4 Creating a Sustainable Planet

At present, various environmental issues such as climate change, plastic pollution, food loss and waste, and waste management are closely related to sustainable corporate operations. Effectively adopting sustainable operations, optimizing resource efficiency and practicing sustainability are important elements in President Chain Store Corporation's overall operating value chain. As the leader in convenience stores, we hope to strike a balance between convenience and environmental impact by being committed to reducing the negative impact of plastics, food waste and waste in our operations, as well as actively improving our ability to address climate change issues.

2 ZERO HUNGER

In 2024, the"iLove Food" program reduced food waste by **17,866.94** metric tons

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

The OPEN iECO Recycled Cups Renting Service has been adopted by **2,531** stores with **20.91%** of consumers bringing their own cups

13 CLIMATE ACTION

Store energy-saving actions saved the equivalent of **61,380.58** metric tons of CO_2e in 2024

15 LIFE ON LAND

The procurement amount for certified raw materials for paper in 2024 was NT$ **617,979** thousand

Management Policies

Policies and Commitments

- Environmental policy
- GHG policy
- Energy policy
- Packaging material management
- Waste management policy

Management Actions

- Inventory and management of environmental information (greenhouse gas emissions, packaging material consumption, waste removal, food loss and waste in the stores, water withdrawal and consumption)
- Low-carbon transition plan for own operations and value chain
- Adaptation strategies for climate-related physical and transition risks, investing in solar photovoltaic power year by year
- Actions towards plastic reduction (reducing product packaging and single-use plastic used for in-store services, expanding recycling mechanism, building a circular model for recycled cups, procuring packaging materials with circular economy certifications)
- Food loss and waste management (reducing the scrap rate of fresh food, improving the management mechanism of the manufacturers, improving the recovery rate of food waste, upgrading order-to-delivery system)
- Waste management (setting up a convenient recycling platform in stores, refurbishment and reuse of store equipment, waste reduction for all operating locations, managing waste flows with suppliers)

Sustainable Goal Management Process

Material Topic	Management Metrics	Medium-and long-term Targets	2025 Targets	2024 Targets & Performance (↑ Ascending ✓ Achieve — Maintain)
Climate Change	Proportion of EUI value decrease compared with the previous year	Reducing EUI by 0.5% compared to the previous year	Reducing EUI by 0.5% compared to the previous year	— Reducing EUI by 0.5% compared to the previous year → EUI increased by 5.75% compared to the previous year
	Proportion of direct (Scope 1) and indirect (Scope 2) GHG emission intensity (carbon emission intensity per NT$ million of revenue) reduction compared with the previous year (Note 4)	Reducing the proportion by 60% compared to 2020	Reducing the proportion by 1.5% compared to the previous year	— Reducing the proportion by 1 % compared to the previous year → Increased by 1.76% compared to the previous year
Packaging Materials Management	Proportion of consumers bringing their own cups (Note 1)	24% by 2028	21%	↑ 19% → 20.91%
	Number of stores adopting the Recycled Cups Renting Service (Note 1)	Following regulations regarding single-use beverage cups	2,500 stores (30% by regulations)	↑ 2,300 stores → 2,531 stores
	Proportion of other single-use plastic for private-label products and materials	10% of other single-use plastic by 2028, completely eliminating plastic shopping bags and plastic straws Completely eliminating other single-use plastic by 2050	18%	— 19% → 20.96%
Food Loss and Waste Management	Total weight of food loss and waste discarded (with 2019 as base year)	4,461 metric tons by 2030 Reduction of 50% by 2030	5,365 metric tons with a 39.9% reduction compared to the base year	↑ 5,667 metric tons with a 36.5% reduction compared to the base year → 3,216 metric tons with a 76% reduction compared to the base year
	Total weight of all food loss and waste	11,605 metric tons by 2030 Halving by 2030 (with 2019 as base year)	11,241 metric tons	— 11,353 metric tons → 12,496 metric tons
	Total weight of food loss and waste volumes used for alternative purposes	7,144 metric tons by 2030	5,875 metric tons	↑ 5,686 metric tons → 9,279 metric tons
Waste Management	Proportion of volume for waste removal reduction in each store (base year 2019) (Note 2)	45% of reduction by 2028	20%	↑ 20% → A 25.63% decrease compared to the base year

(Note 1) Targets for the proportion of bring-your-own cups and the number of stores with recycling cup renting services have been adjusted for 2025 and 2028 in line with regulatory requirements. Considering the high regulatory uncertainty in 2030 and 2050, the targets will not be disclosed for the time being. Please refer to the description of the plastic reduction management action section in the subsection 4.2 Packaging Material Management.
(Note 2) Targets for the current year and 2025 for store waste reduction have been adjusted in line with current operations. Please refer to the description of Waste Generation and Process Flow Management section in 4.4 Food Waste and Waste Management.

Through the optimization of the "OPEN iECO Recycled Cup Renting System" and the NT$5 discount for bringing their own cups, President Chain Store Corporation has achieved outstanding results in reducing the use of single-use containers. Through the efforts of various promotional activities, a total of 102.4 million cups were sold by 2024, reducing the use of plastic by about 112.72 metric tons. However, in the process of investing in the recycled cup service system, we have observed that consumers tend to bring their own cups. Therefore, while maintaining compliance with regulatory standards, President Chain Store Corporation has adjusted its 2025 target to 21% of consumers bringing their own cups. While continuing to improve the results of reducing plastic in beverage sales, we also respond to special holidays such as Earth Day, World Environment Day, DJBICI and other specific periods to work with stores on expanding promotions for bringing their own cups and recycled cups. E-learning is provided for staff on recycled cup service to increase utilization of the recycled cup service.

Online shopping packaging reduction and recycling materials

Regulations require that the weight of average online shopping packaging is reduced by at least 30% in 2025. President Chain Store Corporation started the initiative to reduce the weight of online shopping packaging material in 2022, making MyShip mailing bag packaging lighter and introducing the development and use of degradable material mailing bags. In 2024, the mailing bags reduced plastic consumption by about 8.34 metric tons compared to the previous year, and the proportion of degradable material mailing bags reached 16.64%. In addition to reducing the weight of the mailing bags themselves, President Chain Store Corporation also replaces virgin plastic with recycled plastic. MyShip mailing bags increased the proportion of recycled plastic by 50% with a total of 21.61 metric tons of plastic reduced. In addition, ibon has developed a mailing service label machine. The mailing receipts have adhesive backing and can be directly pasted, reducing the amount of dedicated mailing bags, reducing plastic consumption by 12.90 metric tons in 2024, as well as unnecessary paper and plastic use.

4.3 Climate Change Mitigation and Adaptation

Facing the global challenges brought about by climate change, President Chain Store Corporation actively responds and adapts to the impact of climate change, not only embodying our environmental responsibilities but also ensuring the key to sustainable development. To this end, we respond to domestic and foreign climate initiatives, commit to abiding by the principles of the Paris Agreement to limit global temperature rise to a maximum of 1.5°C above pre-industrial levels, as well as declaring our support for the Ministry of Environment's Pathway to Net-Zero Emissions in 2050. To this end, we follow the PDCA cycle to formulate a net-zero transition plan for President Chain Store Corporation and developed a comprehensive climate governance structure, so as to gradually make our pathway to net-zero emissions a reality and exert a positive influence.

Climate Governance

+ Climate-related Monitoring Mechanisms and Actions +

President Chain Store Corporation's governance structure of climate change issues has the Board of Directors as the highest governing body, with the Sustainable Development Committee underneath supervising and reviewing climate-related issues. The Sustainable Development Committee is responsible for developing and implementing various sustainable development strategies, as well as managing the Company's climate transition actions and target performance.

In response to the development in climate change issues, President Chain Store Corporation set up a Carbon Reduction Task Force in 2021 as a dedicated unit for climate-related issues. The task force is chaired by a member of the Sustainable Development Committee and sets up task groups based on the business scope of each department to ensure cross-departmental collaboration and promotion. The core responsibilities of the Carbon Reduction Task Force include conducting preliminary assessments of major climate change risks and opportunities, incorporating the assessment results into comprehensive discussions, and further formulating response strategies. In the meantime, the Carbon Reduction Task Force has four major projects to execute, including formulating the blueprint strategy, procuring and developing low-carbon products and services, introducing energy-saving and carbon reduction measures and equipment, and promoting energy-saving solutions for logistics. Each project team formulates implementation strategies, medium- and long-term targets, as well as action plans based on its own responsibilities, and tracks progress through monthly meetings to ensure the smooth promotion of various plans (for details of the overall structure of the Committee, see 1.2 Sustainable Development Committee).

Board of Director	Sustainable Development Committee	Carbon Reduction Task Force
Core Responsibilities		
The Board of Directors serves as the Company's highest regulatory and governance body in terms of climate governance and sustainable development, responsible for supervising, reviewing and guiding the Company on climate issues, ensuring the effective advancement of sustainable development goals, and evaluating various plans and results.	The Sustainable Development Committee is a special committee under the Board of Directors that oversees and reviews President Chain Store Corporation's climate-related efforts, including risk assessment, carbon reduction performance progress, budget review, and participation in promotion of external climate actions and initiatives. Two meetings are held each year to monitor and evaluate performance on climate-related issues, as well as ensuring the effective advancement of various goals.	As the task force responsible for climate change-related issues under the Sustainable Development Committee, the Carbon Reduction Task Force integrates the progress and plans of various climate-related efforts of President Chain Store Corporation and submits them to the Committee.
Responsibilities on climate-related issues		
• Annual budget and capital expenditure review related to sustainable development and climate change • Supervise the main axis and development directions of Company's sustainable development blueprint • Monitor the achievement of major sustainable development performance metrics • Supervise the results of climate risks and opportunities identified for the company • Oversee the implementation results of Comapny's climate transition plan • Review and guide climate-related performance reward plans for employees and senior executives	• Regulatory strategy setting and budgeting • Overseeing transition programs and innovation management • Supervising risk management and scenario analysis • Target monitoring and performance evaluation • External cooperation and policy participation	• Financial planning and sustainable investment • Development and implementation of Climate Transition Strategy • Target setting and progress monitoring • Employee motivation and policy participation • Risk management and supply chain cooperation

+ Climate-related Management Incentive Mechanism and Results +

President Chain Store Corporation supports the Paris Agreement and actively responds to the government's Pathway to Net-Zero Emissions by 2050, promising to achieve net zero targets for Scope 1 and Scope 2 of greenhouse gas inventory in its own operations by 2050. In order to improve carbon reduction efficiency, President Chain Store Corporation has set up a "Climate Change Incentive Program." According to the results of ISO14064-1 greenhouse gas inventory each year, if the emission intensity (metric tons of CO_2e/million NT$ revenue) decreases compared with the previous year and meets the Company's annual carbon reduction target, a monetary incentive will be granted. The incentive recipients include members of the senior management team and related units of the Carbon Reduction Task Force.

In addition, in order to encourage employees for actively managing store energy use, President Chain Store Corporation has formulated the "Store Energy Saving Incentive Program," which include the base electricity fee management results of new and renovated stores, as well as the electricity consumption management and energy saving improvements of existing stores into the individual, store and regional performance assessment. Monetary incentives are granted to those who find abnormalities in store electricity bills. There are two incentives methods in the President Chain Store Corporation's Store Energy Saving Incentive Program. A total of NT$14,762 in bonuses was issued after recovering abnormal electricity charges in stores in 2024. From 2022 to 2024, a total of NT$64,246 in bonuses were issued after recovering abnormal electricity charges in stores.

President Chain Store Corporation Energy Saving Incentive Program

Energy saving performance incentive

Engineering employees in each district are responsible for minimizing the electricity consumption and costs of their stores. In each quarter's engineering evaluation, the top three districts will be awarded a group bonus of NT$1,000 each.

Incentive for recovering abnormal electricity charges in stores

If engineering employees can successfully trace and recover overpaid electricity fees due to meter misreading, they can receive a bonus of up to 5% of the total refund.

Assessment for Climate-related Risks and Opportunities

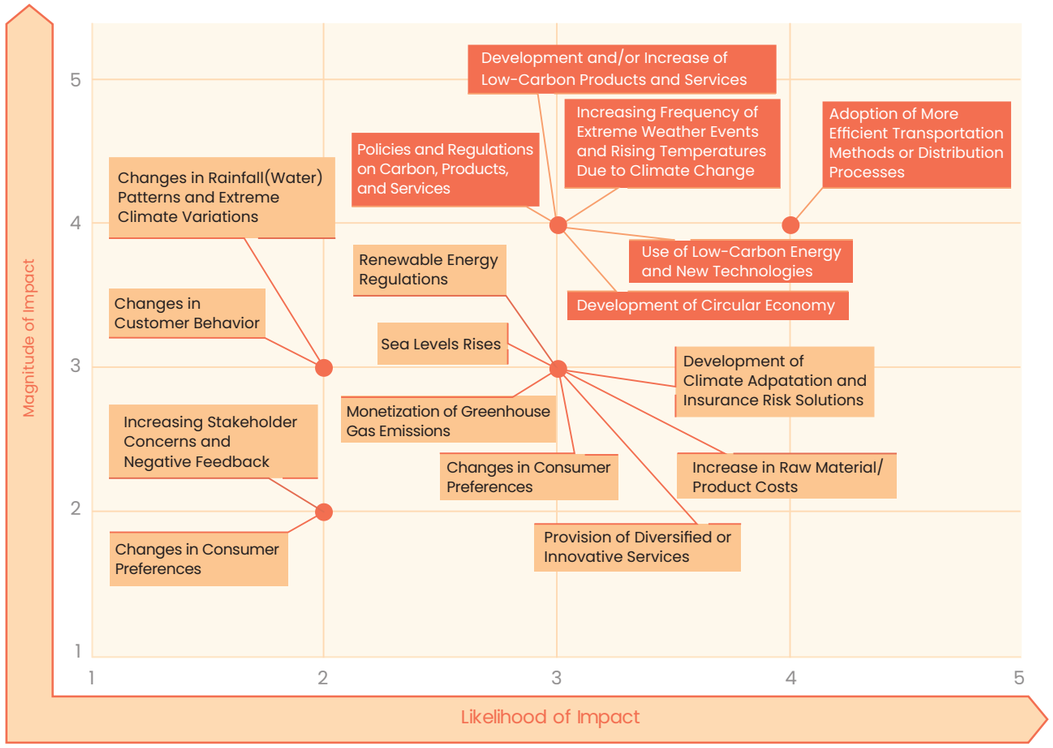
In terms of climate-related topics management, 17 climate-related risks and opportunities were identified in 2023 through the process below. Six major issues were further identified based on the Carbon Reduction Task Force's assessment principles for substantive financial and strategic impacts. The "likelihood of occurrence" and "level of impact" of the climate issue are considered during the assessment, with the time range clearly defined as short-term (0-3 years), medium-term (3-5 years) and long-term (5 years and above). The scope of assessment also covers the upstream, own operations, and downstream of the value chain. As climate topics continue to evolve, the identification of related risks and opportunities also needs to be adjusted in a timely manner. Therefore, a comprehensive review will be conducted every two years to ensure the countermeasures keep pace with the times and strengthen corporate resilience and sustainable development. For details of the climate risks and opportunities assessment process and implementation, please refer to the "President Chain Store Corporation Climate-related Disclosures Report."

In order to understand the impact of climate change issues on the operations of President Chain Store Corporation, scenario analysis and financial impact quantification are conducted for 6 major climate risks and opportunities. As there have been no major changes in President Chain Store Corporation's business model and operating strategy in recent years, the assessment results of major climate-related risks and opportunities of the previous year will continue to be adopted in 2024, and a reassessment is expected to be conducted in 2025 to stay updated with the financial impact of physical risks and transitional risks.

Assessment for Climate-related Risks and Opportunities

1	2	3	4
Collect climate-related risks and opportunities topics in the food retail industry	Inventory and assess President Chain Store Corporation's climate-related risks and opportunities	Confirm key climate-related risks and opportunities for President Chain Store Corporation	Quantify financial impact and conduct scenario analysis of key climate-related risks and opportunities

Climate-related Risk and Opportunities Matrix



Results of Impact Assessment of Major Climate-related Risks and Opportunities

Description of Impact from Major Climate-related Risks

Risk		Description	Timeline	Impact on Value Chain	Impact Assessment on Operations and Finances
Transitional risk	Low carbon energy and new technologies	In response to the global trend towards net-zero emissions, the Ministry of Environment's Climate Change Response Act, and the development of policies and regulations such as electricity price increases, companies are gradually shifting towards the use of low-carbon energy. President Chain Store Corporation primarily rely on electricity used in stores. However, the transition to low-carbon energy is constrained by the business model and operational framework unique to convenience stores. The initial investment required may involve significant costs, potentially posing risks to operations.	Long-term	Own operations	• Electricity tariff might increase in the future, and may raise operating expenses. • Investing in renewable energy and purchasing clean energy will increase operating expenses.
Physical risk	The number of extreme weather events and temperature continue to increase with climate change	With the temperature continuing to rise and extreme weather events such as droughts, floods, typhoons or landslides occurring more frequently, the probability of damage to President Chain Store Corporation's equipment and road disruptions will increase, causing interruptions in product transportation and supply.	Long-term	Upstream, own operations, downstream	• Implementing measures in response to extreme weather events will lead to increased operating costs. • Capital expenditures will also increase due to damage to store equipment and increased power demand with an impact on the revenue.
Transitional risk	Policy and regulation requirements on carbon, products and services	• Considering that the Ministry of Environment amended the Climate Change Response Act, it is expected that carbon price will be charged for large carbon emitters in 2025. Although the act has not been extended to the residential and commercial sectors at this stage, with the government's net-zero emission policy, President Chain Store Corporation has a high probability of being included in the regulations in near future. • In response to the global trend of plastic reduction and Taiwan's regulations on plastic restriction (such as banning single-use straws, providing discounts for bringing your own cups, stores obliged to gradually increase the proportion of recycled cups, etc.). Currently, we have seen an impact from plastic reduction regulations as well as proactively taking actions to comply with regulatory requirements.	Mid-term	Own operations	• If President Chain Store Corporation fails to comply with regulatory requirements, fines or fees might be imposed by the government, leading to increased operating costs. • Recycled cup services provided by President Chain Store Corporation require capital. expenditures such as system development and cup procurement. Investment in cleaning, logistics, transportation and manpower is required to run the services, resulting in increased management costs.

Description of Impact from Major Climate-related Opportunities

Opportunity		Description	Time-line	Impact on Value Chain	Impact Assessment on Operations and Finances
Resource efficiency	Adopting more efficient shipping methods or distribution processes	Choosing energy-efficient vehicles and optimizing routes to reduce transportation or distribution costs.	Short-term	Upstream and down-stream	Adopting efficient transportation or distribution processes will reduce fuel and labor costs, thereby reducing operating costs. However, this may also increase costs for vehicle replacement and R&D.
Products and services	Develop and/or increase low-carbon products and services	Consumers' increasing awareness of climate change has increased demands and opportunities for low-carbon products and services.	Short-term	Own operations and down-stream	• Providing low-carbon products and services to increase consumers' willingness to purchase, thereby increasing revenue. • Developing low-carbon products and services requires additional R&D and management costs.
Resource efficiency	Incorporation of circular economy	• Introducing a circular economy not only lowers operational risks and attracts consumers who value sustainability but also enhances brand image and brings new business opportunities. • Introducing recycled packaging materials to reduce the use of single-use packaging generated by Company's own operations, such as introducing a recycled cup system to reduce the use of single-use paper cups and cup lids. • Promote recycling and refuse with incentive mechanisms, such as encouraging consumers to recycle PET bottles with Intelligent Automatic Recycling machines. Consumers are more willing to spend at President Chain Store Corporation with the incentive while increasing recycling. • Reduce or reuse food waste generated by convenience store operations, such as offering iLove Food discounts on fresh food that is about to expire to encourage consumers to buy. Coffee grounds and scrapped fresh food is turned into organic fertilizer for crops.	Short-term	Own operations	Recycled Cups Service • Recycled cups service reduces the use of single-use paper cups for freshly-prepared beverages and operating costs from material procurement. • The discount given to recycled cups service encourages consumers to purchase, bringing revenue from freshly-prepared beverages to the stores. Intelligent Automatic Recycling machines • Reward money for recycling PET bottles in Intelligent Automatic Recycling machines encourage consumers to spend in the stores, increasing revenue. • Recycling rPET bottles into products for sale to increase revenue. iLove Food and Sustainable Farm • Promoting iLove Food to reduce the weight of food waste to be removed, reducing costs for transportation and product scraps.

Major Climate-related Risks and Opportunities Scenario Analysis and Quantitative Assessment Results

In order to identify the actual financial impact of climate-related risks and opportunities on President Chain Store Corporation, we first classified various issues and assessed their main impact on the Company. We then further introduced scenario analysis to assess the impact of risks and opportunities in various scenarios and their financial impact, ensuring that we formulate appropriate response strategies to enhance operational resilience and sustainable development capabilities. For the results of scenario analysis and financial impact assessment of various risks and opportunities, please refer to the "President Chain Store Corporation Climate-related Disclosures Report." Additionally, this report exclusively addresses the risks and opportunities for the year 2024, assessing the impact on the financial performance. It serves as the basis for tracking the financial impact of risks and opportunities, with the aim of continuously enhancing climate resilience management and improving corporate sustainable competitiveness.

Due to the impact of Typhoon Krathon in 2024, regular operations of certain stores were affected in response to the typhoon warning, which in turn caused a certain degree of financial impact. According to the statistics, the financial impact was estimated to be approximately NT$14.73 million due to suspended operations in the stores.

Type of Risk and Opportunity		Main Impact on Operations	Assumptions of the Scenario	Parameter
Physical Risk	The number of extreme weather events and temperature continue to increase with climate change	Operating locations will not be able to operate due to heavy rain, causing damage to the store's equipment and products.	1. Maintaining the current 1°C increase in mid-century according to the IPCC AR6 assessment. 2. 2°C increase in mid-century according to the IPCC AR6 assessment. 3. 4°C increase in mid-century according to the IPCC AR6 assessment.	Flood Risk Levels for All Regions Across Taiwan Under Three Scenarios.
		Rising average temperatures affect sales of seasonal goods.	According to the 2024 Scientific Report on Climate Change, summer will last nearly 7 months at the end of the 21st century under the SSP5-8.5 scenario.	Estimated number of days in summer and winter in 2030.
Transitional Risk	Low carbon energy and new technologies	Considering that the Climate Change Response Act has been amended, the expanding operations might lead to the carbon pricing policy having an impact on operating expenses in the future.	Assuming that President Chain Store Corporation is subject to carbon pricing regulations in 2030 and must pay a fee, the rate is between the carbon price required to achieve the net zero scenario in 2050 and the NDC scenario.	1. Under the net-zero scenario in 2050, the carbon price in 2030 is NT$3,075/$tCO_2e$. 2. Under the NDC scenario, the carbon price in 2030 is NT$723/$tCO_2e$.
	Policies and regulatory requirements for carbon, products and services	With the continued promotion of carbon pricing policies and the trend of rising electricity tariffs in the future, the development of low-carbon energy and technologies will have a significant impact on finances.	Based on the continued increase in low-carbon energy demand and power generation costs, we assume that Taiwan's electricity prices will continue to rise by 2030.	Based on the regression analysis of electricity price increase from 2016 to 2023, the electricity price in 2030 is estimated to be NT$3.57/kWh.
Opportunities	Use of more efficient modes of transport or distribution processes	If the efficiency of development and investment in transportation is improved, the operating costs may be reduced.	The Ministry of Environment's reduction plan for the transportation sector lays emphasis on the improvement of energy efficiency of the transportation system and vehicles.	Subsidy parameters for investment in the "Second Phase (2021 to 2025) of the Greenhouse Gas Reduction Plan".
	Development and/or expansion of low-carbon goods and services	Low-carbon product development may increase revenue.	Consumers' rising awareness of sustainable consumption makes providing low-carbon products an important direction for industrial transformation.	Internal sales forecast based on the historical sales of low-carbon products of President Chain Store Corporation's private-label products.
	Development of circular economy	Building a circular economy operating model may bring new business opportunities and increase revenue.	Respond to regulatory trends at home and abroad, more and more consumers are becoming more aware of sustainable development and are beginning to pay attention to issues related to plastic reduction and food loss and waste in the retail industry.	Cost-benefit assessment of plastic reduction and food loss and waste reduction programs. The cost is mainly management and maintenance costs, and does not include the costs for setting up the machines.

Climate Adaptation and Transition Strategies

President Chain Store Corporation identifies climate-related risks and opportunities in the entire value chain, and conducts quantitative assessments of the impact of related risks and opportunities on finance or future development based on President Chain Store Corporation's own operating conditions. However, we realize that the risks and opportunities faced by each stage of the value chain are different, so we incorporate the concepts of mitigation and adaptation into the planning of major climate risks and opportunities, integrating them into two main axes of net-zero transition and climate adaptation. We also plan and implement various transition and adaptation strategies from different stages of the supply chain.

Climate change response strategies		Net-zero transition: Energy transition	Net-zero transition: Industrial Transition	Net-zero transition: Lifestyle Transition	Climate Adaptation
Value Chain Action Plan	Upstream	Setting energy efficiency specifications for store equipment procurement.	• Request logistics-related companies to optimize logistics routes, procure new high-efficiency logistics vehicles, and implement energy-saving and carbon reduction measures in logistics centers, achieving a total energy saving of 590.78 GJ in 2024. • Purchase sustainably sourced and certified raw materials such as FSC.	• Managing food waste at the manufacturers to reduce wasting raw materials. • Using rPET for more food containers and shopping bags. • Converting food waste into organic fertilizer through sustainable farming practices to be used for contract agricultural products. • Launched the "Coffee grounds Circular Economy" program to recycle coffee grounds into performance fabrics and shoe materials.	• Understanding the quality and supply of each raw material, actively developing diverse and alternative material sources to ensure smooth operations of the supply chain.
	Own Operations	• Introducing the energy management system. • Introducing energy-saving and carbon reduction measures in the stores with a total of 447,307.84 GJ saved in 2024. • Coaching for stores with high electricity bills. • Introducing energy-saving measures in the head office building.	• Selling low-carbon products such as Veggie Selection, low-carbon rice and fresh boxed meal with paper packaging. • The "Internal Plastic Recycling System" program reduces the use of virtual plastic and creates a traceable internal recycling system.	• Reducing fresh food scraps in the stores with iLove Food to increase revenue. • Increasing consumers' willingness to spent at the stores and further increasing revenue through incentive mechanism for circular economy services, including recycled cups service and efficient PET bottle recycling machines. • Launched shopping bags made with 100% recycled PE.	• Formulating "Construction Specifications for Flood Control Gates and Dwarf Walls in the Stores Located in Low-lying Areas". • Setting up the "Weather Information Distribution System" to immediately notify the stores of the weather and issue flood warnings, so as to reduce the risks caused by flooding. • Formulating emergency response procedures for risks, standardizing the logistics and distribution contingency mechanisms, and purchasing property insurance against natural disasters for the stores to reduce the financial impact of losses. • In response to the rising temperature, President Chain Store Corporation actively introducing energy-saving measures in the stores and headquarters to optimize energy efficiency.
	Down-stream	• Encouraging consumers to reduce the consumption of paper and plastic cups through recycled cups service and posters. • Encouraging consumers to recycle PET bottles through Intelligent Automatic Recycling Machines and incentive mechanisms. • Sharing knowledge on carbon reduction, plastic reduction, food waste reduction, biodiversity etc. through Good Neighbor Funfest to communicate President Chain Store Corporation's sustainability philosophy with consumers. • Participating in the Ministry of Economic Affairs' "Micro-carbon Offset" initiative to conduct lighting tests at 4 stores in Taipei City. The lamps were replaced with LEDs. The external verification unit BSI was entrusted to verify the amount of carbon reduction and before submitting to the Environmental Protection Administration for review in line with relevant guidelines. • Participating in the Ministry of Interior's "Store Energy Consumption Classification" program to support the government's building energy conservation and carbon reduction policies, as well awe becoming the first convenience store to receive the "Nearly-Zero Building" label issued by the Ministry of Interior. • Participating in the Ministry of Environment's "Plastic Reduction" & "Guidelines for Best Practice Regarding Circular Cups" programs and actively promoting plastic reduction actions. • Taking part of the Society of Wilderness' "Earth Hour" initiative.			

Store and Logistics Energy Conservation and Carbon Reduction Actions

In order to effectively improve the energy efficiency of stores, President Chain Store Corporation has formulated basic requirements for equipment and store environment management for new stores by incorporating energy-saving measures such as heat insulation, energy-saving signboards, lamp reduction, reduction of window area, frequency conversion system and LED lamps, and indoor lighting management, as well as introducing the energy-saving windbreak room depending on the stores. Existing stores actively evaluate the feasibility of introducing various energy-saving measures and gradually replace high-efficiency equipment.

In 2024, President Chain Store Corporation stores successfully saved 124,252,177 kWh of electricity through the energy-saving program, the equivalent of 61,380.58 metric tons of CO_2e indirect emissions. In addition to the replacement of energy-saving equipment, all store employees have been trained to conduct regular inspections on air-conditioning, circulation fans, lighting, refrigerators and freezers, signboard windows and other equipment in accordance with the "Self-Inspections on Store Energy-Saving" to ensure that the equipment can maintain efficiency. We also cooperate with the government and relevant academic institutions to improve the energy efficiency of our stores.

Store Energy-saving and Carbon Reduction Measures and Strategies

- Inverter system: Introducing refrigerators, air conditioners and freezers to improve energy efficiency with an inverter system.
- Store building insulation: Taking advantage of each store's geographical environment and architectural design concepts to reduce solar exposure.
- LED lamps: The introduction of LED lamps saves 43% energy compared to T5 lamps.
- Store lighting management: Changing the configuration of store lamps to reduce the total number of lamps.
- Signboard energy saving: Reducing unnecessary lamps through the intelligent lighting system and the improvement of signboard materials and designs.
- Reducing the window area in the stores: Maintaining energy efficiency by reducing the window area of the store.
- Improving the heat exchange environment: Preventing cold air from leaking by introducing energy-saving windbreak rooms and improving the efficiency of air conditioning.

President Chain Store Corporation's commitment to energy conservation and carbon reduction extends beyond its operations. In order to take advantage of opportunities brought by the climate and low-carbon transition, we also actively influence long-term affiliated logistics partners to gradually invest in corresponding management plans or actions. Various energy-saving and carbon-reduction methods have been adopted to improve energy efficiency and reduce environmental impact, as well as continuously adapting operations strategies to respond to the needs of low-carbon operations and increasing the positive benefits brought about by addressing climate change issues in a timely manner.

Logistics Energy-saving and Carbon Reduction Measures and Strategies

- Introduction of new environmental-friendly logistics vehicles: President Chain store Corporation's affiliated logistics companies plan to phase out 222 phase 4 and phase 5 logistics vehicles from 2024 to 2026, and purchase 279 phase 6 logistics vehicles.
- Same-time delivery of frozen and refrigerated goods: Since from 2021, President Chain Store Corporation's affiliated logistics companies has transform single-temperature layer logistics vehicles into logistics vehicles with two layers of different temperature settings (refrigerated and frozen) to improve loading efficiency.
- Distribution automation: Incorporating automatic distribution equipment to the internal operating environment and equipment of the logistics center, such as efficient automatically guided electric trailers, electronic picking and sorting systems, labor-saving lifting tailgates into vehicles, etc. Not only does this significantly reduce the personnel costs of logistics distribution, but also reduces the workload of personnel picking goods.
- Energy saving and carbon reduction measures for logistics centers: Introducing carbon reduction measures to affiliated logistics companies to continuously improve the energy consumption of daily operations.

Store Energy-saving Actions		Quantity in 2024	Energy Saved (kWh)	GJ Energy Saved (GJ)	Greenhouse Gas Emission Reduction (Metric Tons of CO_2e)	Contribution to Energy-Saving Project Results
Inverter system	Inverter air-conditioning	2,746	56,686,222	204,070.40	28,002.99	45.62%
	Third-generation combination refrigerator	4,528	53,665,382	193,195.38	26,510.70	43.19%
	New enery-saving freezer	125	505,192	1,818.69	249.56	0.41%
Reduction in lamp number, LED lamps and indoor lighting management	Arcade lighting energy-saving upgrade	16,243	2,294,591	8,260.53	1,133.53	1.85%
	Lighting upgrade in stores	63,532	9,068,394	32,646.22	4,479.79	7.30%
Energy saving for signboards	Energy-saving improvement of horizontal signboard	5,785	762,522	2,745.08	376.69	0.61%
	Turning off signboards during specific hours in the early morning	1,500	640,800	2,306.88	316.56	0.52%
Improve heat exchange environment	Energy-saving windbreak room	87	629,074	2,264.67	310.76	0.51%
Total		94,546	124,252,177	447,307.84	61,380.58	100%

(Note 1) Since the grid emission coefficient for 2024 had not been published at the time of the greenhouse gas verification, the coefficient of 0.494 kg CO_2e/kWh announced in 2023 was adopted as the greenhouse gas emission parameter to calculate the amount of carbon reduction.
(Note 2) The energy saved from the store energy saving action plan is calculated based on the measured value before and after the improvement of a single equipment for lighting equipment, and the energy saving of non-lighting equipment is estimated by the average cost saving benefit of dynamic tests done in the stores. The annual energy saving is estimated by multiplying the energy saving of each program by the number of equipment replacements per month.

Logistics Company	Energy-saving Action	Amount of Energy Saved (kwh)	Amount of Energy Saved (GJ)	Greenhouse Gas Emission Reduction (Metric Tons of CO_2e)
UPCC	Replacement of 9 inverter air conditioners	9,551.00	34.38	4.72
Retail Support International	Replacement of air conditioners (in the office, Cosmed work area, warehouse meeting room)	39,988.14	143.96	19.75
Wisdom Distribution Service Corp.	An energy monitoring and management system (EMS) was installed, three old chiller pump motors were replaced, and inverter controllers were installed on the pumps in 6 zones	114,566.00	412.44	56.60
Total		164,105.14	590.78	81.07

(Note 1) UPCC and Retail Support International replaced old air-conditioning equipment and calculated the energy saved based on the difference in energy consumption before and after the replacement and decommissioning of the air-conditioning equipment. The formula for calculating energy consumption is the number of equipment (unit) * hours of use * use rate * number of months.
(Note 2) Wisdom Distribution Service Corp. installed an energy monitoring management system (EMS) and replaced old motors with new ones. The energy saving data was calculated by monitoring the energy consumption of the new motors by the EMS system and the product of the operating power and operating hours of the 6 original fixed-frequency motors before the replacement. The energy consumption data monitored by the EMS system has been verified by the public sector.
(Note 3) Since the grid emission coefficient for 2024 had not been published at the time of the greenhouse gas verification, the coefficient of 0.494 kg CO_2e/kWh announced in 2023 was adopted as the greenhouse gas emission parameter to calculate the amount of carbon reduction.

Key Performance Metrics and Targets

+ Greenhouse Gas Emissions +

President Chain Store Corporation's main business locations include stores such as retail stores and shopping centers, as well as administrative facilities such as head office, regional offices and training centers around Taiwan and on outlying islands. We have conducted greenhouse gas inventory in line with ISO 14064-1:2006 since 2017, as well as adopting the updated version of ISO 14064-1:2018 in 2020. We have passed independent third-party certification to ensure the data complies with international standards. Moreover, we have continued to expand the scope of sites on inspection. The scope of the greenhouse gas inspections in 2024 covered 7,261 bases, with the coverage rate of 99.42% for the greenhouse gas inspection boundary.

Operating Locations with ISO 14064-1:2018 Certification in 2024

Stores (convenience stores and shopping centers)	Offices and training center	
7,249	12	7,261 operating locations in total

(Note) The 7,229 stores inventoried in 2024 include the 155 stores that have moved or closed in 2024.

Greenhouse Gas Emissions in 2024

Type of Emissions	Description	Volume (Metric Tons of CO_2e)
Direct Emissions (Scope 1)	Refrigerant, marsh gas, company vehicles, CO_2 for beer on tap	25,562.65
Indirect Emissions (Scope 2)	Electricity consumed by stores, the headquarters, shopping centers and regional offices, training center	564,564.64
Indirect Emissions (Scope 3)	Including emissions from product procurement, upstream electricity emissions, upstream transportation, waste disposal, business travel, employee commuting, and waste disposal of products sold	5,781,597.27
Total Greenhouse Gas Emissions		6,371,724.56

(Note 1) Greenhouse gas inventory adopts the ISO 14064-1:2018 methodology. The organization boundary is set using operational control. The greenhouse gas emission coefficient refers to USEEIO, Electricity Emission Coefficient set by the Bureau of Energy of the Ministry of Economic Affairs, the Ministry of Environment's Emission Coefficient Management Table 6.0.4 and the the Ministry of Environment's Product Carbon Footprint Information Network. GWP adopts AR6 values.
(Note 2) The calculation method for indirect emissions from outsourced power is locate-based. Since the grid emission coefficient for 2024 had not been published at the time of the greenhouse gas verification, the coefficient of 0.494 kg CO_2e/kWh announced in 2023 was adopted as the greenhouse gas emission parameter to calculate the amount of carbon reduction
(Note 3) The types of greenhouse gas covered by the inventory include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6) and nitrogen trifluoride (NF_3).
(Note 4) The carbon dioxide emissions from biological sources are zero.

+ Direct Emissions +

The main source of direct emissions from President Chain Store Corporation is the refrigerant leaked from store freezing, refrigeration and air-conditioning equipment. The emissions are calculated based on the refrigerant refill of the equipment warranty system for the refrigerant equipment failure maintenance. The result accounted for 92.27% of the direct emissions, with the proportion of refrigerant not containing ozone-depleting refrigerant as 100%.

+ Indirect Emissions +

The 2024 indirect emissions survey was evaluated in accordance with the principle of materiality. Significant indirect greenhouse gas emission sources include indirect greenhouse gas emissions from purchased electricity, upstream emissions, cargo distribution and waste treatment. Among them, the emission of purchased electricity is the main source of indirect greenhouse gas emissions.
The greenhouse gas inventory shows total purchased electricity used by all the inventoried operating locations in 2024 was 1,142,843.4 MWh, resulting in indirect greenhouse gas emissions of 564,564.64 metric tons of CO_2e, an increase of 9.9% compared to 2023 emissions. The amount of purchased electricity increased by 10.10% compared to 2023, mainly due to 249 new stores and additional freezers, electronic displays, and ice makers in response to changes in the customers' shopping habits during COVID-19 pandemic. President Chain Store Corporation will continue to promote energy saving in stores and offices, carbon reduction in logistics and transportation, as well as evaluating the expansion of photovoltaics or the purchase of renewable energy so as to gradually achieve the reduction target for 2025.

Indirect Emission Source		Indirect Emissions (Metric Tons of CO_2e)	Percentage of Indirect Emissions (%)
Electricity	Emissions from purchased electricity (Note 1)	564,564.64	8.90%
Purchased products	Upstream emissions of purchased fuel	111,238.68	1.75%
	Emissions from purchased products	5,583,270.89	87.98%
Emissions from upstream transportation and distribution of goods	Diesel used for transportation from the logistics center to the stores	61,393.06	0.97%
Emissions from solid and liquid waste disposal	Waste disposal in the stores	16,456.22	0.26%
Emissions from business trips	Emissions from transportation during employee business trips	1,274.92	0.02%
Emissions from employee commute	Emissions from transportation during employee commutes	6,690.97	0.11%
Emissions from end-of-life stage of products	Disposal of packaging materials	1,272.54	0.02%

(Note 1) 100% of purchased electricity comes from electric grid.

Energy Use

In 2024, the total electricity consumption of all the inspected locations reached 1,142,843.4 MWh, with the total energy consumption of 4,114,384.59 GJ energy consumption. Purchased electricity accounts for 99.95%. 0% of renewable energy was consumed in 2024. Due to the operational characteristics of convenience stores, the energy consumed includes not only the fuel used by company vehicles and electricity for operating bases, but also a significant proportion from upstream transportation. In 2024, the transportation of goods from logistics centers to stores primarily consumed diesel, totaling 18,485,902.82 liters, equivalent to 649,698.15 GJ of energy consumption. We are also gradually integrating renewable energy into store designs. President Chain Store Corporation has implemented photovoltaic systems in the Yawan store and will continue to enhance the development and use of renewable energy in the future.

Energy-consuming Equipment	Source of Energy	Unit of Consumption	Consumption	Energy Consumption (GJ)	Percentage of Energy Use (%)
Gas used for company cars	Gas	Thousand liters	64.21	2,095.43	0.05%
Gas used for company cars	Diesel	Thousand liters	1.83	64.34	0.00%
Electricity consumed by operating locations	Purchased electricity	kWh	114,284.34	4,112,224.81	99.95%
Total Energy Consumption				4,114,384.59	100.00%

Energy Efficiency Indicators and Targets

Since most stores are open around the clock, their electricity consumption pattern is different from that of the headquarters, regional offices and training center. To effectively monitor the electricity consumption of stores and gradually improve their energy efficiency, we set up an EUI and reduction targets for stores as well as tracking the progress each month.

The electricity intensity reduction target for stores in 2024 was 822.3 kWh/m^2, a decrease of 0.5% compared to 2023. The actual energy intensity of our stores was 874 kWh/m^2 in 2024, showing an 5.75% increase from 2023. We have not reached our energy intensity reduction target this year. In response to the diversification of retail channels and the rapid growth of frozen and refrigerated food in 2024, more energy-consuming equipment was adopted by the stores than previous years to support our business expansion. This growth is mainly driven by increasing performance, and equipment configuration will be adjusted in the future depending on business development. In the meantime, we continue to stay updated with equipment energy efficiency and promote energy-saving solutions to improve energy efficiency.

EUI(Note)								
Year	2017	2018	2019	2020	2021	2022	2023	2024
EUI	1,008	962	947	919	891	833	826	874
Percentage of Decrease	-0.30%	-4.56%	-1.56%	-2.96%	-3.05%	-6.46%	-0.81%	5.75%

(Note) The EUI of stores is calculated as the electricity consumption per ping (approximately 3.3 square meters) based on the data provided by Taiwan Power Company each month. The EUI for stores in areas without any data from Taiwan Power Company is estimated on the same basis. The two are added to produce the total electricity consumption that month, which is then divided by total floor area before adding up the EUI value of 12 months.

Greenhouse Gas Emission Intensity Metrics and Targets

As President Chain Store Corporation's main source of greenhouse gas emissions comes from electricity consumption in stores, the emission is closely related to the size of the stores, equipment configuration and operating model, which is ultimately reflected in the overall operating income. Therefore, we calculated the emission intensity per NT$ million in revenue as reference for the carbon reduction target for the intensity of greenhouse gas emissions. In order to further optimize management effectiveness, we reviewed the previous target setting methodology in 2024 to extend the diversion of greenhouse gas emission targets for own operations and value chain management, as well as strengthening relevant management strategies to ensure that carbon reduction actions are more precise and optimize resource allocation. For our own operations, the Scope 1 and Scope 2 greenhouse gas emission intensity of the 2020 greenhouse gas inventory of 2.99 metric tons CO_2e/million in revenue was adopted as the baseline to set a medium- and long-term reduction target of 60% by 2035. In 2024, the greenhouse gas emission intensity was 2.80 metric tons CO_2e/million in revenue, an increase of 1.76% over the previous year. Due to the impact of business growth, the greenhouse gas emission intensity for this year did not reach the target. In the future, we will continue to search and implement feasible carbon reduction measures to improve energy efficiency and operational optimization to achieve long-term carbon reduction targets. In order to strengthen our own operational carbon reduction management, President Chain Store Corporation introduced an internal carbon pricing mechanism in 2024, prioritizing the management of Scope 2 greenhouse gas emissions based on shadow price. According to the carbon price announced by the Ministry of Environment in 2024, the internal carbon price has been set at NT$300/ metric ton CO_2e. Internal carbon pricing is mainly used to manage Scope 2 emissions related to purchased electricity. It is hoped that internal carbon pricing will encourage energy saving and carbon reduction actions to improve energy efficiency. Starting from 2024, President Chain Store Corporation took internal carbon pricing into consideration for major investment and procurement, as well as conducting cost-benefit analysis, such as evaluating the payback period of equipment investment and making a comprehensive comparison of the total cost after adding internal carbon pricing. To ensure that investment projects follow carbon reduction management targets, the subsequent plan is including internal carbon pricing in management reports to track changes in greenhouse gas emissions. The implementation of internal carbon pricing also helps us consider climate issues in our business strategies with an impact on key financial planning. In addition, although President Chain Store Corporation has not yet been included as a target under the government's regulations, the implementation of internal carbon pricing can also cope with potential financial impacts brought about by future regulations in advance.

In terms of value chain management, we are actively optimizing the inventory items and practices of Scope 3. In the future, we plan to introduce Science-based Targets (SBT) to strengthen carbon management of the entire value chain, and update mid- and long-term reduction targets, so that President Chain Store Corporation can exert the influence of the industry and promote the achievement of net-zero goal.