Climate Resilience

Target and Performance

Long-term target by 2030

Achieve carbon neutrality by 2030 (compared to the 2021 baseline), reducing Scope 1+2 emissions by 42% and Scope 3 emissions by 25% with a goal of net-zero carbon emissions by 2050 (reducing Scope 1+2 by 90% and Scope 3 by 90%).

• Achieve carbon neutrality by 2030 (Scope 1+ 2) and Net Zero by 2050.



• SBT Target: reducing Scope 1+2 emissions 42% by 2030, and 90% by 2050.



2024 Performance: **1.38%**

• SBT Target: reducing scope 3 emissions 25% by 2030, and 90% by 2050.



Annual Target of 2024

- Reduce Scope 1&2 emissions at least 2,500 tons CO2 equivalent.
- Increase renewable energy utilization ratio to 10%.



2024 Result

Scope 1&2 emissions reduced by 11,378.40 tons CO₂ equivalent (1.38% from base year)
renewable energy utilization ratio increased to 276,588.12 tons or 16% of total energy.

Greenhouse gas management plan and result

	Carbon Neutralization Strategy	Climate Strategies	Projects & Action	2024 Results
F	Electric VehicleImprove Energy Efficiency 45%Einergy Carbon Asorption10%5%CarBON NEUTRAL IN 2030CarBON Neutral N 2030	Improve Energy Efficiency	 High-efficiency chillers project LED Replacement and installation project. Change the Fixed-speed air conditioners to VRF (Variable Refrigerant Flow) Energy-saving building at the head office. 	 Scope 1&2 emissions reduced by 2,983.28 tons of CO₂ eq.
		Renewable Energy	 Solar rooftop at stores and distribution centers. Solar Thermal for water heater. Solar tube for lighting at head office. 	 Renewable energy utilization ratio increased to 285,050,053.21 tons or 16% of total energy.
		Green Refrigerant	 Use low-carbon refrigerant Low EF refrigerant i.e R290 and R-448A. 	 Reduce energy consumption by 371,750 kilowatt-hours per year Reduce emissions by 185 tons of CO₂ equivalent per year
	Green Refrigerant 10% Renewable S%	Electric Vehicle	 Converted to an electric forklift in own operation BEV and HEV for online delivery service. 	 Reduce greenhouse gases emission 8,933.53 tons of CO₂ eq per year.
	Energy 25% Achieving Carbon Neutrality by 2030 and reaching Net Zero emissions by 2050.	Carbon Adsorption	 Promote perennial planting on Company premises and unused areas. 	 7,204 cumulative tree planting at 119 wholesale distribution centers.

GHG Emission Scope 1 2 and 3 (unit: Ton of CO₂ eq.)













Energy management plan and results (Electricity and Fuel) Target and Performance

Long-term target by 2030

Increase renewable energy utilization ratio to 25% And reduce energy Intensity per revenue by 25% by 2050.





GHG intensity (Scope 1 & 2) per revenue (Unit: Tons of CO_2 per million Baht)



Cost Saving from the Energy Efficiency Improvement (Unit: Baht) 93,895,182.29





Energy management plan (Electricity and Fuel)

The Company places high importance on energy conservation, natural resource sustainability, and environmental preservation. All executives and employees are required to actively support and take responsibility for efficient energy use to ensure continuous sustainability and collaboration across all stakeholders with the practices as follows:

- 1) Establish targets and action plans for energy conservation, with regular reviews of their effectiveness every year.
- Promote energy conservation activities, ensuring a balanced and appropriate use of natural resources and the environment, in alignment with the growth of the business and the organization.
- 3) Comply with all laws and regulations related to energy use, energy consumption, and energy efficiency.
- 4) Emphasizing the importance of involving relevant personnel and fostering awareness to all stakeholder
- 5) Design, procurement, and acquisition of machinery, tools, equipment, and other necessary to enhance energy performance.
- 6) Continuously improve energy performance with increasing energy efficiency and appropriately applying it to various activities.
- 7) Provide adequate resources and information for implementation.



(Unit: Gigajoules per million Baht)

Renewable Clean Energy Management

The company aims to continuously increase the proportion of clean energy usage every year, striving towards RE100. This will be achieved through initiatives such as installing solar rooftops, solar thermal systems, transitioning fuel vehicles, forklifts, and transport trucks to electric and hydrogen energy. These efforts aim to drive a significant transformation in the logistics systems of wholesaleretail business towards clean energy throughout the supply chain. In 2024, the Company's % of clean energy per total energy utilization reached 16%, up from 13% in 2023.

Energy Management

The energy committee is announced to be responsible for improving energy efficiency targets, monitoring, approval project and budget, and quarterly follow-up on the project's progression as:

Topics	Implementation and Project	2024 Results
Target & Progress Monitoring	 Improving the energy efficiency 45% in own operation within 2030. Setting target for 100% of facilities has been energy audited. Action 100% Energy audited. Energy audits to identify opportunities for improving energy performance. 	 Total Energy Saving Total Energy efficiency increased by 6.34% Total Cost saving for energy 93,895,182.29 Baht
Action to reduce the amount of energy use	 High-efficiency chillers project. LED Replacement and installation project. Change the Fixed-speed air conditioners to VRF (Variable Refrigerant Flow). 	Energy Saving 1,338,249 kilowatt-hours per year
Use of Clean or Renewable Energy	 Solar Thermal for Water Heater. Solar tube for lighting at head office. Converted to an electric forklift in own operation. BEV and HEV for online delivery service (by vendor). 	 Total renewable Energy 285,050,053.21 kilowatt-hours per year from below projects; Rooftop solar at stores and distribution centers total of 974 stores. Solar Thermal Water Heater. Solar tube for lighting at head office Converted to an electric forklift in own operation total of 847 units. BEV and HEV for online delivery service (by vendor) total of 47 units.
Innovation for energy saving	 Innovation projects for energy saving that initiated by employee. Install tube and screen to reuse cooled water. Shorten water looping piping system to reduce pump's power consumption. 	 Invest 80,329,331 Baht. Energy Saving 276,157,790.82 kilowatt-hours per year. Saving energy cost 94,770,211.37 Baht per year.
Training and motivation	 Energy and GHG policy. Energy conservation training program for mechanics. Energy-saving awareness. Annual energy-saving event every year. 	 100% of responsible employees are trained and communicated. 100% of employee participate energy saving program.

Example of Climate and Energy Reduction Projects.

"Solar Rooftop" Project

The results of our commitment to conducting business in an environmentally friendly. Generate electricity from solar energy through rooftop installations at distribution centers and both wholesale and retail business, totaling 974 locations. Additionally, our retail business has been recognized with an energy-efficient building award from the Metropolitan Electricity Authority (MEA) for promoting energy efficiency improvements and enhancing indoor air quality.



2024 Results

- Reduce energy consumption **275,786,040.82** kilowatthours per year.
- Cost saving 93,283,211.37 Baht per year.
- Reduce emission 94,356.76 tons of CO₂ equivalent per year.

Replace Refrigerant with "Water-Loop Cooling System and Green Refrigerant" Project

The refrigerant is significant energy consumption and carbon emission at stores. Replacing the refrigerant with a water looping system can improve energy efficiency by the smaller size of the compressor and reduce GHG emissions from refrigerant filling during maintenance. Currently, 11 stores have transitioned to using natural refrigerants, covering a total of 375 refrigeration units. There are also plans to expand this initiative to additional branches in the future.



2024 Results

- Reduce energy consumption **371,750** kilowatt-hours per year.
- Cost saving 1,487,000 Baht per year.
- Reduce emission 185 tons of CO₂ equivalent per year.

Example of Climate and Energy Reduction Projects.

"Utilize EV Truck and Bike for Transportation and Delivery service" Project

EV tractor and EV pickup trucks are operated between distribution center and stores. Furthermore, all of store utilizes EV forklift and delivery fleet are EV truck and bike which decrease greenhouse gases emission, energy consumption and costs.











2024 Results

- 47 EV pickup trucks for delivery and 847 EV forklifts.
- Reduce energy consumption 101,915,395.54 Baht per year.
- Reduce greenhouse gases emission by **8,933.53** tons of CO₂ equivalent per year.

Example of development low-carbon products

Promote Low Carbon Network in Supply Chain

As target to reducing indirect carbon emission 15% along the supply chain from the own operation including customer, contractor, business partners along the supply chain and motive supplier to reduce carbon emission through production, transportation, storage, distribution, and delivery of products through the activities of "Supply Chain Sustainability Excellence Award" in the category of "Climate Action Network" in the 17th Makro HORECA 2024. The company recognizes the products which are certified by Thailand Greenhouse Gases Management Organization (TGO) and conduct continuously promotes the kinds of lower carbon products. Moreover, the sales amounts of lower carbon products are monitored and added score for supplier's ESG assessment.







2024 Results

- **5,015,731,493** Baht sale amount of Low Carbon product (increased **112%** compared to last year).
- Reduce emission 108,383.22 tons of CO₂ equivalent.
- 68 items certified (increased 39 items).
- 13 suppliers are recognized (increased 2 suppliers)