

CENTRAL**RETAIL**

Leading  
**EXCELLENCE,**  
Advancing  
**SUSTAINABILITY**

Climate Report 2024



# INTRODUCTION

Central Retail Corporation Public Company Limited (“Central Retail” or “the Company”) recognizes the urgency of global warming and climate change, which present both significant risks and opportunities for its business, stakeholders, and the broader economy. As part of its commitment to long-term sustainability, and resonating with the evolving climate-related disclosure framework, the Company has therefore prepared this report in alignment with recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) and requirements of the International Sustainability Standards Board (ISSB)'s International Financial Reporting Standards (IFRS) S2: Climate-related Disclosures.

Both TCFD and IFRS S2 provide a structure for organizations to integrate climate-related integrations into core business areas from Governance, Strategy, Risk Management, and Metrics and Targets. Contained within this report, interested parties and stakeholders can find Central Retail's current approach and progress made in managing material climate-related risks and opportunities. This report is established to provide as a foundation to address climate-related risks and opportunities, as well as to serve key stakeholders with quality disclosure.

# TABLE OF CONTENTS

<b>Our Climate Governance</b>	<b>4</b>
<b>Risk Management</b>	<b>6</b>
<b>Climate Strategy</b>	<b>7</b>
<b>Metrics and Targets</b>	<b>22</b>
<b>IFRS S2 Content Index</b>	<b>24</b>

# OUR CLIMATE GOVERNANCE

Climate action requires a group-wide synergy and efforts from all levels within involving executives, management, and employees working across multiple business units, formats, and geographic locations. Therefore, climate governance becomes a critical enabler for Central Retail to mitigate climate-related risks and leverage opportunities, demonstrating roles and responsibilities towards climate change to key stakeholders including investors, lenders, shareholders, and other interested parties.

<b>Corporate Governance and Sustainability Committee*</b>	<ul style="list-style-type: none"> <li>• Oversees compliance with and promotion of sustainability material topics under the Environment, Social, and Governance (ESG) strategy framework, which covers climate change as one of key material topics</li> <li>• Regularly reviews climate-related issues for at least once per year</li> <li>• Oversees progress against climate-related goals and targets, development and revisions of climate strategy and action plans, implementation of measures to mitigate or enhance climate-related risks and opportunities</li> </ul>
<b>Risk Policy Committee (RPC)**</b>	<ul style="list-style-type: none"> <li>• Oversees effective enterprise risk management including ESG risks, which covers climate-related risks (and opportunities)</li> <li>• With climate-related risks as a component of ESG risks, the Risk Policy Committee also oversees:             <ul style="list-style-type: none"> <li>• Integration of climate-related risks into the Company's enterprise risk management</li> <li>• Management and assessment of climate-related risks</li> </ul> </li> </ul>
<b>Executive Management</b>	<ul style="list-style-type: none"> <li>• Chief Executive Officer (CEO) is currently a member of the Board of Directors and the Risk Policy Committee</li> <li>• Manages business operations according to sustainability strategies, as well as integrates climate strategy, and climate-related goals and targets into overall business strategy</li> <li>• Appoints responsibilities and implements effective climate strategy and climate-related risks and opportunities management</li> </ul>
<b>Environment Committee</b>	<ul style="list-style-type: none"> <li>• Consists of executive-level management and key departments from business units to directly drive environmental actions, including climate change and decarbonization measures</li> <li>• Responsible for reviewing annual climate targets, strategies and action plans, including management and analysis of greenhouse gases (GHG) emissions data</li> <li>• Implements strategy and take actions to achieve climate goals, including mitigate climate-related risks and leverage opportunities</li> <li>• Supervise continuous improvement of environmental operations in accordance with laws and other corporate commitments</li> </ul>
<b>Corporate Sustainability Working Team</b>	<ul style="list-style-type: none"> <li>• Establishes sustainability strategy and integrates into overall business operations, which covers climate change</li> <li>• Supports the Environment Committee in driving climate strategy and implementing action plans</li> </ul>
<b>Risk Management Working Team</b>	<ul style="list-style-type: none"> <li>• Integrates climate-related risks into the Company's enterprise risk management</li> <li>• Manages and assesses ESG risks, which covers climate-related risks</li> </ul>

\* For additional details on the Corporate Governance and Sustainability Committee, please visit: [www.centralretail.com/storage/document/cg-charter/crc-corporate-governance-and-sustainable-development-committee-en.pdf](http://www.centralretail.com/storage/document/cg-charter/crc-corporate-governance-and-sustainable-development-committee-en.pdf)

\*\* For additional details on the Risk Policy Committee, please visit: [www.centralretail.com/storage/document/cg-charter/crc-charter-risk-committee-en.pdf](http://www.centralretail.com/storage/document/cg-charter/crc-charter-risk-committee-en.pdf)

To reinforce climate governance, the Company has also established incentives and key performance indicators (KPIs) for the CEO, Environment Committee, and Business Units Representatives. One of the CEO's KPIs evaluates the effectiveness of company-wide sustainability management, which is determined by progress against corporate sustainability-related targets including the reduction of GHG emissions and energy consumption, and increase use of renewable energy. Another of the CEO's KPIs is achieving excellent ESG scores and ratings in corporate Sustainability assessments. Strong performance in line with the Sustainability strategy and relevant KPIs will contribute to the CEO's annual performance review that will also be reflected in annual salary and cash bonus.

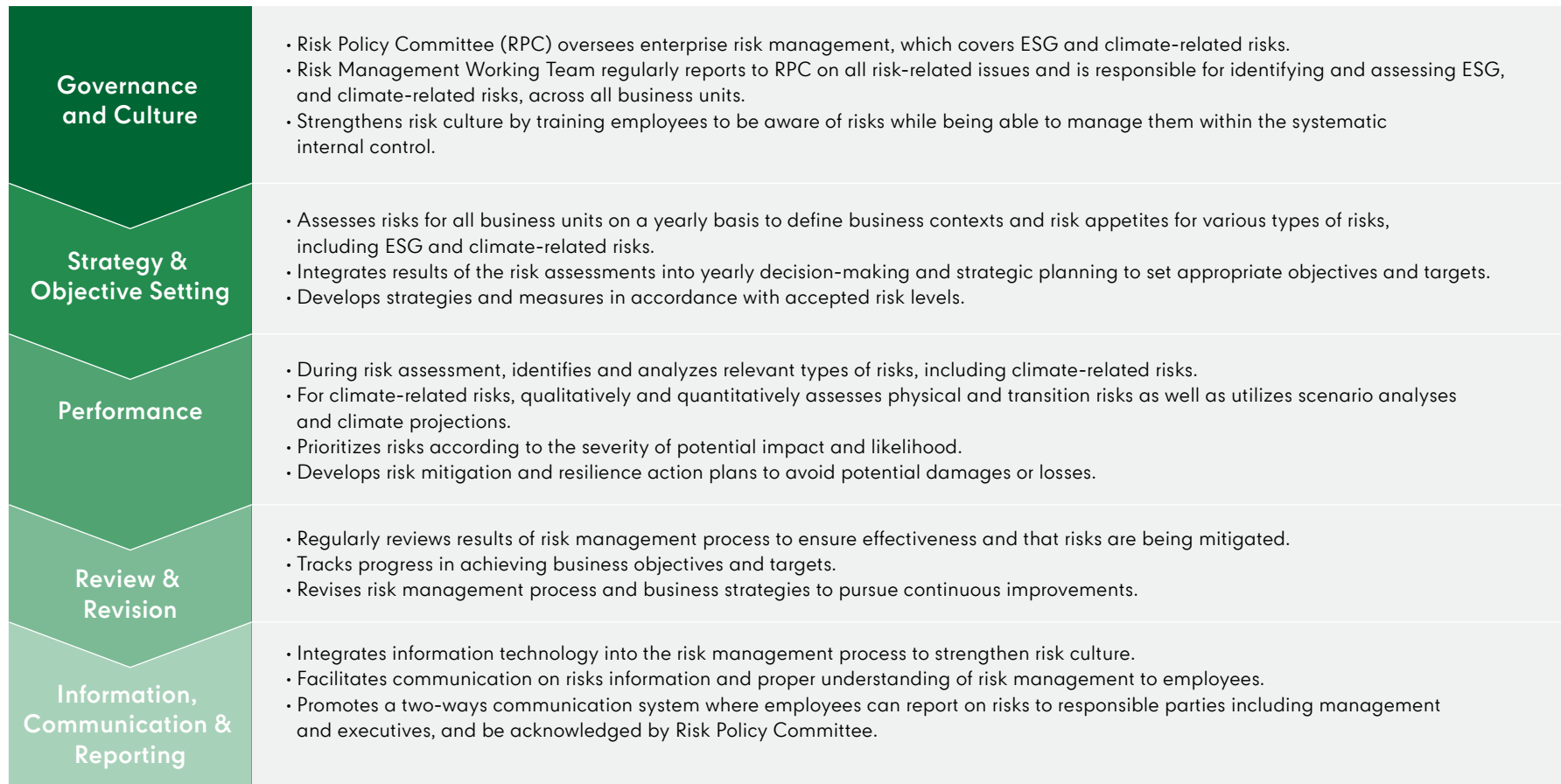
The Environment Committee serves as a centralized management-level body responsible for driving the Company's environmental and climate agenda, including supporting progress toward the Company's Net Zero commitments, and implementing mitigation and transition measures. To reinforce accountability, the performance of each member of the Environmental Committee is linked to climate-related incentivized KPIs, with achievements rewarded through the Company's digital currency that can be exchanged for monetary asset during promotional campaigns and other payments.

Importantly, the Company has appointed Business Units Representatives to drive and monitor climate-related initiatives at the business unit-level as part of the Company's ReNEW Strategy, including GHG emissions reduction, energy efficiency improvements, and increase in use of renewable energy. Business Units Representatives' performance is evaluated against climate-related KPIs, with results influencing annual performance reviews. In addition, achievements are rewarded through the Company's digital currency, which can be exchanged for monetary asset during promotional campaigns and other payments.

# RISK MANAGEMENT

Central Retail has developed a risk management policy and framework and has analyzed key risks inherent to its business operations to ensure good corporate governance and enhance confidence of all relevant stakeholders. The Company’s enterprise risk management system is developed to meet the internationally recognized Committee of Sponsoring Organizations of the Treadway Commission’s Enterprise Risk Management Framework 2017 (COSO ERM 2017), comply to relevant laws, and encompass all types of risks, both financial and non-financial risks including ESG risks. Importantly, climate-related risks (and opportunities) are being covered under ESG risks, and have been integrated into the Company’s existing risk management framework, policies, and internal control process. Thus, climate-related risks are managed under the same risk management process as any other type of risks.

The Company’s enterprise risk management framework and process covering climate-related risks and opportunities is as follows:



# CLIMATE STRATEGY

Central Retail regularly reviews and monitors climate strategy and assessment results to address the outcomes of ongoing enterprise risk management processes and evolving sustainability landscape. The development of climate strategy is also aligned with TCFD and IFRS S2 requirements. In 2025, Central Retail has reviewed climate-related risk assessment which covers both physical and transition risks and opportunities through scenario analysis. The assessment is conducted to cover all of Central Retail core business units and countries.

## PHYSICAL RISKS – IDENTIFICATION OF PHYSICAL HAZARDS

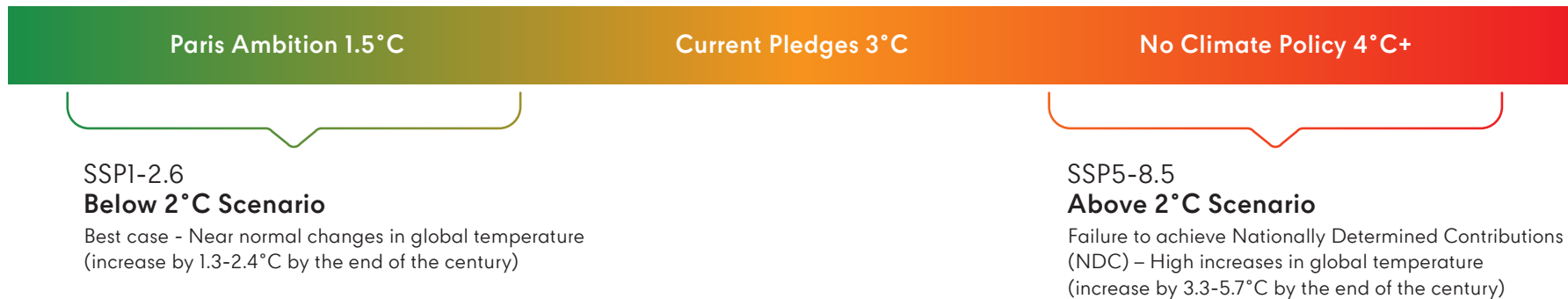
The Company identified five physical climate hazards for this physical risk assessment which consist of acute (event-driven) or chronic (longer-term shifts climate climatic patterns) hazards including river flooding, extreme rainfall, extreme heat, extreme winds and storms, and water stress and drought. These physical hazards were identified through a structured assessment process that considered the potential magnitude of impact on critical assets, the likelihood of occurrence under various climate scenarios, and the specific climatic conditions of the geographic regions in which the Company operates.

Physical Hazards	Categories	Indicators
River Flooding	Acute	Max. inundation depth (meter) caused by 1-in-500-year flood event within a 300m <sup>2</sup> area
Extreme Rainfall		
Extreme Heat	Chronic	Warm Spell Duration Index (WSDI): Periods of at least 6 consecutive days where the daily max. temperature exceeds the typical high for that time of year.
Extreme Winds and Storms	Acute	Maximum sustained wind speed (knots) experienced within 200 km radius of a tropical cyclone with spatial resolution of approximately 25 km <sup>2</sup>
Water stress and Drought	Chronic	Ratio of total water withdrawals (including domestic, industrial, irrigation, and livestock use) to total available renewable surface and groundwater supplies.

# PHYSICAL RISKS - SCOPE OF ASSESSMENT

In 2025, Central Retail conducted a climate-related physical risk assessment covering 25 critical assets in Thailand, Vietnam and Italy including relevant upstream and downstream activities. The physical risk assessment evaluates projected risks levels under the Intergovernmental Panel on Climate Change (IPCC) Shared Socioeconomic Pathways (SSP) 1-2.6 (below 2°C scenario) and SSP5-8.5 (above 2°C scenario), which were selected to present a plausible range of potential events to assess resilience within the context of the Company. The Company also defines short (FY2025), medium (FY2030), and long-term (FY2050) time horizons for the assessment, which are linked to the climate target and Net Zero by 2050 commitments, and the time horizons for adaptation and transition planning.

<b>Boundaries</b>	<ul style="list-style-type: none"> <li>• 25 critical assets in Thailand, Vietnam and Italy</li> <li>• 18 assets under the Company's own operations, including retail stores, department stores, distribution centers, and warehouses</li> <li>• 7 assets operated by key suppliers, covering both upstream and downstream activities</li> </ul>
<b>Scenarios</b>	<ul style="list-style-type: none"> <li>• SSP1-2.6 (Below 2°C scenario)</li> <li>• SSP5-8.5 (Above 2°C scenario)</li> </ul>
<b>Time Horizons</b>	<ul style="list-style-type: none"> <li>• Short-term: 2025</li> <li>• Mid-term: 2030</li> <li>• Long-term: 2050</li> </ul>











































# PHYSICAL RISKS – QUALITATIVE SCREENING

## Levels of Risks

## Description

-  **High** ————— The risk is likely to occur and may result in significant impacts on business continuity and operations. Strong mitigation plans must be implemented to manage and minimize risks.
-  **Moderate** ————— The risk has a moderate chance of occurrence and could cause noticeable impacts on the business and site operations. Active mitigation strategies are recommended to reduce risk exposure.
-  **Low** ————— The chance of the risk occurring is low to very low based on data analysis and asset type, with minimal to negligible impact on the business and site operations. Mitigation is generally not required but monitoring is advised.

## Physical Risk Qualitative Screening - Own Operations

Physical Hazards	Baseline	SSP1-2.6 (Below 2°C Scenario)			SSP5-8.5 (Above 2°C Scenario)		
		Short-term (2025)	Mid Term (2030)	Long Term (2050)	Short-term (2025)	Mid Term (2030)	Long Term (2050)
River Flooding							
Extreme Rainfall							
Extreme Heat							
Extreme Winds and Storms							
Water stress and Drought							

## Physical Risk Qualitative Screening – Key Suppliers in Upstream and Downstream Activities

Physical Hazards	Baseline	SSP1-2.6 (Below 2°C Scenario)			SSP5-8.5 (Above 2°C Scenario)		
		Short-term (2025)	Mid Term (2030)	Long Term (2050)	Short-term (2025)	Mid Term (2030)	Long Term (2050)
River Flooding	Light Red	Light Red	Light Red	Light Red	Light Red	Light Red	Light Red
Extreme Rainfall	Light Red	Light Red	Light Red	Light Red	Light Red	Light Red	Light Red
Extreme Heat	Light Red	Light Red	Dark Red	Dark Red	Light Red	Light Red	Dark Red
Extreme Winds and Storms	Light Red	Light Red	Light Red	Light Red	Light Red	Light Red	Light Red
Water stress and Drought	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red

- Climate-related risks are concentrated across the Company’s own operations assets and value chain in varying degrees, based on their location and business activities.
- Extreme heat is identified as relevant to all assets, with increasing severity projected across business units. Under SSP1-2.6, the Food business unit is exposed to high risk as early as 2030, earlier than other segments. Under SSP5-8.5, all business units are projected to have high risks by 2050.
- The Company’s Food, Fashion, and Hardline business units are exposed to high risks from water stress and drought through 2050 under both scenarios.
- Other physical hazards such as river flooding are relevant only to certain assets located near rivers.

# PHYSICAL RISKS - KEY FINDINGS

Physical Hazards	Key Findings	Business and Financial Implications
<b>River Flooding &amp; Extreme Rainfall</b>	<ul style="list-style-type: none"> <li>• Risk remains low throughout 2025, 2030 and 2050.</li> <li>• SSP5-8.5 shows slight increase in risk level from higher precipitation for certain assets and should be carefully monitored.</li> </ul> <p>Note: Assessment and findings are based solely on climate change-induced changes in rainfall intensity.</p>	<ul style="list-style-type: none"> <li>• Although risk from climate-induced river flooding and extreme rainfall are low at all time horizons, the Company will continue to closely monitor potential flood risks.</li> <li>• Ineffective local water management measures or limited drainage capacity can still lead to potential water accumulation and localized flooding that cause revenue loss from interruptions to the Company’s operations and transportation/distribution activities as well as increased operational expenses from water damage to facilities and inventories.</li> <li>• Financial Implications: Not calculated due to low risks from qualitative screening.</li> </ul>
<b>Extreme Heat</b>	<ul style="list-style-type: none"> <li>• Increase in risk by 2025 and 2030, with a further increase in risk by 2050, but quantification of potential financial impact indicates that risks to business may be minor.</li> </ul>	<ul style="list-style-type: none"> <li>• Current effects of extreme heat on operations may be low.</li> <li>• But anticipated effects of extreme heat may lead to higher operational expense from increased electricity consumption for air conditioning and refrigerants in assets under own operations. Increased electricity consumption may also lead to higher capital expense for installation of energy efficiency or renewable energy technology to reduce energy costs.</li> <li>• Potential health and safety risks for employees and contractors, and suppliers working in outdoor areas may be a major concern.</li> <li>• Financial Implications*: Operating expenses for electricity consumption are expected to increase by 0.5% and 0.7% in 2030 and 2050 respectively under SSP1-2.6, and increase by 0.8% and 1.3% in 2030 and 2050 respectively under SSP5-8.5.</li> </ul> <p>Remark: The financial implication is calculated based on that assumption that the Company’s current electricity mix (i.e., grid electricity, power purchase agreements (PPA) from solar energy, and self-produced solar energy) remains constant throughout all time horizons.</p>
<b>Extreme Winds and Storms</b>	<ul style="list-style-type: none"> <li>• Risk remains low throughout 2025, 2030 and 2050.</li> </ul>	<ul style="list-style-type: none"> <li>• Although risk from extreme winds and storms are low at all time horizons, the Company will continue to closely monitor potential impacts..</li> <li>• Poorly maintained facilities may be exposed to damage from the extreme winds and storms.</li> <li>• Financial Implications: Not calculated due to low risks from qualitative screening.</li> </ul>

Physical Hazards	Key Findings	Business and Financial Implications
<p><b>Water stress and Drought</b></p>	<ul style="list-style-type: none"> <li>• High risk at baseline and expected to remain elevated by 2025, 2030 and 2050.</li> <li>• Early implementation of mitigation measures that are sustained throughout 2050 can help manage potential negative impacts.</li> </ul>	<ul style="list-style-type: none"> <li>• High risk from water stress at all time horizons may lead to higher operational expenses to transport water from additional third-party providers. Despite high risk, the Company implements ongoing effective water management programs to consistently manage the risks.</li> <li>• Water stress may also affect crop yield for food products that can increase their prices, leading to lower product demand and lower revenue for the Company.</li> <li>• Financial Implications: Not calculated as Central Retail does not consider water stress and drought as significant risk to retailing operations. The Company’s ongoing mitigation measures through effective water management programs have so far prevented material negative business and financial effects.</li> </ul>

Physical Hazards	Adaptation Measures*	Expected Time Horizons	
		Short to Mid Term	Long Term
River Flooding & Extreme Rainfall	<ul style="list-style-type: none"> <li>• Conduct flood risk mapping and identify high-risk assets located in flood-prone or low-lying areas.</li> <li>• Install flood barriers, water pumps, or backflow prevention systems at key entry points of facilities.</li> <li>• Develop and regularly update flood emergency response plans, including evacuation and asset protection protocols.</li> <li>• Implement routine maintenance of drainage systems around stores, warehouses, and retail complexes to ensure capacity during heavy rainfall.</li> </ul>	✓	
	<ul style="list-style-type: none"> <li>• Consider site design improvements, such as permeable surfaces, raised flooring, or green infrastructure, in long-term development or renovation plans.</li> </ul>		✓
Extreme Heat	<ul style="list-style-type: none"> <li>• Monitor weather forecasts and develop contingency plans for prolonged heatwaves, including temporary cooling equipment deployment.</li> <li>• Optimize cooling systems and conduct regular maintenance to improve energy efficiency and prevent system failure during peak heat periods.</li> <li>• Install temperature monitoring systems in storage areas and warehouses to ensure product integrity, especially for heat-sensitive goods.</li> </ul>	✓	
Extreme Winds and Storms	<ul style="list-style-type: none"> <li>• Conduct structural assessments of buildings, signage, and roofing in high-risk areas to ensure wind resistance.</li> <li>• Implement early warning systems at site level and integrate with national or local alerts.</li> <li>• Train employees on emergency procedures and shelter-in-place protocols during storms.</li> <li>• Install backup power systems (e.g., generators, UPS) to maintain critical operations during outages.</li> <li>• Develop Business Continuity Plans (BCP) for sites prone to frequent storm-related disruptions.</li> </ul>	✓	
Water stress and Drought	<ul style="list-style-type: none"> <li>• Implement early warning systems and monitor water stress conditions regularly to prepare for potential drought impacts.</li> <li>• Develop and conduct training for employees on water conservation practices and operational adjustments during water scarcity.</li> <li>• Optimize water usage across all operations, including stores, warehouses, and offices, by installing water-efficient equipment and recycling systems.</li> <li>• Establish contingency plans for supply chain disruptions due to water scarcity, including alternative sourcing and inventory management.</li> </ul>	✓	

• For existing and new operations within the same area for business operations in Thailand, Vietnam and Italy.

# TRANSITION RISKS – IDENTIFICATION OF TRANSITION DRIVERS

The Company identified five transition risk and opportunity drivers for this transition risk assessment, which consist of policy, legal, technology, and market drivers. These drivers were identified by considering the potential magnitude of impact on the Company’s overall business operations, likelihood of occurrence under various climate scenarios, and industry and sector specific research papers, corporate commitments, and peer analysis.

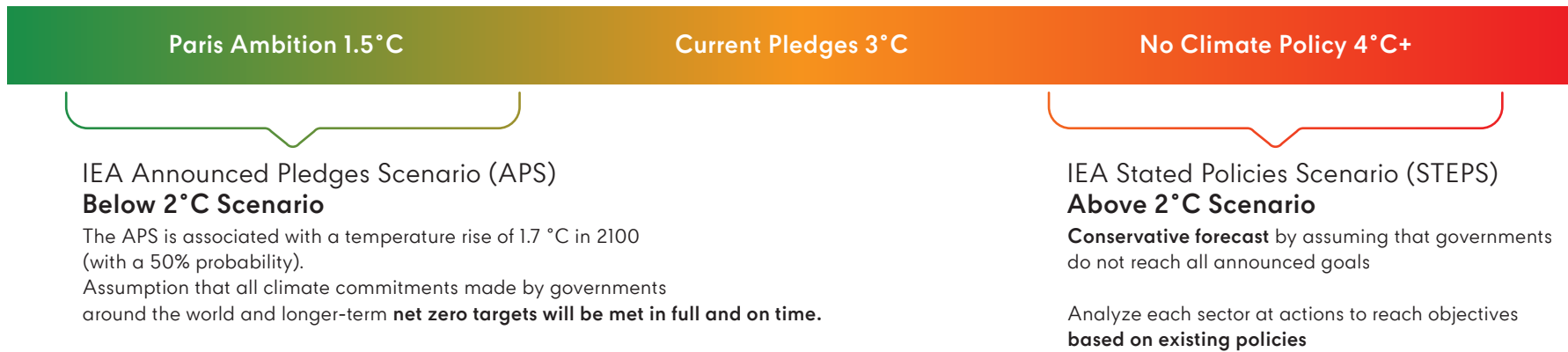
Transition Drivers	Categories		Indicators
Increased pricing of GHG emissions	Risk	Policy & Legal (Emerging Regulation)	Carbon pricing (THB/tCO2e)
Government policy actions on climate change	Risk	Policy & Legal (Current Regulation)	Research on upcoming legislation or policies such as the Power Development Plan (PDP), Thailand's Nationally Determined Contribution (NDC), Plastic Waste Management Action Plan, etc.
Investments in operations and infrastructure to adapt to climate change	Opportunity	Technology	Electricity Capacity (GW) for Solar PV + Battery Storage
Customer behavior changes due to a preference shift to low carbon product	Opportunity	Market	Consumer support for stricter regulations, such as plastic waste import bans, and the increasing consumer preference for sustainability.
Negative reputation due to the company's disregard for environmental issues	Risk	Reputation	Strong environmental reputation attracts investors highlights that companies with a commitment to sustainability are more appealing to investors.

Note: All categories of transition risks (i.e., policy and legal risks, including current and emerging regulations, market risks, technology risks, and reputational risks) have been considered. However, this assessment has identified those that are relevant and deemed to have material impact on the Company. Accordingly, legal risk is not prioritized and screened out due to low relevance in Thailand’s current context and to the nature of retailing business.

# TRANSITION RISKS – SCOPE OF ASSESSMENT

In 2025, Central Retail conducted a climate-related transition risk and opportunity assessment covering the Company’s own operations in Thailand, Vietnam, Italy, and relevant upstream and downstream activities. The transition risk assessment evaluates projected risks levels under the International Energy Agency’s (IEA). Announced Pledges Scenario (APS, or below 2°C scenario) and the Stated Policies Scenario (STEPS, or above 2°C scenario), which were selected to present a plausible range of potential socio-economic landscape relevant to the Company. The Company also defines short (FY2025), medium (FY2030), and long-term (FY2050) time horizons for the assessment, which are linked to the Company’s 2030 and Net Zero by 2050 commitments, and the time horizons for adaptation and

<b>Boundaries</b>	<ul style="list-style-type: none"> <li>• All business units in own operations in Thailand, Vietnam, and Italy</li> <li>• Relevant upstream and downstream activities.</li> </ul>
<b>Scenarios</b>	<ul style="list-style-type: none"> <li>• IEA APS (below 2°C scenario)</li> <li>• IEA STEPS (above 2°C scenario)</li> </ul>
<b>Time Horizons</b>	<ul style="list-style-type: none"> <li>• Short-term: 2025</li> <li>• Mid-term: 2030</li> <li>• Long-term: 2050</li> </ul>



# TRANSITION RISKS – QUALITATIVE SCREENING

## Categories

PL : Policy & Legal

M : Market

T : Technology

R : Reputation

## Levels of Risks

 High

 Moderate

 Low

## Levels of Opportunities

 High

 Moderate





























 Low

## Description

Considered to present high risk/opportunities or have a significant negative/positive impact on the financial performance of the business group.

Considered to present moderate or noticeable potential to negative/positive impact the financial performance of a business group, but not as significantly as high-impact risk/opportunities.

Considered to present low risk/opportunities. with limited potential to negatively/positively impact the financial performance of a business group but still offering some impact for the business.

Transition Drivers	Baseline	SSP1-2.6 (Below 2°C Scenario)			SSP5-8.5 (Above 2°C Scenario)		
		Short-term (2025)	Mid Term (2030)	Long Term (2050)	Short-term (2025)	Mid Term (2030)	Long Term (2050)
Increased pricing of GHG emissions (PL)							
Government policy actions on climate change (PL)							
Investments in operations and infrastructure to adapt to climate change* (T) <small>Note: Refers to Hardline and Property business units.</small>							
Customer behavior changes due to a preference shift to low carbon product (M)							



Transition Drivers	Baseline	SSP1-2.6 (Below 2°C Scenario)			SSP5-8.5 (Above 2°C Scenario)		
		Short-term (2025)	Mid Term (2030)	Long Term (2050)	Short-term (2025)	Mid Term (2030)	Long Term (2050)
Negative reputation due to the company's disregard for environmental issues (R)	●	●	●	●	●	●	●

- Increased pricing of GHG emissions will impact as increase cost from carbon pricing across all three of Central Retail's businesses in 2050.
- Government policy actions on climate change are expected to take place, but they are unlikely to significantly affect Central Retail's businesses. However, there could be a minor to moderate impact by 2050.
- Investments in operations and infrastructure (in term of renewable energy) to adapt to climate change will affect Central Retail's Fashion and hardline business, including its property segment, with the operating infrastructure component being the most directly affected (positively due to cost saving from implementation of renewable energy).
- Changes in customer behavior driven by a shift toward low-carbon products is expected to begin by 2025 under both scenarios and gradually increase over time.
- A negative reputation resulting from the company's disregard for environmental issues is likely to pose a reputational risk, with the impact becoming more significant in 2030 and 2050.

# TRANSITION RISKS - KEY FINDINGS

Hazard Type	Potential Impact	Response Measures
Increased pricing of GHG emissions (PL)	<ul style="list-style-type: none"> <li>Risk is expected to increase to moderate level by 2030 and remain at moderate level by 2050.</li> </ul>	<ul style="list-style-type: none"> <li>Given that the Company operates in the retailing sector, the overall impact of pricing of GHG emissions to its business operations is not expected to be severe throughout 2050.</li> <li>However, increased pricing of GHG emissions can lead to higher production costs for suppliers that may subsequently be passed on to the Company, and affect profitability</li> <li>Financial Implications*: Operational Expense is expected to increase by 0.349% and 1.536% of revenue in 2030 and 2050 respectively under STEPS, and increase by 0.801% and 3.70% of revenue in 2030 and 2050 respectively under APS.</li> </ul> <p>Remark: This financial implication is calculated based on the assumption that Thailand will have a high carbon pricing comparable to that of an OECD member country, which follow Thailand's accession discussion to become an OECD member. (Ref: <a href="https://www.mfa.go.th/en/content/fm-with-oecd-secgen-paris-2?page=5d5bd3cb15e39c306002a9ac&amp;menu=5d5bd3cb15e39c306002a9ad">https://www.mfa.go.th/en/content/fm-with-oecd-secgen-paris-2?page=5d5bd3cb15e39c306002a9ac&amp;menu=5d5bd3cb15e39c306002a9ad</a>)</p>
Government policy actions on climate change (PL)	<ul style="list-style-type: none"> <li>Risk is expected to slightly increase by 2050, driven by more stringent regulations from the government.</li> </ul>	<ul style="list-style-type: none"> <li>More stringent regulations imposed by the government, such as Power Development Plan (PDP) goal of increasing share of renewable energy and Nationally Determined Contributions (NDC) are expected to cause the Company to make investments by 2030 and 2050 to avoid additional costs by aligning with Thailand's GHG reduction goals</li> <li>Financial Implications: Not calculated due to Thailand's Climate Change Act is still at the draft stage with no confirmed implementation guidelines. At present, the available information is insufficient to support a reliable financial assessment. Central Retail intends to conduct such quantification once clearer regulatory direction is provided and sufficient supporting data becomes available.</li> </ul>
Investments in operations and infrastructure to adapt to climate change (T)	<ul style="list-style-type: none"> <li>Modest opportunity is expected by 2050 with main impact on the Company's Hardline and Property business units.</li> </ul>	<ul style="list-style-type: none"> <li>Investments in existing or emerging technologies that tackle climate change can help the Company improves operational efficiency, resulting in some cost savings by 2030 and 2050</li> <li>Financial Implications: Not calculated due to low opportunities from qualitative screening</li> </ul>
Customer behavior changes due to a preference shift to low carbon product (M)	<ul style="list-style-type: none"> <li>Opportunity is expected to only slightly increase by 2050.</li> </ul>	<ul style="list-style-type: none"> <li>Changes in customer behavior driven due to a preference shift toward low-carbon products present an opportunity for the Company to increase revenue from sales of sustainable and eco-friendly products by 2030 and 2050, although at a slow rate of increase</li> <li>Financial Implications: Not calculated due to low opportunities from qualitative screening</li> </ul>
Negative reputation due to the company's disregard for environmental issues (R)	<ul style="list-style-type: none"> <li>Risk is expected to only slightly increase and remain low by 2050.</li> </ul>	<ul style="list-style-type: none"> <li>Risk from reputational damage due to inadequate attention to environmental and climate-related issues will persist for the Company but is expected to be limited to retailing business</li> <li>Financial Implications: Not calculated due to low risks from qualitative screening</li> </ul>



Risks



Opportunities







PL = Policy & Legal, M = Market, T = Technology, R = Reputation

Transition Drivers	Transition Measures*	Expected Time Horizons	
		Short to Mid Term	Long Term
<b>Increased pricing of GHG emissions (PL)</b>	<ul style="list-style-type: none"> <li>• Retrofit factories and stores with energy-efficient equipment and systems (e.g. LEDs, high-efficiency motors, chillers, ovens, eco-friendly materials)</li> <li>• Transition to renewable energy sources, including solar panels, battery storage, and renewable energy power purchased agreement for stores and warehouses</li> <li>• Optimize energy consumption through real-time monitoring systems to improve efficiency</li> <li>• Collaborate with logistics partners using low-carbon fleets (e.g. EVs, biofuel trucks) and optimized delivery routes</li> <li>• Expand product offerings with eco-friendly alternatives made from sustainable materials</li> </ul>	✓	
<b>Government policy actions on climate change (PL)</b>	<ul style="list-style-type: none"> <li>• Set ESG criteria for vendors (e.g., energy labeling, use of recycled materials, packaging compliance)</li> <li>• Switch to recyclable, compostable, biodegradable, or reusable packaging to meet sustainability and packaging waste regulations</li> <li>• Improve inventory planning to reduce waste; donate surplus food and compost organic waste</li> </ul>	✓	
	<ul style="list-style-type: none"> <li>• Conduct energy audits across all properties to identify inefficiencies</li> <li>• Partner with certified sustainable suppliers and ensure compliance with climate and sustainability regulations</li> <li>• Pursue green building certification for both new and existing properties</li> <li>• Invest in innovation (e.g., battery technology, energy-saving devices, circular materials)</li> </ul>		✓
<b>Investments in operations and infrastructure to adapt to climate change (T)</b>	<ul style="list-style-type: none"> <li>• Maximize the use of renewable energy and battery storage where applicable to achieve a strong return on investment</li> <li>• Share sustainability milestones with customers and stakeholders</li> </ul>	✓	
	<ul style="list-style-type: none"> <li>• Design or retrofit properties using climate adaptation standards</li> <li>• Retrofit existing stores and properties with climate-resilient materials</li> </ul>		✓
<b>Customer behavior changes due to a preference shift to low carbon product (M)</b>	<ul style="list-style-type: none"> <li>• Expand and diversify product offerings to include low-carbon and sustainable options</li> <li>• Introduce energy-efficient and sustainable product lines aligned with consumer demand for eco-friendly alternatives</li> </ul>	✓	
	<ul style="list-style-type: none"> <li>• Implement transparent product labeling, including eco-labels and carbon footprint information</li> <li>• Introduce green lease agreements that promote energy-saving practices among tenants</li> </ul>		✓

Transition Drivers	Transition Measures*	Expected Time Horizons	
		Short to Mid Term	Long Term
Negative reputation due to the company's disregard for	<ul style="list-style-type: none"> <li>• Adopt recyclable, biodegradable, or reusable packaging across products and retail outlets to meet regulatory standards</li> <li>• Expand the product range with sustainable, ethically produced, and eco-labeled items; ensure clear labeling to communicate sustainability credentials</li> <li>• Introduce in-store recycling programs for items such as clothing, batteries, tools, and appliances to support circularity</li> </ul>	✓	
environmental issues (R)	<ul style="list-style-type: none"> <li>• Retrofit properties to green standards, establish environmental commitments for the Property division, and maintain regular communication with stakeholders on progress</li> </ul>		✓

# CLIMATE STRATEGY FRAMEWORK

Based on climate-related risk assessment, Central Retail has formulated a strategy to guide the Company toward the climate aspirations under the ReNEW Strategy and in fulfilling its important role as a major retailer and wholesaler.

 Vision	Retail and Wholesale For All			
 Climate Aspirations	Net-Zero Emissions in Scope 1 & 2 by 2050			
 Climate Strategy Pillar	ReNEW Strategy			
 Climate Focus Areas	<b>Re</b> Reduction Greenhouse Gas Emission	<b>N</b> Navigate Environmental Responsibility	<b>E</b> Eco-friendly Materials	<b>W</b> Waste Management Solutions
 Key Initiatives	<ul style="list-style-type: none"> <li>• Increase the use of clean energy</li> <li>• Transition to low-carbon logistics and electric-powered transportation</li> <li>• Adopt energy efficient chillers</li> <li>• Promote reforestation, agroforestry and sustainable agriculture, expansion of green areas</li> </ul>	<ul style="list-style-type: none"> <li>• Climate-focused ESG training for management employees</li> <li>• ESG program for key suppliers to promote low-carbon practices and energy efficiency</li> </ul>	<ul style="list-style-type: none"> <li>• Expand new format distributing green products</li> <li>• Promote natural materials and eco-friendly packaging</li> <li>• Increase sustainable product choices in our stores</li> </ul>	<ul style="list-style-type: none"> <li>• Divert food waste from landfills through fertilization</li> <li>• Adopt circular economy to reduce, reuse, recycle</li> <li>• Encourage key stakeholders to separate waste</li> </ul>
 Enablers	<p><b>Governance</b></p> <ul style="list-style-type: none"> <li>• Board/Executive engagement</li> <li>• Creation of climate-related committees and working groups at group and business unit levels</li> <li>• Climate strategy integration into business processes</li> <li>• Staff engagement and capacity building</li> </ul>	<p><b>Data Management</b></p> <ul style="list-style-type: none"> <li>• Improvement in GHG data management</li> <li>• Regular standardized GHG inventory (Scopes 1 &amp; 2)</li> <li>• Assessment of Scope 3 GHG emissions</li> </ul>	<p><b>Compliance and Communication</b></p> <ul style="list-style-type: none"> <li>• Regulatory compliance and certifications</li> <li>• Compliance to the Company's Environmental Policy, and Management Commitment on Biodiversity Conservation and No-Deforestation</li> <li>• Climate disclosure &amp; reporting (Sustainability Report, Website, and TCFD)</li> </ul>	<p><b>Collaboration</b></p> <ul style="list-style-type: none"> <li>• Collaboration with value chain partners to drive the transition towards a low carbon economy</li> </ul>

# INTERNAL CARBON PRICING

The Company has established a company-wide internal carbon price of 200 THB/tCO<sub>2e</sub> applicable to scope 1 and 2 emissions. This internal carbon pricing was set using the shadow pricing method and is intended to guide the quantification of climate-related risks and opportunities. The implementation of the internal carbon price forms a key component of Central Retail's climate strategy and supports the company's broader climate ambition. Specifically, it aims to drive energy efficiency and low-carbon investments, and incentivize considerations of GHG emissions into decision-making, risk assessment, and cost-benefit analysis. The Company plans to start applying internal carbon pricing into specific business practices such as procurement of certain own-branded sustainable products to enhance alignment of procurement practices with long-term climate transition objectives, before applying internal carbon pricing more broadly across all other business decision-making processes.

## METRICS & TARGETS

Central Retail sees the importance of setting climate-related targets and collecting data for establishing a baseline and to track progress. With regards to climate change, the Company has been conducting greenhouse gas (GHG) inventories for scope 1, 2, and 3 emissions on an annual basis. The GHG inventories are developed in alignment with the recommendations of the GHG Protocol.

### 1. THE METRICS USED FOR GREENHOUSE GAS EMISSIONS ASSESSMENT

Key Metrics	TCFD Recommendation
<p><b>Direct GHG Emissions</b> (Scope 1 - MtCO<sub>2</sub> equivalent)</p>	<p>1. IPCC Guidelines for National Greenhouse Gas Inventories, 2006</p>
<p><b>Market-based energy indirect</b> (Scope 2) GHG emission (MtCO<sub>2</sub> equivalent)</p>	<p>2. ISO 14064-1</p>
<p><b>Location based energy indirect</b> (Scope 2) GHG emission (MtCO<sub>2</sub> equivalent)</p>	<p>3. Thailand Greenhouse Gas Management Organization: The National Guideline Carbon Footprint for organization</p>
<p><b>Other relevant indirect GHG emission</b> (Scope 3)* (MtCO<sub>2</sub> equivalent)</p>	<p>4. The Greenhouse Gas Protocol: Technical Guidance for Calculating Scope 3 Emissions (Version 1.0)</p> <p>5. The Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Accounting and Reporting Standard</p>

\* Other indirect greenhouse gas emissions (Scope 3) include Purchased goods and services (water consumption and packaging), Fuel- and Energy-Related Activities, Upstream Distribution and Transportation, Waste generated in operations, Business travel, Employee commuting, Downstream Distribution and Transportation, and Downstream leased assets.

## 2. GREENHOUSE GAS EMISSIONS AND CLIMATE TARGETS

The Company has adjusted its data collection methodology in 2023 to be aligned with recommendations of the GHG Protocol and has established 2023 as the base year for tracking its progress against achieving its climate target within 2030. The Company is determined to further improve its data collection methodology to become more comprehensive, accurate, and consistent in coverage for future years.

The Company has announced a group-wide target to reduce greenhouse gas emissions (scope 1 & 2) by 30% within 2030 compared to 2023 as the baseline year. Last but not least, the Company is committed to achieve group-wide Net Zero Emissions (scope 1 & 2) by 2050.

<b>Direct Target</b>	<b>Reduce greenhouse gas scope 1 and 2 emissions by 30% by 2030</b>	<b>Achieve net-zero target for scope 1 and 2 emissions by 2050</b>
<b>Indirect Targets</b>	<b>Promote eco-friendly packaging by 100% by 2030</b>	<b>Reduce food loss and wastes by 30% by 2030</b>

<b>Greenhouse Gas Emissions</b>	<b>FY 2024</b>
Scope 1 (tCO <sub>2</sub> e)) - Metric Tons CO <sub>2</sub> e	111,397
Scope 2 (tCO <sub>2</sub> e)) - Metric Tons CO <sub>2</sub> e	593,038
<b>Total Scope 1 &amp; 2 (tCO<sub>2</sub>e)) - Metric Tons CO<sub>2</sub>e</b>	<b>704,435</b>
Scope 3* (tCO <sub>2</sub> e)) - Metric Tons CO <sub>2</sub> e	759,728



\* Other indirect greenhouse gas emissions in scope 3 include Purchased goods and services (water consumption and packaging), Fuel- and Energy-Related Activities, Upstream Distribution and Transportation, Waste generated in operations, Business travel, Employee commuting, Downstream Distribution and Transportation, and Downstream leased assets.

# IFRS S2 CONTENT INDEX

	IFRS S2 Requirements	Public Disclosure
Governance	a. Disclose the governance body(s) or individual(s) responsible for oversight of climate-related risks and opportunities.	<ul style="list-style-type: none"> <li>• Central Retail Climate Report 2024 - OUR CLIMATE GOVERNANCE ( PDF Page 4-5 )</li> <li>• <a href="https://www.centralretail.com/storage/document/cg-charter/crc-corporate-governance-and-sustainable-development-committee-en.pdf">https://www.centralretail.com/storage/document/cg-charter/crc-corporate-governance-and-sustainable-development-committee-en.pdf</a></li> <li>• <a href="https://www.centralretail.com/storage/document/cg-charter/crc-charter-risk-committee-en.pdf">https://www.centralretail.com/storage/document/cg-charter/crc-charter-risk-committee-en.pdf</a></li> </ul>
	b. Disclose management’s role in the governance processes, controls, and procedures used to monitor, manage, and oversee climate-related risks and opportunities.	
Strategy	a. Disclose the climate-related risks and opportunities that could reasonably be expected to affect the entity’s prospects	• Central Retail Climate Report 2024 - CLIMATE STRATEGY ( PDF Page 7-20 )
	b. Disclose the current and anticipated effects of those climate-related risks and opportunities on the entity’s business model and value chain.	• Central Retail Climate Report 2024 - CLIMATE STRATEGY ( PDF Page 7-20 )
	c. Disclose the effect of those climate-related risks and opportunities on the entity’s strategy and decision-making, including information about its climate-related transition plan.	• Central Retail Climate Report 2024 - CLIMATE STRATEGY FRAMEWORK ( PDF Page 21-22 )
	d. the effect of those climate-related risks and opportunities on the entity’s financial position, financial performance, and cash flows for the reporting period, and their anticipated effects on the entity’s financial position, financial performance, and cash flows over the short, medium, and long-term, taking into consideration how those climate-related risks and opportunities have been factored into the entity’s financial planning.	• Central Retail Climate Report 2024 - CLIMATE STRATEGY ( PDF Page 7-20 )
	e. Disclose the climate resilience of the entity’s strategy and business model to climate-related changes, developments, uncertainties, taking into consideration the entity’s identified climate-related risks and opportunities.	• Central Retail Climate Report 2024 - CLIMATE STRATEGY ( PDF Page 7-20 )



	IFRS S2 Requirements	Public Disclosure
Risk Management	a. Disclose the processes and related policies the entity uses to identify, assess, and prioritise, and monitor climate-related risks	• Annual Report 2024 (Form 56-1 One Report)   Central Retail Corporation Page 102 – 103, 120 - 121
	b. Disclose the processes the entity uses to identify, assess, prioritize and monitor climate-related opportunities, including information about whether and how the entity uses climate-related scenario analysis to inform its identification of climate-related opportunities	
	c. Disclose the extent to which, and how, the processes for identifying, assessing, prioritizing and monitoring climate-related risks and opportunities are integrated into and inform the entity's overall risk management process.	• Central Retail Climate Report 2024 – RISK MANAGEMENT ( PDF Page 6 )
Metrics & Targets	a. Disclose the information relevant to the cross-industry metric categories, including greenhouse gases, transition risks, physical risks, opportunities, capital deployment, internal carbon price, and remuneration.	• Central Retail Climate Report 2024 - CLIMATE STRATEGY ( PDF Page 7-20 ) • Central Retail Climate Report 2024 - METRICS & TARGETS ( PDF Page 22-23 )
	b. Disclose industry-based metrics that are associated with particular business models, activities or other common features that characterize participation in an industry	• Central Retail Climate Report 2024 - CLIMATE STRATEGY ( PDF Page 7-20 ) • crc-performance-data-2024-en.pdf (Page 9-10, 13 – 14)
	c. Disclose the targets set by the entity, and any targets it is required to meet by law or regulation, to mitigate or adapt to climate-related risks or take advantage of climate-related opportunities, including metrics used by the governance body or management to measure progress towards these targets.	• Central Retail Climate Report 2024 - CLIMATE STRATEGY ( PDF Page 7-20 )



## CENTRALRETAIL

**Central Retail Corporation Public Company Limited**

22 Soi Somkid, Ploenchit Road, Lumpini, Pathumwan, Bangkok 10330

 +66 2 650 3600    [ir@central.co.th](mailto:ir@central.co.th)    [www.centralretail.com](http://www.centralretail.com)