

Climate Change Strategy

Challenges and Opportunities

Siam Global House Public Company Limited ("the Company") recognizes that climate change and the impacts of greenhouse gas emissions are critical issues that affect global sustainability, the economy, the quality of life of the global citizens, business continuity, and the Company's supply chain. However, At the same time, these challenges also find business opportunities for the Company to develop sustainable practices, such as expanding renewable energy projects, introducing innovations to improve energy efficiency, developing environmentally friendly products and services, and collaborating with business partners.

The Company is committed to being part of the solution to climate change and place great importance on greenhouse gas management by setting a target to reduce Scope 1 and Scope 2 greenhouse gas emissions by 20% by 2030. Furthermore, the Company aims to achieve net-zero greenhouse gas emissions by 2050.

Climate Change Management Framework

The Company has established a climate change management framework that aligns with applicable laws, regulations, and relevant standards at both national and international levels, such as the Task Force on Climate-related Financial Disclosures (TCFD) and the IFRS S2 Climate-related Disclosures Standard. The framework covers four areas: (1) Governance, (2) Strategy, (3) Risk Management, and (4) Metrics and Targets. The Company focuses on analyzing and assessing climate-related risks and opportunities that may affect financial reporting and business operations in the short, medium, and long term. Both qualitative and quantitative methods are applied to cover physical risks and transition risks. The results are integrated into the Company's sustainability strategies and action plans, thereby enhancing long-term competitiveness and business resilience.

1. Climate change governance structure

Duties and Responsibilities

The Board of Directors

- 1. Review and approve policies and guidelines for managing climate change that align with environmental conditions and risk factors, covering business activities and stakeholders throughout the value chain, with at least an annual review.
- 2. Ensure that business operations comply with relevant laws, regulations, directives, policies, and practices related to climate change and promote the implementation of these policies in a fair manner.
- 3. Supervise and monitor the implementation of risk and opportunity management related to climate change to ensure effective risk control and timely response to situations.
- 4. Promote and support the management in recognizing the importance of managing climate change and instilling it as part of the organizational culture.





The Sustainability and Corporate Governance Committee

- 1. Consider, establish, review, and improve policies, strategies, and action plans for managing climate change to ensure alignment with relevant laws, regulations, practices, and standards.
- 2. Supervise the implementation of policies, strategies, and action plans for managing climate change, and regularly monitor the performance data.
- 3. Supervise and advise the risk management working group in assessing risks, managing risks and opportunities, and mitigating risks arising from climate change in accordance with international standards, for presentation to the company's board of directors for consideration.
- 4. Supervise the regular annual disclosure of climate change management reports or its performance to stakeholders across the value chain, in accordance with regulatory requirements.

Chief Executive Officer

- 1. Promote the company's climate change management efforts by clearly defining the roles and responsibilities of those in charge, and by allocating appropriate and sufficient resources to ensure continuous operations in alignment with the company's policy.
- 2. Require the analysis and assessment of climate change risks impacting business operations, and establish appropriate risk management approaches in alignment with company policies and operational strategies.
- 3. Establish objectives, targets, strategies, plans, and interconnected indicators for managing climate change to ensure business continuity.
- 4. Support suppliers, business partners, and stakeholders in complying with relevant laws, policies, measures, and regulations.
- 5. Raise awareness and promote a culture of climate change management by communicating continuously to employees at all levels and relevant stakeholders.
- 6. Consider the performance reports according to policies before presenting to the sustainability and corporate governance committee and the board of directors.

Risk Management Working Group

- 1. Evaluate and manage risks related to climate change, including having strategies for prevention and mitigation of its impacts.
- 2. Report important climate change-related issues affecting business operations to management and the sustainability and corporate governance committee, and promptly report any abnormalities as they occur.
- 3. Manage the disclosure and reporting of climate change management information to stakeholders annually, in accordance with regulatory requirements.
- 4. Communicate and raise awareness, cultivate consciousness, and promote participation in dealing, adapting, and managing climate change among employees and stakeholders consistently.





2. Climate Change Strategy

The Company had set a short-term target to reduce Scope 1 and Scope 2 greenhouse gas emissions by 20% by 2030 and a long-term goal to achieve net-zero emissions by 2050. Accordingly, the Company began assessing its organizational carbon footprint (Carbon Footprint for Organization: CFO) in 2022, in accordance with the standards of the Thailand Greenhouse Gas Management Organization (TGO). The assessment serves as a guideline for effective greenhouse gas management, together with the establishment of the "Smart Stores" strategy, which represents the Company's environmental strategy to minimize the environmental impacts of its business operations.

Risk Management and Opportunities

The company assesses climate-related risks and opportunities to identify the types of risks it may face. The company places importance on potential risks and opportunities to develop action plans that mitigate adverse impacts. The company evaluates both physical risks and transition risks across three time horizons: short-term (1–3 years), medium-term (3–10 years), and long-term (over 10 years). The assessment of climate-related opportunities that impact financial reporting, in alignment with the guidelines of the Task Force on Climate-Related Financial Disclosures (TCFD) and IFRS S2.

Climate-related Risk Assessment

Туре	Climate-Related Risk	Potential Financial Impacts		
Transition Risks	 Policy and Legal Changes in Government Policies and Regulations. Enhancing Standards for Environmentally Friendly Products and Services. Mandates on and regulation of existing products and services. Exposure to litigation Technology Increasing investment in technology, research, and development of alternative products and services with low greenhouse gas emissions. Costs to transition to lower emissions technology. 	 Increased operating costs such as higher compliance costs, increased insurance premiums. Increased cost of goods and services. Increased costs and reduced demand for products and services. Research and development (R&D) expenditures in new and alternative technologies. Capital investments in technology development Reduced demand for products and services. Costs to adopt/deploy new practices and processes. 		
	MarketingChanging customer behaviorUncertainty in market signalsShifting consumer demand toward environmentally	 Reduced demand for goods and services due to shift in consumer preferences. Increased operating expenses due to higher costs of environmentally friendly products. 		
	friendly products may result in challenges in sourcing and maintaining the availability of sustainable products, as well as increased product costs.			



Туре	Climate-Related Risk	Potential Financial Impacts		
Transition Risks	ReputationChanging consumer demands.Increased stakeholder concerns and potential negative feedback.	 Reduced revenue from decreased demand for goods and services. Reduced revenue from negative impacts on workforce management and planning. Decline in Available Capital Due to Negative Corporate Image and Reputation. 		
Physical Risk	 Acute cyclones and floods. Chronic Changes in precipitation patterns and extreme variability in weather patterns. Rising mean temperatures. Rising sea levels. 	 Increased Operating Costs Due to Business Disruption from Natural Disasters. Decline in revenue due to business disruptions (e.g., store closures, transportation issues, supply chain interruptions). Reduced revenue and higher costs from negative impacts on workforce (e.g., health, safety, absenteeism). Increased costs for repairing damaged store and implementing preventive operational measures. Capital expenditures for constructing new store. Increased costs for flood response and mitigation efforts. Increased insurance premiums and potential for reduced availability of insurance on assets in "high-risk" locations 		

Physical Risk Management and Action Plan

			Time Horizon		
_	Climate-Related Risks	Action Plan	short-term	Medium-term	Long – term
Type			(1-3	(3-10 years)	(over 10
			years)		years)
	cyclones	Assess the weather conditions,	\checkmark	✓	\checkmark
Acute		structural and overall condition of			
		store buildings to prevent leaks and			
		damage.			
	floods.	Clean waste and remove waterway	✓	✓	\checkmark
		obstructions and install flood barriers			
		for high-risk stores.			
	Changes in	Inspect and maintain the operation	√	✓	\checkmark
Chronic	precipitation patterns	of generators, cleanliness, and			
	and extreme variability	readiness of equipment.			
	in weather patterns.		-		
	Rising mean	Strengthen employee preparedness	√	✓	\checkmark
	temperatures.	and basic medical knowledge to			
		address heatstroke or related health			
		risks during periods of high			
		temperatures.			
	Rising sea levels.	Maintain communication with local	√	✓	\checkmark
		and national authorities while			
		regularly monitoring sea levels.		_	Call Center



Climate-related Opportunity

Туре	Climate-Related Opportunities	Potential Financial Impacts
Resource Efficiency	 Reduce electricity consumption in stores and offices by replacing lighting systems and electrical equipment, both inside and outside the buildings, with LED technology. Reduce electricity and forklift fuel consumption in conventional warehousing and distribution by implementing an Automated Storage and Retrieval System (ASRS). Efficient material management by converting used pallet wrap from branches and distribution centers into eco-friendly plastic bags, in line with Circular Economy principles. Reduce water consumption by installing watersaving fixtures and sanitary equipment in stores and offices, as well as implementing systems to recycle and reuse wastewater. Transition to renewable energy by installing solar rooftops at all stores to generate electricity from solar power as a substitute for fossil fuel. Transitioning the energy source of machinery and operational vehicles from fossil fuels to electricity by adopting electric forklifts and electric vehicles (EVs). 	 Potential Financial Impacts Increase expenses from system installations, which can reduce operational costs in the long term. Reduce utility costs, including electricity and water expenses. Increase revenue from product sales as the Automated Storage and Retrieval System (ASRS) minimizes product damage and enhances service, thereby improving customer satisfaction. Reduce plastic waste management costs and maximize resource utilization in accordance with Circular Economy principles. Reduce long-term energy and operational costs. Reduce exposure to future energy price volatility. Increase revenue from EV charging station services while enhancing brand image, particularly among
Products and Services	 Participation in a Low Carbon Society by providing electric vehicle (EV) charging stations at store locations. Sourcing and developing environmentally friendly products and services to support and respond to 	 environmentally conscious customers. Increase opportunities to access green financing sources. Increase revenue from environmentally friendly products and services.
Markets	 the shifting needs and behaviors of consumers. Market opportunities for environmentally friendly products and services to expand the customer base of environmentally conscious consumers. 	Increase revenue from a growing base of environmentally conscious customers.
Resilience	Participating in the Thailand Voluntary Emission Reduction Program (T-VER) to demonstrate the company's commitment to reducing environmental impact.	Enhance the company's brand image and credibility by positioning it as an environmentally responsible and sustainable organization.





3. Metrics and Targets

Climate Performance Indicators

Level	Indicators	
Chief Executive Officer and Senior	Increase in sales of environmentally friendly products or	
Executives	ESG1-4 product group.	
	· Increase the proportion of renewable energy usage.	
Executives and employees at all levels	Reduce the use of natural resources, including paper, water, and electricity.	
	· Reduce waste volume.	

Target

- 1. By 2030, reduce Scope 1 and Scope 2 greenhouse gas emissions per total revenue by 20% compared to the base year (2022).
- 2. By 2050, achieve net-zero greenhouse gas emissions.
- 3. By 2027, generate 100,000,000 kilowatt-hours per year of electricity from solar power.
- 4. By 2025, increase the proportion of revenue from ESG product groups to 40% of total sales revenue.
- 5. By 2024, achieve 63% renewable energy usage.

Scope of Greenhouse Gas Emissions

Since 2022, the Company has been conducting an organizational carbon footprint assessment, covering direct greenhouse gas emissions (Scope 1), indirect greenhouse gas emissions from energy consumption (Scope 2), and other related indirect greenhouse gas emissions (Scope 3).

Scope 1	Scope 2	Scope 3
Gasoline/diesel oil volume for executive	• Electricity	• A4 70 grams/ A5 paper purchase
vehicles	consumption.	quantity.
Diesel oil volume for delivery vehicles.		· LDPE Handle Bag Purchase quantity.
Gasoline oil for Lawn movers.		Provincial Water Supply/Metropolitan
LPG/Diesel/Gasoline Volume for Forklift.		Water Works Authority.
Diesel fuel consumption of Generator/Fire		Acquisition of Gasoline / Benzene /
pump.		Diesel / LPG / Electric.
· CO 2Fire Extinguishing Agent Consumption.		· Transportation of raw materials (paper,
Refrigerant quantity for type of		handle bag).
R32/R410A/R407C/R134A/R404A/R401A.		· Landfill Waste Management.
Methane content from Septic tank.		• Employee's travel to the workplace.
Methane content from activated sludge		· Disposal of product residues (Tax
wastewater treatment system.		invoice printing paper(A (5Paper handle
		bag).
		· electricity consumption of tenant.





Greenhouse Gas Emissions Control Performance

1. Renewable Energy Consumption (Solar roof top)

Since 2017, the company has adopted a policy to promote renewable energy consumption, starting with the Solar Rooftop Installation Project at all stores to generate electricity from solar energy, which is a clean and non-polluting energy source that has no negative impact on the environment. In addition, this initiative has effectively helped reduce the company's energy and operational costs.

By 2024, the company successfully completed the installation of solar panels at all 90 store locations, enabling comprehensive electricity generation from solar energy. This achievement aligns with the company's sustainability targets as follows:

Year	Total Stores	Stores with solar cell setting	Electricity generated (kWh/year)	CO ₂ e reduction (tCO ₂ e/year)
2022	77	77	79,611,969	44,662.31
2023	83	83	86,738,391.64	48,660.24
2024	90	90	87,963,304.64	49,347.41

2. Electric Power System Changing Project both Interior and Exterior

The company has an action plan to improve the lighting systems both inside and outside the buildings to enhance energy efficiency and reduce environmental impact. As a result, energy consumption was reduced by 109,911 kWh per year. The details of the operations in 2024 are as follows:

Project	Number of	Reduced	CO ₂ e
	Stores	Energy	reduction
		Volumes	(tCO₂e/year)
		(kWh/Year)	
Change street light around the building from Street	6	46,675	26.18
Light 120 Watt to be Solar Cell system			
Change Customer's Garage light from LED 20 Watt to	6	3,064	1.72
be Solar Cell system			
Change light in display tray from LED 14 Watt to be LED	6	39,168	21.97
10 Watt			
Change Aisle light from TLD 36-Watt, 13 set to be LED	6	15,994	8.97
48-Watt, 4 set			
Change Rack light from TLD 20 Watt to be LED 18 Watt	6	5,010	2.81

3. Electric Forklift and Electric Stacker Using

The company places great importance on enhancing operational efficiency while reducing environmental impact. Each store engages in daily operations involving product transfer, picking, and storage, which require the use of forklifts to ensure efficiency, convenient, fast and labor-saving.

The company has designated the use of electric stackers in home décor product areas and electric forklifts in construction material areas. Since 2020, it has implemented a policy requiring the use of electric torklifts in all

www.globalhouse.co.th



newly opened stores and has gradually replaced fuel-powered forklifts in existing stores as they reach the end of their service life. Fuel-powered forklifts emit greenhouse gases and contribute to air pollution, whereas electric forklifts and pallet trucks significantly reduce environmental impact. By the end of 2024, the company had deployed a total of 89 electric forklifts across all stores nationwide.

4. EV Charger Station installation project

The Company has installed EV Charger Station in service area of stores to support the use of renewable energy and reduce Greenhouse Gas causing from all stakeholders of the Company.

At the end of 2023, the Company has EV Charger Station in number of 12 stores. namely: Phitsanulok, Phrae, Sukhothai, Uttaradit, Mae Sai, Phuket, Satun, Krathum Baen, Kantharalak, Ubon Ratchathani, Nakhon Ratchasima, and Lopburi.

5. Thailand Voluntary Emission Reduction Program

The Company has been registered in the Thailand Voluntary Emission Reduction Program (T-VER) under the Thailand Greenhouse Gas Management Organization (TGO). Demonstrating its commitment to sustainability, the Company joined this voluntary greenhouse gas reduction initiative through the "Solar PV Rooftop Project by GLOBAL HOUSE." As part of its efforts to mitigate greenhouse gas emissions, the Company has successfully registered the following T-VER projects:

- 2023: Registered the first phase of the T-VER project, covering 29 stores, expected to achieve a reduction/sequestration of 16,760 tCO2eq/year. The credit period for this project runs from May 1, 2022, to April 30, 2029.
- 2024: Registered the second phase of the Thailand Voluntary Emission Reduction Program for an additional 12 branches, which is expected to achieve a reduction/sequestration of 6,311 tCO₂eq/year. The crediting period for this phase runs from January 1, 2025, to January 31, 2031.

6. Eco-friendly Products

The Company is committed to sourcing and promoting the sale of environmentally friendly products with a strong focus on minimizing environmental impact. It also continuously supports the concept of responsible consumption among its customers. Environmentally friendly products are categorized into four main groups as follows:

- ESG 1 Energy saving group, reducing global warming group, Natural resources saving group
- ESG 2 Health Promotional Group
- ESG 3 Elderly & Disability Care Products Group
- ESG 4 Product group for responding to New Normal way of living

At the end of 2024, ESG products accounted for 42.20% of total sales revenue.

