



# PCSC-Support for environmental sustainability

## 2017 KPI

- Purchase energy-saving products certified with a Green Mark that account for **4.5%** of annual purchases
- Energy usage intensity (EUI) for retail locations and headquarters **3%** lower than that for 2014
- Power reduction, water reduction, and paper reduction targets for the headquarter building:
  1. Decrease headquarters (floors 2-11) EUI **0.5%** from the previous year
  2. Decrease water usage per person **0.5%** from the previous year
  3. Decrease paper usage per person **0.5%** from the previous year

## 2016 KPI

### Percentage of target met

- |   |   |
|---|---|
| • Purchase energy-saving products certified with a Green Mark that account for <b>4%</b> of annual purchases  | <b>100%</b>   |
| • EUI for retail locations and headquarters <b>2%</b> lower than that for 2014  | <b>100%</b>   |
| • Power reduction, water reduction, and paper reduction targets for the headquarter building: <ol style="list-style-type: none"> <li>1. Decrease headquarters (floors 2-11) EUI <b>7%</b> from the previous year</li> <li>2. Decrease water usage per person <b>0.5%</b> from the previous year</li> <li>3. Decrease paper usage per person <b>1%</b> from the previous year</li> </ol> | <b>100%</b> for electricity and paper; target for water not met |

Note: Water usage increased as the number of employees at the headquarters increased by 39; the actual EUI per person decreased 1.2%.

## SDGs





The time has come to take action regarding recent global climate change. According to the 2015 United Nations Climate Change Conference (COP21), expediting the integration of energy saving and carbon reduction into operational models and production services and directly or indirectly affecting business and consumer behaviors in order to decelerate environmental deterioration can also reduce the impact and damage done by the climate to raw material supply.

In the face of climate change, President Chain Store Corporation has enacted a series of low-carbon and green recycling measures to provide consumers with high-quality, environmentally-friendly products. We wish to help the environment through green operations and low-carbon marketing, further reducing the environmental impact on our operations and bringing us closer to sustainable development.

### 3.1 Green living through saving energy and reducing carbon

#### ● Headquarters

By setting performance goals, the headquarter building successfully fulfilled the carbon reduction promise made this year to save electricity and paper. Energy reduction slogans were strategically posted throughout the building to instill this environmentally-friendly mindset in employees. Equipment on each floor was also monitored to keep track of energy usage to improve hardware performance, helping to meet our energy goals and greatly reduce energy expenditures.

#### ■ 2016 headquarter electricity, water, and paper reduction performance

Item	Measures taken	2016 performance
 <b>Electricity reduction</b>	Replacement of T8 light bulbs with LED lights.	<b>Compared to 2015</b> Electricity saved: <b>179,949 kWh</b> Cost saved: NT\$ <b>714,740</b> EUI per person: <b>-12.6%</b>
 <b>Water reduction</b>	<ul style="list-style-type: none"> <li>The 4th floor and water tower leaks were fixed.</li> <li>Water usage increased as the number of employees at the headquarters increased by 39; the actual EUI per person decreased.</li> </ul>	<b>Compared to 2015</b> Water saved: <b>-234,000 L</b> Cost saved: NT\$ <b>-18,836</b> EUI per person: <b>-1.2%</b>
 <b>Paper reduction</b>	Electronic files and continued promo-tion of scanning documents.	<b>Compared to 2015</b> Electricity saved: Cost saved: NT\$ <b>670</b> EUI per person: <b>-5.8%</b>

#### ● Retail locations

Energy-saving measures were continuously promoted in 2016. With the approval of the Equipment Purchasing Committee, old equipment was replaced with high performance equipment at existing retail locations. All new stores were required to incorporate building insulation, low energy signage, low energy lighting, systems with inverter technology, outdoor energy reduction, indoor lighting management, and LED lighting. In addition to replacing equipment with energy-saving models, employees at all retail locations underwent training on regular inspections of the air conditioning, rotary fans, lighting, refrigerators and freezers, and signage and windows following the “Retail Energy Reduction Checklist” in order to ensure optimal equipment performance. Inverter water pressure systems, DC motor automatic doors, and windbreak rooms were continued to be integrated at existing retail locations throughout 2016, helping to save 29,366,000 kWh and reduce carbon emissions by 15,324 tons per year.

## 2016 Integration of energy saving systems

Item	Qty (No. of machines)	Electricity saved (kwh)	Amount of carbon reduced (Tons of CO <sub>2</sub> e per year)	Cost saved (NT\$10,000)
Replaced embedded open showcases	178	334.8	259	111.14
Replaced fixed speed air conditioners in retail stores with inverter air conditioners (RC/FC2)	726	930	2,676	1,148.48
Replaced fixed speed air conditioners in retail stores with inverter air conditioners (FC1)	94	930	414	177.49
New retail stores install inverter air conditioners (RC/FC2/FC1)	957	930	2,791	1,197.79
Outdoor inverter central air conditioning units	2,727	14.7	230	98.88
Replaced 3 rows of lights in 3-foot horizontal signage with 2 rows of lights	819	269.5	971	416.50
Introduction of DC motor automatic doors	793	41.1	143	61.17
Introduction of windbreak rooms	226	691.5	624	267.60
Installation of inverted U T5 lamps	569	129.5	275	118.19
Introduction of constant pressure inverter water pressure systems	680	18.75	55	23.67
New combination refrigerators	647	528.6	1,368	586.97
Installed inverters to independent combination refrigerator/freezers	2,432	287	3,790	1,626.30
Plug in inverters for single/double door freezers	1,060	334.8	1,608	689.88
Optimal lighting arrangement for exterior arcade	1,068	27.2	121	51.82
<b>Total</b>		<b>5,437.45</b>	<b>15,324</b>	<b>6,575.87</b>

## Paper-free workspaces

In cooperation with the government, President Chain Store Corporation became the first convenience chain store in Taiwan to introduce electronic receipts in 2011. Beginning in 2015, the use of e-receipts extended to our horizontal alliances; at the end of 2016, they had been introduced to NPC Gas, NanRenHu Shopping Center, Taipei 101 Department Store, Global Mall, Freeway Shopping Center, Dream Mall, and Ruentex.

On January 1, 2016, President Chain Store Corporation introduced cloud-based e-receipts for public utilities and simplified accounting records by replacing the Uniform Invoice number with the e-receipt number (BB+8 digits). Consumers' winning receipts can be printed out at any retail location to claim their prize. Public utility companies can also allow customers to print out winning receipts using IBON machines, greatly reducing the costs for utility companies in mailing winning receipts to customers. With these measures, President Chain Store Corporation's Type II telecommunications enterprise (MVNO) predicts to print 980,000 fewer receipts each year.

On January 1, 2016, franchisees began issuing e-receipts for performance bonus rather than paper receipts; currently 95% of franchisees have switched to e-receipts, lowering their costs for receipt paper and reducing the number of scrapped blank receipts. This can save 2.7 million receipts and NT\$320,000 each year.



In order to keep up with international trends, in 2016, President Chain Store Corporation worked with government departments to incorporate international barcodes into e-receipts and to allow public utility payment notices and payment confirmation slips to be used to claim receipt lottery prizes. Future winning receipts claimed at retail locations can be verified and written off electronically, increasing the benefits of these electronic mechanisms and helping to protect the environment.

## Logistics

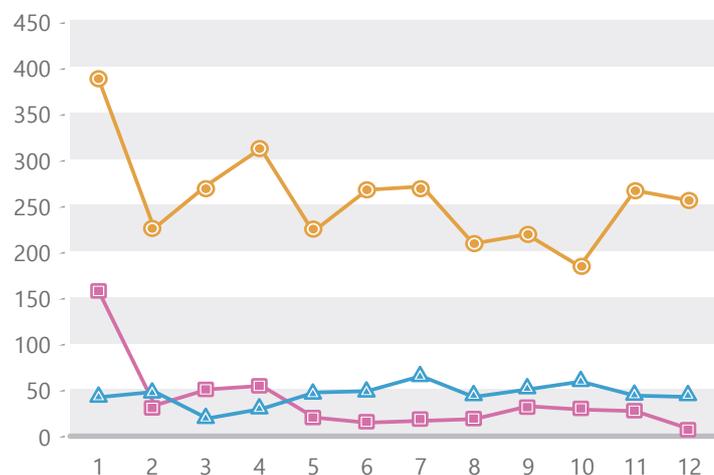
With the ever-increasing number of retail locations across Taiwan and variety of services provided in 2016, the amount of logistics activity has also increased. In order to safely and securely ship the newest products to each retail store as quickly as possible, information management systems, management department guidelines, and standard procedures are improved each year. We also aim to ensure that logistics personnel and vehicles operate at the highest efficiency to reduce any negative impact logistics processes may have on society or the environment. The incorporation of mobile management apps, audiovisual logistics SOP files, President Tokyo Corporation maintenance systems, and operations management systems helps standardize all aspects of shipping and ensure safe vehicle operation.

President Chain Store Corporation boasts long-term cooperation with affiliated logistics companies and has increased logistics efficiency while minimizing environmental harm by reducing the number of deliveries, establishing maintenance systems, utilizing common delivery, and upgrading logistics equipment. President Logistics International Corp., the affiliated company in charge of managing logistics vehicles, began integrating eco-friendly vehicles in 2016 and aims to replace older models (those that met 3rd Stage and 4th Stage Emission Standards) with the newest 5th Stage vehicles by 2020. With the ultimate goal of replacing 223 vehicles and the 2016 goal of introducing 25 vehicles that meet the latest emission standards, this year, a total of 69 3rd Stage vehicles and 14 4th Stage vehicles have been replaced. Exchanging these 83 older models reduced carbon monoxide emissions by 4.29 tons (59.4 kg per 3rd Stage vehicle and 13.71 kg per 4th Stage vehicle) for a fixed asset cost of NT\$222,440,000.

### Vehicle systems

President Logistics International Corp. established the Digital Mobile Surveillance Center in 2012 and co-developed an exclusive vehicle system with Chunghwa Telecom. This system performs dynamic management of logistics vehicles by utilizing GPS/GPRS technology to determine the real-time position of all vehicles as well as road and cargo conditions. In 2016, the data from each vehicle was used to reduce traffic risk and ensure pedestrian safety. The successful application of safety data regarding speeding, rapid deceleration, and rapid acceleration this year effectively controlled various risk factors and generated improvements. The inclusion of breathalyzer tests when reporting to work also ensures each logistics specialist maintains safe and healthy driving habits, thus satisfying social expectations.

● Number of rapid deceleration incidents  
▲ Number of speeding incidents  
■ Number of rapid acceleration incidents



## Outstanding Logistics Specialist Ceremony

Behind the services provided to consumers is a hard-working and determined logistics team that works around the clock to provide maximum support. Every year, we commend exceptional logistics specialists; this year, 68 of the 1,788 specialists from President Logistics International Corp., Retail Support International, Uni-President Cold-Chain Corp., and Wisdom Distribution Service Corporation were celebrated at the 2016 PCSC Outstanding Logistics Specialist Ceremony. Four of these specialists have been recognized for three consecutive years and were distinguished as Exemplary Logistics Specialists. President Chain Store Corporation organizes a two-day one-night event each year to thank the logistics team for their hard work and dedication, and invites their families to join in their success.

2016 marked the ninth ceremony which brought the total number of Outstanding Logistics Specialists to nearly 500. The theme for the 2016 ceremony was “With Your Support, Our Possibilities are Endless” in the hopes of inspiring logistics specialists to utilize high-tech equipment, such as smart vehicle systems, in order to quickly and accurately track the service quality, driving safety, and food conditions for all deliveries.





### Retail Support International

#### Replacing cardboard boxes with pallets and plastic containers

Long-term use of pallets and plastic containers can replace the use of cardboard boxes and help the environment. In 2016, 1,641,429 pallets were used, a 3% increase from 2015, and 11,064,696 plastic containers were used, an increase of 5% compared to 2015.

RSI	Shipping pallets	Plastic logistics containers
2016	1,641,429	11,064,696
2015	1,598,518	10,580,226
Percentage increase	3%	5%

#### Office energy-saving measures

- Energy-wasting light bulbs in the cafeteria, conference rooms, and stairwells were replaced with energy saving light bulbs and expired fluorescent light bulbs are regularly replaced to maintain optimal brightness while saving energy.
- Window curtains were installed to block direct sunlight in order to reduce air conditioning workloads.
- Additional circulating fans were installed and air conditioning timers are used to automatically turn off air conditioning at the end of the work day.
- Digitalization of documents (purchase orders, business travel applications) and payroll sheets, management of work-related paper usage, encouraging double-sided printing.

### Uni-President Cold-Chain Corp.

#### Replacing cardboard boxes with plastic shipping containers

All products are moved from supplier to warehouse and to their final retail location in plastic containers, eliminating the need for cardboard boxes. A total of 58,465,987 plastic containers were used in 2016—an impressive 1179% increase from 2015.

UPCC	Refrigerated containers	Freezer containers	Fresh food containers	Bread containers	Total plastic logistics containers
2016	37,623,179	3,930,814	6,853,257	10,058,737	58,465,987
2015	2,695,336	250,466	649,212	974,452	4,569,466
Percentage increase	1296%	1469%	956%	932%	1179%

#### Initial shipment consolidation:

With shipment consolidation, the transportation process is extended to receiving shipments from the supplier in order to control quality and to ensure the safety of perishable foods. Shipment consolidation can reduce the number of daily shipments required and combined deployments between the logistics company and transport fleet can reduce the number of trips made each day. Consolidation of empty boxes also shortens the amount of turnaround time, further expediting the overall shipping process. For example, shipping consolidation reduces the number of 4°C temperature controlled shipments per day by 80.

## Wisdom Distribution Service Corporation

### Replacing cardboard boxes with plastic shipping containers

Wooden pallets are used to bring shipments from suppliers into the Wisdom Distribution Service warehouse. Plastic pallets are used and reused for all transportation within the warehouse, product storage, and shipments. Shipments to retail locations replace cardboard boxes with plastic containers; a total of 15,063,842 plastic containers were used in 2016, 33% more than used in 2015.

All shipments mainly utilize plastic logistics containers with the exception of terminals and retail locations on outlying islands due to their volume restrictions and excessive number of packages.

### Warehouse energy-saving measures:

- Continuous promotion of policies to save energy and reduce carbon; electricity use decreased 44,531 kWh in 2016 compared to the previous year.
- The Wisdom Distribution Service Corporation Shulin Distribution Center integrated an energy service system (ESCO), installing an inverter for the cold water pump and water tower fan and installing a flow meter detector on the cold water pipes. A total of 44,531 kWh was saved from June to December of 2016.

Inverter control



Cold water flow meter detector



### Paper recycling equipment

The addition of paper recycling equipment greatly improved work efficiency and reduced the number of man-hours by approximately 10 hours (600 minutes) per day.

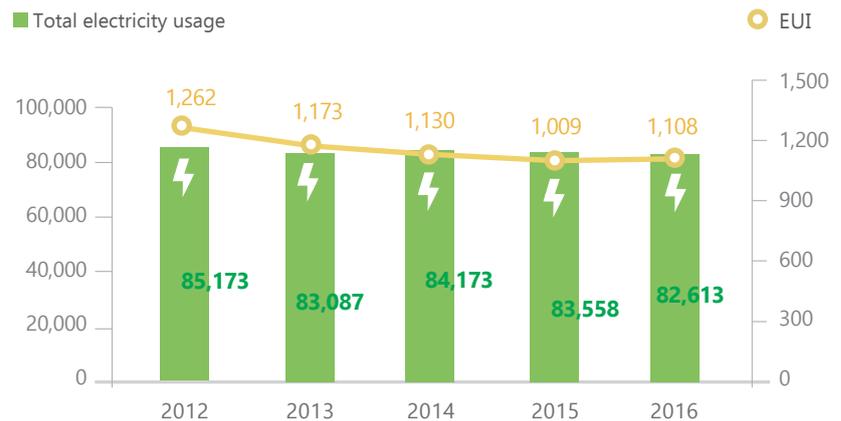
Wisdom Distribution Service Corporation	Cage cart/baler/day	Time spent baling waste paper before improvement (min)	Time spent baling waste paper after improvement (min)
books.com.tw	10	250	50
EC acceptance	16	400	80
IBON mart online shopping	4	100	20
<b>Total</b>	<b>30</b>	<b>750</b>	<b>150</b>



## Greenhouse gas protocol

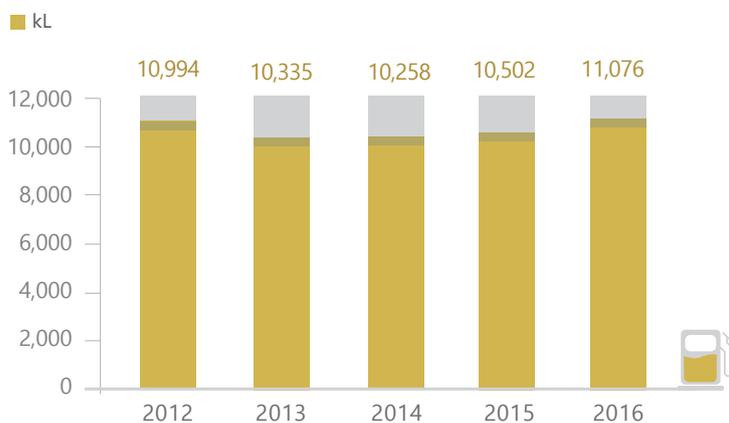
The main source of energy used at the headquarters and all retail locations is electricity. In 2016, the headquarters and all retail locations used a combined 827,370,000 kWh, 10,680,000 kWh fewer than in 2015; 99.8% of the electricity used in 2016 (826,130,000 kWh) was consumed by retail stores. Energy usage intensity (EUI) is used as the performance index to continuously track the efficiency of electricity usage at retail locations; the EUI for 2016 was 1,108 kWh/m<sup>2</sup>.

### Retail location electricity usage and EUI



Retail Support International, Uni-President Cold-Chain Corp., and Wisdom Distribution Service Corporation are responsible for centralized intake and inventory, shipping of room temperature, low temperature, refrigerated, and frozen goods, publications, and electronic platforms. Retail Support International is in charge of the overall management of logistics vehicles, including monitoring gasoline usage, procurement of eco-friendly vehicles, and logistics specialist training. A total of 11,076 kL of gasoline (diesel) was used for shipments in 2016.

### Diesel consumption



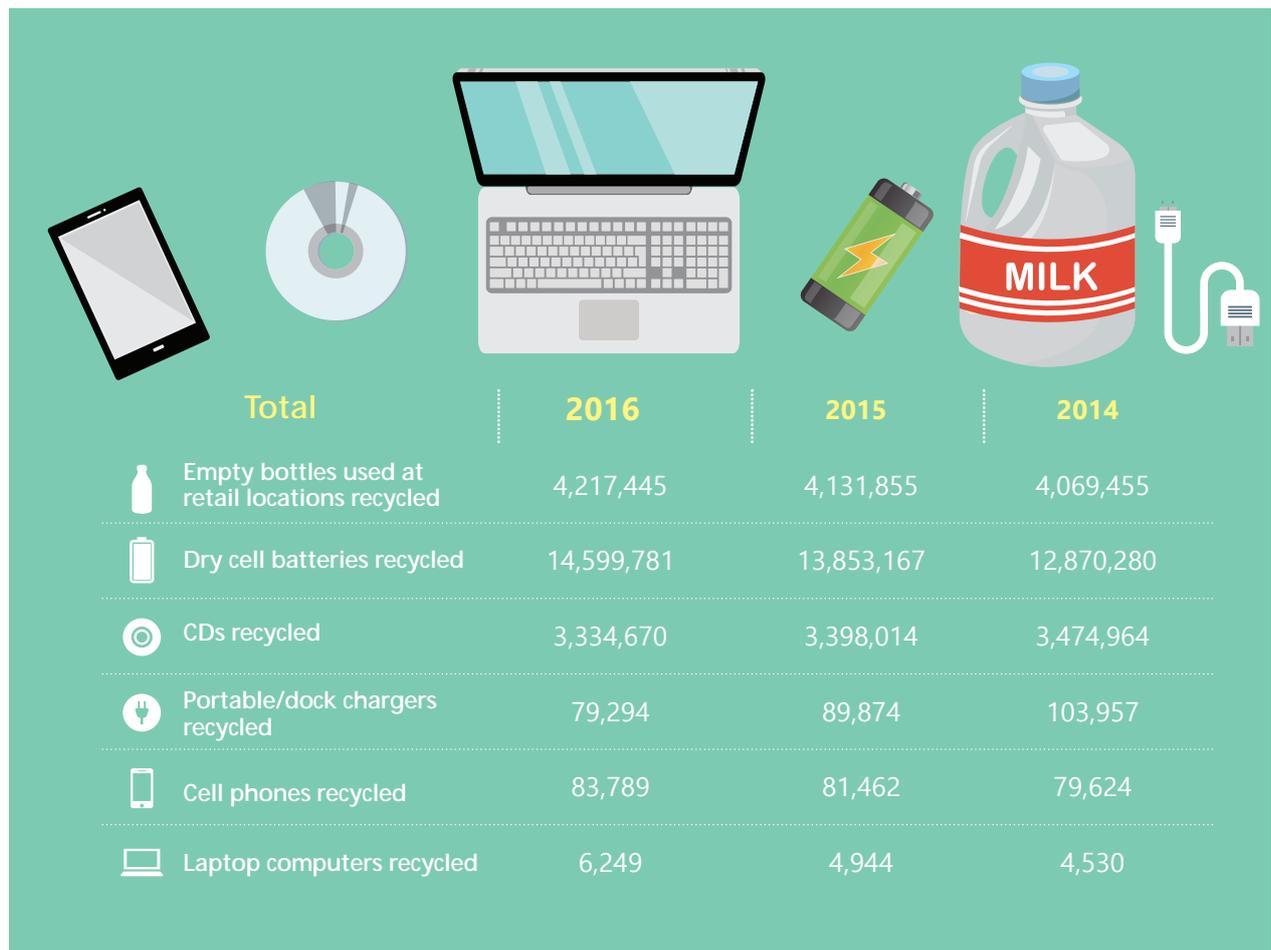
### ■ Diesel consumption

President Chain Store Corporation’s greenhouse gas protocol complies with national policies in measuring life-cycle greenhouse gas emissions. A total of 585,502 tons equivalent carbon dioxide (CO2e) of greenhouse gases were calculated in the 2016 investigation; 74.2% of emissions were Scope 2 emissions caused by electricity use, of which, 99% was due to electricity use at retail locations. Scope 1 emissions accounted for 20.8% of emissions caused mainly by refrigerant gas leaks from refrigeration, freezer, and air conditioning equipment at retail locations. Scope 3 emissions accounted for 5% of emissions (29,368 tons) caused by logistics-related work at retail locations.

## 3.2 Convenient green recycling

In 2010, President Chain Store Corporation began accepting old dry cell batteries, laptop computers, CDs, cell phones, and portable/dock chargers at 7-ELEVEN locations for recycling and gave out vouchers to encourage customers to recycle their unused and unwanted electronics. The ICT products and peripherals recycling program has had great success since its inception. President Chain Store Corporation also began recycling empty commercial-use milk bottles; a total of 4,217,445 bottles were recycled in 2016.

### ■ Recycling performance at retail locations





## 3.3 Green accounting and green procurement

### Green accounting

President Chain Store Corporation upholds its corporate social responsibility by providing consumers with safe products and innovative services and striving to save energy and reduce carbon in order to create environmentally friendly lifestyles. We also contribute to Taiwan's society by practicing our motto that “compassion never closes; happiness is always nearby.”

#### Green accounting items

Category	Item	Description	Environmental impact	Investment (NT\$1,000)	Cost (NT\$1,000)	Total (NT\$1,000)
 Products	Products for sale use environmentally-friendly packaging; inspection of food products	Purchased environmentally-friendly packaging: PLA and coffee cup rack. No preservatives or additives in food products; testing for traces of agriculture chemicals.	Recognition of impacts on health and the environment and helping to protect consumer health.		234,196	234,196
 Retail locations	Energy saving measures	Purchased energy saving equipment: 390 power saving units, 1,561 a/c circulating fans, 1,127 inverter a/c units, 29,393 T5 energy-saving light bulbs, 2,216 plug-in refrigerator/freezer inverters, and 1,736 Slurpee machines that turn off/sleep during off seasons.	Save energy and reduce carbon emissions.	241,155	1,172	242,327
	Cleaning and trash removal	Cleaned retail locations, introduced green technologies, and removed/recycled trash.	Maintain a clean environment.		290,512	290,512
	Extend lifespan of equipment and building materials	Installed 530 steel countertops, equipment was recycled and prepared for reuse.	Reduce the amount of trees cut down and the amount of wasted resources	81,347	27,877	109,224
	Green procurement	Purchased energy saving equipment and environmentally-friendly paper and building materials. Promoted e-receipts.	Meet European standards, FCS certification, save electricity, and reduce carbon emissions		46,473	46,473

Category	Item	Description	Environmental impact	Investment (NT\$1,000)	Cost (NT\$1,000)	Total (NT\$1,000)
 Shipping	President Logistics International Corp., Retail Support International, and Wisdom Distribution Service Corporation combined to create a reverse logistics system, improve shipping efficiency, and recycle resources	Investment in reverse logistics recycling work force and equipment.	Recycling at retail locations: 260.7 tons of dry cell batteries, 59.5 tons of CDs, 6,000 laptop computers, 84,000 cell phones, 79,000 phone chargers.		3,107	3,107
 Internal environmental education	Promotion of environmental education and office recycling	Promoted paper reduction in the office, cleaning the environment, and recycling.	Recycling at offices: 3,308 kg plastic bottles, 15,510 kg paper, 557 kg aluminum cans, 411 kg other (CDs/batteries/light bulbs).		30,908	30,908
 Social contributions	Dissemination of information regarding environmental protection	Promoted energy reduction, wildlife protection, and corporate social responsibility; sponsored environmental protection groups.	Promotion of environmental education and resource reuse.		1,420	47,350
	Organize or attend events beneficial to the environment and society	Donated to Tainan earthquake disaster relief; organized community and charity events.	With the help of 24 publishers, opened the first "OPEN! Children's Reading Room" filled with over 600 books. Organized community events with the Good Neighbor Foundation focused on parent-child interaction, disadvantaged families, education and culture, and environmental protection to add value to communities, inspire children, and make 7-ELEVEN a good neighbor.		45,930	
Total				322,502	681,595	1,004,097

## Green procurement

President Chain Store Corporation continues to engage in green procurement, purchasing an ever-increasing variety of products. In 2016, NT\$197,879,000 was spent on lighting and energy-saving air conditioners for retail locations and NT\$5,048,000 was spent on FSC certified office paper.



## 2016 Green procurement items and costs

Item no.	Purchased item	Qty	Cost (NT\$1,000)	Green Mark/Green certification
1	6 HP inverter air conditioner	145	12,262.7	Energy label certificate no. 102003-1
2	HP LCD 19 in wide screen TV	2	9.6	Certificate no. 13040
3	HP PC SFF computer including OS	3	50.1	Certificate no. 12473
4	Daikin 6 HP inverter commercial air conditioner	422	37,927.5	Energy label certificate no. 100014-2
5	Daikin 6 HP inverter commercial air conditioner made in Thailand	1	90.0	Energy label certificate no. 100014-2
6	Split air conditioner	1	38.1	Energy label certificate no. 100014-2
7	Hitachi 6 HP inverter commercial air conditioner	105	9,450.0	Energy label certificate no. 101162-1
8	1.2 HP inverter warehouse air conditioner	81	1,605.0	Energy label certificate no. 104142
9	2 HP inverter warehouse air conditioner	452	11,342.4	Energy label certificate no. 100014-2
10	Window air conditioner	2	210.0	Certificate no. 990123-2
11	Slurpee cups/lids	7,746,000	7,684.5	Green Mark certificate no. 12622
12	city café bags, 1-2 cup sizes	103,898,000	65,659.9	891000-1
13	OURS Magazine	317.49	254.7	FSC certification
14	China Electric T5 recessed light bulb	5,006	4,412.9	Energy label 102411
15	UCC plaster ceiling tile	5,783.7 boxes	5,740.7	Green Building Material CBM0100353
16	Circulation fan	423	921.5	Energy label 990274
17	LED light bulb/tube	19,034	5,597.0	Energy label 102447
18	Copy paper	57,181 reams	5,048.0	FSC certification
19	Stir sticks	325,790 packages	8,048.5	FSC certification
20	Disposable chopsticks	538,154 bags (100 ct)	21,526.2	FSC certification
Total			197,879.4	

## 3.4 Legal compliance

No actions that violated environmental law and resulted in fines from competent authorities were recorded in 2016.