

PFU ENVIRONMENTAL REPORT 2019



Corporate Profile

Company name: PFU Limited
Capital: 15 billion yen
Sales: 135.2 billion yen
(consolidated for fiscal 2018)
Employees: 4,403 (PFU Group, as of March 2019)
Foundation: May 1962 (Establishment: November 1960)
Shareholder: Fujitsu Limited
Headquarters: Nu 98-2 Unoke, Kahoku-shi, Ishikawa
929-1192 Japan

Our Business

[Solutions & Services]

<Service Integration>

- Services that promote a reform in working style
- Services that support operation and improvement of business practices

<Cyber Security>

- Cyber attack countermeasure support
- Development and manufacturing of network security appliance products

<IT Services>

- Construction and maintenance of an IT infrastructure

[Products]

<Hardware>

- Development and manufacturing of image scanners
- Development and manufacturing of interactive KIOSKs, embedded computers
- Development and manufacturing of products such as keyboards that are targeted at individuals

<Software>

- Development of software products such as OCR for business use, support for form development, and document management

Main Sites

Headquarters: Kahoku-shi, Ishikawa
Yokohama Headquarters: Yokohama-shi, Kanagawa
ProDeS Center: Kahoku-shi, Ishikawa
Kansai Branch: Osaka-shi, Osaka
Tokai Branch: Nagoya-shi, Aichi
Shinbashi Service Center: Minato-ku, Tokyo

PFU Group (as of April 1, 2019)

• Affiliated Companies (9 companies in Japan)

PFU Hokkaido Limited
PFU East Japan Limited
PFU West Japan Limited
PFU Quality Service Limited
PFU Technical Communications Limited
PFU Techno Wise Limited
PFU Technoconsul Limited
PFU Life Agency Limited
PFU Creative Services Limited

• Affiliated Companies (9 companies overseas)

PFU Shanghai Co., Ltd.
PFU Shanghai Information System Co., Ltd.
PFU Jiangsu Nantong Information System Co., Ltd.
PFU America, Inc.
Fujitsu Computer Products of America, Inc.
PFU (EMEA) Limited
PFU Hong Kong Limited
Fujitsu South China Limited
PFU Asia Pacific Pte. Ltd.

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[Sites Covered by this Report]

This report provides information on our company's environmental management system for the company Headquarters, Yokohama headquarters, ProDeS Center, Kansai Branch, Tokai Branch, Shinbashi Service Center, and PFU Techno Wise Takamatsu plant, as well as PFU Quality Service Limited, PFU Technical Communications Limited, PFU Techno Wise Limited, PFU Technoconsul Limited, PFU Life Agency Limited, and PFU Creative Service Limited, which are located within the aforementioned companies, Sales and Maintenance services in Japan, and PFU Shanghai Co., Ltd. This report also contains information on three service affiliated companies (PFU Hokkaido Limited, PFU East Japan Limited, and PFU West Japan Limited) that maintain their own environmental management systems.

[Reporting Period]

This report centers on the environmental activities for fiscal 2018 (from April 1, 2018 to March 31, 2019). This report also includes some information from April 2019 and onwards.



Caring for the Earth & Nature

Messages from Management

PFU's Mission

The PFU Group constantly strives to create new value, and to contribute to international and local communities for mutual benefit through the speedy and continued provision of products, services, and solutions that satisfy our customers' needs, based on our advanced information technology.

Never changing passion, ever changing future

In recent years, with the emergence of innovative technology including AI, robotics, and IoT, society is undergoing a digital transformation. IT is now essential to creating a prosperous society. People use various IT services without being conscious of their use on a daily basis thus enjoying a smart lifestyle and work style.

Because of this digital revolution, people's expectations of IT are becoming higher and more diverse, and this change has required us to take on flexible and innovative challenges by thinking outside the box in order to make further advancements in IT.

Our mission is to maximize the possibilities of IT and continue to contribute to our customers and society. Dealing with the rapid and sudden changes in the era that we live in, we have moved forward through continuous trial-and-error methods in order to provide better products and value.

We will continue to move away from conventional methods and approach new challenges with honesty and sincerity which has always been our way.

We will continue with our efforts in order for our customers as well as our society where people feel safe, assured, and comfortable, to advance.

Efforts for Environmental Activities

We are pursuing environmental activities based on our corporate principles to "keep the environment green".

In fiscal 2018, the last year for the Eighth Environmental Action Plan, we worked on six targets.

(1) Continuous Creation and Provision of Eco-efficient Products, (2) Promotion of Environmentally Conscious Solutions and Services, (3) Promotion of Green Procurement, (4) Improvement of Quality and Enhancement of Business Efficiency, (5) Promotion of Global Warming Countermeasures, and (6) Promotion of an Environmentally Conscious Culture.

In fiscal 2019, we will pursue activities with the aim to be a company that fulfills the following three goals:

- (1) A company where all employees work with motivation and purpose brightly, happily, and vibrantly
- (2) A company that can contribute to everyone around us, including our customers and business partners, as well as society
- (3) A company that can continue to grow in both sales and profit for 10, 20 years or more into the future

To these ends, we will make efforts to become a "company where all of us work fast and work with the awareness that we should surely better ourselves in order to complete the necessary measures". We will make prompt changes in order to make steps toward a brighter future.



PFU Limited
President and
Representative Director
Kiyoshi Handa

Messages from Management

PFU's Environmental Principle

We act with an awareness for living in a way that we benefit from the earth and for protecting the environment. We do this by striving to offer products and services that minimize the burden on the environment, while also focusing on changes in the global environment and in addition, striving to protect the environment.

By carrying out our activities based on the three concepts "Green Product", "Green Process", and "Green Mind", which embody this principle, we will contribute to achieving the Sustainable Development Goals (SDGs) for our customers and society.

Environmental Activities That Are Focused on Our Core Business

By carrying out these activities, we aim:

- (1) to release more products with advanced environmental performance to contribute to reducing the environmental burden at our customers' sites (Green Product)
- (2) to improve the efficiency and quality of operations at our own sites in order to reduce our own environmental load (Green Process)
- (3) to contribute to society through regional environmental conservation activities (Green Mind)

By fiscal 2018, not only were we able to set improvements on our environmental performance as environmental targets for our products, solutions, and services in all our business departments, but we were also able to make our environmental targets into our environmental activities that are focused on our core business by making the environmental targets consistent with our business efficiency enhancement targets or quality targets.

Furthermore, we have started the "PFU Original Environmental Management System", which allows us to convert all environmental activities into CO₂ amounts to evaluate the activities, including the activities mentioned above as well as the activities that involve us contributing to the local communities.

In fiscal 2019, we will continue to engage in the activities that are focused on our core business and aim to make environmental contributions for our customers' sites by providing products, solutions, and services as well as our sites by making the environmental targets consistent with our business efficiency enhancement targets or quality targets

I believe in the statement, "A company bases its people. People are the assets." In order for PFU to continue growing in the future it is important to value employees and help them improve their work styles.

Individuals or people as a team are encouraged to come up with ways of enhancing business efficiency in order to create time that those involved can spend for their personal use. The time that is created can be spent on hobbies that they have, things they like, quality time with family, or work.

I believe that these activities lead to workers' job satisfaction and the company's contribution to the environment.



PFU Limited
Corporate Senior Executive
Vice President
Kenichi Miyamoto

Environmental Management System

ISO14001 Certification

Results in Acquiring Independent Certification

We acquired certification for our Kasashima site (Ishikawa prefecture) in October 1996, the month in which the ISO14001 Environmental Management System Standards were issued. After that, we expanded our certified sites. All sites and sales and maintenance service bases across Japan received certification by October 2008. In addition, an overseas affiliated company has also received certification in March 2010.

Because the Tokyo headquarters and the Tokyo Development Center were relocated to the newly-built Yokohama headquarters in October 2014, we acquired the certifications accordingly in March 2015.

- October 1996: Kasashima site (Ishikawa)
- May 2001: Headquarters/Ishikawa Development Center (Ishikawa), Tokyo Development Center (Tokyo)
- April 2004: Tokyo Headquarters (Kanagawa)
- February 2006: Kansai Branch (Osaka), Tokai Branch (Aichi), Shinbashi Service Center (Tokyo)
- November: ProDeS Center (Ishikawa), PFU Techno Wise Takamatsu Plant (Ishikawa)
- October 2008: Sales and maintenance services in Japan (21 sites)
- March 2010: PFU Shanghai (Shanghai, China)
- March 2015: Yokohama Headquarters (Kanagawa) (Operations in the Tokyo Headquarters and Tokyo Development Center were combined)
- April 2016: PFU Quality Service Limited (Kanagawa)

For this certification, all of the sites in Japan, the sales and maintenance service bases in Japan, and an overseas affiliate (PFU Shanghai) that are listed above, as well as six affiliated companies located within these offices, are now registered as a multi-site system operating under one management system.



Headquarters



Yokohama Headquarters



ProDeS Center

Contents of ISO14001 Certification

Scope of Certification: Design, development, manufacture, sales and maintenance of Hardware of Computer, Peripheral Device, Application Device and Software conducted in PFU Limited, PFU Quality Service Limited, PFU Technical Communications Limited, PFU Techno Wise Limited, PFU Technoconsul Limited, PFU Life Agency Limited, PFU Creative Services Limited, and PFU Shanghai Co., Ltd.

Certification Number: EC99J2029
Registration Date: October 29, 1996
Renewal Date: October 29, 2017
Issued Date: August 30, 2017
Certifying Organization: Japan Audit and Certification Organization for Environment and Quality (JACO)





Environmental Activity History

The history of our environmental activities is as follows:

- 1989: Establishment of the Energy-Saving Committee
- 1992: Establishment of the Environmental Committee
- 1993: Establishment of the Environmental Strategies Office Enactment of PFU's Environmental Policy Start of the First Environmental Action Plan
- 1994: Publication of the PFU Environmental Report
- 1996: Start of the Second Environmental Action Plan Kasashima site receives ISO14001 certification
- 1999: Introduction of Environmental Accounting
- 2001: Start of the Third Environmental Action Plan
- 2004: Start of the Fourth Environmental Action Plan
- 2007: Start of the Fifth Environmental Action Plan
- 2008 : Sales and Maintenance Service bases across Japan receive ISO14001 certification (all sites within Japan have acquired ISO14001 certification)
- 2009: An overseas affiliated company (PFU Shanghai Co., Ltd.) receives ISO14001 certification
- 2010: Start of the Sixth Environmental Action Plan
- 2010: Ranked 31st in manufacturing in the 14th "Environmental Management Investigation (Nikkei)"
- 2013: Start of the Seventh Environmental Action Plan
- 2014: "Ishikawa Satoyama ISO" certification (Ishikawa)
- 2015: "Hama Road Supporter" certification (Yokohama)
- 2016: Start of the Eighth Environmental Action Plan
- 2018: "Hama Road Supporter" certificate of appreciation (Yokohama)
- 2019: Start of the Ninth Environmental Action Plan

Awards

- 1992: Award for the Promotion of Energy-Saving (Governor of Ishikawa Prefecture)
- 1994: Excellent Energy Management Plant Award
(Chairman of the Central Bureau of Trade and Industry)
- 1999: Excellent Energy Management Plant Award
(Secretary of the Natural Resources & Energy Agency)
- 2002: Ishikawa Green Enterprise Award (Governor of Ishikawa Prefecture)
- 2011: Ishikawa Prefecture Creativity and Originality Award in the Occupational Field of the Company (Yonejiro Tsuda Award) for the Promotion of Energy-Saving and the Installation of the High Efficiency Reflective Panel
- 2013: Excellent Energy Management Company Award (ProDeS Center)
(Chairman of the Japan Electric Association, Hokuriku Branch)
- 2016: Eco Mark Award 2015 Prize (image scanner)
- 2017: Excellent Energy Management Company Award (Headquarters)
(Chairman of the Japan Electric Association, Hokuriku Branch)



PFU Corporate Principles/PFU Environmental Commitment/Environmental Policy

With PFU's Environmental Commitment and Environmental Policy based on PFU Corporate Principles, we aim to tackle global environmental issues.

These are the PFU Group's basic philosophies of environmental conservation.

PFU Corporate Principles
(Environment-related description)

Action Principles
"We will act to keep the environment green."

Vision and Standards for Our Actions
"We act with an awareness for protecting the environment."

PFU Group members act with an awareness for living in a way that they benefit from the earth and protecting the environment. We do this by offering eco-efficient products and services, while our employees live and work in a manner that places the least burden on the global environment.

PFU Environmental Commitment (Outline)

Action Policies

1. Engage in various activities with all efforts.
2. Implement corporate responsibility.
3. Contribute to society.

Action Principles

1. Business activities should consider environmental impacts.
2. Natural resources and energy should be used effectively.
3. Technologies that help conserve the environment should be developed.
4. Legal rules and out-of-company agreements should be complied with.
5. Participation and support for environmental strategies and cooperative activities that contribute to society should be pursued.
6. Environmental awareness should be raised through education.
7. Systems that promote environmental conservation should be established.
8. Shareholders and affiliated companies should collaborate.
9. Information should be disclosed, and self evaluations feed back into the system.

Environmental Policy

The PFU Group constantly strives to create new value, and to contribute to international and local communities for mutual benefit through the speedy and continued provision of products, services, and solutions that satisfy our customers' needs, based on our advanced information technology.

1. We shall work towards reducing the burden on the global environment by developing high tech solutions and excellent products for our fields of business.
 - (1) Green Product
 - Continuous creation and provision of eco-efficient products
 - Promotion of environmentally conscious solutions and services
 - Promotion of green procurement
 - (2) Green Process
 - Improvement of quality and enhancement of business efficiency
 - Promotion of global warming countermeasures
 - (3) Green Mind
 - Promotion of an environmentally conscious culture
2. We shall comply with all applicable environmental laws and regulations, as well as any other standards that we have decided to adopt. Furthermore we shall prevent pollution, use sustainable resources, mitigate and adapt to climate change, and protect biodiversity and ecosystems by establishing our own standards and appropriately managing environmental facilities, related equipment and harmful chemical substances.
3. We shall establish an Environmental Management System in compliance with ISO14001, and promote environmentally conscious business development, all the while continually improving the system to better conserve the environment.
4. We shall endeavor to raise all of our employees understanding of our environmental activities, and improve their environmental awareness through environmental education, advertising, and social contribution activities. In addition, we will endeavor to work on global environmental conservation such as tackling climate change and conservation of biodiversity through our business and civic activities to be role models in society.
5. To promote this environmental policy, we shall establish firm targets and implement effective plans for their achievement.

This environmental policy is disclosed to the public.
April 2019
PFU Limited

President and Representative Director Corporate Senior Executive Vice President

By carrying out our activities based on the three concepts "Green Product", "Green Process", and "Green Mind", which embody our environmental policies, we contribute to reducing the burden on the environment as well as sustaining the development of our customers and society.

We try to pursue the environmental management system that allows us to convert all environmental activities into CO₂ amounts to evaluate the activities (EMS).

Green Product

We make environmental contributions to the global market by providing products, solutions, and services with **advanced environmental performance.**

Green Process

We make environmental contributions to our company by **improving quality and efficiency** for our business operations.

Green Mind

We make environmental contributions to society by engaging in **environmental and social contribution activities** within our region.



PFU Environmental Action Plan (Eighth Plan: Fiscal 2016 - Fiscal 2018)

Results from the Eighth Environmental Action Plan (Fiscal 2016 - Fiscal 2018) are shown below.

Activity		Details		Results from fiscal 2016	Results from fiscal 2017	Results from fiscal 2018	
Green Product	1	Continuous Creation and Provision of Eco-efficient Products	To produce products with top-level energy efficiency	Scanner products	Maintained 100% product compliance with the International ENERGY STAR Program Ver. 2.0 (5 models)	Maintained 100% product compliance with the International ENERGY STAR Program Ver. 2.0 (5 models)	Maintained 100% product compliance with the International ENERGY STAR Program Ver. 2.0 (7 models)
				Embedded products (*1)	Environmental performance index: 5.639	Environmental performance index: 4.693	Environmental performance index: 4.81
				Interactive KIOSKS	Provisioned products compliant with energy-saving standard levels (2 models) Environmental performance index: (0.106)	Environmental performance index: 0.109	Environmental performance index: 20.0 Amount of reduction in CO ₂ emissions at our customers' sites: 1,659 tons of CO ₂
				Security products	Provisioned eco-efficient products (1 model)	Environmental performance index: 1.908	Environmental performance index: 1.98 Amount of reduction in CO ₂ emissions at our customers' sites: 775 tons of CO ₂
				Proposal for the use of a cloud computing system	-	Environmental contribution index: 15	Number of orders received for the proposal: 28
				Solutions	-	Environmental contribution index: 1.27	Amount of reduction in CO ₂ emissions at our customers' sites: 2,899 tons of CO ₂
				Complying with environmental labels (EPEAT)	Maintained and expanded compliance with EPEAT Maintained 100% product compliance (4 models)	Maintained and expanded compliance with EPEAT Maintained 100% product compliance (4 models)	Maintained and expanded compliance with EPEAT Maintained 100% product compliance (6 models)
	2	Promotion of Environmentally Conscious Solutions and Services	To reduce our customers' environmental burden by expanding our environmentally conscious solutions and services	At least one suggestion per department (21 out of 21 departments)	At least one suggestion per department (21 out of 21 departments)	At least one suggestion per department (23 out of 23 departments)	
	3	Promotion of Green Procurement	To promote procurement from suppliers that work aggressively in consideration of the environment	Promoted CO ₂ reduction activities to the upper stream in the supply chain: 100% understanding of business partners' activities (59 companies)	Promoted CO ₂ reduction activities to the upper stream in the supply chain: 100% understanding of business partners' activities (55 companies)	Promoted CO ₂ reduction activities to the upper stream in the supply chain: 100% understanding of business partners' activities (47 companies)	



Green Process	4	Improvement of Quality and Enhancement of Business Efficiency	To reduce the burden on the environment with improved business operations	At least one suggestion per department (46 out of 46 departments)	At least one suggestion per department (46 out of 46 departments)	At least one suggestion per department (42 out of 46 departments)
	5	Promotion of Global Warming Countermeasures	To cut the amount of energy consumption.	Crude oil conversion value: 3,232 kL	Crude oil conversion value: 3,120 kL	Crude oil conversion value: 3,228 kL
Green Mind	6	Promotion of an Environmentally Conscious Culture	To promote the protection of the environment through not only environmental and social contribution activities and biodiversity conservation activities, but also through sharing environmental activity information and improving operation	Promoted social contribution activities (22 projects)	Promoted social contribution activities (21 projects)	To promote social contribution activities (22 projects)
				Promoted the sharing/transmitting environmental information and improving operation of environmental activities (37 projects)	Promoted the sharing/transmitting environmental information and improving operation of environmental activities (35 projects)	To promote the sharing/transmitting environmental information and improving operation of environmental activities (36 projects)
				Compliance with ISO14001:2015 (completed compliance)	Steady transition to ISO14001:2015 (completed transition)	Continued improvement of the management system (completed the activities for the action plan)

The environmental performance index is calculated by the amount of power consumed per product and the number of shipments. The environmental contribution index and the amount of reduction in CO₂ emissions at customers' sites are calculated from the number of solutions and services provided.

(*1) Embedded products: Embedded computers

Results from Activities in Fiscal 2018

During fiscal 2018, the last year of the Eighth Environmental Action Plan (Fiscal 2016 - Fiscal 2018), we pursued 16 environmental targets and achieved 13 of them.

✓: Target Achieved -: Target Not Achieved

Activity	Details	Fiscal 2018				
		Target	Result	Evaluation		
1 Continuous Creation and Provision of Eco-efficient Products	To produce products with top-level energy efficiency	Scanner products	To maintain 100% product compliance with the International ENERGY STAR Program Ver. 2.0	Maintained 100% product compliance with the International ENERGY STAR Program Ver. 2.0 (Sum of 7 models)	✓	
		Embedded products	Environmental performance index: 4.45 or less	Environmental performance index: 4.81	-	
		Interactive KIOSKS	Environmental performance index: 21.3 or less	Environmental performance index: 20.0	✓	
			Amount of reduction in CO ₂ emissions at our customers' sites: 1,897 tons of CO ₂ or more	Amount of reduction in CO ₂ emissions at our customers' sites: 1,659 tons of CO ₂	-	
		Security products	Environmental performance index: 2.07 or less	Environmental performance index: 1.98	✓	
			Amount of reduction in CO ₂ emissions at our customers' sites: 768 tons of CO ₂ or more	Amount of reduction in CO ₂ emissions at our customers' sites: 775 tons of CO ₂	✓	
		Customer services	Number of orders received for the proposal: 17 orders or more	Number of orders received for the proposal: 28	✓	
		Solutions	Amount of reduction in CO ₂ emissions at our customers' sites: 2,486 tons of CO ₂ or more	Amount of reduction in CO ₂ emissions at our customers' sites: 2,899 tons of CO ₂ or more	✓	
		To comply with environmental labels (to acquire EPEAT)		To maintain and expand compliance with EPEAT Maintained 100% product compliance	Maintained and expanded compliance with EPEAT Maintained 100% product compliance (Sum of 6 models)	✓
		2 Promotion of Environmentally Conscious Solutions and Services	To reduce our customers' environmental burden by expanding our environmentally conscious solutions and services	To achieve at least one target per department (23 departments)	Achieved at least one target per department (23 departments)	✓
3 Promotion of Green Procurement	To promote procurement from suppliers that work aggressively in consideration of the environment	To promote CO ₂ reduction activities to the upper stream in the supply chain: 100% understanding of business partners' activities	Promoted CO ₂ reduction activities to the upper stream in the supply chain: 100% understanding of business partners' activities (47 companies)	✓		



Green Process	4	Improvement of Quality and Enhancement of Business Efficiency	To promote improved business operations (to reduce the burden on the environment with improved business operations in areas such as quality and efficiency)	To achieve at least one target per department (46 departments).	Achieved at least one target per department (42 out of 46 departments)	-
	5	Promotion of Global Warming Countermeasures	To cut the amount of energy consumption (Purchased electricity and gas are converted into crude oil)	Crude oil conversion value: 3,239 kL or less	Crude oil conversion value: 3,228 kL (Down by 0.3% compared to the target)	✓
Green Mind	6	Promotion of an Environmentally Conscious Culture	To promote the protection of the environment through not only environmental and social contribution activities and biodiversity conservation activities, but also through sharing environmental activity information and improving operation	To promote social contribution activities 22 projects	Promoted social contribution activities 22 projects	✓
				To promote the sharing/transmitting environmental information and improving operation of environmental activities (36 projects)	Promoted the sharing/transmitting environmental information and improving operation of environmental activities (36 projects)	✓
				Continued improvement of the management system	Continued improvement of the management system (completed the activities for the action plan)	✓

1. Continuous Creation and Provision of Eco-efficient Products

We promote ecological designs and makes efforts to develop and provide eco-efficient products that support "energy-saving", "3R design (*2)", and "management of used chemical substances" in order to reduce the burden on the environment throughout the product's entire life cycle.

In fiscal 2018, in order to contribute to reducing the environmental burden at our customers' sites by releasing more products with advanced environmental performance, we engaged in activities setting the improvement of environmental performance as an environmental target for products, solutions, and services in all our business departments and promoted the development and provision of eco-efficient products.

Main Achievements of Fiscal 2018

Producing products with top-level energy efficiency	Scanner products	As planned, we complied with the International ENERGY STAR Program Ver. 2.0 for a sum of 7 newly-developed models.
	Embedded products	To make environmental contributions, we made efforts to develop better products by improving the environmental contribution indexes that we defined based on our own standards.
	Interactive KIOSKs	To make environmental contributions, we made efforts to develop better products by improving the environmental contribution indexes that we defined based on our own standards. We have also made efforts to reduce the environmental burden at our customers' sites by providing our products for customers.
	Security products	To make environmental contributions, we made efforts to develop better products by improving the environmental contribution indexes that we defined based on our own standards. We have also made efforts to reduce the environmental burden at our customers' sites by providing our products for customers.
	Solutions	We have made efforts to reduce environmental burden at our customers' sites by providing our solutions for the customers.
	Customer services	We have made efforts to reduce environmental burden at our customers' sites by providing our services for the customers.
Complying with environmental labels	Scanner products	As planned, we acquired certification for a sum of 6 new models that are to be expanded to North America, for EPEAT (Electronic Product Environmental Assessment Tool), an environmental evaluation system for electronic products adapted as a system for promoting green purchasing, primarily in organizations related to the American government.
		As our environmentally conscious activities, such as 3R design and energy-saving functions became recognized, a sum of 11 new models received Eco Mark certification.

(*2) 3R design: Design in which the concepts of "Reduce", "Reuse", and "Recycle" are taken into consideration.





Main Eco-efficient Products for Fiscal 2018

<p>Fujitsu Image Scanner fi-7300NX</p> 	<ul style="list-style-type: none">• Compliant with the International ENERGY STAR Program Ver. 2.0 (Power consumption during sleep mode: 2.4 W or less)• Eco Mark certified product (18 155 007)• LED light adopted (mercury eliminated)
<p>ScanSnap iX1500</p> 	<ul style="list-style-type: none">• Compliant with the International ENERGY STAR Program Ver. 2.0 (Power consumption during sleep mode: 1.5 W or less (via a USB connection))• Eco Mark certified product (17 155 060)• LED light adopted (mercury eliminated)

Information for EPEAT 4.7.2.2: [Public disclosure of supply chain toxics](#)

2. Promotion of Environmentally Conscious Solutions and Services

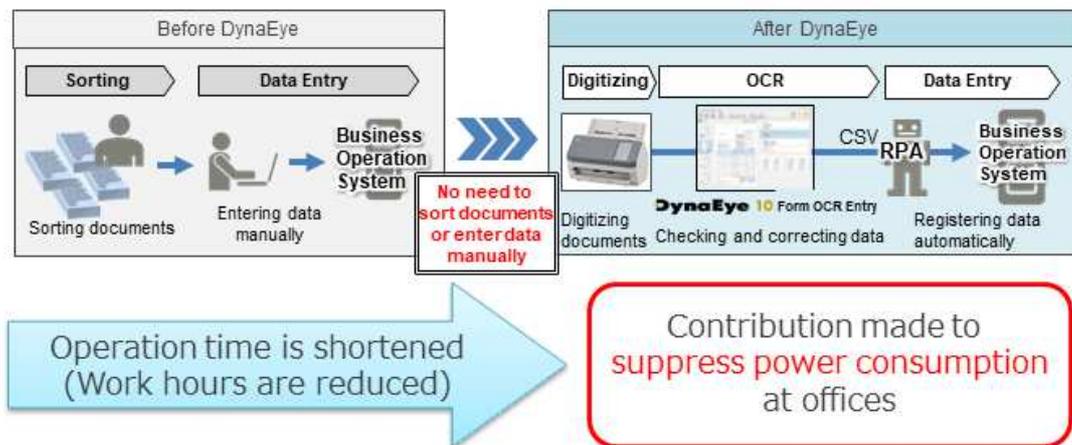
We provide environmentally conscious solutions and services that contribute to reducing the burden on the environment from our customers' business, such as energy conservation and paperless work, through more efficient business, reduced consumption, reduced movement, and efficient use of space. In fiscal 2018, we moved forward with the activities that contribute to reducing the environmental burden on our customers, such as developing and shipping various solutions and services, and expanding the provision of solutions and services that utilize scanners.

Main Achievements of Fiscal 2018

Reducing our customers' environmental burden by expanding our environmentally conscious solutions and services	Activity	Product
	<ul style="list-style-type: none"> Development and shipment of environmentally conscious solutions Expansion of the provision of solutions and services that utilize scanners Promotion of virtualization, cloud negotiation, etc. 	<ul style="list-style-type: none"> DynaEye 10 BIP Smart iNetSec SF IPCOM EX2

• Enhancing Data Entry Efficiency by Digitizing Printed and Hand-written Characters

"DynaEye", the OCR software that enhances business operations with highly accurate text recognition, enhances data entry efficiency for documents such as forms by digitizing printed and hand-written characters or barcodes with high accuracy. When "DynaEye" is used, the OCR and RPA (*3) enhance the efficiency of data entry operations, such as payment processing. As a result, working hours are reduced and power consumption at offices are suppressed. By providing these functions, we contribute to reducing the environmental burden on our customers.



(*3) The RPA needs to be obtained by each customer.

3. Promotion of Green Procurement

To provide eco-efficient products, we established "PFU Group Green Procurement Direction", which specifies basic requirements for our suppliers, and we promote environmental activities together with our suppliers.

In fiscal 2018, we promoted CO₂ reduction activities to the upper stream in the supply chain for target business partners, and gained an understanding of the activities of all business partners.

Main Achievements of Fiscal 2018

Promotion of procurement from suppliers that work aggressively in consideration of the environment	100% understanding of the status of CO ₂ reduction activities to the upper stream in the supply chain (11 new companies + 36 existing companies = 47 companies: 100%)
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4. Improvement of Quality and Enhancement of Business Efficiency

Even in in-house work, we promote the reduction of the environmental burden through the enhancement of business efficiency and the improvement of quality using IT, which leads to promoting environmental activities that are focused on our core business. Activities for enhancements are shared as Idea Snap Activities (in-house improvement activities). To promote spreading the activities throughout the company, examples are regularly introduced.

In fiscal 2018, we made our environmental targets consistent with our quality targets and promoted the reduction of the environmental burden by improving the quality, efficiency, and delivery time for our core business, including product development and in-house business related to provision of products, solutions, and services.

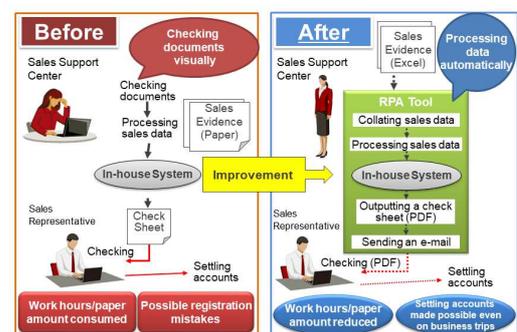
Examples of Improvements in Fiscal 2018

• Enhancing the Sales Data Entry Efficiency by Introducing the RPA

When entering a large number of orders into a company's system, the operator would enter them manually by checking them visually.

By introducing the RPA to automate the operation mentioned above, we were able to prevent items from being missed or prevent them from being entered incorrectly so that we could reduce the amount of paper for checking the entered data.

(Total reduced work hours/paper: -9.8 kg-CO₂/month)



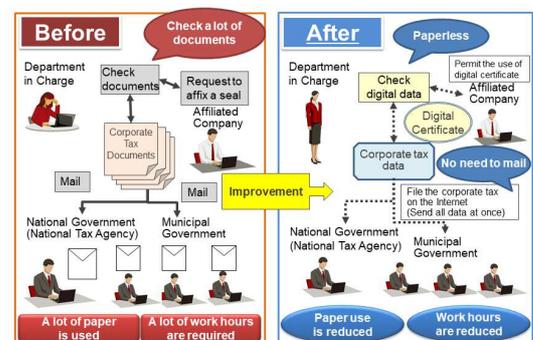
Automating the Sales Data Entry by Introducing the RPA

• Shifting to Paperless Operations and Enhancing Business Efficiency by Introducing an Electronic Tax Filing System for Corporate Tax

In order to file corporate tax, we had printed a large amount of documents, affixed a seal on each document, and then sent them to the national and municipal governments. In fiscal 2018, we introduced an electronic tax filing system for the PFU group's corporate tax one year and a half before it is legally required.

Introducing the electronic tax filing system reduced work hours and amount of paper used, and also reduced the workload of tax personnel that increased during the busy period.

(Total reduced work hours/paper: -171.3 kg-CO₂/month)



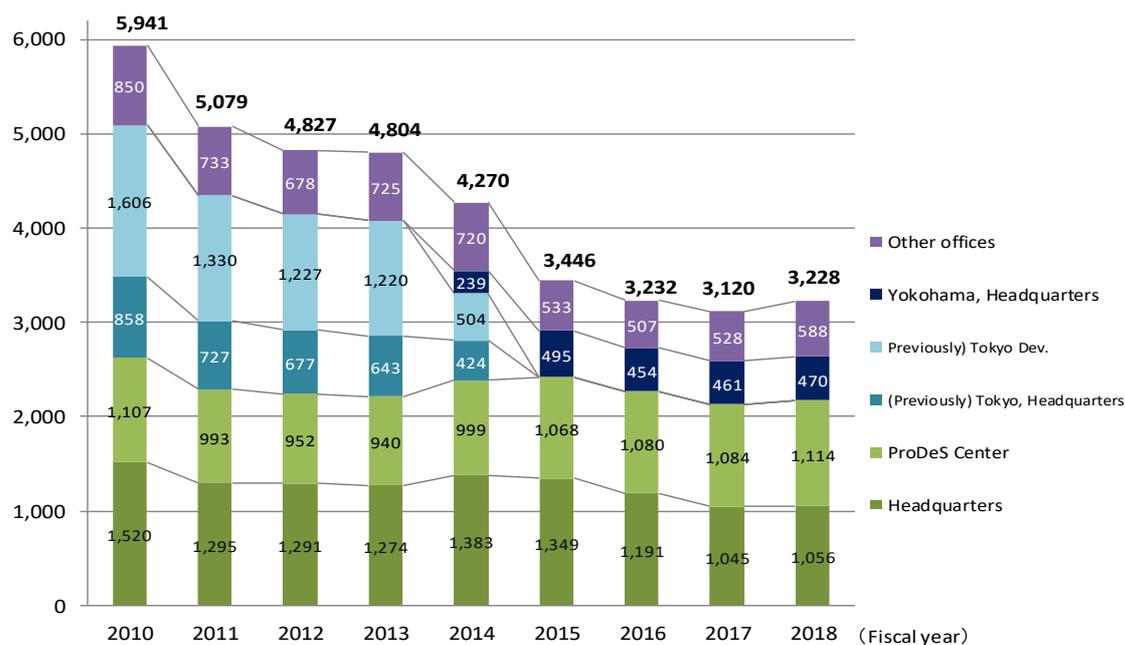
Shifting to Paperless Operations and Enhancing Business Efficiency by Introducing an Electronic Tax Filing System

5. Promotion of Global Warming Countermeasures

To prevent global warming, we engage in energy-saving and power-saving activities to reduce the amount of energy consumption. (*4)

In fiscal 2018, we monitored the operating statuses of the air conditioners at the ProDes Center and reduced the amount of electricity that the air conditioners consumed by introducing the power-saving devices that suppress power when the air conditioners run at their peak. However, the amount of energy consumption increased, compared to the previous fiscal year, due to the intense heat of the summer and the increase in business operations.

Trends in Energy Consumption (Crude Oil Conversion Value: kL)



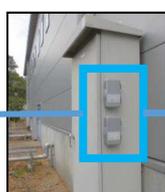
(*4) Amount of consumption of purchased electricity, gas, and heat, converted into crude oil (kL)

Power-saving Effect by Introducing a Power-saving Device (at the ProDes Center)

At the ProDes Center, we reduced electricity that is consumed by the air conditioners in summer by introducing power-saving devices. These devices regularly monitor the operating statuses of outdoor units which are heavily used mainly in summer, and suppress power when the air conditioners run at their peak.



Outdoor Unit for the Air Conditioner



Controllers (Power-saving Devices) Connected to the Controlling Devices in the Storage Unit



Monitoring and Controlling the Air-conditioners on Demand

Number of power-saving devices installed	37
Start of operation	July 2018 to present
Reduction in air conditioning power	-82,000 kWh (Compared to the previous fiscal year when the devices were not installed:-15%)

6. Promotion of an Environmentally Conscious Culture

Each and every one of our Group workers plays a major role in promoting the protection of the environment through environmental and social contribution activities and biodiversity conservation activities.

In fiscal 2018, we carried out activities such as a voluntary activities for the Kahoku Lagoon reclaimed land and an in-house food recycling system.

List of Main Activities

No.	Event name	Date	Implemented at:
1	Hama Road Supporter activity	May 11, 2018	Yokohama Headquarters
		August 28, 2018	
		November 13, 2018	
		February 5, 2019	
2	Green Fund donation	May 31, 2018	Ishikawa
3	Environmental beautification activities with the trees to block out wind on the Kahoku Lagoon reclaimed land	June 2, 2018	Ishikawa
4	Cutting grass around the PFU Techno Wise Takamatsu Plant	June 8, 2018	Ishikawa
5	Community Cleanup around the PFU Quality Service site	May 15, 2018	Atsugi
		October 16, 2018	
6	Installation of "Green Curtains"	July to September, 2018	Ishikawa
7	Commuting and access road cleanup	June 25, 2018	Ishikawa
8	Mass beach cleanup in Kahoku	July 8, 2018	Ishikawa
9	Creation workshop (distribution of environment leaflets)	August 4, 2018	Ishikawa
10	Plantation of nandina saplings	December 4, 2018	Ishikawa
11	Plantation of trees to block out wind on the Kahoku Lagoon reclaimed land	March 16, 2019	Ishikawa
12	In-house Food Recycling System	All year	Ishikawa
13	Collection of plastic bottle caps	All year	All the sites in the nation
14	Collection of used disposable wooden chopsticks	All year	Tokai Branch, etc.
15	Sale of drinks at a subsidized price for donation	All year	Ishikawa, Yokohama Headquarters, Kansai Branch

• Volunteer Activities for Kahoku Lagoon Reclaimed Land

In March 2007, we entered into a contract to take part in voluntary activities such as weeding and beautification of the environment to help maintain the beauty of the reclaimed land in the Kahoku Lagoon (in Kahoku) and the function of its agricultural facilities, as private company No. 1 for the Kahoku Lagoon reclaimed land Improvement Area and Kahoku Lagoon reclaimed land Periphery Improvement Area. In accordance with this contract, we joined in activities such as the beautification of the trees to block out wind (June 2018) and the planting of trees to block out wind (March 2019).



Plantation of Trees on the Kahoku Lagoon Reclaimed Land

• **Local Environment Beautification Activities**

As part of our CSR activities and environmental activities, we participated in the Hama Road Supporter activities sponsored by Yokohama city at the Yokohama Headquarters.

We also participated in the mass beach cleanup activity sponsored by Kahoku.



Hama Road Supporter Activity



Mass Beach Cleanup in Kahoku

As a group company initiative, employees at PFU Techno Wise cut grass around the Takamatsu plant (in Kahoku) as one of their environmental activities for the environmental month (June).

Employees at PFU Quality Service cleaned up around the community (in Atsugi).



Cutting Grass around the PFU Techno Wise Takamatsu Plant



PFU Quality Service Community Cleanup

Environmental Awareness & Communication

We strive to increase our employees' environmental awareness through efforts such as holding environmental facility tours and sharing environmental information.

We also respond to inquiries about the environment from our customers.

Environmental Facility Tours

We held environmental facility tours at the ProDes Center for our employees to learn about the environmental equipment up-close. We entered environmental facilities which are normally off-limits to deepen employees' environmental awareness and their understanding of the facility's role and environmental burden.

(Participants: 12)



Environmental Facility Tour
(ProDes Center)

CO₂ Reduction/Light Down Campaign

We participated in the "CO₂ Reduction/Light Down Campaign", held by the Ministry of the Environment, from June 21 (summer solstice) to July 7 (Cool Earth Day).

We used our website for employees and digital signs to provide information that encouraged employees to turn the lights off after 8pm both at work and at home.



Office after the Lights Go Out
(ProDes Center)

Creation Workshop

As a regional contribution in Kahoku City, elementary and junior high school children from the local area were invited to participate in a "PFU Creation Workshop".

This year, the participants built a computer for educational purposes (by soldering the parts) and programmed a sensor or servomotor to operate it.

Information about PFU image scanners (that have received Eco Mark certification) was distributed to the participants.



Participants Experienced
Building and Programming a
Computer for Educational
Purposes

In-house Food Recycling System

Every year since October 1999, we have produced vegetables at a company-owned farm (Eco-farm) on land owned by the company (in Kahoku City). The vegetables from this farm are provided in the company cafeteria on a menu of locally produced food. Kitchen waste from the cafeteria is converted into compost that is used on the farm, allowing us to build and maintain a system for recycling food.



Company Cafeteria



Company-Owned Farm
(Eco-farm)

Collection of plastic bottle caps

We contributed to the reduction of waste emissions by donating plastic bottle caps.

(Implemented at: Headquarters, ProDes Center, Yokohama Headquarters, Kansai Branch/Tokai Branch/Shinbashi Service Center, service bases, etc.)

[Fiscal 2018: 249,989 bottle caps (weight : 580.7 kg)]

Sale of drinks at a subsidized price for donation

From the sale of drinks to our company employees, part of the proceeds (2 yen from each bottle) are given to the "Fujitsu Group Malaysia Eco-Forest Park" in Sabah State, Malaysia to help restore the tropical rainforests.

(Implemented at: Headquarters, ProDes Center, Yokohama Headquarters, Kansai Branch)

[Fiscal 2018: 27,206 drinks (donation amount 54,412 yen)]

Sharing Environmental Information

Our company now presents information related to environmental activities, introduces the environmental activities of each department, and covers current topics, event information, and environmental news on our in-house intranet.

Also, using "Idea Snap Activities", which allow for improvement activities to be shared throughout the company, we are showing the environmental effect of reducing the amount of paper or electricity used. We are trying to enhance the motivation for improvements among our employees by regularly making an honorable recognition of good proposals.



Portal site for environmental information for employees



Idea Snap Website

Requests and Inquiries from Outside Our Company

In fiscal 2018, we responded to 232 requests and inquiries, such as questionnaires and survey requests regarding the environment submitted to our company by customers, the government, industrial groups, and others. There were no environmental claims.

	Requests and Inquiries	Number of Requests
1	Requests about products and services (Example: Request for REACH/RoHS surveys, survey on the use of chemical substances specified by a customer, etc.)	142
2	Requests other than those related to products (Example: Request for provision of data about the environment from customers, the government, industry organizations, etc.)	90
	Total	232

Sharing Environmental Information

We transmit and introduce information about eco-efficient products and environmental activities via our official website and at events.

Environmental Report

Since 1994, we have been issuing an annual environmental report as the "PFU Environmental Report" (and the English version since 2003), and we publish these on our website. In addition to this report, we also share the latest information about eco-efficient products on our official website.

Showroom

We set up showrooms at our main sites in Japan to display our eco-efficient products.

- Number of displayed products
Headquarters: 12 products
Yokohama Headquarters: 24 products
ProDeS Center: 30 products



Headquarters



Yokohama Headquarters

Participation in Exhibitions

Every year, we participate in environmental exhibitions to introduce our eco-efficient products and environmental activities.

We exhibited our eco-efficient products and solutions at the "PFU IT Fair 2018" (held in Tokyo and Osaka), where we exhibit our latest technology and products. We also exhibited panels that show our environmental activities in the "e-messe kanazawa 2018" exhibition.



Exhibiting eco-efficient products and solutions (PFU IT Fair 2018)



Exhibition of Environmental Activity Panels (e-messe kanazawa 2018)

Use of Green Power at Exhibitions and Events

At the "PFU IT Fair 2018" (held in Tokyo in June and Osaka in July) and at the "PFU Christmas Charity Concert" (held in Kanazawa in December), we contributed to spreading the use of natural energy in the nation and mitigating global warming by using renewable energy from wind power to supply the equipment in the venues with electricity.



The Certificate of Green Power (PFU IT Fair 2018)

Environmental Performance Data

Environmental Accounting

To quantify the costs and benefits of environmental conservation and evaluate environment investment and its benefits, "Environmental Accounting" was introduced in fiscal 1999. In fiscal 2018, this accounting method was applied to seven of our business sites in Japan (Headquarters, Yokohama Headquarters, ProDeS Center, Kansai Branch, Tokai Branch, Shinbashi Service Center, and PFU Quality Service).

Breakdown of environmental accounting results for fiscal 2018

(April 1, 2018 to March 31, 2019)

(Unit: One million yen)

Item		Main Scope	Capital Investments	Costs	Benefits
Business area	Pollution prevention costs/benefits	Air pollution prevention, water pollution prevention, etc.	0 (±0)	7 (±0)	0 (±0)
	Global environmental conservation costs/benefits	Global warming prevention, energy-saving, etc.	7 (-17)	66 (+1)	11 (+3)
	Resource recycling costs/benefits	Disposal of waste and effective use of resources, etc.	0 (±0)	47 (+7)	8 (±0)
Upstream/downstream costs/benefits		Collection/recycling/re-merchandising of products, etc.	0 (±0)	0 (±0)	2 (±0)
Management costs/benefits		Maintenance/operation of the Environmental Management System, environmental education for employees, etc.	18 (+18)	193 (+4)	101 (+9)
R&D costs/benefits		R&D for products/solutions that contribute to environmental conservation, etc.	0 (±0)	266 (-37)	1,731 (-210)
Social activities costs/benefits		Contributions/support for organizations involved in environmental conservation, etc.	0 (±0)	0 (±0)	0 (±0)
Costs/benefits to repair environmental damage		Repairs involved in soil/ground water pollution, etc.	0 (±0)	0 (±0)	0 (±0)
Total			24 (±0)	580 (-25)	1,853 (-199)

Numbers in parentheses () are comparisons with the previous fiscal year.

Costs and Benefits of Fiscal 2018

After tallying fiscal 2018, we see that both costs and benefits decreased, with the costs at 580 million yen (-4.2% compared to the previous fiscal year) and the benefits at 1.853 billion yen (-9.3% compared to the previous fiscal year).

Resource recycling costs increased because the disposal of PCB waste began. (three-year plan until 2020). Since we conducted an in-house analyses on phthalic esters in order to comply with the amended RoHS directive, management benefits increased. R&D costs and benefits of eco-efficient products decreased.

Capital investment was 24 million yen (±0% compared to the previous fiscal year). Main capital investments include the power-saving devices at the ProDes Center and the device to analyze phthalic esters (gas chromatograph mass spectrometer).

Environmental Conservation

In order to conserve the environment surrounding our sites, we regularly measure water quality, noise output, and vibration output, and perform ongoing management of our facilities, as well as properly manage chemical substances to prevent pollution.

Also, we monitor the burden on the environment from our sites by assessing the actual amount of greenhouse gases, waste material, and water resources emitted/used in business.

Water Quality Measurement Results

We make efforts to maintain the water quality of drainage from Headquarters, the ProDeS Center, and the PFU Techno Wise Takamatsu Plant. The results of the measurement did not exceed the legal regulations, and there was no problem with water quality.

	Regulated substances	Unit	Regulation value	Fiscal 2018 Measured value	Evaluation
Headquarters (Bld. A & B)	Hydrogen ion concentration (pH)	-	Between 5 & 9	6.5	✓
	Biochemical oxygen demand (BOD)	mg/L	Less than 600	280	
	Suspended substances (SS)	mg/L	Less than 600	170	
	Mineral oil	mg/L	5 or less	Less than 1	
	Animal and plant oils	mg/L	30 or less	18	
	Ammonium-nitrogen, nitrite-nitrogen and nitrate-nitrogen content	mg/L	Less than 380	34	
Headquarters (Bld. E)	Hydrogen ion concentration (pH)	-	Between 5 & 9	7.7	✓
	Biochemical oxygen demand (BOD)	mg/L	Less than 600	13	
	Suspended substances (SS)	mg/L	Less than 600	23	
	Mineral oil	mg/L	5 or less	Less than 1	
	Animal and plant oils	mg/L	30 or less	1.1	
	Ammonium-nitrogen, nitrite-nitrogen and nitrate-nitrogen content	mg/L	Less than 380	Less than 1	
Headquarters (Anechoic Chamber)	Hydrogen ion concentration (pH)	-	Between 5 & 9	7.4	✓
	Biochemical oxygen demand (BOD)	mg/L	Less than 600	78	
	Suspended substances (SS)	mg/L	Less than 600	48	
	Mineral oil	mg/L	5 or less	Less than 1	
	Animal and plant oils	mg/L	30 or less	4.9	
	Ammonium-nitrogen, nitrite-nitrogen and nitrate-nitrogen content	mg/L	Less than 380	36	
ProDeS Center	Hydrogen ion concentration (pH)	-	Between 5 & 9	7.9	✓
	Biochemical oxygen demand (BOD)	mg/L	Less than 600	160	
	Suspended substances (SS)	mg/L	Less than 600	240	
	Mineral oil	mg/L	5 or less	Less than 1	
	Animal and plant oils	mg/L	30 or less	5.3	
	Ammonium-nitrogen, nitrite-nitrogen and nitrate-nitrogen content	mg/L	Less than 380	45	
PFU Techno Wise, Takamatsu Plant (Bld. 1)	Hydrogen ion concentration (pH)	-	Between 5 & 9	7.5	✓
	Biochemical oxygen demand (BOD)	mg/L	Less than 600	4	
	Suspended substances (SS)	mg/L	Less than 600	2	
	Mineral oil	mg/L	5 or less	Less than 1	
	Animal and plant oils	mg/L	30 or less	Less than 1	
	Ammonium-nitrogen, nitrite-nitrogen and nitrate-nitrogen content	mg/L	Less than 380	0.7	

PFU Techno Wise, Takamatsu Plant (Bld. 2 & 3)	Hydrogen ion concentration (pH)	-	Between 5 & 9	7.5	✓
	Biochemical oxygen demand (BOD)	mg/L	Less than 600	Less than 1	
	Suspended substances (SS)	mg/L	Less than 600	2	
	Mineral oil	mg/L	5 or less	Less than 1	
	Animal and plant oils	mg/L	30 or less	Less than 1	
	Ammonium-nitrogen, nitrite-nitrogen and nitrate-nitrogen content	mg/L	Less than 380	0.8	

Noise/Vibration Measurement

At our Headquarters, we maintain our facilities to ensure that the noise and vibration generated by our business activities are within the limits required by regulations.

We measure the noise and vibration once every five years in order to make sure that the facilities are maintained effectively. (The last time we measured the noise and vibration was in fiscal 2015. The next time will be in fiscal 2020).

Proper Handling of Chemical Substances

We tally the amount of chemical substances that are used for purposes such as designing, developing, evaluating, manufacturing, maintaining, or cleaning up the premises no matter how much there is.

• Chemical substances subject to PRTR law

The amount of chemical substances subject to the PRTR law that were handled in fiscal 2018 is shown below. None of the chemical substances were in excess of the annual values which require the relevant prefectural authorities to be notified (*5).

Furthermore, no Special Class I Specified Chemical Substances were handled.

Annual Handled Amount of Chemical Substances Subject to the PRTR Law (Class I Specified Chemical Substances)

Chemical Substance Name	Fiscal 2014	Fiscal 2015	Fiscal 2016	Fiscal 2017	Fiscal 2018
N-alkylbenzenesulfonic acid and its salts	0.006	0.007	0.007	0.007	0.034
Silver and its water-soluble compounds	0.026	0.022	0.022	0.027	0.028
2-aminoethanol	0.004	0.003	0.003	0.004	0.021
Poly (oxyethylene) alkyl ether	0.020	0.020	0.017	0.015	0.021
Calcium cyanamide	0.048	0.048	0.051	0.048	0.016
Lead and its compounds	0.002	0.001	0.001	0.003	0.008
Mecoprop	0.000	0.000	0.000	0.000	0.002
Sodium dodecyl ether sulfate	0.008	0.011	0.011	0.012	0.002
N,N-dimethyldodecylamine N-oxide	0.005	0.005	0.006	0.006	0.001
Sodium dodecyle sulfate	0.006	0.007	0.006	0.006	0.001
Other	0.004	0.003	0.003	0.009	0.001

(*5) 1 ton or more per year for Class I Specified Chemical Substances, 0.5 tons or more per year for Special Class I Specified Chemical Substances.

• VOC (Volatile Organic Compound)

Although there are no specific facilities that are subject to VOC emission control, we make an independent effort to maintain and manage the amount of VOCs handled.

Annual Amount of VOC Handled

Chemical Substance Name	Fiscal 2014	Fiscal 2015	Fiscal 2016	Fiscal 2017	Fiscal 2018
Isopropyl alcohol	0.756	0.627	0.768	0.789	0.746
Ethanol	0.179	0.214	0.280	0.336	0.150
Methanol	0.278	0.253	0.194	0.081	0.002
Other	0.034	0.058	0.058	0.083	0.084

• Greenhouse Gases

The amount of greenhouse gases other than CO₂ that were handled in fiscal 2018 is shown below. The annual amount handled in fiscal 2018 is converted to a CO₂ equivalent weight of approximately 23 tons, and is equivalent to approximately 0.3% of emissions from all our sites (6,695 tons).

Annual amount of greenhouse gases handled (Converted to CO₂)

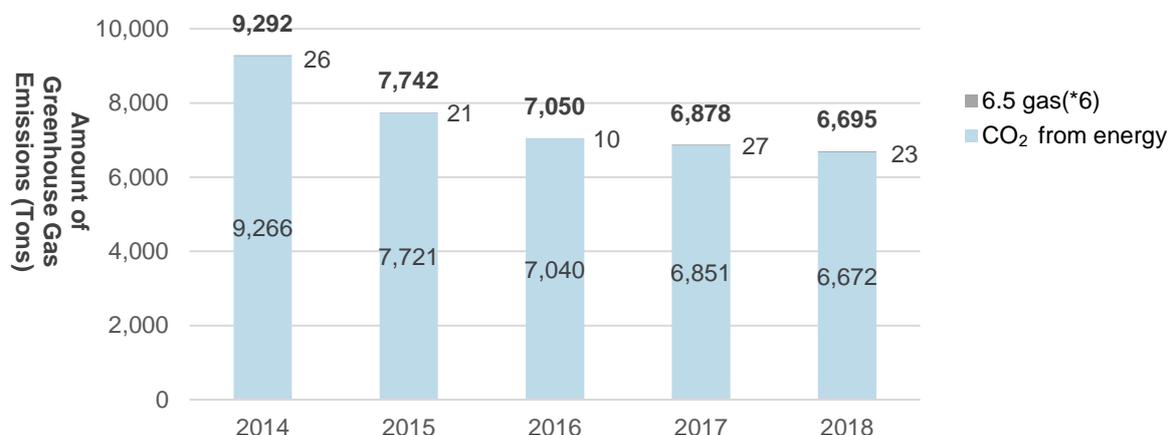
(Tons)

Chemical Substance Name	Fiscal 2014	Fiscal 2015	Fiscal 2016	Fiscal 2017	Fiscal 2018
1,1,1,2-Tetrafluoroethane (HFC-134a)	25.390	19.926	9.245	26.980	23.271
1,1-Difluoroethane (HFC-152a)	0.458	0.744	0.316	0.336	0.023
CO ₂ not from energy	0.003	0.002	0.002	0.000	0.001
Total	25.851	20.672	9.563	27.316	23.295

Environmental Burden

Total Amount of Greenhouse Gas (GHG) Emissions

The amount of greenhouse gas emissions from all our sites in Japan is converted to a CO₂ equivalent weight as shown below.



(*6) 6.5 gas: CO₂, methane, dinitrogen monoxide, HFCs (fluorocarbons), PFCs (perfluorocarbons), SF₆ (sulfur hexafluoride), NF₃ (nitrogen trifluoride)

(Note) The amount (tons) of greenhouse gas emissions above is calculated by taking the total of Scope 1 and Scope 2 of the WRI/WBCSD GHG Protocol.

Total of CO₂ from energy (CO₂ emissions due to use of purchased electricity, city gas, liquefied petroleum gas (LPG), and heat (district cooling and heating at the Yokohama headquarters)) and the amount of use of greenhouse gases such as chlorofluorocarbon alternatives (6.5 gas), converted into carbon dioxide.

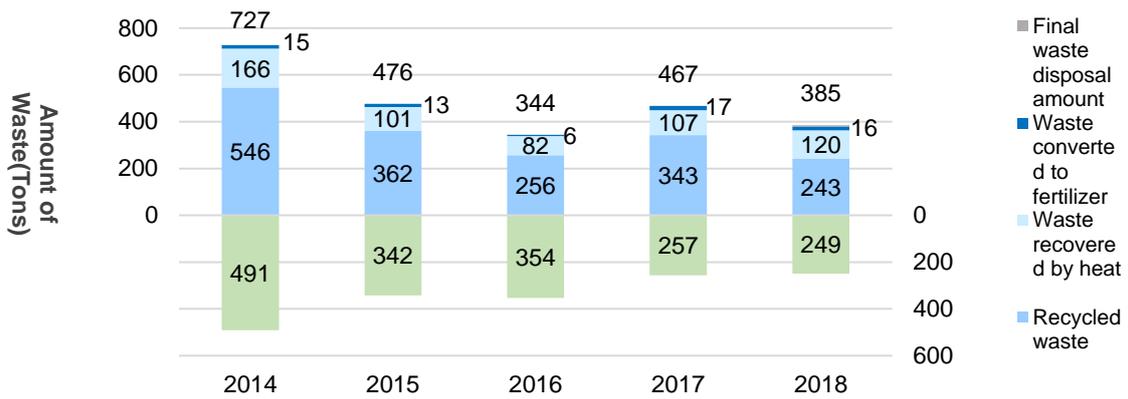
[Conversion factor] Purchased electricity: Uses each electric company's conversion factor for the Act on the Rational Use of Energy report
 City gas: 2.29 tons of CO₂/1000 m³ (fixed), Liquefied petroleum gas (LPG): 3.00 tons of CO₂/ton (fixed)
 Amount of heat: 0.057 tons of CO₂/GJ (fixed)

Amount of Waste

The amount of waste for all our sites in Japan is shown below. We achieved zero waste emissions (*7) in all our offices and factories.

We check that after thermal recycling by means such as the conversion of general combustible matter to RDF (Refuse Derived Fuel), the residue is put to effective use as base material for cement and paving materials.

In fiscal 2018, we reduced units thrown out, which contain metal waste and plastic waste.



(*7) Zero waste emission means that waste produced by our sites is all used effectively, such as through recycling, and disposal by simple incineration or landfills is less than 0.5%. The term "Waste", as used above, specifically includes 11 sub-types, such as sludge waste, oil waste, acid waste, alkali waste, plastic waste, paper waste, metal waste, timber waste, textile waste, glass and ceramic waste, and meat and vegetable waste (Cafeteria kitchen waste). Medical waste is not included in this definition.

(Note) The valuable resource amount means the amount of waste resources sold off for monetary compensation. The final waste disposal amount means the remaining waste (landfill) other than recycled waste, waste recovered by heat, and simple incinerated waste.

• **Disposing of Low-concentrated PCB Waste**

In December 2018, we started to dispose of low-concentrated PCB waste that we have stored. Our plan is to dispose of all low-concentrated PCB waste by 2020 before March 31, 2027, the deadline set by the government.



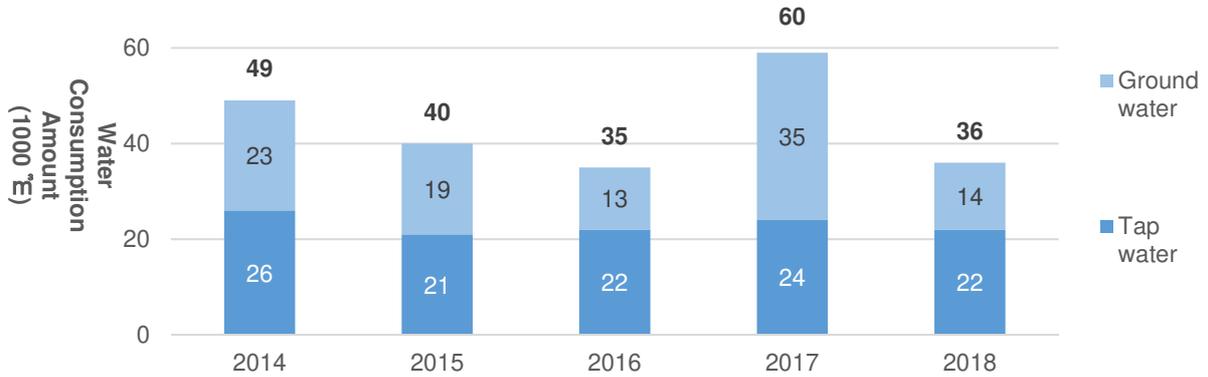
Low-concentrated PCB Waste (Headquarters)



Water Consumption/Water Drainage

The amount of water consumption and water drainage for our main sites in Japan is shown below. There was much snow in fiscal 2017, and therefore there was an increase in the volume of both water usage/drainage compared to the previous year due to an increase in ground water used to melt snow. However, the amount in fiscal 2018 was the same as the amount in an average year.

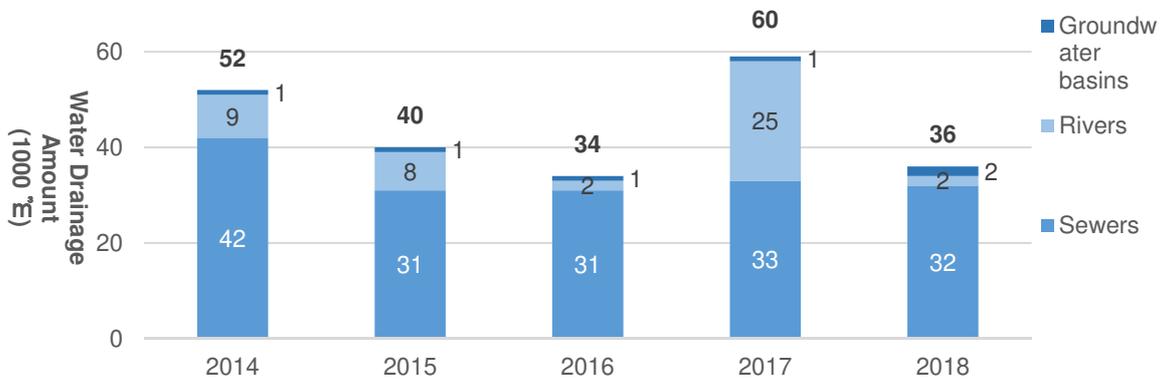
• Water Consumption Amount



At each site, we use tap water for domestic use and to humidify the office in winter. At our Headquarters, we use ground water to water our plants in summer, and at our Headquarters and the ProDeS Center, we use ground water to melt snow. We use water for our every day needs at our company sites, not for industrial purposes.

In fiscal 2017, more ground water was used to melt snow because of heavier snowfall in Ishikawa. However, the amount used in fiscal 2018 was the same as the amount in an average year.

• Water Drainage Amount



Tap water used for domestic uses drains into the sewer. Ground water used to melt snow drains into the rivers, and water used to water plants and vegetable drains underground. We have been continuously monitoring and measuring water quality by using our own self management values in order to ensure the quality of water that drains from our main sites. (Page 23)

In fiscal 2017, more ground water was used to melt snow because of heavier snowfall in Ishikawa. Therefore, more water was drained to rivers. However, the amount used in fiscal 2018 was as the same as the amount in an average year.

Internal Audits and External Inspections

Internal Audits

Internal audits are carried out by employees certified with auditing qualifications, confirming the implementation of each department's environmental activities target set in accordance with the Environmental Policy and confirming that each department reliably upholds various rules, including laws. These audits help improve problems and spread positive activities in our company.

In July 2018, we carried out internal audits in all of the 34 departments as well as internal audits regarding our PFU environment management system in 16 service bases including six affiliated companies. We found one non-compliant case, eight cases needing improvement, and 50 positive cases.

We set a cycle for the department audit to every three years in order to reduce the time required to carry out audits. This has reduced the burden on each department.

External Inspections

In September 2018, A certification inspection was conducted by the Japan Audit and Certification Organization for Environment and Quality (JACO) as a regular ISO14001 surveillance audit.

"Enhanced" was the result of this inspection that we received for the overall evaluation with no non-compliant cases, two cases needing improvement, and six highly-rated cases. Our management system was also evaluated with a result stating that the system satisfied the standard requirements and was implemented effectively.

Fiscal 2018 Results of Internal Audits and External Inspection

(Cases)

	Internal Audits			External Inspection (Regular surveillance audit)		
	Non-compliant Case	Case Needing Improvement	Positive Case	Non-compliant Case	Case Needing Improvement	Highly-rated Case
Discovered items	1	8	50	0	2	6

Environment-Related Facilities

We installed a recycling facility in our company in order to promote the effective use of resources.

Food Recycling Processor

Food waste from the company cafeterias at Headquarters and the ProDeS Center is converted with recycling processors into compost, which is then used at the company-owned farm. We provide our company cafeterias with vegetables that are produced at the company-owned farm to construct and sustain an in-house food recycling system.

Facility Overview

Composting method:	Aerobic fermentation by useful microorganisms
Fermentation time:	24 hours
Kitchen waste:	74 kg/day
Fertilizer produced:	16 kg/day
Processing time:	8 to 10 hours



Compost Results

(Tons)

Item	Fiscal 2014	Fiscal 2015	Fiscal 2016	Fiscal 2017	Fiscal 2018	Note
Compost from recycled kitchen waste	3.4	3.6	1.5	3.5	3.2	Used at the company-owned farm

Affiliated Company Activities

Three of our affiliated companies (PFU Hokkaido Limited, PFU East Japan Limited, and PFU West Japan Limited), each of which are running their own environmental management systems, are promoting environmental activities consistent with PFU's environmental management system. Furthermore, PFU Technoconsul Limited and PFU Life Agency Limited conduct their own environmentally related business.

PFU Hokkaido Limited

Targets and Results for Environmental Activities

✓: Target Achieved -: Target Not Achieved

Activity		Fiscal 2018			Fiscal 2019
		Target	Result	Evaluation	Plan
Green Product	Provision of eco-efficient products and environmentally conscious solutions	Image scanners 112 units or more	Image scanners 75 units	-	Image scanners 83 units or more (Up by 10% compared to the previous fiscal year)
	Improvement of the rate for solving the issues the first time in maintenance	89.6% or more	89.6%	✓	89.7% or more (improvement of 0.1% compared to the previous fiscal year)
Green Process	Promotion of Green Processes	new project 1 project or more	1 new project	✓	new project 1 project or more
Green Mind	Promotion of an Environmentally Conscious Culture	Contributions to the local society 11 times or more	Contributions to the local society 9 times	-	Contributions to the local society 10 times or more

Topics

In fiscal 2018, PFU Hokkaido continued its efforts for "Promotion of an environmentally conscious culture" by carrying out the following activities.

- "Eco Cap Campaign (Collecting Plastic Bottle Caps)" and "Commuting and Access Road Cleanup" (continuing activities)
- Participating in the "Biodiversity Conservation Forum" sponsored by Hokkaido

In fiscal 2019, PFU Hokkaido aims to create a comfortable workplace by organizing paper documents, digitizing paper documents, using workspace more efficiently, and enhancing business efficiency.



"Biodiversity Conservation Forum"
(International Hall in Sapporo)

Targets and Results for Environmental Activities

✓: Target Achieved - : Target Not Achieved

Activity	Fiscal 2018			Fiscal 2019	
	Target	Result	Evaluation	Plan	
Green Product	Provision of eco-efficient products and environmentally conscious solutions: Increase in the number of PFU products (scanners, interactive KIOSKs, software)	Up by 12% (Compared to 2016)	Up by 13% (Compared to 2016)	✓	Up by 18% (Compared to 2016)
	Reduction of the environmental burden by improving maintenance efficiency: Reduction of repeated failure rate by maintenance	10.0% or less (improvement of 0.1% compared to the previous fiscal year)	9.9%	✓	9.8% or less (improvement of 0.1% compared to the previous fiscal year)
	Reduction of the environmental burden by improving maintenance efficiency: Reduction of emergency shipping rate of maintenance parts	To reduce the time it takes to handle complaints by 1 minute per case	1.2 minute per case reduced	✓	To reduce the time it takes to handle complaints by 1 minute per case
Green Process	Promotion of Green Processes	Promotion of leaving work on time (4 times/month) (Target: Average 75% or more)	4 times/month (Average 79.8%)	✓	4 times/month (Target: Average 80% or more)
Green Mind	Promotion of an Environmentally Conscious Culture	Cooperation/exchange with the community (8 times per year)	9 times	✓	Cooperation/exchange with the community (8 times per year)

Topics

In 2018, PFU East Japan Limited participated in the "Tohoku-Miyagi Revive Marathon", the event that was held to support the reconstruction from the Great East Japan Earthquake. PFU East Japan Limited continued to advertise this activity to workers at the company and affiliated companies, informing them of the current status in the affected areas, so that the memory of the disaster will not be lost. In addition, some workers participated in planting trees in the affected areas and interacted with local volunteers. This activity led to the activities that aim to form a corporate culture which promotes the support of the affected areas actively from now on.



"Revive Marathon" (Miyagi)
Participants (Runners and Volunteers)



Planting Cherry Blossom Trees in the Affected Areas(Iwaki, Fukushima)

Targets and Results for Environmental Activities

✓: Target Achieved -: Target Not Achieved

Activity		Fiscal 2018			Fiscal 2019
		Target	Result	Evaluation	Plan
Green Product	Provision of eco-efficient products	Up by 2.0% compared to fiscal 2017	Up by 7.8%	✓	Up by 2.0% compared to fiscal 2018
	Provision of environmentally conscious solutions	Up by 2.0% compared to fiscal 2017	Up by 2.2%	✓	Up by 2.0% compared to fiscal 2018
	Reduction of the environmental burden by improving maintenance efficiency (Emergency shipping rate of maintenance parts)	Down by 2.0% compared to fiscal 2017	Down by 3.8%	✓	Down by 2.0% compared to fiscal 2018
Green Process	Promotion of Green Processes	1 new project in each department	1 project in each department	✓	1 new project in each department
	Improvement of gasoline use efficiency (Fuel efficiency of company owned cars)	Up by 2.0% compared to fiscal 2017	Up by 5.8% (16.01 km/L)	✓	Up by 2.0% compared to fiscal 2018
Green Mind	Promotion of an Environmentally Conscious Culture	Environmental education and awareness-raising activities 8 projects or more	Environmental education and awareness-raising activities 9 projects per year	✓	Environmental education and awareness-raising activities 8 projects or more

Topics

- Two years have passed since PFU West Japan reconstructed its environmental management system to comply with ISO14001:2015. PFU West Japan have further improved each activity, and have clarified the content on the activities in accordance with the requirements for the standards.
- As part of the Promotion of Green Processes, PFU West Japan promoted improvement proposals for reducing the environmental burden and continuously engaged in activities such as enhancing business efficiency by digitizing paper documents and reducing working hours for the LCM operations.
- As part of the activities for "Promotion of an environmentally conscious culture", PFU West Japan promoted participation in "social contribution activities (cleanup activities)" held in the areas shown below. PFU West Japan will continue to promote these activities this fiscal year as well.
 - June: Cleanup activity in Fukuyama, Hiroshima, "Cleanup Around Fukuyama Station"
 - July: Beach cleanup activity in Hakui, Ishikawa, "Hakui Nagisa Clean Campaign in Chirihama Beach"
 - October: Cleanup activity in Fukuyama, Hiroshima, "Cleanup Around Fukuyama Station"



"Hakui Nagisa Clean Campaign in Chirihama Beach" During Cleanup (Hakui, Ishikawa)



Participated in "Cleanup Around Fukuyama Station"



PFU Technoconsul Limited

Services Related to ISO Management System

PFU Technoconsul provides comprehensive services such as consulting for management system certification acquisition on environment, quality, and information security.

<Solutions and Services Menu>

ISO Certification Acquisition Consulting

- Quality Management System (ISO9001)
- Environmental Management System (ISO14001)
- Occupational Health & Safety Management System (ISO45001)
- Information Security Management System (ISO27001)

Follow-up Services After ISO Certification Acquisition

- ISO Certification Follow-up Services
- Provision of ISO-related Information (E-mail Newsletter)
- Survey Support for Applicable Regulations and Ordinances
- Operational Support Including Impact Evaluation
- Support for Traceability of the Measuring Equipment

Support for the Operation of the Chemical Management System

- Support service for the operation of the chemical management system for universities

PFU Life Agency Limited

Waste Collection, Transport, and Recycling

We collect and transport the industrial and general waste, then recycle the waste via a qualified waste disposal contractor.

Status of Permissions

<Industrial Waste Collection and Transport Operations>

- Ishikawa Pref.: License No. 01707052827

<General Waste Collection and Transport Operations>

- Kahoku County and Kahoku City: License No. 7
- Kanazawa City: License No. 25
- Hakusan City: License No. 26

PFU Environmental Action Plan (Ninth Plan: Fiscal 2019 - Fiscal 2021)

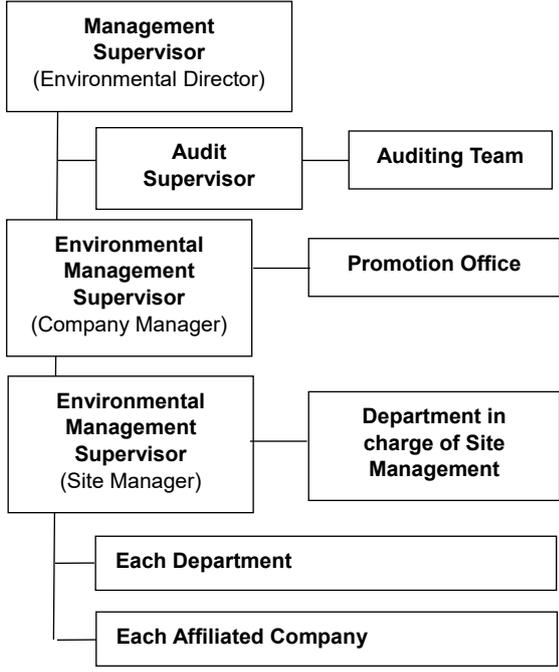
Targets for the Ninth Environmental Action Plan (Fiscal 2019 - Fiscal 2021) are shown below.

Activity		Details		Target in Fiscal 2019	Target in Fiscal 2020	Target in Fiscal 2021	
Green Product	1	Continuous Creation and Provision of Eco-efficient Products	To produce products with top-level energy efficiency	Scanner products	To maintain 100% product compliance with the International ENERGY STAR Program Ver.2.0/3.0 (28 models)	To maintain 100% product compliance with the International ENERGY STAR Program Ver.3.0	To maintain 100% product compliance with the International ENERGY STAR Program Ver. 3.0
				Embedded products	Environmental performance index: 5.26 or less	Environmental performance index: 5.00 or less	Environmental performance index: 4.75 or less
					Amount of reduction in CO ₂ emissions at our customers' sites 36.00 tons of CO ₂ or more	Amount of reduction in CO ₂ emissions at our customers' sites 39.60 tons of CO ₂ or more	Amount of reduction in CO ₂ emissions at our customers' sites 43.56 tons of CO ₂ or more
				Interactive KIOSKs	Environmental performance index: 19.38 or less	Environmental performance index: 18.41 or less	Environmental performance index: 17.49 or less
					Amount of reduction in CO ₂ emissions at our customers' sites 1,663 tons of CO ₂ or more	Amount of reduction in CO ₂ emissions at our customers' sites 1,829 tons of CO ₂ or more	Amount of reduction in CO ₂ emissions at our customers' sites 2,012 tons of CO ₂ or more
				Security products	Environmental performance index: 1.63 or less	Environmental performance index: 1.55 or less	Environmental performance index: 1.47 or less
					Amount of reduction in CO ₂ emissions at our customers' sites 779 tons of CO ₂ or more	Amount of reduction in CO ₂ emissions at our customers' sites 857 tons of CO ₂ or more	Amount of reduction in CO ₂ emissions at our customers' sites 943 tons of CO ₂ or more
	Solutions	Amount of reduction in CO ₂ emissions at our customers' sites 4,427 tons of CO ₂ or more	Amount of reduction in CO ₂ emissions at our customers' sites 4,648 tons of CO ₂ or more	Amount of reduction in CO ₂ emissions at our customers' sites 4,880 tons of CO ₂ or more			
	Services	Amount of reduction in CO ₂ emissions at our customers' sites 27.7 tons of CO ₂ or more	Amount of reduction in CO ₂ emissions at our customers' sites 29.1 tons of CO ₂ or more	Amount of reduction in CO ₂ emissions at our customers' sites 30.6 tons of CO ₂ or more			
			To comply with environmental labels (EPEAT)	To maintain and expand compliance with EPEAT To maintain 100% product compliance (5 models)	To maintain and expand compliance with EPEAT To maintain 100% product compliance	To maintain and expand compliance with EPEAT To maintain 100% product compliance	
2	Promotion of Environmentally Conscious Solutions and Services	To reduce our customers' environmental burden by expanding our environmentally conscious solutions and services	At least one suggestion per department (21 out of 21 departments)	At least one suggestion per department (all relevant departments)	At least one suggestion per department (all relevant departments)		
3	Promotion of Green Procurement	To promote procurement from suppliers that work aggressively in consideration of the environment	To promote activities to reduce CO ₂ and to preserve water resources to the upper stream in the supply chain: 100% understanding of business partners' activities	To promote activities to reduce CO ₂ and to preserve water resources to the upper stream in the supply chain: 100% understanding of business partners' activities	To promote activities to reduce CO ₂ and to preserve water resources to the upper stream in the supply chain: 100% understanding of business partners' activities		

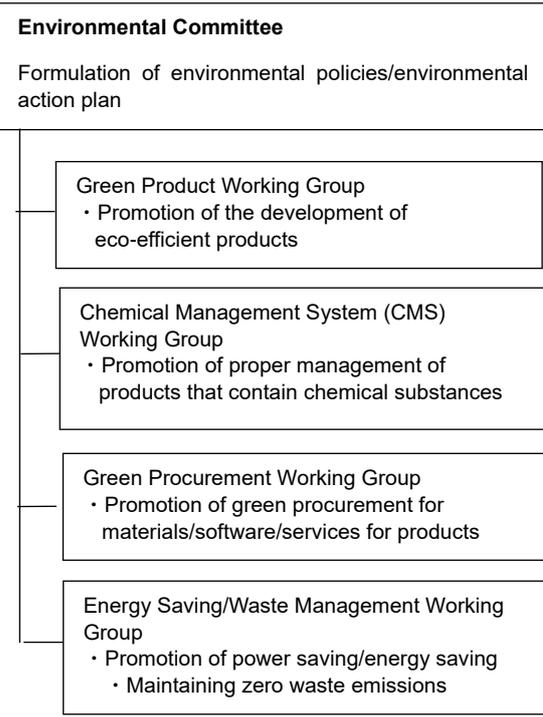


Green Process	4	Improvement of Quality and Enhancement of Business Efficiency	To reduce the burden on the environment with improved business operations	At least one suggestion per department (42 out of 42 departments)	At least one suggestion per department (all departments)	At least one suggestion per department (all departments)
	5	Promotion of Global Warming Countermeasures	To cut the amount of energy consumption.	Crude oil conversion value: 3,298 kL or less	Crude oil conversion value: 3,265 kL or less	Crude oil conversion value: 3,232 kL or less
Green Mind	6	Promotion of an Environmentally Conscious Culture	To promote the protection of the environment through not only environmental and social contribution activities and biodiversity conservation activities, but also through sharing environmental activity information and improving operation	To promote social contribution activities (22 projects)	To promote social contribution activities (22 projects)	To promote social contribution activities (22 projects)
				To promote the sharing/transmitting environmental information and improving operation of environmental activities (37 projects)	To promote the sharing/transmitting environmental information and improving operation of environmental activities (38 projects)	To promote the sharing/transmitting environmental information and improving operation of environmental activities (39 projects)
				To continue improvement of the management system (1 project)	To continue improvement of the management system (1 project)	To continue improvement of the management system (1 project)

EMS Organization



Organizations in Charge





Caring for the Earth & Nature

2019 Environmental Report

Publisher Oct 2019 (2nd Edition)

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