

Material Issue 3 Non-Wasteful Usage of Products, Ingredients, and Energy

Approach to Material Issues

The Seven & i Group operates around 20,000 primarily retail stores throughout Japan, and deals with numerous products. We believe that reducing the energy consumption and waste material generated by the Group's business activities will make a significant contribution toward realizing a sustainable society.

At the same time, such efforts are also of great value to the Seven & i Group as they will additionally help to reduce waste, product and raw material costs, together with energy costs. We have therefore positioned elimination of waste in products, raw materials, and energy throughout the entire value chain one of our most material issues, and we are taking measures to address it.

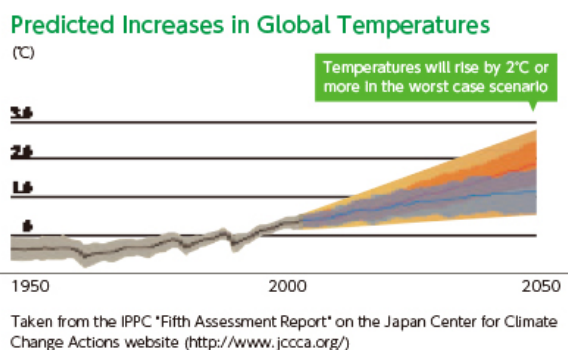
Relevant Policies

- > [Environmental Guidelines / Environmental Rules](#)
- > [Seven & i Holdings Environmental Declaration / Fundamental Policies Relating to Measures to Contribute to the Prevention of Global Warming](#)
- > [Business Partner Action Guidelines](#)

Background to Material Issues

Climate Change

Environmental issues are a global concern. Manifestations of climate change, such as rising sea levels, erratic weather, and damage to primary industries, pose serious threats to future generations. An Intergovernmental Panel on Climate Change (IPCC) report states that global warming is "beyond doubt," and if current trends continue, the worst case is that temperatures will rise by 2°C or more by 2050, with CO₂ emissions considered to be the major cause.



Food Waste

In 2014, the global amount of food aid reached approximately 3.2 million tons. The increase in the global population and abnormal weather have given rise to food shortages with one in nine people now estimated to suffer from chronic hunger. By comparison, over 17 million tons of food is wasted every year in Japan. Of this, 6.32 million tons is food loss—food that is likely to be still edible, such as half-eaten food or food that has passed its expiry date.



Promotional Framework for Material Issues

In response to this material issue, the CSR Management Committee, led by the president, and its subordinate Environmental Subcommittee, work together with the Group companies and related departments to promote initiatives to reduce CO₂ emissions and make effective use of limited resources through business activities. These activities are supervised by the Seven & i Holdings executive officer in charge of Corporate Communication.

Contribution to SDGs

In addressing these material issues, Seven & i Holdings contributes to achieving goals 4, 7, 12, 13, and 15 of the Sustainable Development Goals (SDGs) by reducing CO₂ emissions and waste of food products, and so forth.



Seven & i Holdings' Initiatives

Environmental Management

In addition to establishing a system of environmental management, Seven & i Holdings is striving to attain a proper grasp of its environmental impact through third-party audits of CO₂ emissions.

[> More](#)

Initiatives to Realize a Low-Carbon Society

Seven & i Holdings has set a target of reducing CO₂ emissions generated from store operations by 27% compared to FY2013 by FY2030, and is expanding energy conservation and the use of renewable energy, aiming at the realization of a low-carbon society with significantly reduced CO₂ emissions, a major cause of global warming.

[> More](#)

Reducing Environmental Impact in the Supply Chain

Seven & i Holdings is focusing on initiatives to reduce its own environmental impact as well as working together with its business partners to reduce environmental impact across the entire supply chain.

[> More](#)

Promoting Food Recycling

In light of the business characteristic where foods account for a large portion of sales, Seven & i Holdings is undertaking initiatives with the important themes of reduction and recycling of food waste, and has set a food recycling target of 66% by 2030.

[> More](#)

Effective Use of Resources

Seven & i Holdings is not only working to reduce waste emissions associated with store operations, but is also working with cooperation from customers and business partners to reduce container and packaging materials used for supplying products, and to reduce and recycle container and packaging materials after customers have used them.

[> More](#)

Introduction of Environmental-Friendly Packaging

Product containers and packaging play important roles including preserving products and displaying information about ingredients, but after product use, these items become waste. Seven & i Holdings is working to reduce the environmental impact of containers and packaging by introducing containers and packaging made from recycled materials or biodegradable materials.

[> More](#)

Internal and External Communication

Seven & i Holdings is working to raise the awareness of Group employees by providing them with environmental education and other initiatives. At the same time, it is emphasizing communication with customers, external environmental organizations and so forth.

[> More](#)

Material Issue 3 Non-Wasteful Usage of Products, Ingredients and Energy

Environmental Management

To fully implement its initiatives to reduce its environmental impact, Seven & i Holdings is establishing a system of environmental management and striving to attain a proper grasp of its environmental impact through third-party audits of CO₂ emissions.



ISO 14001 Acquisition

Seven & i Holdings aims to reduce its environmental impact. To this end, we are promoting acquisition of the international standard ISO 14001, and we conduct annual internal audits at the operating companies that have the certification. Sogo & Seibu became the first in the department store sector to acquire ISO 14001 certification in 1999, and has maintained it continuously at all business sites. Furthermore, SEJ acquired the certification at the end of February 2015 for its offices and directly managed stores throughout Japan. Seven & i Food Systems also acquired the certification in February 2015, and IY Foods in February 2016. The sales ratio of the operating companies that have obtained ISO 14001 certification is approximately 50% of the Group's net sales.

Eco Action 21 Certification Acquired

In collaboration with the Nihon Delica Foods Association (NDF), SEJ shares information on examples of initiatives that have substantial energy-saving effects at biannual nationwide CSR promotion conferences. SEJ also confirms the need to create system that can respond to a variety of environmental issues including compliance, continuing energy-saving measures, and reducing CO₂ emissions.

Based on the results of the confirmations, SEJ declared that it will utilize Eco Action 21 established by the Ministry of the Environment. SEJ is taking action such as holding briefings and acquired certification at 21 plants of six companies that produce daily products (as of February 28, 2018).

Material Issue 3 Non-Wasteful Usage of Products, Ingredients and Energy

Initiatives for Realizing a Low-Carbon Society

Seven & i Holdings is taking steps to reduce CO₂, the main cause of global warming, and to create a low-carbon society with dramatically reduced CO₂ emissions. We are promoting energy saving initiatives and expanding the use of renewable energy in order to achieve a target of reducing CO₂ emissions arising in conjunction with store operation by 27% compared to FY2013 by 2030*.

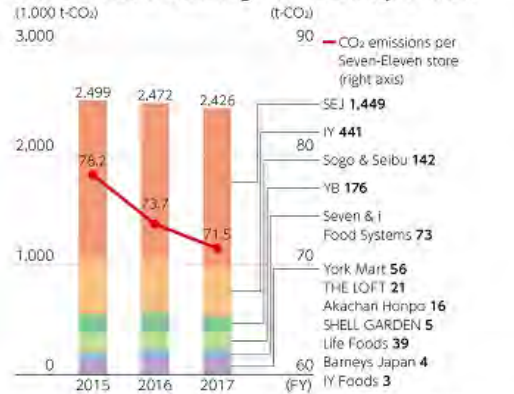
* The target covers 12 operating companies subject to the Act Concerning the Rational Use of Energy (Energy-Saving Act) (SEJ, IY, Sogo & Seibu, YB, York Mart, Seven & i Food Systems, Akachan Honpo, THE LOFT, SHELL GARDEN, Life Foods, IY Foods, and Barneys Japan).



Reduction Targets for CO₂ Emissions

Approximately 90% of the CO₂ emissions by each Seven & i Group company are from the use of energy for store operations. For this reason, we set a target of reducing CO₂ emissions occurring in conjunction with operation of the stores of the 12 operating companies in Japan by 27% compared to FY2013 by FY2030 so that CO₂ emissions do not increase in conjunction with the expansion of business and increases in the number of stores. We also believe that expanding the use of renewable energy will be essential for achieving a low-carbon society, and accordingly, we have set a target of increasing renewable energy to 20% of all store electric power consumption by 2030.

CO₂ Emissions Resulting from Store Operations*



* For calculation conditions, please see the data posted on the website. Starting in the fiscal year ended February 28, 2017, we have added CO₂ emissions from the store and factory operations of Life Foods, and starting in the fiscal year ended February 28, 2018, we have added CO₂ emissions from the store of Barneys Japan as well as store and factory operations of IY Foods.

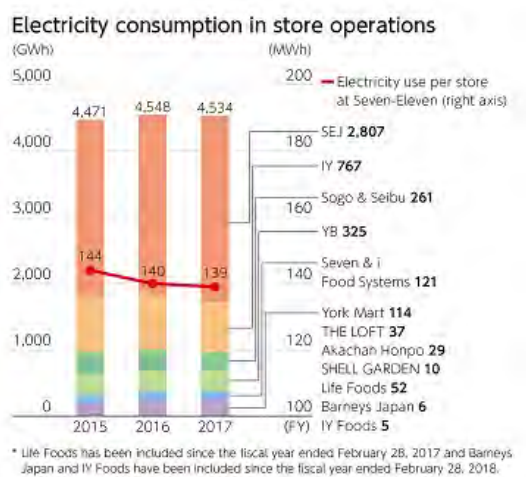
> [Details of CO₂ emissions amount data can be found here](#)

Promoting Introduction of Energy-Saving Equipment at Stores

In order to curtail the increase in environmental impact in comparison to increases and expansion of stores and expansion of products and services, each Seven & i Group company is installing energy-saving equipment such as LED illumination and solar panels when opening new stores and refurbishing existing stores. Conserving energy at stores also leads to lower costs for energy use.

For example, at 7-Eleven stores, we are promoting environmentally friendly store creation by converting all types of lighting to LED, including store signage, sales area lighting, and sign poles. In 2014, we introduced new specification LED lighting that can further reduce electricity usage by approximately 50%. In addition, we have made progress with installing solar panels, which are now installed at 8,017 stores (as of February 28, 2018).

At IY as well, to reduce the load on the environment from store operations, LED lighting has been installed at almost all stores, and solar panels have been installed at 13 stores (as of February 28, 2018).



LED lights



Solar panels

Main investments in environmental equipment—cost and effect (FY2017)*

Environmental investment (million yen)	Environmental expenses (million yen)	Projected reduction in expenses (million yen)	CO ₂ reduction effect (Tons)
12,967	3,401	1,123	40,504

※ Totals for nine companies: SEJ, IY, Sogo & Seibu, YB, York Mart, Seven & i Food Systems, Akachan Honpo, THE LOFT, and SHELL GARDEN

Stores with Hydrogen Stations

SEJ has signed a comprehensive agreement with Iwatani Corporation regarding the installation of hydrogen stations together with convenience stores. In March 2017, the companies opened a store with a hydrogen station in Sendai, Miyagi Prefecture, bringing the total number of hydrogen-station stores to three with the existing stores in Ikegami, Ota-ku, Tokyo Metropolis and Kariya City, Aichi Prefecture.

Looking ahead, we will install pure hydrogen fuel cells at the 7-Eleven stores with hydrogen stations and conduct a trial test on the environmental impact reduction to verify the potential for the use of fuel cells in stores. The project also aims to promote the creation of "close-by, convenient stores" that are closely tied to local communities, while creating sites that can serve as social infrastructure able to provide products, services, and clean energy at a single point.



7-Eleven store with hydrogen station at Ota-ku Ikegami 8-chome

People- and Environment-Friendly Next-Generation 7-Eleven Stores

In December 2017, SEJ refurbished the Chiyoda Nibancho 7-Eleven store, incorporating new technologies that will serve as the foundations for optimal next-generation stores.

By utilizing the technologies and facilities of companies representing various fields from Japan and other countries, total electric power externally purchased by the store has been reduced by approximately 28%*1, and work times relating to the subject equipment has been reduced by approximately 5.5 hours per day*2.

By introducing equipment that can reduce environmental impact, creating a store environment that facilitates work by employees, and building nearby and convenient stores, we are responding to a wide range of social issues.

*1 Converted from the case where the technologies and equipment were installed in a standard store, compared to FY2013.

*2 Total compared to work performed according to existing procedures in an average store environment.



Sliding shelves at the Chiyoda Nibancho 7-Eleven store

Installation of Electric Vehicle Chargers

Seven & i Holdings and NEC Corporation have installed approximately 2,700 chargers for electric vehicles (EVs) and plug-in hybrid vehicles (PHVs) as of February 28, 2018 in parking lots at 48 stores in Japan, including IY, Ario, and Sogo & Seibu department stores to provide a fee-based charging service. Payment for the service is made with a charging card issued by Nippon Charge Service LLC, a joint venture established by four Japanese automakers, as well as credit cards.

This project is the largest scale introduction of EV and PHV chargers ever attempted in Japan. The initiative aims to increase the convenience of the commercial facilities and establish a pattern for using EVs and PHVs of charging them while shopping. It also aims to contribute to the realization of a low-carbon society by promoting the spread of environment-friendly, next-generation cars.



Electric Vehicle Chargers

Managing Climate Change Risks

Seven & i Holdings is affected by various risks related to climate change. These include regulatory risk from tighter regulations in Japan and overseas, physical risk from the occurrence of major disasters, and judgment risk, in which changes in consumer purchasing behavior due to the climate and response to weather fluctuations become the standards for evaluating companies. In particular, the impact from changes in temperature and the occurrence of major natural disasters extends beyond damage to store equipment and distribution networks, restrictions or halts to trading, and sales opportunity loss; it can also affect Group companies' product suppliers and raw material prices. Climate change is therefore a risk factor for all aspects of operations, from product development and production to distribution, store operations, and product lineups. Seven & i Holdings therefore recognizes that quickly building and implementing a business model that can cope with weather and climate change is important for maintaining growth.

Seven & i Holdings, in accordance with its "basic rules for risk management," establishes, maintains, and utilizes comprehensive risk management systems, centered on the Risk Management Committee, in order to properly analyze and evaluate, and appropriately respond to risks associated with each business, with consideration for changes in the management environment and risk factors relevant to the Company and its Group companies. Risks associated with climate change are managed under the systems described below.

Once each year, each Group company identifies risks affecting that company based on an examination of the shared Group risk catalogue presented by the Risk Department, which serves as the administrative office for the Risk Management Committee. Companies quantify risks assessments based on the degree of impact and the likelihood of occurrence of each risk, organize responses countermeasures to each risk in a risk assessment table, and submit the table to the Risk Department. The risk assessment tables include physical risks (large-scale disasters) from restrictions on CO₂ emissions and climate change as well as reputational risks from delays in responding to climate change and other such risks.

The Risk Management Committee meets twice annually with the president of Seven & i Holdings in attendance to comprehensively determine the status of Group risks based on the risk assessments and countermeasures submitted by each Group company and monitors implementation of risk management and improvement measures by each company from the perspectives of materiality, urgency of improvements, and so on.

The officer responsible for the Risk Management Committee responds on the status of Group risk management to the Seven & i Holdings Board of Directors at least once annually.

Measures for Adaptation to and Mitigation of Climate Change Risks

Our enduring concern around weather and temperature change is reflected in our daily ordering activities and sales floor formation. In product development and lineups as well, we strive to provide products that meet customers' needs by establishing a hypothesis based on weather changes over several months. At the same time, we will respond carefully to changes in customers' purchasing behavior driven by abnormal weather and temperature changes driven by climate change.

The "Seven Farm" environmental recycling-oriented agriculture initiative of IY buys the entire quantity of harvested produce, including non-standard items. This enables us to procure and sell vegetables steadily regardless of market trends. In this way, we are also addressing the aspect of stable product procurement. These Seven Farms are located in 13 places throughout Japan, covering approximately 200 ha in total. (As of February 28, 2018). In addition, Seven & i Holdings is establishing systems to prepare for disasters associated with sudden weather phenomena, such as the numerous incidents of heavy rain and landslides that have occurred recently in Japan. For example, we have distributed booklets to regular employees summarizing how to respond in an emergency, and we have also been holding regular simulation drills using teleconferencing systems and so forth. Furthermore, Seven & i Holdings is constructing 7VIEW (Seven Visual Information Emergency Web), a system that enables provision, sharing, and joint use of disaster information. The system gathers together information from within the Group and through cooperation with business partners.

Measures to mitigate climate change include various initiatives related to reducing our environmental impact, such as energy conservation and use of renewable energy at stores, along with forest maintenance and related activities throughout Japan.

Material Issue 3 Non-Wasteful Usage of Products, Ingredients and Energy

Reducing Environmental Impact in the Supply Chain

Seven & i Holdings is focusing on reducing its own environmental impact as well as working together with its business partners to reduce environmental impact across the entire supply chain. For example, we are promoting various initiatives such as working together with original product manufacturing plants and delivery service providers and others to save energy at factories and introduce eco-friendly vehicles.



Scope 3*1 Calculation

Seven & i Holdings is working to reduce CO₂ emissions and evaluate its environmental impact at every stage from the supply chain through to sales and consumption, as stated in its Fundamental Policies Relating to Measures to Contribute to the Prevention of Global Warming. To this end, we have calculated the CO₂ emissions (“Scope 3”) throughout the entire supply chain following the “Basic Guidelines on Accounting for Greenhouse Gas Emissions throughout the Supply Chain Ver. 2.1.” of the Ministry of the Environment. For the fiscal year ended February 28, 2017 we calculated emissions for 10 major Group companies*2. The results showed that Scope 3 emissions accounted for almost 90% of the Group’s overall emissions, and of these, around 80% originated in the raw materials procurement process. We will analyze this calculation result and use it to achieve further reductions of CO₂ emissions across the entire supply chain.

*1. “Scope 3”: CO₂ emissions other than those from the company, emitted from its procurement of raw materials and products, transportation, and product use, together with CO₂ emissions from waste disposal processes

*2. SEJ, IY, Sogo & Seibu, YB, York Mart, Seven & i Food Systems, Seven Bank, Akachan Honpo, THE LOFT, and SHELL GARDEN

Breakdown of Greenhouse Gas Emissions throughout the Supply Chain in the Fiscal Year Ended February 28, 2018 (Totals for 10 companies)

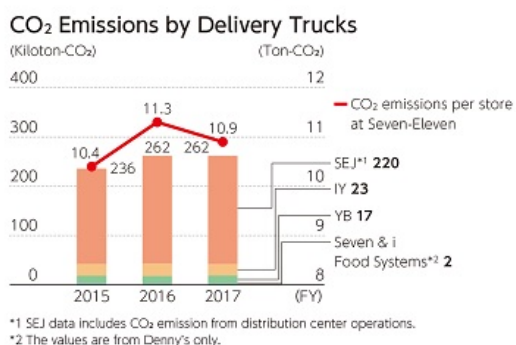
Category	Composition ratio	
Scope 1	0.5%	
Scope 2	10.9%	
Scope 3 Categories 1-15 (total)	88.7%	100.0%
Category 1 (Purchased goods and services)		85.1%
Category 2 (Capital goods)		3.4%
Category 3 (Fuel- and energy-related activities not included in Scope 1 or 2)		1.0%
Category 4 (Upstream transportation and distribution)		1.5%
Category 5 (Waste generated in operations)		0.4%
Category 6 (Business travel)		0.1%
Category 7 (Employee commuting)		0.2%
Category 8 (Upstream leased assets)		0.01%
Category 9 (Downstream transportation and distribution)		0.2%
Category 10 (Processing of sold products)		-
Category 11 (Use of sold products)		0.4%
Category 12 (End of life treatment of sold products)		6.4%
Category 13 (Downstream leased assets)		1.2%
Category 14 (Franchises)		-
Category 15 (Investments)		-
Total of Scopes 1, 2 and 3	100.0%	

Environmental Consideration in Leased Vehicles

At SEJ, Operation Field Consultants, who support franchised store management, use leased vehicles to visit franchised stores. We have been phasing in hybrid vehicles for these leased vehicles. In the fiscal year ending February 28, 2019, we plan to replace about 1,200 of our leased vehicles with hybrid models, with an anticipated CO₂ emission saving of around 1,680 tons.

Reducing CO₂ Emissions from Deliveries

Seven & i Holdings is asking its partners who deliver products to stores to cooperate with efforts to introduce eco-friendly vehicles, improve fuel efficiency, and reduce store delivery frequencies. Furthermore, progress is also being made in fitting trucks with drive-data terminals that record driving status. Data collected from the terminals is used to provide driver instruction and eco-driving seminars.



Introduction of Eco-Friendly Vehicles

SEJ is actively introducing eco-friendly hybrid trucks and compressed natural gas (CNG) delivery vehicles and working to reduce CO₂ emissions to support the development of a low-carbon society. Of the total of 5,927 delivery vehicles, 825 are eco-friendly vehicles (as of February 28, 2018). SEJ began phased introduction of Japan's first EV delivery vehicles, developed by Mitsubishi Fuso Truck and Bus Corporation, in December 2017 and plans to have a total of 25 vehicles in use at eight locations in Tokyo, and Kanagawa, Saitama, and Chiba Prefectures by the end of 2018.

In August 2017, SEJ entered into a basic agreement with Toyota Motor Corporation regarding investigation of energy saving and CO₂ reduction measures at stores and in logistics. Under the agreement, a project for small fuel cell trucks and fuel cell chargers to be developed by Toyota will be carried out in stages starting in 2019.



Japan's first EV delivery truck



A small fuel cell truck

Using Biodiesel in Delivery Vehicles

SEJ is cooperating with a project being conducted by Ehime Prefecture to encourage the use of biodiesel fuel (BDF) produced from used frying oil. In March 2018, SEJ started a demonstration trial using BDF as the fuel for vehicles that deliver cooked rice and chilled products to stores in the prefecture. The BDF used in the vehicles is refined from oil collected from households, fryers in 7-Eleven stores, and production of fried foods at specialized plants in Ehime Prefecture. Approximately 20,000 liters of BDF are used each month. SEJ projects that emissions from deliveries will be reduced by about 2,590 kg-CO₂ per month.



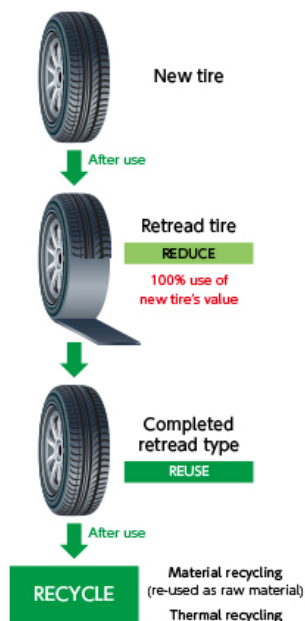
A delivery vehicle the uses biodiesel fuel

Promoting Introduction of Eco-Friendly Tires

SEJ is promoting the introduction of eco-friendly tires with low rolling resistance for delivery vehicles. As of February 28, 2018, we have installed eco-friendly tires on 5,884 delivery vehicles, representing approximately 99% of the total fleet.

Moreover, SEJ has also introduced retread tires to 10,880 vehicles*1, as of February 28, 2018. These tires are made from tires that have finished their service life, by removing a certain amount of the rubber surface that makes contact with the road and applying new rubber and tread. In this way, they can be re-used as rear tires for delivery vehicles. SEJ will promote the use of retread tires to contribute to resource conservation and waste reduction by reusing them.

*1. Tires may be removed and refitted several times for each vehicle, so the number is the total number of vehicles.



Retread tires

Introduction of Energy-Saving Equipment at Distribution Centers

SEJ is promoting efforts to reduce wasted power usage at its distribution centers by introducing “demand controllers” that monitor the electricity usage of each unit of equipment and apply controls to the equipment in use to ensure that the usage does not exceed a certain range at 73 of 156 distribution centers (as of February 28, 2018).

Promoting Environmental Information Management at Manufacturing Plants

SEJ has its original daily products manufactured by several contract manufacturers. These manufacturers have organized the Nihon Delica Foods Association, which reports on the CO₂ emissions, waste emissions, and the food recycle rate associated with plant operations. We work to ascertain environmental information shared by our contract manufacturers and hold study seminars in conjunction with the Environment Countermeasures Committee of the Nihon Delica Foods Association, where we share environmental measures such as energy-saving with each manufacturer in an effort to reduce energy use at their plants.

Business Partner Action Guidelines and CSR Audit

To ensure that it meets its social responsibilities on matters such as human rights, labor issues and the environment, Seven & i Holdings formulated the Business Partner Action Guidelines and asks business partners to understand and implement them. The guidelines cover compliance with environmental laws and regulations, as well as consideration for climate change, biodiversity, and sustainable procurement.

Since the fiscal year ended February 28, 2013, we have had CSR audits conducted by third-party inspections organizations at the manufacturing plants of our private brand suppliers in developing countries. The CSR audits include inspections of environmental aspects, such as compliance with environmental laws and regulations, management of effluent and chemical substances, and promotion of energy-saving and environmental protection activities.

➤ [Further details about the Business Partner Action Guidelines can be found here](#)

➤ [Further details about CSR audits of business partners can be found here](#)

Material Issue 3 Non-Wasteful Usage of Products, Ingredients and Energy

Promoting Food Recycling

At Seven & i Holdings, food products account for a large portion of net sales. With this in mind, we have been advancing measures based on the key themes of reducing food waste and promoting recycling with a target food recycling rate of 66% by 2030*.



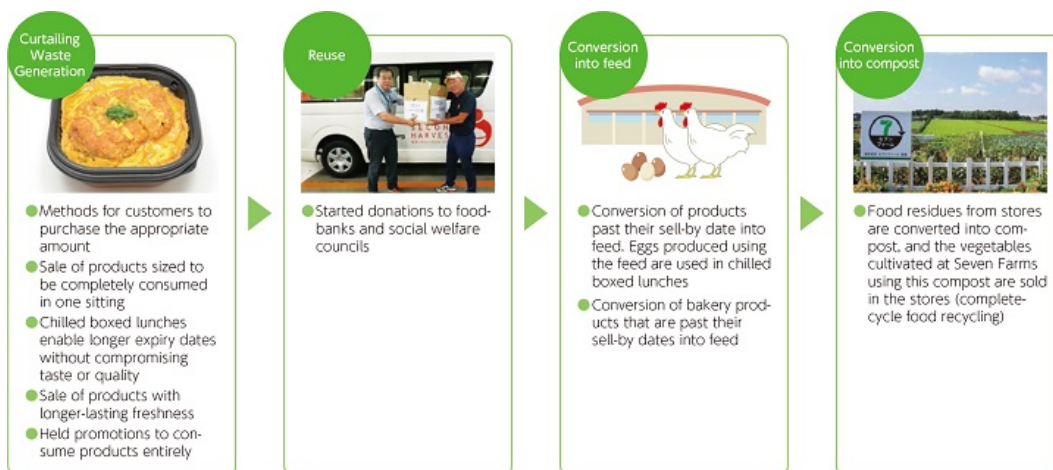
* Covering six food-related operating companies: SEJ, IY, YB, York Mart, Seven & i Food Systems, and SHELL GARDEN.

Our Approach to Reducing Food Waste

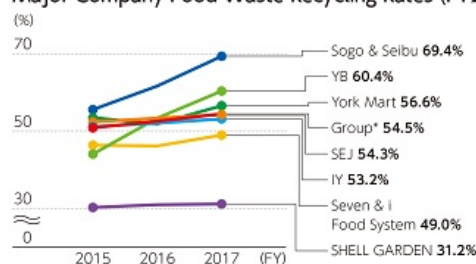
Our priorities for reducing food waste are to curtail the generation of waste, promote the reuse of waste, convert waste into feed and fertilizer, and recover heat. The Seven & i Group is currently conducting initiatives centered on converting waste into feed and fertilizer. For example, IY has been engaged in “recycling-oriented agriculture” since 2008. Under this system, food residue generated by IY stores is composted and used by Seven Farms to grow vegetables. These vegetables are then sold at IY stores.

Looking ahead, we will continue to establish these recycling systems in each region, with a view to enhancing the recycling rate.

We are also taking steps to curtail the generation of waste, including innovating sales methods and developing products with longer-lasting freshness. Looking ahead, we will continue to advance innovative initiatives to prevent the generation of food waste, such as by developing new products and services. With regard to reuse, SEJ has been donating inventories of process foods to food banks when stores are closed or refurbished, since the fiscal year ended February 28, 2018, and began making donations to social welfare organization in the fiscal year ending February 28, 2019. Ito-Yokado has similarly been donating unexpired foods from some stores to food banks since the fiscal year ended February 28, 2018. We believe that promoting reuse is an important issue, and we will step up our measures in this area in the future.



Major Company Food-Waste Recycling Rates (FY2017)



* Six food-related operating companies (SEJ, IY, YB, York Mart, Seven & i Food Systems, SHELL GARDEN)

Reducing Food Waste

In order to reduce food waste, the Seven & i Group has been innovating its sales methods, products and other aspects of business in various ways. For example, IY has introduced sales methods such as selling individual loose items and selling by weight, enabling customers to purchase products only in the amounts they need. In addition, SEJ has developed chilled boxed lunches that have longer expiry dates than conventional products, without compromising taste or quality. This has been achieved by revising ingredients, manufacturing processes, and temperature control methods. SEJ is also working to reduce food waste by developing products with longer-lasting freshness in the categories of bread and delicatessen items.

In other areas, Seven & i Food Systems has been implementing measures to reduce food leftovers at Denny's restaurants, such as providing menus offering dishes with smaller servings that can be finished comfortably without leftovers, supplying take-home boxes for any leftovers, and holding a campaign in collaboration with municipalities to encourage people to enjoy eating everything on their plate.

Installing Systems to Treat Garbage

At IY, a "biodegradable garbage processor" system that breaks down garbage using microorganisms was introduced in October of 2011 and has been installed in 18 stores as of the end of February 2018. Through the power of microorganisms, the devices break down into water and CO₂ garbage that is ill-suited to recycling (such as highly fibrous substances, etc.). This process results in reduced CO₂ emissions compared to incineration processing, and it offers an effective reduction of waste volumes.



Garbage processor

Converting Food Waste into Feed and Fertilizer

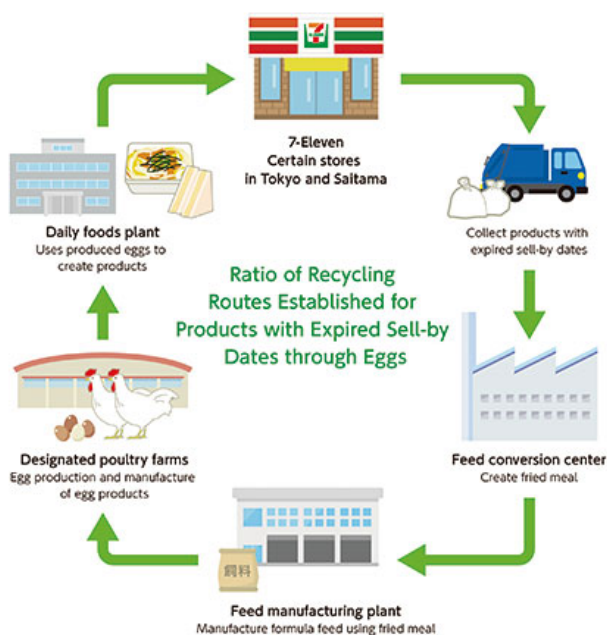
SEJ has been promoting “Eco Distribution*1” since 1994 as a system for appropriate processing and recycling of waste. Under this system, we work to recycle food products that have passed their sell-by dates into feed and fertilizer. The system is operating in 27 prefectures in Japan. In the fiscal year ended February 28, 2018, the combined recycling rate for products that had passed their sell-by dates and discarded food oil was 54.3%.

Certain 7-Eleven stores in Tokyo and Saitama Prefecture have established routes within their supply chains for recycling products with expired sell-by dates discarded from stores into recyclable resources. The expired products are collected from the stores and converted into fried meal, which is used to manufacture formulated feed*2. The formulated feed is fed to chickens at designated poultry farms and the eggs produced are used as a raw material in boxed lunches.

*1 Eco Distribution: 7-Eleven’s original waste recycling system.

A recommended waste disposal provider for franchisees in each region collects all of the waste from 7-Eleven stores for appropriate processing and recycling.

*2 The products with expired sell-by dates that are used to manufacture formulated feed are recognized as safe raw materials in Japan because they have been licensed by the Ministry of Agriculture, Forestry and Fisheries for use as feed. The feed manufacturers manufacture and sell feed that complies with the BSE Guidelines issued by the Ministry of Agriculture, Forestry and Fisheries.



> [More details on 7-Eleven initiatives can be found here \(in Japanese\)](#)

Recycling-Oriented Farms (Seven Farms)

In August 2008, with the aim of enhancing recycling rates and revitalizing local agriculture, IY established “Seven Farm Tomisato” as an agricultural production corporation in Tomisato City, Chiba Prefecture, thereby becoming the first player in the retail sector to engage in “recycling-oriented agriculture.” “Recycling-oriented agriculture” is a system for composting food residues (garbage) generated by IY stores and using it at Seven Farms. The produce that is grown at the farms is then harvested and sold at the stores from which the food residues were generated. As of February 28, 2018, Seven Farm had expanded to 13 sites nationwide, Seven Farm is actively working to acquire certification under Japan Good Agricultural Practice (JGAP), an agricultural production process management technique, and currently, eight farms have acquired JGAP certification.

Seven Farms Outline



Seven Farm

> [More details on Seven Farm can be found here \(in Japanese\)](#)

Material Issue 3 Non-Wasteful Usage of Products, Ingredients and Energy

Effective Use of Resources

Depletion of resources such as oil has become an issue. Seven & i Holdings is working to reduce waste emissions associated with store operations, as well as working with customers and business partners to reduce container and packaging materials used for supplying products and to recycle them after they are used by customers.



Reducing Waste Resulting from Products

7-Eleven is working to curtail the generation of waste and to promote reuse and recycling with a view to reducing waste disposal. For example, in product deliveries, we recommend the use of reusable containers and the use of hangers for delivery of apparel as a way of cutting down on the use of packaging and cardboard. At stores, we promote understanding of recycling, and store employees are encouraged to rigorously sort waste for recycling purposes.



Reusable containers for store deliveries

Reuse of Fixtures and Building Materials from Closed Stores

When 7-Eleven stores are to be rebuilt or closed, rather than disposing of the product shelving, fixtures, chiller cases, and lights, they are reused at other stores. In the fiscal year ended February 28, 2018, 34,822 items of store equipment were recovered and reused. Furthermore, reusable steel frames and recyclable sashes are used in construction of stores to reduce the amount of waste produced during store demolition.



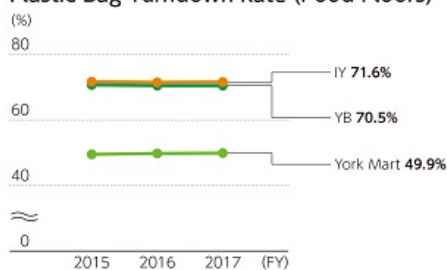
Innovating Sales Methods to Reduce Containers and Packaging

At IY, YB, and York Mart, we have devised sales methods for fresh food and delicatessen items that reduce the amount of containers and packaging used, such as selling by weight or selling individual loose items. In our delicatessen items sales areas, we are increasingly using paper bags rather than plastic containers for selling items such as croquettes and fried chicken. In other areas, some fresh meat sales areas have adopted the method of packing meat for sale in plastic bags without a polystyrene tray.

Reducing the Use of Disposable Plastic Bags

The Seven & i Group promotes the reduced use of disposable plastic bags by asking customers whether they need a bag at the register, displaying posters and POP signs, and holding events to encourage customers to bring their own shopping bags when shopping at stores. Moreover, IY has discontinued the free distribution of plastic bags on the food floors of all its stores and YB has followed suit at around 90% of its stores. SEJ is working to introduce biomass polyethylene shopping bags.

Plastic Bag Turndown Rate (Food Floors)



Resource Recovery at Stores

The Seven & i Group is promoting an important initiative to recover and recycle empty containers and other materials from its products. Every Group company cooperates with customers and local governments to recover resources such as bottles, cans, polystyrene, paper cartons, and PET bottles at stores in accordance with local waste disposal sorting rules. Recently, some stores of the Group have also been cooperating with local governments to recover small electrical appliances, which have been drawing attention as “urban mines.” For example, IY’s Kasai Store hosted the event “Creating Products from an Urban Mine – Medal Project for Everyone” held by the Ministry of the Environment in February 2017. Currently, 14 stores have a permanent recycling box for small home appliances (as of the end of March 2018), and are working to increase awareness among local residents and to collect materials.

Installing Automatic PET Bottle Collection Machines

IY, YB, and York Mart have had automatic PET bottle collection machines installed at stores since 2012. Because PET bottles inserted into the machines undergo an automatic process of foreign-matter removal and volume-reduction (by either compression or crushing), large volumes of bottles for recycling can be sent to recycling plants on each occasion, which reduces the delivery frequency from stores. Moreover, by utilizing Seven & i Holdings logistics routes, more efficient transportation is possible and the volume of CO₂ emissions resulting from the operations can be reduced.

SEJ conducted trials of automatic PET bottle collection machines at five stores in Koto-ku, Tokyo starting in December 2015. Later, the program was expanded in stages to 300 stores in Tokyo and Saitama Prefectures starting in December 2017.

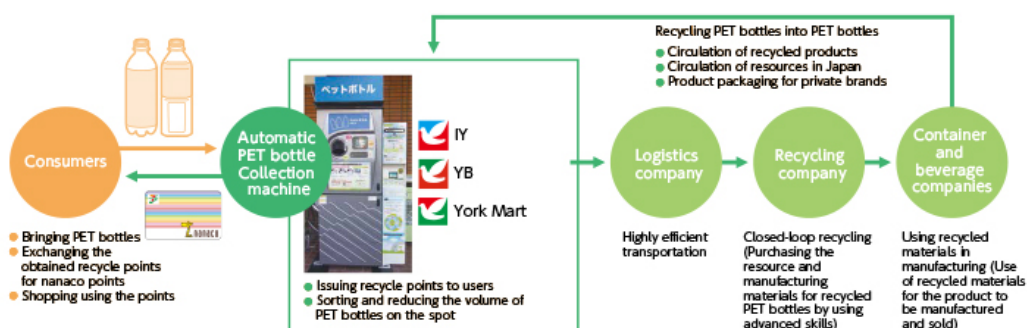


Small-sized PET Bottle Recycling System for convenience stores

Some of the collected PET bottles are made into new PET bottles for the domestic market. This “closed-loop recycling” system of recycling PET bottles into new PET bottles is the first attempt by a major retail chain in Japan to be implemented on such a large scale. As of the end of February 2018, collection machines have been installed in 701 stores across the four companies, and approximately 7,109 tons of PET bottles have been collected.

We are promoting an initiative to recycle material from PET bottles recovered at stores and use it in packaging for Seven Premium private brand products. Moreover, we have printed a note explaining the process from recovery to recycling on the product packaging.

PET Bottle Recycling System Using an Automatic Collection Machine



Material Issue 3 Non-Wasteful Usage of Products, Ingredients and Energy

Introduction of Environmental-Friendly Packaging

Product containers and packaging play important roles including preserving products and displaying information about ingredients, but after product use, these items become waste. Seven & i Holdings is working to reduce the environmental impact of containers and packaging by introducing containers and packaging made from recycled materials and biodegradable materials.



Environmental-Friendly Seven Premium

With its private brand Seven Premium, the Group seeks to promote the values of “taste,” “quality,” and “safety and reliability,” while at the same time developing products that are environmental-friendly. So far, the Group has used environmentally considerate packaging such as recycled PET or forest thinning materials in 950 Seven Premium products. The Group is expanding its measures with the aim of using environmental-friendly containers and packaging for all Seven Premium products by 2030.

Change to Recyclable Packaging

In July 2015, we changed the paper cartons used for Seven Premium alcohol products from the previous aluminum carton material to a non-aluminum carton material. This change enables the cartons to be recycled as paper cartons. Moreover, the volume of CO₂ emissions per carton from the raw material procurement and manufacturing process is around 12% lower compared with the aluminum cartons. Furthermore, the CO₂ reduction effect from this initiative is projected to be approximately 250 tons per year, the equivalent of the CO₂ absorbed by approximately 18,000 cedar trees.



The identification mark also changed from the Paper Mark to the Paper Carton Mark

Use of Plant Based Materials

In April 2016, SEJ introduced rice ink for printing the packaging of rice balls sold at its stores. Rice ink is made from rice bran oil, a non-edible part of the plant extracted from rice bran. This ink reduces the company's annual CO₂ emissions by around 60 tons compared with conventional petroleum-based inks and is therefore expected to help reduce environmental impact. Moreover, the packaging is also contributing to our efforts to promote local production for local consumption by using domestically produced rice bran oil, which is one of the raw materials.

In December 2016, SEJ changed to plant-based packaging film and ink for its original bakery products. Compared with the previous oil-based packaging, this is expected to reduce the company's annual CO₂ emissions by approximately 108 tons.



Product packaging made with plant-derived materials

Use of Forest Thinning Materials

Certain Seven Premium cup soups and yoghurt drinks have containers made with Seven Forest thinning materials. Japan has a large number of unmaintained man-made forests that have been left unattended. With many such forests currently not fulfilling their potential as carbon sinks, use of forest thinning materials can contribute to the creation of healthy forests and prevention of global warming.

Forest thinning materials are also being phased in for use in the outer sleeve section of the hot cups used for SEVEN CAFÉ, which is sold mainly at 7-Eleven stores throughout Japan.



Products that use forest thinning materials



A SEVEN CAFÉ cup and the Forest Thinning Material Mark (printed on the reverse side)

> [See here for further information about Seven Forest \(in Japanese\)](#)

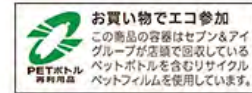
Introduction of Recycled Materials

IY and York Mart are introducing recycled trays manufactured by suppliers that have received Eco Mark certification. In the fiscal year ended February 28, 2018, approximately 800 types of recycled tray were introduced (a decrease of 19% year on year by weight). The introduction of recycled trays reduced annual CO₂ emissions by approximately 2,500 tons.

Moreover, in packaging for lifestyle household goods such as Seven Premium Refillable Body Soap, the Group has adopted recycled materials such as those from PET bottles, some of which are recovered at Group stores.



Recycled tray



Packaging made from recycled PET bottle material

Introduction of Biomass Materials

In the fiscal year ended February 29, 2016, SEJ replaced the original Salad Cup Container sold in the chilled cases of its stores with containers that use environmental-friendly PET made from recycled or biomass PET rather than oil-based PET. The CO₂ emission reduction resulting from the change for that fiscal year was 1,790 tons. IY will also use bioplastics that make partial use of plant-based oil materials for the containers in its cut fruit and boxed lunches.



Example of Salad Cup Container using environmental-friendly PET

Environmental-Friendly SEVEN CAFÉ

Many customers support SEVEN CAFÉ, which is promoting environmental considerations in various ways. For example, forest thinning material is used for the outer sleeves for hot beverages. Cups for iced beverages use a compound material that includes recycled PET. We are also working to cut down our use of limited resources, for example by making cups lighter and thinner.

In the fiscal year ended February 28, 2018, we have developed an antibacterial deodorizer that uses recycled coffee grounds collected from some of our stores. The new product is being used for cleaning at 7-Eleven stores.

取り組みの概要



Environmental-Friendly SEVEN CAFÉ

Material Issue 3 Non-Wasteful Usage of Products, Ingredients and Energy

Internal and External Communication

Seven & i Holdings is working to raise the awareness of Group employees by providing them with environmental education and so on. At the same time, it is emphasizing communication with customers, external environmental organizations and others.



Promoting Environmental Education of Employees and Taking the Certification Test for Environmental Specialists

Seven & i Holdings regularly holds training for new recruits and newly appointed managers in line with the characteristics of each Group company. The aim is to instill basic knowledge and facilitate their understanding of environmental matters.

Specifically, June has been designated as Group Environment Month, and various programs are conducted to raise employee awareness and understanding. In the fiscal year ended February 28, 2018, environmental e-learning and environmental lectures conducted by outside instructors were held for all employees as well as programs that impart knowledge and facilitate consideration of the environment by employees while enjoying themselves such as environmental study sessions at the Takao Forest and Nature School operated by the Seven-Eleven Foundation and the Tokyo Metropolitan Government and collection and recycling of unneeded small consumer electronic devices.

Since the fiscal year ended February 28, 2015, the Group has been encouraging employees to pass the Certification Test for Environmental Specialists (Eco Test) as a training tool for systematically acquiring a broad knowledge about increasingly diverse environmental problems. With a target of having 12,000 Group employees pass the Eco Test by 2020, each company supports test takers by subsidizing test fees, holding study sessions, and so forth. In the fiscal year ended February 28, 2018, 1,713 employees passed the test (cumulative total of 4,151 people passing the test since the fiscal year ended February 28, 2015).

Holding Environmental Events

Seven & i Holdings holds environmental events both within and outside the Company to provide opportunities to raise environmental awareness of employees. For example, Group employees and 7-Eleven franchisees regularly participate in volunteer activities organized by the Seven-Eleven Foundation. Major activities include events such as forest care operations ranging from tree planting to tree thinning and undergrowth cutting at "Seven Forests" in 18 locations throughout Japan; marine afforestation initiatives to increase eelgrass, which purifies water and reduces CO₂ in Tokyo Bay, thereby enriching the bay's marine environment; and conservation activities on Mt. Fuji. In the fiscal year ended February 28, 2018, a total of 2,003 people took part in such events, comprising both Group employees and personnel from SEJ franchised stores.

[> For more details about "Seven Forest" \(in Japanese\)](#)

[> For more details about the Tokyo Bay UMI Project \(in Japanese\)](#)

Support for NPOs and Other Environmental Organizations

Seven & i Holdings continues to make donations to various environmental organizations such as the Keidanren Nature Conservation Fund, which promotes wider awareness of biodiversity and supports the nature protection projects of environmental and wildlife preservation group, as well as WWF Japan and various NGOs in and outside of Japan.

In addition, SEJ has been conducting environment-themed social contribution activities together with franchised stores through the Seven-Eleven Foundation since 1993. Based on contributions*1 from customers collected through collection boxes placed at the counters of 7-Eleven stores, along with donations from SEJ and other funds, the Seven-Eleven Foundation engages in environmental citizenship activity support projects, natural environment protection and conservation projects, publicity projects, and disaster recovery assistance projects. One of the major pillars of the environmental citizenship activities*2 is the funding of NPOs conducting regional environmental activities. The foundation has been calling for applications from NPOs each year since 2001, with the goal of seeing regional donations used to support regional environmental activities. Over the past 17 years in total, the foundation has provided ¥2,024,766,181 in funding for 3,249 activities.

The Seven-Eleven Foundation operates the Kokonoe Furusato Nature School located in Kokonoe Town, Kusu District, Oita Prefecture and the Takao Forest Nature School in Hachioji City, Tokyo, based on the principle of "Learning from nature: how to promote coexistence and mutually beneficial relationships between people and nature and the natural environment and local communities." The Kokonoe Furusato Nature School is engaged in projects to protect and preserve the nature of Kujuu and to create towns where the crested ibis can also live. The school's efforts to promote creation of rice fields that coexist with nature and where living things can thrive has been designated as a project in coordination with the Japan Committee for the United Nations Decade of Biodiversity. The Takao Forest Nature School is a collaborative project with the Tokyo metropolitan government, operating in a forest of approximately 26.5 ha owned by Tokyo Metropolis. The school's programs include bird watching, volunteer experiences in the forest, flora observation, and craft work.

*1. Storefront donations collected in the fiscal year ended February 28, 2018 amounted to ¥472,036,817.

The total amount of storefront donations collected since the fiscal year ended February 28, 1995 is ¥7,089,076,061

*2. Assistance for environmental NPOs through public support in the fiscal year ended February 28, 2018 (including recipients of ongoing support): 302 support projects; ¥167,417,785 provided in total



Collection box placed on counters in stores



Kokonoe Furusato Nature School

Responding to Opinions and Requests

We receive and respond to opinions and requests relating to the environment from customers and civic groups at the customer service offices at each Group company and at the CSR Department of Seven & i Holdings. In 2014, when we identified the material issues that Seven & i Holdings should address, we incorporated the opinions of stakeholders including customers, business partners, shareholders and other investors, as well as those of CSR experts.

[> For more details about the selection process for material issues](#)