



# 3

## A Good Neighbor Reducing Environmental Impact

-  Recycling of empty fresh milk bottles for retail business use reached **2,325.5 tons** (From the start of its promotion in August 2009 to the end of 2013)
-  The paper expenses of the headquarter in 2013 decreased **16.33%** compared with that of 2012, which converts to about 333,200 sheets of A4 paper saved.
-  Various investments and expenses against revenue which were put into environmental protection in 2013 totaled **\$NT1.27 billion**

### 3.1

## Taiwan's Large-scale and Continuous Environmental Recycling Platform

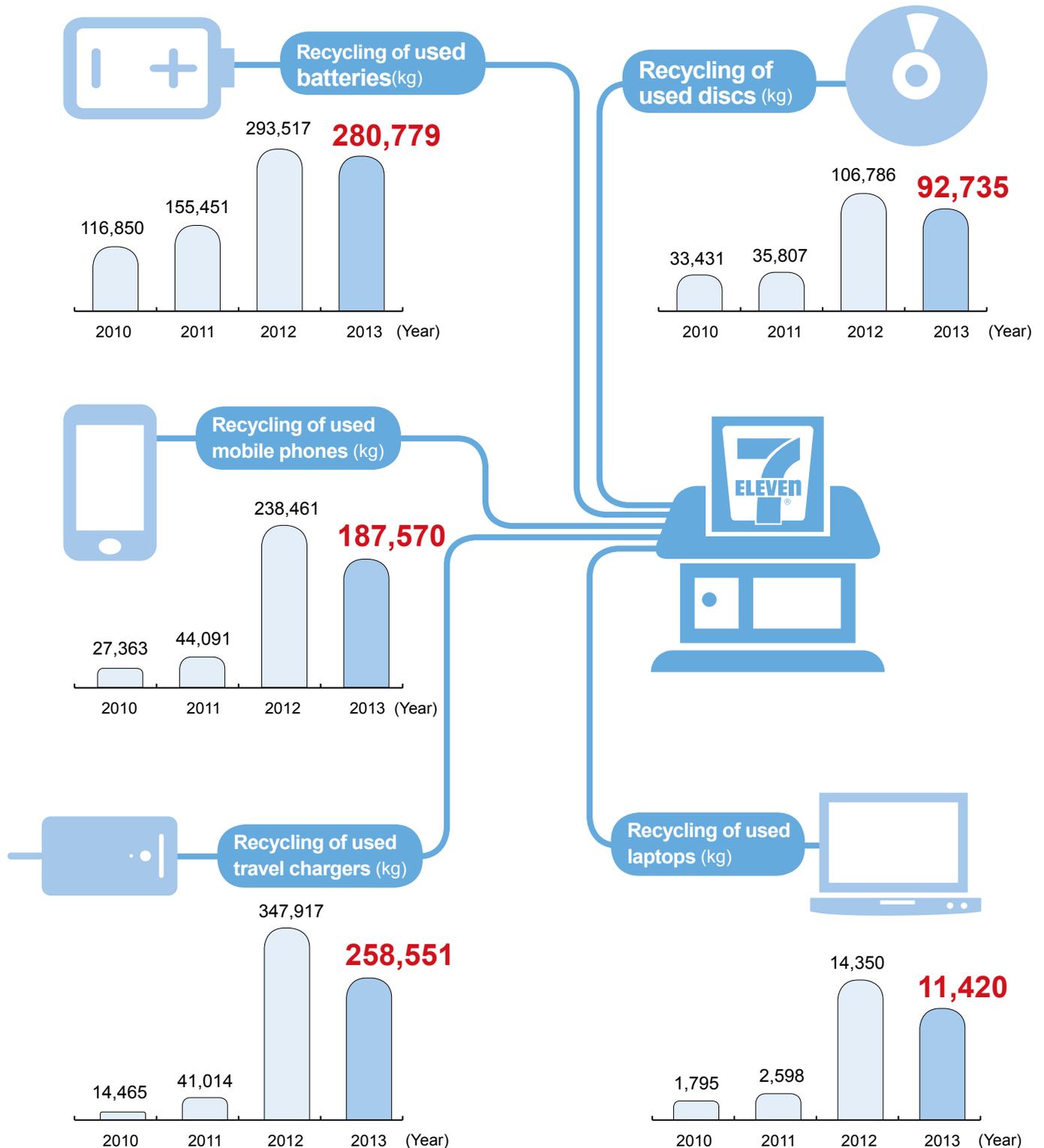
In the current situation where the resources are limited, population and material demands are still growing. Having a great deal of influence on Taiwanese people's lives, we realize that if we have the ability to subtly affect everyone do friendly things for that planet, it will maximize the benefits of environment protection. So we have a cross-sectorial "resource recovery group" to completely plan the overall process of recycling, making the concepts of "convenience" and "recycling" effectively combined and making recycling as convenient as shopping. This also makes the recycling business as an important business policy in constructing the largest and most convenient platform for environmental protection and recycling in Taiwan.

Four years ago, we first created the mechanism of "exchanging recyclable items for cash" to construct the largest recycling resource network in the world. In addition to the fixed recycling of waste packaging containers, such as PET bottles and aluminum foil packets, from 2010 7-ELEVEN stores, we have added the recycling

of used batteries, laptops, discs, mobile phones and travel chargers, considering the high replacement rate for IT products and gadgets, and put forward the program of exchanging coupons for merchandise. The special recycling bags with airtight adhesive design are used for the recycling of used batteries and discs; heavy-duty damage-resistant bags were specially developed for used laptops and mobile phones and given to professional qualified recyclers to deal with, for the purpose of the full implementation of environmental protection. Since the implementation of the platform for environmental protection and recycling, our recycling program has exceeded 2,300 tons of goods. To encourage and foster the concept of resource recovery among consumers, we held two sessions



of activities wherein people are given coupons double the exchange for recyclable items in 2012 and held a similar ones in conjunction with the international environmental festival in 2013 to encourage people to take part in recycling activities effectively and make the environmental protection more of life. With this activity, the recycling quantity of mobile phones especially surpassed that of the major mobile phone distributors' recycling programs. This recycling amount shows the success of 7-ELEVEN in its efforts to make the people of Taiwan get used to the idea of going to their store for resource recycling. More and more people are willing to contribute to environmental protection, reduce the consumption of the earth's resources, and create a better future for the next generation.



Note: The number of recycling voucher activities organized in 2012 is more than that in 2013, so the amount of recovery is relatively higher



## Yongjiu Shop, Shilin District, Taipei City (Residential-type district)

### Growth in management/ Share of practice tips in improvements:

**Target customer group** Surrounding residents and office workers of middle and small-sized enterprises nearby

**Executive motivation** Through competition and rewards program, the public is encouraged to recycle resources and the notion of environmental protection is instilled in them.

### Key methods

- 1 Reason:** At present, humans have a rapid rate of consumption of the earth's resources and instilling environmental protection awareness in the people is an urgent concern. Using the company's resources, recycling programs and competitions are held to educate the public of the benefits of resource recycling and what it can do for the environment.
- 2 Communication:** One week before the event, a POP is posted on the front of the store's display window and the borough chief is committed to assist in announcing and giving out the DM within the surrounding business district.
- 3 Guidance:** The selection of prizes should consider the environmental concept as the theme, which could help to improve the people's concept of environmental protection.
  - ① Hanging filter coffee: It is designed to brew by itself and reuse the cups
  - ② Kiwi fruit: It is suggested to be taken everyday for intra-individual environmental protection
  - ③ Coffee tumbler: It is suggested to bring one's own cup to the shop to reduce the usage rate of the dixie cup
- 4 Execution:** The customers are enticed to come to the event through the prizes and the benefits of recycling were explained during the program.

### Benefit

On that day, 15 mobile phones, 30 kilograms of battery and optical disk, 89 chargers and 32 kilograms of PET bottles and iron or aluminum cans were collected for recycling.



Environment Protection  
Activity of Excellent Shops

| Excellent Management |



## Wuxun Shop, Anle District, Keelung City (Industrial and Artery Trade Zone)

### Growth in management/ Share of practice tips in improvements:

**Target customer group** Customers within the trade zone.

**Executive motivation** The theme of the activity is Guarding the Earth, Protecting the Environment through Recycling. By doing that to advocate the response to environment protection concept.

#### Key methods

- 1 **Reason:** Organize small activities within the trade zone to interact with the customers and publicize the importance of recycling resources.
- 2 **Communication:** The theme of the activity is Guarding the Earth, Protecting the Environment through Recycling. By doing that to advocate the response to environment protection concept.
- 3 **Guidance:** The activity is scheduled to be held on July 16th. POPs will be put up to inform the customers beforehand.
- 4 **Execution:** On the day of the activity, anyone who can offer 0.5kg recyclable products can get a wonderful delicacy besides cash in exchange for their items. The recyclable products include used batteries, CDs, electroprobe, cellphone seat charger and home charger.

#### Benefits

On that day, the activity saw 200 meals served and attracted about 100 customers.

As for the recycling of the package for its own merchandise, recycling operations of empty milk bottles is adopted by PCSC. From August 2009 to the end of 2013, the weight of empty bottles recycled by the retail stores reached to about 2325.5t.

In order to create a friendlier recycling environment, it's predicted that the future dustbin and recycle bin will be made of stainless steel to be convenient to clean and maintain sanitation. At the same time, the height of the recycling board will be lowered to make it convenient for the customers. With the aid of the placard in the retail store, customers are invited to maintain cleanliness and tidiness. Additionally, recyclable resources and garbage classification will be more precisely implemented.





3.2

# Energy Conservation and Reduction of Greenhouse Gas Emissions

The headquarters is implementing energy conservation and carbon emissions reduction.

In order to reach the set goal of energy conservation and carbon emissions reduction, we simultaneously implemented the energy conservation and carbon emission reduction plan in the PCSC headquarters focusing on the improvement of hardware efficiency and the cultivation of employee awareness. First, this plan starts from the review and evaluation of the existing equipment to determine the deterioration and service condition of the equipment in the headquarters. The improvement focuses on three aspects including the electric system, office air conditioning system and lighting equipment. Energy saving slogans shall be put up in areas with high traffic inside the building. Equipment efficiency will be promoted through regular routine inspection.

 <b>Electricity Saving</b>	 <b>Water Saving</b>	 <b>Paper Saving</b>
<p><b>Measures:</b></p> <ol style="list-style-type: none"> <li>1.Set on-off time of air conditioning system and water dispenser.</li> <li>2.Replace T8 tube in the office area with T5 tube.</li> <li>3.Change contractual electric capacity of some floors.</li> </ol>	<p><b>Measures:</b></p> <ol style="list-style-type: none"> <li>1.Water conservation POP is put up near the water access area of each floor to call on colleagues to implement water conservation.</li> <li>2.Water flow of each faucet is adjusted to 50ml/s. Installed water collector.</li> <li>3.Put PET bottles filled with water into the toilet's water storage tank.</li> </ol>	<p><b>Measures:</b></p> <ol style="list-style-type: none"> <li>1.Advocated presetting the printer to black and white printing.</li> <li>2.Introduced Scan to mail and personal profile print.</li> <li>3.The A4 printing paper passes the Forest Stewardship Council Identification and Carbon Footprint Certification</li> </ol>
<p><b>Performance:</b>The total electricity consumption for 2013 is 1,418,098 kilowatts. Compared with 2012, 100,862 kilowatts were saved, which equals to the reduction of 2631kg carbon emission.</p> <p><b>143.6kilowatt is saved per person a year.</b></p>	<p><b>Performance:</b>5,268 kilowatts water have been saved since 2013. 596 kilowatts water were saved compared with 2012, which equals to the reduction of 93kg of carbon emission.</p> <p><b>0.85kilowatts water is saved per person a year.</b></p>	<p><b>Performance:</b>The annual paper cost in 2013 was \$NT 187,818 , 16.33% reduction compared with that in 2012. This equals to a savings of 333,200 pieces of A4 paper, which means 111 20-year old trees have been saved.<sup>1</sup></p> <p><b>475pieces of paper are saved per person a year.</b></p>

<sup>1</sup> Reference Forest Service Bulletin data, a 20-year-old trees, depending on species, one can absorb about 11 to 18 kg of carbon dioxide

## E-paper

In order to support the concept of green enterprise and promote the efficiency of cross-unit communication, President Chain Store entrusted Microsoft Taiwan Branch to especially design the electronic document system which was put into use in 2013. The electronic document system integrates seven official document templates including petition, liaison list, notification and amendment petition, external mailing, meeting record and the form to deal with franchising contract violation (rules). Additionally, the system also designs the same format and column with the paper version to help the users achieve seamless integration. The users can add and trace a document and check their to-do list in the electronic documents system on communication platform. The system will also make use of the internal Outlook mailbox to deliver the to-do list and overcome the traditional document's shortages including inability to check the delivering process, document loss and even repeat delivery. This can demonstrate our active actions to implement environment protection by efficiently managing the delivery process, saving operating time and promoting work efficiency.

## Retail stores make efforts in energy saving and reducing carbon emissions

As the issue of global climate change is gradually warming and with the price increase policy for both oil and electricity, we realize that energy conservation and carbon reduction is not only a key task that world-class enterprises should initiate and take the lead for, but also an important management topic for discussion which needs to be operated sustainably. The natural disasters caused by climate change may increase the operational risks of a company, while the growing price of electricity is expected to result alongside this rise in operating costs. So we set the retail stores which are distributed most widely and have the greatest impact as the starting point to implement the program from seven main aspects, such as electricity management, lighting design, air-conditioning planning, refrigeration equipment improvement, building materials selection, construction method improvement and water savings and conservation. With the approval of the Equipment Purchasing Committee, we fund for the upgrade into energy-efficient equipment, cooperation with the government, ITRI and related academic institutions to enhance the energy-saving efficiency and reduce operating costs of retail sales outlets, and expect to achieve a sustainable business model.

Up to 2013, the specific energy-saving measures were continuously implemented including setting the operation time of the Slurpee machine according to the season, using the frequency converter to reduce the energy consumption of the refrigerator, adoption of environment friendly T5 modulator tubes for store illumination and open-style refrigerator for new retail stores, the use of LED in refrigerators and modulator tubes for chandeliers, the introduction of natural light to change the lighting time of the modulator tube near the showcase, cutting the illumination to reduce the use of modulator tubes, as well as reducing the nighttime lighting length of the signboard. It is estimated that the electricity more than 85 million kWh of electricity could be saved sustainably per year in the future which represents a decrease of 44,370 metric tons of carbon emissions, and an electric charge of about NT \$ 200 million or more is estimated to be saved.

### The Main Energy-saving Programs Implemented and its Benefits

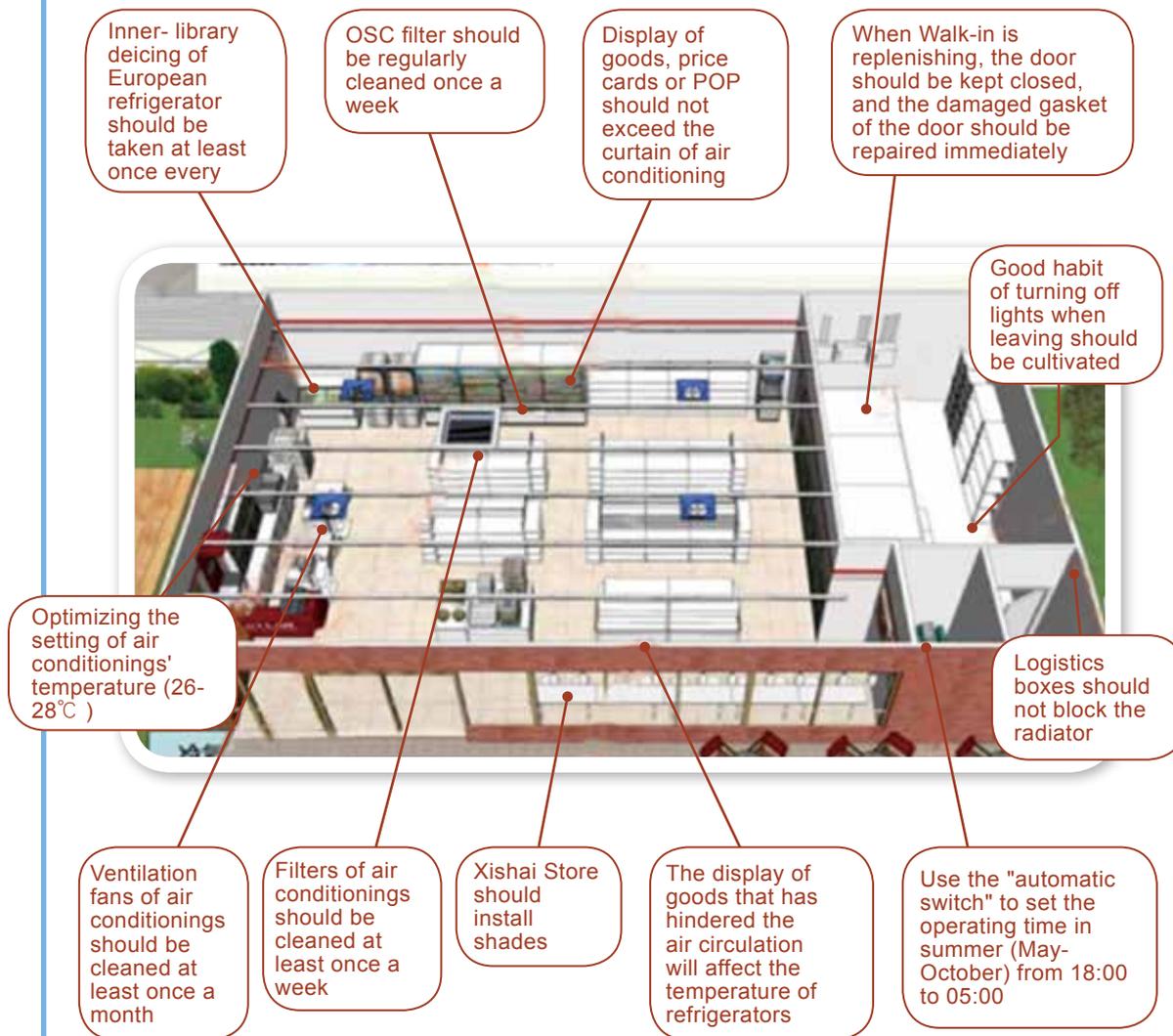
Implemented Items	Investment Amount	Decrement Benefit
Circulation fans are installed on air conditioning systems of retail stores	1,615 cool air circulation fans were introduced Investment of NT \$3.88 million	Electricity of about 2.34 million kWh/year is saved
Power saver	Implemented in 285 stores Investment of NT \$23.94 million	Electricity of about 4.48 million kWh/year is saved
Steel counter	560 sets were introduced Investment of NT \$84 million	About 2800 trees were saved. If the wooden mode is adopted for counters, in addition to the need to cut down trees, the life span is also short and cannot be recycled; whereas the steel counters are of long service life and recyclable
Air conditioning of frequency conversion	1,708 air conditioners of frequency conversion were introduced Investment of NT \$153.72 million	Electricity of about 8.12 million kWh/year is saved
Frequency converters are installed on refrigerators without inverter	1,762 sets of frequency converters were introduced Investment of NT \$54.06 million	Electricity of about 4.97 million kWh/year is saved
T5 lamps and lanterns in retail stores	13,560 sets were introduced in all stores	Electricity of about 39.05 million kWh/year is saved
Off Mode/Sleep Mode for Slurpee machines during slack season	Implemented in 3,203 stores	If the machine operations are halted for maintenance during off-season of four months or made to sleep for six hours a day, electricity savings can reach to about 6.27 million kWh annually
The number of signboard lights is reduced	Implemented in 2,734 stores The reduction in the number of modulator tubes used is 51,759	Electricity of about 17.16 million kWh/year is saved
Plug-in inverter of freezer	Implemented in 1,200 stores Investment of NT \$32.40 million	Electricity of about 1.04 million kWh/year is saved
The illumination of the refrigeration units is changed to LED	Implemented in 2,500 stores Investment of NT \$49.00 million	Electricity of about 4.79 million kWh/year is saved

Note: The benefits assessment of the power reduction measures were measured through a device or obtained through the projects evaluation of energy efficiency certification by specialists, scholars and professional units.



## Self-inspection of energy conservation in retail stores

We also conduct self-testing of energy savings in our retail outlets, including air-conditioning systems, circulating fans, lighting, freezing and refrigeration units, signboards, showcases and other equipment, based on standard operating procedures. We also confirm such savings against our electricity bills, thus ensuring that carbon reduction is fully implemented.



As for the electro-intensity of retail stores, the turnover created by using 1 kWh of electricity in 2013 is NT \$159, an increase of about 4% compared with NT \$153 in 2012, which represents that we have made good use of energy to create greater operating efficiency. In addition, we work with the Architecture and Building Research Institute to transact site interrogation and examination, diagnostic assessment and energy conversation of the energy used in convenience stores to obtain the classification and certification for being green convenience stores. By the end of 2013, 3,245 retail outlets have achieved the highest 3-star level, accounting for 66% of all retail outlets; 1,505 stores have achieved 2-star, accounting for 31%; and 42 stores have achieved 1-star, accounting for only 1%. There are more than 200 other stores waiting for certification.

## Encyclopedia

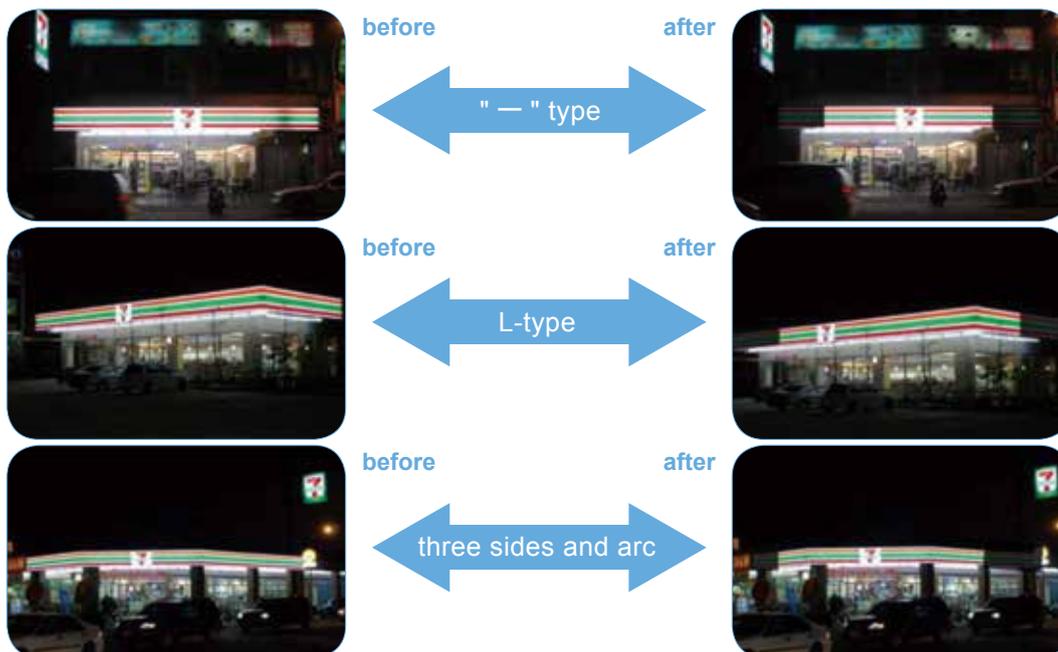
### Classification and certification of green convenience stores

"Classification and Certification of Green Convenience Stores" is performed by the Architecture and Building Research Institute who hopes to, through a classification system, promote the energy-saving improvements of convenience stores, drive consumers to pay attention to the concept of energy conservation and enhance the benefits of energy saving and carbon reduction. The authentication method of green convenience stores were mainly assessed from six aspects such as freezing and refrigeration equipment, air conditioning equipment, illumination lamps and lighting systems and electricity utilization, building space, electricity management and usage management of each convenience store. For those qualified, the appropriate level certification will be awarded. The certification is divided into three levels (1-star ~ 3-star), the higher the level, the better the energy efficiency it represents.



### The plan of reducing the luminance / quantity of signboards

The plan of reducing the luminance / quantity of signboards of 7-ELEVEN has started in July 2012. Under the premise that the operation of the retail stores and the recognizability at night are not to be affected, we planned the approach to reduce the length of the nighttime lighting according to different horizontal signboards of " — " type, L-type, three sides and arc. By allowing the brightness to extend outward from the center of the logo, a total of more than 100,000 modulator tubes have been removed; and new retail stores have implemented the reduction of lights in the store's outdoor signage. Also, by dividing the signage into partitions and reducing the number of partitions lighted at night in accordance with the store's area and characteristics, and setting up an independent switch that allows it to be turned on and off manually, electricity savings have been more efficient. From the completion of the construction work in October 2012 to the end of 2013, a total electricity of 20,025,102 kWh has been saved; the average amount of electricity charge each store has saved is NT \$997 per month. The achievements in electricity savings are obvious to all and the retail stores that have not yet implemented the plan will continue to be analyzed in the future.





## Linkou Yongli ECO-STORE

The model retail store of 7-ELEVEN in terms of energy savings and carbon emission reduction is the Linkou Yongli store, as it is the first to combine the international trend of photovoltaic building in Taiwan and uses solar energy, wind power and other renewable ECO energy concept into gas stations to provide consumers new refueling and shopping experience. In addition to the use of LED lights on the signboards, it also adopts the ceiling fans and the setting up of rainwater catchment systems in stores. The capacity of a solar photovoltaic is 9.52kWp with an annual generation capacity of 10,425 kWh, representing a decrease of 5.44 tons of carbon emissions. Later we will follow and refer to the practices of Yongli stores, taking into consideration the geographical and environmental conditions of each store, to implement renewable energy facilities.



## Energy saving and carbon emissions reduction for Logistics related enterprises

### Marketing of UPCC

After being given the Excellent Award for blue-chip companies in energy savings by the Ministry of Economy in 2010, UPCC has continued to annually push forward different energy-saving measures to contribute to environmental protection. Take Yingge Distribution Center (DC), UPCC as an example, with the lights in the refrigeration and freezer units replaced in May 2013 to the end of year, a total of 67,888 kWh of electricity has been saved and carbon emissions have been reduced by 35,437 kilogram.

Yingge DC (since May)	Conversion into energy-saving LED lights	Amount of electricity savings (kWh)	Amount of carbon emissions reduced (kg)
Refrigerator	244	48,253	25,188
Freezer	179	19,635	10,249
Subtotal		67,888	35,437



Refrigerator E



Refrigerator D

### Lights in the refrigeration unit:

Since May 2013, the Yingge Distribution Center's refrigeration unit lights have to be all replaced with 244 energy-saving LED lights; and by the end of 2013, around 48,253 kWh of electricity has been saved and carbon emissions have been reduced by 25,188 kg.

### Freezer lights:

Since May 2013, the Yingge Distribution Center's freezer lights have to be all replaced with 179 energy-saving LED lights; and by the end of 2013, around 19,635 kWh of electricity has been saved and carbon emissions have been reduced by 10,249 kg.



Refrigerator B

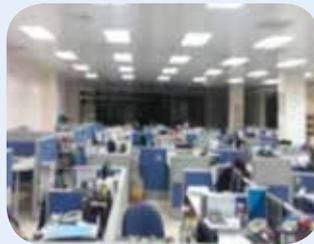


Refrigerator C

**Marketing of Wisdom Distribution Service Corporation**

The total electricity consumption of Wisdom Distribution Service Corporation in 2013 is 60,516 kWh less than that in 2012, with a total electricity savings of 1.9%. The representative energy-saving measures implemented in 2013 include the replacement of lights in the offices with energy-saving ones and the installation of light detection controller on vehicles and docks, etc. The total electricity saved from all the projects is 36,354 kWh, reducing the carbon emissions by 18,976 kg.

Energy-saving measures of Wisdom Distribution Service Corporation	Amount of electricity savings (kWh)	Amount of carbon emissions reduced (kg)
Replacement of lights in offices with energy-saving ones	5,700	2,975
Installation of light detection controller on vehicles and docks	4,632	2,418
Off-peak charging	1,830	955
Indoor temperature control	24,192	12,628
Subtotal	36,354	18,976



**Office lighting:**

Since August, 2013, all lighting in the offices have been replaced with 198 energy-saving lights; and by the end of 2013, around 5,700 kWh of electricity has been saved and carbon emissions have been reduced by 2,975 kg.

**Light detection controller on vehicles and docks:**

Since May 2013, 43 light detection automatic controllers have been installed on vehicles and docks to strengthen the management and control of lights, achieve the benefits of controlling the illumination and reduce unnecessary waste; and by the end of 2013, 4,632 kWh of electricity has been saved and carbon emissions have been reduced by 2,418 kg.



**Off-peak charging:**

Since December 2013, electrical equipment are controlled by timer to conduct off-peak charging to satisfy the operational requirements of site plants; and by the end of 2013, around 1,830 kWh of electricity has been saved and carbon emissions have been reduced by 955 kg.

**Indoor temperature control:**

Since January 2013, the temperature setting of indoor air conditioning is controlled at 27°C ; thus saving 24,192 kWh of electricity in 2013 and carbon emissions have been reduced by 12,628 kg.



## Marketing of Retail Support International

The total electricity consumption of Retail Support International in 2013 compared with that of the same period in 2012 reduces 320,912 kWh, a decline of 2.9%. Retail Support International marketing continues to promote energy-saving measures, including the installation of LED lamps, the addition of ventilation in air-conditioning places and the adjustment for the capacity of electricity contract. The total electricity saved by all projects is 257,984 kWh, reducing the carbon emissions by 134,667 kg.

Energy-saving measures of Retail Support International	Amount of electricity savings (kWh)	Amount of carbon emissions reduced (kg)
Power improvements	167,909	87,648
Lighting improvements	85,083	44,413
Air-conditioning improvements	4,992	2,605
Subtotal	257,984	134,667

### Power improvements:

Analysis and adjustment of contract requirements: the amount of electricity required in Zhongli plant is analyzed. The contract requirement is downgraded from 1,275 KW to 1,258KW, and demand for electricity is managed pointedly. By the end of 2013, around 167,909 kWh of electricity has been saved and carbon emissions have been reduced by 87,648 kg.

### Economic measures designed for lighting:

The measures are described below. By the end of 2013, around 85,083 kWh of electricity has been saved and carbon emissions have been reduced by 44,413 kg.

- ▶ The sunlight is used as a natural light source to save the power consumption of interior lighting.
- ▶ LED lightings are used in newly added areas and the fluorescent lamps are gradually replaced.
- ▶ Fluorescent lamps: electronic ballast should be matched with high-frequency lamps such as T8 and T5.
- ▶ Recessed lights (down lamps), emergency lighting, indicator lights of refuge are changed to LED type.
- ▶ The design of walls and ceilings makes use of white or light-colored series to increase the effect of light reflection.



### Economic measures designed for the air conditioning system:

The measures are described below. In 2013, about 4,992 kWh of electricity has been saved and carbon emissions have been reduced by 2,605 kg.

- ▶ Large work area: the capacity of the refrigerator needs to be up to 100 tons with the main engine of water-cooled chiller planned
  - ▶ Office areas or small work area: the capacity of the refrigerator needs to be lower than 100 tons with the main engine of air-cooled inverter planned
  - ▶ Selection of the air conditioner with high energy efficiency ratio (EER): the higher the EER value, the more electricity the air conditioners save. Generally, each increase of 0.1 in EER value allows the air conditioner to save 4% of electricity
  - ▶ The use of auxiliary ventilation in offices can effectively reduce the degree of air-conditioning to a certain level.

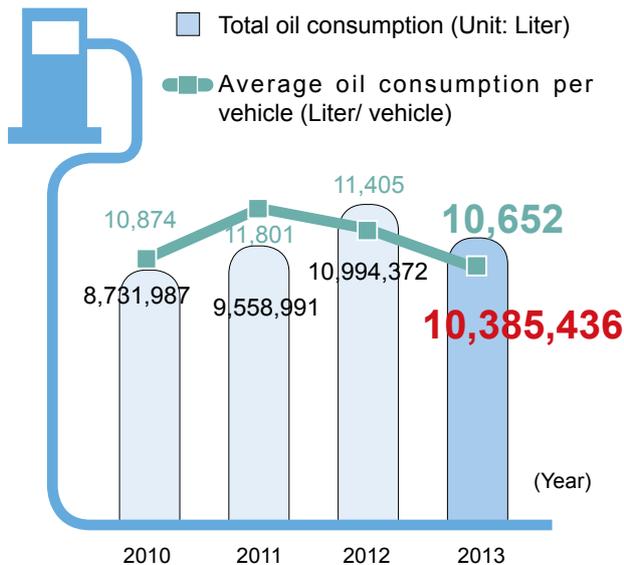
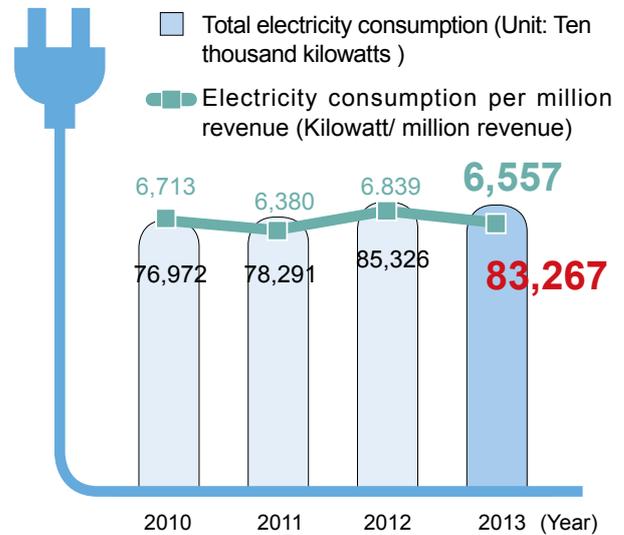


## Energy Consumption and Greenhouse Gas Emission Inventory

PCSC attracts 7 million people all over Taiwan every day. Therefore, room temperature, lighting and other equipment shall be kept functioning well to ensure the customers are comfortable when they shop. The total electricity consumption amount for 2013 is 8.3267 billion kilowatts, of which the shops' electricity consumption takes up 99.8%.

In 2013, 396 new shops were opened and 164 shops were renovated, an increase of 70 shops compared with 2012. Therefore, due to the increase in shops and equipment, the total electricity consumption increased. As for the electricity-intensive part, with one million of business volume as base, every million of business volume cost 6,557 kilowatts of electricity in 2013, a decrease of 4.12% compared to that of 2012.

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With the increase in 7-ELEVEN shops and service items, the distribution volume also increases. In order to deliver the latest commodity to shops all over Taipei to offer to the public, the 7-ELEVEN logistics army races with time day and night. Each day, the Logistics and Marketing Management Department is responsible for arranging and dispatching a motorcade consisting of logistics companies including Retail, PCSC and Wisdom. The motorcade travels all over Taiwan to offer comprehensive stocking and tally services; jointly deliver room temperature goods, refrigerated goods, chilled goods, frozen goods, publications and e-commerce goods. About 1000 logistic vehicles from Jiasheng Transportation all over Taiwan set out from the 29 logistic centers located in the north, middle, south and east of Taiwan to deliver the goods to each shop. The Earth's circumference is about 40000 km, while the total distribution distance of 7-ELEVEN logistics vehicles is about 126,828 km circling the earth three times. In 2013, the total oil consumption (diesel) used in distribution is 10,385,436 liters.

Each day, 7-ELEVEN logistics vehicles frequently deliver the goods, therefore fuel burning becomes the main energy consumption. The indirect energy consumption source is electricity. We undergo greenhouse gas inventory according to GHG Protocol and gradually trace greenhouse gas emissions within the boundary year by year. According to the inventory results of 2011 and 2012, we continuously improve the accuracy of the data collected. Except for the shops that cannot get the actual volume of electricity usage, more than 90% accurate data can be mastered.

PCSC greenhouse gas inventory cooperates with national policies to renew of electricity carbon emission coefficient over the years. It covers the past years and renews the greenhouse gas emission amount over the years. In 2013, the total amount of greenhouse gas inventory is 555,543t carbon emission. Category 2 emissions caused by power usage are the main source taking up 78.2%. Shop power usage takes up 99.8% of category 2 emission. While, direct emission of category 1 emission takes up 16.9% of which the main sources are refrigeration, cold storage and air conditioning

<sup>2</sup>Statistics of the electricity consumption amount including the headquarters and shops.



equipment in the shops. Category 3 emission caused by logistics related to shops takes up 4.9%. In 2013, the amount of greenhouse gas emission per million revenue is 4.37t of carbon emission. 10,914t of carbon emission increased compared with the total amount of greenhouse gas emission of 2012. This is mainly because of the increase in electricity and refrigerant caused by the expansion of shops and purchase of new cooling equipment.

Under the Generally Accepted Accounting Principles of the Republic of China, in 2012, the amount of PCSC's greenhouse gas emission per million revenue reduced by 3.8% compared with the base year 2010. And it gradually nears the target of 5%. Because of the changes of ROC GAAP and International Financial Reporting Standards, since the beginning date of fiscal year of 2013, PCSC prepares a financial report according to the IFRSs accepted by the Financial Supervisory Commission. This makes the standard of 2013 report different from the ROC GAAP used in the base year, so the actual yield rate cannot be compared and estimated. In future, the base year may be changed or sought for consistent comparison basis in terms of reduction performance.

### Category 1

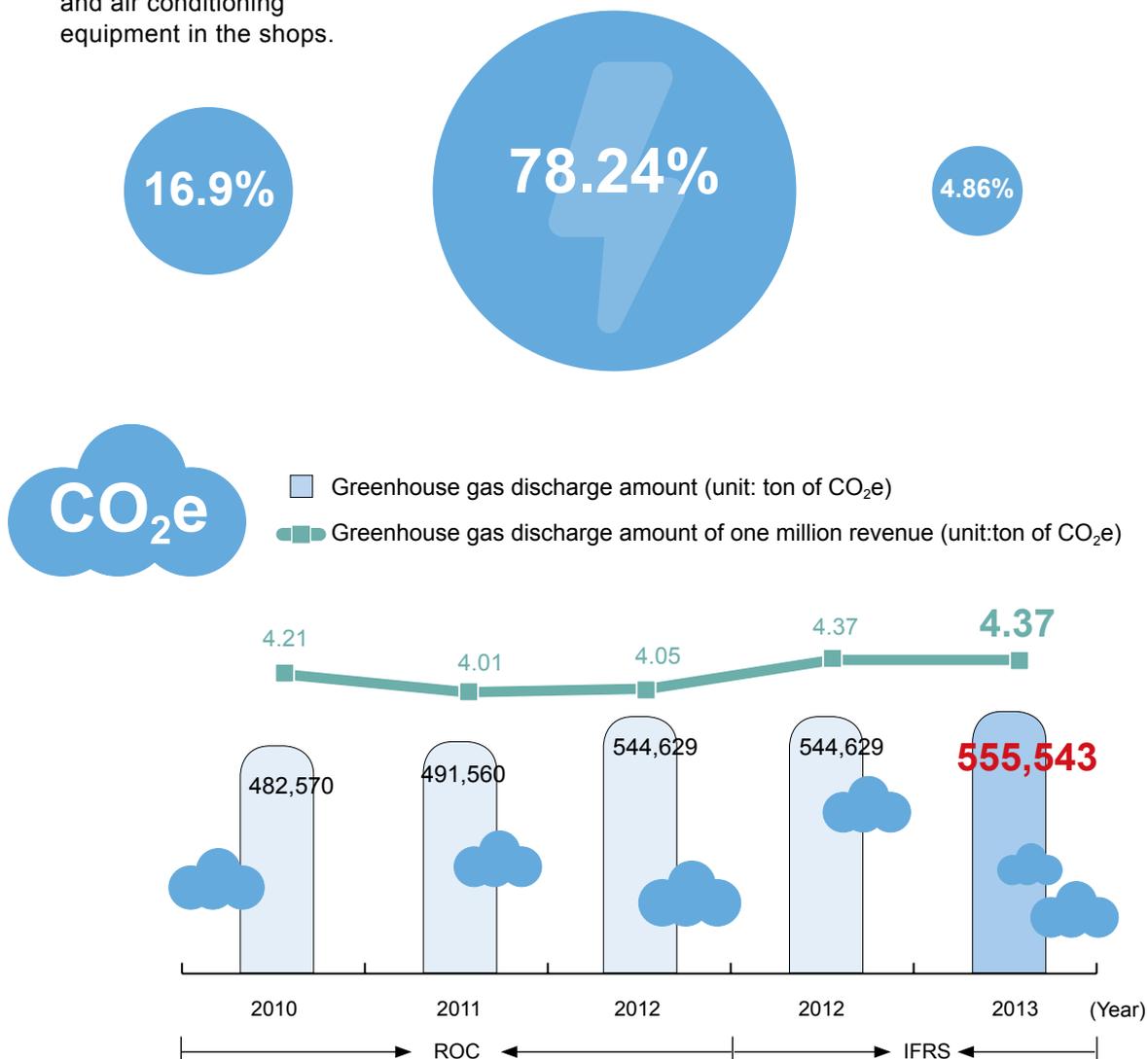
Direct emission mainly caused by the freon escape from the refrigeration, cold storage and air conditioning equipment in the shops.

### Category 2

The main source of Category 2 emission is electricity consumption.

### Category 3

The relevant shop logistics.

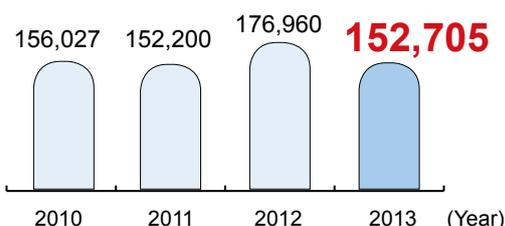


### 3.3 Green Lifestyle

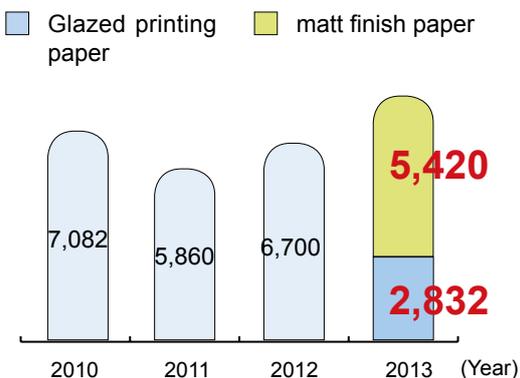
#### Green management and purchase

We continue to insist on reducing the environmental burden brought by our company through green purchase. Examples are as follows: the freezing hang tag and plug-in card of the display cabinet used in retailer shops are made of green stone paper with stone material as its materials; most of the magazine paper is green wood-free paper and heat transfer printing paper certified by the Forest Stewardship Council. We hope that the environmental impact generated in the supply chain could be reduced through green purchasing.

**Paper consumption** (Unit: Kg)



**Amount of the paper used** (unit: kg)



#### Encyclopedia

##### Green wood-free paper

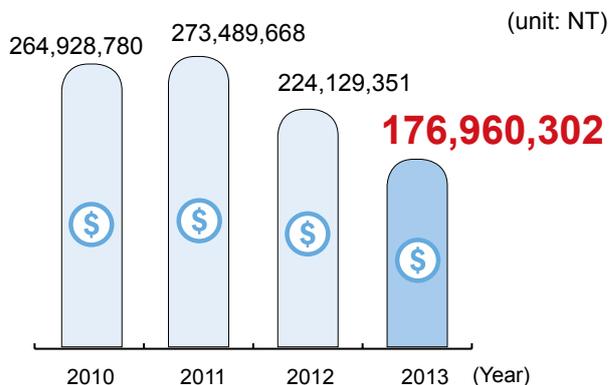
Green wood-free paper is the printing paper made from more than 50% recycled pulp. Forest resources can be saved and the pollution produced in the process of making paper can be reduced by making use of recycled pulp. Additionally, green wood-free paper is made of the paper through careful selection with the highest cleanliness or even made of paper without being printed. In consequence, it has the characteristics of less spots and high cleanliness.

##### FSC Certification

Currently, the mark of the non-profit international organization FSC (Forest Stewardship Council) is the generally accepted highest standard for sustainable purchase wood fiber and is the measurement whether the company undergoes responsible forestry management. The FSC mark with much credibility gains support from all sectors including many non-governmental organizations and business corporations. They all advocate the spirit of green consumption and offer mechanisms and standards to ensure the sustainable development of resources.



**Amount of money for Green Procurement**



In 2013, PCSC got the Advanced Green Purchase Company again issued by the Environmental Protection Administration and had remained NO.1 in the retail industry in terms of the company's purchase amount issued by the Environmental Protection Administration for four successive years, which encourages us to move towards the sustainable path of green purchase. In 2013, the amount of green products purchasing reached NT \$176,960,302 of New Taiwan currency. It relatively decreased compared with that of 2012, mainly because of the reduction in the purchase of expensive energy-saving electronic products or equipment.



At the end of 2011, in order to cope with the government policies, PCSC became the national first convenience store chain to introduce electronic invoice. Compared with the past, there is no need to estimate and print paper invoice in advance after the introduction of the paper electronic invoice. 78 million pieces of traditional scrapped paper invoice can be saved per year, which weighs 4,041 kilograms. Due to the reduction of cost in scrapped blank invoice, about NT \$16 million is saved per year. In addition, as for the selection of paper supply, the set material requirement of BPA-free, water resistant, oil resistant, heat resistant, light resistant and wet resistant shall be met. In case of supply deficiency, a capable printing plant must be sought and a backup printing plant must be prepared. Combined with icash and EasyCard's e-Wallet, the customer is encouraged not to print the invoice, which can save 60% of the sheet quantity.

In 2012, once again cooperating with the fiscal policy issued by the Ministry of Finance, PCSC stores introduced new paper electronic invoice. For the public's ease of storage, 5.7cm-width narrow version paper electronic invoice was comprehensively introduced with the 8.0cm-width wide version paper electronic invoice which was promoted in 2012 being replaced. Besides about 11.8 million cost being saved, about 30.4% sheet quantity was saved.

For the customers' convenience in inquiring about transaction information and checking the account, 7-ELEVEN considerably decides to keep the transaction details to make it convenient for the customers to check after repeated negotiation with the relevant institutions of the Ministry of Finance. In future, besides the electronic invoice certification, customers can inquire transaction details list connected with the invoice with a trim line in the middle when they check out in 7-ELEVEN counters. Besides the transaction details list printed along with the invoice, transaction details can be checked through another 3 channels: scanning the QR CODE on the new invoice via app on cell phone, visiting electronic invoice website of the Ministry of Finance and logging in the invoice number to browse transaction information; via the ibon convenient life station in 7-ELEVEN to inquire invoice transaction information. Electronic invoicing saves the transaction information in the Cloud System, so in future, customers will never worry about losing and damaging the invoice or missing the time to receive the award. Moreover, according to the introduction conditions, 7-ELEVEN will evaluate the economic printing of transaction details and consider planning a marketing promotional event to encourage customers to pay via their cell phone so as to achieve the benefits of a paperless environment.

However, we also devote ourselves to the reduction of paper quantity used in POP advertising in shops. Furthermore, an annual POP reduction target of 130 pieces every period is set. By reducing the floor shelf of paper structure, the current annual average POP quantity is 110 pieces, a 15% reduction on POP printings. In order to fully implement paper reduction, we advocated using the ichannel (electronic advertising screen) since 2012. Up to 2013, there were 2000 shops (40% of the total shops) that have introduced the ichannel. 3000 shops (60% of the total shops) were forecasted to introduce ichannel. After the comprehensive introduction of ichannel, it's estimated that 2.6 million pieces of paper are being saved annually. Promotional text and advertising are jointly charged by the Quality Assurance and Legal Service Department to ensure the advertisements abide by norms both in law and self-regulation standards.

And we also try hard to reduce the amount of pop posters of each shop, and set the goal to reduce it to 130 posters in one year.

## Green Product

Seeing that the future lifestyle is leaning towards environmental protection and promoting a low carbon environment, PCSC volunteers to lead the public towards a sustainable lifestyle. The simplest and most direct way is to offer the green products with high quality to spread the commodity's sustainability to the consumers and promulgate the concept of environment protection to customers through marketing and certificating mark commodity.

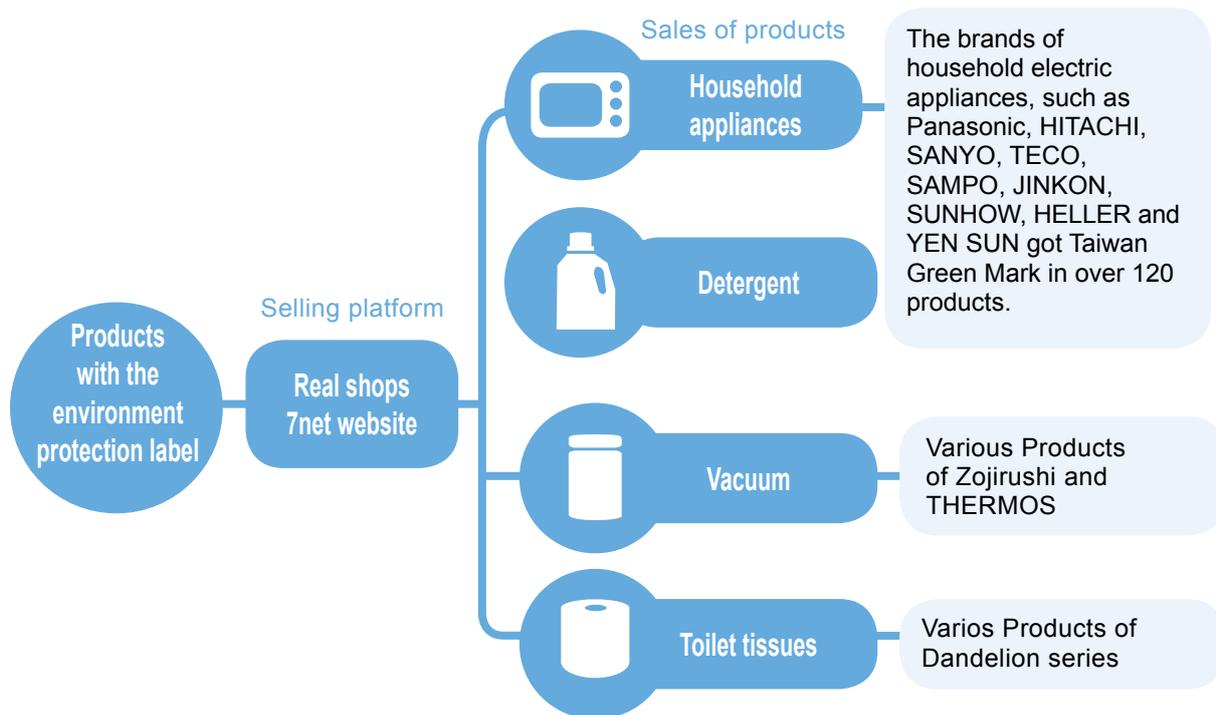
We will continue to combine environment friendly concepts with the commodity and introduce products with the green mark. The shops also offer products with Carbon Footprint certification. By combining products of these kinds into our offerings, the customers' awareness and cognition of environment and climate change can be promoted.

The virtual second floor on 7net will also continue introducing merchandise with the green mark and Carbon Footprint certification. The retail shops will release products under its own brand, 7-SELECT, with the concept of environment protection and green packaging materials, and these include LED lighting, 2.5 X extreme concentrated antibacterial detergent, 7-SELECT water series and electrical appliances with the energy efficiency mark. With the characteristics of our commodity, we hope to efficiently reduce the usage of energy and resources to make contributions to environment protection.

<sup>3</sup>The annual paper saving quantity is 26 periods/year and 20 pieces every period. It's calculated as comprehensively introduced into 5000 shops.

### Products with the Carbon Label

PCSC wheat black tea TP300, PCSC wheat milk tea TP300, PCSC wheat green tea, PCSC wheat black tea TP375, PCSC wheat black tea TP375, Minute Maid orange juice PET450, Coca Cola PET600, Coca Cola PET2000, Hey Song Sarsaparilla PET600, Hey Song green tea PET580, Shin An Farm Animal Friendly Eggs.



### Green Logistics

PCSC has long been reducing the times of distribution, building maintenance mechanism, upgrading logistics equipment to improve logistics efficiency and make remarkable achievements. Among which, the system of Diesel Vehicles Autonomous Management and Insurance Passport is a typical example. When the vehicle undergoes maintenance and repair, the system makes it clear about whether its smoke emission meets the emission standard to ensure that the vehicle can discharge the smoke normally. By doing that, it can efficiently reduce the air pollution produced by diesel vehicles and can meet the target of carbon reduction management to build a continuous low carbon living environment.

### Biodiesel Testing Project

We are also committed to the promotion of the equipment's efficiency and upgrading of logistics distribution vehicles to reduce the impact on the environment produced in the process of logistics distribution. Since 2010, in order to cooperate with government policies, we have comprehensively introduced the biodiesel B2 and gradually enhanced the usage ratio. In 2012, Jiasheng Transportation, our logistics partner, altogether with Automotive Research & Testing Center, jointly underwent biodiesel B5 testing to ensure the stability of the vehicles when the usage





ratio of bioenergy is enhanced. According to the result of a real vehicle test about black smoke and horsepower, using higher ratio biodiesel can reduce the emission load of black smoke. Taking the vehicle driving 60,000 kilometers with biodiesel B8 as an example, a mean reduction of 1% to 13.8% black smoke pollution is reached while the relevant horsepower only decreases about 3.4% to 5.24%. The relevant data shall be an important reference for the government to issue follow-up biodiesel policies.

## Hybrid Electric Vehicle Introduction Trail

At the same time that biodiesel was introduced, in 2014, we launched the hybrid electric vehicle testing project. A 6.5t room temperature vehicle and an 8.5t dual-temperature vehicle are purchased to shoulder the short distance distribution task in Taipei City. According to the previous distribution condition of Jiesheng Transportation, it's predicted that the hybrid electric vehicle can save 12% to 20% oil consumption. 120,000 to 140,000 fuel charge can be saved a year. It will take 2 to 3 years to balance the price difference between purchasing the hybrid electric vehicle and the general vehicle.



## Innovatively Create an Auxiliary Power Unit

In order to lower the burden on the environment and the residents during the process of distribution, Jiesheng Transportation set some particular shops as its "power-off shop". It means that the engine shall be turned off when the vehicle arrives at the shop to reduce the noise produced in the process of unloading. However, electricity used by the

refrigerator on the vehicle must be generated by the engine. Thus, turning off the engine will influence the operations of the refrigerator while the freshness of chilled items cannot be guaranteed. For the sake of solving such dilemma, ahead of the industry, Jiesheng Transportation invited Automotive Research & Testing Center last 2013 to offer help to create an Auxiliary Power Unit which costs about \$NT 500,000. In 2014, this equipment formally became the alternative power source of the refrigerator on the vehicle. Noise can be efficiently reduced for the engine can be surely turned off when the vehicle is loading or unloading. In future, the testing zone will be expanded to the Taipei Metropolitan Area and the concept of green logistics will be strengthened and implemented.

## Introduction of GPS/GPRS

Aside from this, Shengjie Transportation built the Digital Operation Monitoring Center and jointly created an exclusive GPS altogether with China Telecom. By using GPS/GPRS, the real-time dynamic information of each logistics vehicle, road and commodity can be mastered and the dynamic management of each logistics vehicles can be achieved. Meanwhile, the system also focuses on the further reduction of oil consumption, omnidistance temperature monitoring and safe driving to form a safer and correct driving habit in the delivery personnel. On this basis, the three objectives, including vehicle real-time monitoring, safe energy saving control and working quality control can be achieved. Currently, except for the freezer car and refrigerator car, all other cars can introduce GPS. The installation rate reached 65.84%. 100% installation rate was targeted in 2014. Additionally, optimization performance can be realized through common distribution and integration mechanism and improving driving habits including lesser vehicle idling, revving up and neutral position skidding. In 2013, for the shop's distribution business, a total of 1.4 million kg carbon emission is reduced. By doing that, PCSC aims to call for the Taiwan logistics industry to step into a new milestone that features green logistics.



## Education and Training to Improving Driving Habits

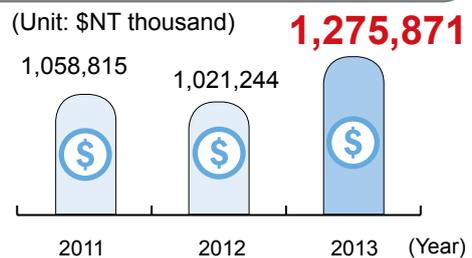
Besides equipment upgrading, we also believe that the driver himself is of core importance to

implement green logistics. Therefore, we hold PCSC Elite Logistician Award Meeting to encourage logisticians to form a good service image and thank them for the contribution they have made. In 2013, five honorable logisticians and 61 elite logisticians were elected from more than one thousand logisticians from logistics companies including Jiasheng, Retail, PCSC and Wisdom. It's difficult to get this award for the elite logistician have to meet the following basic requirements: served the company for more than a year; pass the certification of the distribution company; credits meet a certain level; no consumer complaint and major violation event for the full year. In order to further improve the elite logistician's professional quality, PCSC arranges honorable logisticians and elite logisticians to join the Energy Conservation Driving Training Plan held by the Automotive Research & Testing Center. In this plan, the logisticians have to accept a total of 236 hours of training on safe energy conservation and safe driving skills. Through the theory teaching and actual driving test, these logisticians learned the relationship between oil consumption and driving styles including idling, speeding up, gear shifting. Logisticians' driving habits were efficiently improved.

## Green Accounting

Adhere to the original intention "Careful 24-hour service, Happiness is nearby", PCSC translates the actions that promote environment protection to financial data through the green accounting system. In 2013, a total amount of \$NT 1,275,871 thousand was spent on property investment and costs used in environment protection.

### Environmental Cost Accounting



Green Accounting Project					
Classification	Item	Content	Investment (\$NT Thousand)	Cost (\$NT Thousand)	Footing (\$NT Thousand)
Commodity	Using green packaging for the products; fresh food commodity inspection	Purchase paper bento box, dishes and green packaging-PLA; No preservative and gourmet powder in fresh food commodity; pesticide residue inspection	--	526,240	526,240
Shop	Energy conservation	Purchase energy conservation equipment- power saver, cool air circulator、variable-frequency air conditioning, refrigeration/external plug-in refrigerator and T5 CFL	231,728	18,516	250,244
	Waste disposal and cleaning	Shop environment cleaning and waste disposal	--	256,808	256,808
	Lengthen the service life of construction materials and equipment	Introduce steel counters; equipment recovery and reuse	84,000	37,806	121,806
	Green purchase	Purchase energy conservation equipment and paper; advocate electronic invoicing	51,005	13,258	64,263
Social Contribution	Publicize environment information	Advocate economical and social responsibility, sponsor environment protection organizations	--	17,170	32,826
	Hold or join activities concerning environment protection and social benefits	1. Sponsor public benefit activities like Hunger 30.	--	15,656	
Internal Educational Environment	Advocate environment protection education and recycling office resources	Promote a paper saving environment, cleaning and greening environment, waste disposal	--	19,866	19,866
Distribution	Improve distribution efficiency, recycling resources	Human resources and equipment invested in recycling operations in shops	--	3,818	3,818
Total			366,733	909,138	1,275,871