

ENVIRONMENTAL REPORT

2017

Scope of environment management: Tokyo Head Office of Taisho Pharmaceutical, Kitanihon Branch, Kitanihon Branch Sapporo Office, Nakanihon Branch, Nakanihon Branch Kanazawa Office, Kansai Branch, Chushikoku Branch, Chushikoku Branch Shikoku Office, Kyushu Branch, Yokohama Office, Okinawa Office, three factories (Omiya, Hanyu, and Okayama), Research Center, five distribution centers (Hiroshima, Sendai, Yokohama, Osaka, Fukuoka), etc. and its group companies, Taisho Toyama Pharmaceutical Co., Ltd. (excluding the affiliated offices of its branch offices), MEJIRO KOSAN Co., Ltd., and Taisho Pharmaceutical Logistics Co., Ltd.

Outline of Environmental Loads

We quantitatively understand the environmental influences of resource inputs including various raw materials, water, and energy in a range from research & development to production, distribution, and sales.

About Environmental Loads

The basic concept of our environmental activities is to reduce "inputs" and "outputs." We are striving to increase the reduction rate by improving the facilities and operation methods for each material, water, and energy and effectively using disposed/emitted objects.

Our important initiatives are "reduction of CO₂ emissions" and "reduction of final landfill disposal volume of waste." Our environmental activities were also implemented with a focus on these two points.

✿ Important Initiatives

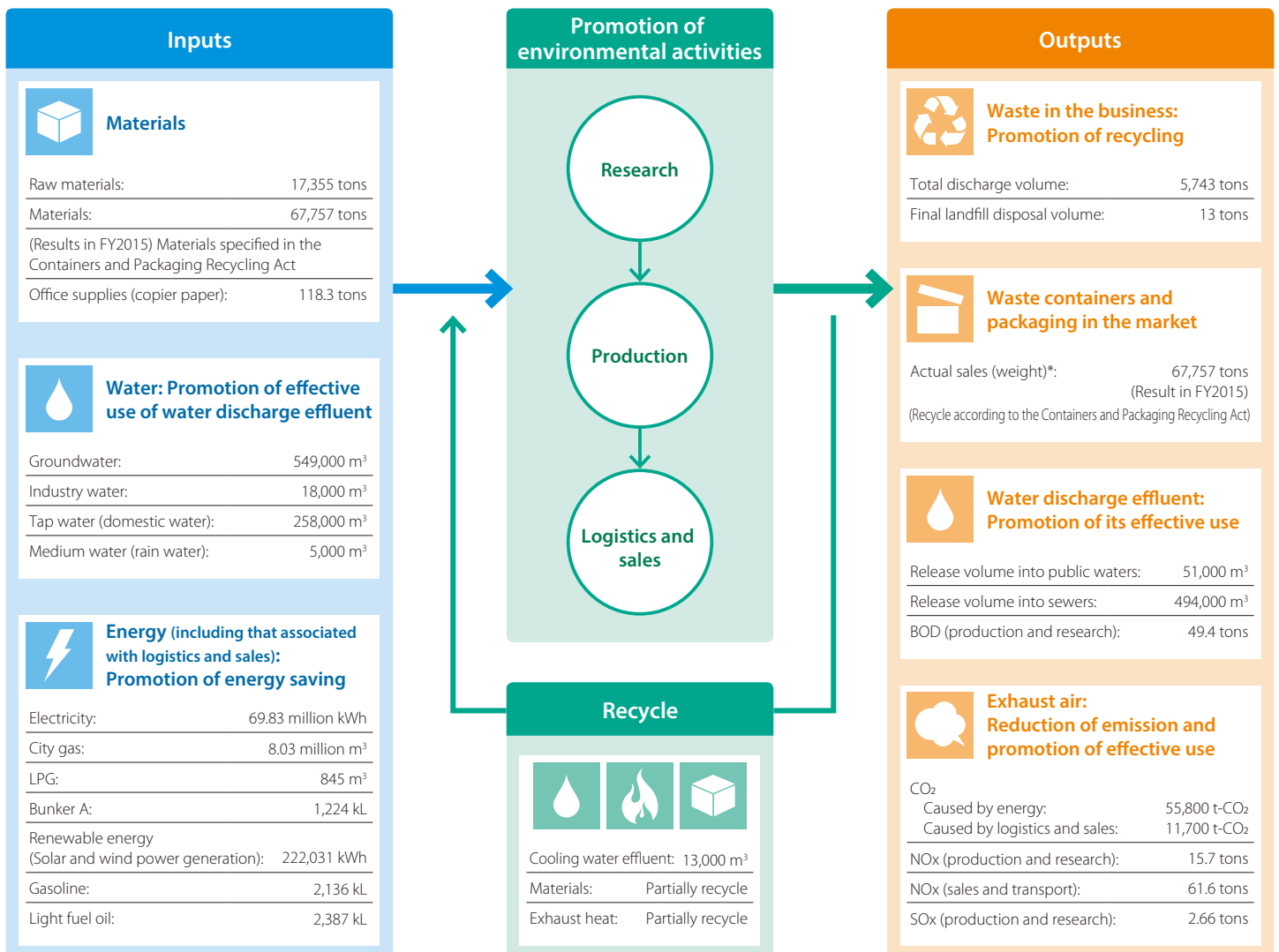
Reduction of CO₂ emissions (global warming countermeasures)

We positioned the reduction of CO₂ emissions as an important issue because it is a global issue for preventing global warming.

Reduction of final landfill disposal volume of waste

We positioned it as an important issue, because the reduction of waste is a major issue in Japan where the final landfill disposal fields are almost full.

✿ Outline of Environmental Loads



* Only the containers and packaging covered by the Containers and Packaging Recycling Law

Global Warming Prevention

CO₂, fluorocarbons are the main causes of global warming. The reduction of their emissions is therefore a global issue. Under the following goals, Taisho Pharmaceutical Group mainly performs energy-saving activities and the appropriate management of devices using fluorocarbons.

Reduction of CO₂ Emissions

Goal

Reduce the average amount of CO₂ emissions from the offices in Saitama Prefecture over FY2015 to FY2019 by 13% compared with the baseline year*¹

*1 The baseline year is the duration from FY2002 to FY2004, and the average value during those three years is used as a baseline.

The graph shows the transition of CO₂ emissions from the offices in Saitama Prefecture in FY2012 to FY2016.

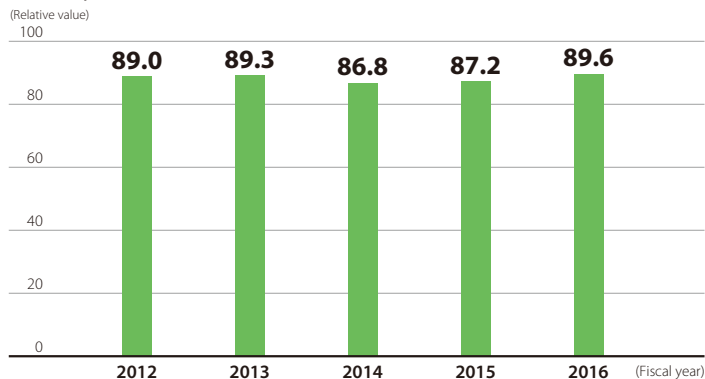
In FY2016, as our activities to reduce CO₂ emissions, we have updated the cooling facilities at the factories and the research center and introduced high-efficiency devices such as LED lighting.

In addition, as groupwide initiatives, we have been continuously performing "Cool Biz" and participating in the light down campaign hosted by the Ministry of the Environment.

However, CO₂ emissions increased in FY2016 because of the increased operating energy for air conditioning to operate a new logistics warehouse and maintain the quality of products and raw materials that are stored by the Production Department.

The result of our activities for reducing CO₂ emissions from the offices in Saitama Prefecture during the phase 1 planned term (FY2011 to FY2014) exceeded the goal (reduction of 6% compared with the baseline year). However, since the goal for phase 2 (FY2015 to FY2019) was changed to a reduction of 13% compared with the same baseline year, the result in FY2016 was down 10.4%, which did not achieve the goal. We will further promote measures such as the introduction of high-efficiency devices, increased energy efficiency, and energy savings to achieve the goal in the phase 2 planned term as well.

CO₂ Emissions from the Offices in Saitama Prefecture (% Compared to the Baseline Year)



Promotion of Energy Saving

Goal

Reduce the groupwide average annual specific energy consumption*² by 1% or more in FY2016 to FY2020

*2 Specific energy consumption
 (1) Omiya Factory (including Research Center), Hanyu Factory, and Okayama Factory : Energy consumption / (operation hours x floor area)
 (2) Sales and back offices: Energy consumption / floor area
 The specific energy consumption is the weighted average of the component ratios of the respective energy consumptions in (1) and (2).

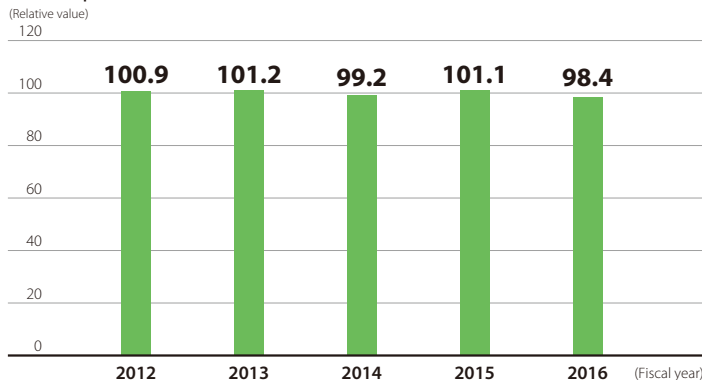
The graph shows the transition of the groupwide specific energy consumption in FY2012 to FY2016. In FY2016, the groupwide specific energy consumption was improved by 1.6% compared with the previous year.

For energy saving, we have been performing activities from both the hardware and the software aspects. In FY2016, as our hardware initiatives, we introduced high-efficiency devices and partial light down.

As our software initiatives, the production departments reviewed operation methods of air conditioning facilities and utility facilities and made the operation methods of the facilities more appropriate (such as the reduction of losses) and reduced the standby electricity.

We will continue to improve the specific energy consumption in the future as well.

Groupwide Specific Energy Consumption (% Compared with the Previous Year)



Main Energy Saving Measures Taken in FY2016

	Measure
Taisho Pharmaceutical Groupwide	① Update the cooling facilities (increase efficiency)
	② Introduce LED lighting, partial light down
	③ Implement Cool Biz
	④ Participate in the light down campaign hosted by the Ministry of the Environment
Production and logistics departments	⑤ Review the operations of production facilities
	⑥ Update the brine freezers
	⑦ Review the start/stop temperatures during free cooling operation
	⑧ Review the operation hours of facilities such as drain pumps

Appropriate Management of Devices Using Fluorocarbons

Goal

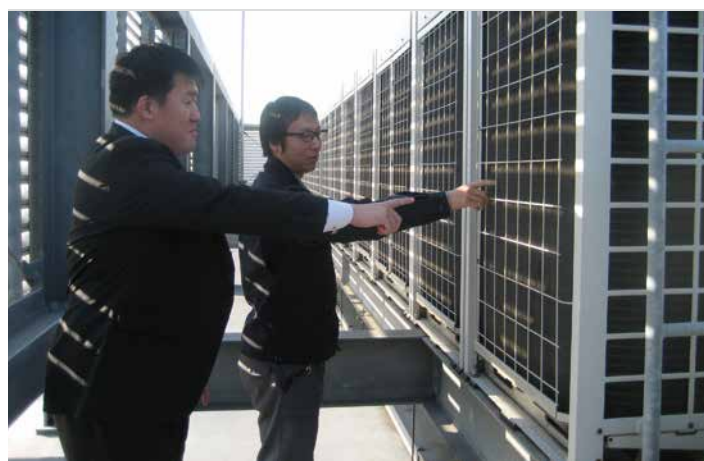
Appropriately manage devices using fluorocarbons through simplified and periodical inspections of devices using fluorocarbons based on the Regulations for Management of Devices Using Fluorocarbons, etc. and reduce greenhouse gas emissions.

Defining Rules for Managing Devices Using Fluorocarbons, etc.

To ensure compliance with the Act on Rational Use and Proper Management of Fluorocarbons, we have established a groupwide system for managing devices using fluorocarbons, etc. and have selected a general manager and assigned responsible managers and management representatives at the respective offices to form a system that allows systemized management. In addition, we have established the Regulations for Management of Devices Using Fluorocarbons, etc. and listed the devices that use fluorocarbons as coolant, planned, implemented, and recorded their checks, and understood and reported the leaked amount of fluorocarbons to appropriately manage devices using fluorocarbons.

Implementation of Checks of Devices Using CFC Fluorocarbons

We appropriately check devices using fluorocarbons, etc. under the guidance of persons with sufficient knowledge.



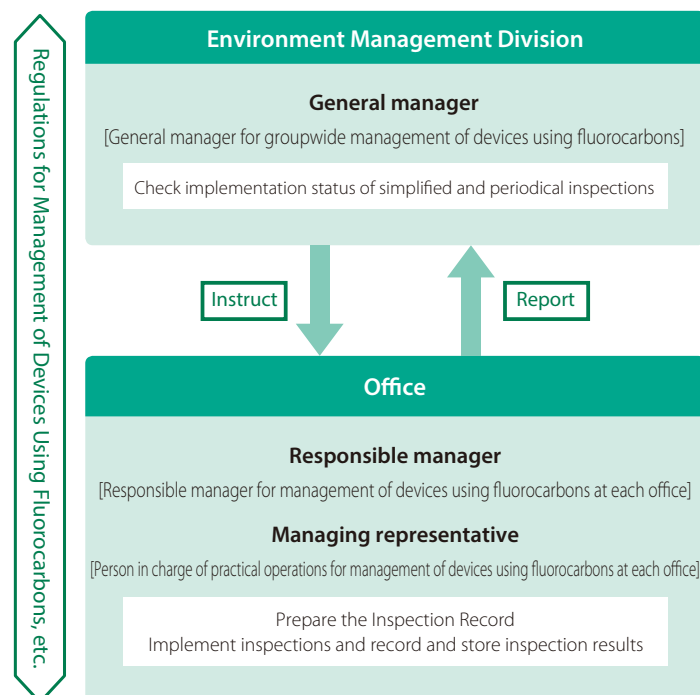
Calculated Leaked Amount of Fluorocarbons

Leakages occurring in FY2016
 [Number of occurrences] 18
 [Calculated leaked amount] 807.0 t-CO₂

Date	Cause	Leaked amount (t-CO ₂)
2016/5/8	Gas leakage from an air cooling chiller	246.0
2016/5/9–2017/3/7	Gas leakage from air conditioners, etc. (11 cases) (Research Center)	117.9
2016/6/20	Operation error during filling gas to a chiller	244.5
2016/7/6	Gas leakage from an air conditioner	87.2
2016/8/5	Gas leakage from an air cooling chiller	7.2
2016/8/23	Partially loosen inspection connector of a coolant pipe	12.7
2017/1/16	Gas leakage due to damaged refrigerator fusible plug	16.3
2017/1/27	Gas leakage due to a failure of an air conditioning device	75.2

In future, we will learn from the leakage cases and strive to prevent leakages.

Groupwide System for Managing Devices Using Fluorocarbons



Reduction of Environmental Loads Associated with Transport

The reduction of environmental loads associated with transport is an important issue. Accordingly, Taisho Pharmaceutical strives to implement activities such as the improvement of energy efficiency during transport and the reduction of transported materials to reduce the environmental loads during transport.

Reduction of Environmental Loads during Transport - Promoting Modal Shift*¹ and Improving Fuel Efficiency -

*¹ An initiative that switches the transport method to one with smaller environmental loads.

Improvement of Energy Efficiency During Transport ~ Compliance with "Role of Consigners" in the Act on the Rational Use of Energy (Energy Saving Act) ~

The annual amount we transport as a cargo owner is 30 million ton-k or more, so we fall under the "Specified Shippers" referred to in the Energy Saving Act.

We are therefore performing activities such as the promotion of the modal shift, the reduction of the number of transports, and the improvement of fuel efficiency to reduce energy consumption during transport.

In FY2016, we improved the specific energy consumption (specific transport amount) by 1.5% compared with the previous year and by 1.5% compared with the average over five years, and we have continuously achieved the non-binding target of the Energy Saving Act.

Energy Consumption and Specific Energy Consumption Associated with Transport

Fiscal year	2012	2013	2014	2015	2016
Energy consumption (converted to crude oil) (kL)	2,934	2,960	2,702	2,690	2,626
Specific energy consumption (L/ton-kilo)	0.0352	0.0343	0.0333	0.0336	0.0331
Compared with the previous year (each fiscal year) (%)	-	-2.6	-2.9	+0.9	-1.5
Compared with the previous year (average for five years) (%)			-1.5		-

Promotion of Modal Shift

To improve energy efficiency during transport, we are promoting the modal shift. Since the energy consumption for each transport method has the relationship of "railway < ship < truck," switching the transport method to another (e.g. from truck to ship) will help reduce the transport energy.

Because we increased the number of railway transports in FY2016, the percentage of railway transports increased by 1.5 points compared with the previous year and the percentages of truck and ship transports were reduced, which improved the specific energy consumption. We will continue to promote the modal shift because it is a dominant tool for reducing CO₂ emissions during transport.

Transported Quantity of Products by Transport Method

Fiscal year	2012		2013		2014		2015		2016	
	Transport amount (10,000 ton-k)	Percentage	Transport amount (10,000 ton-k)	Percentage	Transport amount (10,000 ton-k)	Percentage	Transport amount (10,000 ton-k)	Percentage	Transport amount (10,000 ton-k)	Percentage
Total transport amount	8,329	100.0	8,635	100.0	8,104	100.0	8,000	100.0	7,934	100.0
Truck	6,127	73.6	6,300	73.0	6,099	75.3	5,770	72.1	5,708	71.9
Railway	846	10.2	866	10.0	534	6.6	748	9.4	868	10.9
Ship	1,356	16.3	1,468	17.0	1,470	18.1	1,482	18.5	1,358	17.1

Reduction of the Number of Transports

We have reduced the number of transports by increasing the load quantity per truck to improve the efficiency of transportation energy.

In FY2016, we focused on increasing truck sizes (e.g. replacing a 10-ton truck with a 20-ton truck) as an activity for improving transport efficiency.

Improvement of Fuel Consumption

By improving the fuel consumption of freight trucks, we are promoting the reduction of energy consumption.

In FY2016, after consultations with carriers about the truck transport for branch office supply, we improved the fuel consumption of trucks by using low-fuel-consumption trucks and by ceasing idling during stops in winter (for air conditioning for the driver's seat) by using an electronic blanket, a regenerative air conditioner, etc.

Review of Transport Routes

By reviewing (shortening) transport routes, we are reducing transport distances and energy consumption.

Establishment of Sustainable Recycling Society

In a recycling society, the establishment of 3R strategies is required. Taisho Pharmaceutical is striving to reduce the landfill disposal volume by controlling the waste amount and promoting the appropriate use of recycled products.

Appropriate Management of Waste Handling

Goal

Continue the status check of waste handling and the self-check of waste management at each office based on the Industrial Waste Management and Waste Management Regulations to operate waste disposal appropriately.

Establishment of Rules Regarding Waste Disposal

To be sure to comply with the Waste Management and Public Cleansing Act, we have established a groupwide system for managing waste and have selected a general manager of groupwide waste and assigned responsible waste managers and waste management representatives at the respective offices (15 offices) to create a system that allows systemized waste management. In addition, we have established the Industrial Waste Management and Waste Management Regulations and related procedures to manage waste appropriately. In this management system, we are also reducing the final landfill disposal volume, etc.

Preventive Measures Against Incorrect Disposal When Waste Disposal is Outsourced

To prevent the incorrect disposal of the waste from Omiya Factory when it is outsourced, we have established a system for checking separated waste. More specifically, when waste is carried into a waste stockyard, it is all checked to see whether it is separated as specified to prevent incorrect disposal.



Checking the separation status of all the waste when it is carried into the waste stockyard

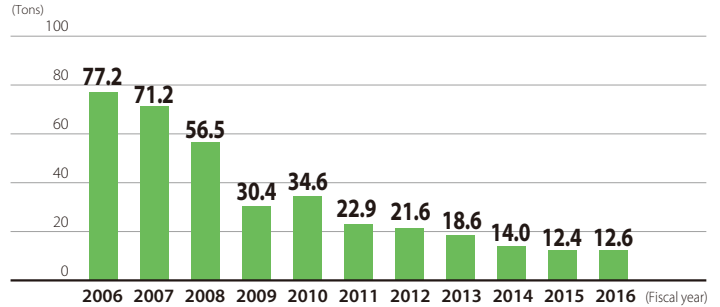
Outsourcing of Transport to Carriers

When waste is passed to a carrier, it is all checked again to see whether it is separated appropriately before outsourcing its transport.



Checking all the waste when it is passed to a carrier to prevent incorrect disposal

Final Landfill Disposal Volume of Waste



Procedures for Passing Waste to a Carrier

1. Summing up the amount of waste

Weigh the waste that has been carried into the waste stockyard.

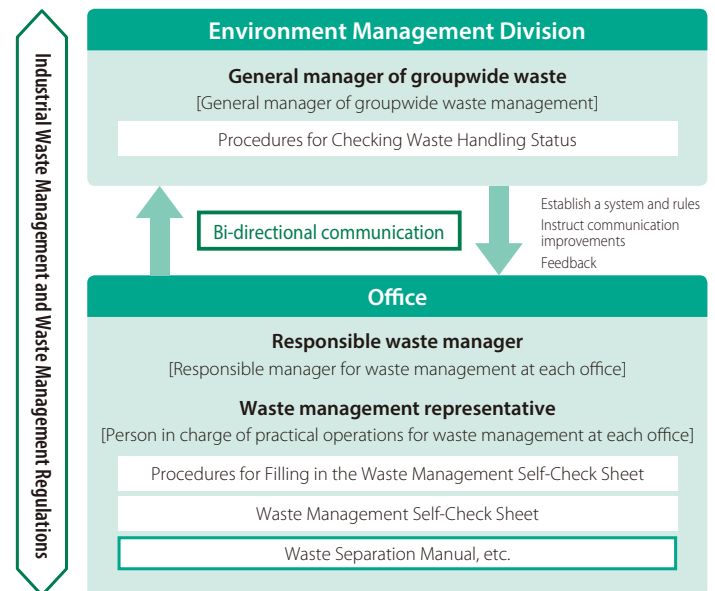
2. Recording the amount to be passed

Record the date, time, department name, and quantity for each waste type on the "Check Sheet When Waste is Carried into the Waste Stockyard." The person in charge from the Environment Management Division performs a visual check and a separation status check and records the results.

3. Passing waste to a waste carrier

The person in charge from the Environment Management Division performs the visual check and the separation status check again and records the results. The date, time, and judgment result for each carrier are recorded in the "Carrier Payment Check Sheet," and the waste is then passed to them.

Groupwide System for Managing Waste (Conceptual Diagram)



Environment Friendliness of Goods Used and Products

We are striving to select and purchase environmentally friendly goods and design environmentally friendly products. In addition, we handle containers and packaging when they are finally disposed of in accordance with the relevant laws and regulations.

Purchasing Environmentally Friendly Goods (Green Purchase)

Internet Purchasing System

In FY2005, we introduced an Internet purchasing system for consumables. The purchase catalog preferentially contains environmentally friendly products, which leads to green purchasing.

Green Purchasing of Automobiles

Taisho Pharmaceutical and Taisho Toyama Pharmaceutical Co., Ltd. use 947 cars for their business activities (as of the end of March 2017). We have progressively switched them to low-emission cars, and in FY2011, all the cars used for business activities achieved a reduction of 75% or more in exhaust gas compared with the certification standard in 2005.

Since FY2008, we have introduced some hybrid cars, and since FY2013, we have altered the main car from the TIIDA LATIO (1,500 cc) to the LATIO (1,200 cc) with lower displacement to improve fuel consumption. In future, we will further reduce the environmental loads by conducting eco-driving, etc.

Percentage of Green Purchasing of Corporate Cars (As of the end of March 2017)

	Number of cars	Percentage
Total number of cars	947	
Exhaust gas certification standard in 2005	947	
Reduced by 75% (New ☆☆☆☆) Hybrid	28	100%
Reduced by 75% (New ☆☆☆☆)	919	
Reduced by 50% (New ☆☆☆)	0	
Others	0	0%

Outsourcing Costs for Re-productization in FY2016

Container type	Glass bottles
	Paper containers and packaging
	Plastic containers and packaging
	PET bottles
Outsourcing cost (after clearing)	122 million yen

Environmental Friendliness of Products

Designing Environmentally Friendly Products

Containers and packaging after a product is used generate environmental loads when they become waste. To reduce them, we are considering designing the products with lower environmental loads.

Compliance with Containers and Packaging Recycling Act

We fulfill our duties as a business operator by outsourcing re-productization to the Japan Containers and Packaging Recycling Association.

The outsourcing cost for re-productization in FY2016 was a total of 122 million yen in glass bottles, paper containers and packaging, plastic containers and packaging, and PET bottles.

The outsourcing cost for the re-productization for each material is also found on the website of the Japan Containers and Packaging Recycling Association.

Environmental Communications

We are striving for environmental communication internally and externally through group education regarding the environment, bi-directional external communications, and information disclosure via the environment website, etc.

Bi-directional External Communications

- Active Discussions with the Government, Local Residents, and Pharmaceutical Associations, etc. -

We are striving for bi-directional communications through information disclosure regarding the environment and interactions with local communities.

Omiya Factory held the fourth Taisho Pharmaceutical Environmental Communication in February 2017 to disclose environment information to the Saitama prefectural government, the Saitama city government and local residents and have an opinion exchange meeting between them and us. In addition to the opinion exchange meeting, we also introduced the key points of communications such as the purposes, details, and evaluation method in an easy-to-understand way based on various types of internal and external bi-directional communication cases that we have conducted previously.



The fourth Taisho Pharmaceutical Environmental Communication (February 10, 2017)



Implementation Status of Environmental Communications

We are promoting environmental activities in cooperation with the environment-related committees of the pharmaceutical associations and the material recycling associations.

Activities implemented	Detailed activity
Hold the Environmental Communication	Disclose information about our environment activities to deepen bi-directional understanding
Eco report from Taisho Pharmaceutical	Distribute to visitors to the factories
Eco exhibition	Installed in the corridor for visitors at Omiya Factory (manufacturing laboratory building 2)
Participate in industrial associations	Participate in the operation of the environment-related committees hosted by the Japan Pharmaceutical Manufacturers Association and the Japan Self-Medication Industry to promote environmental activities in cooperation with them.
Participate in recycling associations	Participate in the Glass Bottle 3R Promotion Association to promote recycling.

Organizations we are associated with

- Environment & Safety Committee of the Japan Pharmaceutical Manufacturers Association
- Environment Committee of the Japan Self-Medication Industry
- Japan Containers and Packaging Recycling Association
- Glass Bottle 3R Promotion Association
- Saitama City Environment Conservation Liaison Council

Environment Education and Internal Communication Activities

- Providing Awareness of Environmental Friendliness and the Reduction of Excessive Workload, Waste, and Unevenness -

Groupwide Common Basic Training <Environment>

Since FY2010, we have continuously provided employees with monthly training to improve groupwide basic education with the aim of improving the basic abilities of employees and the organizational power of each department and improving their performance.

One of the themes is "environmental activities." Since FY2012, we have selected themes that are more strongly related to each division in addition to the groupwide common themes. We have provided training that enables every employee to act with strong awareness of the environment and have gradually begun seeing the results.

Fiscal year	Theme
2012	<Common Theme> Review our past activities for cost and energy saving and reflect them in new environment activities <Theme for Each Division> Head office and branch offices: Resource saving and energy saving Production Department: Water supply/drainage, risk control Research center: Waste management
2013	<Common Theme> Results and summary of resource-saving activities <Theme for Each Division> Head office and branch offices: Waste (garbage) Production Department: Environment-related misconduct case Research center: Current status of global warming and activities for reducing CO ₂ emissions
2014	<Common Theme> Results and summary of resource-saving activities Head office and branch offices: Reduce waste by promoting 3R Production Department: Reduce waste by promoting 3R Research center: Reduce waste by promoting 3R
2015	<Common Theme> Environmental activities - Consider power saving again -
2016	<Common Theme> Reduce waste by promoting 3R

Group Training

The Production Department provides environment training to all workers at each factory according to the ISO 14001 system.

In a situation where a large number of cases of the illegal disposal of novelty goods are reported these days, the sales and back-office departments explain the risks regarding the disposal of novelty goods and compliance with the Waste Management and Public Cleansing Act at the sales meetings to improve the medical device sales representatives' (SRs) awareness of compliance with laws.

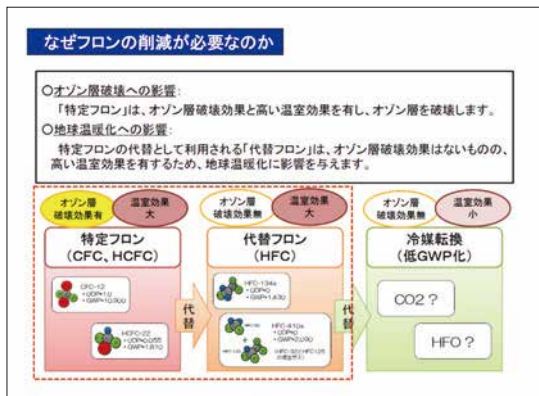
We have also been continuously providing environment training at the head office and branch offices.

In FY2016, we provided educational lectures on the need to reduce CFCs and countermeasures against it at the head office (Toshima Ward, Tokyo) in August and at the Fukuoka Distribution Center of Kyushu Branch (Fukuoka City, Fukuoka Prefecture) in January for the purpose of maintaining compliance.

In future, we will continue to provide environment training to improve employees' awareness of the environment and compliance with laws.



Fukuoka Distribution Center of Kyushu Branch (January 26 and 27, 2017)
Lecture on the need to reduce CFCs and countermeasures against it



As a result of the analysis of the answers from the participants, the knowledge about the environment among our group employees was almost the same as that of the examinees of the Eco Test.

In Environment Month in Summer (July), the Production Department performed an initiative that required the workers at each workplace to consider and perform their unique environmental activities to improve their independence regarding environmental activities.

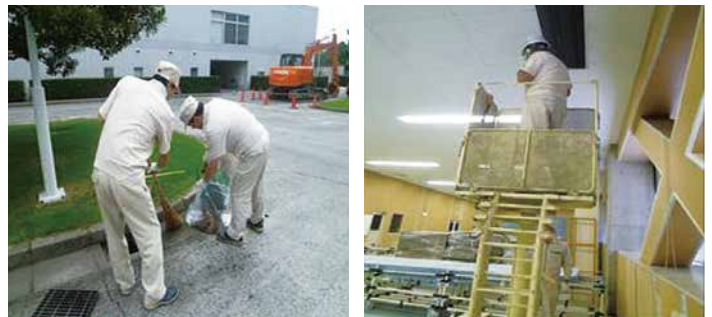
One example is the running of the environment campaign at a workplace where the people working there unified to improve their awareness of the environment through internal and home activities that encourage environmental activities and eco commuting and through motor vehicle eco-maintenance, etc.

*"Eco People" is the name for the people who have passed the Certification Test for Environmental Specialists (Eco Test) - Test for developing people who think about society and the environment or promoting a sustainable society, which is conducted twice a year by the Tokyo Chamber of Commerce and Industry.

Initiatives Uniquely Conducted by Each Department in FY2016

(July 1, 2016 to September 30, 2016)

[Production Department] Participants: 1,270 people (including the workers' families)



Pipe Material Division: Great results from small efforts

実施内容	参加人数
1. 環境月間推進委員会（民生工場）の開催	100
2. 環境月間啓発活動（民生工場）の実施	100
3. エアコンのフィルター清掃（民生工場）の実施	100
4. エアコンのガス充填（民生工場）の実施	100
5. エアコンのガス回収（民生工場）の実施	100
6. エアコンのガス補充（民生工場）の実施	100
7. エアコンのガス回収・補充（民生工場）の実施	100
8. エアコンのガス回収・補充（民生工場）の実施	100
9. エアコンのガス回収・補充（民生工場）の実施	100
10. エアコンのガス回収・補充（民生工場）の実施	100
11. エアコンのガス回収・補充（民生工場）の実施	100
12. エアコンのガス回収・補充（民生工場）の実施	100
13. エアコンのガス回収・補充（民生工場）の実施	100
14. エアコンのガス回収・補充（民生工場）の実施	100
15. エアコンのガス回収・補充（民生工場）の実施	100
16. エアコンのガス回収・補充（民生工場）の実施	100
17. エアコンのガス回収・補充（民生工場）の実施	100
18. エアコンのガス回収・補充（民生工場）の実施	100
19. エアコンのガス回収・補充（民生工場）の実施	100
20. エアコンのガス回収・補充（民生工場）の実施	100

Hanyu Factory and five other departments participated in Eco Life

The department's unique poster was created



Environment Month

We set February as environment month from FY2002 and July from FY2009, and performed various activities related to the environment.

In Environment Month in Winter (February) in FY2016, we carried out the "Are You Eco People?*" campaign by using the Intranet as a groupwide initiative in the same manner as in the previous year. We prepared questions that were the equivalent of this test and had the employees answer them.

Environment Month Initiatives Conducted in FY2016

- Environment Quiz
- Week of No Use of Private Car for Commuting (twice a year)
- Light Down campaign (on the day of the summer solstice and on Cool Earth Day)
- "Are You Eco People?"
- Unique environmental activities at each workplace

Policies for Environmental Activities

Taisho Pharmaceutical has promoted environmental activities and established initiatives on an annual basis based on the Fundamental Policy and Code of Conduct related to the environment and on the Fourth Fundamental Environmental Plan (FY2016 to FY2020) that we established in July 2016.

Fundamental Policy and Code of Conduct related to the Environment

Taisho Pharmaceutical positions environmental issues as one of the important issues for our business activities and sets and strives to achieve the numerical goals of resource saving and reduction of CO₂ emissions.

Fundamental Policy

The mission of Taisho Pharmaceutical is to contribute to society by creating and offering superior pharmaceuticals and health-related products as well as healthcare-related information and services in socially responsible ways that enrich people's lives by improving health and beauty. Based on this mission, we consider the environment and biodiversity in all corporate activities from product R&D, manufacturing and disposal to distribution and sales.

Code of Conduct

- 1 We shall comply with environmental laws and regulations and our agreements with stakeholders including government institutions, related industry groups, and local residents. We shall also set voluntary management standards and work to improve our level of environmental management.
- 2 We shall reduce our use of limited energy and resources to promote energy and resource conservation and help preserve the environment, and work to reduce CO₂ emissions.
- 3 We shall promote the 3R of reduce, reuse and recycle to reduce waste and practice responsible waste treatment.
- 4 We shall work to create the conditions for effective environmental initiatives by providing environmental information to all employees to raise their awareness and broaden their perspective.
- 5 We shall participate in the environmental activities of related pharmaceutical manufacturing organizations, material recycling organizations and other organizations, and cooperate with them on environmental tasks.
- 6 We shall work to achieve harmony with local communities by energetically participating in the preservation and improvement of the local environment.
- 7 We shall proactively disclose information related to the environment and participate in various environmental events to promote communication outside the Company.
- 8 We shall prepare for environmental emergencies in ways such as preparing appropriate systems and manuals, and shall upgrade our crisis management system.

Environment Risk Management and Pollution Prevention

We have established a groupwide framework for managing environment risks. In addition, we have set unique management standards for preventing environment pollution such as air pollution and water contamination and are conducting activities for them.

Reduction of Environment Risks

✿ Establishment of Organization that Deals with Environment Risks

Since FY2008, we have prepared an appropriate framework and procedures for an emergency event related to the environment and have established the following guidelines to build a groupwide crisis management framework.

- Guidelines for Environment Pollution Special Crisis Response - Chronological Action Plan for Environment Pollution Special Crisis

The Production Department uses the ISO 14001 system to establish a framework against environment risks.

✿ Implementation of Emergency Event Response Training

We provided emergency event response training, which assumes an explosion or fire caused by a chemical leakage or ignition to continuously learn the response methods, extract problems, and improve the measures against them.

The Production Department also provides training every year that assumes that an emergency event occurs in a dark place where fewer workers are present, such as at nighttime and on days off.

Operation Status of ISO 14001

✿ Status of Audit

Taisho Pharmaceutical integrated the environment management systems certified for each factory into the Production Department and commenced its operation in FY2010. In the periodic audit performed in FY2016, one item for observation was found.

In addition, in the internal environment audit, we conduct not a simple system audit but a performance audit, which audits the system in terms of performance, and an environment risk audit. We also strive to improve the auditors.

✿ Implementation Status of ISO 14001 Audit

Office	Certificate integrated date	Audit date	Findings	
			Minor nonconformance	Item for observation
Production Department	January 2011	December 2016	0	1

Efforts for Pollution Prevention

✿ Air Pollution and Water Contamination Prevention

We not only comply with laws and regulations but also set our own management standards as required to reduce the environmental loads.

✿ Soil and Groundwater Pollution Countermeasures

As for soil and groundwater pollution, which was found during the factory site soil investigation that was conducted during the period from November 1999 to May 2000 at Omiya Factory, we have undertaken continuous cleaning since FY2001.

* The environment data can be found on our website.

✿ Appropriate Management of PCB Waste

We have appropriately stored and managed PCB waste according to the Waste Management and Public Cleansing Act and the Act on Special Measures concerning Promotion of Proper Treatment of PCB Wastes. We check the storage and management status on a periodic basis and report the results to the government body every year.

In FY2016, we disposed of 35 high-pressure capacitors containing highly concentrated PCB at the Japan Environmental Storage & Safety Corporation (JESCO). In future, we will continue to store and manage the remaining fluorescent ballasts and low-pressure capacitors that contain PCB while disposing of them as appropriate according to the instructions from the national government and related organizations.



✿ Management of Chemical Substances

As for the PRTR-applicable chemicals specified in the Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof as well as environmentally toxic chemicals, we strive to manage them appropriately and reduce their emissions according to the related rules and Taisho Pharmaceutical's unique management procedures.

Targets and Results of Environmental Activities and Details of Future Actions

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Initiative	Target in FY2016	Actual in FY2016	Self-evaluation	Future action
1. Improvement of energy efficiency	Reduce annual groupwide specific energy consumption* ¹ by 1% or more	<ul style="list-style-type: none"> Reduced by 1.6% groupwide Omiya Factory (including Research Center): Reduced by 3.4% Hanyu Factory: Reduced by 1.0% Okayama Factory: Increased by 6.1% Sales and back offices: Increased by 1.6% 	○	<ul style="list-style-type: none"> Update the cooling facilities at Omiya and Hanyu Factories (improve efficiency)
2. Reduction of CO ₂ emissions	Reduce the average amount of CO ₂ emissions from the offices in Saitama Prefecture (Omiya Factory, Research Center, and Hanyu Factory) over the course of FY2015 to FY2019 by 13% compared with the baseline year* ² (Targeted emission amount: 41,998 tons)	<ul style="list-style-type: none"> 43,270 tons (reduced by 10.4%) 	×	<ul style="list-style-type: none"> Introduce LED lighting
3. Promotion of environmentally friendly distribution operations	Reduce the annual average amount of specific energy consumption associated with transport by 1% or more by FY2016	<ul style="list-style-type: none"> Reduced by 1.5% compared with the previous year Previous year: 0.0336 L/ton-k This year: 0.0331 L/ton-k The annual amount was reduced by 1.5% on average (for five years). 	○	<ul style="list-style-type: none"> Promote Modal Shift in Truck Transport (Factory -> Branch) <ul style="list-style-type: none"> Review the transport routes Reduce transport energy in cooperation with carriers <ul style="list-style-type: none"> Improve fuel consumption Decrease the number of transports by increasing the transport amount
4. Appropriate management of waste handling	Strive to perform appropriate waste disposal operations by checking the waste handling status at the Environment Management Division and self-checking waste management at each office based on the Industrial Waste Management and Waste Management Regulations.	<ul style="list-style-type: none"> Checks of waste handling status: performed at two out of 15 offices. Self-checks of waste management at each office: performed at all 15 offices in May Waste seminars: held at two offices 	○	<ul style="list-style-type: none"> Perform regular checks of waste handling status and self-checks of waste management Hold regular waste seminars at each office
5. Compliance with the Act on Rational Use and Proper Management of Fluorocarbons	Perform management in compliance with the law	<ul style="list-style-type: none"> Perform simplified and periodical checks Understand the calculated leakage amount 	○	<ul style="list-style-type: none"> Implement checks Understand the calculated leakage amount
6. Promotion of environment risk management	Realize zero occurrence of the environment risks* ³ that have an influence externally	<ul style="list-style-type: none"> Occurrences of environment risks that have an influence externally: 0 	○	<ul style="list-style-type: none"> Identify environment risks and evaluate their influence Take risk preventive measures
7. Promotion of environment communications	Pick up environmental activities for the groupwide common basic training to further improve the basic knowledge of the employees Evaluate "understanding of training contents," "improvement of environmental awareness," and "awareness of the environment" on a scale of -2 to +2 points. Each item targets +1.0 point or more.	<ul style="list-style-type: none"> We provided environment training as one of the groupwide common basic training courses in February 2017 and confirmed the effect. Each department achieved their target. 	○	Since we saw a certain degree of impact of the repeated training, we will not perform it in FY2017.
	Improve employees' awareness of the environment through the groupwide events in Environment Month and the group training such as environment training, which is performed at each branch office.	<ul style="list-style-type: none"> Check the effects of the training using a questionnaire. The target was achieved at the branch office that completed the questionnaire. The target number of visitors (1,500 visitors) was not achieved in Environment Month in Summer. July 2016 (Summer): 1,499 visitors February 2017 (Winter): 1,534 visitors 	△	<ul style="list-style-type: none"> Perform environmental activities that can be performed easily such as energy saving and resource saving.
	Disclose our environmental activity information externally in an appropriate, fair, and timely manner.	<ul style="list-style-type: none"> Issue a web version of the environmental activity report (September) Undertake environmental communication (February 2017) 	○	<ul style="list-style-type: none"> Issue a web version of the environmental activity report Participate in environmental activities conducted by external organizations
Self-evaluation	○ = The activities have proceeded smoothly and sufficient effects have become apparent.	△ = The activities have proceeded smoothly and some effects have become apparent.	×	The activities have proceeded but greater efforts are needed.

*1 Groupwide specific energy consumption
Omiya Factory (including Research Center), Okayama Factory, and Hanyu Factory: Energy consumption / (operation hours x floor area)
Sales and back offices: Energy consumption / floor area

*2 The average amount of CO₂ emissions over FY2002 to FY2004 (total of Omiya Factory, Research Center, and Hanyu Factory: 48,275 tons)

*3 An event that has a certain or higher level of influence as a result of multiplying the influence of an accident or emergency event that may have a major influence on the environment when it becomes evident with the percentage of becoming evident.