

Message from Management



In 2022, the world suffered from the impact of inflation, geopolitical conflicts and the COVID-19 pandemic, bringing severe challenges for business operations. Facing an ever-changing external environment, all PCSC employees and franchisees stood firm in making a continuous effort for improving operating processes and business model, providing convenient products and services in a timely manner that meet consumer needs as an attempt to build a platform of everyday services that exceeds customer expectations. In addition to operating performance, PCSC shoulders the responsibility of providing sustainable products and services as a retail platform that is closely intertwined with people's daily life, making it easier for consumers to make better choices for the environment and society. Continuing with "Year One of Sustainability" in 2021, PCSC has made 2022 the "Year of Sustainability Action" to strive for the three goals of Environment, Social and Governance. Based on the core concept of "My Sustainability, Your Daily Life," PCSC will focus on furthering the four major projects "Plastic Reduction, Carbon Reduction, Food Waste Reduction and Sustainable Procurement" so that consumers practice green consumption and a sustainable lifestyle in a simpler and more convenient way through more than 6,700 (Note) 7-Eleven stores.

With the active engagement in ESG and sustainable development, PCSC achieved amazing performance in sustainable governance in 2022 with recognition from domestic and international sustainable ratings. It was re-listed by the Dow Jones Sustainability Index (DJSI) for the Sustainability World Index for 4 consecutive years. In the same year, PCSC responded to CDP (Carbon Disclosure Project) climate change questionnaires for the first time and achieved a score of A-. Moreover, PCSC continued to be selected by the FTSE4Good Emerging Markets Index, MSCI ESG Leaders Indexes, MSCI Global SRI Indexes and FTSE4Good TIP Taiwan ESG Index. In the meantime, PCSC was given the "Ten Most Prestigious Sustainability Awards-Top Ten Domestic Companies" in Corporate Comprehensive Performance by TCSA Taiwan Corporate Sustainability Award for 2 consecutive years. Various sustainability projects have been awarded sustainability awards such as Enterprise Asia, and it is the only retail business among listed companies that has ranked in the top 5% in the Taiwan Corporate Governance Evaluation System for 8 consecutive years.

PCSC's continuous recognition from ESG evaluations at home and abroad must be supported by solid sustainability actions that continue to evolve. PCSC has set 2022 as the "Year of Sustainability Action" to implement sustainable strategies in products, services and organizational structures, focusing on furthering the four major task forces in plastic reduction, carbon reduction, food waste management and sustainable procurement, actively promoting green operations by taking advantage of PCSC's core capabilities to respond to Taiwan's 2050 net-zero emission path and strategy. The specific actions of the four major task forces in 2022 include integrating group resources to introduce the "OPEN iECO Recycled Cups Renting" service and "Intelligent automatic recycling machines," taking the lead in building a "store of the future in plastic reduction on outlying islands" in line with the policy of the Environmental Protection Administration. PCSC pledges



eliminating single-use plastics by 2025 through the three aspects of "encouraging consumers to bring their own cups," "reduction at source" and "innovative packaging materials." In terms of climate change, PCSC officially became a "TCFD supporter" in 2022 to connect with the international community. The stores spared no effort in energy conservation and carbon reduction, making PCSC the first convenience store chain to obtain the "near-zero carbon building" label and the "micro-carbon offset" certification by ISO14064-2. Renewable energy devices were also installed in the Yawan store. We provided fresh food and beverages made of local agricultural products, as well as continuing to expand the "Veggie Selection" food section, encouraging consumers to reduce carbon emission from their diet. The stores continue to reduce food waste through the "iLove Food" campaign, gradually moving towards the goal of halving food waste by 2030. PCSC also continues increase the proportion of sustainable raw material procurement through procuring raw materials and store supplies with sustainable certification. In terms of social participation, PCSC expanded the application of circular economy in 2022 by building a "Good Neighbor Cardboard Library" with recycled cardboard boxes in the stores, implementing circular economy and improving the reading environment in towns and villages. We also continued to build a network of public welfare-friendly stores with the most extensive service network, joining hands with public welfare organizations to promote a variety of public welfare services and activities, and continuing to dedicate to areas such as environmental protection, public welfare donations, senior care, education quality, urban and rural sustainability, as well as health and well-being. PCSC also extends the concept of age-friendliness to store operations by encouraging Elderly-friendly Stores to hire middle-aged and senior jobseekers. PCSC aims at creating an age-friendly workplace by integrating measures such as optimizing training and work processes, as well as building age-friendly facilities. In 2022, PCSC won the "Excellence Award for Promoting the Employment of Middle-aged and Elderly Job Seeker" from the Ministry of Labor.

It was the best of times, it was the worst of times. Even with operational challenges caused by global economic uncertainty for all enterprises, PCSC will continue to adhere to the mission of "being committed to becoming the most outstanding retailer, providing the most convenient services in everyday life, and fulfilling the responsibilities of a good citizen" towards the goal of becoming a "service platform for everyday life that exceeds consumer expectations." Building on the foundation laid by the Year of Sustainable Action in 2022 and looking forward to 2023, we will continue to demonstrate our determination for realizing long-term ESG goals such as environmental protection and plastic reduction, energy saving and carbon reduction, food waste reduction, sustainable procurement and so on, while improving corporate governance, taking care of employee well-being, and furthering social welfare. If you want to go fast, go alone. If you want to go far, go together. PCSC starts from its own operations to create sustainable value with partners in the value chain, as well as taking advantage of the close ties between PCSC and the general public's everyday life to co-create a sustainable lifestyle, never holding back on the effort towards sustainable development.

■ Note: Statistics of February 2023.



Highlights of Sustainability Performance

E Environment

In 2022, lightweight and decomposable materials were incorporated for online shopping packaging and traditional barcode slips were replaced with mobile phone barcodes,

reducing a total of

685,000 tonnes of paper

18.06 tonnes of single-use plastics

The EUI at the stores in 2022

decreased by

6.46%

compared with the year before

The Veggie Selection brand reduced carbon emissions

by approximately

20,865 metric tonnes

by the end of 2022

In 2022, the energy-saving transition of the overall stores saved 116.9 million kWh of electricity, which is equivalent to

reducing

59,524 metric tonnes of carbon emissions

In 2022, average waste generated by a single store was

5.80 metric tonnes,

a decrease of

31.24%

compared with the base year (2019)

In 2022, the purchase amount of sustainably-certified raw materials for PCSC private-label products

reached

NT\$ 2.385 million,

accounting for about 14.12% of procurement

In 2022, **500** stores

adopted the OPEN iECO Recycled Cups Renting service. 12.18% of consumers used their own cups

reducing about 58.8 tonnes of single-use plastic

"iLove Food"

reduced food waste by

9,780.15 metric tonnes

in 2022

The frequency severity indicator was

0.21

lower than

the average value of the retail industry over the past three years published by the Occupational Safety and Health Administration of the Ministry of Labor

NT\$ 463 million

was raised for public welfare

over

150,000 people

took advantage of the DIY materials provided by the Good Neighbor Foundation

The Good Neighbor Meal Delivery Team delivered and picked up meals for

over

190,000 people

G Governance

The number of stores exceeded 6,600. PCSC ranks first in market share with

a total of

6,631 stores

Female managers in revenue-generating functions

accounted for

52.79%

The annual consolidated total revenue reached a record high of

NT\$ 290,434,137,000

an increase of

10.54% over last year

PCSC ranked in the top 5% in the 8th Taiwan Corporate Governance Evaluation System, which is the only retail business among listed companies that has

ranked in the top 5% for **8** consecutive years



Honors and Recognition

International



PCSC was listed for the fourth year on the Dow Jones Sustainability World Index, as well as being named as a global sustainability benchmark.



PCSC was once again selected by FTSE4Good Emerging Markets Index.



Awarded the 11th Asia Responsible Enterprise Award: the Good Neighbor O2O Community Funfest won the Social Empowerment category, the Age-friendly Store project won the Investment in People category, and the Plastic Reduction project won the Green Leadership category.



In 2022, PCSC was recognized by CDP (Carbon Disclosure Project) as an A- rating on the climate change questionnaire.



PCSC was once again selected by MSCI ESG Leaders Indexes and MSCI Global SRI Indexes.

Local



Ranked in the top 5% in the 8th Taiwan Corporate Governance Evaluation System, as the only retail business in the listed companies to do so for the eighth year running.



Selected by the FTSE4Good TIP Taiwan ESG Index and the Taiwan RAFI EMP 99 Index.



Won the TCSA "Ten Most Prestigious Sustainability Awards-Top Ten Domestic Companies" in Corporate Comprehensive Performance, with the ESG report winning the Platinum Report Award in the retail and department store category for the third consecutive year.



Presented the 18th CSR Award Model in ESG Integrated Performance by the Global Views Monthly.



Once again presented the Corporate Citizen Award by Commonwealth Magazine.



The OPEN POINT Ecosystem won the IDC 2022 Best in Future of Industry Ecosystems award.

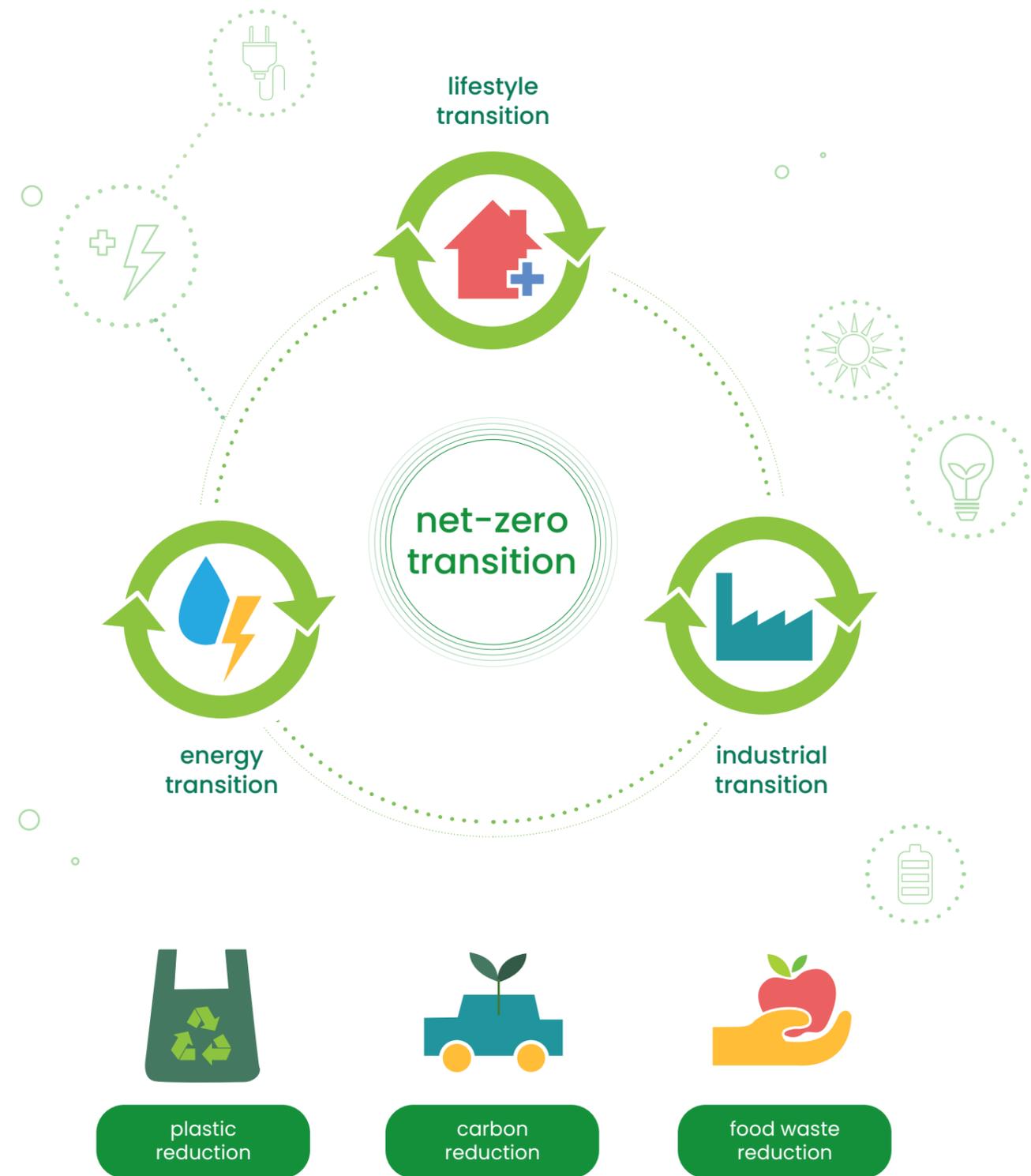


Won the "Excellence Award for Promoting the Employment of Middle-aged and Elderly Job Seeker" from the Ministry of Labor.



Sustainability Column

Climate change is a major challenge facing the world at the moment, with a profound impact on the human race, ecology and earth environment. To take on this challenge, countries at COP26 in 2021 reached a consensus to issue the Glasgow Climate Pact, reaffirming the goals of the 2015 Paris Agreement to limit global warming to 1.5°C. In 2022, COP 27 called for public disclosure of a comprehensive plan for net zero transition. In 2021, the government also announced the goal of achieving net zero emissions by 2050. The "Taiwan's Pathway to Net-Zero Emissions in 2050" was then published in 2022, formulating transition strategies for the four major aspects of "energy, industry, lifestyle and society." As one of the local retail channels, PCSC is duty-bound on the path to net-zero transition. We analyze our own key environmental issues and take actions, focusing on responding to the "energy transition," "industrial transition" and "lifestyle transition" in the net zero transition strategy by promoting sustainability actions towards "carbon reduction," "plastic reduction" and "food waste reduction." To this end, PCSC starts from its own operations to reduce carbon together with suppliers/logistics partners, and taking advantage of close tie between PCSC and daily life of the general public to encourage people to transition to a low-carbon green life, working with stakeholders to move towards a net zero sustainable society.



Energy Transition

PCSC started conducting greenhouse gas inventory in line with ISO 14064-1:2006 since 2017, as well as adopting the new version of ISO 14064-1:2018 since 2020 and passing third-party verification. We also continue to expand the coverage of bases that are inventoried to include all stores and offices in the mainland and outlying islands. In 2021, the main source of carbon emissions came from purchased electricity, accounting for about 68% of the total, out of which nearly 99% was used for store operations. Therefore, we promote energy saving and energy efficiency improvement in the stores, as well as increasing the proportion of renewable energy while responding to the energy transition strategy in the net zero transition strategy. The relevant highlight projects in 2022 include the first near-zero carbon store, micro-carbon offsets in stores, and installation of renewable energy devices in stores.

■ Note: Please refer to [4.3 Climate Change Mitigation and Adaptation](#) for information on in-store energy-saving measures.

Near-Zero Carbon Store

The Antong store in Tainan has obtained the "Near-Zero Carbon Building" label issued by the Ministry of the Interior, making it the first convenience store in a "Near-Zero Carbon Building." The "Near-Zero Carbon Building" label means that the building has almost achieved carbon neutrality in which carbon reduction offsets carbon emissions, meaning existing buildings are equally capable of reducing carbon emissions.

Antong store improved energy efficiency by reducing the use of air-conditioning, refrigerating and freezing equipment, and energy consumption of lighting. The measures include adding a windbreak room to reduce cold air leakage, replacing the inverter systems for air-conditioning, refrigerators and freezers, and installing circulating fans to improve the indoor cooling effect from air-conditioning, choosing LED lamps and concentrating the lamps in the aisles to reduce the number of lamps, adopting large glass surface for the seating area so that less lighting is necessary during daytime, as well as managing the use of air-conditioning and lighting for different zones and periods of time.

We have continued to implement in-store energy-saving transformation to more stores. In 2022, the energy-saving renovation of all stores saved 116.9 million kWh of electricity, which is equivalent to reducing carbon emissions by 59,524 metric tonnes.



Micro-carbon Offsets in Stores

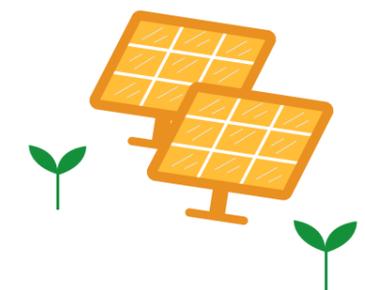
In 2022, PCSC started working on the micro-carbon offsets in stores together with the Department of Commerce, MOEA and Taiwan Green Productivity Foundation. Lighting tests were carried out in 4 stores in Taipei that were scheduled to be renovated. The number and illuminance of light fixtures were inventoried and measured by professionals with illuminance simulation, as well as replacing tubes with LED ones. According to Guidelines for Micro-carbon Offsets, the carbon reduction amount was assured by the external verification unit BSI before submitting to the Environmental Protection Administration for review. PCSC passed review in the same year as the first local convenience store with ISO14064-2 certification for micro-carbon offsets. The project of in-store micro-carbon offsets saves approximately 61,000 kWh of electricity each year.

In-store Renewable Energy Devices

In 2022, PCSC integrated the concept of green power into the store design for Yawan store by introducing solar power energy. PCSC worked with Taiwan Cement to develop a new energy model for Yawan store, using solar power energy and an energy storage system to prioritize power supply. In the event of a power outage, the micro-grid system will automatically switch to providing power through solar power energy and energy storage batteries, allowing Yawan store to maintain uninterrupted power for at least 4 hours, including lighting, monitoring systems, cash registers, automatic doors, etc. In addition, the use of green power and energy storage system also greatly reduces carbon emissions ^(Note).

PCSC also plans to expand the application of renewable energy by purchasing green power for the headquarters building in 2023, in order to gradually transition to renewable energy in line with policies.

■ Note: Since renewable energy certificate applications are still in process, the actual generation capacity cannot be presented.





Industrial Transition

In addition to our own operations, we have also expanded the scope of net zero transition to suppliers and logistics, facilitating carbon reduction in the entire value chain through local food procurement, equipment replacement and greenhouse gas inventory.

Procurement of Local Food Ingredients

Local food ingredients not only reduce the carbon footprint derived from imports, but also make it easier for consumers to opt for green diet and integrate a “sustainable table” into daily life. PCSC continues to support local agriculture, fishery, vegetables and fruits with the three strategies of “stable procurement,” “sustainability” and “planned support,” with actions including consistent use of local high-quality rice and seasonal ingredients for fresh food products, and making good use of product development capabilities to turn high-quality local ingredients into differentiated products such as fresh food and fresh-brewed beverages to boost the added value of local agricultural and fishery products. In the meantime, the “iPre-order” and “iGroup-buying” platforms are integrated to facilitate online sales of fresh local products and fruit with digital tools, making sustainable development of local agricultural products possible through long-term and stable procurement. Among them high-quality local rice is used in more than 60 items such as our onigiri, stewed rice and boxed meals with the “Taiwan Rice Label” issued by the Agriculture and Food Agency. In 2022, more than 19,000 tonnes of rice were used. In addition, PCSC provided technical guidance on fresh food in the “King of Fried Rice in Taiwan” competition held by the Agriculture and Food Agency in 2022. Mass-produced products have been put on the shelf, and the award-winning “light boxed meal” made with local ingredients has been made available in the stores.



In addition to rice, we also concentrated on locally-grown coffee in 2022. The PCSC R&D team supports local farmers in planting coffee beans in a planned way through farm visits, technical exchanges and brand marketing. Alishan is one of the most important local coffee-producing areas. Local young farmers started growing Geisha coffee in 2018 without using pesticides and herbicides, setting an example for the local coffee industry by embracing the business philosophy of co-existing and prospering with the local environment. PCSC worked with young farmers from Alishan to create

“Alishan Fengshan Geisha Coffee” to bring consumers premium coffee while practicing low-carbon consumption.

In 2022, the purchase amount of special agricultural products reached 63,000 tonnes and NT\$7.45 billion, including categories such as rice, chicken, pork, eggs, vegetables, fruit and so on. The quantity of local agricultural products purchased accounted for 76% of the total. The purchase amount of local agricultural products reached NT\$4.76 billion, accounting for 64% of the overall purchase amount.

Note: For other local procurement details, please refer to [3.4 Sustainable Procurement](#).

Low Carbon Transportation

To reduce carbon emissions caused by transportation, PCSC replaced a total of 62 old vehicles in 2022 and introduced 4 phase IV vehicles and 98 phase VI vehicles to meet business needs, including low-temperature and room-temperature ones in different sizes for logistics and transportation demands of all stores. It is estimated that by 2026, 267 phase III and phase IV environmentally-friendly vehicles will be replaced, and a total of 267 environmentally-friendly vehicles of newer phases will be purchased. Besides actively introducing new environmentally-friendly vehicles, we also stay updated with domestic and international logistics suppliers through exchanges to respond to trends in industries and regulations.

Expanded Scope 3 GHG Inventory

To stay updated with the Company's carbon emissions, we decided to expand the inventory Scope 3 greenhouse gases in 2023. Scope 3 includes procured goods and services, end use of goods, investment (greenhouse gas emissions of subsidiaries) and upstream transportation and distribution. The result of the inventory is adopted to formulate future carbon reduction goals and to strengthen the carbon governance of the entire value chain and move towards the goal of net zero emissions.





Lifestyle Transition

In addition to industrial transition, as one of the industries with the closest link to people's lives, PCSC assists consumers with their lifestyle transition. Just like the slogan "My Sustainability, Your Daily Life," we make good use of our core retail capabilities to promote sustainable actions in everyday consumer lives such as "food waste reduction," "plastic reduction" and "carbon reduction" to promote low-carbon diets, reduce food waste, encourage plastic reduction and recycling to help consumers move towards a low-carbon green life. In addition to promoting sustainable life to consumers, we became a TCFD supporter in May 2022 to respond to climate change issues in line with international trends, as well as supporting the government's social transition strategies with actions.

Zero Waste Low-Carbon Diet

Veggie Selection

Due to the impact of the pandemic and climate change in recent years, we have noticed that citizens lay more emphasis on health and environmental protection. The local vegetarian population is as high as 3.3 million, accounting for 13% as the second highest in the world. To this end, PCSC took the lead as the first retail channel to launched its own brand, "Veggie Selection." at the end of 2020. In November 2021, the first "Veggie Selection Compound store" opened its doors with almost 300 plant-based food items. Besides frozen box meals and microwave fresh food, home-cooked vegetarian food products at different temperature were introduced to satisfy the needs of different consumption situations.



Veggie Selection also took the initiative to create a detailed vegetarian label system with different production lines, so that everything is clear and reassuring for consumers upon making purchase decisions. Vegetarians and vegans attach great importance to the labeling of food ingredients. To help them identify product content, we have launched 13 vegetarian/plant-based labels. Categories are distinguished by green and orange for different groups by listing whether ingredients such as spices, milk and eggs are used in the products. Vegetarians and vegans also attach great importance to food production details as well. Prior to the emergence of the vegetarian/vegan markets, most production lines produced both vegetarian and non-vegetarian food with very few strictly vegetarian ones. As a result, PCSC dedicated a lot of effort and cost to create special production lines for vegetarians by strictly controlling every step of the procedure from the production. Combined with the existing supply chain advantages, we have launched the first vegan production line with a Taiwan Certified Agricultural Standards (CAS) label. From the use of raw materials to the production line, we are committed to meeting the needs of various vegetarian/vegan consumers.



As of the end of 2022, 67 Veggie Selection Compound Stores have been set up, with the line sold at 2,500 stores. The performance of vegetarian products increased by more than 30% compared with 2021 as the top choice for vegan and vegetarian food products in convenience stores in consumer reviews. Since the launch of the brand, it has reduced carbon emissions by 20,865 metric tonnes by the end of 2022, equivalent to the annual carbon absorption of 54 Daan Forest Parks.

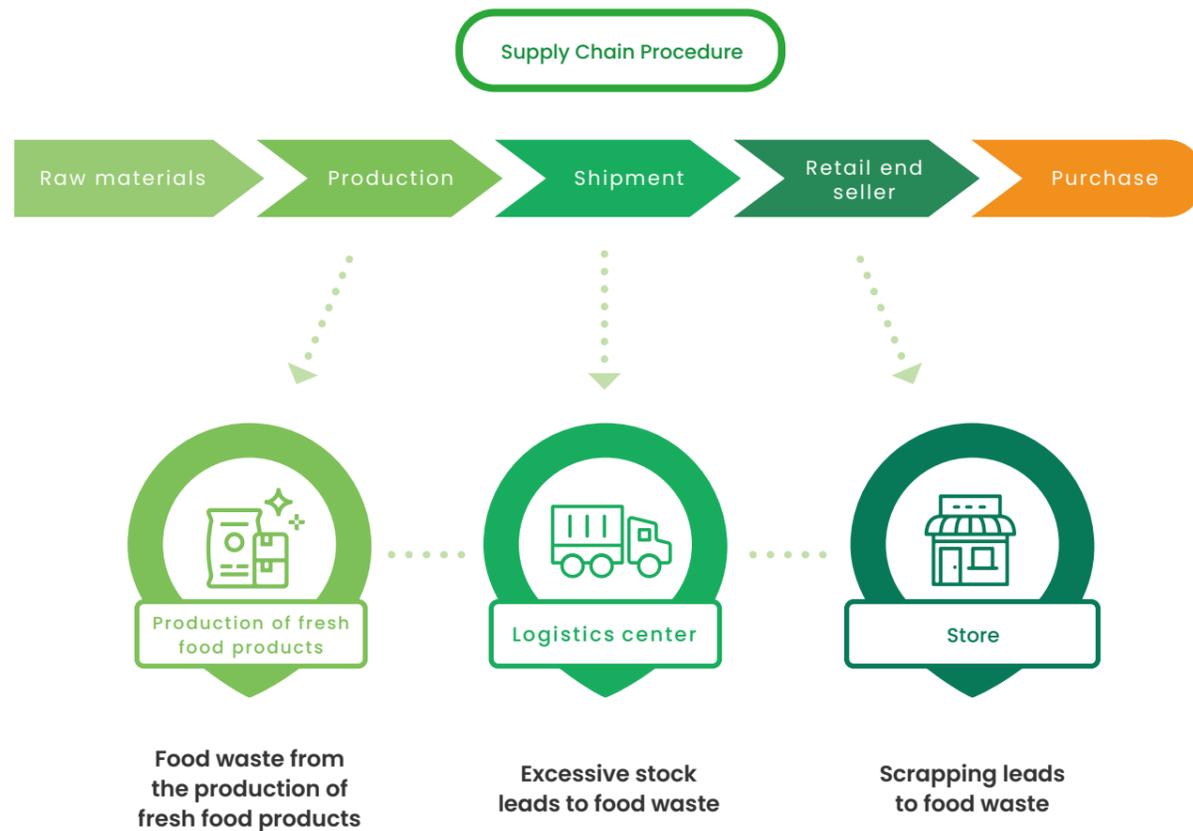


In the future, PCSC will create a more professional vegan/vegetarian brand for consumers based on the three strategies of "co-branded green meal," "expanding sales bases" and "optimizing vegan/vegetarian food labels." PCSC plans to launch new products, collaborate with known brands and attract vegan/vegetarian consumers with a diverse product structure, as well as providing accurate information on the labels as the most convenient kitchen for vegan and vegetarian consumers. In the future, more eco-friendly and sustainable production methods will be adopted, including using local raw materials to reduce carbon footprint and whole food ingredients.

Food Waste Management

According to the UN Food and Agriculture Organization (FAO), one-third of the food produced in the world is discarded at roughly 1.3 billion tonnes. Food waste is not simply about wasting ingredients, it involves the loss of resources consumed during food production, including land, water, energy and labor, etc., which may also lead to food security problems. The decomposition of food waste in landfills also produces greenhouse gases. Therefore, the urgency of reducing food waste is self-evident.

As part of the retail industry, PCSC is closely intertwined with food. It has taken the responsibility in reducing food waste from three stages including "production," "order shipment" and "retail." In 2021, the Food Waste Reduction Task Force was set up under the Sustainability Development Committee, regularly reporting the progress of the project to the Sustainability Development Committee.



Production

Reducing Food Waste from the Production of Fresh Food Products

PCSC reduces food waste from the factory production process through three major changes. First of all, production is now initiated upon order receipt instead of estimation to better control the production volume. The second reducing the waste of raw materials through the centralized production of various items. Last but not least, two adjustment of raw material estimates are performed prior to production to avoid excessive material in stock caused by weather changes or order fluctuations. The surplus after production is provided as employee meals. Finished and semi-finished products are also resold to employees to reduce food waste. In 2022, the production losses (amount of food waste per NT\$ million of revenue) decreased by 44.82% compared to the base period of 2019.

Reducing Food Waste from Excessive Stock

PCSC has set up an AI order forecasting system at store end to reduce inventory and scrapped goods through placing accurate orders. The store end keeps the most suitable items on the shelves through monitoring the ones that are often scrapped because they don't sell well each month. In addition, starting from August 2020, the ordering time for 4°C fresh prepared food was advanced to 12 hours before delivery. This allows fresh food factories to adjust supply and demand earlier and reduce food depletion to a minimum. In the meantime, in order to reduce food loss in the process of logistics and distribution, PCSC has extended the validity period of fresh food products in 2022. New technologies have been adopted to allow for the extension, such as the high-temperature sterilization equipment and special sealing film to reduce food waste.



Order Shipment

Reduce Food Waste from Scrapped Food

PCSC introduced the "iLove Food" program that takes advantage of the "smart labeling system" that was originally used for flagging expired products to prevent expiration. Besides managing the shelf life of food, this allows for better control over the "best before" time (8 hours prior to expiration). A 35% discount is given 8 hours prior to expiration on over 100 products. The "iLove Food Map" was also launched on the OPEN POINT APP in November 2021 to check on the stock as well as subscribing for product availability notifications. In 2022, the "iLove Food" program reduced the generation of leftover food by approximately 9,780.15 metric tonnes. In the future, PCSC also plans outsource cleaning and transportation to certain stores, all of which will join the food waste recycling process.



Retail

PCSC will continue to manage the value chain, stay updated with factory production losses, the scrap rate of fresh food (the percentage of decline in the amount of food waste per NT\$ million in revenue), the recovery rate of food waste in stores (the proportion of stores with food waste recycling) and other management indicators, in order to achieve the goal of halving food waste by 2030 (with 2019 as the base year) and contributing to the mitigation of climate change.

Use Instead of Owning

Recycled Cups Renting Service



According to the statistics of the Environmental Protection Administration as many as 4 billion disposable beverage cups are consumed each year. The production of beverage cups and waste disposal both cause a heavy burden on the environment that cannot be ignored. PCSC joined hands with President Packaging Ind. Corp. to create the first "OPEN iECO Recycled Cup Renting Machine. It took more than a year and invested more than 10 million to successfully establish 500 stores by the end of 2022 to provide recycled cups renting services. Consumers can borrow and return reusable circular cups by accessing OPEN POINT on their mobile phones, namely the dedicated membership app, to reduce environmental pollution caused by disposable beverage cups. The OPEN iECO Recycled Cup Renting machine has developed the first "stacking" function on the market, effectively saving about 50% of the space each time it is filled. In addition, the cup has a patented PP heat insulation layer to reduce the amount of cup sleeves. The recycled cups that are retired afterwards will be turned into other items to achieve resource reuse.

In order to promote the use of recycled cups renting service, we started from "convenience" and "rewards", and invested a total of 228 million dollars in 2022 in the promotion of recycled cups and self-contained cups. In terms of convenience, the recycled cups service was introduced to 500 stores in 2022, and the service area is expected to expand to another 500 stores in 2023 for a total of 1,000 stores. In terms of rewards, in addition to providing an NT\$5 discount for bringing your own cup in line with the regulations, PCSC offers an NT\$7 discount for bringing your own cup on the first of each month. In 2022, the percentage of bring your own cup grew from 6.29% in 2021 to 12.18% (reducing approximately 58.8 metric tonnes of single-use plastic), achieving the 10% goal for this year. In 2023, PCSC's goal for bring your own cup has been increased to 15%, continuing to encourage consumers to reuse cups. After the introduction of the recycled cups renting service at the end of 2022, nearly 5,000 people have used recycled cups by February 2023, reducing a total of 5,000 disposable beverage cups. The PCSC recycled cups renting service has also received external recognition as the first enterprise to win the "Excellence in Circular (Rental) Cup Service" by the Environmental Protection Administration.



Intelligent Automatic Recycling Machine

PCSC pioneered the 100% locally built "Intelligent Automatic Recycling Machine", which took more than one year for PCSC and President Packaging Ind. Corp. It recycles PET bottles and dry cells using patented AI optical image and material identification technology while being easy and fast to use. To encourage people to take advantage of the machine, they can earn store gift vouchers by recycling PET bottles and batteries. The unique "crushing" feature can crush PET bottles into flakes, optimizing the existing procedure of recycling flattened PET bottles on the market, effectively reducing the volume by up to 75% and increasing the number of recycled bottles with the same volume, greatly reducing the environmental impact of transportation and minimizing carbon footprint. In addition, recycled PET bottles are subsequently entrusted to a professional manufacturer by President Packaging Ind. Corp. to turn into recycled materials that are used to make store uniforms or products that can be sold in the stores. PCSC also works with major PET bottle manufacturers in Central, Southern Taiwan and outlying islands to build a "bottle to bottle" recycling system. Recycled PET bottles are handed to manufacturers for turning into new PET bottles through professional technology, giving new life to discarded PET bottles and building a green circular supply chain.



The Intelligent Automatic Recycling Machine Task Force holds monthly meetings to review the progress of the promotion of intelligent automatic recycling machines. By the end of 2022, the machines have been installed in 50 stores with nearly 40,000 people recycling a total of over 400,000 PET bottles and dry cells, with the stack height about the same as 105 Taipei 101 in height. It is estimated that another 200 intelligent automatic recycling machines will be installed in 22 counties and cities in 2023.

Good Neighbor Cardboard Library

Since 2014, PCSC Good Neighbor Foundation has promoted reading motivation for students through the Reading Program by continuing to support the schools in the network. Rural elementary school libraries have outdated facilities that reduce the students' willingness to step into the library, which in turn has an impact on reading education. In view of this, PCSC joined hands with Cheng Loong Corp., Retail Support International to create the Good Neighbor Cardboard Library for the Hudong Branch of Liujia Elementary School in Tainan City. The cardboard library was made of 5,000 kilograms of cardboard boxes recycled by PCSC stores, which was equivalent to saving 100 trees and reducing carbon emissions by 29 metric tonnes. The Good Neighbor Cardboard Library was coordinated by the Good Neighbor Foundation, with PCSC providing recycled cartons to Retail Support International for sorting and transportation, before Cheng Loong Corp. utilizing low-carbon green manufacturing and design development technologies to decompose the recycled cartons into 100% recycled corrugated cardboard, ending up in the form of sustainable paper tools that met the reading needs of schoolchildren. In addition, PCSC prepared the space by investing more than 20 partners to assist with renovation, cleaning and transportation. Associated companies also offered 100 books as the first batch of books for the cardboard library. We took advantage of our resources as a retail channel and collaborated with many different parties to make circular economy a reality as well as improving the reading environment in rural areas to create a sustainable and circular ecosystem.



7-ELEVEN “Brings Back the Love” Sustainable Circular Economy Project

PCSC has furthered its collaboration with social welfare and social enterprises through the 7-ELEVEN Bring Back the Love fundraising platform. In 2021, it collaborated with the Cerebral Palsy Association of R.O.C. and zero-waste fashion social enterprise Story Wear on the “Addition and Subtraction in the New Life – CHIC Corporate Charity Project” to create a sustainable circular economy for convenience stores. Sustainable products are designed and remade by the social enterprise before being handmade by social welfare organizations. Consumers can purchase the products from stores or the preorder website to create job opportunities for families with patients of cerebral palsy. The funds raised will be invested in the employment program for patients of cerebral palsy. The program has helped over 100,000 families.

Two new sustainable products were launched in 2022, including the “Hugging Hedgehog Bag” and “Small Star and Moon Bag on Strap.” The materials for the products come from PE bottles and milk bottles recycled by PCSC stores. Moreover, PCSC helped its supplier Swire Coca-Cola to join the initiative by donating recycled PET bottles. The bottles are then made into recycled fabrics. With designs by Story Wear, the bags are hand-sewn by mothers of children with cerebral palsy in the non-profit organization. To let consumers who agree with the concept feel the warmth of the product, children with cerebral palsy worked together with the popular online character Happy Cat in 2022 to demonstrate their feelings and dreams.



Over the past two years, the program recycled 3,527 kilograms of PET bottles and 3,064 kilograms of empty milk bottles (PE), with more than 20,000 people responding to the charitable actions by purchasing the products and assisting nearly 100 families with employment opportunities. Over NT\$120 million have been raised for two consecutive years. This project realizes circular economy by not only solving the problem of plastic waste, but also creating employment opportunities for families with children of cerebral palsy and connecting them with the society, helping them find self-worth and a sense of accomplishment while reducing plastic and helping the disadvantaged, creating a win-win situation for public welfare groups, social enterprises and corporates.

Note: Please [click here](#) to watch the video.



Plastic Reduction Stores on Outlying Islands

To reduce the environmental impact of plastic waste from tourism on outlying islands, PCSC became the first convenience store to set up two Plastic Reduction Future Stores on Orchid Island in June 2022 in line with “Guidelines for Source Waste Reduction Service Design for Convenience Stores on Outlying Islands” issued by the Environmental Protection Administration. The stores adopt the three principles of “unpackaged, large packaging, and alternative materials” to tailor a “disposable waste reduction” plan for outlying islands. First of all, most beverage PET bottles are replaced by aluminum cans that are easy to recycle, and packaged food and refrigerated dairy products are sold in family-sized large packages so as to reduce waste from packaging. In terms of fresh food products, microwaved box meals adopt packaging with reduced plastic. Plastic packaging is replaced by round paper boxes, and the plastic lids are replaced by seal with less plastic. Paper packaging has also been introduced. Recycled cups renting services and recycling machines have also been introduced to encourage people to produce less plastic waste. With replacing packaging materials, the Plastic Reduction Future Stores on outlying islands saved about 0.7 metric tonne of plastic in 2022. Reverse logistics has also been employed to transport about 1 tonne of plastic back to the main island for recycling every year. According to the estimates of the Environmental Protection Administration, it can reduce the generation of plastic waste by about 1.3 metric tonnes per year. In the future, the program will be expanded to more than 70 stores in Penghu, Kinmen, Matsu, Green Island and Lambai Island.

Note: Please refer to [4.2 Packaging Material Management](#) for information on other actions towards plastic reduction management.

