

1. Kikkoman Group Environmental Principles

Kikkoman Corporation formulated and published its Environmental Philosophy (Principles and Action Guidelines) in 1992. This was subsequently adopted as that of the Kikkoman Group as a whole in 2007.

1) Environmental Philosophy

The Kikkoman Group will respect the working of nature, and contribute to the realization of a society comfortable to live in through our corporate activities keeping harmony with the environment.

Commentary of Environmental Philosophy

“Respect for the working of nature” means:

Kikkoman Group looks to create an atmosphere where human life fits harmoniously within the nature world.

“Our corporate activities keeping harmony with the environment” means:

We will improve and develop our means of production and distribution to minimize our impact on the environment.

“A society comfortable to live in” means:

A society in which individuals are respected and emotional richness is valued within a healthy natural environment.

Under the “Environmental Principles,” the Kikkoman Group strives to ensure that its corporate activities are compatible with the natural environment while working to preserve the global environment and build a recycling-based society.

2) Action Guidelines

The Kikkoman Group acts on the following guidelines with enthusiasm and creativity to achieve the goals of our Environmental Philosophy.

1. Every one of us will aim to remain in harmony with the environment when performing our duties across all sectors (development, procurement, production, sales and support).
2. In addition to observing standard laws, we will formulate and observe our own company rules and regulations related to environmental protection.
3. As responsible members of society, we will actively participate in efforts to preserve the environment in our local communities.
4. We will study and deepen our understanding of the environment.
5. We will think and act from a global point of view.

3) Priority Action Assignments

Priority Action Assignments are set for the Kikkoman Group to achieve the Environmental Philosophy.

<For the Group as a whole>

To achieve the medium- and long-term environmental goals of the Kikkoman Group

<By Sectors>

<Research and Development Sector>

- R&D of environmentally friendly manufacturing technologies, materials and products
- R&D in technological application of byproducts and waste

<Procurement and manufacturing Sector>

- Promotion of green purchasing
- Promotion of resources and energy saving measures
- Conducting Environmental Preservation Activities in and around sites

<Sales and Distribution Sector>

- Reduction and appropriate disposal of waste and returned unsold products
- Streamlining logistics

<Other Sectors>

- Provision of environmental information
- Implementation of environmental preservation activities of all kinds, and the provision of support to and cooperation with such activities

2. Voluntary Action Plan for Environmental Preservation (Voluntary Plan)

<Medium- and Long-term Environmental Preservation Policies and Goals>

To achieve the "Medium- and Long-term Environmental Goals of the Kikkoman Group," a priority action assignment of the Group as a whole, the General Environment Preservation Committee, established in FY2000 (see I-3-1), announced the following "Medium- and Long-term Environmental Preservation Policy and Goals" formulated as the Voluntary Action Plan for all Group companies in August 2000.

Policy	Goals
Policy 1: Prevention of Global Warming	Reduction of CO ₂ emissions by FY2011 Domestic major manufacturing sector of the Kikkoman Group 92% of FY1991 level (-8%) Distribution sector of the Kikkoman Group 92% of FY1991 level (-8%)
Policy 2: Reduction of waste	Reuse and recycle of waste and byproducts by FY2006 Domestic major manufacturing sector of the Kikkoman Group 99% (excl. construction waste) Other sectors of the Kikkoman Group 95%
Policy 3: Establishment of the Environmental Management System	Implementation of internal environmental audit Domestic manufacturing sector and Technological sector from FY1996 Overseas plants and related companies from FY1998 Obtaining ISO14001 certification Domestic major manufacturing sector by FY2006 Introduction of Environmental Accounting Publication of the Environmental Accounting of domestic and overseas manufacturing companies for FY2000 by the end of June 2000 Introduction of the Consolidated Environmental Accounting by the end of 2001

In the following years, the contents of the "Medium- and Long-term Environmental Preservation Policies and Goals" have been revised along with the progress of environmental preservation activities and the achievement of goals.

February 2001	Change
	Addition to the basic policy "Promotion of the Global Compact" To promote three principles related to the environment among the nine principles
	Reason for addition In January 2001 Kikkoman became the first corporation from Japan to join the UN Global Compact.
May 2005	Changes
	Change in the goal of "Prevention of Global Warming"
	Goals Reduce the total amount of CO ₂ emissions of the Kikkoman Group (domestic major manufacturing sector) to 90 percent (-10%) of the FY1991 level by FY2011.
	Reason for revisions The goal was raised because the previously set goal "Reduce CO ₂ emissions to 92% of the FY1991 level" had been achieved for 2 consecutive years. The goal is based on the document "Sector-wise goals to reduce CO ₂ emissions: 8.6% for the Industrial Sector" decided upon by the Cabinet in April 2005.
	Change
	Addition to the basic policy: "Promotion of Environmental Education" To promote environmental education to employees, neighboring communities and schools, and the public at large
	Reason for addition To respond to the enforcement of the Act on Environmental Preservation Activities and Environmental Education Promotion in October 2003.
Change	
Deletion from the Environment Sector: Promotion of the Global Compact	
Reason for deletion To spread the goal to all Group companies	

May 2006	Change
	Change in the goals of Reduction of Reduction of waste
	Goals
	(1) Improve the methods of recycling use of waste and byproducts (2) Promote the use of environmentally considerate containers and packaging materials
	Reason for revisions
	The goal "to raise the ratio of recycling use of waste and byproducts to 99% and higher by FY2006" was achieved. Therefore, it was decided that the quality of recycling use will be enhanced instead of setting a target. Efforts to upgrade containers and packages were added as an important task.
	Change
	Revise the "Establishment of the Environmental Management System" to the "Promotion of Environmental Management"
	Goals
	(1) Promote the PDCA Cycle. (2) Disseminate environmental information positively. (3) Disclose Environmental Accounting.
May 2009	Reason for revisions
	(1) The goal "that major Group companies and offices acquire ISO14001 certification by FY2006" had been achieved, and a new goal was set forth to make effective use of the system. (2) The website-version of "Kikkoman Group Sustainability Report" was developed into the printed version of "Kikkoman Group Corporate Citizenship Report" with an aim to positively publicize the environmental preservation efforts by Kikkoman. (3) As the "introduction" of Environmental Accounting was finished, only the term "disclosure" was used.
	Change
	Addition of a goal to the Prevention of Global Warming:
	Goals
	Reduce CO ₂ emissions per unit of the Kikkoman Group (major manufacturing companies) to 99% and lower than that of the previous fiscal year.
	Reason for addition
	In order to make concerted efforts across the Group including overseas companies to reduce CO ₂ emissions, the range of targets was expanded. As the targets to reduce the total emissions vary from country to country, a per-unit-of-production goal was set forth.
	Change
	Addition of a goal to the Promotion of Environmental Management:
Goals	
Acquire ISO14001 for the domestic major manufacturing companies as a whole by FY2012.	
Reason for addition	
The holding company system was introduced in October 2010. By acquiring group certification, it is aimed to promote highly sustainable environmental management in the Group by building an efficient environmental management system to fit the holding company system, and to continuously improve the system.	

Environmental Preservation System

June 2010	Change
	Revision of the goals of the "Reduction of Waste"
	Goals
	Increase the reuse rates of waste and byproducts to 99% and higher at domestic and major overseas manufacturing companies by FY2015.
	Reason
	New numerical goal was set forth.
December 2010	Change
	Revision of the goal of the "Prevention of Global Warming"
	Goals
	(1) To reduce CO ₂ emissions by 15% and more by FY2013 compared to the FY2006 levels at major domestic companies.
	(2) To reduce CO ₂ emissions per unit of production by 1% and more from the previous year at major domestic companies and overseas major manufacturing companies.
	Reason for revisions
May 2012	Change
	Revision of the goal of the "Prevention of Global Warming"
	Goals
	(1) To reduce the total CO ₂ emissions of major domestic companies by 17% or more from the FY2006 levels by FY2015.
	Reason
	The numerical goal amount was raised following to efforts made to reduce CO ₂ emissions.
April 2015	Change
	Revision of the goal of the "Promotion of Environmental Management."
	Goals
	(1) To promote certain and continued improvements in the Group as the whole.
	Reason
	Upon the Group acquisition of ISO14001 in June 2011, the promotion of environmental management covering Group companies became necessary.
April 2015	Change
	"Medium-term Environmental Policy" and "Goals"
	Policy&Goals
	"Medium-term Environmental Policy FY2016-FY2018" and "Goals" (table in the following page)
April 2015	Reason
	"Medium-term Environmental Policy FY2013-FY2015" were achieved.

Environmental Preservation System

“Medium-term Environmental Policy FY2016-FY2018”

Goal	Objective
Goal 1: Low-Carbon Society	To reduce CO₂ emissions in procurement of raw material To conduct environmental impact assessment for raw material production processes To study methods of energy reduction for procurement processes
	To reduce CO₂ emissions in manufacturing Goal to reduce CO ₂ emissions Domestic manufacturing divisions (per unit of production): 80% (-20%) of the FY2006 level by FY2018 Major overseas manufacturing divisions (per unit of production): 97% (-3%) of the FY2015 level by FY2018 Domestic sales and back-office divisions (emissions): 99%(-1%) of the previous fiscal year
	To reduce CO₂ emissions in distribution To study and determine methods of distribution that most efficiently lead to the reduction of CO ₂ emissions such as improving the ratio of loading trips to total trips and controlling ecological driving
	To reduce waste from products and work-in-progress To promote reduction in waste resulting from problems with products, work-in-process and raw materials
	To reduce waste in general Numerical goal of waste reduction (except for byproducts) Domestic manufacturing divisions and major overseas manufacturing divisions (per unit of production): keep the level of the previous fiscal year or below Domestic sales and back-office divisions (emissions): keep the level of the previous fiscal year or below
Goal 2: Recycling-Based Society	To reduce environmental load in containers and packaging To conduct technological R&D for environmentally considerate containers and packaging To promote reduction in materials for containers and packaging
	To enhance environmental assessment in raw material procurement To promote the introduction of environmental assessment into the purchasing criteria
	To preserve water environment Numerical goals of drainage (water discharged into rivers) Domestic manufacturing divisions (<i>river discharge area</i>): BOD ≤ 10mg/l or COD ≤ 8mg/l
Goal 3: Symbiotic Society	To reduce water consumption Numerical goal of water consumption Domestic manufacturing divisions and major overseas manufacturing divisions (per unit of production): keep the level of the previous fiscal year or below
	To cooperate with local communities To support and cooperate with efforts to preserve local environments
Goal 4: Environmental Management Activity	To respond against environmental risks To strengthen compliance with relevant laws and regulations
	To keep improving the environmental management system To expand environmental education and communication To accommodate to the revision of standards

3. Environmental Management Promotion System

1) History of the Environmental Management Promotion System

<Refer "Environmental Management Promotion System," Corporate Citizenship Report 2006>

<Start of Environment Management Organization>

Kikkoman's forerunners who had been engaged in brewing soy sauce since the Edo era have been concerned about maintaining a healthy environment in order to maximize the activity of brewing microorganisms, such as *koji*, and have taken care of the water of the Edo River for the sake of people downstream including Edo (now Tokyo) using the water for their daily life. In other words, they have been concerned with what is termed environmental management today as the principle of business.

After the impoverished postwar days, Japan's economy enjoyed rapid growth but at the same time, it began to be faced with the pollution issue. To cope with this issue, Kikkoman established the Environmental Measurement Committee in August 1970, conducted air, water and noise surveys around its factories, and presented the basic report on measures to prevent pollution. In February 1972, the Environmental Preservation Group was formed with responsibilities to plan and execute comprehensive pollution prevention measures, and to conduct measurements, analyses, and research. In October in the same year, the Environmental Analysis Office was established. Further, in December, the Environmental Management Department combining the functions of both groups was established as part of the re-organization of the company. This marked the birth of a division specializing in pollution prevention.

Later, the Environmental Management Department has expanded its functions while undergoing changes in the name from "Environmental Protection Division" (1992), "Environmental Protection Promotion Division" (1995), "Environment Management Division" (1999), to "Environment Department" (2002).

<Formulation of the Environmental Charter>

In 1992, a year before the promulgation of the Environment Basic Law, the concept on the environmental issue greatly changed within Kikkoman. The traditional concept was rather passive to carry out business activities that do not cause environmental pollution, while the new concept was a proactive one to seek "business activities to harmonize with the environment" to protect the earth as the treasure of all humans. Based on this concept, the General Environment Protection Committee was established directly under the president, and the present Environmental Principle was formulated and published.

<Formulation of the Voluntary Plan>

In 1993, the "Voluntary Action Plan for Environmental Preservation (Voluntary Plan)" was formulated by the General Environment Protection Committee, aiming at energy conservation and maintaining harmony with the environment. Efforts to achieve its goals were initiated involving all sectors of the Group.

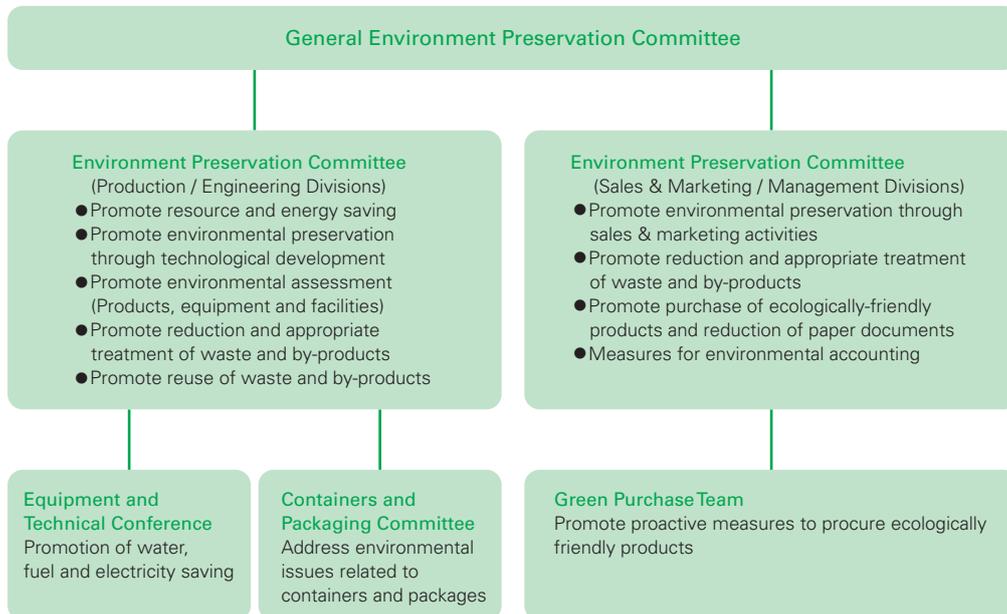
<Introduction of the Environmental Management System>

In 1996, the Internal Environmental Auditing System was introduced to monitor whether environmental protection and management activities were adequately implemented, and whether the management level was maintained and further enhanced. On the extension line of this, efforts to acquire ISO14001 certification were taken at major branches and factories in Japan. The first step for acquiring ISO14001 certification was completed in February 2006 with the Kinki Branch.

In 1999, the General Environment Protection Committee was renamed the General Environment Preservation Committee and it is responsible to formulate the "Medium- and Long-term Environmental Preservation Goals" as the guidelines to direct the environmental preservation activities of the Kikkoman Group, and to promote and manage the implementation of the guidelines.

Environmental Preservation System

● Environmental Management Promotion System (FY2000-FY2010)



2) Re-organization of the Environmental Management Promotion System to acquire ISO14001 certification for all domestic Kikkoman Group facilities as a whole

<Refer "Environmental Preservation System" in Corporate Citizenship Report 2010, website>

<Re-organization of the Environmental Management Promotion System>

The Kikkoman Group reorganized its Environmental Management Promotion System in October 2009 to adapt to the newly introduced holding company system.

Previously overseen by the General Environmental Preservation Committee, the Production/Engineering Division and Sales & Marketing/Management Division were united under the Environmental Preservation Promotion Committee. The members of the Committee are the representatives of major affiliated companies and offices in the Kikkoman Group which have acquired ISO certification.

The "Equipment and Technology Conference" and "Containers and Packaging Committee" which were substructures of the Environmental Preservation Committees before the reorganization will continue their activities as independent committees under the directors in charge of production, the environment and purchasing. The "Green Purchase Team" which was established to concretely promote the procurement of green products will be dissolved and its activities will be absorbed in respective entities which have acquired ISO certification.

Further, the Noda and Nagareyama Environmental Preservation Round Table and Takasago Factory Environmental Preservation Committee were terminated. The target of the participants in the Workshop for Environmental Administrators of the Kikkoman Group has been expanded to include all group companies in the newly named "Kikkoman Group Environmental Manager Information Exchange Meeting."

As a result, the system (refer p.13) has been established.

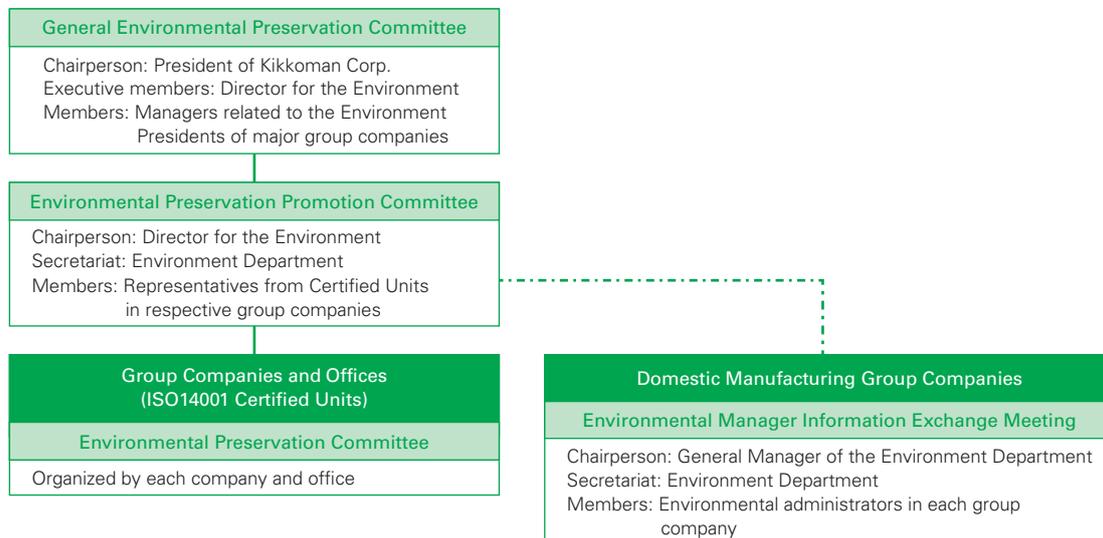
<Environmental Management Promotion System aimed for all major domestic Kikkoman Group facilities to acquire ISO14001 as a whole>

Under the new Environmental Preservation Management Promotion System of the Kikkoman Group, the General Environmental Preservation Committee has been established as the supreme decision-making organ for the environmental activities of all member companies. The Committee, chaired by the president of Kikkoman Corporation, and consisting of directors for the environment of Kikkoman Corporation and the presidents of major member companies of the Kikkoman Group, will formulate, promote and

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supervise, among others, the Medium- and Long- term Environmental Preservation Goals.

● Environmental Preservation Management Promotion System (FY2010-)



Under this General Environmental Preservation Committee, the Environmental Preservation Promotion Committee, consisting of the managerial people and environmental administrators of member companies of the Group, is set up to promote environmental preservation activities from a Group-wise perspective. Further, concrete environmental preservation activities conducted under the directorship of this Promotion Committee are planned and supervised by the Environmental Preservation Committee established in each of the companies and offices which have acquired ISO14001 certification. In addition, the Kikkoman Group Environmental Manager Information Exchange Meeting is set up for people responsible for the environmental preservation at major manufacturing group companies in Japan through which information is shared, to accumulate environment-related knowhow and technologies, and to enhance the Group's capacity to respond to changes.

In order to improve the environmental management system, the Kikkoman Group puts forward the policies and goals of environmental preservation activities on the whole Group level, periodically review the outcomes of activities, and provides the system to help those in charge of environmental preservation to exchange information and interact among themselves.

3) Environmental Management Promotion System after Acquiring ISO14001 Certification for all major domestic Group facilities

<Reported in 2011>

In June 2011, all major domestic facilities of the Kikkoman Group which had acquired ISO14001 certification were united to acquire group certification. At this occasion, the Environmental Preservation Promotion Committee comprising environmental managers of respective facilities was established to administer ISO14001.

The framework of the Environmental Preservation Promotion System (refer p.14 "Environmental Management Framework) is as follows:

Environmental Preservation System

<Top Management>

Head of the system who supervises the entire Kikkoman Group: President of Kikkoman Corporation

<General Environmental Preservation Manager>

Environmental manager appointed by the Top Management to supervise environmental management: Officer in charge of the Environment of Kikkoman Corporation

<Secretary General>

Head of the Secretariat supporting the work of General Environmental Preservation Manager: General Manager of the Environmental Department

<Secretariat>

Staff to promote the General Environmental System under the General Environmental Preservation Manager

<Areas>

Regions, corporations and branches to implement the Environmental Management System: Refer to “Names of Area” in the chart of the Environmental Management Structure

<Area Management>

Managers of organizations supervising areas

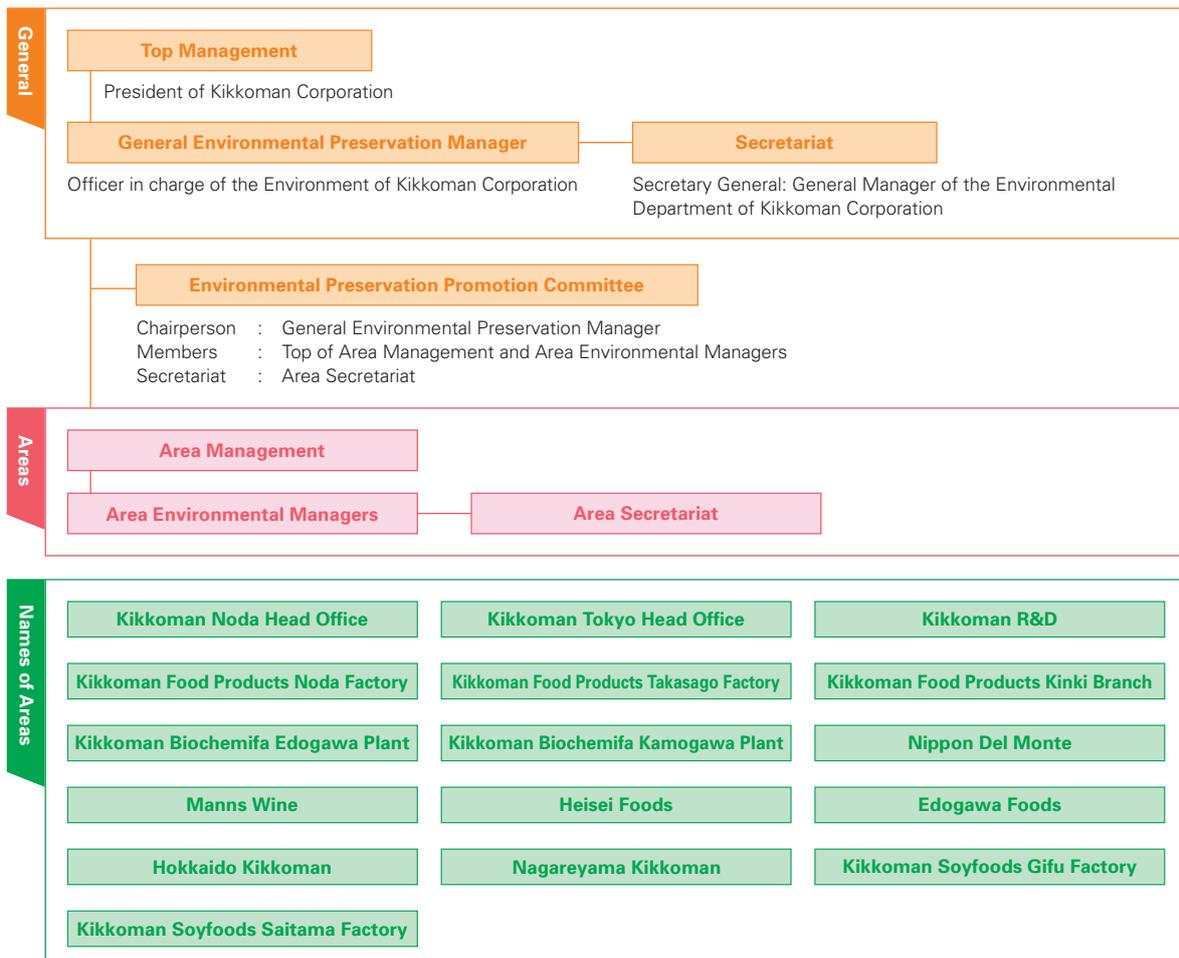
<Area Environmental Managers>

Environmental managers appointed by the Area Management to administer the areas

<Area Secretariats>

Office to promote the Area Environmental Management System under the Area Environmental Managers

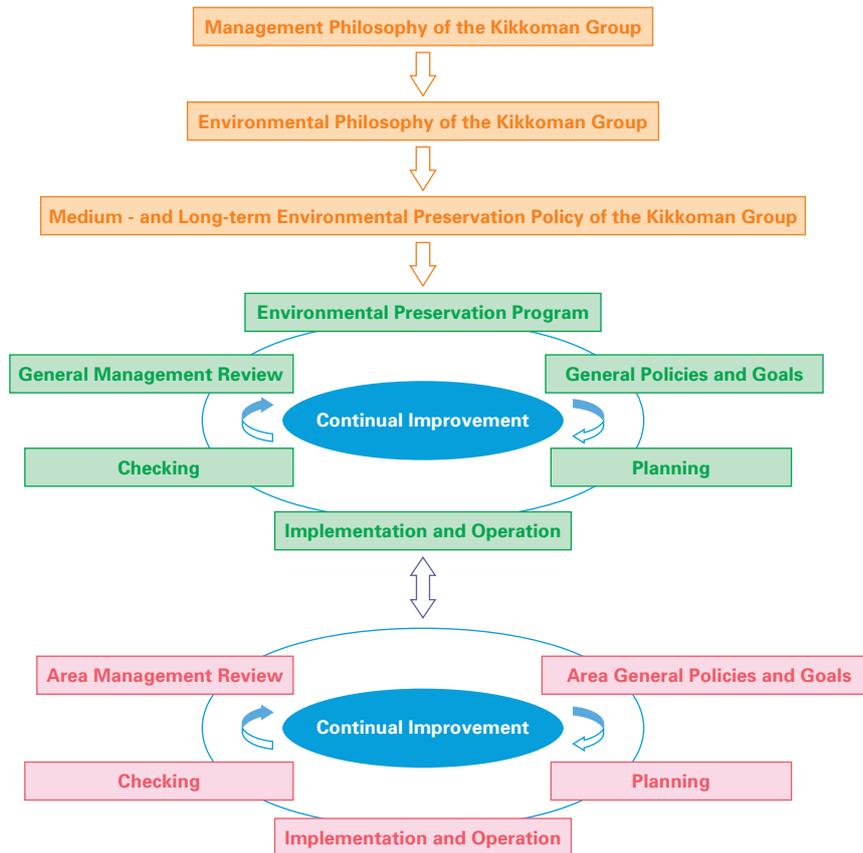
Environmental Management Framework



Environmental Preservation System

Based on its Management Philosophy, Environmental Philosophy and Medium- and Long-term Preservation Goals, the Environmental Management System of the Kikkoman Group is administered in the following framework. It aims for a high level of environmental management as a whole Group under one holding company.

Environmental Management System of the Kikkoman Group



Under the Management System, the following activities are conducted:

- To determine appropriate environmental preservation program
- To identify aspects that can influence the environment
- To identify and have access to the applicable legal requirements and other requirements
- To establish environmental preservation policies and goals
- To establish, implement and maintain plans for achieving its policies and goals
- To facilitate and review planning, managing and checking preventive actions in order to put the environmental management system into practice effectively
- To accommodate to changing circumstances

Environmental Preservation System

<Reported in FY2014>

In FY2013, Takara Shoyu Co., Ltd. began operating the Environmental Management System. With this addition, the total number of the Environmental Management Framework was 17 units. In the following fiscal year, FY2014, the company became one of the ISO14001 certified Kikkoman Group member companies.

<Reported in FY2017>

In FY2016, the Ibaraki Plant of Kikkoman Soyfoods Co. began operating the Environmental Management System. With this addition, the total number of the Environmental Management Framework was 18 units. In FY2016, the plant became one of the ISO14001 certified Kikkoman Group members.

<Reported in FY2019>

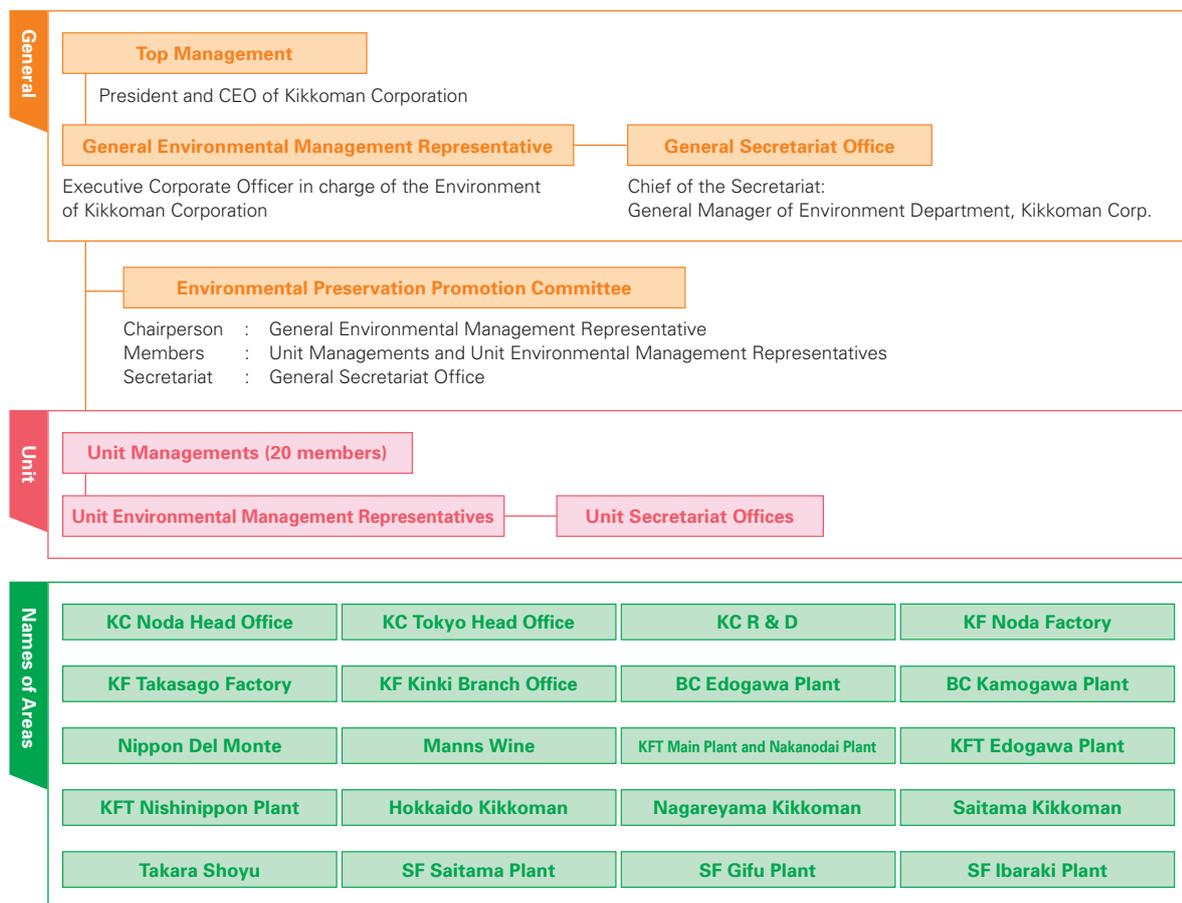
In FY2018, Saitama Kikkoman Co. began operating the Environmental Management System, and became one of the ISO14001 certified Kikkoman Group member companies.

The Nishinippon Plant of Kikkoman Foodtech Co. began operating the Environmental Management System, too. And, in the following fiscal year, FY2019, the plant became one of the ISO14001 certified Kikkoman Group members.

With these addition, the total number of the Environmental Management Framework was 20 units.

* Heisei Foods Co. merged Edogawa Foods Co. and changed its name to Kikkoman Foodtech Co. on April 1, 2017.

Environmental Management Framework (FY2018)



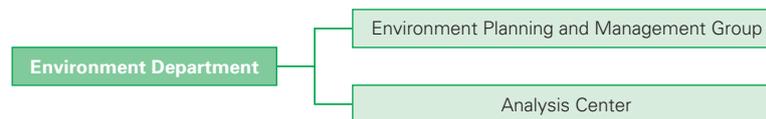
KC=Kikkoman Corp. KF=Kikkoman Food Products BC=Kikkoman Biochemifa KFT=Kikkoman Foodtech SF=Kikkoman Soyfoods

4. Environment Department

1) Before September 2009

<Refer "Activities of the Environment Department," Sustainability Report 2005>

With the aim of maintaining and conveying beautiful nature and a rich living environment for future generations, the Environment Department plans and promotes environment preservation activities of the Group, and guides and supports environmental activities by all branches and factories.



(1) Environment Planning and Managing Group

In an effort to realize the Environmental Philosophy, and with the purposes of "supporting the corporate activities keeping harmony with the environment," "supporting the development of eco-friendly products and technologies," and "living in harmony with the environment and local communities including making social contribution," the Group,

- plans, promotes and supports the environment preservation activities of the Kikkoman Group,
- plans and implements internal environmental audits, and supports branches and factories to acquire ISO14001 certification (environmental management system), and
- plans educational activities on environmental preservation, and supports Group companies to carry out social contribution activities.

(2) Analysis Center

As a professional group of analysts and measuring technicians, the Analysis Center supports and promotes Kikkoman Group's environmental preservation activities. At the same time, as a registered company authorized to certify environmental measurements, the Center aims to contribute to the environmental preservation of local communities through its activities to analyze the air, water, soil, industrial waste, noise, vibration, odor, drinking water and agricultural chemicals. In practice, the Analysis Center:

- conducts surveys and analyses on samples brought in by corporations and organizations from inside and outside the Kikkoman Group, and
- reports the results to clients

2) October 2009 and Afterwards

<Refer "Risk management backed by research and development activities" in Corporate Citizenship Report 2010, website>

The Analysis Center was re-organized at the time of the organizational reform in October 2009 as the "Environment and Food Safety Analysis Center" to "support researches on food safety and analyzing activities," and to "support environmental analyses and environmental preservation activities." It was moved from the Environment Department to the Research and Development Division. By integrating R&D and environmental analysis functions, it is expected that techniques and knowledge for analysis will be enhanced, that more efficient analysis work will be achieved and that new analysis methods will be developed.

The Environment Department will be engaged in the following activities which have been carried out so far by the Environmental Planning and Management Group.

- Planning, promoting and supporting the environmental preservation activities of the Kikkoman Group,
- Planning educational activities on environmental preservation, and supporting corporate social contribution activities, and
- Planning and implementing internal environmental audits.

In addition, the department will

- Promote acquiring ISO14001 certification of all major domestic Kikkoman Group facilities.