Company to identify the potential risks and opportunities for the business. In 2023, the risk related to increased temperature posed a potentially high impact for Frasers Property Thailand in the long term, especially urban and riverine flood, as well as water stress. These risks could potentially disrupt the property usage, decrease the property value, increase operational cost (especially insurance cost), and compliance costs to comply with laws and regulations to maintain appropriate living conditions for the society. In addition, the flooding can consequently cause the health issues while the water stress may limit the land development and usage which could affect the market perception and new project development in the future.

The Company is dedicated in taking action to mitigate the impacts of physical risks. To ensure all employees have a basic understanding of climate-related risks, the Company provided knowledge sharing session on physical risks, their impacts, and mitigation measures. In 2023, the Company engaged with over 30 representatives from each business unit to conduct climate risk assessment to share their experiences, future perception, and potential impacts to the business from the physical risks. The objective was to encourage the business to actively recognize, understand, and address climate-related risks and foster dialogue, share information, and promote actions to mitigate and adapt to climate-related challenges.

During the session, the physical risks, climate drivers, hazards/risks, and key impacts on the business were presented to create a common understanding, stimulate discussion, and encourage participants to share their experiences and concerns about climate-related risks. As a result of the session, the Company identified that the most significant physical risks to be urban floods, lightning, and heatwaves. This was followed by cyclones/storms, water stress, water depletion, drought, and river floods. These risks posed concerns about business disruption, increasing expenditure, and damage on the assets. The Company is working to enhance its resilience, reduce vulnerabilities, and develop sustainable solutions for the environment and society as a whole.

To build business resilience and adaptive capability to respond to climate change risk throughout all operating processes, the Company has integrated the physical risk management into the business policies and strategies. These covers studying the topographic and flooding characteristics of an area, designing properties that are able to withstand climate change impacts, and by complying with mitigation measures prescribed under the environmental impact assessment study. Furthermore, the Company has a policy to promote the construction and management of its buildings according to green building standards, such as Leadership in Energy and Environmental Design (LEED) by U.S. Green Building Council, Excellence in Design for Greater Efficiencies (EDGE) by International Finance Corporation (IFC), and Thai's Rating of Energy and Environmental Sustainability (TREES) by Thai Green Building Institute. This aims to ensure that its buildings are high-quality, comply with standards, meet the needs of customers, and have no negative impacts on the environment or society. Also, the Company considers ESG issues in the risk assessment, building design and construction, and laws and regulations, as well as the national and international criteria and standards for land acquisition, design, and construction processes to minimize the potential impacts of climate related risks across the value chain. (Please see more details of strategies and actions in Part IV: Metric and Target).

As a next step, the Company has developed a comprehensive physical risk management framework to manage climate-related risks in its business unit. This framework serves as a guideline for evaluating and alleviating the influences of climate-related risks. The objective of this framework is to enhance the Company's preparedness and responsiveness to both anticipated and unforeseen risks and to facilitate the development of effective strategies within their specific context. All potential responses and crucial actions embedded in the framework, explicitly addressing the mitigation of physical risk, are outlined below.

Physical Risk Management Framework



Potential Responses	Responding to	Description	Key Actions
Risk Assessment and Planning	All Risks	The purpose of risk assessment and planning is to reduce the impacts of climate-related risks through identification, evaluation, and monitoring of climate-related risk from several perspectives. This also includes the step of planning after assessment to prepare the mitigation plan in advance and avoid the damages in all aspects caused by its risks.	<ul style="list-style-type: none"> Conduct thorough risk assessments to identify vulnerabilities to extreme weather events. Develop contingency plans and strategies to mitigate potential damages. Regularly monitor changes in environmental risks and adapt strategies accordingly. Stay informed about evolving technologies and best practices for resilience and sustainability.

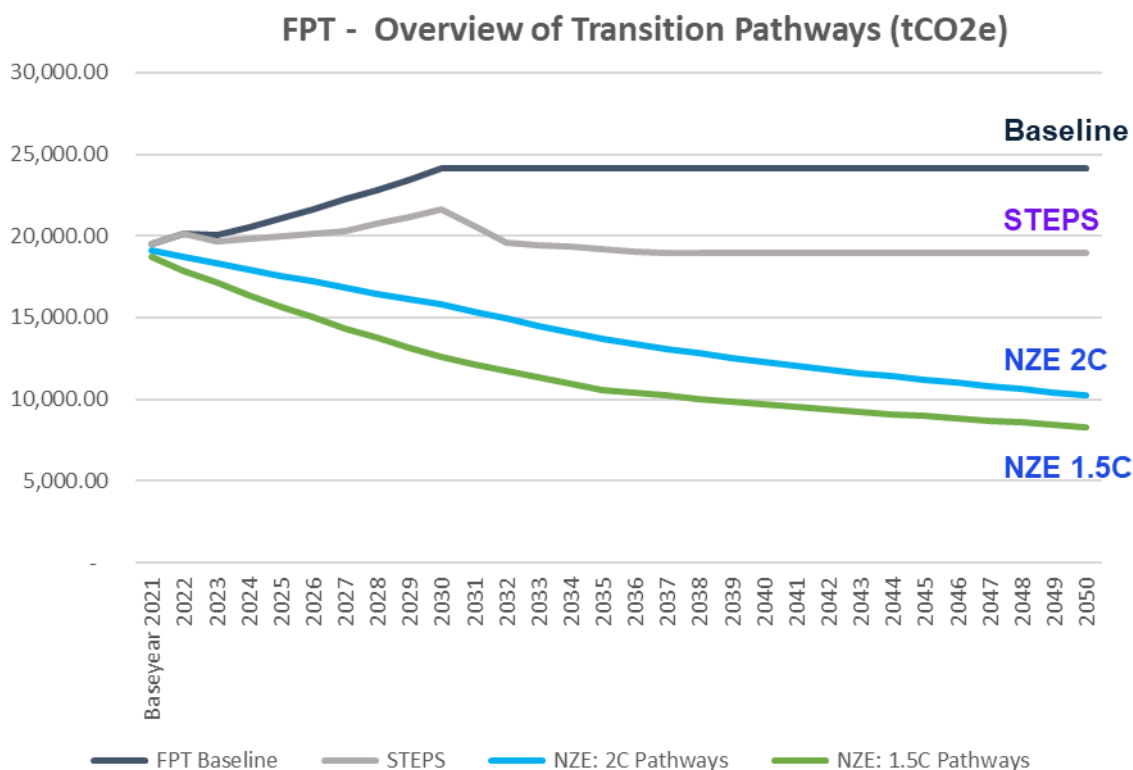
Potential Responses	Responding to	Description	Key Actions
Engagement and Education	All Risks	Stakeholder engagement could lead the opportunity for all group of stakeholders to exchange their opinion with the Company on potential risks related climate change. This aims to understand and prevent its potential impacts on the society and environment. While training and education could fulfill necessary skills and raise awareness in among employee to increase the efficiency of risk management in the organization and be able to reduce those risks.	<ul style="list-style-type: none"> Collaborate with relevant stakeholders to participate in resilience-building initiatives. Advocate for better infrastructure improvements, and sustainable development practices. Educate clients, tenants, and employees about the importance of resilience and sustainability. Promote the benefits of investing in properties equipped to withstand environmental risks.
Investing in Resilient Infrastructure	All Risks	Investing in resilient building is to increase the investment proportion in infrastructures or real estates that consider on ESG aspects and have the potential to be resilient to the natural disasters caused by climate change, such as flood, extreme heat, and water stress.	<ul style="list-style-type: none"> Prioritize investments in properties equipped with resilient features to withstand extreme weather conditions, such as energy-efficient systems or technologies, and disaster-resistant structures. Embrace sustainable building practices that prioritize energy and water efficiency. Implementing green building materials, smart technologies, and energy efficiency systems can mitigate physical risks.
Diversifying Portfolio and Location Analysis	All Risks	In real estate investment, it is necessary to analyze the target location of investment thoroughly in order to avoid damages from physical risk and cost of business. Furthermore, the Company should invest in diverse assets, review its property portfolios, and ensure the overall risk level not over the risk appetite.	<ul style="list-style-type: none"> Diversify property portfolios by considering assets in regions less prone to specific risks or those implementing proactive measures to adapt to climate change. Conduct thorough location analysis to assess potential risks and opportunities related to environmental factors. Consider specialized insurance coverage for properties vulnerable to floods, droughts, or other climate-related risks.

Transition Risks Assessment

Transition Risks Baseline and Scenario Analysis

Transition risks are the challenges and uncertainties that our businesses face as they navigate the ongoing global shift towards a more sustainable and low-carbon economy. According to TCFD recommendations, transition risks can be classified into four categories which are policy and regulation, market, technology, as well as reputation risks.

The Global Energy and Climate Model (GEC Model) of International Energy Agency (IEA) has been used in the scenario analysis. To reflect the transition risks, the greenhouse gas emission has been projected into two scenarios, namely Stated Policies Scenario (STEPS) were used to illustrate as above 2°C scenario (high emission scenario) and Net Zero Emissions by 2050 Scenario (NZE2050) were used to display below 2°C scenario (low emission scenario) as the way to achieve net zero carbon emissions by 2050 compared to our transition baseline. The scenario for transition risk analysis is illustrated as below.



Remark: This approach specifically incorporates only Scope 1 and Scope 2 of Greenhouse Gas (GHG) emissions to focus on the Company's efforts in addressing transition risks.

FPT Baseline

The baseline reflecting the Company's emission without mitigation measures. According to global commitment, the year of 2030 is considered as a peak period for emission. In addition, as the Company has determined target to achieve net zero emission by 2050 from the base year 2021. According to the Paris Agreement and Nationally Determined Contributions (NDCs), the global milestone of GHG emission, the global emission will be peak in 2030 and then reduce accordingly. Therefore, the Company's business as usual (BAU) GHG emission is expected to be remained at the same level from 2030 to 2050.





Stated Policies Scenario (STEPS)

Reflecting the Company's emission (baseline/BAU) with the national policies, including the commitment and plan of NDCs under the Paris Agreement. Particularly, the Power Development Plan (PDP) has been highlighted in the NDCs with a concrete value for lowering grid emission.

Net Zero Emissions by 2050 Scenario (NZE2050)







Reflecting the Company's emission (baseline/BAU) with a pathway for the global energy sector to achieve net zero CO₂ emissions by 2050, with advanced economies reaching net zero emissions in advance of others. According to IPCC AR6, the reduction levels has been defined in 2 pathways; namely limit warming to 1.5°C (>50%) with no or limited overshoot, and limit warming to 2°C (>67%).

According to the secondary research on real estate trends and relevant regulations, we identified key potential risks following TCFD category and their crucial influencing drivers used in our scenario analyses. The list of key transition risks broken down into each TCFD category is presented in the table below:







TCFD category	Key Potential Risks	Key Influencing Drivers
Policy and Regulation 	<ul style="list-style-type: none"> Intensive regulations and enforcement Climate disclosure Carbon taxes and Carbon pricing 	<ul style="list-style-type: none"> Nationally Determined Contributions (NDCs) Draft of Climate Change Act / Climate bills National Energy Plan Thailand Taxonomy
Market 	<ul style="list-style-type: none"> Shifts in consumer preferences Difficulties in obtaining funding Change in resource availability 	<ul style="list-style-type: none"> Real estate sustainability trends National Energy Plan CBAM Thailand Taxonomy
Technology 	<ul style="list-style-type: none"> Cost of carbon reduction Capacity and knowledge of workers 	<ul style="list-style-type: none"> Transition to lower emissions technology Carbon price: International Energy Agency (IEA)
Reputation 	<ul style="list-style-type: none"> Deterioration of the image of business 	<ul style="list-style-type: none"> Nationally Determined Contributions (NDCs) Draft of Climate Change Act / Climate bills Real estate sustainability trends







Transition Risk Impacts Assessment







Legend:  Extremely High  High  Medium High  Medium Low  Low







TCFD Category	Key Potential Risks	Scenario	Risk Level		Description	Scenario Interpretation	Potential Impacts to Frasers Property Thailand
Policy and Regulation	Intensive Regulation and Enforcement	STEPS	2030		<ul style="list-style-type: none">According to Climate Action Tracker ⁽¹⁾, the NDCs, the target and plan of Thailand remained insufficient and far from being 1.5°C or 2°C compatible.	<ul style="list-style-type: none">STEPS has not proven adequate in fulfilling the global commitment, potentially leading to ramifications for the Company's long-term business strategies and performance. The stringent regulations and policies associated with STEPS might pose challenges and hinder the Company's ability to align with international obligations effectively.NZE2050 allows the Company to effectively meet global commitments. Also, it enhances the Company's resilience in navigating evolving conditions. By adopting NZE2050, the Company as a frontrunner among its peers, showcasing leadership in	<p>Compliance Costs: Stricter regulations lead to significant investments in meeting environmental standards, conducting audits, and implementing sustainable practices, resulting in higher operational expenses.</p> <p>Development and Construction Changes: Regulations may require alterations in building codes for environmentally friendly properties, involving sustainable materials, energy-efficient designs, and renewable energy sources, impacting project timelines and expenses.</p> <p>Property Valuation and Investment: Climate regulations impact property valuation, with non-compliant assets facing devaluation and compliant ones potentially gaining higher value. Investor preferences for environmentally compliant properties influence</p>
			2040				
			2050				
		NZE2050	2030		<ul style="list-style-type: none">The NDCs target must be updated every decade. Therefore, the ambition can be changed to be more intensive and Thailand's climate strategies meanwhile the mitigation policies can be more strengthened, to reflect a fair share contribution to the global commitment.The taxonomy has raised the standard for carbon reduction projects to counter greenwashing. The Company's proposed projects must prioritize being		
			2040				
			2050				




Remark: (1) Source: [Thailand | Climate Action Tracker](#)









TCFD Category	Key Potential Risks	Scenario	Risk Level		Description	Scenario Interpretation	Potential Impacts to Frasers Property Thailand
					environmentally friendly without causing additional environmental impacts. For instance, biomass projects might face rejection due to the continued emission of CO2.	sustainable practices and commitment to global environmental goals.	investment decisions and property demand.
	Climate Disclosure	STEPS	2030		<ul style="list-style-type: none"> The development of national greenhouse gas (GHG) databases based on the draft of the climate act and technical screening criteria in Thailand's taxonomy demands a more detailed level of data precision. The Company must improve its data collection efforts concerning climate disclosure and environmentally sustainable initiatives to comply with new reporting requirement. 	<ul style="list-style-type: none"> <i>There is no distinction between the STEPS and NZE2050 scenarios.</i> Given that this requirement takes effect in 2030, the risk may be minimal as it could serve as the initial phase for climate disclosure. However, by 2040 and 2050, the criteria and demands for disclosure might become more rigorous and stringent. 	<p><u>Reporting Requirements:</u> The Company must meet disclosure obligations, potentially including reporting on carbon emissions, energy usage, environmental impact, and sustainability efforts. This involves extensive data gathering, analysis, and reporting efforts.</p> <p><u>Regulatory Compliance and Legal Risks:</u> Non-compliance with climate disclosure rules can result in penalties, necessitating constant adherence to evolving regulations.</p> <p><u>Costs and Operational Changes:</u> Meeting climate disclosure rules may lead to added expenses for data management and adopting sustainable</p>
			2040				
			2050				
		NZE2050	2030				
			2040				
			2050				



TCFD Category	Key Potential Risks	Scenario	Risk Level		Description	Scenario Interpretation	Potential Impacts to Frasers Property Thailand
							practices, impacting operational costs.
	Carbon Taxes Carbon Taxes	STEPS	2030		<ul style="list-style-type: none">In 2026, the Excise Department plans to impose a carbon tax on the energy, transport, and industrial sectors to encourage more companies to use cleaner or renewable energy. The Company will need to annually report their CO2 emissions, even for imported goods. Non-compliance will lead to increased taxes.The execution of carbon taxes may come with the target either per sector, overall, or individual target which posed the challenges to limit the emission.In long term, “Cap & Trade” might be implemented, either individually or together with carbon tax, to limit, or cap, the total level of emissions of each business sector. The	<ul style="list-style-type: none">STEPS indicates a significant long-term risk associated with carbon taxes. There is a possibility that the remaining emissions might surpass the carbon tax limit. However, if the Company adopts a "Cap & Trade" system, it might incur higher taxes to meet compliance regulations.NZE2050 presents a notable long-term risk related to carbon taxes. By adhering to NZE2050 standards, the carbon tax burden may reduce while the Company complies with the "Cap & Trade" system without incurring additional expenses. Aligning with NZE2050 could potentially exempt the Company from carbon tax risks entirely.	<p>Cost of Compliance: Real estate companies may need to invest in carbon offsetting strategies, renewable energy sources, energy-efficient technologies, and sustainable building practices to reduce their carbon footprint and minimize the impact of carbon taxes. Compliance efforts might involve additional expenses for equipment upgrades, retrofits, or adopting new construction methods.</p> <p>Increased Operational Costs: Carbon taxes or pricing mechanisms typically impose charges based on a company's carbon emissions. Real estate firms with high carbon footprints might face increased operational costs as they'll be required to pay for their emissions, potentially impacting profitability.</p>
			2040				
			2050				
		NZE2050	2030				
			2040				
			2050				








TCFD Category	Key Potential Risks	Scenario	Risk Level		Description	Scenario Interpretation	Potential Impacts to Frasers Property Thailand
					Company requires to make more ambitious climate goals and actions.		
Market	Shift in consumer preference	STEPS	2030		<ul style="list-style-type: none">The national energy plan includes incentives aimed at encouraging the adoption of renewable energy sources and the widespread use of electric vehicles (EVs).	<ul style="list-style-type: none">STEPS might prove insufficient, if the demands and interests of stakeholders, including customers, investors, and shareholders, increase for sustainability features. Properties with lower energy efficiency ratings could become less appealing, resulting in potential decreases in property values.NZE2050 emphasizes a collective commitment to promote eco-friendly practices in energy usage, transportation, and construction. This initiative is likely to prompt the Company to integrate these features in response to consumer demands.	<p>Competitive Disadvantages: The Company that do not prioritize sustainability features or obtain certifications may face a competitive disadvantage. They might struggle to attract environmentally conscious consumers and could be overshadowed by competitors offering eco-friendly alternatives.</p> <p>Development Costs: Incorporating sustainability features and obtaining certifications often requires higher upfront investment and development costs. Real estate companies might face financial strain due to additional expenses related to eco-friendly materials, energy-efficient systems, and certification processes.</p> <p>Reduced Profit Margins: Higher initial costs to implement sustainability features could lead to</p>
			2040				
			2050				
		NZE2050	2030		<ul style="list-style-type: none">There is a direct demand for features such as energy-efficient appliances, renewable energy sources, eco-friendly building materials, and smart technologies that can reduce energy consumption and environmental impact. Real estate developers and builders are more likely to incorporate these features in response to consumer demand.This shift has drawn the attention of environmentally		
			2040				
			2050				





TCFD Category	Key Potential Risks	Scenario	Risk Level		Description	Scenario Interpretation	Potential Impacts to Frasers Property Thailand
	Difficulties in obtaining funding	STEPS	2030		<ul style="list-style-type: none"> The taxonomy criteria aid in comparing companies and portfolios, guiding investment choices. Low-rated building standards might lead to higher loan costs as lenders aim to cut financed emissions. 	<ul style="list-style-type: none"> STEPS pose challenges for companies seeking funds as they navigate the transition toward sustainability. Inadequate consideration or incorporation of these challenges within the taxonomy criteria could hinder companies' access to funding, despite their efforts toward sustainability. 	<p>conscious customers, investors, and shareholders who prioritize sustainability.</p> <p>certifications such as LEED (Leadership in Energy and Environmental Design) or ENERGY STAR, serving as evidence of their sustainable building practices. This has the potential to attract stakeholders who are well-versed in and enthusiastic about sustainable building practices.</p> <p>reduced profit margins for real estate developers, especially if they are unable to pass on these increased costs to consumers through higher property prices or rental rates.</p>
			2040				
			2050				
		NZE2050	2030		<ul style="list-style-type: none"> Considering trend of sustainable finance market, Thailand has seen the surge of ESG bond issuance since 2020 and ESG bond issuance has increased dramatically by 100% from 2020 to 2021 and 21% from 	<ul style="list-style-type: none"> NZE2050 provides a motivation for companies to strive to reach a level of environmental 	<p>Reduced Investment Capital: The Company may struggle to secure funding due to stricter criteria from lenders or investors, resulting in reduced capital available for sustainable development or renovation.</p> <p>Higher Financing Costs: The Company may face higher borrowing costs, with lenders potentially imposing increased interest rates or stricter terms due to perceived risks associated with such projects, elevating overall financing expenses.</p>
			2040				
			2050				

TCFD Category	Key Potential Risks	Scenario	Risk Level		Description	Scenario Interpretation	Potential Impacts to Frasers Property Thailand
					<p>2021 to 2022 respectively.</p> <ul style="list-style-type: none"> Investor focus on climate change and ESG can affect capital availability for real estate. Funds might favor sustainable projects, impacting non-compliant assets. ESG-aligned real estate can gain lower borrowing costs and higher valuations, like green bonds. Conversely, less sustainable projects could face increased borrowing costs due to perceived risk. 	<p>performance that financial markets recognize as green. In addition, it provides incentives to gradually increase their share of green economic activities to attract more investors or possibly new and different types of investors.</p>	<p><u>Limited Access to Green Financing:</u> The Company could limit access to specialized green financing options, making it challenging for real estate companies committed to sustainability to secure green loans or bonds, impacting their ability to finance eco-friendly projects.</p> <p><u>Market Perception and Investor Confidence:</u> A lack of funding for climate action might affect investor confidence. Investors might prioritize companies demonstrating a strong commitment to climate initiatives, potentially leading to a loss of investment opportunities to obtain funding for such projects.</p>
	Change in resource availability	STEPS	2030		<ul style="list-style-type: none"> CBAM could change the market demands in the construction materials, affecting the change in resource availability. However, this might 	<ul style="list-style-type: none"> <i>There is no distinction between the STEPS and NZE2050 scenarios.</i> Given that Thailand could impose a tariff on carbon-intensive 	<p><u>Resource Scarcity and Cost Increases:</u> The Company can be disrupted by resource availability, such as raw materials for construction, impacting real estate</p>
			2040				
			2050				

TCFD Category	Key Potential Risks	Scenario	Risk Level		Description	Scenario Interpretation	Potential Impacts to Frasers Property Thailand
		NZE2050	2030		<p>not potentially affect FPT's value chain.</p> <ul style="list-style-type: none"> The significant shift in resource availability is potentially influenced by the increasing demands for renewable energy consumption, particularly in FPI. The Company may encounter challenges in the competitive landscape due to the limited supply of renewable energy. This can potentially affect project schedules and overall profitability. 	<p>products to against the global actions in the long term. In 2040 and 2050, such requirements could be taken in action and might become more rigorous and stringent. Similar to the renewable energy supplies, the Company could be affected in the long term especially when the demands of customers are shifted.</p>	<p>development. Scarcity or increased costs of materials might lead to delays, cost overruns, or changes in project plans, affecting profitability.</p> <p><u>Investor Perception and Financing Risks:</u> The Company reliant on resources might face challenges in attracting investors or securing financing. Investors increasingly consider climate-related risks, and projects vulnerable to resource availability changes might encounter difficulties in obtaining funding.</p>
			2040				
			2050				
Technology	Cost of Carbon Reduction	STEPS	2030		<ul style="list-style-type: none"> Considering the Company target and plan for GHG reduction, the national ambition and target in NDCs has influenced the Company to reduce the GHG emission in alignment with the policy and plan. This can cause the additional cost for the Company to 	<ul style="list-style-type: none"> Transition to lower emissions technology may lead to potential financial risks in long term. The energy efficiency projects might reach its limit. The new technologies are required to invest for carbon reduction while the availability, feasibility, and 	<p><u>Initial Investment:</u> Implementing carbon reduction measures often requires substantial initial investments. Real estate companies might need to invest in renewable energy sources, energy-efficient technologies, green building designs, and sustainable practices to reduce carbon emissions.</p>
			2040				
			2050				
		NZE2050	2030				
			2040				

TCFD Category	Key Potential Risks	Scenario	Risk Level		Description	Scenario Interpretation	Potential Impacts to Frasers Property Thailand
			2050		develop the initiatives to achieve the target.	<p>payback of each technology remained a challenge in the future.</p> <ul style="list-style-type: none"> ○ STEPS reflects the lower risk on the cost of carbon reduction comparing to NZE2050. The initiatives and technologies can be done together with carbon offset to achieve the target. ○ Considering the abatement cost from IEA, NZE2050 reflects the high risk to invest in carbon reduction initiatives. The fuel consumption (Scope 1) will be banned in 2040 while the Company requires to deploy a wide portfolio of clean energy technologies, without offsets. 	<p><u>Operational Costs:</u> Adopting carbon reduction measures can lead to increased operational costs. This might include expenses related to installing energy-efficient systems, conducting regular maintenance, and adopting sustainable practices across properties. Higher utility costs for renewable energy sources or energy-efficient upgrades may also impact expenses.</p>
	Capability and	STEPS	2030		<ul style="list-style-type: none"> ○ Advanced technologies 	<ul style="list-style-type: none"> ○ STEPS requires less technology's 	<p><u>Implementation Challenges:</u> Limited</p>

TCFD Category	Key Potential Risks	Scenario	Risk Level		Description	Scenario Interpretation	Potential Impacts to Frasers Property Thailand
	knowledge of workers		2040		<p>frequently come with complex systems and interfaces. Employees must possess technical knowledge and adaptability to navigate through these systems efficiently, addressing issues, and optimizing the technology for improved performance.</p> <ul style="list-style-type: none"> Data management is also necessary to trace the Company performance. The employee should understand the linkage of data collection and its impacts to increase the efficiency in its operations and innovate new solutions for the Company. 	<p>adaptation. The risk of capacity and knowledge of workers on advanced technology might pose only low impacts to the business.</p> <ul style="list-style-type: none"> NZE2050, the technological advancements occur rapidly. Employees need to engage in continuous learning and stay updated with the latest trends, updates, and advancements in technology to remain competent in managing and utilizing this technology effectively. In addition, skilled employees can identify opportunities to enhance processes and utilize technology to drive innovation within the Company. 	<p>worker knowledge or expertise regarding climate-related technologies might hinder successful implementation. Inadequate capacity to understand, adopt, and operate new climate-focused technologies could lead to inefficiencies or operational disruptions.</p> <p>Innovation Constraints: Limited worker knowledge could restrict the Company's ability to innovate in climate-focused technology. Without a skilled workforce to explore and implement new solutions, the Company might lag in adopting cutting-edge technologies to address climate risks.</p>
			2050				
		NZE2050	2030				
			2040				
			2050				
Reputation	Deterioration of the image of business	STEPS	2030		<ul style="list-style-type: none"> The reputation of the business can be damaged particularly from the national 	<ul style="list-style-type: none"> STEPS conflict with climate action goals. Increased societal awareness and 	<p>Reputational Damage: Negative publicity or public perception of insufficient commitment to</p>
			2040				

TCFD Category	Key Potential Risks	Scenario	Risk Level		Description	Scenario Interpretation	Potential Impacts to Frasers Property Thailand
			2050		<p>policies and market preference.</p> <ul style="list-style-type: none"> ○ Sudden or drastic policy changes may create uncertainty within the industry, leading to concerns among investors and stakeholders about future profitability or compliance. Also, this could lead to a perception that the industry is not prioritizing climate action due to inadequate policy support. ○ The political and economic instability may deter investors or buyers due to concerns about the long-term viability and security of their investments. 	<p>stakeholder activism around climate issues might amplify negative attention on companies perceived as not taking adequate steps toward sustainability, impacting their reputation adversely.</p> <ul style="list-style-type: none"> ○ NZE2050 viewed as industry pioneers, attracting environmentally conscious consumers and investors. Embracing sustainable practices can differentiate themselves in the market, enhancing brand image and attracting consumers seeking environmentally responsible products or services. 	<p>climate action can result in reputational damage. This can affect a company's brand value, credibility, and overall standing within its industry.</p> <p>Stakeholder Confidence: A negative image in climate action can erode trust and loyalty. Stakeholders concerned about environmental issues may choose competitors perceived as more committed to sustainability, leading to reduced sales and market share.</p> <p>Supply Chain and Partner Relationships: Negative perceptions of a company's climate action efforts might affect relationships with suppliers, partners, or collaborators. Companies may be hesitant to associate or collaborate with businesses perceived as lacking in sustainability commitments.</p>
			2030				
			2040				
		NZE2050	2050				

Potential Responses to Transition Risks

Transition risks, particularly associated with the Company's greenhouse gas emissions, carry significant implications in terms of policy, market, technology, and reputation. From a policy perspective, the Company needs to navigate the changing dynamics of regulatory and measure that may impose constraints on new development projects. Non-compliance with evolving environmental regulations may lead to financial penalties and damage relations with regulatory bodies. In the market, failure to address emerging eco-friendly and sustainable options risk losing market share and investors' trust, which could negatively impact their future profitability. Embracing and integrating green technologies is not only essential for operational efficiency and competitiveness, but it is also vital for companies that aspire to succeed in a sustainability-focused business landscape. Without technology adaptation, the Company may lead to inefficiencies and increased further costs. Furthermore, the Company must be mindful of the potential damage to their reputation due to stakeholders' close monitoring of their environmental practices. To mitigate transition risks and ensure long-term success, the Company proactively align with new regulations, adapt to market dynamics, embrace sustainable technologies, and safeguard their reputation to tackle with the changing business landscape.

Frasers Property Thailand commits to conducting the business with consideration of risks caused by climate change. The Company strives to achieve Net Zero Emission by 2050. To achieve this target, the Company established management approaches to address this risk through both mitigation and adaptation strategies, as well as setting up a strategy to reduce GHG emissions in the long term. In practice, the Company conducted a sensitivity analysis and developed a climate change roadmap to reduce both direct and indirect greenhouse gases from three business units that are in line with the Science Based Targets initiatives (SBTi). Consequently, various initiatives were established to reduce greenhouse gas emissions from construction and business operations.

In 2023, the Company implemented resource efficiency management, which includes energy efficiency, water, and waste management, as well as green procurement. To reduce GHG emissions, the Company has installed LED lighting to save energy consumption and accelerate renewable energy development to reduce electricity consumption. Meanwhile, the Company fosters green procurement by selecting environmentally friendly products. In addition, the Company has developed all new properties in accordance with green building standards certified by the Global Real Estate Sustainability Benchmark (GRESB) and carried out mitigation measures prescribed under the environmental impact assessment report. Energy conservation reports were also developed by the energy management committee for buildings in accordance with relevant regulations. (Please see more details of strategies and actions in Part IV: Metric and Target)

In the next step, the Company has a plan to formulate comprehensive net-zero roadmap and action plan. Beyond conventional measures such as enhancing energy efficiency, implementing green procurement practices, and optimizing green buildings, the Company's plan places a heightened emphasis on investing in innovative solutions for carbon reduction and removal. This strategic focus aims to not only curb greenhouse gas emissions more efficiently but also contribute to broader environmental initiatives, positioning the Company as a proactive leader in the pursuit of a sustainable and low-carbon future. By prioritizing investments in cutting-edge technologies and methodologies, the Company is not just mitigating transition risks but actively contributing to global efforts in combatting climate change and fostering a more resilient and environmentally conscious business model.

In addition, the Company has developed a comprehensive transition risk management framework to manage climate-related risks in its business unit. This framework consists of the key consideration on transition risks which allows the business units to develop the resilient actions towards net zero target. All potential responses, and key actions for addressing the mitigation of transition risk, are outlined below.

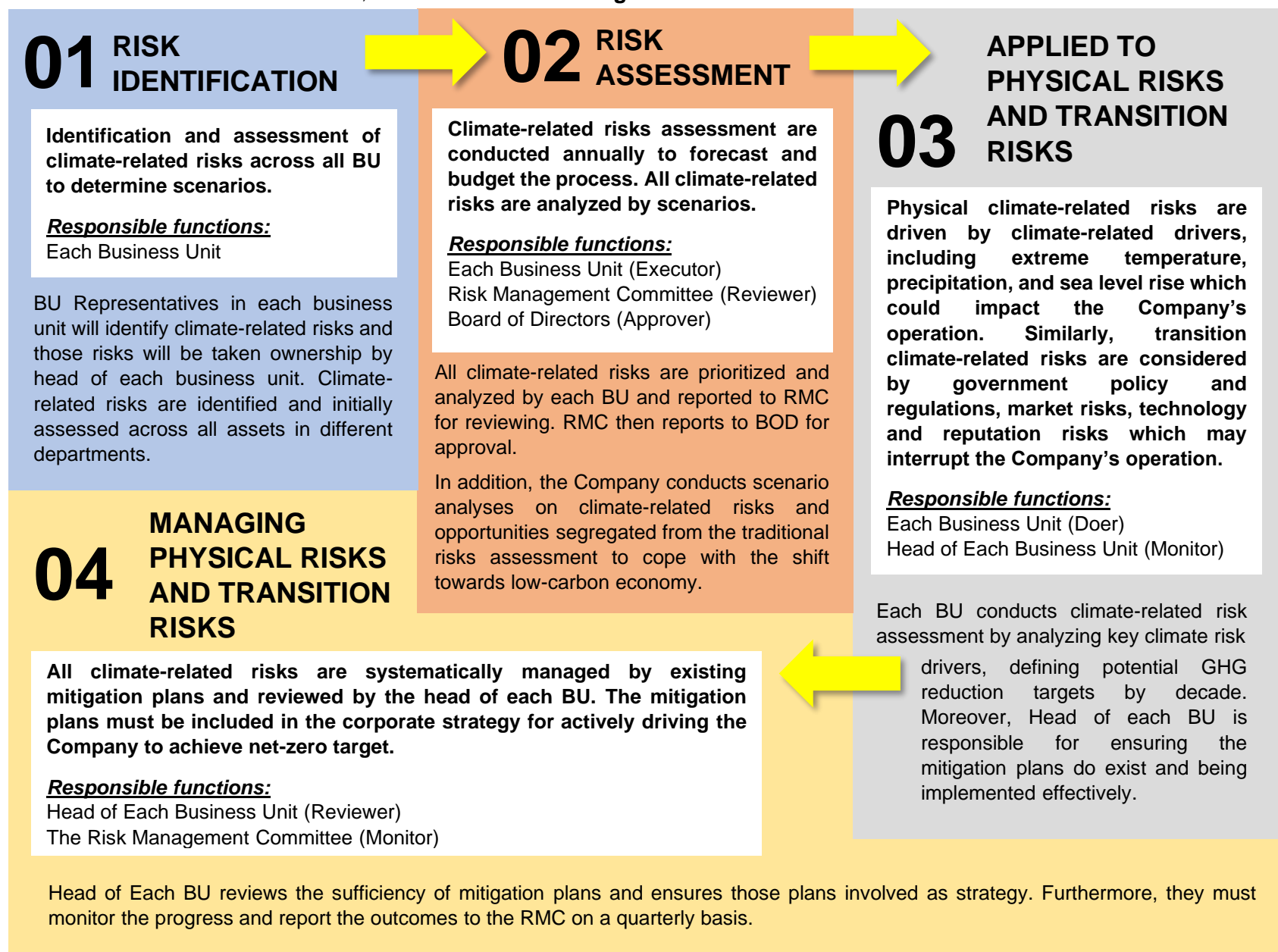
Transition Risk Management Framework

Potential Responses	Respond to	Description	Key Actions
Policy and Regulation	<ul style="list-style-type: none"> Intensive Regulation and Enforcement Climate Disclosure Carbon Taxes 	It is necessary to ensure that the Company complies with the Company's policies and other regulations regarding climate-related issues to avoid incompliance risks leading to unfavorable fines.	<ul style="list-style-type: none"> Ensure compliance with existing regulations related to climate risk and develop mitigate measures and creating contingency plans to address potential challenges arising from transition risks. Develop and implement industry-wide standards for evaluating and disclosing climate-related risks in real estate transactions, ensuring transparency and informed decision-making.
Market	<ul style="list-style-type: none"> Shifts in consumer preferences Difficulties in obtaining funding Changes in resource availability 	It is necessary to ensure that the Company has effective mitigation plans to limit market transition risk for better position and sustained success in a dynamic and evolving business environment.	<ul style="list-style-type: none"> Expand product and service offerings to include sustainable and eco-friendly properties to attract environmentally conscious buyers and tenants. Diversify the portfolios by investing in properties that prioritize climate resilience and sustainability, thus reducing exposure to high-risk areas. Educate investors, buyers, and tenants about the importance of climate-resilient properties and the potential long-term benefits, thereby increasing demand for such properties.
Technology	<ul style="list-style-type: none"> Cost of carbon reduction Capacity and knowledge of workers 	New ESG technologies shape the modern business environment. RMC must ensure that the Company can limit risks due to technology to maintain operational stability and comply with climate-related acts and regulations.	<ul style="list-style-type: none"> Embrace innovative technologies such as renewable energy systems, smart building, EV and green infrastructure to enhance property resilience and reduce environmental impact. Utilize data analytics and predictive modeling to assess and mitigate climate-related risks, allowing for more informed investment and management decisions. Train the employees to utilize technology effectively and to drive innovation with the Company.

Potential Responses	Respond to	Description	Key Actions
Reputation	<ul style="list-style-type: none"> ○ Deterioration of the image of business 	Reputation can be fragile and easily damaged. RMC must ensure that the Company can effectively mitigate risks which can undermine the Company's reputation by not violating environment and operating business with sustainable mindset.	<ul style="list-style-type: none"> ○ Engage with stakeholders – investors, customers, and communities – to communicate the Company's commitment to climate resilience and sustainable practices through sustainability-focused events and initiatives. ○ Obtain certificates, e.g., LEED, WELL, EDGE, and Fitwell, and adhere to sustainability standards to demonstrate a commitment to environmentally responsible for business practices.

Part III: Risk Management

Climate-related risk Identification, Assessment and Management Process



Climate-related Risks Identification & Assessment

In 2023, the Company conducted a climate-related risk assessment by identifying relevant physical and transition risks based on the TCFD framework. In the first step, the Company performed a desktop and literature review from various sources, ranging from scientific publications, global trends, upcoming regulations, emerging markets, and news. This aims to update the current physical and transition risks as well as opportunities that are relevant to Frasers Property Thailand. Then, the Company organized the engagement session to screen and make a short list of the relevant risks that could impact the business. After that, the level of impact of both physical and transition risks was evaluated across the business assets in different scenarios. To identify the suitable scenario, the Company has identified the essential elements, including scope, the time horizon, and the number of scenarios for the subsequent analysis of risks and opportunities. Also, the Company has considered the scenario characteristics recommended by TCFD recommendation, including plausible, distinctive, consistent, applicable, and challenger.

According to the sixth Assessment Report, AR6 of the IPCC, the Company has adopted the climate model that integrated the Shared Socioeconomic Pathways (SSPs) and Representative Concentration Pathways (RCPs) for physical risk analysis. This model reflects more robust “storylines” of factors, including population growth, urbanization, and technological advancements to mitigate climate change. As a result of the physical risk scenario analysis, the Company has adopted SSP1-2.6 to reflect the optimistic scenario while using SSP5-8.5 to reflect the pessimistic scenario. Meanwhile, the Company has adopted the Global Energy and Climate Model of the International Energy Agency (IEA) for transition risk analysis. Towards the net zero emission target, the Company has selected the Net Zero Emissions by 2050 Scenario (NZE Scenario) as the best case of scenario analysis. Also, the Company has conducted a Stated Policies Scenario (STEPS) to reflect the impacts of national policies on net zero emissions.

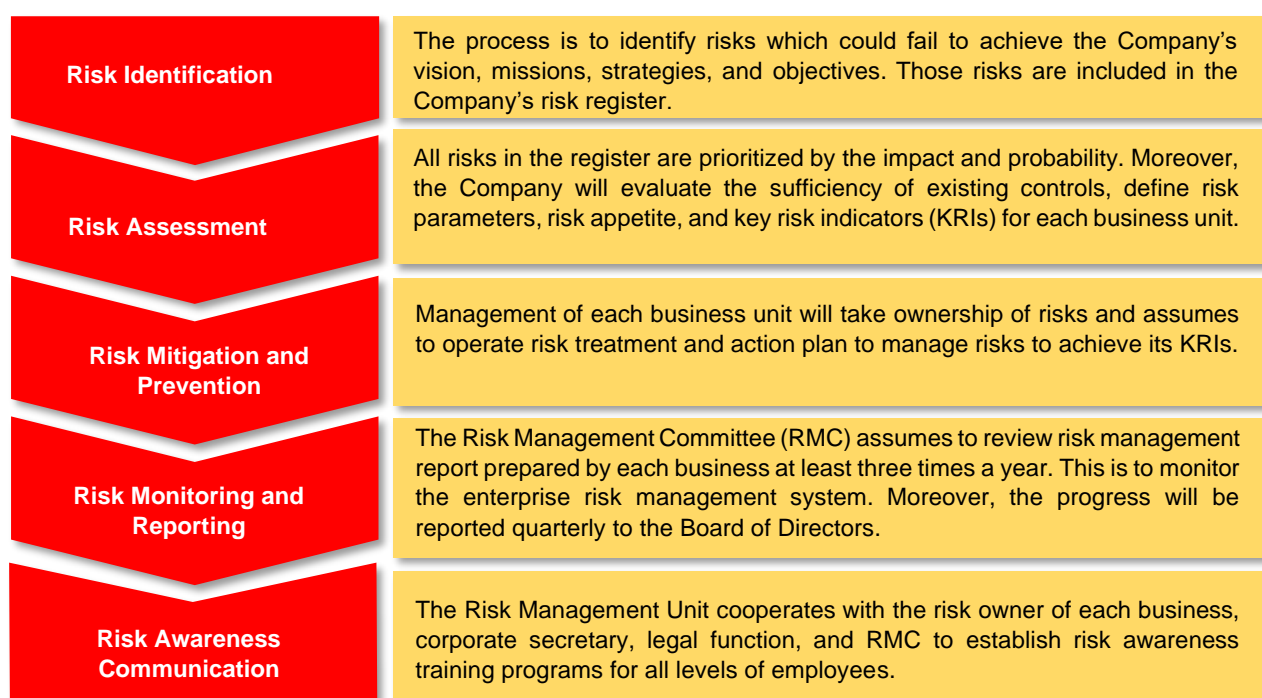
As a result, the chosen scenarios have considered the Paris Agreement goals, the new scientific updates on the latest IPCC Assessment Report (AR6), and the global set of TCFD recommendations, not only the limitation of temperature to 2° or less but also the above 2°C scenario. The scope of scenario analysis has reflected only “own operation” in Thailand. The scenarios are considered level in 2030, 2040, and 2050 for both physical and transition risks to align with a global commitment to reach Net Zero by 2050 and with the updates of Nationally determined contributions (NDCs). For the number of scenarios, the Company selected four scenarios in total, focusing on the best-case and worst-case scenarios, which are physical risks: SSP1-2.6 (2°C to below 2°C) and SSP5-8.5 (above 2°C) and transition risk: NZE2050 (2°C to below 2°C) and STEPS (above 2°C).

The consolidated outcomes were taking into consultation with internal stakeholders which enables the Company to be aware and understand the impacts of key risks. In addition, the Company also conducted a systematically review on risk management strategies and approaches across the business and developed the framework on the potential response and key actions to mitigate the risks throughout the organization. (Please see more details of scenario analysis in Part II: Strategy)

The Process for Managing Climate-Related Risks

The Company established an Enterprise Risk Management framework in alignment with the international standard of the Committee of Sponsoring Organizations of the Treadway Commission (COSO). This framework is designed to systematically address risks linked to climate change across the entire organization. In addition, the Company has reflected the framework into the risk management policy, rules, and standards related to governance, risk management, internal control, and compliance, to incorporate climate-related risk management into the internal management to create sustainable value for the organization. Moreover, the Company has emphasized the risk management culture, the risk owners from each business unit is assigned to identify the potential risks and prepare the mitigation measure. To ensure that all employees and risk owners have a sufficient understanding on climate related risk, the Company has conducted the trainings and workshop on climate related risk and maintained a constant communication with all employees on the progress and action towards net zero organization.

The risk management process is described as below.



In 2023, the identified climate-related risks were reviewed by the risk management department and communicated with all employees at all levels. The potential responses and key action were identified as a guidance for all business units to manage the climate related risks. Meanwhile, the Company has defined the responsibility for implementation of adaption and mitigation recommendations to the functions in each business unit. To ensure the efficiency of climate risk management, the Company has organized the climate related risks trainings to build the employees capacity and to create awareness on the impacts of climate related risks, forthcoming regulations, and ESG trends.

In the next step, the Company will adopt the physical analytic tool to evaluate physical risks associated with new development locations. This tool will analyze climate-related exposure across various aspects, including properties, portfolios, and asset classes. By incorporating this detailed assessment, the Company aims to proactively identify and understand potential risks, allowing for the formulation of comprehensive plans to mitigate these risks and capitalize on opportunities. This strategic approach ensures that the Company is well-informed and equipped to make informed decisions prior to making investments, aligning with its commitment to effective risk management and sustainable business practices.

Integration of Climate Related Risks into the Enterprise Risk Management

Integrating climate-related risks into Enterprise Risk Management is crucial for the Company to address the climate change issues. The process for climate-related risk identification, assessment, and management is conducted on an annual basis, in which the results are integrated into the Enterprise Risk Framework (ERM) by embedding into corporate risks, including strategic and operational risks.

At present, the Company has initially developed climate-related disclosures in line with the TCFD recommendations for the first year. The scope of the scenario analysis has been focused on the Company's operations within Thailand. Climate-related risks have been examined by using qualitative methods involving the identification of potential impacts and opportunities for the business. This strategic disclosure approach not only aligns with international best practices but also demonstrates the Company's commitment to transparently addressing climate-related considerations and positioning itself as a responsible player in the evolving landscape of environmental disclosure and risk management.

To address and mitigate climate-related risks, the Company adopts a decision-making process that communicates these risks to executive members and site representatives. This ensures that management strategies are developed collaboratively and validated for their appropriateness. The key functions and employees are encouraged to be involved in the risk management process to guarantee the effectiveness of risk mitigation. These actions will contribute to refining strategies and maintaining adaptability in the face of evolving risks.

In the next step, the Company will quantify the financial impacts of physical and transition risks on the existing asset and development activities. This aims to create a better understanding of potential impacts on the Company's asset values, profits and loss, and balance sheet under future climate scenarios. With the result of financial impacts, the Company will prioritize the potential risks in the corporate risk matrix by considering the financial, operational, strategic, and compliance aspects. The strategies and management approaches of these risks were defined as well as integrated into the Enterprise Risk Management (ERM) framework as corporate risks. This approach serves a dual purpose by not only supporting future financial and strategic planning but also fostering resilience within the business.

Additionally, in line with a forward-thinking strategy, the Company has plans to broaden the scope of climate-related risk assessments to encompass all activities across its supply chain. This extended assessment aims to enhance the Company's understanding of potential risks throughout its entire operational ecosystem, reinforcing its commitment to proactive risk management and sustainable business practices.

Part IV: Metric and Target

The Company is aware that greenhouse gas is one of the major factors that contribute to severe climate change occurrences. Climate change is a global issue that causes significant impacts to the economy, society, and environment such as, severe weather and floods, which may affect the livelihoods of communities, customers, suppliers, and other stakeholders.

Methodologies and Standards

The Company use the following methodologies to quantify and track our GHG emissions:

1. The data based on unit consumption is used to calculate direct GHG emissions (Scope 1) covering fuel consumption for buildings (Stationary Combustion) and Company's owned vehicles (Mobile Combustion), fire extinguishers, and the refrigerant for air conditioners (Fugitive emission) in buildings. Likewise, the electricity consumption data is used to calculate indirect GHG emissions (Scope 2). The emission factors used in calculation were referenced from the Journal of Thailand Greenhouse Gas Management Organization (Public Organization) ("TGO") published in April 2022.

2. The data used to calculate other indirect GHG emission (Scope 3) includes other indirect greenhouse gas emissions associated with Category 1, 2, 3, 5, 6, 7, 11, 12 and 13. Assumptions and calculation methodologies for such GHG accounting are in accordance with The Greenhouse Gas Protocol. The calculation of scope 3 is based on consumption, except for Category 1 (water and paper consumptions) and Category 6 (Business Travel) that was calculated by spend-based method.

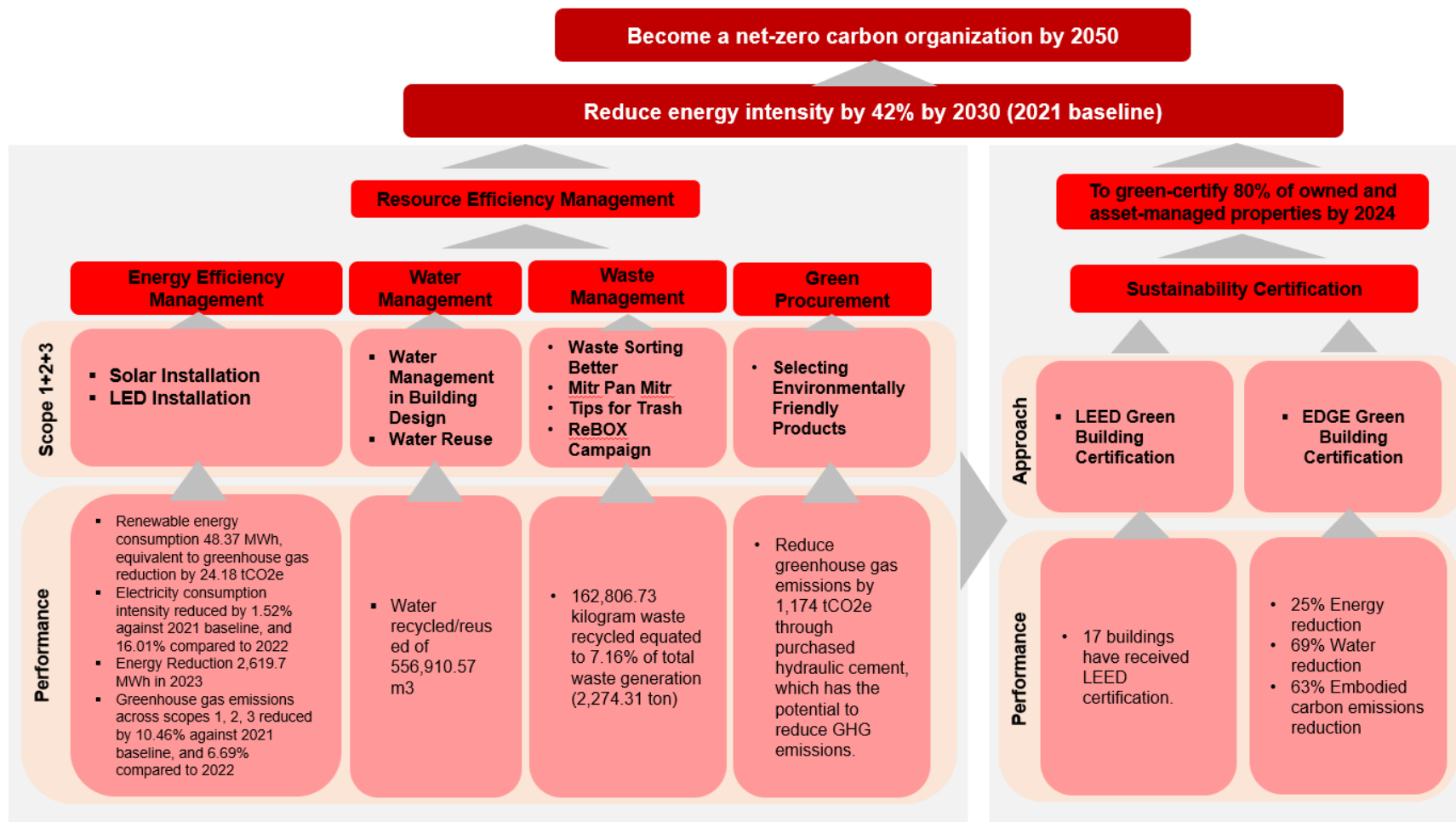
Performance

Performance Indicator	Unit	2021	2022	2023
Total GHG emission (Scope 1 – 3)	ton CO2e	579,670.31	510,519.13	459,810.59
Direct emission (Scope 1)	ton CO2e	2,445.64	604.84	1,752.78
Energy indirect emission (Scope 2) – Location Based Emissions	ton CO2e	17,079.49	19,534.15	17,740.68
Total Other indirect emission (Scope 3)	ton CO2e	560,145.18	490,380.14	440,317.13
Category 1: Purchased Goods and Services	ton CO2e	29,017.21	37,434.41	32,230.57
Category 2: Capital Goods	ton CO2e	90,748.55	112,423.74	64,116.28
Category 3: Fuel- and related-activities not included in scope 1 or scope 2 emissions	ton CO2e	3,307.19	3,280.36	4,527.81
Category 5: Waste generated in operations	ton CO2e	1,021.18	1,903.54	1,905.58
Category 6: Business Travel	ton CO2e	237.21	374.23	376.51
Category 7: Employee commuting	ton CO2e	2,112.07	2,241.31	2,075.26
Category 11: Use of Sold Products	ton CO2e	348,323.16	253,505.08	263,391.27
Category 12: End-of-Life Treatment of Sold Products	ton CO2e	830.56	729.40	735.68
Category: 13 Downstream leased assets	ton CO2e	84,549.08	78,488.07	70,958.18
Scope 1 and scope 2 GHG emission intensity	ton CO2e / m2	0.00306	0.00323	0.00289
Scope 1, 2, and 3 GHG emission intensity	ton CO2e / m2	0.09077	0.08196	0.06827

Total energy consumption within organization	MWh	42,976.69	41,535.28	38,915.55
Water withdrawal from all areas	m3	998,163.38	1,037,672.84	2,574,389.27
Total waste generated	Ton	991.43	2,011.64	2,274.31

Targets Used by the Organization to Manage Climate-related Risks and Opportunities and Performance Against Targets

The Company is committed to operate business with responsibilities to manage and minimize greenhouse gas emissions from all activities from construction to the product services. This aims to achieve net zero emission by 2050. The Company strives to increase resource efficiency, promote the green certification buildings, and encourage all stakeholders throughout the value chain to be involved in reducing greenhouse gas emission. The strategy and action are illustrated as below. (For further information please refer to [FPT Sustainability Report 2023](#))



Resource Efficiency Management

Energy Efficiency Management

1. Solar Installation

- **Solar Rooftop at Samyan Mitrtown:** In 2023, the Company made an investment in installing a 40-kilowatt solar rooftop at Samyan Mitrtown. The installed solar panels generated 54,000 kilowatt-hours of electricity per year, resulting in substantial cost savings of 270,000 Baht on electricity expenses per year. This initiative is equivalent to greenhouse gas emissions reduction by 27,000 tCO₂e. Moreover, The Company adopted the energy management system software to oversee the electricity usage of utility systems within Samyan Mitrtown. This software effectively controls the energy demand to ensure that it does not exceed specified limits. In instances of elevated energy demand, the software promptly shuts down utility equipment, and will automatically reinstate operations when the system returns to normalcy. This technological intervention contributes to a substantial reduction in electricity consumption, amounting to 145,157 kilowatt-hours. Consequently, this translates to a reduction in electricity costs of 725,785 Baht in 2023. This achievement corresponds to a reduction of 72,563.98 kgCO₂e, which supports the Company's commitment to sustainable energy practices and carbon footprint mitigation.
- **Installation of Solar Panels in Warehouse Buildings:** The Company has initiated a goal to install solar panels with a cumulative production capacity of 3 megawatts by 2023. The industrial property business has successfully achieved this goal by installing solar roofs at 8 distinct warehouse buildings, total production capacity of 2.9 MW. This performance significantly contributed to augmenting the Company's reliance on renewable energy sources. The installed solar panels generated 3,900,000 kilowatt-hours of electricity per year, which is equivalent to greenhouse gas emissions reduction of 1,950,000 kgCO₂e per year.
- **Solar Roof Package:** In May 2023, the Company offered a promotion deal on solar panel installation for customers purchasing single-detached houses. This solar roof package encourages customers to use renewable energy and take part in reducing greenhouse gas emissions. Through this deal, the Company was able to install a total of 15 kilowatts of solar panels for participating customers.

2. LED Replacement

- **LED Bulb Installation Project:** In response to potential environmental impacts stemming from its operations, the Company has initiated the replacement of light bulbs in factories and warehouses with LED bulbs since 2022. Demonstrating a steadfast commitment to sustainability, the Company is actively progressing towards replacing all conventional light bulbs with LED alternatives. In 2023, the Company successfully replaced over 8,000 light bulbs that encompasses 106 buildings, spanning an area exceeding 360,000 m² or constituting approximately 35% of the total area of assets in portfolio. Customers from previous installations indicate positive feedback as LED bulbs demonstrate a longer lifespan than traditional counterparts and emit less heat, thereby lowering internal temperatures within buildings. This transition contributes to a significant reduction in electricity costs, estimated at up to 40%, equating to a yearly reduction of more than 5,357 tCO₂e for customers.

Water Management

- **Water Management in Building Design:** The Company integrates green building standards as criteria for constructing buildings, which includes the selection of water-saving fixtures to minimize water consumption within the project area. The criteria for building design are outlined as follows.

Residential properties	water-saving fixtures should account for no less than 70% of the overall number of instruments used. Prior to handover of houses, the Company must conduct a water flow-rate test on fixtures such as toilets, sinks, and showers against both the green label and Thai Industrial Standards (TIS).
Residential and commercial properties	The Company selects drought-tolerant plants at common green areas within residential and commercial properties. For example, Samyan Mitrtown was able to reduce 53% of water required for irrigation.

Industrial and warehouse properties	The Company has been adopting green building standards by selecting water-saving fixtures for all new projects that were constructed since 2021. This initiative has resulted in an average of 58% water saving benefits for tenants.
Building design	The Company will consider implementing water reuse measures, such as providing rainwater storage ponds in residential properties, reusing wastewater from houses for plant irrigation, or reusing water in utility systems. For example, Samyan Mitrtown reuses treated condensate water for gardening activities.

- **Water Reuse:** In 2023, the Fraser's Property Logistics Park Bangna 1 project changed its sprinkler system and reused treated water for irrigation within the project to reduce water consumption. Similarly, the residential property business implemented water management measures by using harvested rainwater from storage ponds and household wastewater to irrigate trees across various project areas. These measures helped reduce 556,910.57 m³ of water withdrawal from various sources.

Waste Management

- **Waste Sorting Better:** The Waste Sorting Better project was initiated to enhance waste management practices for the industrial property business. In 2023, waste sorting points were designated at 5 industrial properties including Fraser's Project Property Logistics Center (Wang Noi), Fraser's Project Property Logistics Park (Bangna 1), Fraser's Project Property Logistics Center (Rojana, Ayutthaya), Fraser's Project Property Logistics Center (Bang Phli 1), and Fraser's Project Property Logistics Park (Laem Chabang 2). The project's outcome resulted in 6,515.9 kilograms (accumulated from October 2022 – June 2023) of recycled waste. Additionally, visible signs were installed for customers to communicate and foster their knowledge on waste segregation and sustainable environmental management.
- **Mitr Pan Mitr:** The Company aspires to derive value from food surplus through partnerships with affiliated stores in Samyan Mitrtown and the Scholars of Sustenance Thailand Foundation (SOS), or the "Food Rescue Foundation". This collaborative effort involves donating remaining food, which is still of high quality, safe for consumption, and nutritionally rich, to the foundation for redistribution to those in need. This initiative serves the dual purpose of minimizing food wastage while optimizing the utilization of food surplus. In 2023, a total of 264 meals or 554 kilograms of food were donated.
- **Tips for Trash:** The Company initiated the "Tips for Trash" activity from 20-30 September 2023 at five office buildings including Park Ventures Ecoplex, Sathorn Square, FYI Center, Mitrtown Office Tower, and Silom Edge. The objective of this activity was to promote tenants and the public on proper waste segregation and to increase the volume of recycled waste generated at each building. Through this activity, the Company was able to provide knowledge about the current environmental issues and waste segregation in a "clean and dry" manner to prepare waste for further recycling. The activity focused on sorting five types of waste including 1) PET plastic bottles, 2) aluminum cans, 3) glass bottles, 4) hard plastic, and 5) stretched plastic, as they can be recycled if separated and managed properly. In addition, the Company also established a designated area for accepting plastic water-bottle cap donations at the lobby at these five buildings under the Separate and Exchange campaign. These donated caps will be further recycled to make tables and chairs for schools in rural areas. Donors were informed that these caps must be cleaned and dried through thorough washing and drying prior to donation. Furthermore, donors can retrieve cash vouchers for every donated 20 caps to purchase drinks from stores in the building with a condition that they must bring their own cups as a means to reduce plastic usage. These activities led to a 50% increase in recycled waste at the buildings, which complements the Company's goal to involve customers, tenants, and the public in reducing environmental impacts and waste recycling.
- **ReBOX Campaign:** Consumers' behavior changes towards increased online shopping have increased the amount of waste generation from packaging materials such as boxes, envelopes, and paper. Recognizing the significance of this issue, the Company initiated the reBOX campaign, which aimed to responsibly collect and recycle waste from shipping parcels. The collected materials are upcycled into

useful items such as desks, chairs for schools, or paper-beds, and subsequently distributed to various foundations and charities to benefit those in need. This initiative aligns with the United Nations Sustainable Development Goal (UNSDGs) Target 11 for Sustainable Cities and Communities. The campaign was conducted from 15 July - 30 September 2023 across 5 office commercial buildings, namely Park Ventures Ecoplex, Sathorn Square, FYI Center, Mitrtown Office Tower, and Silom Edge, which have more than 20,000 customers and users. The Company designated collection points near service lift for donations of boxes, envelopes, and paper which will then be picked up by the Thailand Post. The outcome of this activity resulted in a collection of more than 400 kilograms of recycled waste, exceeding the target of 200 kilograms. In addition, this activity also helped raise awareness among tenants to recognize the importance of waste segregation particularly boxes, envelopes, and paper where tenants may further initiate relevant campaigns within their own organization.

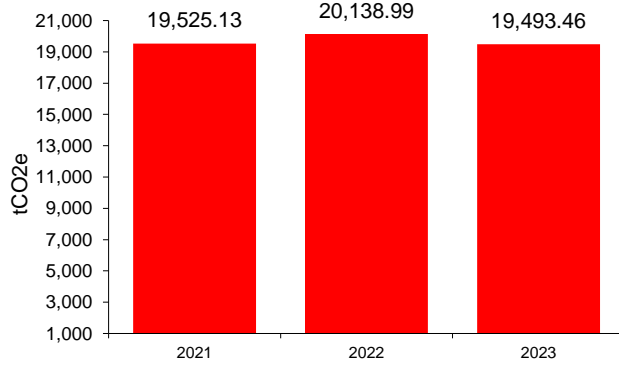
Green Procurement

- **Selecting Environmentally Friendly Products:** The Company is aware of the environmental impact arising from its business operations resulting from construction or other activities. Consequently, the Company has implemented measures to select materials with minimal environmental impact, aiming to reduce the overall carbon footprint of the organization. For instance, the Company opted for hydraulic cement over conventional cement (Portland cement) as it can reduce upstream greenhouse gas emissions. Hydraulic cement utilizes alternative materials instead of clinker, which traditionally requires incinerating process. The substitution of hydraulic cement not only contributes to environmental preservation but also enhances durability, strength, and fluidity of constructed buildings. In the preceding year, the residential business group procured 62,687 cubic meters of precast concrete exclusively containing hydraulic cement, constituting 100% of the total volume of cement used. This equates to approximately 22,567 tons of hydraulic cement, which can help reduce greenhouse gas emissions by 1,174 tCO₂e.

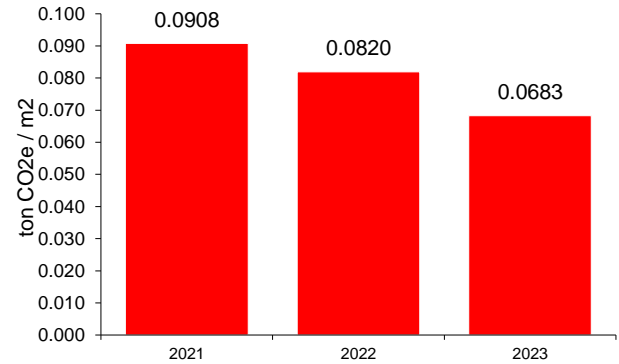
Sustainability Certification

- **LEED Green Building Certification:** In 2023, the Company's Ready-Built factory, a 2,275 m² total area sized factory located in Laem Chabang Industrial Estate Chon Buri, was renovated, and received EDGE certification by the Green Business Certification Inc. (GBCI). To achieve LEED certification, this assessment is considered five criteria, including sustainable sites, water efficiency, energy and atmosphere, materials and resources, and indoor environmental quality. Presently, the Company has a total of 17 buildings that have received LEED certification.
- **EDGE Green Building Certification:** In 2023, the Company's Ready-Built factory, a 2,275 m² total area sized factory located in Laem Chabang Industrial Estate Chon Buri, was renovated, and received EDGE certification by the Green Business Certification Inc. (GBCI). EDGE requires a minimum projected reduction of 20% in energy use, water use, and embodied carbon in materials as benchmarked against a standard local building.
- In 2023, a total of 23 buildings successfully obtained green building certifications, while 19 buildings are currently undergoing the certification process. Moving forward, the Company aims to obtain green building certification for 80% of its existing buildings by 2024. In addition, the Company recognizes the financial and environmental benefits associated with green building initiatives and plans to leverage green building certification as a financial tool through a green finance mechanism. This approach will help the Company take advantage of emerging financial opportunities that incentivize eco-friendly practices, while reflecting its forward-thinking strategy. This will contribute to the Company's overall resilience and competitiveness in the evolving business landscape.

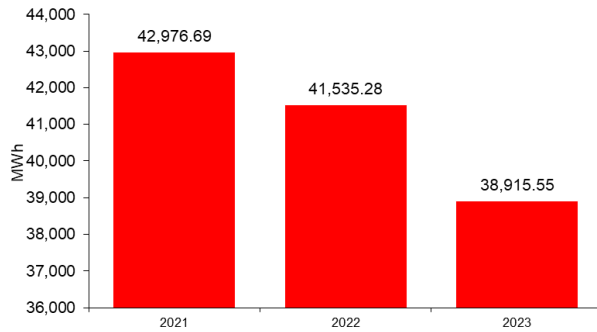
Direct and Indirect Greenhouse Gas Emissions (Scope 1,2)



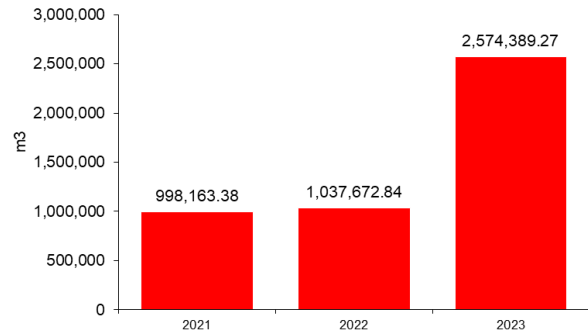
Scope 1,2, and 3 GHG Emission Intensity



Total energy consumption within organization



Water withdrawal from all areas



Total waste generated

