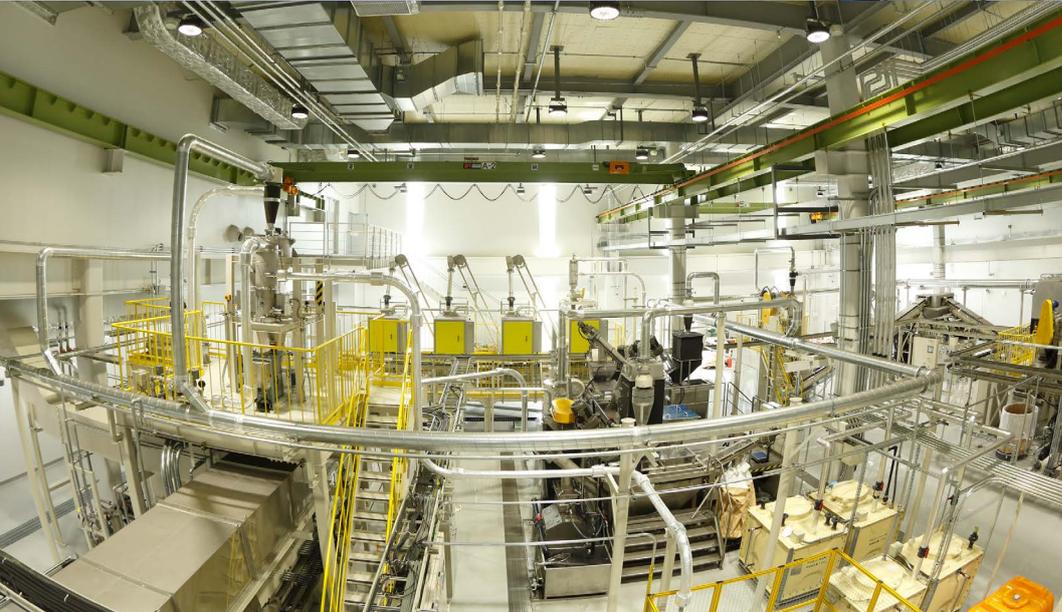


CANON SUSTAINABILITY REPORT 2018



About this Report

Editorial Policy

Every year Canon publishes the Canon Sustainability Report to share information on the diverse initiatives it is undertaking to contribute to the realization of a sustainable society. This year, the report includes four “Highlights” articles about material topics relating to Canon’s CSR. It also explains how Canon’s CSR activities intersect with the Sustainable Development Goals (SDGs) adopted by the United Nations in 2015. The report aims to be comprehensive in nature, providing a range of CSR information in line with the global disclosure guidelines in the GRI Standards for sustainability reporting, and based on the specific nature of Canon’s operations. Chapter headings include “Creating New Value and Solving Social Issues Through Business Activities,” “Environment,” “Human Rights and Labor,” “Social Contribution,” “Product Responsibility,” and “Management Structure.” The report has been prepared in accordance with the Core option of the GRI Standards.

Scope of the Report and Period Covered

In principle, this report covers Canon’s economic, social and environmental activities within the scope of consolidated accounting for 2017 (January 1 to December 31, 2017). The scope of environmental reporting is not limited to activities (development, production, and sales) at operational sites. Rather, it covers every stage of the product lifecycle, including raw materials and parts manufacturing by suppliers, as well as product use by customers. Supplemental information on important targets, indicators, and initiatives prior to and beyond 2017 is referenced in this report. Information specific to a region or organization is indicated as such.

Target of the Report

Data from 376 companies (63 companies in Japan and 313 overseas) that are consolidated companies of the Canon Group have been compiled and reported.

Date of Publication

August 2018 (previous: August 2017, next planned: June 2019)

Referenced Reporting Guidelines

- GRI (Global Reporting Initiative) Sustainability Reporting Standards 2016
- RBA Code of Conduct
- Ministry of the Environment, Japan “Environmental Reporting Guidelines (2012 Edition)”
- Ministry of the Environment, Japan “Environmental Accounting Guidelines (2005 Edition)”

Comparative tables for the RBA Code of Conduct and GRI Standards can be found online at the following URLs. Relevant GRI references are listed for each management approach used in CSR activity reporting.

(Ref.) Comparative table for GRI Standards (to be published in September): <https://global.canon/en/csr/search/gri.html>
 (Ref.) Comparative table for RBA Code of Conduct (to be published in September): <https://global.canon/en/csr/search/rba.html>

Disclosed Data

Disclosed data has been revised to reflect changes in calculation methods and the expanded scope of sites covered. Accordingly, some data in this report differ from data presented in last year’s report.

Notation

“Canon” refers to all companies in the Canon Group including Canon Inc. and its consolidated subsidiaries, while “Canon Inc.” indicates the non-consolidated parent company. Employees refers to full-time employees and also includes part-time workers. In addition, “Europe” refers to the region including Europe, the Middle East, and Africa.

Third-Party Opinion and Third-Party Assurance

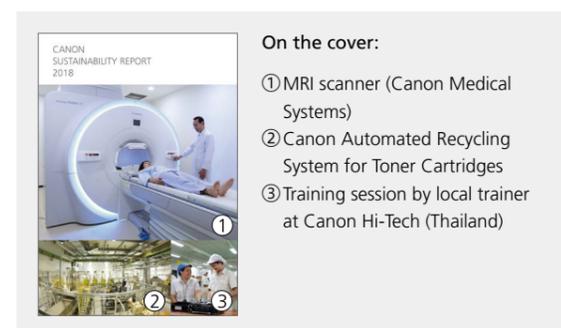
Canon received a third-party opinion (→P141) from Justus von Geibler (D.Phil.) of the Wuppertal Institute, which is helping to improve ongoing CSR initiatives as part of the company’s stakeholder engagement activities. Furthermore, Canon calculates direct greenhouse gas (GHG) emissions (Scope 1), indirect GHG emissions from energy sources (Scope 2), as well as other indirect GHG emissions (Scope 3), and has received third-party assurance (→P144) from Lloyd’s Register Quality Assurance Limited (LRQA).

Forward-Looking Statements

This report contains not only past and present facts about Canon, but also forward-looking statements based on plans, prospects, management policies and strategies as of the publication date. These forward-looking statements are assumptions or estimations based on information available at the time the report was prepared. Due to a range of variables, however, the results or circumstances of future business activities may vary from the forecasts contained herein.

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 E-mail: sus@list.canon.co.jp
 Website: <https://global.canon/en/csr/>



- On the cover:**
- ① MRI scanner (Canon Medical Systems)
 - ② Canon Automated Recycling System for Toner Cartridges
 - ③ Training session by local trainer at Canon Hi-Tech (Thailand)

Under the corporate philosophy “Kyosei,” we are stronger and deeper with stakeholders

Following half a century of operations, Canon adopted *kyosei* as its corporate philosophy in 1988, expressing clearly the company’s firm commitment to working together with stakeholders around the world.

Kyosei is the aspiration to create a society in which all people, regardless of race, language or culture, harmoniously live and work together for the common good into the future.

Canon is pursuing the realization of a sustainable global society based on the principle of *kyosei*.



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Message from Management

Pursuing a Grand Strategic Transformation to Help Realize a Better Society



The Grand Strategic Transformation of Our Business Portfolio: “Change is Evolution, Transformation is Progress”

In 2016, Canon embarked on Phase V of the Excellent Global Corporation Plan, covering the five-year period through 2020. The basic policy of this phase is “embracing the challenge of new growth through a grand strategic transformation.” In 2017, which marked the 80th anniversary of Canon’s founding, we fortified and grew our four new core businesses of “commercial printing”, “network cameras”, “industrial equipment” and “healthcare” while reinforcing our existing business domains, which include cameras and office multifunction devices. As a result, we reported increases in both net sales and operating profit for the first time in four years. Furthermore, with an increase in net sales to more than ¥4 trillion (U.S.\$36.1 billion*), we have laid the foundation for the grand strategic transformation that will lead Canon into a new era.

Among the four new core businesses that we aim to fortify and grow, our healthcare and network camera businesses enable us to contribute directly to the resolution of social issues concerning safety and security. In healthcare, we have recently welcomed Canon Medical Systems into the Canon Group and will work with them to develop our business by providing solutions closely attuned to the needs of medical institutions and patients. We are focusing on diagnostic imaging, healthcare IT and in vitro diagnostics that will help detect diseases earlier and reduce patient

burden during testing. In network cameras, we are working with Canon Group members Axis Communications and Milestone Systems to meet various safety and security needs by developing network visual solutions that incorporate image analysis technologies.

With a strong foundation of advanced technology we have cultivated over the years, and the companies we have welcomed into the Canon Group, it is our mission to realize a new age for Canon—building a sustainable enterprise by anticipating and embracing change.

* At an exchange rate of JPY 113=U.S.\$1

Our Corporate Philosophy of *Kyosei* and Corporate Social Responsibility

The United Nations adopted its Sustainable Development Goals (SDGs) in 2015. These apply to advanced economies and developing countries alike, and many companies worldwide are recognizing that the expansion of operations that contribute to the SDGs can lead to new business opportunities. The thinking is increasingly that companies’ long-term growth depends on adopting a perspective that values environmental, social and governance (ESG) criteria.

At Canon, we believe our social responsibility as a corporate citizen is about dispelling stakeholders’ concerns and satisfying their expectations. In 1988, some 30 years ago, we adopted our corporate philosophy of *kyosei*, which recognizes the need to build good relationships not only with customers and business partners, but also with nations,

regions and the global environment. Creating new value and solving issues, protecting and conserving the global environment and responding to people and society as a good corporate citizen, which Canon adopted as material topics to pursue in order to realize a better society, were identified based on our corporate philosophy of *kyosei*. Moreover, we believe that *kyosei* is consistent with the principles of the SDGs and that we can help achieve these goals through our corporate activities. We consider it our responsibility to address these important issues in order to realize a more prosperous society. Going forward, Canon will continue to operate with consideration towards the SDGs in order to create a better world.

In 2017, we established the Canon Group CSR Basic Statement to lay the foundation for creating enduring trust and reaffirming the Canon Group’s worldwide commitment to fulfilling social responsibilities as a global corporate citizen.

Protecting and Preserving the Global Environment

The protection and conservation of the global environment is one of the most important issues a corporation must address if it is to generate sustainable growth. With the goal of maximizing resource efficiency, we strive to increase operational efficiency and reduce environmental impact at Canon Group operating sites worldwide.

We have consistently engaged in activities that aim to reduce the environmental impact of Canon products over their entire life cycle, from green procurement—or the purchasing of more eco-friendly parts and materials—to the development of energy-saving product designs, recycling of factory wastewater and collection and recycling programs for used toner cartridges. As a comprehensive environmental indicator, we have set a goal of improving product lifecycle CO₂ emissions by an average of 3% per year. Over the period from 2008 to 2017, we achieved an average annual improvement of approximately 5%. In 2017, we completed the Canon Eco Technology Park, a symbol of our ongoing commitment to “product-to-product recycling.” In addition to its role as a base for environmental initiatives designed to maximize resource efficiency, it will also provide environmental education opportunities for visitors, including primary and secondary school students. Furthermore, under our Biodiversity Policy, we leverage the products and technical expertise Canon has cultivated throughout its history to promote a society rich in biodiversity. As outlined in our Environmental Vision, we will continue our efforts to realize a society that promotes both enriched lifestyles and the global environment.

Respect for People and Society

As the basis for promoting corporate sustainability and maintaining the trust of our customers and business partners, we have focused on strengthening not only our quality assurance, but also compliance, governance and risk management capabilities. As part of these efforts, we have continued our commitment to human rights while instituting workplace reforms that promote diversity and a better work-life balance. We have also increased the focus on our entire supply chain in line with the public’s increasing expectations of businesses. Canon conducts annual reviews of the thousands of firms in our supply chain to confirm such obligations as the prohibition of child and forced labor, and in 2018, we established newly revised supplier CSR guidelines. Moreover, we continue to be actively engaged in a range of social contribution activities around the world that promote the arts, culture and sports, assist with humanitarian and disaster-relief efforts and fund educational and academic support initiatives.

Developing Human Resources That Can Respond to Change

Both Canon and today’s global society are in the midst of an unprecedented transformation brought on by such technological advancements as artificial intelligence (AI). As such, each employee must be able to adapt to change and face up to the challenges of this transition. At Canon, we promote our traditional Canon spirit, comprising the *San-ji* Spirit (three selfs spirit: self-motivation, self-management and self-awareness) and an enterprising nature, while creating workplace conditions to help each employee fulfill their potential. For example, as production lines become more automated, we are re-training production workers and creating new job opportunities in such high-value-added roles as designing manufacturing systems.

Under our corporate philosophy of *kyosei*, we strive to meet the expectations of all stakeholders in our pursuit to make Canon a truly excellent global corporation worthy of people’s admiration and respect. At the same time, we will continue our efforts to achieve the ideals of *kyosei* and the UN SDGs towards realizing a better society, and to ensure that Canon will prosper as an enterprise for the next 100—or even 200—years.

We humbly ask for your continued support.

Fujio Mitarai
Chairman & CEO
Canon Inc.

Canon Group Business Operations (As of December 31, 2017)

Canon Inc. got its start as a camera manufacturer in 1937. The Company promoted globalization from early on, opening a New York branch in 1955. Marking its 30th anniversary of establishment, in 1967 Canon took up the challenge of diversification under the slogan, "Cameras in the Right Hand, Business Machines in the Left," marking its foray into the field of copying machines.

Not only is Canon currently a global leader in market share for such products as interchangeable-lens digital cameras and inkjet printers but the Company is also remodeling its business portfolio by growing four new businesses in the B-to-B field, namely, commercial printing, network cameras, healthcare, and industrial equipment.

Company Overview

Company name	Canon Inc.	Common stock	¥174,762 million
Established.....	August 10, 1937	Group companies	376 consolidated subsidiaries
Headquarters.....	30-2, Shimomaruko 3-chome, Ohta-ku, Tokyo, Japan	Affiliated companies accounted for by the equity-method	7
Chairman & CEO	Fujio Mitarai		

Net Sales by Business Unit and Main Products

Industry and Others Business Unit

6,475 million dollars 17.9%

- Semiconductor lithography equipment
- FPD (Flat panel display) lithography equipment
- Vacuum thin-film deposition equipment
- Organic LED (OLED) panel manufacturing equipment
- Die bonders
- Micromotors
- Network cameras
- Handy terminals
- Document scanners



Semiconductor lithography equipment

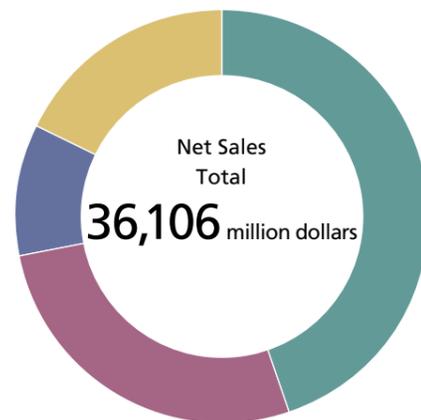
Medical System Business Unit

3,860 million dollars 10.7%

- Diagnostic X-ray systems
- Computed tomography
- Magnetic resonance imaging
- Diagnostic ultrasound systems
- Clinical chemistry analyzers
- Digital radiography systems
- Ophthalmic equipment



Computed tomography



Office Business Unit

16,513 million dollars 45.7%

- Office multifunction devices (MFDs)
- Laser multifunction printers (MFPs)
- Laser printers
- Digital continuous feed presses
- Digital sheet-fed presses
- Wide-format printers
- Document solutions



Office multifunction devices (MFDs)



Digital sheet-fed presses

Imaging System Business Unit

10,055 million dollars 27.8%

- Interchangeable-lens digital cameras
- Digital compact cameras
- Digital camcorders
- Digital cinema cameras
- Interchangeable lenses
- Compact photo printers
- Inkjet printers
- Large format inkjet printers
- Commercial photo printers
- Image scanners
- Multimedia projectors
- Broadcast equipment
- Calculators



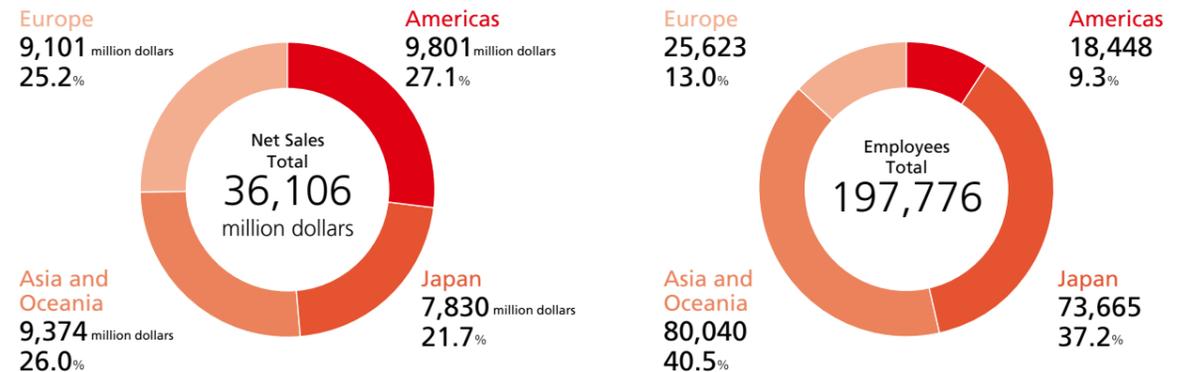
Interchangeable-lens digital cameras



Inkjet printers

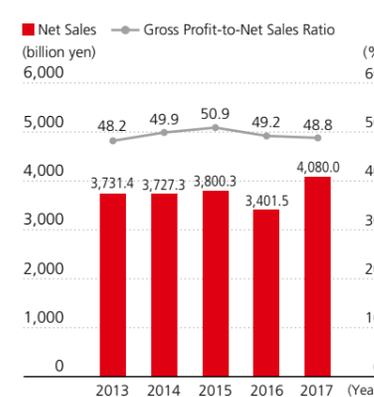
* As consolidated net sales for business units include sales related to inter-unit transactions, the total is not 100%.
* U.S. dollar amounts are translated from yen at the rate of JPY 113=U.S.\$1, the approximate exchange rate on the Tokyo Foreign Exchange Market as of December 29, 2017, solely for the convenience of the reader.

Net Sales and Number of Employees by Region

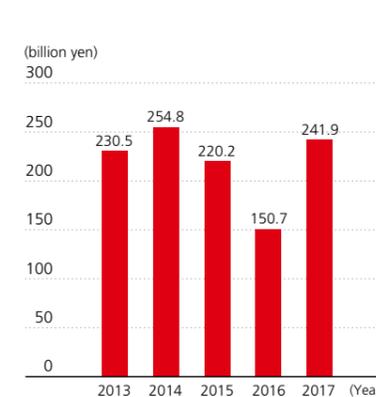


Major Financial Data and Employee Data

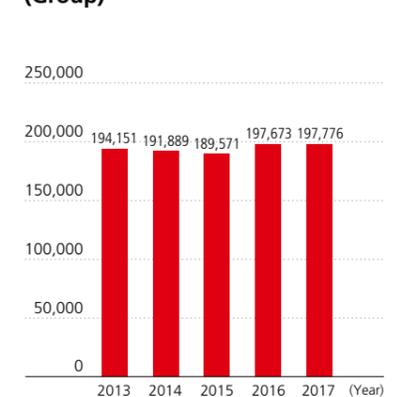
Net Sales and Gross Profit-to-Net Sales Ratio



Net Income Attributable to Canon Inc.



Number of Employees (Group)



	2013	2014	2015	2016	2017
Basic net income attributable to Canon Inc. shareholders per share	200.78	229.03	201.65	137.95	222.88
Total assets	4,242.7	4,460.6	4,427.8	5,138.5	5,198.3
Shareholders' equity	2,910.3	2,978.2	2,966.4	2,783.1	2,870.6
Return on equity (ROE)*	8.4	8.7	7.4	5.2	8.6
Return on assets (ROA)*	5.6	5.9	5.0	3.1	4.7

* Based on net income attributable to Canon Inc. and total Canon Inc. stockholders' equity

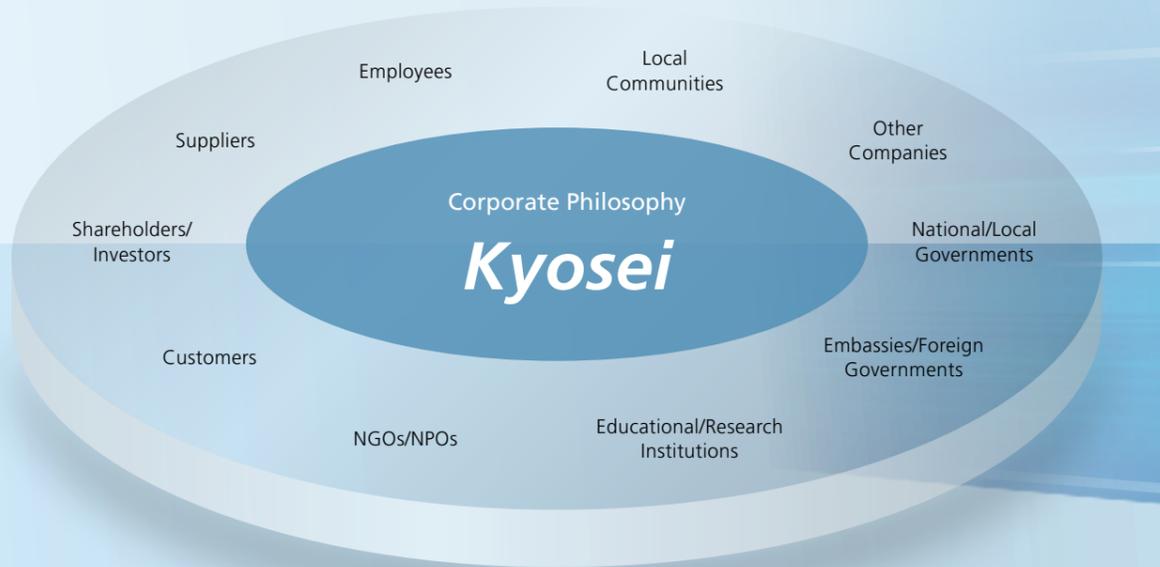
Dividends to Stockholders

	2013	2014	2015	2016	2017
Dividend per share	130	150	150	150	160
Total dividend amount	148.8	164.7	163.8	163.8	172.8
Dividend payout ratio	64.6	64.6	74.4	108.7	71.4

Canon's Growth Strategy and Sustainability

Since 1996, the Canon Group has endeavored to promote medium- to long-term growth through the "Excellent Global Corporation Plan."

In 2016, Canon entered Phase V of the Excellent Global Corporation Plan—a growth strategy based on the social and industrial shifts seen in recent years. At the same time, Canon has identified material CSR topics that the Company has been addressing for some time in line with its business strategy. As illustrated in the diagram below, "Responding to people and society as a good corporate citizen" is already a fundamental element of Canon's corporate philosophy of *kyosei*. The Company also endeavors to help resolve social issues affecting global society by advancing the following topics: "Creating new value and solving social issues" and "Protecting and conserving the global environment."



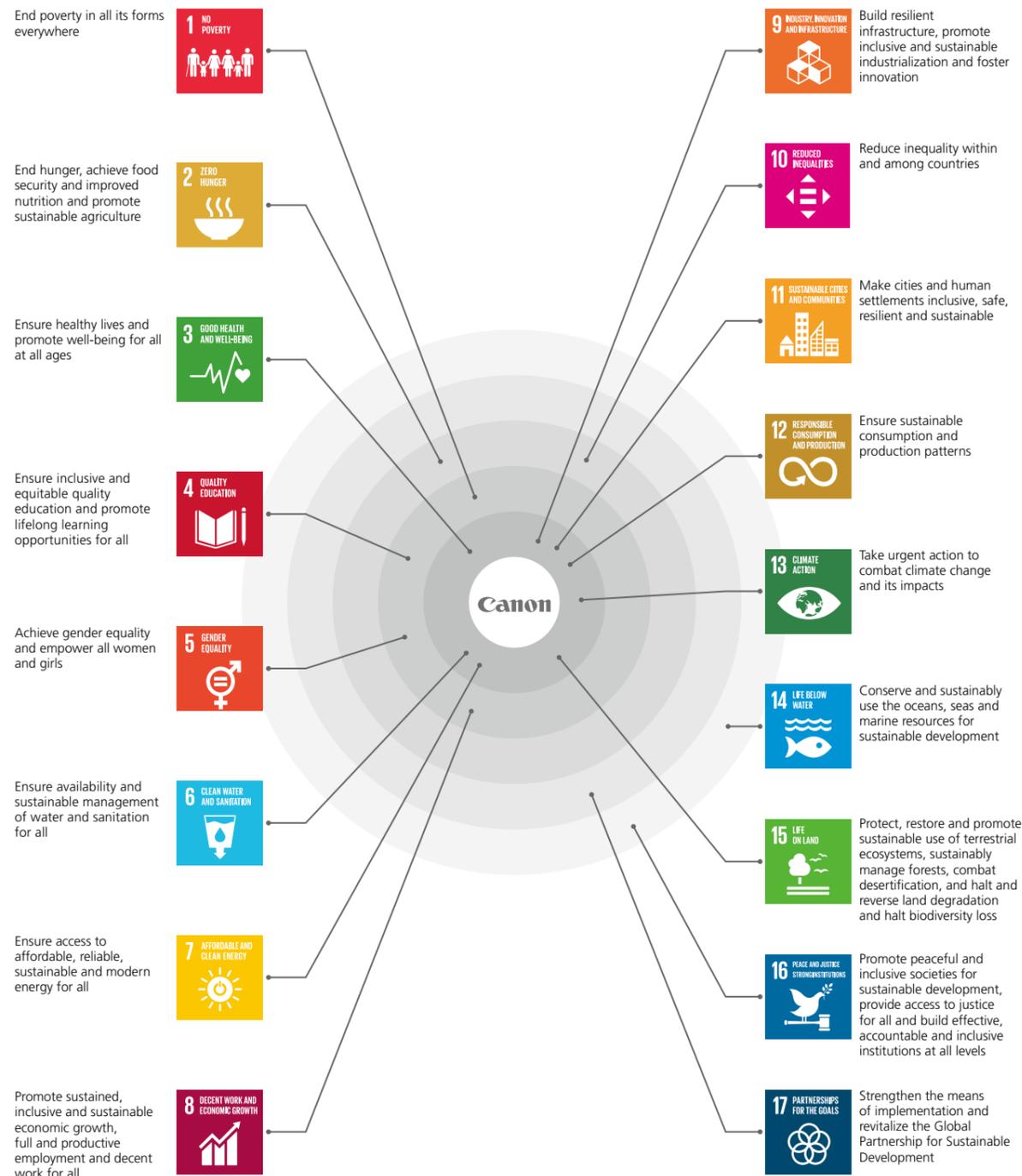
Contributing to the realization of a better society

Relationship with SDGs

Canon's Activities Targeting a Better Society and Their Relation to SDGs

The figure below shows the relationship between the impact of Canon's activities on society and the global environment and the Sustainable Development Goals (SDGs), based on the results of the stakeholder survey as outlined on the following page.

The closer the SDG icon-linked circle is to the center (Canon), the greater is the degree of relevance to Canon's operations.



Stakeholder Expectations

Canon conducts an annual survey to see whether CSR activities are satisfying the wishes of stakeholders. Since 2016, the survey has included questions on SDGs. In 2017, it also covered CSR-related targets for Canon, asking what kind of contribution Canon was expected to make.

For further details of this research, please refer to "Stakeholder Questionnaire Survey" (in the CSR Management section) (→P14).

Goals to which Canon is expected to contribute



The top three SDGs (out of 17) to which stakeholders expected Canon to contribute were, in descending order, numbers 12, 13 and 9.

Example opinions

- Sustainable consumption patterns would have a significant effect on the environment, and companies have a major part to play in this. (Asia, university/research institution)
- We would like to see Canon focus more on the health sector in the future. (Europe, customer)
- Climate change is society's most critical issue. Progressive companies such as Canon should be doing a lot in this area. (Americas, investor/analyst)
- We want to see Canon creating new value by leveraging advanced technology. (Japan, supplier)

Examples of Main Canon Activities Contributing to SDGs

Canon has consistently pursued a strategy of creating value to help address social issues. Further steady progress was made in 2017 through a variety of activities designed to help realize SDGs.

In addition to the following, you can read more about Canon's activities for SDGs in the CSR Reporting (→P23-118).

Materiality

■ Creating new value and solving social issues



Creating a Safe and Secure Society

Canon is helping to safeguard society by protecting people's safety and security. In 2017, we installed a system of network cameras to facilitate urban development in the City of Yokohama, and have released software products which leverage our technological capabilities.

For details, please refer to "Activity Highlights 1" (→P15).



Promoting Healthcare

In a growing healthcare sector, Canon is promoting technological innovation to improve medical equipment. In 2017, in partnership with medical institutions, we completed the development of the world's first ultra-high-resolution CT system.

For details, please refer to "Activity Highlights 2" (→P17).



Materiality

■ Protecting and conserving the global environment



Contributing to a Circular Economy Eliminating Hazardous Substances and Preventing Pollution

Canon is working to improve sustainability through the recycling of limited resources. In 2017, we established the Canon Eco Technology Park, a state-of-the-art recycling plant designed to maximize the resource efficiency.

For details, please refer to "Activity Highlights 3" (→P19).



Contributing to a Low-Carbon Society

Canon is promoting lower CO₂ emissions over product lifecycles. In 2017, we continued to work on cutting CO₂ emissions by seeking to reduce emissions at every stage, from the raw material to site operations, logistics and customer use.

For details, please refer to "Activity Highlights 4" (→P21).



The entire Canon Group promotes CSR activities with the aim of contributing to the realization of a better society.

Canon Group CSR Basic Statement

The expectations and responsibilities placed on companies by society are wide-ranging. In line with the times, they are expanding from product quality and safety, and measures to address environmental issues, to compliance, information security, employee rights and labor management, and even to supply chain management.

In the field of business as well, with the advancement of globalization the demand from customers and business partners to deal with companies that meet certain criteria in terms of consideration paid to the global environment and society is increasing.

Under its corporate philosophy of *kyosei*, Canon has for many years taken proactive measures to fulfill its diverse social responsibilities in its corporate activities. These initiatives are disclosed in this report, which is published every year. In May 2017, following senior management approval, Canon published the Canon Group CSR Basic Statement with the aim of explaining to stakeholders in an

easy-to-understand manner the Group's attitude toward fundamental and universal elements of corporate social responsibility. In October 2017, the head of the CSR Division gave a presentation on Canon Group CSR Basic Statement at a conference of senior managers from Canon Headquarters, Products Operations, and Canon Group companies worldwide.



Presentation on Canon Group CSR Basic Statement by head of CSR Division

Canon Group CSR Activity Policy

Since its founding, Canon's corporate culture has emphasized the importance of contributing to society while growing as an enterprise. The corporate philosophy of *kyosei* that Canon adopted in 1988 helped to formalize this concept. Canon formulated the Canon

Group CSR Activity Policy in 2012 to express the Group's commitment to social contribution as a corporate citizen. Under this policy, Canon tries to utilize its strengths effectively to conduct its CSR activities in accordance with the needs of each country and region where it operates.

Canon Group CSR Activity Policy

— Contributing to the Realization of a Better Society as a Good Corporate Citizen —

The Canon Group, recognizing that its corporate activities are supported by the development of society as a whole, aims to achieve growth through sound and fair business activities while contributing to the realization of a better society as a good corporate citizen.

Therefore, Canon will promote its CSR activities within the international and local communities, effectively leveraging the company's advanced technological strengths, global business deployment, and diverse, specialized human resources.

Key Activities

- Contribute to cultural improvement; support the arts, science, sports, etc.
- Provide humanitarian support to people and regions facing harsh conditions due to disasters, etc.
- Contribute to the promotion of both enriched lifestyles and the global environment
- Contribute to society through business activities
- Contribute to the realization of a sound and fair society

Canon Group CSR Basic Statement

Enacted on May 8, 2017

In accordance with our corporate philosophy of *kyosei*—living and working together for the common good—Canon makes sincere efforts to engage with the social responsibilities that come with operating a business and to disclose any relevant information.

This basic statement reiterates our stance regarding the fundamental and universal corporate social responsibilities that the Company must fulfill in order to ensure Canon products and services can be used with peace of mind and maintain the reliability of the Canon Group.

- | | |
|--|---|
| <ol style="list-style-type: none"> 1. Provide safe and secure products and services 2. Comply with the laws and regulations of each country and region, and conduct fair and honest business activities 3. Practice fair and free competition, and ensure transparency in business transactions 4. Contribute to realizing a society that promotes both enriched lifestyles and the global environment 5. Minimize environmental burden through initiatives aimed at conserving energy, conserving resources, eliminating hazardous substances, and preserving biodiversity 6. Ensure thoroughness in managing information, prevent information leaks, and protect personal information 7. Prevent infringements of the intellectual property rights of others 8. Ensure thoroughness in security trade control 9. Prevent corruption in all its forms including bribery 10. Avoid complicity in armed insurgencies and anti-social forces 11. Disclose relevant and accurate corporate information | <ol style="list-style-type: none"> 12. Respect fundamental human rights and prohibit discrimination based on such factors as race, nationality, gender, religion and creed 13. Promote diversity 14. Prohibit child labor and forced labor (including human trafficking) 15. Promote sincere dialogue between employees and management in accordance with the laws and regulations of each region 16. Pay employees wages equal to or greater than legally mandated wages 17. Prevent excessive overtime work and grant appropriate holidays 18. Ensure occupational health and safety, and prevent occupational injuries 19. Request that business partners take steps to address basic social responsibility for such issues as the environment, human rights, labor and compliance within the supply chain, and confirm the implementation of said steps |
|--|---|

Canon respects the following international initiatives and complies with them in line with the above basic statement:

- Universal Declaration of Human Rights
- UN Guiding Principles on Business and Human Rights
- International Labor Organization (ILO) Declaration on Fundamental Principles and Rights at Work
- Organization for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises

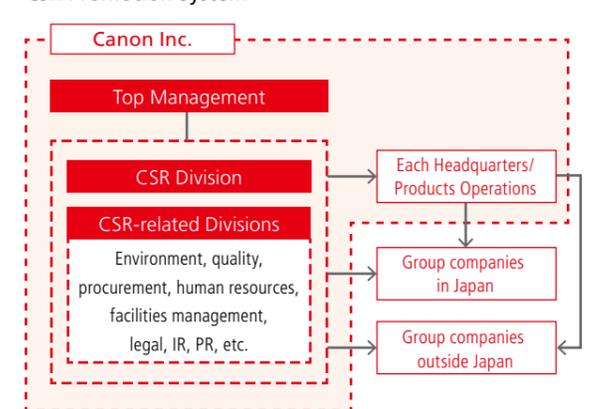
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CSR Promotion System

The CSR Division directory under top management promotes and coordinates CSR-related activities across the Canon Group. The CSR Division works together with relevant divisions to address any CSR-related issues that require inter-departmental cooperation, such as environmental, quality, procurement, human resource, facilities management, legal, IR or PR issues. Divisions directly in charge of fields with high societal expectations, such as environmental protection, compliance, or quality management, take the lead in CSR activities in those areas.

The CSR Division reports on CSR-related matters to top management as needed.

CSR Promotion System



Educational and Awareness-Raising Activities

Canon promotes a variety of educational and awareness-raising activities for its employees. For specialized topics, such as quality assurance, environmental protection, information management, or compliance, the respective division in charge provides employee training as required. By incorporating training for newly appointed managers

that provides an overview of CSR trends and Canon's CSR initiatives, Canon is also working to develop managers from both technical and administrative fields with a broad perspective. In addition, CSR managers at Group companies worldwide share information and work closely together on CSR initiatives.

Canon's Supply Chain and the Fulfillment of its Social Responsibility

In recent years, the environment, human rights and labor issues have been topics of increasing attention, and various stakeholders are calling into question the scope of our social responsibility initiatives across our supply chain.

According to news reports, their concerns about manufacturers with respect to social responsibility likely stems from large numbers of manufacturing companies in such industries as sports, apparel and electronic products outsourcing their sewing, assembly and manufacturing operations to outside factories. Furthermore, the social responsibility expected of manufacturers has expanded in scope to encompass large, medium and small size suppliers that provide parts and materials to factories.

Canon places great importance on manufacturing, engaging in product assembly as well as the production of certain components, parts and materials at its own plants, factories and Canon Group manufacturing companies that bear the Canon name and are owned by Canon Inc. directly or indirectly. The manufacturing companies in the Canon Group*1 are located in such countries and regions as Japan, China, Taiwan, Malaysia, Thailand, the Philippines, Vietnam, the United States and Europe, and supply Canon products to Canon Inc. and companies including Canon Group marketing subsidiaries and affiliates. These manufacturing companies directly employ considerable numbers of employees and are administrated by Canon Inc., which acts as the head of the Canon Group.

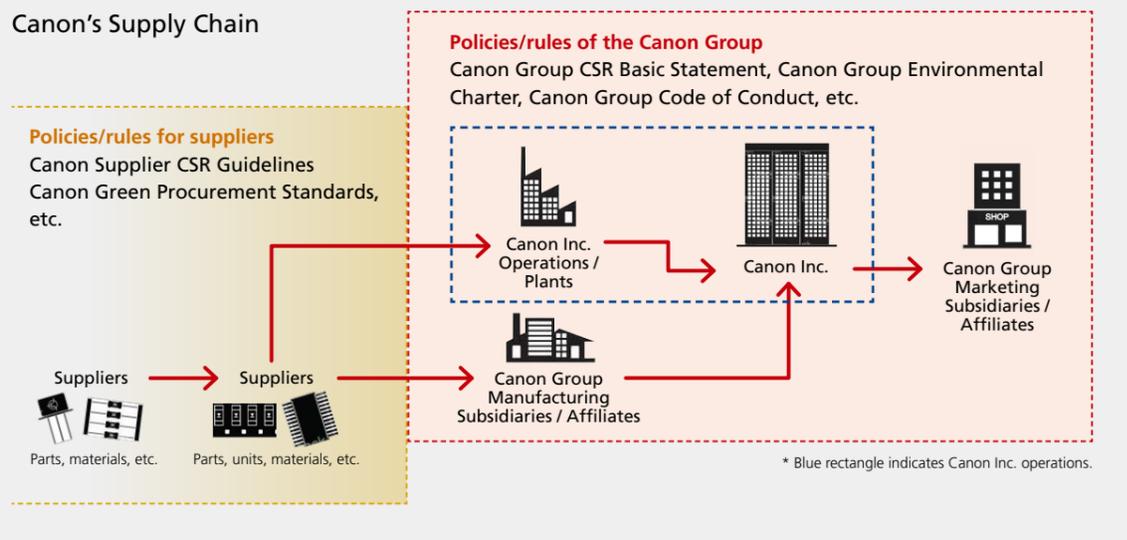
Canon Group manufacturing companies conduct business while adhering to Group policies regarding such matters as human rights, labor, the environment, legal compliance, procurement and security, including the "Canon Group CSR Basic Statement," the "Canon Group Code of Conduct" and the "Canon Group Environmental Charter." When necessary, each administrative office, product operation headquarters and auditing office at Canon Inc. verify the situation at Group companies as a whole, be they in Japan or overseas, from the standpoints of internal controls and risk management.

The Canon Group offices, factories and manufacturing companies are engaged in partnerships with several thousand suppliers unaffiliated with the Canon Group, from whom they purchase considerable numbers of such components as electronic parts, mechanical parts, units and materials. Procurement divisions at Canon Inc. headquarters and Group manufacturing companies periodically review and evaluate the social responsibility of these suppliers. In particular, Canon may choose to terminate business with suppliers if they fail to abide by laws and ordinances covering such areas as human rights and labor. In 2018, Canon established the "Canon Supplier CSR Guidelines"*2 in order to clarify the social responsibility standards suppliers must adhere to. Canon also requires that these companies urge their own upstream suppliers to do the same.

Among aspects of social responsibility, child labor and forced labor in particular are areas of growing concern. Within the scope of our 2017 survey of Canon Group companies and suppliers, no problems were found with respect to child labor or forced labor.

*1 Manufacturing Subsidiaries and Affiliates in the Canon Group
<https://global.canon/en/corporate/information/group/gr01.html>
 *2 Canon Supplier CSR Guidelines
<https://global.canon/en/procurement/social.html>

Canon's Supply Chain



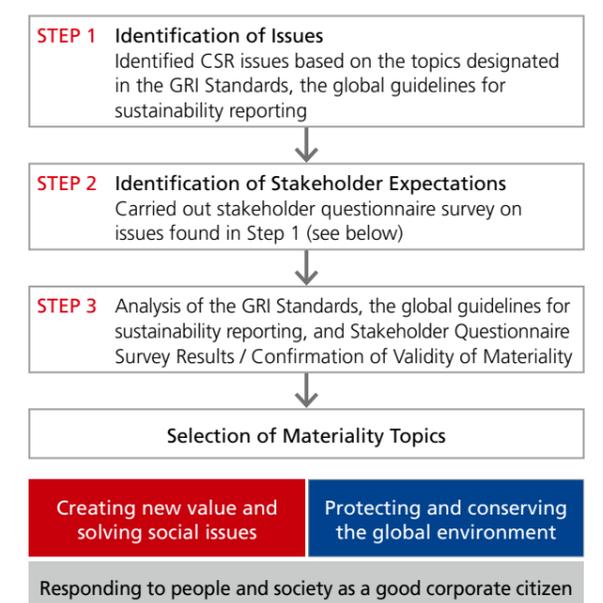
Identifying and Reviewing Materiality

To reliably meet the expectations of its stakeholders, Canon makes efforts to confirm the validity of its CSR-related materiality.

Identifying Materiality

Canon conducts questionnaire surveys to ascertain stakeholder expectations. Through analysis of survey results alongside past initiatives and medium- to long-term management plans, we identify materiality themes that should be addressed. In 2017, we identified "Responding to people and society as a good corporate citizen" as a new materiality theme. Under this theme, Canon is actively working towards solutions to the problems faced by global society by promoting "Creating new value and solving social issues" and "Protecting and conserving the global environment". In the environmental field, Canon also identifies materiality at the topic level as stipulated in the GRI Standards (→P34).

Materiality Identification Process



Stakeholder Questionnaire Survey

Canon carries out stakeholder questionnaire surveys once a year in order to better understand the social issues stakeholders are interested in as well as the expectations they have of the Company. Based on the results of these surveys, Canon confirms the validity of its materiality topics and makes an appropriate review. In addition, these surveys help Canon analyze its impact on society and further improve its CSR activities. Furthermore, Canon has explored the opinions of stakeholders regarding the Sustainable Development Goals (SDGs) adopted by the United Nations in 2015, which we expect will help in expanding our future activities.

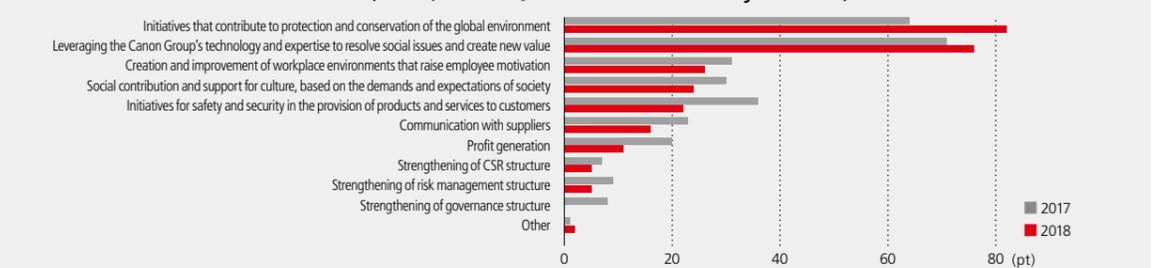
Stakeholder Questionnaire Survey Outline

Method: Questionnaire survey
 Survey period: February to March 2017, January to February 2018
 Target: Consumers, suppliers, investors and analysts, NGOs and NPOs, persons affiliated with universities and research organizations, national and local governments in Japan, the Americas, Europe and Asia

Interest toward CSR-Related Issues

Canon surveyed stakeholders on their expectations of the Company with regard to ten CSR themes of importance to Canon within a wide range of social issues, including items outlined by GRI standards. We ascertained that stakeholder interest in "Initiatives that contribute to protection and conservation of the global environment" and "Leveraging technology and expertise to solve social issues and create new value," remains high, as in the previous year.

Level of Stakeholder Interest (2017, 2018 Questionnaire Survey Results)



Our Innovation Highlights

01 for Society



Network cameras watch over the streets of Yokohama

We are contributing to secure living with new infrastructure to combat increasingly diverse urban crime.

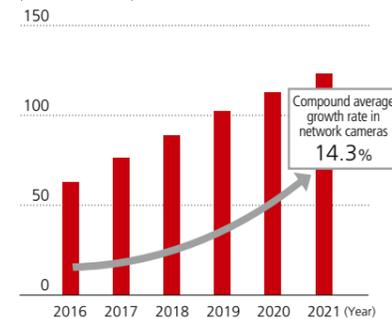
Urbanization is progressing rapidly throughout the world, and it is predicted that the world's total urban population will increase from 50% of the current global population to around 70% by 2050. Meanwhile, threats to human life and the security of businesses, such as increasing urban crime, armed terrorism against the backdrop of globalization, and cyberattacks accompanying advances in information technology, are diversifying. As the movement of people and goods increases, a review of the maintenance and management of urban spaces, and the development of new infrastructure that protects personal safety and security are needed in order to respond to these growing risks, secure the safety of cities, and create living spaces where everyone can continue to live sustainably.

Japan will be hosting large-scale sports events such as Rugby World Cup 2019™, Japan and the Olympic and Paralympic Games Tokyo 2020, and along with urban redevelopment in each region, the number of travelers from overseas is expected to increase substantially. Maintaining public safety and securing the stability and security of infrastructure are important issues for the success of these events.



Ongoing Expansion of the Global Network Camera Market

(millions of units)



Source: "Video Surveillance Intelligence Service," IHS Markit Technology (published December 2017). Data for 2017 are estimates; those for later years are forecasts.

We are contributing to crime prevention and increased convenience with network cameras.

Combining cameras and IT, network cameras are part of the new infrastructure to ensure the safety and security of cities, enabling remote monitoring of public spaces and a more rapid response to threats to public safety. Meanwhile, demand for network cameras has grown and global markets are expanding at an annual average of more than 10%. Network cameras have a variety of practical applications. They can, for example, contribute to the improvement of quality and productivity at a production site, analyze the flow of customers from video feeds and thus lead to improvements in product sales, or monitor the daily activities of the elderly.



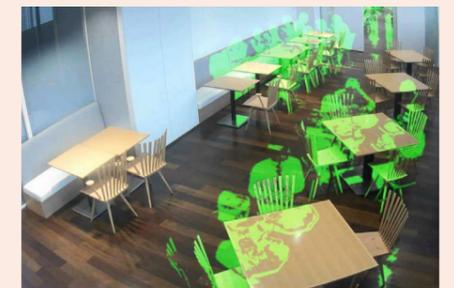
Network cameras for transportation hubs

Canon has positioned network cameras as one of the new business pillars in Phase V of its Excellent Global Corporation Plan. We have launched solutions that utilize optical and image-processing technologies cultivated in our camera business along with network control technologies cultivated through the development of our office multifunctional devices, and made it available worldwide for disaster prevention, crime prevention, and surveillance. In addition, we recently welcomed Axis of Sweden, a leader in the network camera industry, and Milestone Systems, one of the world's largest video management software companies, into the Canon Group, and their expertise is now helping us open up possibilities in a wide range of fields, including medical care, nursing care, education, transportation, and urban planning. For example, in Yokohama, which has a population of 3.7 million people, Canon and Axis network cameras are contributing to secure and safe urban planning, such as through incident and accident prevention at large events, and other safety measures that include rapid real-time assessment capability in the case of an urban disaster.

Our Achievements

Silhouette indication for privacy

In addition to safety and security, the ability of network cameras to provide added-value images presents a number of potential applications in such fields as customer service and market research. Canon has launched Moving Object Mask software that displays individuals within a selected area as silhouettes so they cannot be identified, thereby enabling both privacy and safety. Because captured images contain a great deal of information which can be used to identify specific subjects, this product has potential for use in a variety of scenarios—for example, users can confirm such information as congestion status or queue lengths at train stations, bus stops or taxi ranks while the privacy of those viewed by the cameras is protected by the silhouette effect.



Subjects displayed as silhouettes

This enables users to select effective detour routes and consider transport usage periods, thus contributing to better customer service as well as helping to avert danger by avoiding congestion. In this way, Canon will continue striving to deliver new kinds of video recording and analysis solutions.

Our Innovation Highlights
02
for Society



CT scanner in use at Fujita Health University Hospital

We are supporting more advanced medical treatment with new technologies amid rising demand for healthcare services.

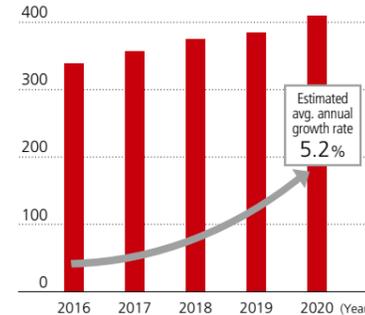
The population of elderly people is increasing globally, and it is estimated that in 2050 the population aged 65 years or older will reach 1.4 billion, more than twice the current global population of this age group. Japan, where this demographic will exceed 40% of the population, and other advanced countries experiencing declining birthrates, will also face serious concerns over the accompanying rise in healthcare costs.

Awareness among people who want to live life without limitation in their later years is growing, and the need for a wide range of health care services ranging from health promotion and disease prevention to advanced examination, diagnosis and treatment has increased.

To respond to these social changes, the healthcare industry has undergone a major transformation on a global scale, based on the evolution of technology. Canon is concentrating its efforts in the field of diagnostic medical devices, where, in addition to therapeutic devices such as pacemakers and catheters, diagnostic equipment such as computed tomography (CT) and magnetic resonance imaging (MRI) systems have evolved significantly to support sophisticated medical care. Such diagnostic equipment not only fulfills a vital role in the prevention, early detection and early treatment of diseases, it is also relied upon for its economic benefits which include helping to streamline operations of doctors and other professionals at medical institutions while balancing low cost and high functionality.



Worldwide medical device market (in billions of U.S. dollars)



Source: BMI Research "Worldwide Medical Devices Market Forecasts to 2021." Graph created by Industry Research Department, Mizuho Bank

We are contributing to early disease detection and the development of advanced medicine with long-cultivated diagnostic imaging technologies and new innovation.

The medical equipment market is expanding globally on the back of world population growth and aging, and it is estimated that in 2020, the world market will exceed ¥40 trillion.

Canon is focusing on its medical business as one of its new business pillars in Phase V of the Excellent Global Corporation Plan. In December 2016, Canon Medical Systems (formerly Toshiba Medical Systems), a world leader in diagnostic imaging, joined the Canon Group, strengthening and expanding our business.

Under the business slogan "Made for Life," which expresses our desire to contribute to medical treatment that preserves precious lives, Canon Medical has been developing technologies, including CT, MRI and ultrasound equipment, which both reduce patient burden and increase image quality, while giving due consideration to the importance of medical care and conditions on the frontline. We will add to these technologies, such as Canon's long-cultivated proprietary image-processing technologies and those offering information analysis using AI (artificial intelligence), to provide solutions even better suited to patients and medical professionals.

In addition, we will promote healthcare IT that provides state-of-the-art hospital information systems and network solutions that make use of information and communication technologies (IT), as well as in vitro diagnostic systems that quickly and with high precision analyze specimens such as patient blood samples.



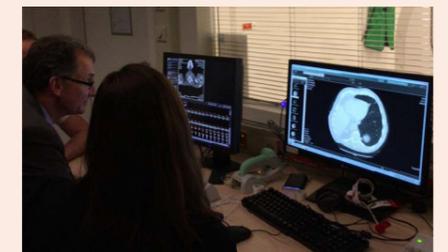
MRI system employing noise reduction technology

Our Achievements

Innovation through high-definition CT

CT, MRI, X-ray, and ultrasound diagnostic equipment are indispensable for the diagnosis and treatment of such serious diseases as cancer, heart disease, pneumonia, and cerebrovascular disease.

At Canon Medical, we approach the development of CT diagnostic devices with the aim of early detection, reliable diagnosis, and non-burdensome treatment. In 2017, we released the Aquilion Precision ultra-high resolution (UHR) CT system, realizing overwhelmingly higher resolution than ever before in order to meet the needs of the medical frontline, namely to clearly display human body structure with higher resolution while limiting patient burden from radiation exposure. While previous systems could not resolve shapes clearly less than 0.35mm, the Aquilion Precision achieves a resolution of 0.15mm while reducing the exposure dose. With the ability to acquire detailed biometric information that was previously undetectable, we are contributing to increased diagnostic ability of, for example, fine blood vessels diverging from a cerebral aneurysm, and expectations are high for application in the discovery of cancers that are difficult to detect in the early stages.



Evaluating images acquired by the Aquilion Precision

Our Innovation Highlights 03 for the Earth



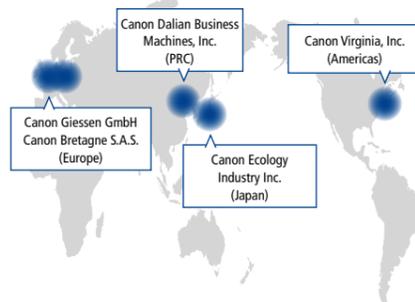
The newly opened Canon Eco Technology Park

We are pursuing advanced recycling initiatives to support a sustainable society for future generations.

The effective use of finite resources is essential for sustainable consumption and production. Many initiatives worldwide are promoting greater resource efficiency and the circular economy. The aim is to enable future generations to be able to enjoy sustainable lifestyles by restricting the use of new resources through the repeated reuse or recycling of existing resources.

Canon has undertaken resource-recycling initiatives on an ongoing basis with the aim of maximizing resource efficiency. As part of this, Canon is pursuing ways of adding value to resources through “product-to-product recycling.” To undertake such initiatives, Canon has established five recycling centers in four regions around the world to hone related recycling technologies.

Construction of the Canon Eco Technology Park was completed in 2017. Equipped with a state-of-the-art automatic recycling line, this facility aims to carry out more advanced and resource-efficient product-to-product recycling. In marked contrast to the conventional image of a recycling plant, the design concept for the Canon Eco Technology Park is “clean and silent.” Canon remains committed to continually advancing resource recycling.



Our Achievements

Pursuing maximum resource efficiency, the state-of-the-art Canon Eco Technology Park is the future of recycling.

Supporting Canon’s product-to-product recycling initiatives are two processes: remanufacturing, which involves turning post-use MFDs into products with good-as-new quality; and closed loop recycling to create new toner cartridges using plastics recycled from collected toner cartridges.

Completed in 2017, the Canon Eco Technology Park employs an abundance of technologies to optimize these processes.

For example, in the Canon Automated Recycling System for Toner Cartridges (CARS-T), used toner cartridges are crushed and the materials are automatically separated using their different physical characteristics. It is a system that can recycle plastic with sorting purity of 99% or greater (According to Canon sorting methods). A clean and silent operation, the CARS-T process also ensures there are no messy toner leaks from the sealed process units.

With the Canon Automated Recycling System for Ink Cartridges (CARS-I), a camera-based automatic identification and sorting process is applied to the used ink cartridges as they are transported on a conveyor belt. The entire production line is automated, yielding a fully integrated process for the recycling of cartridges from disassembly and pulverization to washing.

Equipped with the most-advanced technologies and facilities, the Canon Eco Technology Park is also designed to operate in harmony with its natural surroundings. The site features extensive greenery. A bird bath has been installed as part of the Canon Bird Branch Project (→P63), along with network cameras to monitor bird life in the local ecosystem.

The Canon Eco Technology Park is the most technologically sophisticated recycling facility in the Canon Group and serves as a hub for Group environmental activities. The facility will also offer a plant field trip course for primary and secondary school students that includes Canon’s automated toner and ink cartridge recycling programs and a showroom describing such environmental initiatives as the Canon Bird Branch Project, along with a variety of visual and hands-on contents.



Canon Automated Recycling System for Toner Cartridges (CARS-T)



Canon Automated Recycling System for Ink Cartridges (CARS-I): camera-based technology used for automatic sorting of post-use ink cartridges



Recycling programs are outlined in the showroom

Our Innovation Highlights 04 for the Earth



Office multifunction devices with reduced CO₂ emissions related to produce use stage

We are combating climate change through greater operational efficiency as we continue our quest to support enriched lifestyles and global environmental protection.

Recent years have seen a global increase in natural disasters caused by extreme weather events thought to be the result of climate change. Cyclones, hurricanes, torrential rain, droughts, and heat waves are having a major impact on human life.

Countries are taking action to tackle this issue, based on the Paris Agreement that came into force in 2016. Within the Sustainable Development Goals (SDGs) adopted by the United Nations in 2015, SDG 13 specifies the need to "Take urgent action to combat climate change and its impacts." One of the targets listed under SDG 7 is that of improving global energy efficiency.

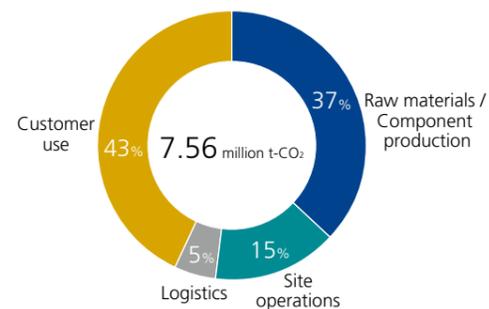
Recognizing the link between its business activities, energy consumption, and CO₂ emissions, Canon has been working to lower CO₂ emissions at every stage of the product lifecycle since before the creation of this international framework. Canon has received high praise for its continued efforts to reduce CO₂ emissions caused by customer product use and to make its production sites more energy efficient.

Developing more compact products is another approach to CO₂ emissions reduction. Not only does it cut the emissions attributed to the raw materials and component production stages, but the higher loading efficiency of containers due to more compact products translates into reductions in CO₂ emissions caused by transport.

Our continual improvements resulted in a reduction in the average lifecycle CO₂ emissions per product of more than 35% in 2017 compared to 2008.



Lifecycle CO₂ emissions (Canon Group)



Our Achievements

By developing more compact, lighter products, we are lowering CO₂ emissions at every stage, from site operations to logistics and customer use.

Reducing CO₂ emissions attributed to product use

Newly developed features of Canon's imageRUNNER ADVANCE C5550F II office multifunction device (MFD) include a main controller that cuts standby power consumption, and an upgraded toner with improved melting characteristics to lower operating power consumption. With a lower TEC value than previous MFDs, the model lowers CO₂ emissions attributed to the customer use stage by approximately 47%.



Office MFDs featuring reduced operating power consumption

Introducing energy-saving technologies across production sites

Efforts to reduce energy consumption also involve detailed reviews of the operating conditions on factory production lines and at other facilities, based on building energy management system (BEMS) data. For instance, optimizing compressor air pressures yields a 10% cut in yearly energy consumption. Applying such approaches to Group production sites worldwide, Canon has made more than 4,000 improvements between 2014 and 2017.



Reducing the pressure of compressed air helps lower energy consumption during production

Lowering CO₂ emissions with compact product design

Within the PIXMA series of consumer-use inkjet printers, the TS8100 series model is about 44% smaller and roughly 29% lighter than the equivalent 2011 model, translating into a 26% reduction in CO₂ emissions attributed to raw materials. Greater compactness also increases container loading efficiency by 25%, translating into a reduction in CO₂ emissions during transport of approximately 23%.



More compact and lightweight inkjet printers

Awards received by the Canon Group

In the ENERGY STAR® awards for 2018, sponsored by the US Environmental Protection Authority (EPA), Canon USA received "Partner of the Year – Product Brand Owner" award for the third year running for its efforts to promote energy conservation and reduce greenhouse gas emissions.



The 2018 ENERGY STAR® award ceremony

Canon was awarded the Agency for Natural Resources and Energy Director-General's Prize for initiatives to improve energy efficiency in the annual energy conservation awards sponsored by the Energy Conservation Center, Japan for FY2017.



Energy Conservation Grand Prize ceremony

Canon Australia was accredited as a Gold Partner in the Sustainability Advantage Program sponsored by the Office of Environment and Heritage, a department of the state government of New South Wales.



The Sustainability Advantage Program award ceremony

CSR Reporting

Canon recognizes that as a global corporation it has a significant impact on society. With that in mind, we carry out activities to fulfill our social responsibilities from various viewpoints.

We have organized our report on these activities by category in accordance with GRI standards.

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Development of network cameras (Axis)

Creating New Value and Solving Social Issues Through Business Activities

Management Approach

Canon contributes to a better future, a sustainable society through innovation

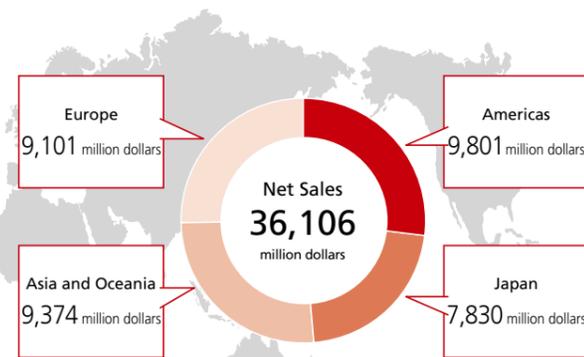
Why it Matters

To realize a sustainable future, society has many challenges yet to overcome. Many of these issues, such as the aging population in developed countries, the improvement of standards of living in emerging countries, and the security problem accompanying the advancement of IT, cannot be solved without the cooperative sharing of expertise in the global society. Meanwhile, understanding the connection between the expansion of business activities that contribute to solving such social problems and business opportunities is spreading to corporations. For Canon as well, keeping close to social issues in each region of our global operations and contributing to solutions through business will fulfill our social responsibilities and increase the sustainability of Canon and society.

With a corporate philosophy of *kyosei*, Canon is committed to creating new value through diversified products and services based on advanced technologies and platforms while creating good relationships with customers, business partners, communities and the global environment. We have developed new businesses that are already helping to address social issues with many innovative products,

including network cameras that support safe and efficient social infrastructure, medical diagnostic equipment that supports advanced medical treatment, and industrial equipment that supports activities of daily living and IT with advanced technologies.

Canon Group Sales in 2017



* U.S. dollar amounts are translated from yen at the rate of JPY 113=U.S.\$1, the approximate exchange rate on the Tokyo Foreign Exchange Market as of December 29, 2017, solely for the convenience of the reader.

Creating New Value and Solving Social Issues Through Business Activities

Canon's Approach

GRI102-15 | GRI103-2

Canon is now moving ahead with major strategic changes aimed at sustainable growth, positioning network cameras, healthcare, industrial equipment, and commercial printing as four new pillars of business in addition to such existing businesses as cameras, office multifunction devices, and printers. Utilizing the advanced technological expertise we have cultivated so far, we will deepen collaboration with Group companies newly acquired by M&A, namely Canon

Tokki, Canon ANELVA, Canon Machinery, Océ, Axis, Milestone Systems and Canon Medical Systems, and create new value. In addition, we will promote joint development and open innovation with leading research institutions, such as universities, and other companies in Japan and overseas, and provide products and services suited to various needs.

Overview of Material Issues and Activities in 2017

GRI103-3

Creating a Safe and Secure Society

In collaboration with Axis and Milestone Systems, we will respond to diverse needs for "security and safety" with network visual solutions, including image analysis technology. In 2017, we expanded our product lineup of network cameras and launched AXIS Q1659, the first joint development product by Canon and Axis.

Expanding Our Medical Business

In 2017, Canon Medical Systems released a high-resolution Aquilion Precision CT scanner capable of resolving features 0.15mm in size, contributing to greater clinical value through earlier and more accurate cancer diagnoses. In the future, we plan to concentrate on the fields of "imaging diagnosis", "healthcare IT", and "in vitro diagnosis", and develop business activities offering support to medical institutions and patients.

Supporting Industrial Innovation

In 2017, Canon delivered the semiconductor lithography equipment that utilizes proprietary nanoimprint lithography (NIL) technology, to Toshiba Memory Corporation, a leading provider of semiconductor memory solutions. The provision of this equipment for verification represents significant progress toward mass production of a semiconductor device that employs NIL technology. In addition, we have worked to increase the production of Canon Tokki's organic EL display manufacturing equipment by putting the entire strength of the Canon Group into it.

Related SDGs

Through its new businesses, Canon aims to contribute especially to the achievement of:

SDG 3 "Ensure healthy lives and promote well-being for all at all ages"

SDG 9 "Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation"

SDG 11 "Make cities and human settlements inclusive, safe, resilient and sustainable"

SDG 17 "Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development"



Creating a Safe and Secure Society

Canon contributes to the creation of a safe and secure society through network visual solutions that integrate cameras and video technology with advanced IT.

Urbanization is advancing rapidly around the world. Forecasters predict as many as about 70% of the global population will live in cities by 2050, up from 50% today. Rising urban populations create traffic congestion, which is thought to cause huge economic and environmental losses. In addition, the threats to the safety and security of homes and businesses continue to diversify due to the increasing incidence of urban crime, terrorism and cyberattacks associated with advances in IT. To mitigate growing risks while protecting freedom of movement for people and goods, new urban infrastructure is needed to promote safety and security in cities. We must rethink the creation and management of urban spaces to ensure the everyday safety of residents.

In Japan, cities are undergoing extensive redevelopment to prepare sporting venues and surrounding precincts for large-scale sporting events such as Rugby World Cup 2019™, Japan and the Olympic and Paralympic Games Tokyo 2020. At the same time, the numbers of people visiting Japan from overseas are expected to rise as the country is highlighted internationally. Maintaining law and order while ensuring people's safety and security and protecting infrastructure are essential to ensure these events are a success.

Network cameras help to maintain law and order and protect infrastructure, both by anticipating safety or security threats and supporting appropriate responses, and by helping to address issues based on accurate recordings. Having positioned network cameras as a new business under Phase V of its Excellent Global Corporation Plan, Canon is working to upgrade the product lineup and to reinforce in-house solutions development capabilities. This involves the integration of core camera technologies developed over years, including optical, sensor and imaging engine technologies as well as image-processing software, with the network control and cloud services that have been cultivated in MFP development.

Using expertise from Group members such as Axis, a major player in the network camera industry from Sweden, and top global video management software supplier Milestone Systems, Canon offers integrated,

state-of-the-art systems based on advanced network image processing (Axis) and video management technology (Milestone). Going forward, Canon aims to progress the development of network video solutions to extract the necessary data from video content for use in a variety of fields, including health, nursing care, education, transport, and urban infrastructure.

Amid growing adoption of various big data applications in the IoT era, the evolution of image-processing technology is creating uses for network cameras not only in crime prevention, but also from use of video data in new sectors such as manufacturing and marketing. Canon is developing innovative camera-based network video solutions for crime prevention, surveillance, and other applications.

Software responding to safety and security needs

Canon is looking to add value to network camera imaging by responding to network camera market demand for recording and analysis solutions for video content. Work is progressing on the commercialization of video content analysis software for use in the security, customer service, marketing and other sectors.

Concerns are also being raised about how to protect the privacy of individuals in the context of continuously recording network cameras. Canon has developed "Moving Object Mask" software that can render a person as a moving silhouette to stop their identification in a video feed (→P16). We have also developed "People Counter" software to provide instant readouts of the number of people in a frame (approximately 1,500), with potential marketing applications. This could also be used to help security, from assessing overcrowding or people flow in various types of venues to the deployment of security personnel or giving evacuation instructions. Moreover, we have developed "Profile Analyzer" software for estimating the age and gender profile of a group of people from video data. We are continuing to develop the technology to gauge crowds at concerts or large-scale sporting events, or to search and track specific people in a crowd quickly using live video feeds from multiple cameras.



Readout from People Counter v1.0 software

High-resolution network camera for Full HD color video even in low light

Canon's ME20F-SHN network camera has an in-house-developed Full Frame 35mm CMOS sensor to enable professional Full HD color video recording even in almost total darkness or low light settings where little would be visible to the naked eye. The product has a wide range of potential uses in night-time monitoring, surveillance or disaster and crime prevention, including monitoring rivers or other border crossings and photographing animals in the wild.



ME20F-SHN video recording (left) versus image using naked eye (right)

Solutions for a wide range of needs

Including Group member company Axis' product lineup, Canon can offer a range of products to cater to varied customer needs. We supply box-type monitoring cameras for a strong, conspicuous deterrent; module cameras to embed in the landscape or for portability; thermal imaging cameras for installation inside trains or vehicles; and cameras that can endure harsh conditions in terms of vibration, impact, shaking or temperature variation. We have products to suit a varied range of user requirements.

The first product jointly developed by Axis with Canon, the AXIS Q1659 combines Canon's superlative optical and imaging technologies with the advanced network image-processing technology of Axis to deliver high-resolution video surveillance capabilities. The camera is compatible with eight different interchangeable lenses for Canon's EOS-series digital SLR cameras, enabling a wide range of potential uses. It is ideal for remote surveillance in settings from cities and airports to stadiums.

By combining these various products and software, Canon is catering to varied safety and security needs, including surveillance in shops, restaurants and other commercial facilities; factories and hospitals; stations, airports and parts of the transport network; and public spaces.



Network cameras can be used to protect public spaces

Expanding Our Medical Business

Canon is contributing to better medical care by developing new diagnostic technology and utilizing healthcare IT.

With the global population continuing to simultaneously grow and age, the number of people aged at least 65 is expected to double to more than 1.4 billion by 2050. In Japan, around 40% of the population is predicted to be at least 65 by 2050. With people expecting to live healthily without any restrictions on daily activities even later in life, demand is rising for a wide range of healthcare services, from promotion of better health and prevention of disease to advanced personalized medicine. The global healthcare market is forecast to exceed ¥500 trillion by 2030.

The gap between average and healthy life expectancy is between five and ten years. Reducing this gap will be a major issue as society ages more rapidly in the future. Prevention, early detection and the treatment of disease are the keys to living healthily into old age. Preventing and detecting disease early can help curtail healthcare cost inflation in an aged society, which is an essential element in targeting greater sustainability.

Diagnostic accuracy is also a prerequisite for supplying high-quality medical services. To this end, there is a great need to make effective use of vast volumes of medical data and cumulative information on patients. Simplifying the challenges faced by health professionals will become a major issue in realizing a sustainable society.

Canon founder Takeshi Mitarai, who was also a doctor, was strongly committed to “contributing to society via medicine.” In 1940, not long after the company was established, Canon developed the first radiographic camera made in Japan to help detect pulmonary tuberculosis. Ever since, Canon has contributed to the early detection and treatment of disease by supplying ophthalmological instruments and diagnostic equipment using digital radiography and other technologies. During Phase V of its Excellent Global Corporation Plan, Canon is reinforcing medical operations as one of its new core businesses. In December 2016, the Canon Group accepted Canon Medical Systems (formerly Toshiba Medical Systems), the top supplier of CT scanners in Japan and ranked third in the world by market share in the field. Based on the company’s philosophy “Made for Life” that expresses the firm’s

mission to contribute to medicine to protect human life, Canon Medical has built up technical expertise in diagnostic equipment such as CT, MRI and ultrasound systems, which reduce the burden on the patients. We aim to supply solutions for patients and health professionals by combining artificial intelligence (AI) with our proprietary image-processing technology to support better medical diagnoses and improve patient outcomes.

Canon’s Boston US-based Healthcare Optics Research Laboratory conducts research targeting technical advances in medical robotics, miniature endoscopic imaging and other fields in partnership with Massachusetts General Hospital, an institution linked to Harvard Medical School, and Brigham and Women’s Hospital.

Going forward, partnering with leading medical institutions in Japan and abroad, we plan to concentrate our resources on diagnostic imaging systems. We will also focus on the fields of healthcare IT – supplying advanced visualization tools, diagnostic support systems and network solutions, based on the latest ICT – and in vitro diagnostic systems for the rapid and precise analysis of blood and other patient samples.

Global average healthy life expectancy

Country	Average life expectancy (yrs)	Healthy life expectancy (yrs)	Period of poor health (yrs)
Japan	83.7	74.9	8.8
Spain	82.8	72.4	10.4
Italy	82.7	72.8	9.9
France	82.4	72.6	9.8
Norway	81.8	72.0	9.8
U.K.	81.3	71.4	9.9
Germany	81.0	71.3	9.7
U.S.	79.3	69.1	10.2
Cuba	79.1	69.2	9.9
China	76.1	68.5	7.6

Average healthy life expectancy data from “World Health Statistics 2016” published by the WHO

Patient-friendly and cutting-edge diagnostic imaging systems

Canon Medical’s CT scanners have been recognized for their advanced diagnostic capabilities, high analytical efficiency, reduced burden to the patient, and lower lifetime operating costs. In 2007, the Aquilion ONE became the world’s first CT scanner to reproduce the movement of organs or blood flow using sequenced images. The latest models in the same series ensure that procedures are more patient-friendly due to less radiation exposure from quicker imaging and reduced usage of contrast agents. This should enhance substantially the utility of CT scanners with geriatric and pediatric patients and in intensive care situations. In 2017, the Aquilion ONE was awarded the Minister for Health, Labour and Welfare Prize as part of the government-instituted Grand Prize for Japanese Medical R&D. In the same year, we introduced the Aquilion Precision, an ultra-high resolution CT scanner that enables clear visualization of microstructures in the body (→P18).

In MRI scanners, responding to patient feedback about noise and compartment tightness, we have developed proprietary “Pianissimo” noise-reduction technology and redesigned the scanner so patients do not feel so enclosed. In other sectors, we are contributing to the early detection of disease with patient-oriented diagnostic equipment, including high-resolution ultrasound systems and a mammography system developed by an all-female team to minimize patient discomfort during the machine’s operation.



CT scanner enabling reduced radiation exposure

Healthcare IT solutions for high quality and efficiency in medical consultations

We continue to develop our healthcare IT solutions business to integrate, analyze and process diagnostic scans with various frontline medical data. We aim to boost the utility of such data with systems that support diagnostic analysis, using AI to process the collated medical data and an integrated platform to store, distribute and share patient-related information. In January 2018, we introduced the Abierto series of medical data management solutions for the collection, collation, analysis and visualization of medical information. While delivering three types of customer value in terms of enhanced clinical value, better operating efficiency and higher enterprise value, we hope to contribute to improved medical care by forging stronger links with hospitals and local-community health professionals.

In vitro diagnostic systems for rapid, patient-friendly diagnoses

Applying our know-how in sensitive detection technology, Canon Medical is developing in vitro diagnostic systems that detect the tiny quantities of virus present in the early stages of an infection. Detecting viruses such as influenza accurately at an early stage is extremely useful to medical practitioners. We are working on a test kit that would only need the patient to sneeze into a paper tissue. Faster detection makes it possible to treat infections earlier, reducing the incidence of serious cases and limiting the spread of disease.

Canon Medical’s wide range of in vitro diagnostic systems for testing blood and other samples provide a range of clinical tests. With tropical viruses such as Ebola and Zika posing a growing global threat, we are also developing new DNA testing kits to help early detection of infections. Looking ahead, we will continue to work to make diagnostic tests less invasive for patients and more efficient by developing quicker tests requiring smaller samples.

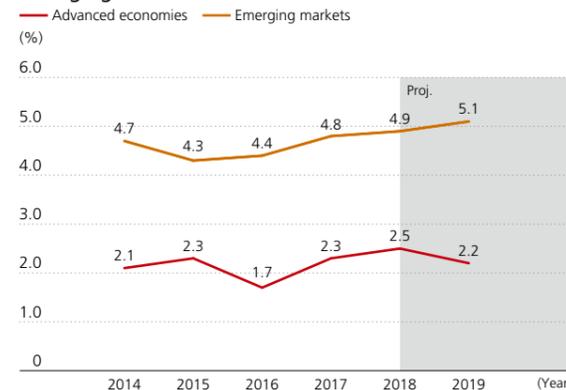
Supporting Industrial Innovation

Canon is promoting sustainable economic growth by applying proprietary optical and image-processing technologies to manufacturing.

Supporting constant innovation to adapt to changing conditions is essential to the realization of a sustainable society. Amid growing adoption of IoT, big data, AI and robot technologies as part of the so-called Fourth Industrial Revolution, there exist widespread possibilities for personalized, made-to-order or customized products and services. Committed to the expansion of B-to-B operations as part of Phase V of its Excellent Global Corporation Plan, Canon aims to create new value by using proprietary optical and image-processing technologies developed over many years in the industrial machinery field.

In semiconductor manufacturing, building on conventional lithographic approaches as device manufacturing moves into the IoT era, Canon is aiming to establish nanoimprint technology to realize chip manufacturing at higher resolution and lower cost. In other sectors, OLED production equipment (Canon Tokki) and sputtering equipment (Canon ANELVA) are essential elements in supporting affluent consumer lifestyles. In addition, leveraging the latest sensing and 3D image recognition technologies, we are developing a state-of-the-art "3D Machine Vision System", which acts as an eye for the robot, to help increase industrial manufacturing productivity.

Economic growth rates for advanced economies and emerging markets



Source: IMF "World Economic Outlook, April 2018"

Technology supporting affluent lifestyles

As the brains of electronic equipment, semiconductor devices are essential parts in the IoT era when everything is linked to the Internet. This trend is driving the growth in demand for flash memory used in mobile handsets and the development of a range of automotive applications for semiconductors. We supply lithographic equipment for semiconductor manufacturing. The functionality and memory capacity of semiconductors continue to increase as chip manufacturers adopt more complex circuit patterns and large-scale integration. Our aim is to use nanoimprint lithography, a ground-breaking technology that stamps circuitry onto wafers at high resolution, to support ongoing process migration and reduce manufacturing costs, thus contributing to gains in the performance of electronic devices as well as IT advances. In 2017, we installed semiconductor lithography equipment using nanoimprint technology at leading chip manufacturer Toshiba Memory Corporation.

Elsewhere, Canon ANELVA makes sputters and other film-formation apparatus for use in semiconductor production, based on high-vacuum thin-film process technology. The firm is also the world's sole supplier of sputtering equipment for hard disk drive (HDD) head production. Moreover, equipment supplied by Canon ANELVA is helping to boost performance while dramatically reducing the cost of production for communications devices used in high-speed 4G and 5G networks.

With demand for OLED displays on the rise, the OLED production equipment developed and manufactured by Canon Tokki has become a critical component in production processes. Thinner than LCDs and capable of delivering brighter colors, OLED displays can also be molded into curved forms. Roll-up OLED displays may also be a reality in the future. Based on overwhelming technical superiority compared with rivals, Canon is creating original value in response to the growing demand for OLED displays for use in smartphones, TVs and other products.

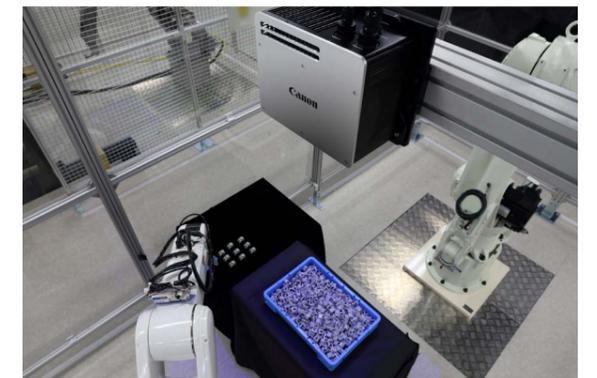


Semiconductor lithography equipment using nanoimprint technology installed at Toshiba Memory

Technology supporting innovation in manufacturing

Various types of robots are used today in manufacturing processes. This shift has created a new bottleneck since the piled parts traditionally delivered on bins must be arranged to facilitate their use by production line robots. This can offset the benefits from automation in terms of shortening production processes. Canon is developing the 3D Machine Vision System for picking out parts from a pile with high accuracy and speed. The system acts as an eye for the robot based on 3D image recognition technology. Since the system is compatible with existing robots, it can help automate the processes for feeding parts. We are developing it to cope with small, medium or large parts so it can boost productivity across a range of manufacturers in industrial sectors such as autos, electrical machinery, metals, plastics and chemicals. In the future, 3D machine vision technology is also expected to apply the automation of assembly processes.

We have also introduced software for use with industrial cameras or Canon-made network cameras. This software can help raise operational efficiency in production facilities by monitoring for emergencies or faults and supporting a quick recovery if such events occur. Other software uses image-processing technology for reading barcodes or inspecting materials.



The 3D Machine Vision System can pick out parts from a pile



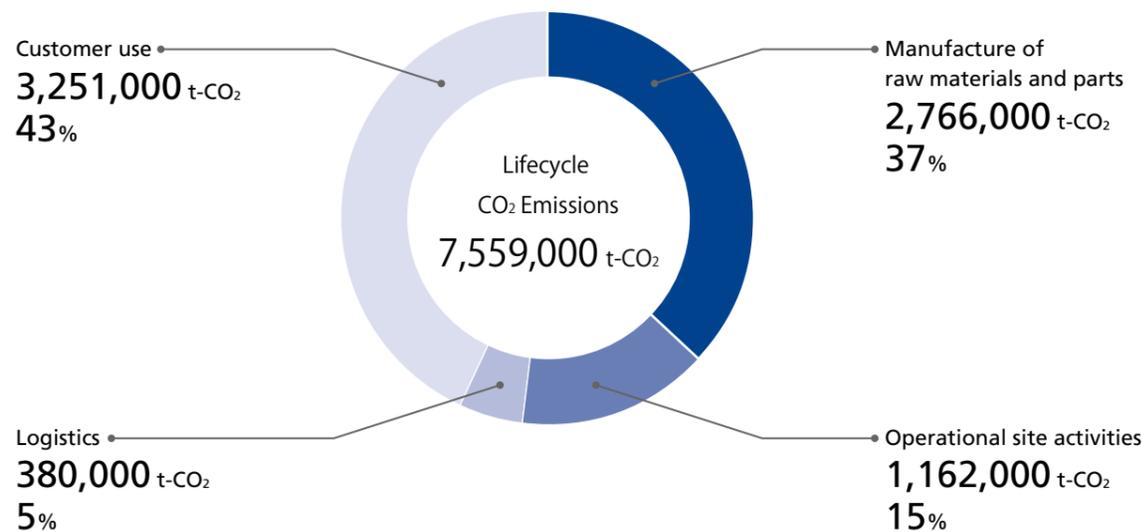
Canon Bird Branch Project (→P63)

Environment

Aiming to leave an affluent society in harmony with nature for future generations

We are tackling environmental issues such as climate change, resource depletion, pollution, and biodiversity conservation on a global scale. To help leave a prosperous planet for future generations, Canon is implementing a multifaceted environmental strategy using a consistent PDCA cycle-based approach. As a global corporation working in harmony with the environment, Canon will continue to deepen its connection to the earth based on the principle of *kyosei*.

Our Impact: Canon Group Lifecycle GHG Emissions in 2017 (CO₂ Equivalent)



Management Approach

Materiality and Environmental Aspects

GRI102-11 | GRI102-15 | GRI103-1 | GRI103-2

In order to promote environmental assurance activities efficiently and effectively in response to the numerous environmental issues that companies face today, companies must first understand the characteristics of their own business activities and their impact on the environment. They then need to clarify priority initiatives, taking into account both risks and opportunities. Every year, Canon identifies the major issues of material significance through the materiality analysis described below.

Taking global trends into account, Canon organized the environmental aspects of its business activities in relation to global environmental issues. Priority was assigned to these environmental aspects from two perspectives, namely, the relative interest level of stakeholders and the relative impact on Canon's business activities.

In the analysis of a stakeholder survey conducted in 2018, we found out that 'reuse and recycling of used products' was the issue of greatest interest to stakeholders, followed by 'management of air emissions and prevention of pollution,' 'management of raw material use,' 'reduction of waste/prevention of water and soil pollution,' and 'reduction of energy consumption.'

Canon recognizes that issues relating to resource recycling and the prevention of global warming, such as 'reuse and recycling of used products' and 'management of raw material use,' have a major impact on our business activities

in terms of product competitiveness, costs and other factors, which is why we give them the highest priority.

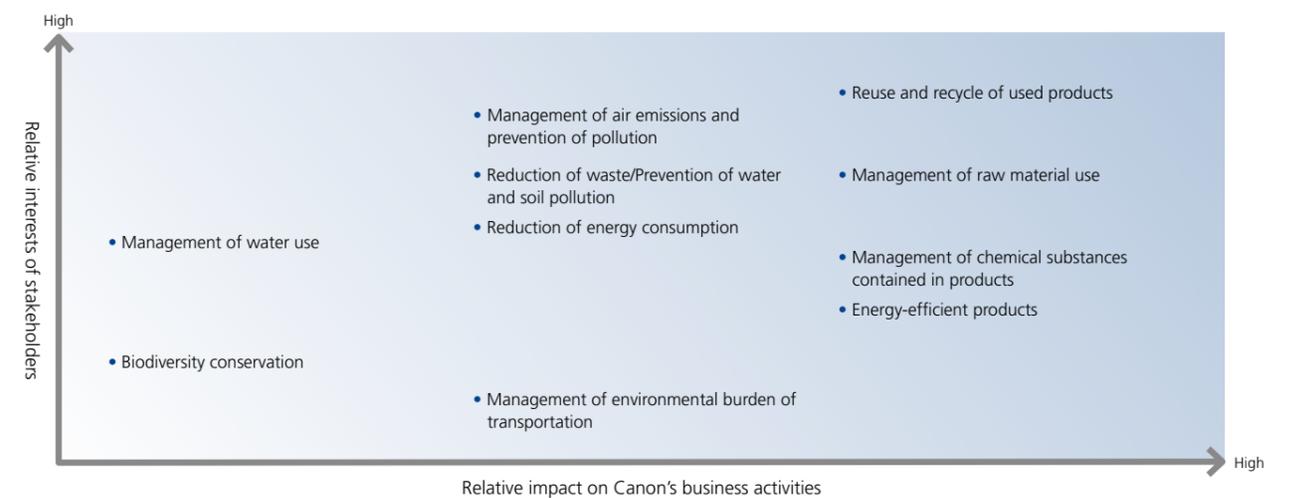
The issue of the 'management of chemical substances contained in products' is one that Canon expects to impact business activities significantly given the potential links to health problems and environmental pollution. Regulatory compliance is also part of our corporate responsibility as the global trend toward stricter regulation of chemical substances increases.

We recognize the importance of initiatives relating to the 'management of air emissions and prevention of pollution' in regions where the Canon Group has operations. We continue to take steps to meet the targets and emissions standards that we have set in this area.

As for 'biodiversity conservation,' while the relative interest of stakeholders is not as high, there are elements that are directly and indirectly related to various aspects of our business. So we consider this a material issue to address.

We continue to take measures to advance our environmental activities in the four areas that we have identified of material concern. These are (1) contributing to a low-carbon society; (2) contributing to a circular economy; (3) eliminating hazardous substances and preventing pollution; and (4) contributing to a society in harmony with nature.

Materiality Matrix



Risks and Opportunities

The risks and opportunities in each environmental aspect of Canon's business activities are as follows. We try to evaluate specific risks and opportunities in each business sector on an ongoing basis.

Contributing to a Low-Carbon Society Climate Change Countermeasures, Energy

Risks

- Regulatory risk: higher investment costs to promote energy efficiency to comply with stricter energy-efficiency regulations
- Risks from market/technological change: loss of competitiveness due to market switch to low-carbon products or slow response to changes in customer behavior
- Physical risks: negative operational impacts due to increased severity of extreme weather events such as cyclones and floods

Opportunities

- Product/service sales opportunities: increased opportunities to sell energy-efficient products
- Opportunities to improve resource/energy efficiency: improved efficiency in energy or resources from high-efficiency production or use of high-efficiency buildings/logistics
- Resilience: promotion of innovation to improve response to changes in markets and customers, along with greater resilience due to use of renewables and implementation of energy-efficiency measures

Contributing to a Circular Economy Resource Efficiency, Water Resources

Risks

- Higher parts/materials procurement costs caused by soaring of resources prices
- Negative impact on stable water supplies resulting from natural disasters and extreme weather events
- Negative impacts on supplier operations due to water restrictions caused by rapidly changing precipitation patterns

Opportunities

- Reduce dependency on natural resources, achieve resource stability through waste reduction, and reduce operating costs through use of recycling-conscious product design and development of recycling technologies

Eliminating Hazardous Substances and Preventing Pollution

Risks

- Risk of cessation in product shipments due to regulatory noncompliance or supply chain contamination caused by prohibited chemical substances
- Supply chain disruption affecting parts procurement due to official order on supplier to cease operations as result of pollution or other causative factor

Opportunities

- Maintain product competitiveness by ensuring safety and peace of mind
- Positive impact on brand value
- Reductions in supply chain and other management costs
- Lower costs from more efficient supply chain management due to international standardization and other factors

Contributing to a Society in Harmony with Nature

Risks

- Contraction in market supply of paper for printing caused by impaired sustainability of forestry resources
- Increased restraints on operating activities in regions caused by loss in balance or sustainability of regional ecosystems

Opportunities

- New business opportunities from use of Canon products/technologies in biodiversity conservation efforts
- Promote communication with local communities through initiatives at our production sites and other contributions to a society in harmony with nature

Canon's Environmental Activities and Their Relationship with SDGs

The SDGs were adopted by the United Nations in 2015. Canon's four areas of materiality are related with the SDGs as follows:

Canon's Environmental Activities and Their Relationship with SDGs



Contributing to Climate Change Countermeasures and the Sustainable Use of Energy

Goal 13 of the SDGs calls for each country to take measures to address climate change. In addition, the adoption of the Paris Agreement has led to the establishment of an international framework for climate change countermeasures from 2020 onward. This has encouraged all countries and regions that have ratified the agreement to declare their own targets and plans to reduce greenhouse gas emissions and establish a "Pledge & Review" framework. Furthermore, Goal 7 of the SDGs, which focuses on improvements in energy efficiency, is closely connected to the realization of a low-carbon society. Not only does the use of fossil fuels lead to greenhouse gas emissions, fossil fuels themselves are a limited resource. Recognizing this, it is essential for us to promote the efficient use of energy.

Canon has been promoting improvements in CO₂ efficiency at all stages of the product lifecycle in order to contribute to the realization of a low-carbon society. To successfully implement these improvements, we have been enhancing energy efficiency at each lifecycle stage. At the same time, we have been making efforts to utilize renewable energy while taking into account the availability of renewable energy options from region to region.

As activities aimed at realizing the SDGs, Canon will continue efforts to improve energy efficiency as well as initiatives to reduce lifecycle CO₂ emissions per product.



Contributing to a Circular Economy Aimed at Sustainable Consumption and Production

Goal 12 of the SDGs aims to ensure sustainable consumption and production patterns, calling for the promotion of resource recycling following the 3Rs and the reduction of waste. Also, Goal 6 emphasizes the sustainable use of water resources, which are essential for human life.

To this end, Canon is pursuing more advanced circulation of limited resources based on the reuse and recycling of its products. We are also making continuous efforts to design smaller products, to reduce the consumption of resources at our production sites, and to reduce waste.

We reaffirmed that our initiatives for resource conservation and resource circulation fulfill these SDGs, and we will continue to promote such efforts going forward.



Eliminating Hazardous Substances and Preventing Pollution

Goal 12 of the SDGs calls for the appropriate management of chemical and waste substances at each lifecycle stage. Based on frameworks agreed upon internationally, each country and region has established various regulations and is making efforts to comply with these regulations. Furthermore, Goal 6 identifies the preservation of clean water as a crucial element in the sustainable use of water resources.

Canon built and operates its own framework to appropriately manage both the chemical substances contained in its products and the chemical substances used in its production processes. Under our green procurement system, we work in cooperation with suppliers to strictly manage the chemical substances contained in our products, thereby preventing contamination from hazardous chemical substances.

Moreover, for chemical substances used in production processes, we determine "prohibited substances," "emission-reduction substances," and "regulated substances," and manage them accordingly based on the rules and regulations of each country where we operate. At the same time, we diligently manage the amount of chemicals used in accordance with standards adopted in each region and thoroughly comply with standards for air, water, and soil emissions.

Additionally, we make proactive contributions to the establishment of international frameworks for the appropriate management of chemical substances in the supply chain.

We believe our efforts to manage chemical substances and prevent pollution are deeply connected to these SDGs. As such, we will continue to pursue stringent management practices.



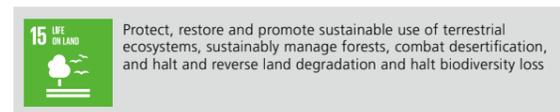
Contributing to a Society in Harmony with Nature

Valuable forest resources, biodiversity, and various natural habitats are disappearing as a result of climate change and overdevelopment. In response to this, global initiatives are being undertaken to achieve the Aichi Biodiversity Targets adopted at COP10. The SDGs, particularly Goal 15, call for the protection and conservation of terrestrial ecosystems, reconfirming the importance of protecting forests and the ecosystems of living creatures.

At Canon, we recognize the importance of conserving and protecting biodiversity and ecosystems. Based on our Biodiversity Policy, we are promoting conservation and protection activities around the world.

One such activity is the Canon Bird Branch Project, which gives consideration to the cycle of life by focusing on birds as they occupy the top spot in the local ecosystem pyramid consisting of plants, insects, and small animals that provide birds with food, as well as the water and soil that allow these living things to grow.

In addition, based on our Basic Procurement Policy for Wood Products, we procure lumber products that have been produced through sustainable means to prevent valuable forest resources from being lost in excessive amounts due to such practices as illegal logging.



Environmentally Conscious Management

Canon's Approach to Environmental Assurance

Based on our corporate philosophy of *kyosei*, Canon's approach to environmental assurance (EA) centers on maximizing resource efficiency. We use the EQCD concept as a basic policy to harmonize our environmental and economic activities. Since EQCD, which stands for environment (E), quality (Q), cost (C), and delivery (D), defines environmental assurance as a qualification for product manufacturing, Canon views EA as a top priority.

In 2008, we formulated our environmental vision, Action for Green, based on the Canon Group Environmental Charter. Our vision for the future is a society that achieves a beneficial balance between enriched lifestyles and the global environment. The Canon Group, with the cooperation of its stakeholders, is working on environmental initiatives to facilitate the creation of products with advanced capabilities while minimizing environmental impacts across the entire product lifecycle.

Canon Group Environmental Charter

Corporate Philosophy: *Kyosei*

Achieve corporate growth and development while contributing to the prosperity of the world and the happiness of humankind.

Environmental Assurance Philosophy

In the interest of world prosperity and the happiness of humankind, pursue maximization of resource efficiency, and contribute to the creation of a society that practices sustainable development.

Fundamental Policies for Environmental Assurance

Seek to harmonize environmental and economic interests in all business activities, products and services (the EQCD concept); offer products with lower environmental burden through innovative improvements in resource efficiency, and eliminate anti-social activities that threaten the health and safety of mankind and the environment.

EQCD Concept

E: Environment (environmental assurance)	Companies are not qualified to manufacture goods if they are incapable of environmental assurance.
Q: Quality	Companies are not qualified to market goods if they are incapable of producing quality goods.
C: Cost	Companies are not qualified to compete if they are incapable of meeting cost and delivery requirements.
D: Delivery	

1. Optimize the organizations for prompting the Canon Group's global environmental efforts, and promote environmental assurance activities for the Group as a whole.
2. Assess the environmental impact of entire product lifecycles and explore ways to minimize environmental burden.
3. Promote the research and development of technologies and materials essential for environmental assurance and share the achievements with society.
4. Comply with all applicable laws in each country/region and other requirements the Canon Group agrees upon with stakeholders, and promote energy and resource conservation and elimination of hazardous substances in all corporate activities.
5. In procuring and purchasing necessary resources, give priority to materials, parts and products with lower environmental burden.
6. Establish an Environmental Management System (EMS) and establish and periodically review environmental objectives and targets to prevent environmental pollution and damage, and steadily reduce environmental burden.
7. Actively disclose to all stakeholders information on environmental burden and keep them updated on the progress of environmental measures.
8. Raise the environmental awareness of employees and educate them to take the initiative in environmental protection.
9. Maintain close relationships with governments, communities, and other interested parties, and actively support and participate in environmental protection activities.

23 March, 2007
Chairman & CEO
Canon Inc.

Canon Environmental Vision
Action for Green

Through technological innovation and improved management efficiency throughout all of its corporate activities, Canon aims to achieve sustainable corporate growth while also realizing a society that promotes both enriched lifestyles and the global environment.

To this end, Canon offers greater value using fewer resources throughout the entire product lifecycle —Produce, Use, Recycle— to achieve highly functional products with minimal environmental burden.

Canon continues to expand these activities with its customers and business partners.

Canon will contribute to a future that promotes both enrichment and the environment through technological innovation.

Canon Environmental Vision

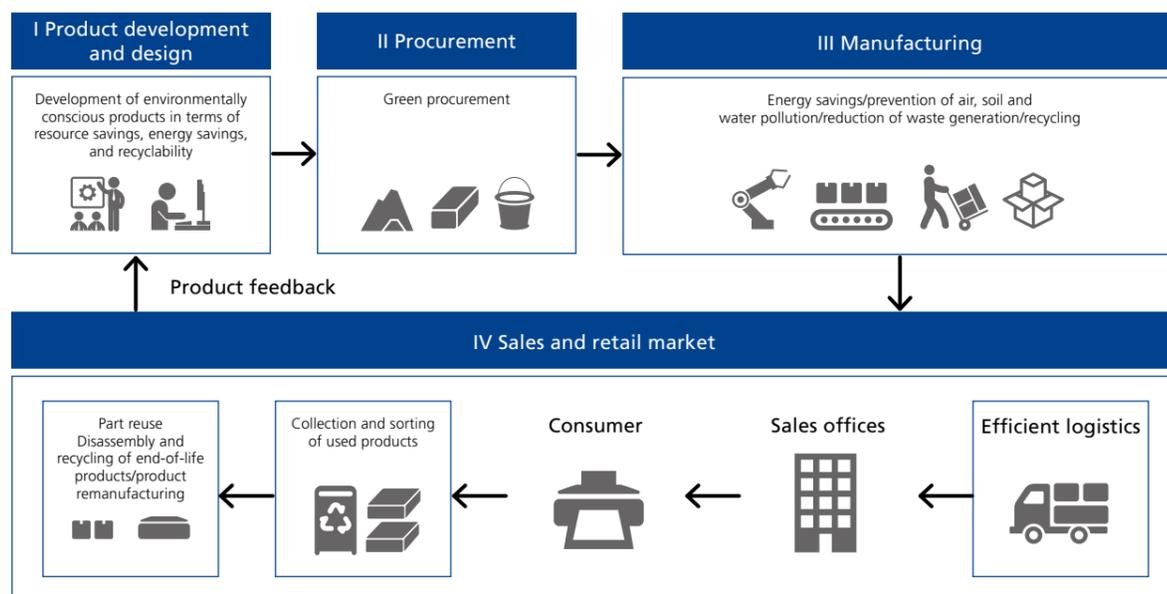
Environmental Goals and Achievements
Overall Goal, Product Goals and Operational Site Goals

Canon considers, and works to reduce, environmental impacts at each stage of the product lifecycle. This applies not just to our own development, production and marketing activities but also includes the production of raw materials and components by suppliers, the transport of products to retail outlets, and even customer use, disposal and recycling.

To gauge our progress in reducing these impacts over the entire product lifecycle, we convert each type of environmental impact to CO₂ equivalents, and, using these as benchmarks, we set an overall goal for our Medium-Term Environmental Goals to achieve an average improvement of 3% per year in the lifecycle CO₂ emissions improvement index per product.

We have broken down lifecycle CO₂ emissions per product into product goals and operational site goals. We have established a product goal of 3% improvement per year in the raw materials & usage CO₂ emissions improvement index per product, and operational sites have unit improvement targets covering energy consumption, total waste generation, water usage, and emission of controlled chemical substances. We continue to make improvements in order to better these metrics.

Environmental Activities Over Entire Product Lifecycle



Achievement of Medium-Term Environmental Goals

In 2017, we achieved our goal of improving lifecycle CO₂ emissions per product by 3%, recording an average improvement of 5.2% (2008–2017) thanks to the ongoing efforts of our operational sites. As a result of continuing to pursue an improvement target, lifecycle CO₂ emissions for Canon products in 2017 were improved 35.9% less than the equivalent products in 2008.

Achievement of Product Goals

In 2017, due to continuing efforts to make products more compact, lightweight, and energy efficient, we achieved our target of an average annual improvement of 3.0% in raw materials & usage CO₂ emissions per product.

Achievement of Operational Site Goals

An overview of the achievement of operational site goals is as follows.

Energy consumption per basic unit at operational sites

The Facilities Management Headquarters is the primary driver of energy-reduction activities. In 2017, energy consumption per basic unit improved by 2.3% over the previous year, reaching the 1.2% improvement target.

Total waste generation per basic unit

As a result of such initiatives as reducing waste at manufacturing sites and recycling waste generated internally at manufacturing sites, we met our target of a 1.0% improvement with a 1.0% reduction in total waste generation over 2016.

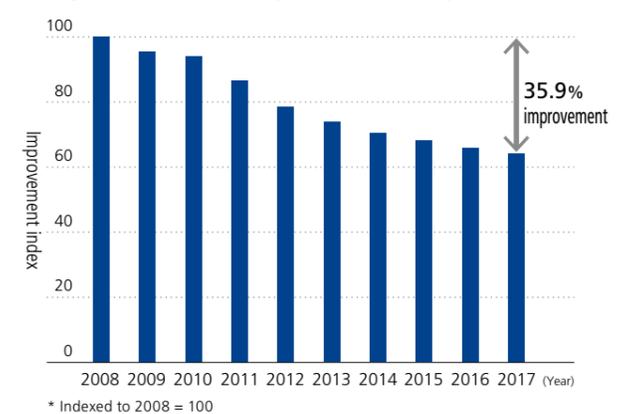
Water usage per basic unit in production

Water usage per basic unit in production declined by 1.3% compared to 2016 thanks to efforts to improve water management including more efficient water use and greater reuse of wastewater. This exceeded our target of a 1.0% improvement.

Emissions of controlled chemical substances per basic unit

We achieved a 3.4% improvement over 2016 in emissions of controlled chemical substances per basic unit, attaining our goal of a 1.0% improvement, by optimizing chemical substances used in manufacturing processes and reusing materials.

Lifecycle CO₂ Emissions Improvement Index per Product



Environmental Goals and Achievements

	2017–2019 Medium-Term Environmental Goals	2017 Achievements	2018–2020 Medium-Term Environmental Goals
Lifecycle	3%-per-year (average) improvement in lifecycle CO ₂ emissions improvement index per product	Avg. improvement: 5.2% p.a.	3%-per-year (average) improvement in lifecycle CO ₂ emissions improvement index per product
Products	3%-per-year (average) improvement in raw materials and use CO ₂ emissions improvement index per product	Avg. improvement: 3.0% p.a.	3%-per-year (average) improvement in raw materials and use CO ₂ emissions improvement index per product
Operational Sites	2017 Environmental Goals		2018 Environmental Goals
	1.2%-per-year improvement in energy consumption per basic unit at operational sites (compared to 2016)	2.3% improvement over 2016	1.2%-per-year improvement in energy consumption per basic unit at operational sites (compared to 2017)
	Improve total waste generation per basic unit at operational sites by 1% (compared to 2016)	1.0% improvement over 2016	Improve total waste generation per basic unit at operational sites by 1% (compared to 2017)
	Improve water usage per basic unit for production by 1% (compared to 2016)	1.3% improvement over 2016	Improve water usage per basic unit in production by 1% (compared to 2017)
	Improve emissions of controlled chemical substances per basic unit by 1% (compared to 2016)	3.4% improvement over 2016	Improve emissions of controlled chemical substances per basic unit by 1% (compared to 2017)

Overview of Environmental Impacts

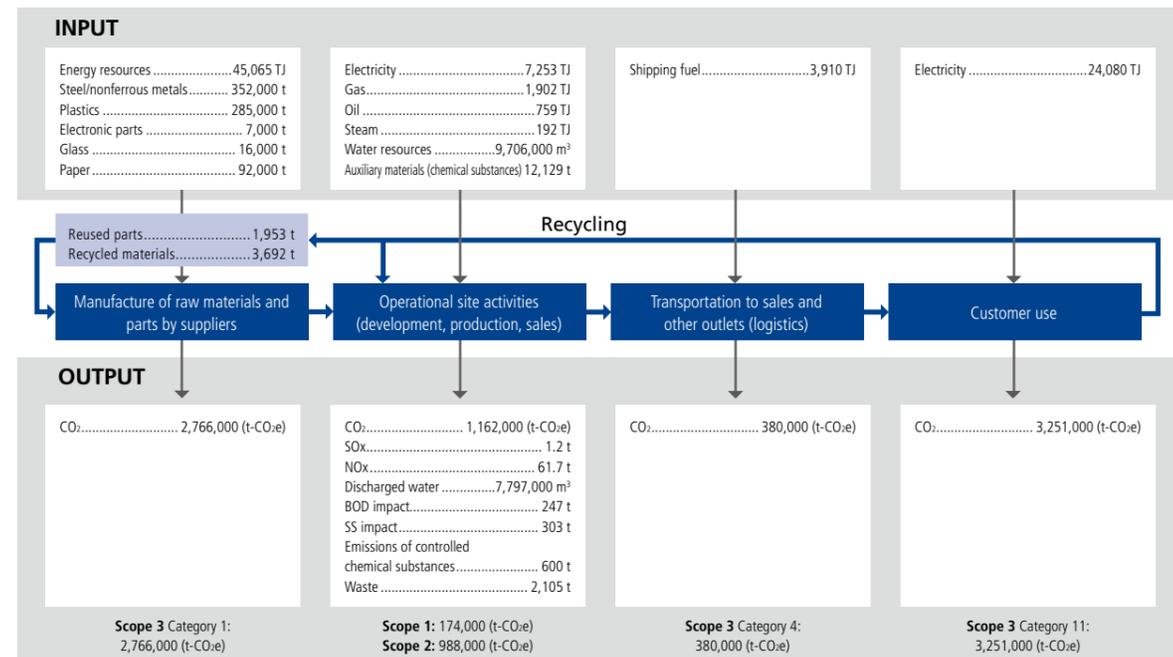
As a result of initiatives to meet these goals, the resources (input) that Canon used in its business activities over the entire product lifecycle and emissions into the global environment (output) are as shown in the following figures.

Total lifecycle CO₂ emissions in 2017 were approximately 7.56 million tons, an increase of roughly 1.4 million tons

(or 22.6%) compared to 2016. This figure reflected the expansion of the semiconductor/FPD lithography and other industrial equipment operations, the addition of Canon Medical Systems (former Toshiba Medical Systems) to the Canon Group, and other factors.

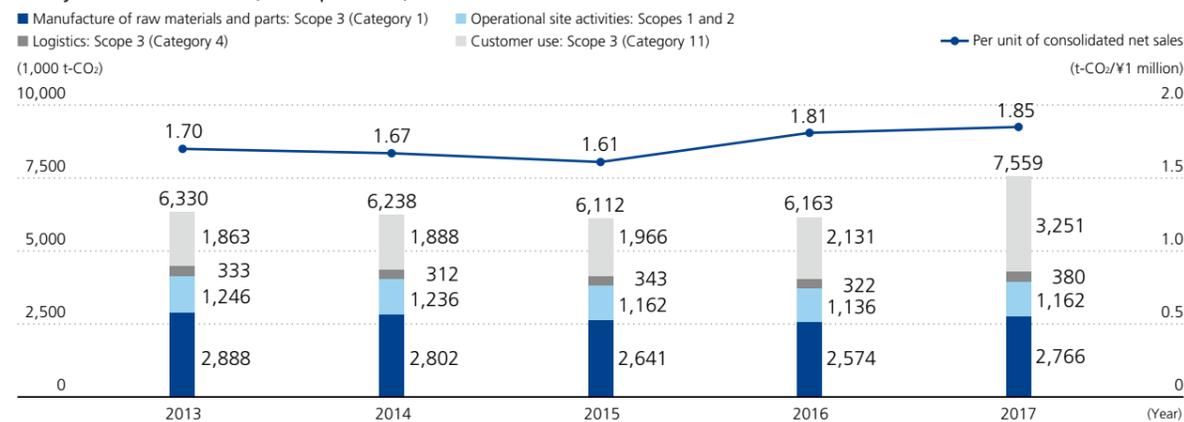
From 2017, we expanded third-party assurance of Scope 3 GHG emissions to all categories.

2017 Material Balance



* Scope 1: Direct GHG emissions (utility gas, LPG, light oil, kerosene, non-energy derived GHG, etc.)
 Scope 2: Indirect GHG emissions (electricity, steam, etc.)
 Scope 3: Supply chain-related GHG emissions (purchased parts or services [Category 1], transportation and distribution [Category 4], use of sold products [Category 11])
 Calculation of categories 1, 4, 11 from Scope 3 of the GHG Protocol

Lifecycle GHG Emissions (CO₂ Equivalent)



* Figures for 2017 include data for Canon Medical Systems.

Basic Approach to CO₂ Calculations
 Canon compiles data for greenhouse gas (GHG) designated under the Kyoto Protocol (revised version). Past data may be revised due to improvements in the precision of data collection.
 Until 2014, figures used in Japan for CO₂ emission factors for electricity were published by Japan's Ministry of the Environment and the Federation of Electric Power Companies of Japan. Outside Japan, they were published by the International Energy Agency. From 2015, calculations use CO₂ emission factors provided by individual electricity suppliers, but publicly disclosed region-specific figures are used when CO₂ emission factors are not provided by electricity suppliers. (Please refer to Operational Sites Covered in the Environmental Section (page 72).)
 For figures on customer use, electricity consumption of products shipped in a given year is calculated based on the average lifespan and output capacity, and converted to the CO₂ equivalent using the same factors stipulated above. Other CO₂ emission factors use coefficients from the Carbon Footprint Communication Program of the Japan Environmental Management Association for Industry (JEMAI).

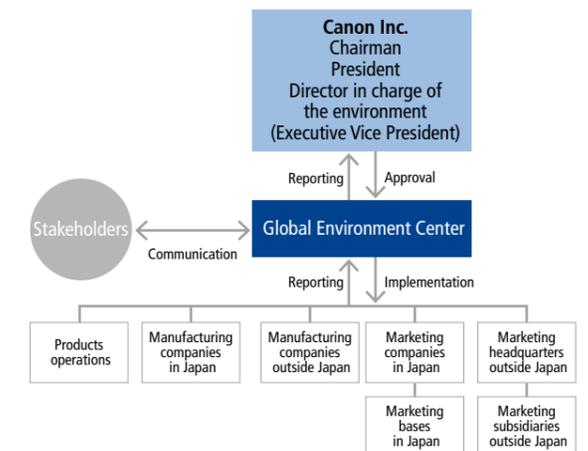
Scope 3 GHG Emissions in 2017

Category	Scope	2017	Calculation Method
1	Purchased goods and services	2,766	Calculated by multiplying the weight of each material input (including any inputs emitted as waste) by the emission factor for each material/process.
2	Capital goods	550	Calculated by multiplying the total amount of each asset category of purchased capital goods by the emission factor for each asset category.
3	Fuel- and energy-related activities not included in Scope 1 or Scope 2	96	Calculated by finding the total for fuel and electricity usage at each operational site and then multiplying it by the emission factor from fuel extraction to burning and power generation.
4	Upstream transportation and distribution	380	Logistics from the supplier to Canon manufacturing sites is calculated by finding the average transport distance and transport volume and then multiplying this by the emission factor for transportation. Logistics from manufacturing site to customer's warehouse is calculated by multiplying the emission factor of transportation by logistics performance data.
5	Waste generated in operations	1	The total weight of waste generated by material and disposal process at each operational site is derived and then multiplied by the end-of-life treatment emission factor.
6	Business travel	75	The emission factor for each transportation method is multiplied by the total payment amount for each transportation method. For business travel using a personal vehicle, the total payment amount is converted to fuel usage and then multiplied by the emission factor of fuel consumption.
7	Employee commuting	173	The emission factor for each transportation method is multiplied by the total payment amount for each transportation method. For commutes by private vehicle, total fuel usage is derived from amounts paid and then multiplied by the emission factor for fuel combustion.
8	Upstream leased assets	0	CO ₂ emissions from leased buildings and vehicles are applicable, but both are included in Scope 1 and Scope 2.
9	Downstream transport and distribution	53	Average transport distance and weight of transported products is calculated for each region and multiplied by the emission factor of transportation.
10	Processing of sold products	0	Emissions from production by outsourcing partners of intermediate products used in sale of Canon-branded products are included in Category 1.
11	Use of sold products	3,251	Lifetime energy usage is calculated for each product and then multiplied by the average electricity emission factor.
12	End-of-life treatment of sold products	225	Sold products are categorized by material and then the emission factor of end-of-life treatment is multiplied by each based on the volume of materials used.
13	Downstream leased assets	0	Leased assets such as multifunction devices are included in Category 11 above together with sold products
14	Franchises	0	Not applicable
15	Investments	0	Not applicable
Scope 3		7,569	

Global Environmental Promotion System

Canon Group companies around the world are working as one in carrying out environmental assurance activities to achieve our environmental goals and make the above-mentioned environmental vision a reality. Led by Canon's Global Environment Center (GEC) under the supervision of the Executive Vice President of Canon Inc., who serves as the director in charge of the environment, we carry out environmental activities in a global system that unites products operations with our manufacturing sites and marketing companies worldwide. The GEC reports each month to the director in charge of the environment on environmental activities to gain approval and receive instructions on any required improvements.

Global Environmental Promotion System



Environmental Management System

The Canon Group has established an environmental management system (EMS) covering its operational sites in Japan and outside Japan as a mechanism for continually improving the quality and efficiency of environmental assurance activities according to ISO 14001 standards.

This EMS promotes environmental assurance activities (Do), which are linked with activities of each division (products operations, operational sites, and Group companies). In turn, we set annual and medium-term environmental goals (Plan) and establish action plans and important measures to achieve those goals, which are reflected in our business activities. Moreover, we carry out environmental audits to check the progress of initiatives as well as any issues to be addressed in each division in addition to conducting environmental performance evaluations to assess our environmental performance (Check). We then work to continually improve and enhance our environmental assurance activities (Act). By implementing the PDCA cycle for environmental assurance activities of each division, we achieve continual improvement and reinforcement and advance the environmental assurance activities of the entire Canon Group.

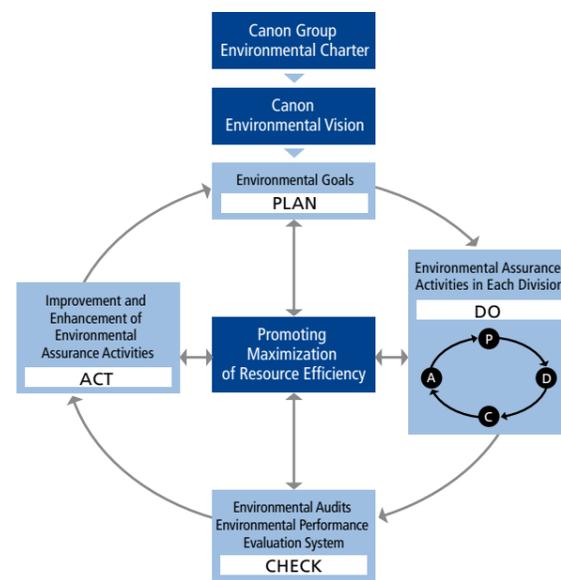
The Global Environment Center ensures the smooth implementation of this system by gathering information on environment-related laws and regulations, establishing policies and rules for the entire Group, and planning and managing evaluation methods for environmental assurance activities.

Manufacturing and sales companies in Japan and outside Japan obtain ISO 14001 consolidated certification as an objective third-party evaluation of EMS effectiveness. As of 2017, ISO 14001 consolidated certification covers Canon Inc. as well as 128 Group companies in 40 countries and regions around the world.

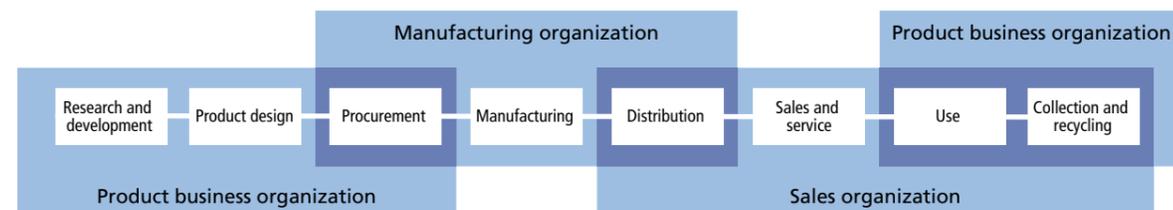
In accordance with the ISO 14001:2015 revised in September 2015, by the end of 2015, Canon had completed all necessary changes to its environmental management system, and from 2016 was operating under the newly revised system. Within this system, the Global Environment Center oversees the environmental assurance activities of the entire Group, and reports on progress to the Chairman, President, and Executive Vice President of Canon Inc. in management reviews.

Reference: ISO 14001 Certifications Obtained
<https://global.canon/en/environment/data/iso14001.html>

Canon's Environmental Management System



Environmental Management over the Lifecycle



Environmental Regulatory Compliance and Response to Complaints

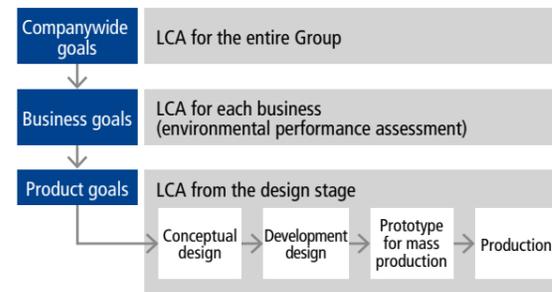
Under this management system, in 2017 Canon did not have a single legal violation or accident that seriously impacted the environment. The Canon Group also did not

incur any fines. Operational sites received complaints about issues such as facilities generating noise, management of vegetation at site boundaries, and foul odors emitted by factories, all of which were resolved satisfactorily via appropriate measures.

Product Development System Using LCA Methodology

Canon's environmental initiatives are not limited to its manufacturing processes, but undertaken over the entire product lifecycle. Lifecycle assessment (LCA) methodology has been introduced in the product development stage to help reduce environmental impacts throughout the product lifecycle. Canon has established an LCA development management system that can centrally manage all processes from product development to information disclosure. This system ensures that CO₂ emissions can be

Flow Chart of Environmentally Conscious Design Using LCA Methodology



System for Product Environmental Assessments and Product Environmental Information Management

At the product realization stage, Canon conducts an environmental assessment to check whether a product meets product environmental legal requirements and other requirements applicable for products and has

calculated from the development and design stages, which we use when manufacturing products as we move toward our environmental goals.

Chairman's Prize awarded to Canon at 14th JLCA Awards

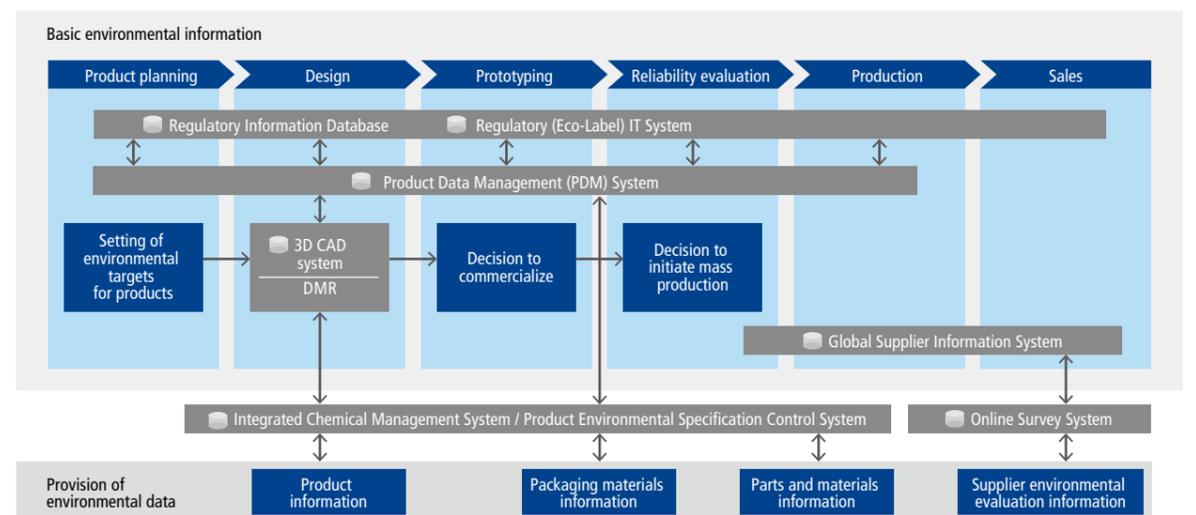
Canon Inc.'s use of LCA*1-based management in its cartridge collection and recycling services was awarded the Chairman's Prize at the 14th JLCA Awards*2.

The award recognized the contribution of Canon Inc.'s cartridge collection and recycling activities in addressing the issues of global warming and resource depletion, referring specifically to the quantitative impact of the recycling services as demonstrated using the LCA methodology; the reductions in GHG emissions from process improvements due to establishing dedicated recycling facilities; and Canon Inc.'s long track record in promoting environmentally conscious product design and development activities.

*1 Lifecycle Assessment; the LCA methodology objectively quantifies the environmental impact of a product over its entire lifecycle, from raw materials sourcing and manufacture to transportation, use and post-use recycling or disposal.

*2 The awards program of the LCA Society of Japan (JLCA) aims to encourage activities to reduce environmental impact over product lifecycles. Organized by the JLCA and supported by the Ministry of Economy, Trade and Industry and Nikkan Kogyo Shimbun, Ltd., the awards recognize LCA-related activities by industrial firms, academia and research institutions.

System for Managing the Environmental Information of Products



achieved the necessary environmental performances.

First, at the product planning stage, the product is assigned an environmental performance target to meet. Before decisions are made to realize product and initiate mass production, Canon evaluates if this environmental performance target has been met, and ascertains if the product also satisfies the applicable legal and other requirements.

Environmental Assurance Activities in Cooperation with Suppliers

In addition to its own environmental initiatives, Canon gives attention to the operations of partners that supply parts and materials. Canon has established Canon Green Procurement Standards, which outline its environment-related requests to suppliers. Suppliers must comply with these standards to do business with Canon.

Specifically, we assess a supplier's environmental management from two perspectives: business activity management and product management. We require that they have effective environmental management in the following frameworks labeled A – D. If a supplier is found to have a negative impact on the environment, we immediately demand remedial action be taken and check the status of improvements made.

A: Environmental management system for business activities
A company must construct and operate a system to reduce environmental impact caused by its business activities.

B: Performance of business activities
As the result of constructing and operating an environmental management system, the following must be achieved: compliance with environment-related laws and regulations and other applicable legal requirements,

no use of the prohibited substances, reduction in the use of substances targeted for reduced levels of use, and implementation of preventive measures against pollution of soil and groundwater.

C: Management of chemical substances in products (environmental management system for parts and materials)

A system must be constructed and operated to keep track of and manage chemical substances contained in parts and materials delivered to Canon.

D: Performance of parts and materials

No "prohibited substances" are contained in parts and materials delivered to Canon, and no "use-restricted substances" are contained after a specified period.

Canon has manufacturing bases around the globe. Through steady efforts such as these initiatives, we are striving to prevent pollution and lessen the environmental impact throughout the supply chain.

Reference: Green Procurement
<https://global.canon/en/procurement/green.html>

Requirements of the Canon Green Procurement Standards

	Environmental management system	Performance
Business activities	A: Environmental management system for business activities Constructing and operating of environmental management system for business activities	B: Performance of business activities - Compliance with environment-related laws and regulations - Compliance with other applicable legal requirements - No use of prohibited substances - Reduction in the use of substances targeted for reduced levels of use - Preventative measures against soil and groundwater pollution
Parts & Materials	C: Management of chemical substances in products Constructing and operating of system for management of chemical substances in products	D: Performance of parts and materials - No prohibited substances are contained - No use-restricted substances are contained after a specified period

■ Evaluation per supplier (A-C) ■ Evaluation per part and material (D)

Stronger risk management within supply chain (preventing pollution)

To date, Canon has consistently checked the organization and environmental performance of the business activities of suppliers, along with any corrective measures. Canon has now strengthened its risk management to help prevent pollution in its supply chain.

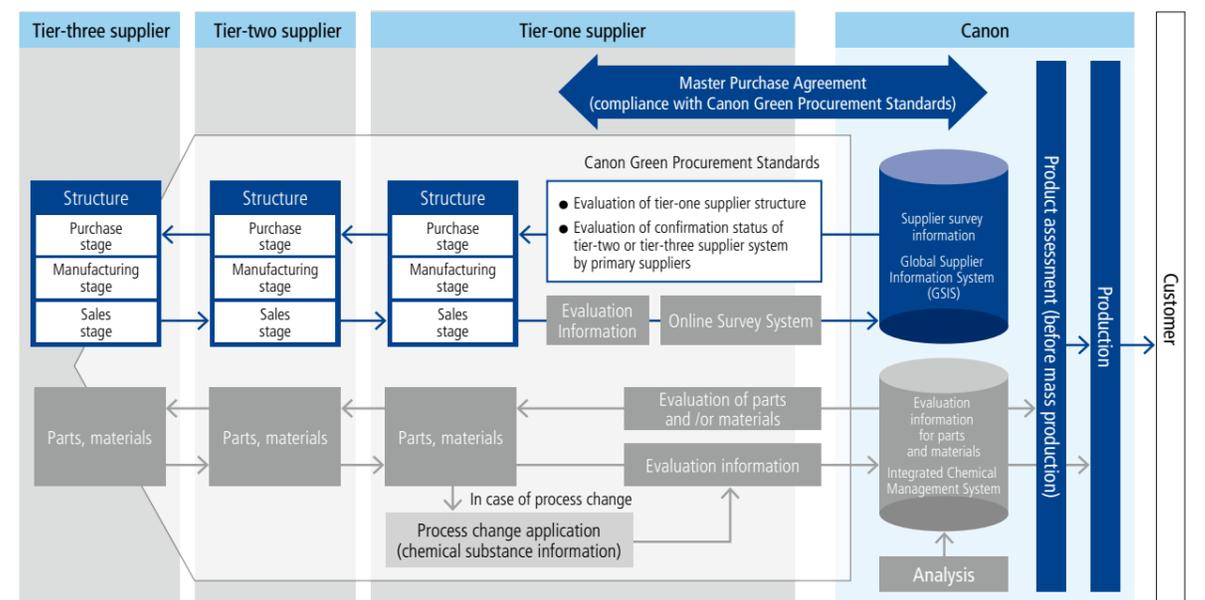
Specifically, Canon is strengthening risk management for processes such as plating with a significant risk of environmental pollution linked to wastewater leakage. Canon now checks the compliance status of secondary plating suppliers, including any subcontracted wastewater treatment service providers engaged by such plating suppliers that lack an in-house wastewater treatment facility.

Canon recognized as "Five-Star Green Supply Chain" company for second year running

In 2017, for the second consecutive year, the Canon Group was certified as a "Five-Star Green Supply Chain" company by the China Environmental United Certification Center* (CEC), an influential body that assesses companies' activities based on the Ministry of Environmental Protection of the People's Republic of China (currently the Ministry of Ecology and Environment of the People's Republic of China)'s policy of "promoting green supply chain management through green procurement and production." In addition to practicing green procurement, the CEC recognizes our efforts to build trust with suppliers as part of establishing a green supply chain satisfying the highest compliance standards.

* The China Environmental United Certification Center, authorized by the Ministry of Ecology and Environment of the People's Republic of China, is the only certification body that can certify products with the nationally recognized China Environmental Label. Additionally, it is China's first third-party certification body to assess green supply chains.

Management System for Chemical Substances in Products



Environmental Audits and Environmental Performance Evaluations

In order to check the current status of environmental initiatives, Canon primarily uses two systems: internal environmental audits that ascertain the effectiveness of environmental management systems, and an environmental performance evaluation system that measures progress toward targets and achievement.

Internal Environmental Audits

Internal environmental audits composed of headquarters environmental audits performed by the Global Environment Center, and operational site environmental audits and product environmental audits conducted by the audit divisions of operational sites and products operations. Mutual cross-site audits are also carried out in certain locations.

Results of internal environmental audits conducted throughout the year are compiled by the Group audit management section of the Global Environment Center, and reported to the Chairman, President and Executive Vice President in management reviews.

In 2017, the audits found no major nonconformity or violations. From the perspective of continual improvement and prevention, we are taking steps to rectify even minor findings in operations management.

Environmental Performance Evaluations

Through environmental performance evaluations, the outcomes of the environmental activities at individual products operations, operational sites and sales companies are evaluated and scored twice yearly. These are incorporated in consolidated performance evaluations along with business performance.

The Global Environment Center sets the environmental evaluation criteria and carries out the evaluations, which account for approximately 10% of the overall consolidated performance evaluation. Environmental evaluation indicators include compliance with laws and company rules, achievement of environmental goals, improvements in the environmental performance of products, and environmental communication, among others. Results are announced to the Group every six months.

We will raise the criteria appropriately in response to achievement of targets and improvement in our activities. Through continuous improvement we aim to raise environmental performance across the company.

Environmental Performance Evaluation Process



Environmental Education

Canon's environmental education programs provide awareness training to all employees, and specialized training for employees engaged in specific types of work.

Awareness training is aimed at giving employees full recognition of the importance of environmental assurance activities as well as the policies, targets, and rules of their own divisions, while specialized training is aimed at enhancing the capabilities of employees involved in environmental assurance activities.

Specialized training is classified into product environment, operational site environment and environmental audit sections. Of these, product environment training involves detailed programs to enhance the abilities of those responsible for product environmental assessments, product surveys and integrated management of chemical substances.

These educational programs are designed to enable employees to receive needed training at a time that suits their schedule and by a method that best suits the purpose, such as e-learning, group discussion or group work.

In particular, among the specialized environmental training classes, Canon is reinforcing its education program for risk management globally, and has been using training materials in English and Chinese since 2016. As of the end of 2017, employees involved in related operations had all completed this training (total of 2,584 participants).

In 2017, we also began providing recycling training as part of the hands-on factory training for newly hired technicians and engineers. At Canon Ecology Industry, the curriculum includes practical training in recycling, such as office MFD disassembly.

Information Disclosure, Education and Awareness Via Environmental Communication

Canon has been vigilant in disclosing environmental information to a diverse range of stakeholders.

Besides the publication of this report, Canon actively uses a range of media and platforms to inform stakeholders about its environmental activities, including its environment website, various trade fairs and other events.

Canon also promotes environmental education and awareness activities for the benefit of people in regional

communities, providing environmental outreach classes for elementary students and environmental programs run in cooperation with regional organizations. Canon has held a total of 121 outreach classes on toner cartridge recycling since 2011 for more than 6,900 participants.

Canon Group companies worldwide have been switching off their lights to participate in the global environmental event, Earth Hour*, since 2016.

* Earth Hour is a global lights-off event started by the WWF (World Wildlife Federation) in 2007.
Reference: Earth Hour Activities
<https://global.canon/en/environment/global/earthhour/2018/index.html>

First in Nikkei Research Environmental Management Survey for manufacturers for second consecutive year

Canon ranked first among manufacturers in the 21st Environmental Management Survey conducted by Nikkei Inc. for the second year in a row, and for the fourth time overall.

Canon's highest score for resource recycling, as well as the high marks in other categories are attributable to our "Product-to-Product" initiatives to reuse or recycle used MFDs and toner and ink cartridges, along with the carbon offsets that we offer as a customer service for our range of MFDs and certain production printers. Overall, Canon achieved a score of 491 (out of a maximum of 500), topping the manufacturer rankings for the second year in a row.

Contributing to a Low-Carbon Society

As the world grapples with the challenges of climate change, Canon is contributing to a low-carbon society by working to reduce CO₂ emissions and improve energy efficiency throughout the product lifecycle.

Canon's Initiatives and Their Relation to Sustainable Development Goal (SDGs) Targets

Climate Change, Energy	Initiative		Target 13.2	Target 7.3
	 	• Designing energy-efficient products	• Improving energy efficiency at operational sites	Target 13.2
	• Contributing to the spread of renewable energy	• Reducing CO ₂ from logistics	Target 13.2	Target 7.2

Target 7.2: Increase substantially the share of renewable energy in the global energy mix
 Target 7.3: Double the global rate of improvement in energy efficiency
 Target 13.2: Integrate climate change measures into national policies, strategies, and planning

Initiatives for Realizing a Low-Carbon Society

Canon tracks CO₂ emissions throughout the product lifecycle (materials and parts manufactured by supplier, activities at operational sites, distribution, and customer use) and works to reduce emissions at each stage.

In the materials and parts manufactured by supplier and customer use stages, we strive to reduce CO₂ emissions through effective product development (making products smaller and lighter, using recycled materials, and developing energy-efficient designs). We also work to reduce CO₂ emissions in activities at our operational sites and during the distribution stage (using modal shifts and improving efficiency in cargo loading and transport).

CO₂ Reduction in Product Development Energy-Saving Designs for Office Equipment

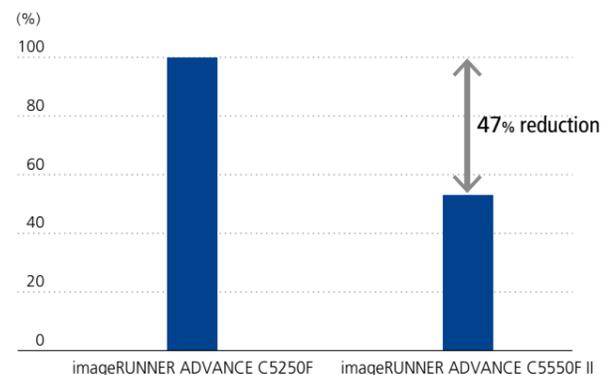
For its office multifunction devices (MFD) and laser printers, Canon uses energy-saving technologies, including on-demand fixing and induction heating (IH) fixing to reduce the amount of electricity needed during operation. Furthermore, we continue to make technological advances aimed at expanding our lineup of energy-saving products. For example, we have begun employing low-melt-point toner in new products, enabling fixing at lower temperatures than traditional toner. In the imageRUNNER ADVANCE C5500 II Series of office multifunction devices (MFD), we reduced standby power consumption with a newly developed main controller and operating power consumption with a newly developed toner with optimized melt properties. With the imageRUNNER ADVANCE C5550F II, we achieved a reduction in CO₂ emissions during use of approximately 47% and

a reduction in lifecycle CO₂ emissions of approximately 23% compared to the imageRUNNER ADVANCE C5250F, based on such measures as lowering the typical energy consumption (TEC)* value.



imageRUNNER ADVANCE C5500 II Series

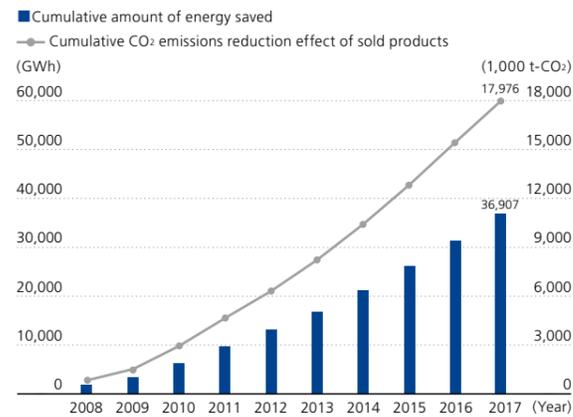
Reduction of CO₂ Emissions in Product Use Stage



Thanks to energy-saving technologies used in office equipment, between 2008 and 2017 Canon products achieved cumulative energy savings of 36,907GWh (equivalent to a reduction of 17,976,000 tons of CO₂).

* TEC value: An environmental indicator for the typical amount of electricity consumed by a product while in normal operation during a one-week period. Reference: Energy-saving technologies in Canon products <https://global.canon/en/v-square/index03.html>

Energy-Saving Effects of Office Products



* Target products: Electrophotographic multifunction devices and laser printers for offices (excluding production printers).
 * Energy-saving effect using the average energy (electricity) consumed by products sold in 2007 as a baseline.
 * Cumulative yearly effect assumes that products sold in each year are used for 5 years.
 * CO₂ emissions factors are calculated by using the weighted average of sales per region based on emission factors published by the Federation of Electric Power Companies (in Japan) and the International Energy Agency (outside Japan).

Energy-Saving Designs for Medical Equipment

Canon is now expanding energy-saving product design to its medical equipment. The Aquilion ONE/GENESIS Edition CT system reduces power consumption during usage by 49.6% compared to the previous model. This product was awarded a Gold Prize at the Green Apple Awards for Environmental Best Practice 2017 sponsored by The Green Organisation, a UK-based non-profit organization. These awards, which recognize excellence in environmental activities by companies, organizations and individuals, attracted more than 500 entries from around the world.

CO₂ Reduction Through Initiatives at Operational Sites

Canon strives to improve energy efficiency at operational sites in order to restrict the volume of CO₂ emissions during operation.

Initiatives to Improve Energy Efficiency at Operational Sites

Canon created the Energy Cost Reduction Working Group to address the important issue of annually rising energy costs. Since 2014, the group has been working mainly with production divisions on initiatives to cut energy costs.

Applying the 5Gs* to return to basics in assessing issues at production sites, Canon focused on reforming the workplace mindset and finding points for improvement. An audit of roughly 6,000 pieces of production and development equipment confirmed operating requirements and identified opportunities for cutting energy consumption through such adjustments as lowering air pressure or changing settings for production cooling water or air-conditioning.

Canon U.S.A. received 2018 ENERGY STAR® Partner of the Year awards

Canon U.S.A. was selected as Partner of the Year – Product Brand Owner for the third year running at the 2018 ENERGY STAR® Awards sponsored by the US Environmental Protection Agency. In addition, Canon U.S.A. received the top honor, the Partner of the Year – Sustained Excellence Award, in recognition of its track record of leadership in this area. The ENERGY STAR® awards acknowledged Canon's contribution through its products to raising energy-saving awareness among its customers and business partners while also helping to promote energy-saving activities.

In 2015, Canon formed the Energy Efficiency Diagnosis Team to coordinate improvements in the operational efficiency of equipment based on regular checks of equipment status and operating settings. Training sessions were also organized for production personnel aimed at making further improvements with limited investment.

These activities have been extended to Canon Group companies worldwide, including development divisions and all production sites outside Japan. More than 3,000 measures to improve energy efficiency were implemented in the three-year period of 2014–16, generating overall energy savings of approximately 40,000kl (crude oil equivalent), or roughly 3% of total annual energy consumption.

In recognition of these activities, Canon was honored in the Energy Conservation Grand Prize 2017 sponsored by the Energy Conservation Center, Japan. Canon received the Director-General of the Agency for Natural Resources and Energy Prize (Chief Green Officer/Company Division) for its theme of “a company-wide deployment of aggressive energy-conservation measures based on the 5Gs.”

* The 5Gs is an operational improvement methodology for problem-solving. It adds theory “genri” and principle “gensoku,” which are the foundation of decision making, to the well-known 3Gs — visit the actual site “genba” in person and recognize the actual facts “genjitsu” through the actual parts or things “genbutsu.” The 5Gs takes its name from the five Japanese terms, all of which start with the letter g.



Onsite inspection by Energy Efficiency Diagnosis Team



Energy Conservation Grand Prize ceremony

To increase the operating efficiency of its air compressors, which account for 24% of power consumption, Canon Precision set a target of 0.48MPa (below the design value) for some of its production equipment. Checks were done on equipment in over 1,600 locations over four months. The target was achieved by installing booster valves if higher pressure was required for production. The program delivered a 1.6% gain in air compressor operating efficiency.

Canon Suzhou has designated “core holiday” dates on which production shuts down entirely so that compressors and air-conditioning can be turned off. Other energy-saving measures include changing the settings on cooling water pumps and installing inverters. CO₂ emissions were reduced by 17% year on year.

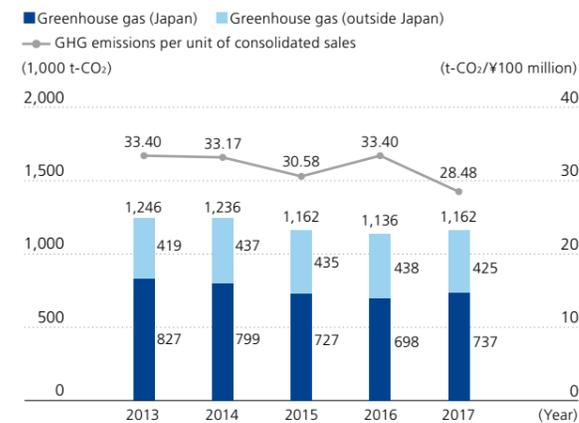
Canon’s sales offices have also been promoting measures to cut CO₂ emissions. For its longstanding efforts in this area, Canon Australia was accredited as a Gold Partner by the New South Wales state government in its Sustainability Advantage Program.

Canon Deutschland installed a high-efficiency lighting system inside its head office and promotes initiatives aimed at energy conservation by employees. The firm was recognized for its success in creating a sustainable office environment in the Office & Environment Awards sponsored by B.A.U.M. e.V. (German Environmental Management Association).

In 2017, while the addition of Canon Medical Systems to the Canon Group increased GHG emissions, the level of emissions from existing operations was lower in year-on-year terms due to concerted energy-saving measures across operational sites.

As a result, total emissions in 2017 of 1,162 kt-CO₂ were only slightly higher than in 2016, and our emissions per unit of sales improved to 28.48 t-CO₂/¥100 million.

Greenhouse Gas Emissions at Production Sites and Sales Offices



* Canon’s calculation of total greenhouse gas emissions
Calculation of energy-derived greenhouse gas CO₂, and non-energy derived greenhouse gases PFCs, HFCs, SF₆, N₂O, methane, and NF₃. Through 2014, conversion to CO₂ is made using annual coefficients for each region. Coefficients supplied by Japan’s Ministry of the Environment and the Federation of Electric Power Companies of Japan are used for site activities in Japan, and coefficients supplied by the International Energy Agency (IEA) are used for site activities in regions outside Japan. From 2015, CO₂ conversion coefficients from the Electric Power Council for a Low Carbon Society are used, and where coefficients are not provided by electric power companies, publicly provided coefficients by region are used. As there is a delay between compilation and disclosure of data, CO₂ conversion coefficients are adjusted retroactively.
* Sales offices (worldwide) of marketing companies included in data count have been expanded starting in 2013. Figures for 2017 also include Canon Medical Systems.

Contributing to Increased Use of Renewable Energy Use of Renewable Energy Suited to Regional Characteristics

To increase the use of renewable energy, which is an SDG target, preparation of infrastructure suited to regional characteristics is under way.

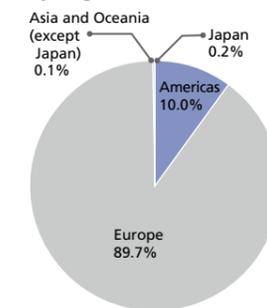
Canon aims through the end of 2020 to derive from renewable sources at least 300MWh of the energy it uses at sites in Japan, and at least 85,000MWh of the energy it uses at sites outside Japan. We are currently working to expand the use of renewable energy, especially in Europe, while keeping regional renewable energy uptake status and economic feasibility under consideration.

Axis Communications AB (Sweden) and Océ Printing Systems GmbH (Germany) buy power from hydroelectric sources, and Océ -Technologies B.V. (Netherlands) purchases wind power. The three main Axis sites and three Océ group companies buy nearly all their energy from renewable sources. Océ -Technologies also employs a geothermal HVAC system that uses the temperature differential with groundwater to power heating and cooling systems. In 2017,

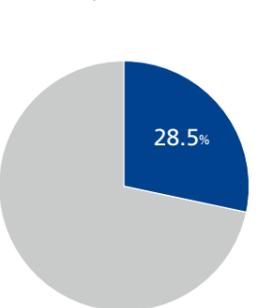
Canon Group companies in Europe sourced about 28.5% of total energy needs from renewable sources.

Total renewable energy consumption by Canon Group companies worldwide in 2017 was 88,984 MWh, an increase of about 7% compared with 2016.

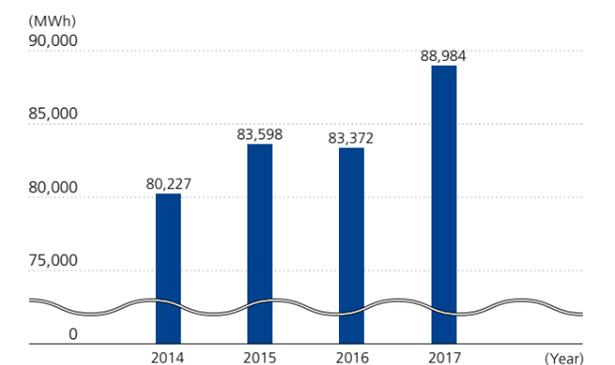
Share of Renewable Energy Consumption by Region in 2017



Share of Renewable Energy Consumption in Europe



Renewable Energy Consumption



CO₂ Reduction in Logistics

In order to reduce CO₂ emissions from product distribution, Canon has undertaken several initiatives: modal shifts that utilize transport modes with a lower environmental impact, improving loading efficiency by downsizing of products and packaging, diversion or direct-shipment from production sites, and shortening routes by consolidating distribution centers.

In addition to these initiatives, to further improve transport efficiency, instead of the traditional one-way transport of containers with cargo, we have been actively pursuing Container Round Use (CRU), which includes not just containers within the Canon Group, but also containers imported by other companies for us to export. We are working with carriers and container transporters to expand the initiative in regions. We are also expanding the initiative to our overseas sites, and have introduced it in China, Vietnam, Thailand, the Philippines, and Malaysia.

Contributing to a Circular Economy

Canon pursues reductions in resource consumption and product-to-product recycling with the aim of contributing to the development of a circular economy.

Canon's Initiatives and Their Relation to Sustainable Development Goals (SDGs) Targets

Contributing to a Circular Economy	SDG Targets	
	Target	Target
● Designing more compact products	Target 12.2	Target 12.5
● Remanufacturing products	Target 12.2	Target 12.5
● Recycling consumables	Target 12.2	Target 12.5
● Reducing waste through prevention, recycling and reuse	Target 12.4	Target 12.5
● Using sustainable water resources	Target 6.3	Target 6.4

Target 12.2: Achieve sustainable management and efficient use of natural resources
 Target 12.4: Achieve environmentally sound management of chemicals and all waste throughout the product lifecycle, in accordance with agreed international frameworks, and significantly reduce their release into air, water, and soil
 Target 12.5: Substantially reduce waste generation through prevention, reduction, recycling, and reuse
 Target 6.3: Improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, and substantially increasing recycling and safe reuse globally
 Target 6.4: Substantially increase water-use efficiency

Canon's Approach to Achieve a Circular Economy

To ensure more efficient use of limited resources and reduce waste, Canon is making products smaller and lighter, and reusing and recycling materials as much as possible. We also strive to reduce water consumption and the generation of waste from manufacturing at our operational sites.

Canon pursues product-to-product recycling—in other words, recycling used products into new ones. In particular, we have emphasized such initiatives as closed-loop recycling of toner cartridges and the remanufacturing of office multifunction devices—collecting them post-use and making them into essentially new products. Currently, Canon has five sites conducting recycling, in Japan, Europe (two sites), the United States, and China. We are continuing initiatives aimed at circulating resources within the same regions where they are consumed.

In the last five years, we have taken 19,658 tons of plastics from used products for recycling as raw materials, and another 14,353 tons of products and parts were reused directly.

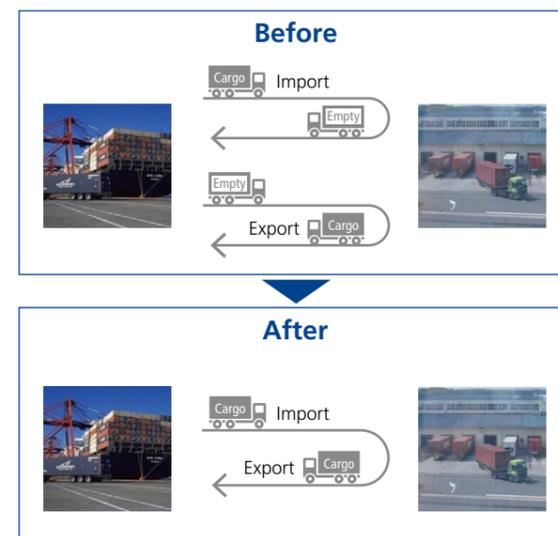
State-of-the-Art Automated Recycling Plant Built at Canon Eco Technology Park

In 2017, we completed the Canon Eco Technology Park. Equipped with automated recycling systems based on a “clean and silent” design concept, this facility overturns the traditional image of recycling operations. It features advanced systems to boost recycling efficiency, creating a clean environment on a par with an office. In the Canon Automated Recycling System for Toner Cartridges (CARS-T), used toner cartridges are crushed and the materials are automatically separated. It is a system that can recycle plastic with sorting purity of 99% or greater (According to Canon sorting methods). With the Canon Automated Recycling System for Ink Cartridges (CARS-I), a camera-based automatic sorting process is used on the used ink cartridges. The process line is automated, yielding an integrated process for the recycling of ink cartridges from disassembly and pulverization to washing. Separated materials are reused for ink cartridge components, materials for pallets used in logistics, construction materials, or in stationery products. Any resources that cannot be recycled through product-to-product recycling are diverted to material recycling or thermal recovery processes to help maximize resource efficiency. (→P19–20, Activity Highlights 03 ‘Advanced recycling initiatives by Canon to support a sustainable society for future generations’).

For example, Canon Vietnam increased the amount of cargo shipped using CRU from 4,000FEU* in 2016 to 9,000FEU in 2017, so that the CRU ratio over all ocean freight increased from average 20% to more than 40%.

* FEU: Forty-Foot Equivalent Unit

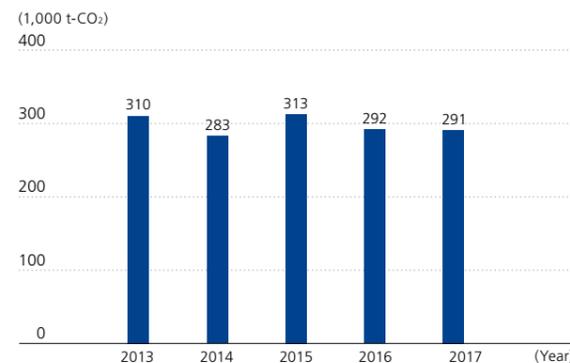
Overview of Container Round Use



Canon Vietnam is developing CRU by using not only containers of Canon's import for Canon own export, but also of other companies', in co-operation with those in the north area of the country.

In 2017, CO₂ emissions from logistics operations amounted to 291 kilotons, a decrease of 1 kilotons compared to 2016.

CO₂ Emission in Logistics



* Does not include logistics for procured parts where the transportation cost is borne by the supplier

Helping Customers Reduce Their Environmental Impact Using the Carbon Offset Program (Initiatives in Japan)

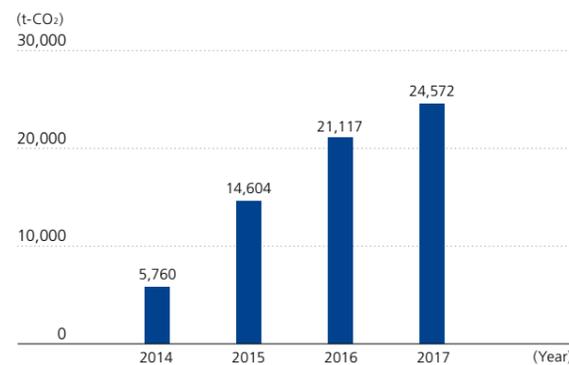
Canon promotes initiatives that help customers reduce their CO₂ emissions.

To enable customers to select products with the lowest CO₂ emissions, we strive to disclose relevant information and are also in the process of obtaining carbon footprint (CFP) certification under the Japan Environmental Management Association for Industry's CFP communication program.

Additionally, by utilizing the Carbon Offset Program making use of CFP* promoted by the Ministry of Economy, Trade and Industry, we have been able to realize products with practically zero lifecycle CO₂ emissions. With some of these products, such as the imageRUNNER ADVANCE series and the imagePRESS production printers, customers can report to the authorities, based on the Act on Promotion of Global Warming Countermeasures, that they do not produce the CO₂ emissions that would ordinarily be expected from use of the products.

Carbon offsets linked to customer demand from when we began using this system in 2014 until 2017 totaled approximately 24,572 t-CO₂.

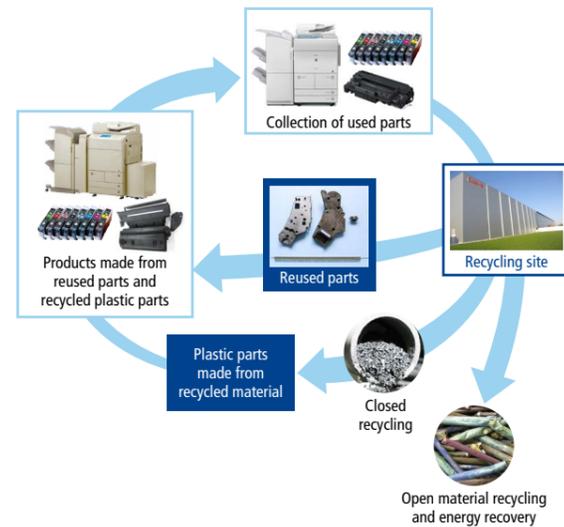
Carbon Offsets Linked to Customer Demand (Cumulative)



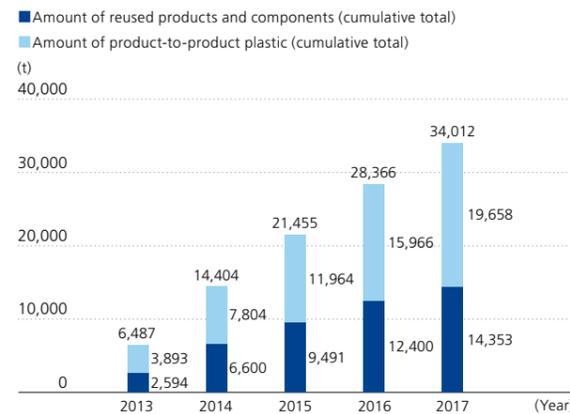
* Carbon offset program enables one's GHG emissions that are difficult to reduce to be offset wholly or partially by cuts in emissions or amounts absorbed by other parties.

Reference: Products qualifying for Carbon Footprint (CFP) Declaration (Japanese website only)
<https://canon.jp/ecology/products/cfp/index.html>
 Reference: Canon's carbon offset initiatives (Japanese website only)
<https://cweb.canon.jp/ecology/carbon-offset/index.html>
 Reference: Products certified under Carbon Offset Program making use of carbon footprints (Japanese website only)
<https://cweb.canon.jp/ecology/products/cfp-certified/index.html>

Flow of Canon's Circular Economy



Product-to-Product Recycling Amounts (2013-2017 Cumulative Total)



Product Development Initiatives Aimed at Efficient Use of Resources Recycling-Conscious Design

There is an emerging global trend toward the recycling and reusing of resources due to concerns about natural resource depletion. Canon gives careful consideration to collection and recycling of end-of-life products from the design and development stage, through the use of Lifecycle Assessments (LCA) and the Product Assessment System.

Specifically, to assist these efforts in the design stage we formulated the Environmentally Conscious Design Guidance,

which covers an array of considerations, including product-related environmental laws and regulations, Green Public Procurement standards, and environmental label standards in the countries where we sell our products.

The Environmentally Conscious Design Guidance contains design guidelines relating to such matters as reduced use of materials by making products lighter, smaller, longer-lived, and easier to maintain, ease of disassembly, ease of sorting materials following disassembly, and information disclosure.

Remanufacturing of Multifunction Devices

Canon remanufactures used multifunction devices.

In remanufacturing, we collect used devices and break them down into parts, which are washed and cleaned using optimal techniques to meet rigid standards. Following strict reuse standards, we replace any parts that show wear or deterioration. The production line and inspection processes used are on a par with those for devices made only with new parts. When a remanufactured device is shipped, it is guaranteed to offer the same level of quality and reliability as a new product.

In Japan, we sell remanufactured devices from the imageRUNNER ADVANCE series as the Refreshed series. The imageRUNNER ADVANCE 6065-R, a remanufactured monochrome multifunction device, contains reused parts accounting for 80.9% of its gross weight.

Toner Cartridge Closed-Loop Recycling

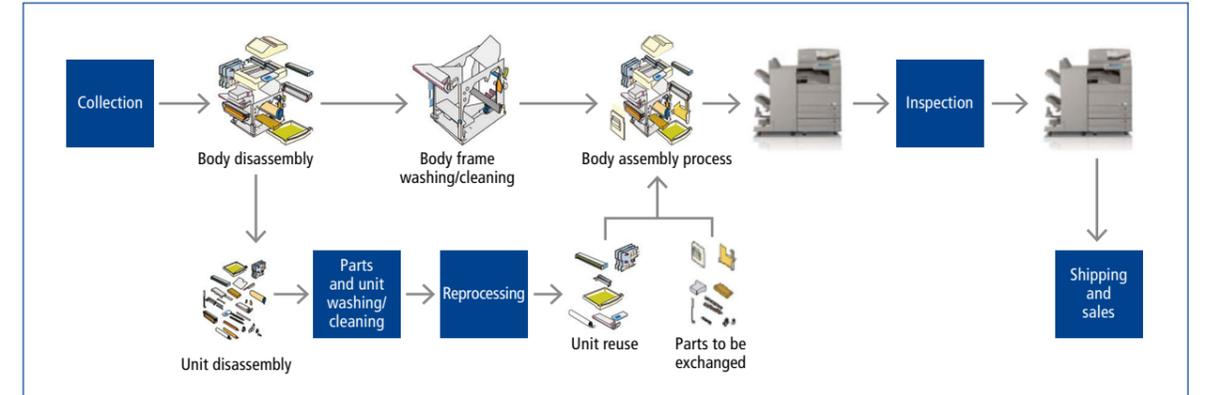
In 1990, Canon launched its Toner Cartridge Collection and Recycling Program, the first such program in the industry. The program is continuing operating today.

Returned used toner cartridges are brought to Canon recycling sites, where they are sorted by model on the recycling line. Reusable parts are picked up prior to crushing. Washing and maintenance are performed as needed, and the parts are reused in new products. Parts that cannot be reused are crushed and separated by material using physical characteristics such as electrostatic properties and specific gravity.

The primary material of toner cartridges is the high-impact polystyrene (HIPS) used primarily for the housing. HIPS can be used repeatedly to make new toner cartridges a unique feature of Canon's closed-loop recycling process.

We conduct used toner cartridge collection in 23 countries and regions (with a cumulative collection volume of about 394,000 tons as of the end of 2017) for recycling at four sites*, in Japan, the United States, France, and China (recycling in the same region where the product is used).

Remanufacturing Flowchart

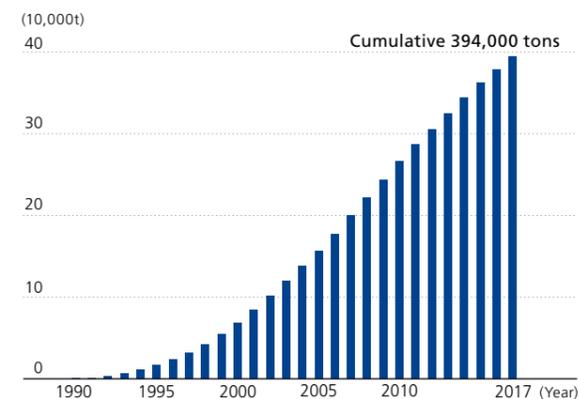


Thanks to our recycling initiatives, as of 2017 we have achieved a cumulative reduction in the use of new resources of approximately 273,000 tons.

* Toner cartridge recycling sites
 Japan: Canon Ecology Industry
 United States: Canon Virginia
 France: Canon Bretagne
 China: Canon Dalian Business Machines

Reference: Toner Cartridge Recycling Program Special Website
<https://global.canon/en/environment/cartridge-sp/index.html>

Used Toner Cartridge Collection Volume (Cumulative)



Collection and Recycling of Ink Cartridges

Worldwide Collection

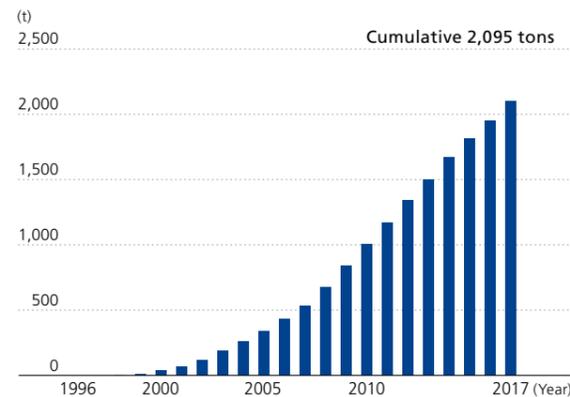
Canon has been collecting and recycling used ink cartridges since 1996. As of the end of March 2018, Canon's collecting program was operational in 35 countries and regions worldwide, and the total volume of cartridges that had been collected up to the end of 2017 reached 2,095 tons.

In Japan, Canon is part of the Ink Cartridge Satogaeri (Homecoming) Project, a joint program by printer manufacturers to collect cartridges via boxes placed in post offices, libraries, and other local government facilities. Schools also collect cartridges through activities related to the Bellmark Campaign.

Outside Japan, we place cartridge collection boxes in large retail stores, affiliate sales outlets, shopping malls, companies, schools, libraries, train stations, Canon service stores, Canon showrooms, and other locations, depending on the circumstances in each country or region.

Reference: Ink Cartridge Satogaeri Project (Japanese website only)
<https://cweb.canon.jp/ecology/satogaeri/index.html>
 Reference: Collection activities related to the Bellmark Campaign (Japanese website only)
<https://cweb.canon.jp/ecology/bellmark/index.html>

Used Ink Cartridge Collection Volume (Cumulative)



* Data scope is worldwide. Figures include cartridges for large-format inkjet printers and compact photo printers.

Making Products Smaller and Lighter

Canon strives to make its products smaller and lighter to help reduce the consumption of resources in the form of raw materials.

For example, the new TS8100 series inkjet printer in the PIXMA series is about 44% smaller than the older MG6200 series model. Similarly, our TR8500 series business inkjet printer is about 35% smaller than the older MX920 series model.

With Canon's imagePROGRAF PRO series of large-format inkjet printers, the latest model PRO-6000S is 30cm narrower than the iPF9400S model from 2012. The reduction in footprint of roughly 13% means that this 60-inch-size model occupies the same space as our large-format printer for B0-size printing, which is a size smaller.

Reference: Eco-Conscious Technology for Inkjet Printers
<https://global.canon/en/environment/products/ij-printer.html>

Initiatives to Reduce Waste at Operational Sites

Reducing Waste

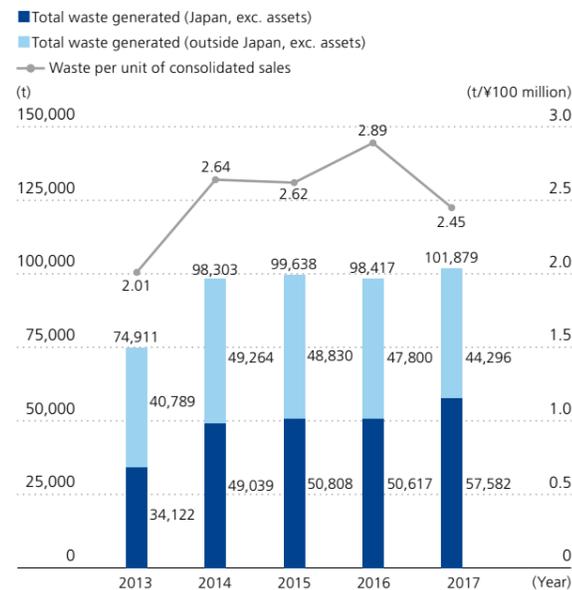
Canon is working hard to reduce the amount of waste it generates. Efforts include increasing recycling through sorting and collection and minimizing initial waste generation.

In particular, we have sought to determine which factors most significantly affect waste generation for each division and each production process. Based on these findings, we have implemented a number of ongoing initiatives to curb waste generation.

Canon Components reduced liquid waste generation by about 5%, or roughly 250t, by cutting the frequency of initial make-up of planting bath to restrict sludge production due to developer fluid, and by installing equipment to concentrate waste liquids from cleaning processes.

Total waste generation in 2017 amounted to 101,879 tons. The increase compared with 2016 was minimal despite the addition of Canon Medical Systems and business expansion. Waste generated per unit of sales fell to 2.45 t/¥100 million due to waste-reduction initiatives across sites.

Total Waste Generated



* Sales outlets of marketing companies (worldwide) included in data count have been expanded starting in 2014.
 * Performance of Canon Medical Systems Corporation included from 2017.

Initiatives Related to In-House Waste Recycling and Outside Resource Recovery

Canon actively works to reduce the amount of waste originating from its operations and to reuse or recycle waste where possible, appropriately disposing of any waste that can be neither reused nor recycled in accordance with the law.

Our various operational sites employ a range of in-house recycling schemes, including reprocessing waste plastic from injection molding or recycling it for other items.

Even in the case of waste that must be sent outside the company, we make sure it does not enter landfills*. Rather, we contract with companies that reprocess waste into materials. In 2017, contracted companies processed 98,999 tons of waste from Canon back into materials.

* Except for some general waste generated by business activities that is disposed of under government oversight.

Aiming for Sustainable Water Resources

Water Risk in Regions Where Canon Production Sites Are Located

Canon assesses locations to confirm available water intake volume before establishing operational sites and facilities. We use the AQUEDUCT water-risk mapping tool provided by the World Resources Institute* for quantitative evaluation and reconfirmation of water risk in regions where production sites are located.

The results of our evaluations show that no regions where Canon has production sites are considered to be extremely high risk.

* World Resources Institute: WRI is an independent institute based in the United States that conducts policy research and provides technical assistance concerning environmental and development issues around the world.

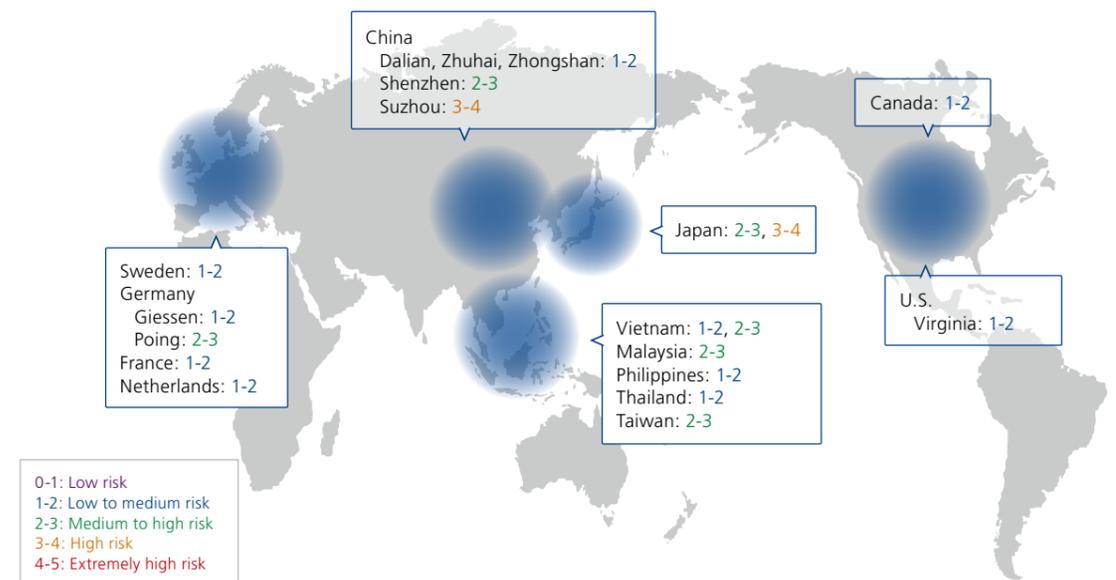
Canon Hi-Tech (Thailand) Receives Eco Factory Award

Efforts by Canon Hi-Tech (Thailand) to reduce waste, increase resource efficiency and save energy were recognized in 2017 when it became the first electronics firm since 2014 to be honored with an Eco Factory Award, sponsored by the Federation of Thai Industries (FTI).



Award ceremony (Thailand)

Water risk (quantitative) in regions containing major production sites



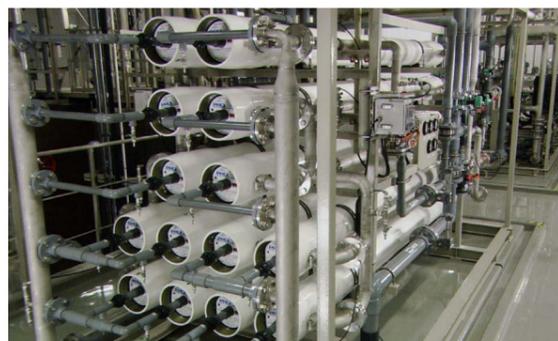
* Results using World Resources Institute (WRI) AQUEDUCT mapping tool
 * Result of assessment "physical risk quantity" for region containing production site

Reducing Water Usage

Canon collects water data by intake source (public water system, industrial water system, or groundwater) and manages water resources carefully so as not to exceed intake limits for the different regions in which it operates. We also set and manage targets for the volume of water used in production, and constantly strive to reduce water usage by improving production processes and raising water-usage efficiency at each operating site.

Water Recycling at Production Sites

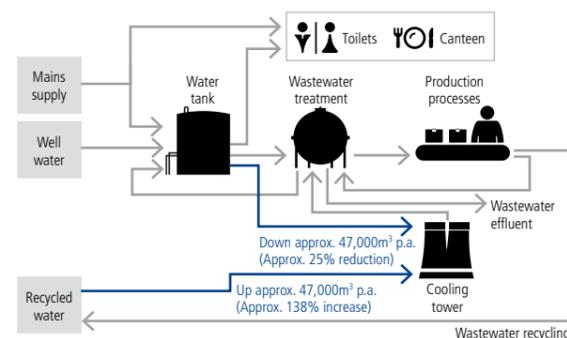
Canon promotes the recycling of water resources. The Kitsuki Plant of Oita Canon Materials Inc. is located on Beppu Bay, home to precious natural resources and habitats. In consideration of the impact on the ecosystem, the plant employs a closed wastewater system that discharges nothing but rainwater.



Closed wastewater system

At Canon Opto (Malaysia), wastewater from production processes is collected and re-used in a cooling tower. Upgrades to the recovery plant in 2016 and 2017 increased water recycling capacity. This cut consumption of non-recycled water by the cooling tower in 2017 by roughly 25% compared with 2016.

Water recycling at Canon Opto (Malaysia)

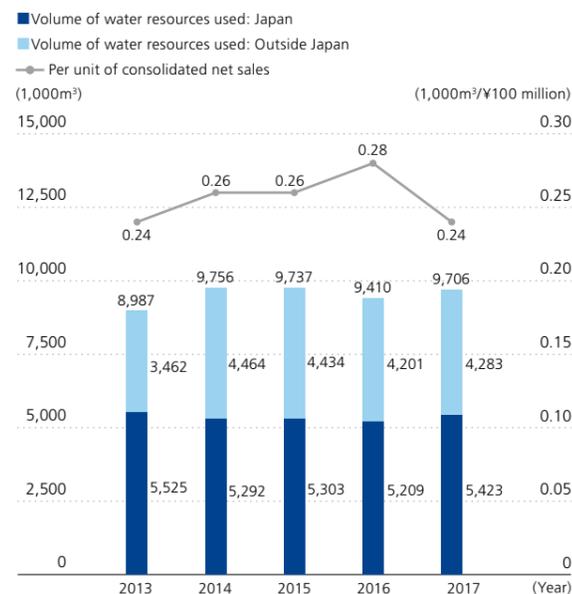


A rainwater reuse system was installed at Canon Canada's new headquarters completed in 2016. Rainwater is collected from the roof of the building and stored underground in a 45,000m³-capacity tank. The collected water is used for toilets and on-site irrigation.

In 2017, although the addition of Canon Medical Systems to the Canon Group and business expansion led to higher water usage, increases were minimized by raising water-usage efficiency at sites. Total water usage was 9,706 TCM* and water usage per unit of sales fell to 0.24 TCM/¥100 million.

* TCM = Thousand Cubic Meters

Use of Water Resources



* Sales outlets of marketing companies (worldwide) included in data count have been expanded starting in 2014. Data for Canon Medical Systems have also been added from 2017.

Eliminating Hazardous Substances and Preventing Pollution

Canon thoroughly manages chemical substances in products and those used in manufacturing processes to prevent environmental pollution and adverse effects on people's health.

Canon's Initiatives and Their Relation to Sustainable Development Goal (SDGs) Targets

Eliminating hazardous substances and preventing pollution

- Managing chemicals contained in products, meeting international standards Target 12.4

- Managing chemical substances in work processes Target 12.4

- Reducing discharges into the air, water and soil Target 12.4 Target 6.3

- Green supply chain Target 12.4

Target 12.4: Achieve the environmentally sound management of chemicals and all waste throughout the product lifecycle, in accordance with agreed international frameworks, and significantly reduce their release into air, water, and soil
 Target 6.3: Improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, and substantially increasing recycling and safe reuse globally

Canon's Approach to Managing Chemical Substances

Canon strictly manages chemical substances in products as well as those used in manufacturing processes. Our basic approach to management involves confirming products do not contain regulated chemical substances that exceed the prescribed standard and production sites do not emit regulated chemical substances that exceed the prescribed standard.

Management of Chemical Substances in Products

Canon has built a Group-wide environmental assurance system for managing chemical substances in products. Taking the laws and major environmental-labeling requirements around the world into consideration, we established in-house standards in line with the most stringent regulations in the world. Specifically, our management system classifies chemical substances into three categories: "prohibited substances," which cannot be used in products; "use-restricted substances," for which we are working to find alternatives by specific deadlines; and, "controlled substances," the amount of which should be monitored.

Understanding the Latest Information on Chemical Substances in Products and Taking Preemptive Action

Research and studies are being carried out around the world on the impact risk of chemical substances on the environment and people's health. Europe, in particular, has taken the lead in expanding its regulations.

Canon strives to grasp new regulatory trends at an early stage and take action, ensuring that it provides products that are safe for the environment and people in every country and region where Canon products are used.

Proactive Contribution to International Standards for Transmitting Information on Chemical Substances

To manage chemical substances appropriately, it is important to share information on the chemical substances contained in materials, parts, and products accurately and efficiently along the supply chain from upstream to downstream, and to ensure compliance with all regulations.

In the past, companies each employed their own survey formats to request the suppliers for the information about chemical substances in products, which meant responding to questions multiple times in different formats even with regard to the same parts or chemicals. This situation incurred substantial burden on and costs to the entire supply chain. Furthermore, using such a variety of survey formats gave rise to concerns about the decreased reliability of data as it was communicated across the supply chain.

Amid such circumstances, the Ministry of Economy, Trade and Industry (Japan) decided to sponsor chemSHERPA (chemical information SHaring and Exchange under Reporting PARTnership in supply chain) as a common platform for sharing information, facilitating the smooth transmission of information between companies to confirm compliance with regulations on chemical substances in products. Canon has been proactively involved as a member company supporting the scheme.

Applying the IEC62474* international standard, the chemSHERPA data scheme enables the management of compliance checks for chemical substance regulations for each material and part. It is expected to enable more accurate checks as well, since revisions to regulations are updated in a timely manner.

As having previously surveyed and managed the information on chemical substances contained in products as outlined in this scheme, Canon introduced and began using chemSHERPA in 2017.

Since its introduction by Canon, around 90% of survey replies have been based on chemSHERPA. Some suppliers have also adopted pre-filled survey replies that contain some of the required information. This shift to a more standardized approach is helping to make operations more efficient.

We continue to promote the adoption of the new data platform by providing support to suppliers preparing to make the shift, such as by explaining how to reply to surveys.

* IEC62474: Material Declaration for Products of and for the Electrotechnical Industry. International standards issued by the IEC (International Electrotechnical Commission) in March 2012 aiming to streamline the material declarations on chemical substances and compositions contained in the products of the electrotechnical industry in the global supply chain.

Managing Chemical Substances Used in Manufacturing Processes

The chemical substances handled during manufacturing at Canon include “controlled chemical substances” regulated in terms of adverse effect on the environment, human health and safety, and so forth. Canon separates these substances into three categories: A) Prohibited substances; B) Emission reduction substances; and C) Regulated substances. In turn, effective measures are in place for each category.

Prohibited substances are defined as those prohibited under the Chemical Weapons Convention, the Stockholm Convention, the Montreal Protocol and the Convention concerning Safety in the Use of Asbestos, as well as specified greenhouse gases (PFC/HFC/SF₆), other soil and groundwater pollutants, and substances that significantly impact people’s health.

Greenhouse gases other than PFC/HFC/SF₆, greenhouse gases identified by the IPCC as having global warming potential (GWP), volatile organic compounds (VOCs) and other substances specified by Canon are designated as emission reduction substances.

Regulated substances are chemical substances with defined compliance requirements, including compliance with reference values and the ascertainment of usage and storage quantities.

Reducing Use and Emissions of Controlled Chemical Substances

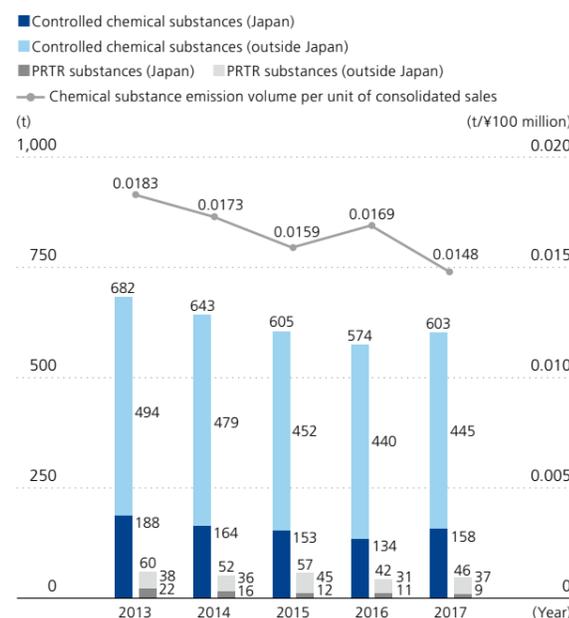
Canon engages in various initiatives at its operational sites to reduce emissions of controlled chemical substances, including reducing the consumption or re-use of chemical substances through improvement of production processes.

Canon Dalian is trying to re-use or recycle solvents to help reduce VOC emissions. In 2017, the company posted a year-on-year reduction of 30% in VOC usage based on efforts to expand the types of solvents that could be re-used or recycled and related processes.

Canon Vietnam has cut its chemical usage by 7.0 tons via in-house manufacture of production tools for modifying amounts of coating oils or grease used in assembly processes (cutting oil usage by 4.4% and grease usage by 2.2%), alongside measures to improve coating operations and reduce the number of areas requiring coating.

Total emissions of controlled chemical substances in 2017 amounted to 603 tons. The increase compared with 2016 was minimal despite the addition of Canon Medical Systems and business expansion. Emissions per unit of sales improved to 0.0148 t/¥100 million due to a range of emissions-reduction initiatives at sites.

Emissions of Controlled Chemical Substances and Amount of Chemical Substances Designated by the PRTR System*



* PRTR System: Pollutant Release and Transfer Register System, a notification system for the transfer and release of chemical substances.
 * Controlled chemical substances exclude regulated substances.
 * Océ Group data has been included only for controlled chemical substance volume starting in 2013. Océ Group data has been added to emissions of controlled substances and emissions of PRTR substances in 2014.
 * Canon Medical Systems data has been included from 2017.

Reducing Emissions into the Atmosphere and Waterways and Preventing Pollution

Canon alleviates the environmental impact of its operational sites by reducing emissions of NOx*¹ and SOx*², which are major causes of air pollution and acid rain; reducing discharges of phosphates and nitrogen compounds, which cause the eutrophication of water environments; and, reducing BOD*³ and SS*⁴ indexes, which have an environmental impact on water environments.

To prevent air pollution, when installing or updating equipment that uses fuel, we opt for fuels that do not generate air pollutants (such as sulfur oxide, nitrogen oxide and soot), and have banned the use of heavy oil in principle.

Furthermore, we have designated ozone-depleting substances and persistent organic pollutants cited in the Stockholm Convention on Persistent Organic Pollutants as banned substances.

With regard to wastewater, each operational site sets its own levels based on those stipulated in local laws and regulations. We have 80% as an internal management value for these items, and we regularly check the status of compliance with management standards.

As a result of these initiatives, Canon’s emissions or discharges from its operational sites in 2017 again did not exceed established standards.

*1 Nitrogen oxides (NOx)
 A major cause of air pollution, acid rain and photochemical smog, NOx is generated when the nitrogen in fuels is oxidized or when nitrogen in the atmosphere is oxidized during high-temperature combustion.
 *2 Sulfur oxides (SOx)
 A major cause of air pollution and acid rain, SOx is generated when fossil fuels, such as oil and coal, are burned.
 *3 Biochemical oxygen demand (BOD)
 BOD is the amount of oxygen consumed when microorganisms degrade organic matter in water.
 *4 Suspended solids (SS)
 A collective term used for substances of less than 2mm in diameter that float in the air and do not dissolve.

Soil and Groundwater Remediation Status

Canon places high priority on soil and groundwater protection. In line with this, we established the Canon Group’s Basic Policy on Soil and Groundwater Pollution and implement comprehensive measures based on it. In the unlikely event that soil or groundwater pollution is found at one of our operational sites, cleanup and remedial actions are carried out in close accordance with all relevant laws. In 2017, cleanups were completed at Canon’s Meguro and Kanuma sites in Japan, and the related regulatory filings were made.

Also, our standard when acquiring new land is to conduct a preliminary soil examination and carry out any other necessary procedures, such as soil remediation, before making the purchase. We also monitor the chemical substances used at each site, remaining fully aware of the national and regional standards where each site is located in order to implement countermeasures according to the situation at each location.

Going forward, we will continue with the above initiatives and carry out monitoring and reporting of operational sites with completed remediation in a timely manner.

PCB Waste Management

In accordance with relevant laws, Canon strictly manages polychlorinated biphenyl (PCB), which damages living organisms and the environment.

As of December 2017, 14 operational sites were storing PCB waste. In terms of highly concentrated PCB waste, there are 22 capacitors and transformers and 1,922 fluorescent ballasts in storage.

This PCB waste is processed sequentially by the Japan Environmental Storage & Safety Corporation (JESCO).

Status of Soil and Groundwater Cleanup Activities*

Operational Site	Substances	Measures
Shimomaruko	Trichloroethylene, etc.	Water quality measurement
Utsunomiya parking lot 1	Fluorine and its compounds, etc.	Pumping, water quality measurement
Toride	Trichloroethylene, etc. Hexavalent chromium and its compounds	Pumping, excavation and elimination, water quality measurement
Bando	1,1-dichloroethylene, etc.	Pumping, covering, water quality measurement
Nagahama Canon	Hexavalent chromium and its compounds	Covering (soil pollution from soil improvement agents), water quality measurement

* Reports are made to the authorities concerning sites where cleanups are in progress.

Contributing to a Society in Harmony with Nature

We launched the Canon Bird Branch Project, which encourages consideration of the “Cycle of Life”, as one of the various activities based on our Biodiversity Policy that we promote worldwide.

Canon's Initiatives and Their Relation to Sustainable Development Goal (SDGs) Targets

Contributing to a Society in Harmony with Nature		Target 15.2	Target 15.5
	● Biodiversity Policy, Basic Policy on the Procurement of Timber Products		
	● Bird Branch Project		
	● Preservation of natural habitats and biodiversity		
	● Forest preservation, tree-planting initiatives		

Target 15.2: Promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally
 Target 15.5: Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species

Canon's Biodiversity Policy

Canon recognizes biodiversity as essential for a sustainable society. We carry out various activities to conserve and protect biodiversity under our Biodiversity Policy, which applies to the entire Canon Group.

Biodiversity Policy

Basic Policy

Canon fully recognizes biodiversity as an important basis for a sustainable society, and promotes activities that contribute to biodiversity conservation.

Action Guidelines

- Canon strives to conserve biodiversity with consideration for various regional characteristics from a global perspective.
- Canon actively works to reduce the impact on biodiversity associated with various business activities, and to conduct social-contribution activities that lead to biodiversity conservation.

Specific Actions

- “Utilization of Canon technologies and products for biodiversity conservation”
Support for biodiversity conservation activities and projects
- “Consideration for biodiversity centered on operational sites”
Ascertaining the impact of our business activities on biodiversity, and conservation of animal and plant habitats around operational sites
- “Contribution to the realization of a community rich in biodiversity”
Promotion of biodiversity conservation activities and educational activities in collaboration with local communities

Canon Bird Branch Project

Biodiversity refers to the way living things interact as they coexist on earth. Within this sphere, birds occupy the top position in a local ecosystem pyramid of plants, insects, and small animals, symbolizing the cycle of life. In line with this concept, Canon promotes the Bird Branch Project as a symbol of the activities it conducts based on its Biodiversity Policy.

A part of Bird Branch Project, a wild habitat has been created at Canon Global Headquarters in Tokyo, including the installation of nest boxes and bird baths within the campus grounds. Moreover, we have regularly conducted bird surveys, such as a bird monitoring with network cameras and a spot census recording the number and species of birds at fixed locations.

In 2016, Canon Group plants at Toride, Susono and Oita joined the Bird Branch Project, along with the Kawasaki Office. Wild bird surveys are conducted at each of these sites in collaboration with the Wild Bird Society of Japan. The Rustic Bunting, a bird species classified as Vulnerable on the IUCN Red List, has been spotted within the grounds of the Toride site.

We plan to increase the number of operational sites participating in the project as part of our efforts to conserve and protect biodiversity.

Reference: Bird Branch Project website
<https://global.canon/en/environment/bird-branch/index.html>



Installing a nesting box at Canon's head office in Shimomaruko

Initiatives to Support Continuous Use of Sustainable Forestry Resources within Value Chain

To help support biodiversity, Canon promotes the use of sustainable forestry resources as the raw materials for paper production within the value chain. We have set procurement policies favoring the purchase of paper products derived from sustainably sourced wood pulp. Moreover, the office paper we sell is made under forest certification schemes or using environmentally conscious raw materials.

Basic Policy on the Procurement of Timber Products

1. Use sustainable forest materials
In its procurement of timber products, the Canon Group uses materials supplied from forest resources managed exclusively for use as timber products.
2. Trace the origin of forest resources used
We seek the cooperation of business partners to ensure the traceability of products throughout the manufacturing process, from the harvest of raw materials onward.
3. Confirm evidence of traceability
Canon works with its business partners to ensure the traceability of materials used in Canon products (or OEM products) and their packaging that are subject to timber product regulations in each country.

Utilization of Canon Technologies and Products to Support Biodiversity Introducing the Habits of Wildlife through Photos “WILDLIFE AS CANON SEES IT” environmental advertisement series in National Geographic magazine

Canon believes that communicating the importance and beauty of nature to people around the world through its proprietary imaging technologies will lead to wider appreciation of the importance of biodiversity conservation.

Our environmental advertisement “WILDLIFE AS CANON SEES IT” has been running in *National Geographic* magazine since April 1981. Through photographs, we introduce the habits of wildlife that normally would be difficult to observe, and show the natural environment they live in.

As part of the Canon Bird Branch Project, we created a website to introduce our environmental initiatives in this area and to explain the ecology of wild birds using photographs. The site also provides tips on photographing birds in the wild and related etiquette. The information on the site aims to help customers use Canon products more effectively when observing nature while respecting natural surroundings.

Canon's network cameras are also helping to monitor wildlife and their habitats as part of conservation initiatives. We donated a VB-R12VE network camera with 360° continuous panning capabilities to the Wild Bird Society of Japan (WBSJ) for installation on the outer wall of the Nature Center at the Tokyo Port Wild Bird Park. The cameras are being used for daily observation of herons, cormorants, sandpipers and other types of waterfowl, and it is hoped that some rare bird species will be observed as well.

Reference: WILDLIFE AS CANON SEES IT
<https://global.canon/en/ad/wild/index.html>



Expressing the ecology of wild animals through photos

Site-Based Biodiversity Conservation Initiatives

The Canon Eco Technology Park (→P20) that opened in 2018 on the grounds of Canon Ecology Industry features extensive green landscaping. Tree and shrub species native to the area in Ibaraki Prefecture have been planted onsite. A bird bath has also been installed as part of the Canon Bird Branch Project, along with network cameras to help monitor the local bird population.



The bird bath installed inside Canon Eco Technology Park

Contributing to the Realization of a Community Rich in Biodiversity Leaving an Abundant Home for Our Children through the Children *Furusato* Project—Linking Our Dream to the Future

In Japan, Canon promotes an environmental conservation and environmental education project known as the *Furusato* Project—Linking Our Dream to the Future, with the aim of passing on a beautiful, verdant, and biologically diverse *furusato* (hometown) for future generations to enjoy.

Through this project, Canon stakeholders, including employees and their families, customers, and business partners, forge links with NPOs and regional community members across Japan to carry out environmental conservation activities and environmental education programs. To help finance these activities, we promote initiatives closely linked with our business activities, such as donating funds according to the amount of used ink cartridges collected or the volume of paper sold.

In 2017, activities aimed at educating people about the importance of biodiversity and preserving the environment were conducted 45 times across Japan. Specifically, 667 participants were involved in such activities as planting trees, preserving terraced rice paddies, restoring abandoned fields, and conducting ecological surveys.

In 2017, in recognition of the breadth and longevity of Canon's programs of future-focused environmental activities, Canon received the Minister's Award, Ministry of the Environment in the 5th Contest for Corporate Activities on Biodiversity (sponsored by the Contest for Corporate Activities on Biodiversity Committee; supported by the Ministry of the Environment and the Ministry of Agriculture, Forestry and Fisheries). In 2018, this project was accredited by The Tokyo Organising Committee of the Olympic and Paralympic Games as part of "Tokyo 2020 Nationwide Participation Programme".

Furusato Project—Linking Our Dream to the Future Activity Locations through 2017



- | | |
|--------------------------------|---|
| 1 Asahikawa, Hokkaido | Morinet Hokkaido |
| 2 Osaki, Miyagi | Tambo |
| 3 Ushiku, Ibaraki | Asaza Fund |
| 4 Hachioji, Tokyo | The Lifestyle Research Institute of Forests |
| 5 Mishima, Shizuoka | Groundwork Mishima |
| 6 Kahoku District, Ishikawa | Kahokugata Lake Institute |
| 7 Kanzaki District, Hyogo | Tanada LOVER's |
| 8 Maniwa, Okayama | Maniwa Heritage Society |
| 9 Yamagata District, Hiroshima | Natural History Society of the West Chugoku Mountains |
| 10 Oita City, Oita | Oita Environmental Conservation Forum |

Initiatives in Canada

Canon Canada Branch Out Program

Canon Canada began the Branch Out Program in 2014 as an environmental initiative to help employees from the head office and sales offices across the country give back to their local communities. Once a year, Canon Canada employees turn out to participate in a range of activities, such as cleaning up parks or rivers, or planting trees. To date, the program has helped to plant more than 30,000 trees across 45 locations while clearing over 1,200m³ of non-native vegetation. In 2017, around 450 employees took part in Branch Out activities in 13 cities across the country, from east (Quebec City, Quebec) to west (Vancouver, B.C.), including Brampton, Ontario, where Canon Canada's head office is located. Outfitted in specially designed "Branch Out" T-shirts, teams of volunteers cleaned up parks and rivers, planted over 600 trees, cleared non-native vegetation, and made nesting boxes for birds, among other activities. The 2017 program featured biodiversity conservation and pollination support projects, including activities to survey specific habitats.



Tree-planting activity (Canada)

Initiatives in China

Project to Plant 563 Protected Trees

Canon contributed to a green landscaping program by the Zhongshan Torch High-tech Industrial Development Zone with tree-planting activities around its operational site.

In collaboration with government staff from the development zone, around 130 Canon Zhongshan Business Machines employees helped to plant 563 trees, including *Aquilaria* (lign-aloes) tree varieties that are protected under Chinese law.

Initiatives in Thailand

Water Conservation Project Targeting Chao Phraya River in Ayutthaya Province

Canon Hi-Tech (Thailand) participated in a water conservation project targeting the Chao Phraya River, in cooperation with local authorities of the Prasatong region, the Hi-Tech Industrial Association, the Royal Irrigation Department, and members of the local community.

80 of the 300 participants in the project were Canon Hi-Tech (Thailand) employees. About 25 tons of common water hyacinth, which were invading the environs of the river, were removed to help protect local biodiversity and improve the scenery (landscape).



Water conservation activities (Thailand)

Data Summary

Data on Management

List of Environmental Training Programs

Training Program		Format	Outline	
Awareness Training	Global Environmental Education Self-Awareness Program	WBT training	All Group employees develop a basic understanding of environmental issues.	
	Environmental Management Education for Managers	WBT training	Managers study the relationship between individual workplace tasks and environmental assurance activities, learning how to best influence the organization's environmental activities.	
	Environmental Training for Employees Working Outside Japan	WBT training	Employees stationed outside Japan learn about societal trends related to the environment, Canon's endeavors, and various laws and regulations.	
Specialized Training	Environmental Auditor Training	Basic Course (Operational Sites)	Basic knowledge and technical skills related to environmental audits of operational sites.	
		Basic Course (Product Environment)	Basic knowledge and technical skills related to environmental audits of product environments.	
	Product Environmental Assurance Product Survey Training	Group training	Staff and experienced employees study the inspection process involved in product chemical substance assurance, learning about data inspection and verification methods.	
	CAPRI* Staff Training	For Product Surveyors	Group training	Staff learn about the CAPRI system, basic operations and how to carry out fieldwork following the workflow of product inspections.
		For Product Evaluators	Group training	Staff learn about the CAPRI system, basic operations and how to carry out fieldwork following the workflow of product evaluations.
	Supplier Environmental Evaluation Training	Group training	Evaluators acquire knowledge and methods needed for environmental evaluation of suppliers.	
	Product and Environmental Assurance for Developers and Designers	WBT training	Product developers and designers study technical standards, related regulatory developments and product assessment methods required for environmentally conscious design.	
	Plating Basic Training	General knowledge	WBT training	Trainees acquire basic knowledge about solder, one of the hazardous substances on the environmental assessment checklist.
		For auditors	WBT training	Trainees study approaches applied in solder-related auditing.
	Chemical Substance Management Staff Training	Group training	Employees in charge of product chemical management systems learn about the appropriate use and management of chemical substances, focusing on both environmental and safety and health issues.	
	Chemical Substance Management Basic Training	WBT training	Employees learn the basics of managing chemical substances.	
	Basic Training for Handlers of Chemical Substances	WBT training	Employees acquire minimum knowledge required to prevent occupational accidents and environmental pollution caused by chemical substances.	
Compliance Training	Product Assessment Training	WBT training	Employees who determine assessment items or who determine conformance and achievement of targets learn about related knowledge and mechanisms.	
	Course for Parts and Materials Survey Officials Fundamentals Section		Employees who carry out assurance work on chemical substances contained in products learn about the assurance system, including mechanisms for product inspections and requirements of regulations and rules.	
	Course for Parts and Materials Survey Officials Validity Evaluation Section		Employees learn the key points and necessary knowledge for evaluating the validity of responses from suppliers for product inspections.	
	Course for Parts and Materials Survey Officials Conformance Verification Section		Employees learn about methods for checking product compliance and criteria for applicability judgment, etc., based on the results of product inspections.	

* CAPRI: Canon Group's integrated chemical management system

Product Standards Compliance

2017 Standards Compliance for Environmentally Conscious Products

	Law on Promoting Green Purchasing (Japan)	Eco Mark (Japan)	International ENERGY STAR® Program
Copying Machines / Multifunction Devices (MFDs)	11/11 (100%)	11/11 (100%)	11/11 (100%)
Laser Printers	9/10 (90%)	9/10 (90%)	9/10 (90%)
Inkjet Printers	8/8 (100%)	7/8 (88%)	8/8 (100%)

* Values show the number of models meeting specifications out of the number of models on sale in Japan, with the compliance ratio in parentheses.

2017 Standards Compliance for Consumables

	Law on Promoting Green Purchasing (Japan)	Eco Mark (Japan)
Toner Cartridges	20/20 (100%)	20/20 (100%)
Ink Cartridges	35/35 (100%)	35/35 (100%)

* Values show the number of models meeting specifications out of the number of models on sale in Japan, with the compliance ratio in parentheses.

Environmental Accounting

Calculations performed according to the Environmental Accounting Guidelines (2005 edition) issued by Japan's Ministry of the Environment.

Environmental Conservation Costs

Category	Details of Key Activities	2017	
		Investment	Cost
(1) Business Area Cost		1.80	7.79
Details	1. Pollution Prevention Cost	0.89	4.52
	2. Global Environmental Conservation Cost	0.88	1.20
	3. Resource Circulation Cost	0.03	2.07
(2) Upstream / Downstream Cost	Green procurement initiatives, product recycling*1, etc.	0.07	7.35
(3) Administration Cost	Environmental education, environmental management system, tree planting, information disclosure, environmental advertising, personnel, etc.	0.0	4.15
(4) R&D Cost*2	R&D for reducing environmental impact	0.0	0.0
(5) Social Activity Cost	Contributions to organizations, sponsorships, memberships, etc.	0.0	0.21
(6) Environmental Remediation Cost	Soil remediation	0.0	0.05
(7) Other	Other environmental protection-related costs	0.17	0.10
Total		2.03	19.65

*1 In connection with the recycling of used products, expenses for product collection, storage, sorting, shipment, etc.

*2 Expenses for basic research on environmental technologies

Environmental Conservation Benefit

Details of Benefit	Environmental Protection Indices		
	Index	Index Value	
Benefit Related to Business Area Cost	Benefit related to resources input into business activities	Energy conservation (t-CO ₂)	41,953
	Benefit related to waste or environmental impact originating from business activities	Recycled resources volume (t)	98,999
Benefit Related to Upstream / Downstream Cost	Benefit related to goods and services produced from business activities	Product energy conservation amount (1,000t-CO ₂)*3	2,696
		Recovery of used products (t)*4	70,241

*3 CO₂ reduction resulting from energy-conservation technologies in electrographic multifunction devices and laser printers.

*4 Amount of recovered copying machines, cartridges, etc. (including outsourced material recycling and thermal recovery)

Economic Benefit Associated with Environmental Conservation Activities

Details of Benefit		2017
Revenue	Sales revenue from waste recycling	2.23
Cost Reduction	Reduction in energy costs from energy conservation	1.86
	Reduction from green procurement	0.0
	Reduction in waste handling costs from resource conservation and recycling	1.51
Total		5.60

Benefit of Upstream / Downstream Costs

Details of Benefit		2017
Lower energy costs from reduced product energy consumption*5		66.58
Profit from used product recycling		5.25

*5 Calculated as the reduction in energy consumption of electrographic multifunction devices and laser printers sold in 2017 (excluding production printers) × 12 yen/kWh (economic effect for the customer).

Data on CO₂

Total GHG Emissions by Scope

	2013	2014	2015	2016	2017
Scope 1	168,465	176,894	169,974	164,769	174,342
Scope 2	1,077,894	1,059,561	992,380	970,848	987,485

Data on Energy

Energy Consumption by Region in 2017

	Electricity	Gas	Oil	Other (steam, wide area heating and air conditioning)
Japan	4,525	1,475	298	33
Americas	416	158	8	0
Europe	342	181	421	64
Asia and Oceania (except Japan)	1,971	88	33	95
Total	7,253	1,902	759	192

* Electricity includes the amount generated by renewable energy sources.

Use of Renewable Energy by Region in 2017

	Electric power (MWh)	Geothermal power (TJ)
Japan	176	0
Americas	8,902	0
Europe	75,298	16
Asia and Oceania (except Japan)	91	0
Total	84,467	16

Data on Waste

2017 Recovery Volume by Type of Waste

Type of Waste	Type of Recovery Treatment	Recovery Amount (t)
Paper	Cardboard, paper used by OA equipment, toilet paper, raw material for paper products, building board, roadbed materials, etc.	21,533
Plastics	Raw materials for plastic products and other applications, roadbed materials, cement materials, fuels, blast furnace reducing agents, soil improvement agents, etc.	20,529
Metals	Raw materials for metals, roadbed materials, etc.	26,522
Oils, acids and alkalis	Cement materials, fuels, roadbed materials, reuse of oils, chemicals and solvents, etc.	11,138
Sludge	Cement materials, construction materials, aggregates, metal materials, organic fertilizers, compost, etc.	4,216
Wood	Construction boards, bedding for plants, fuels, pulp materials, fertilizers, etc.	4,887
Glass and ceramics	Glass materials, roadbed materials, cement, metal materials, etc.	317
Others	Combustion aid, roadbed materials, soil improvement agents, iron-making materials, metal materials, etc.	9,855
Total		98,999

General Landfill Waste Generated by Business Activities

	2013	2014	2015	2016	2017
General landfill waste generated by business activities	2,811	2,382	2,188	2,343	2,105

Atmospheric Emissions

SOx and NOx Emissions

	2013	2014	2015	2016	2017
SOx	0.7	0.7	0.7	0.6	1.2
NOx	69.0	67.8	65.6	62.1	61.7

Data on Water Resources

Total Wastewater Discharge

	2013	2014	2015	2016	2017
Japan	3,488	4,084	4,122	4,108	4,491
Outside Japan	3,010	3,751	3,744	3,433	3,306
Total	6,498	7,835	7,866	7,540	7,797

Wastewater Amount in 2017 by Discharge Route

	Rivers	Sewerage System	Total
Japan	1,188	3,302	4,491
Outside Japan	1,128	2,179	3,306
Total	2,316	5,481	7,797

2017 Water Quality Data

	2017
SS	303
BOD	247

Water Usage in 2017 by Type

	Tap Water	Industrial Water	Groundwater	Total
Japan	1,689	2,403	1,332	5,423
Outside Japan	3,313	742	228	4,283
Total	5,001	3,145	1,559	9,706

Use of Recycled Water and Recycling Rate in 2017

	Recycled Water (1,000m ³)	Recycling Rate (%)
Japan	1,801	33.2
Outside Japan	92	2.1
Total	1,893	19.5

Data on Chemical Substances

Substances Canon No Longer Uses

	Substance Eliminated	Date Eliminated
Ozone-Depleting Substances	Chlorofluorocarbons (CFCs), 15 types	December 1992
	1,1,1-Trichloroethane	October 1993
	Hydrochlorofluorocarbons (HCFCs), 34 types	October 1995
Greenhouse Gases*1	Perfluorocarbons (PFCs)	December 1999
	Hydrofluorocarbons (HFCs)	December 1999
Soil Contaminants	Trichloroethylene	December 1996
	Tetrachloroethylene	December 1996
	Dichloro methane (for cleaning)	December 1997
	Dichloro methane (for thin film coating)*2	October 2003

*1 Excludes use in semiconductor manufacturing

*2 Discontinued use in Japan in December 2001

Amount of Chemical Substances in 2017 (t)

	Amount
Japan	10,881
Outside Japan	1,248
Total	12,129

VOC Emissions in 2017 (t)

	VOC Emissions
Japan	125
Outside Japan	223
Total	348

2017 List of Chemical Substances Subjected to the PRTR Act (kg)

Statutory No.	Name of Substance	Emissions Volume		Transfer Volume		
		Atmosphere	Public Water	Sewerage System	Waste	Recyclables
7	N-butyl acrylate	1	0	0	0	40,957
20	2-aminoethanol	91	0	2	0	15,991
31	Antimony and its compounds	90	0	0	0	305
53	Ethylbenzene	790	15	0	103	18,770
71	Ferric chloride	0	0	0	0	161,449
80	Xylene	2,793	23	0	330	141,400
125	Monochlorobenzene	1,599	0	0	56	57,530
128	Methyl chloride	4	0	0	0	0
150	1,4-dioxane	547	0	0	0	812
202	Diphenylamine	0	0	0	0	80
232	N,N-dimethylformamide	365	0	0	0	520
240	Styrene	277	0	0	0	151,434
259	Tetraethylthiuram disulfide	0	0	0	0	13
296	1,2,4-trimethylbenzene	7,586	0	0	1	24,734
298	Tolylene diisocyanate	0	0	0	0	330
299	Toluidin	3	0	0	0	0
300	Toluene	17,997	140	0	3,349	69,144
306	Hexamethylene diacrylate	0	0	0	0	38
308	Nickel	0	0	0	1	1,037
309	Nickel compounds	0	0	0	19	3,778
343	Pyrocatechol	12	0	0	0	4,076
349	Phenol	11	0	0	0	187
374	Hydrogen fluoride and its water-soluble salts	4	60	1,639	0	664
395	Water-soluble salts of peroxodisulfuric acid	0	0	41	0	5,245
408	Poly(oxyethylene) octylphenyl ether	0	0	0	0	1,192
412	Manganese and its compounds	0	0	0	22	5,117
438	Methylnaphthalene	104	0	0	0	591
448	Methylenebis(4,1-phenylene) diisocyanate	0	0	0	0	5,376

* Since the figures in the data collection are rounded off, the individual figures may not agree with the total.

Operational Sites Covered in the Environmental Section

Name	Location
Canon Inc. (15 operational sites)	
Headquarters	Tokyo
Yako Office	Kanagawa
Kawasaki Office	Kanagawa
Tamagawa Office	Kanagawa
Kosugi Office	Kanagawa
Hiratsuka Plant	Kanagawa
Ayase Plant	Kanagawa
Fuji-Susono Research Park	Shizuoka
Utsunomiya Plant	Tochigi
Toride Plant	Ibaraki
Ami Plant	Ibaraki
Utsunomiya Optical Products Plant	Tochigi
Optics R&D Center	Tochigi
Oita Plant	Oita
Tsukuba Parts Center	Ibaraki
Marketing Headquarters in Japan	
Canon Marketing Japan Inc.	Tokyo
Manufacturing Subsidiaries in Japan (23 companies)	
Canon Electronics Inc.	Saitama
Canon Finetech Nisca Inc.	Saitama
Fukui Canon Materials Inc.	Fukui
Top Business Machines Co., Ltd.	Shiga
Canon Precision Inc.	Aomori
Canon Chemicals Inc.	Ibaraki
Oita Canon Inc.	Oita
Miyazaki Canon Inc.	Miyazaki
Canon Optron, Inc.	Ibaraki
Canon Components, Inc.	Saitama
Nagahama Canon Inc.	Shiga
Oita Canon Materials Inc.	Oita
Canon Semiconductor Equipment Inc.	Ibaraki
Canon Ecology Industry Inc.	Ibaraki
Ueno Canon Materials Inc.	Mie
Fukushima Canon Inc.	Fukushima
Canon Mold Co., Ltd.	Ibaraki
Hita Canon Materials Inc.	Oita
Canon ANELVA Corporation	Kanagawa
Canon Machinery Inc.	Shiga
Canon Tokki Corporation	Niigata
Nagasaki Canon Inc.	Nagasaki
Canon Medical Systems Corporation	Tochigi

Name	Location
Manufacturing Subsidiaries Outside Japan (21 companies)	
Canon Virginia, Inc.	U.S.A.
Canon Giessen GmbH	Germany
Canon Bretagne S.A.S.	France
Canon Inc., Taiwan	Taiwan
Canon Opto (Malaysia) Sdn. Bhd.	Malaysia
Canon Electronics (Malaysia) Sdn. Bhd.	Malaysia
Canon Hi-Tech (Thailand) Ltd.	Thailand
Canon Dalian Business Machines, Inc.	PRC
Canon Zhuhai, Inc.	PRC
Canon Vietnam Co., Ltd.	Vietnam
Canon Zhongshan Business Machines Co., Ltd.	PRC
Canon (Suzhou) Inc.	PRC
Canon Finetech Nisca (Shenzhen) Inc.	PRC
Canon Machinery (Malaysia) Sdn. Bhd.	Malaysia
Canon Prachinburi (Thailand) Ltd.	Thailand
Canon Business Machines (Philippines), Inc.	Philippines
Océ Technologies B.V.	The Netherlands
Océ Printing Systems GmbH. & Co. KG	Germany
Océ Display Graphics Systems Inc.	Canada
Axis Communications AB	Sweden
Canon Electronics Vietnam Co., Ltd.	Vietnam
Marketing Headquarters Outside Japan	
Canon U.S.A., Inc.	U.S.A.
Canon Europe Ltd.	United Kingdom
Canon Europa N.V.	The Netherlands
Canon (China) Co., Ltd.	PRC
Canon Australia Pty Ltd.	Australia

Other Companies Subject to Reporting (81 companies)

In Japan (22)
Outside Japan (59)

* The scope of third-party verification of GHG includes the 129 companies covered in Canon's consolidated ISO certification and three other companies not included in consolidated certification, all listed above.
* Performance of Canon Medical Systems Corporation included from 2017.



Training session by local trainer at Canon Hi-Tech (Thailand)

Human Rights and Labor Management Approach

Canon respects the diversity of employees, and aims to create workplaces in which employees can express their individuality and work with a sense of worth and achievement.

Why it Matters

GRI102-7 GRI102-11 GRI103-1 GRI103-2 GRI103-15

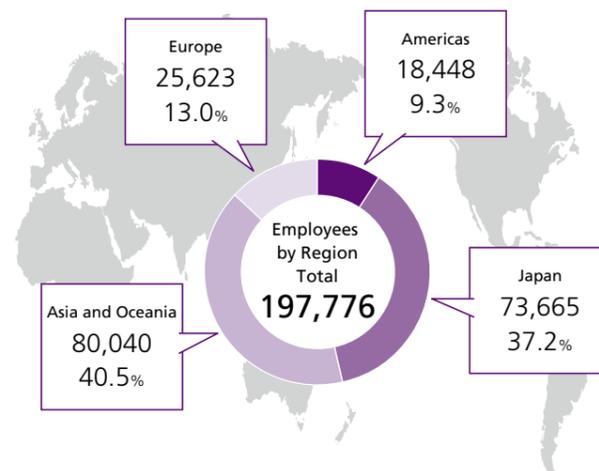
Amid the growing expansion of cross-border economic activities, human rights violations such as unfair discrimination, child labor, and forced labor have become hot-button issues. In the international community, the United Nations 'Guiding Principles on Business and Human Rights' and the International Labor Organization (ILO) 'International Labor Standards' are established, and SDGs are encouraging companies to respect human rights as well.

Canon's corporate philosophy of *kyosei* expresses the desire to achieve a society in which all human beings live and work together for the common good, regardless of differences in culture, customs, language, or ethnicity. Based on this philosophy, Canon develops business activities globally and promotes various initiatives to respect human rights throughout the value chain.

In addition, we believe it is important that we create a workplace environment that allows each employee to realize their full potential. Allowing each employee to make use of their unique strengths and viewpoints leads to increased business opportunities, allowing the company to realize sustained growth.

Our Impact:

Canon Group Employee Numbers (as of the end of 2017)



Canon's Approach

GRI102-15 GRI103-1 GRI103-2

Based on *kyosei*, Canon strives to create a workplace environment that fosters mutual respect among its ethnically and culturally diverse workforce.

In addition to working to ensure full compliance with laws and regulations in each country and region and respect human rights as part of the development of global business activities, under Phase V of the Excellent Global Corporation Plan, Canon has set the cultivation of globally competent human resources as one of its key strategies.

We are stepping up efforts to develop human resources that can provide leadership on the international stage. Moreover, alongside ensuring workplaces to support the health and safety of every employee, Canon also provides varied types of training to assist employees with skills improvement.

In line with this approach, Canon is carrying out various initiatives to address the five material topics presented below.

Overview of Material Issues and Activities in 2017

GRI103-3

Respecting Human Rights

Throughout its 80-year history, respect for the rights of others has been an integral part of Canon's corporate culture, as codified in the Canon Group Code of Conduct. In 2017, we continued to work across the Canon Group to create workplaces that are free of all forms of discrimination and harassment, and to prevent child or forced labor.

Hiring and Treatment of Human Resources

Canon strives to ensure fair treatment of employees as part of retaining high-caliber personnel around the world and enabling them to continue to exercise their abilities. In 2017 also, we extended initiatives aimed at making workplaces more attractive by upgrading employee welfare programs and facilitating better work-life balance.

Promotion of Diversity and Inclusion

In a competitive global environment, Canon believes it is vital to mobilize human resources with diverse skills and talents and continually create new value. Canon actively encourages the fair hiring and promotion of employees, regardless of race, religion, nationality, gender, or age. In 2017, we took steps to support workplace diversity, including initiatives to promote active participation of women, the LGBT community and other sexual minorities at work, support local recruitment across all Canon Group operational sites, and create disabled-friendly workplaces.

Occupational Safety and Health Support

At Canon, the safety and health of employees form the foundation of our business activities, and we established the principle of "health first" shortly after our founding. In 2017, we introduced the Canon Occupational Health and Safety Management System to all Canon Group sites in Japan to upgrade efforts aimed at eliminating workplace accidents. Labor and management continue to cooperate in ensuring workplace safety and supporting the health of workers, maintaining an environment in which every employee can work with peace of mind.

Assisting Talent and Self Developments

Canon supports career development and foster experts in a variety of fields. In 2017, we extended existing initiatives and introduced the Canon Leadership Development Program aimed at cultivating the next generation of leaders within the company.

Related SDGs

Canon's efforts to address the five issues related to human rights and labor are contributing to the achievement of these SDGs (right).

Of these, the goals identified in our stakeholder survey as being of particular importance were SDG 5 and SDG 8.



Respecting Human Rights

Canon respects the rights of every employee and works to ensure that its workplaces are free of all forms of discrimination and harassment.

Prohibiting Discrimination

The Canon Group Code of Conduct prohibits all Group executives and employees, irrespective of their position or duties, from engaging in discrimination based on race, religion, nationality, gender, age or other unfair grounds. To disseminate and ensure understanding of the Code of Conduct, it has been translated into many languages and is also practiced at Group companies outside Japan.

Sections of the Canon Group Code of Conduct (Extract)

Management Stance

- Contribution to Society**
 - Provision of excellent products
 - Protection of consumers
 - Preservation of the global environment
 - Social and cultural contributions
 - Communication
- Fair Business Activities**
 - Practice of fair competition
 - Observance of corporate ethics
 - Appropriate disclosure of information

Code of Conduct for Executives and Employees

- Compliance with Corporate Ethics and Laws**
 - Fairness and sincerity
 - Legal compliance in performance of duties
 - Appropriate interpretation of applicable laws, regulations and company rules
- Management of Corporate Assets and Property**
 - Strict management of assets and property
 - Prohibition against improper use of company assets and property
 - Protection of the company's intellectual property rights
- Management of Information**
 - Management in compliance with rules
 - Prohibition against personal use of confidential and proprietary information
 - Prohibition against insider trading
 - Prohibition against the unlawful acquisition of confidential or proprietary information pertaining to other companies
 - Appropriate use of confidential and proprietary information pertaining to other companies
- Conflicts of Interests / Separation of Personal and Company Matters**
 - Avoidance of conflicts of interests
 - Prohibition against seeking, accepting or offering improper gifts, entertainment, or other benefits
 - Prohibition against acquisition of pre-IPO shares
- Maintenance and Improvement of Working Environment**
 - Respect for the individual and prohibition against discrimination
 - Prohibition against sexual harassment
 - Prohibition against bringing weapons or drugs to the company workplace

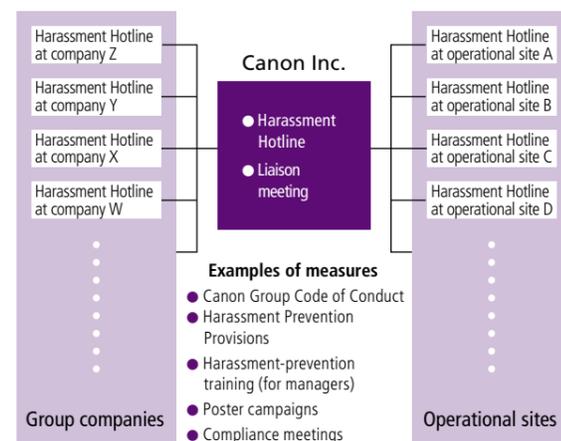
Preventing Harassment

Canon maintains a zero-tolerance policy on harassment, which it communicates to all management executives and employees.

In addition to sexual harassment and power harassment, Canon Inc.'s employment rules and Harassment Prevention Provisions clearly stipulate prohibition of harassment that would amount to so-called maternity harassment and other types of harassment in accordance with new legislation passed in Japan in 2017. The provisions have been disseminated throughout the Canon Group, and many Group companies have instituted similar rules based on them.

In a further effort to maintain a comfortable workplace environment, Canon Inc. and its many Group companies in Japan have established a Harassment Hotline. Confidentiality is strictly maintained and a firm guarantee against detrimental treatment is provided to victims and informants. The number of harassment complaints has remained mostly unchanged in recent years.

Organizational Structure for Harassment Prevention



Regular liaison meetings are held for persons responsible at Canon Inc. operational sites and Group companies, enabling the operational status of hotlines to be monitored and shared. Reviews of procedure manuals are conducted at such meetings, and guidance on how to respond to reports of harassment is also provided on an ongoing basis.

In addition, we periodically conduct employee awareness surveys that enable us to evaluate trends while gathering the opinions of employees. By instituting any necessary measures, managers act to improve the workplace environment.

Educating Employees on Harassment Prevention

Canon conducts a variety of training programs and poster campaigns to raise awareness of harassment issues among employees.

Canon Inc. conducts harassment-prevention training for executives, managers and managerial candidates. The aim is to develop measures to address decreased productivity due to deteriorating workplace conditions, mental health issues, occupational injuries, lawsuit risks and corporate legal responsibilities.

The same training program will be held for staff in charge of Harassment Hotlines at Group companies, who will in turn assist with training employees at their respective companies.

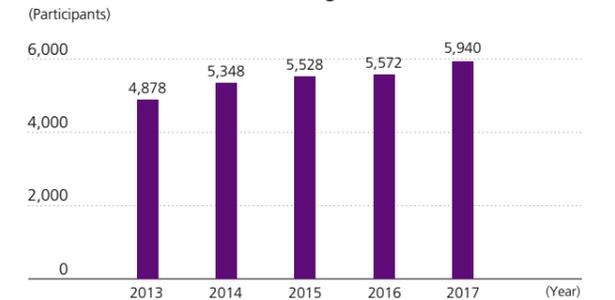
To prevent harassment and raise awareness of hotlines, we created posters for display at Canon Inc. and Group company sites.

In 2018, we are preparing new posters to help foster a better working environment based on the theme "A good atmosphere comes from good relationships."



Posters to raise awareness about harassment prevention

Harassment Prevention Training (Canon Inc.)



Eliminating Child Labor and Forced Labor

All Canon Group companies manage human resources in compliance with the laws and regulations of each country and region in which they operate, as well as Canon's own regulations.

We carry out investigations every year at our manufacturing companies in Asia to confirm their compliance with laws pertaining to child labor and forced labor. To date, no Canon Group company has violated laws relating to child labor or forced labor.

Respecting Basic Workers' Rights, Including Freedom of Association

Canon respects workers' basic rights, including freedom of association and collective bargaining. We also strive to address issues by promoting dialogue between labor and management. In addition, in Canon Group CSR Basic Statement (→P11), we clarify our intent to comply with the laws and regulations of various countries and regions. For example, the labor agreement between Canon Inc. and the Canon Workers' Union commits both sides to work in good faith to find a peaceful resolution to any problems quickly.

Hiring and Treatment of Human Resources

Canon strives to create an attractive, motivational workplace environment for employees.

Basic Policy on Human Resources

To become a truly excellent global corporation, Canon believes that each employee must be an “excellent person.”

In line with its human resource measures, Canon is building a corporate culture that encourages an enterprising spirit by guaranteeing respect for the values of ambition, responsibility and mission, as well as fair and impartial assignments, evaluations, and treatment based on merit. At the same time, we are focused on developing our next generation of leaders.

Guiding Principle of the Three Selves Spirit

The *San-ji* (Three Selves) Spirit has been a central guiding principle for Canon since its founding. The three “selves” refer to 1) self-motivation: proactively taking the initiative; 2) self-management: conducting oneself responsibly and with accountability; and 3) self-awareness: knowing one’s position, roles and circumstances.

Canon encourages all Group employees to embrace the *San-ji* Spirit as they pursue their work with a positive and forward-looking attitude, and promotes this approach at Group companies worldwide.

Globalization of Corporate Culture

Materials explaining our corporate philosophy of *kyosei* and “Three Selves” principles on which Canon’s code of conduct is based are conveniently displayed at many operational sites to help disseminate these ideas throughout the entire Group.

At Canon U.S.A., new employees receive training on Canon’s corporate culture and business policies at the end of their first month. The program ends with participants giving a presentation based on their reflections of *kyosei* and the Three Selves Spirit to aid deeper understanding of our corporate culture.



Training to deepen understanding of Canon’s corporate culture (Canon U.S.A.)

Hiring and Retaining Talent

Canon seeks to hire and retain talent that can drive globalization and innovation in its businesses with the ultimate goal of sustainable growth. With this in mind, we follow a uniform policy for hiring, job placement and human resource development.

In 2017, Canon Inc. and Group companies in Japan embarked on a vigorous recruitment program, resulting in the hiring of 993 employees in total (excluding subsidiaries newly consolidated in 2017). Canon also has established various programs and systems, such as a career matching system (→P94) to support the continued employment of each and every employee so that they remain motivated and can maximize their skills and abilities over the long term. We regularly conduct employee surveys and work to improve employee satisfaction. Thanks to these initiatives, Canon Inc. boasts one of the highest retention rates in the industry. As part of maintaining high job satisfaction, regular

employee surveys are conducted by Canon U.S.A., Canon Europe and Canon Group sales companies based in Asia.

Promoting Globalization of Executive Management

As part of promoting the development of globalized management, Canon appoints appropriate personnel, regardless of nationality, as presidents, executive officers, and managers of subsidiaries in each country and region where it operates.

Ratio of Internationalization in Canon Group Companies Outside Japan (%)

	Americas	Europe	Asia (excluding Japan)
Presidents	28.6	95.7	33.3
Managers	90.3	97.9	89.4

* Share of non-Japanese appointed as presidents and managers (As of the end of 2017)

Canon China actively promotes local employees to managerial positions as part of developing business operations. Local appointees occupied 71% of all managerial positions across the region in 2017, up from 37% in 2013.

Creating Local Employment Opportunities at Production Bases

In order to help stimulate local communities and economies through job creation, we focus on local employment when establishing or expanding production bases.

For example, Canon Prachinburi (Thailand), which started operations in 2013, has hired approximately 5,000 people locally, and Canon Business Machines (Philippines) employs approximately 3,700 local residents (as of December 31, 2017).

In addition, our production bases in Asia have created over 60,000 local jobs since 2007.

Canon ensures that its employees are paid substantially more than the local minimum wage.

Comparison of Canon’s Minimum Wage to Local Minimum Wage

	Japan	U.S.	China
Local minimum monthly wage	143,700 yen	1,257 dollars	1,680 renminbi
Canon Standard minimum monthly wage	166,900 yen	1,924 dollars	2,448 renminbi
Ratio compared to local minimum wage	116%	153%	146%

* Figures represent wages for leading manufacturing companies in each region, not average wages (As of the end of 2017).

Fair and Impartial Compensation System Salary Linked to Duties and Performance

Canon Inc. has introduced a position-based pay system to evaluate and compensate individuals fairly and impartially, regardless of gender or age.

In this system, remuneration is based on duties and performance. Basic pay scales incorporate the level of position in the company based on responsibilities and other factors. An employee’s achievements as well as work-related processes and performance during the year are evaluated to determine annual remuneration. Bonuses reflect individual achievements and company performance.

This system is being applied across the Group worldwide, and has already been adopted by the majority of Group companies in Japan and manufacturing subsidiaries in Asia. Systems for determining compensation based on duties and performance have already been established at Canon U.S.A. and Canon Europe, along with other Group companies in those regions.

Regarding basic salary amounts and increases as well as calculation and payment of bonuses, a committee meets with the Canon Workers’ Union four times a year to check whether remuneration is being paid in accordance with the rules of the labor agreement. The minutes of these meetings are made available to all employees. The committee also facilitates discussions between labor and management on the implementation and improvement of the compensation system.

Canon Europe Certified as Top Employer

In 2017, Canon Europe was certified as a Top Employer in Germany, the Netherlands, Britain, and Spain by the Netherlands-based Top Employers Institute, an international organization that evaluates corporations against global standards. The assessment covers various aspects, including training and development, remuneration, employee benefit programs, performance reviews, and recruitment.



Employee Benefit Programs

Canon offers various employee benefit programs, covering each stage of life from hiring to retirement, enabling employees to lead comfortable and enjoyable lives.

For example, as well as providing staff canteens and sporting facilities, Canon funds or subsidizes programs and clubs that bring together people with shared interests to foster better workplace communication. We host various events for employees and family members that incorporate the local culture and customs of each region. In addition, employee benefit programs have been developed in line with each Group company's needs.

With a view to securing their futures, in addition to national social insurance programs, employees of Canon Inc. and Canon Group companies in Japan are eligible for added benefits that include a corporate pension plan as well as membership in our welfare association and health insurance society. Canon Inc. also offers a voluntary employee stock ownership plan, a savings plan and group life insurance policies, among other benefits.

Corporate Pension Plan

At Canon Inc., we offer employees the defined-benefit Canon Corporate Pension as a form of performance-based pay—a role- and grade-based retirement system—to supplement their public pension and contribute to a more comfortable retirement. A company-run pension fund manages pension assets so employees do not need to provide any additional funds. Other Group companies in Japan have also set up their own corporate pension plans.

Canon Inc. also offers a defined-contribution pension plan, which, coupled with the defined-benefit pension plan, provides solid financial security.

Reducing Total Work Hours

Canon works diligently to ensure that employee work hours comply with the laws of each country and region where it operates, targeting reductions in hours where appropriate.

For example, at Canon Inc., we encourage workplaces to ban overtime in principle and to review work practices. We have also taken measures such as encouraging employees to take paid leave. Annual hours worked per employee were 1,735 in 2017, a reduction of 64 hours compared with the equivalent figure of 1,799 hours in 2010 when we initiated efforts to reduce working hours.

We will continue our efforts to keep total hours worked per year to less than 1,800.

Annual Hours Worked per Employee (Canon Inc.)

	2013	2014	2015	2016	2017
Total hours worked, Canon Inc.* ¹	1,740	1,751	1,762	1,721	1,735
Total hours worked, typical Japanese worker* ²	1,997	1,998	2,009	2,024	2,026

*¹ Regular/post-retirement employee survey data (Canon Inc.)

*² Based on monthly MHLW workforce surveys, excluding part-time workers

Flexible Work Styles

We promote flexible work styles in line with national and regional employment customs. For instance, in 2005, Canon Inc. formulated an action plan following the guidelines of Japan's Ministry of Health, Labour and Welfare (MHLW). Based on this plan, we are encouraging the adoption of flexible work styles while helping employees achieve work-life balance, and taking steps to aid the development of the next generation.

Promoting Flexible Work Styles

Canon Inc. has a number of leave programs that enable employees to take time off flexibly to respond to their personal circumstances.

Main Leave Provisions (Canon Inc.)

Time-unit leave program (in 30-minute increments)	To promote flexible work styles, we have introduced a program in which employees can take leave in 30-minute increments for such reasons as childcare, illness or injury.
Open vacation program	To encourage planned vacations, we have introduced a program in which employees can take five consecutive days of vacation once a year.

In April 2015, we launched the fifth phase of the action plan outlined in the table on the following page. This phase spans the three-year period to March 2018.

Supporting Working Parents/Care Givers

To enable employees to focus on childcare responsibilities with peace of mind, Canon Inc. offers an array of programs, including childcare leave for employees raising children up to the age of three, which go beyond the legally stipulated minimum requirements.

For example, to support the work-life balance of those in our local community, Canon Inc. established Poppins Nursery School Tamagawa. Located on our property adjacent to the Shimomaruko headquarters, the school is certified by the Tokyo Metropolitan Government and open to local residents. Approximately 40 children are enrolled at the school.

Action Plan Phase V (from April 2015 to March 2018)

Action Plan	Measures	Results as of the End of 2017
(1) Promote use of work-life balance programs and raise participation rate.	<ul style="list-style-type: none"> Regularly check the performance of employees using work-life balance programs, and have VIVID*¹ and the Workstyle Innovation Committee work together to consider and implement specific measures before March 2018. 	<ul style="list-style-type: none"> Confirmed that, in addition to female employees, who have made up the majority of those taking advantage of these programs, the trend for use of these programs by male employees is on the upswing.
(2) Make workstyle reform a part of our corporate culture, continue efforts to reduce overtime work, promote use of paid leave, and maintain an appropriate level of total work hours.	<ul style="list-style-type: none"> Use total work hours as an indicator for work-life balance, and in 2015 work to raise awareness of this change internally through visualization techniques, and consider and implement specific measures for 2016 and beyond. 	<ul style="list-style-type: none"> Prohibited overtime work, in principle, throughout the year. Implemented earlier work hours from July–September as a campaign period to promote work-life balance. This was maintained as an opportunity to pursue further improvements to labor practices. Provided employee benefits program for encouraging self-development during the earlier work hours. Total work hours company-wide decreased by 64 hours compared to 2010*².
(3) Carry out community contribution activities targeting children—who are the future of our communities.	<ul style="list-style-type: none"> Continue reaching out to local regions and communities and implement appropriate initiatives from April 2015 to March 2018. 	<ul style="list-style-type: none"> Continuously conducted throughout Japan the following community contribution activities for children <ol style="list-style-type: none"> Unique tutorial program for children, including lessons on lens-crafting and environmental education outreach programs Junior Photographers photography classes Support for girls soccer (Canon Girls-eight, Canon Girls-Camp) Tag rugby lessons and rugby lessons, etc.

*¹ VIVID: Vital workforce and Value Innovation through Diversity, a company-wide horizontally integrated organization for promoting diversity. (→P82)

*² The year that activities to reduce total work hours commenced.

We provide various forms of support to help employees caring for aged relatives, including nursing care leave, sympathy money, and flexible work schedules for care giving.

Hotlines have been set up at each of our operational sites to handle employee inquiries about these systems.

In addition, Canon Inc. conducts surveys on flexible work styles to assess the circumstances and needs of employees, aiming to create a flexible workplace environment.

Main Nursing Care Support Provisions (Canon Inc.)

Nursing care leave	Leave for those caring for aged relatives
System for reducing work hours to support nursing care	Reduction of up to two hours in daily work time to fulfill family care responsibilities

Number of Employees Taking Childcare and Nursing Care Leave (Canon Inc.)

	2013	2014	2015	2016	2017
Taking childcare leave	153 (14)	168 (22)	184 (30)	186 (43)	186 (43)
Using reduced work hours for childcare	169 (9)	144 (7)	142 (10)	132 (4)	122 (11)
Taking maternity leave	19	27	34	30	21
Working reduced hours due to pregnancy	4	6	7	5	2
Taking nursing care leave	12	13	9	15	11
Using reduced work hours for nursing care	5	6	6	4	4
Applications for childbirth support*	263	222	260	248	255

* Number of employees in that year using the system for the first time.

* () Number of male employees.

* Childbirth support includes leave and financial support for fertility treatment.

Return/Retention Rates and Number of Employees Returning from Childcare/Nursing Care Leave (Canon Inc.)

		2013	2014	2015	2016	2017
Returning from childcare leave	Number of returning employees	134 (9)	132 (22)	169 (30)	185 (37)	164 (38)
	Return rate (%)	97.8	100	100	97.3	98.2
	Retention rate (%)	99.2	98.4	99.4	98.8	97.3
Returning from nursing care leave	Number of returning employees	8	13	9	18	6
	Return rate (%)	100	100	100	100	100

* () Number of male employees
 * Retention rate: (The total number of employees who are registered as of 12 months after returning from childcare leave)÷(The total number of employees who returned to work from childcare leave during a previous report period) ×100

Supporting Employees' Volunteer Activities

In recognition of the growing interest in volunteer activities, Canon Inc. established a volunteer leave system in 1994.

Under this system, employees wishing to participate in volunteer activities certified by the company may take up to one year of leave (two years and four months in the case of JICA Japan Overseas Cooperation Volunteers).

Worker-Management Relations

At Canon Inc. and Canon Group companies in Japan, worker-management relations are founded on the principle of prior consultation, that is, finding solutions through thorough discussion. Candid discussions between management and the labor union are held whenever policies that affect wages, working hours, safety and health, and benefit programs are to be implemented.

Every month, Canon Inc. convenes a Central Worker/Management Conference with the Canon Workers' Union* to exchange opinions and information spanning a range of subjects. The conference is attended by the CEO and senior management.

Additionally, special committees have been established to consider wages, working hours, safety and health issues,

and benefit programs. Based on these conferences, new systems are established and policies enacted. As of the end of 2017, combined employee membership in the Canon Workers' Union totaled 27,399, representing 80% of Canon Inc.'s workforce.

Group companies in Japan hold a similar conference, which they refer to as the Canon Group Workers' Union Conference (Canon Inc. representatives also attend). This conference brings together 17 Group workers' unions, including executives from 20 Group companies as well as representatives of the Canon Workers' Union. In 2017, reports on the current situation of both labor and management throughout the Group as a whole were presented. As of the end of 2017, there were 51,567 employees in unions that belonged to the Canon Group Workers' Union Conference.

In accordance with the labor laws of each country and region in which we operate, Canon continuously maintains proper labor relations based on thorough dialogue between labor and management at Group companies outside Japan.

Canon will continue to implement changes based on mutual understanding and trust with the Canon Workers' Union in its pursuit of continuous development.

* The Canon Workers' Union consists of employees from Canon Inc., Canon Marketing Japan, Fukushima Canon and Ueno Canon Materials.

Minimum Notification Period for Changes in Work Duties

Canon Inc. has established a minimum notification period clause within its labor agreement to ensure that personnel transfers do not negatively impact the lives of employees.

Employees receive official notice of personnel transfers at least two weeks in advance for temporary assignments and at least one week for other types of transfers. Employees who need to relocate due to the transfer are officially notified up to four weeks in advance.

Additionally, Canon Group companies inside and outside Japan have established minimum notification periods in accordance with the laws and regulations of the countries and regions where they operate.

Diversity and Inclusion

We aspire to be a company that grows by openly accepting and working with people having different characteristics and perspectives.

Policy on Respecting Diversity

Under our corporate philosophy of *kyosei*, Canon respects diversity globally and actively encourages the fair hiring and promotion of employees, regardless of gender, age, or disability.

In 2012, Canon Inc. established Vital workforce and Value Innovation through Diversity (VIVID), a company-wide horizontally integrated organization to promote diversity.

Three Steps Towards Diversity



Promoting the Active Participation of Women

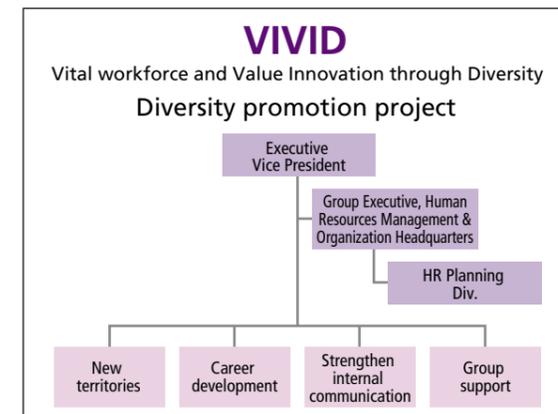
As part of promoting diversity, Canon strives to create a workplace environment in which female employees can more actively participate.

At Canon Inc., we have implemented a number of initiatives to deepen understanding of diversity, including exploring issues using employee surveys and roundtable discussions as well as hosting lectures from outside experts.

Additionally, we are using our company intranet to post interviews with various people, including employees who have remained active in balancing their work with various life events, managers who support their activities, and male employees who have taken childcare leave.

Other initiatives include roundtables where female managers talk about their own life experiences, and back-to-work seminars where employees who have returned after childcare leave review case studies with their managers.

Diversity Promotion Structure



Policies

- Respecting diversity as an important issue, promote the introduction of new systems across the Canon Group rather than seeking to replace existing systems. Strive to change employees' thinking and raise awareness of diversity issues.
- Revise HR policies and workplace conditions to avoid any limitations or restrictions being placed on the career opportunities afforded to talented people with the ambition to succeed.
- Promote internal/external dissemination of information on diversity promotion activities to help identify/develop role models and encourage wider adoption of optimal workplace conditions.

Percentage of Female Employees (Canon Inc.) (%)

Employees	Managers	Executives
15.5	2.6	4.0

(As of December 31, 2017)

Career Support for Women

Canon is committed to providing equal opportunities according to ability and fair treatment for all, irrespective of gender. At the same time, we recognize the need to take a range of measures to promote greater female participation.

One such measure in 2017 was the presentation of an interview with Noriko Gunji, President and CEO of Canon Singapore.

Next-Generation Support Accreditation

The "Kurumin" mark is an accreditation awarded by Japan's Minister of Health, Labour and Welfare (MHLW) to firms providing employees with childcare support, based on the Next Generation Nurturing Support Measures Promotion Law enacted in 2003. Canon Inc. has been accredited each year since 2008, in part due to our use of life plan-based systems and support measures for those returning to work after taking childcare leave.

We also organized leadership training for women as part of efforts to develop female candidates for managerial positions. Using the theme of developing a new business proposal, the training provides an opportunity to develop leadership skills, including awareness, agenda setting and persuasiveness.



Interview with Noriko Gunji, President and CEO of Canon Singapore

Since its launch in 2012, more than 130 women have completed leadership training and are playing active roles in their workplaces, including at overseas locations.

Such initiatives are helping to close the gender gap in management gradually. The number of female managers had risen to 114 by 2017, compared with 58 in 2011.

Group Company Activities

Since 2016, activities to promote active participation of women under VIVID have been extended to all Group companies in Japan. Conferences attended by each company's president and head of human resources have been organized to act as a catalyst for the adoption of initiatives to promote the active participation of women at Group companies in Japan.

In 2017, our Group policies in this area were reformulated. Activity plans and outcomes are being shared annually at meetings of company presidents to help promote initiatives across the Group.

Group companies in Japan are taking a range of steps to support women's career development, including using roundtable discussions and surveys to gauge awareness, and organizing career training and courses for women who have returned from childcare leave. For example, at Canon Components, Inc., we are organizing the committee to



Meeting of committee to promote female participation at Canon Components, Inc.

promote female participation.

In addition, to support higher levels of male participation in key life events, we have disseminated interviews with, and organized seminars by, men who have taken paternity leave. Handbooks on related systems have been distributed.

In addition, Canon U.S.A carries out activities to promote diversity and inclusion based on our philosophy of *kyosei*. As part of its activities to promote the active participation of women, Canon U.S.A. created a Business Resource Group (BRG) named Women in Leadership Levels (or WiLL for short). This project supports women's participation through a variety of opportunities, including networking events, lectures and mentoring.

Since 2016, Canon India has held a series of "Ladies Power Lunch" events to enable female employees from various divisions to discuss issues with the CEO. Four lunches were held in 2017 involving a total of 26 female employees. The discussions with management at these events focused on issues such as corporate expectations of women, ways of increasing motivation, and the support required for female career development. Some specific changes have resulted, including various revisions to maternity leave system regulations.



Ladies Power Lunch at Canon India

LGBT Community and Other Sexual Minorities

The Canon Group Code of Conduct emphasizes respect for the individual and prohibits discrimination based on race, religion, nationality, gender, age, or sexual orientation. Our initiatives cover sexual minorities, including the lesbian, gay, bisexual and transgender (LGBT) community.

With the goal of eliminating all forms of discrimination from the workplace, training for managers includes education on preventing discrimination. Companywide understanding is ensured by holding compliance meetings at the workplace regularly.

With regard to provisions for employees belonging to LGBT community and other sexual minorities, Canon provides such amenities as barrier-free washrooms and private dressing rooms. We also have an internal hotline for employees wishing to speak with a specialist counselor.

Workforce Globalization

Canon is working to establish a Three Regional Headquarters management system in Japan, Europe and the U.S. as part of Phase V of the Excellent Global Corporation Plan. We are now widely searching for talented human resources from around the world to support this system.

As part of these efforts, for example, Canon Inc. has opened the door to international students as part of its regular hiring activities. Non-Japanese nationals are hired as contract workers for specialist positions to utilize their specialized knowledge, skills and experience.

Utilizing the Abilities of Veteran Employees

Canon Inc. makes full use of the wealth of knowledge and skills of its veteran staff. In 1977, a time when the retirement age at most Japanese companies was 55, Canon Inc. was one of the first companies in Japan to set its retirement age at 60. In 1982, we introduced a system for re-employing retired employees until the age of 63.

In 2000, we partially revised our system for re-employment after retirement and introduced a system of open recruitment internally for re-employment posts.

Further, we raised the age limit for re-employment to 65 in 2007. A variety of positions with different work environments and working conditions are made available to employees who request re-employment after retiring. These veterans work effectively, putting their experience and expertise to good use in various ways, including as prior-art technology examiners, promoters of intellectual property, career counselors, and quality or environmental inspectors.

As of the end of December 2017, there were 1,059 rehired employees in total, of which 306 were rehired in 2017.

Proactive Support for the Participation of People with Disabilities in Society

Respecting the ideal of normalization* advocated by the United Nations, Canon proactively employs persons with disabilities at Canon Inc. and Canon Group companies in Japan.

For example, at Canon Inc., we have been proactive in employing persons with disabilities for many years. We are doing our utmost to make workplaces more comfortable and accessible for people with disabilities by improving our facilities, including providing greater barrier-free access. Additionally, we are working to expand the range and nature of jobs for people with disabilities, while also ensuring that they are settling into and becoming active members of their assigned workplaces. Canon has incorporated hands-on workplace learning experience into the selection process to ensure that new hires can contribute quickly after they are hired and assigned to a workplace. Canon Wind primarily hires people with intellectual disabilities. In addition to maintaining a high employee retention rate, this employment helps us realize our corporate philosophy of *kyosei*.

Activities to Promote Female Participation at Fukushima Canon

Fukushima Canon organizes lectures and seminars by experts as part of an initiative to change the mindset of managers and female employees. Besides introducing a childcare leave system for employees with children up to three years of age, the company has also tried to make working conditions more compatible with raising children, such as by providing parking spaces and lockers for pregnant employees.

In recognition of such efforts, Fukushima Canon has received an award from an organization representing an alliance of 13 prefectural governors in the region in 2017. It has also earned the "Kurumin" mark, an accreditation awarded by the Ministry of Health, Labour and Welfare to firms that provide employees with childcare support. Fukushima Canon is the first company in Fukushima Prefecture to gain the mark three times.



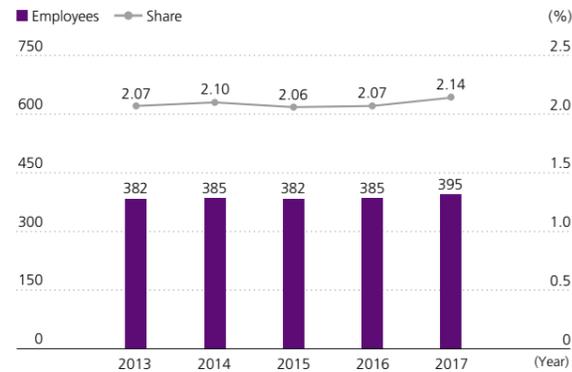
Award presentation at the Fukushima Prefecture Government Office

Canon Inc. and Group companies in Japan have set up onsite hotlines after the 2016 amendment of the Promotion of Employment of Disabled Persons Law prohibiting discrimination and mandating reasonable consideration for people with disabilities. Canon's measures to prevent discrimination against disabled people and ensure reasonable consideration at each site include providing individual consultations and personalized assistance or instruction during evacuation training drills and disaster preparedness training. In 2018, Canon Inc. established a dedicated internal unit with the aim of reinforcing and upgrading such support.

Since 2004, Canon Inc. and Canon Group companies in Japan have organized training courses and created e-learning modules to ensure workplaces are attentive to the needs of the hearing-impaired. The training covers communication methods and provides knowledge of hearing disorders to help promote smooth working arrangements. A total of 651 people participated in this training up to and including 2017.

* The principle of normalization: According to the World Programme of Action concerning Disabled Persons adopted by the United Nations in 1982, society is made up of many different types of people and it is normal for people with and without disabilities to coexist in all settings. Therefore, we should create an environment in which all people can live and work together.

Number and Percentage of Employees with disabilities at Canon Inc.



(As of June 1 each year)

Canon Wind employee attended the Abilympics

The Abilympics (officially known as the National Skills Competition for Persons with Disabilities) is a competition to improve the vocational skills of persons with disabilities and raise the awareness of society at large. Canon provides support for employees to compete at this event. At the 37th Abilympics in 2017, Emi Kubo from Canon Wind represented Oita Prefecture in the product packing category. This was her first appearance at the national competition. Canon Wind is a subsidiary of Oita Canon formed in 2008 as a joint venture with the Social Welfare Corporation Gyoun Welfare Association with the aim of promoting employment for persons with intellectual disabilities. This unique initiative, which aims to open up new areas of work for people with disabilities through manufacturing knowledge, is attracting attention.



Emi Kubo of Canon Wind competes in Abilympics

Various activities for realizing kyosei

Canon holds various activities themed on our corporate philosophy *kyosei* in order to deepen understanding on diversity for our employees.

In November 2017, about 170 employees attended a lecture by para-triathlete Yukako Hata from Canon Marketing Japan Inc. (Mars Flag, Inage Inter; ranked third in the world as of May 2018).



Yukako Hata speaking about her experiences

Occupational Safety and Health Support

We pursue initiatives aimed at improving occupational safety and health so employees can feel safe and secure in their work environment.

Policy and Structure

At Canon, the safety and health of employees form the foundation of our business activities. Adhering to the principle of "management without safety is not management," labor and management work hand in hand to support safety and health. In line with this principle, we have established detailed rules and regulations regarding occupational safety and health (OSH), which are also reflected in agreements with labor unions.

Canon has established the Central Safety and Health Committee as its highest body overseeing health and safety. Chaired by the senior executive in charge of OSH, the committee establishes policies and medium-term plans regarding safety and health primarily at Group companies within Japan, while also promoting the elimination of occupational accidents, the maintenance and improvement of health, traffic safety, fire and disaster prevention, and the creation of pleasant workplaces. Overseas, mostly at production bases in Asia, we conduct safety and health activities with consideration given to specific circumstances in each region and at each company.

Occupational Safety

Creating Workplaces Where Employees Feel Safe and Secure

Canon strives to prevent occupational and health hazards, creating workplaces that allow each employee to maximize their performance.

Specifically, the Central Safety and Health Committee prepared a medium-term (three-year) plan containing the following initiatives for achieving an ideal workplace.

Priority Initiatives of Medium-Term Plan

1. Implement the Canon Occupational Safety and Health Management System
2. Ensure no serious machinery-related accidents occur
3. Halve the number of falls and other non-occupational accidents

Recognition as Certified Health & Productivity Management Organization

In the Certified Health & Productivity Management Organization Recognition Program run by Japan's Ministry of Economy, Trade and Industry (METI) and Nippon Kenko Kaigi since 2017, Canon Inc., Canon Marketing Japan Inc. and Canon IT Solutions Inc. have been accredited in the large enterprises category (known as "White 500").

This program aims to give social recognition to companies engaged in managing employee health from an economic and strategic perspective. Canon Marketing Japan Inc. was also recognized in the Health & Productivity Stock Selection, a program in which METI and the Tokyo Stock Exchange select and introduce attractive enterprises (one from each industrial sector) to investors who prioritize improvement in corporate value from a long-term perspective.



Implementation of the Canon Safety and Health Management System

In the past, Canon implemented the Occupational Safety and Health Management System (OSHMS) of the Japan Industrial Safety and Health Association (JISHA), mostly at its production bases in Japan.

Aiming to improve on OSHMS, Canon Inc. launched the Canon Safety and Health Management System, which promotes its own occupational safety and health activities, meets JISHA-style OSHMS requirements, and clearly reflects Canon's standards and rules.

The system was introduced and began operating at all Canon Group sites in Japan in 2017. We have also introduced initiatives to cultivate best practice across all sites based on reciprocal supervision as well as measures to tackle a variety of issues. We plan to promote the gradual introduction of the system as a way of upgrading OSH activities across the entire Canon Group with the aim of preventing workplace accidents, improving workforce health, and creating pleasant workplace environments.

Ensure No Serious Machinery-Related Accidents Occur

At our production bases in Japan, we carefully conduct risk assessments according to standard criteria. Based on the results, we conduct follow-up checks with the aim of reducing residual risk. The primary focus is to eliminate any serious machinery-related accidents.

The training program for machinery and equipment technology launched in 2016 was continued in 2017, featuring the promotion of safety measures to deepen employee understanding of production machinery by OSH representatives. We assessed the status of Canon's Machinery Accident Prevention Standards that focus on the prevention of serious accidents involving employees being caught by or pulled into machinery, and worked to promote greater machinery-related safety by implementing revised standards.

We will continue a range of initiatives to ensure that no serious machinery-related accidents occur, including regular checks of machinery.

Halve the Number of Falls and Other Non-Occupational Accidents

Canon Inc. and key Group companies in Japan are working diligently to prevent non-occupational accidents. These are accidents that can occur in everyday life, such as tripping in a hallway or falling when going up or down stairs.

In 2017, we collected experiences about scares and close calls in the workplace. Based on these experiences, we implemented better practices to improve safety, such as clearly marking potential hazards on floor plans and instituting measures to support internal sharing of related information. We are also working to cultivate greater safety awareness among Canon Group employees through various activities such as disseminating regular OSH bulletins.

Through such measures, we will continue working to improve the safety awareness of all employees.

Numbers of Occupational Accidents (Canon Inc., Key Group Companies in Japan)

	2013	2014	2015	2016	2017
Accidents requiring time off work	13	19	25	18	22
Accidents not requiring time off work	132	133	110	112	101

Frequency of Occupational Accidents (Canon Inc., Key Group Companies in Japan) (%)

	2013	2014	2015	2016	2017
Frequency rate	0.13	0.20	0.25	0.18	0.22
Severity rate	0.003	0.108	0.007	0.006	0.006

* Frequency rate indicates the prevalence of occupational fatalities and injuries per 1 million working hours.
 * Severity rate indicates the degree of the disaster with the labor loss days per 1,000 total of working hours.

Addressing Work with High Risk of Injury, Illness or Accident

Canon engages in various OHS-related risk assessment activities, centered on its production bases in Japan. Workplace managers and people in charge of operations and risk assessments undergo group training in advance to learn and enhance their understanding of assessment methods according to Canon's uniform standards. By making regular visits to worksites and reviewing assessments, we work to maintain and enhance the risk management system.

Conducting repeated risk assessments in this way enables us to identify operations with a high risk of injury, illness or accident. By taking appropriate measures to

mitigate risk and manage residual risks, Canon endeavors to prevent occupational accidents.

In addition to distributing protective gear and conducting advanced training, we focus particular attention on injuries caused by employees being caught by or pulled into machinery. We address this issue within our medium-term plan and take rigorous measures to prevent such risks.

It is also important to prevent the risk of illness arising from work that involves exposure to chemical substances. Besides providing practical training on handling chemicals for those involved in routine manufacturing operations, we have also introduced uniform standards across the Group for the management of chemical substances. We strive to ensure full regulatory compliance in this area. In Japan, we have systems in place so we can respond quickly to any reports of illnesses caused by exposure to chemicals not regulated by the Occupational Health and Safety Law.

In addition, for tasks involving heavy manual labor, we have rules for worker safety that place limits on maximum permitted physical loads.

Initiatives to Improve Safety and Health at Overseas Group Companies

Canon is working to implement an occupational safety and health management system overseas on the same level as Japan, with a focus on production bases.

Three companies—Canon Zhuhai, Inc., Canon Hi-Tech (Thailand) Ltd., and Canon Opto (Malaysia) Sdn. Bhd.—adopted an occupational safety and health management system based on the international standard OHSAS* 18001.

Canon will continue to work on advancing the level of its safety and health activities outside Japan through the active exchange of information to strengthen ties with safety and health managers at overseas Group companies.

* OHSAS: Occupational Health and Safety Assessment Series

Health Support Health Management Based on "Health First" and the "Three Selves Spirit"

Since its founding, Canon has endeavored, based on the principles of "health first" and the "Three Selves Spirit" to create workplaces where employees can focus on their work with peace of mind. We aim to assist employees in knowing their own health (self-awareness), taking action to improve their health (self-motivation), and continuously managing their progress (self-management).

Canon believes that initiatives based on the "health first" principle can lead to a stable workforce and help

individual members of that workforce reach their full potential. We therefore consider such initiatives a driving force in the context of company operations and systematically and actively promote physical health-support measures.

For example, the Central Safety and Health Committee (→P86) periodically prepares and implements a medium-term plan. The plan includes various types of medical check-ups (annual employee health checks are mandatory for Canon Inc. and all Group companies in Japan) and stress checks, in line with government regulations. We have established standards for their implementation, as well as post-measures, and conduct careful, individual follow-up checks as well. To prevent overwork, we coordinate with the health support department and human resources department on appropriate management of working hours. All employees with potential health issues have consultations with and receive instruction from a doctor according to the Group's internal standards, and we strive to prevent health issues or respond to them as soon as possible when they occur. In addition to these measures, we pay special attention to the following four key items.

In 2017, we created a website for employees of Canon Inc. and Canon Group companies in Japan that brings together a range of health-related information. We also initiated a program aimed at raising the health consciousness of employees working for Canon Inc. and Canon Group companies in Japan and international secondees working at Group companies outside Japan when they reach the ages of 25, 30, 35, 40, 45 or 50.

Medium-term Plan: Four Key Items

1. Education and awareness activities for all employees by age group
2. Mental health-related measures
3. Measures against lifestyle diseases
4. Cancer-related measures (early detection and treatment of cancer, regular review of diagnostic systems to ensure effectiveness)

We also actively collaborate with the Health Insurance Union on effective measures to deal with medical fees, with a focus on preventing progression of lifestyle diseases.

Measures for Achieving Mental Health Through Self-Care

To promote comprehensive mental health measures, Canon effectively conducts a variety of programs in Japan that incorporate four care and three prevention guidelines.

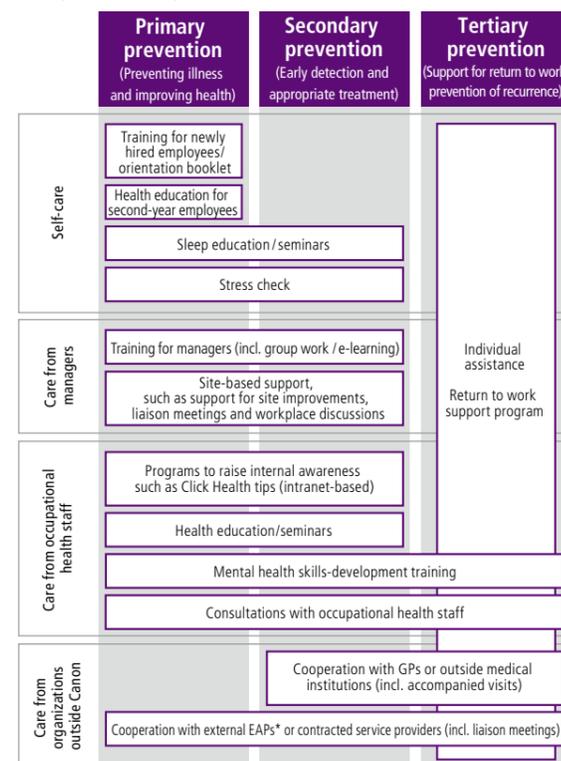
In recent years, we have conducted stress checks and focused attention on employee and manager education and the training of occupational healthcare staff, including human resource staff members.

Applying the revised Occupational Health and Safety Law of 2015, we continued efforts in 2017 to create an encouraging atmosphere for taking stress checks, using posters and other media to increase awareness of the system.

At the same time, we expanded e-learning training that was previously only for managers to regular employees, including those on overseas assignment. The participation rates for managers and regular employees were 92.6% and 88.5%, respectively.

Elsewhere, to strengthen our support for employees taking leave, we reviewed our existing programs for supporting employees' return to work. By facilitating communication and cooperation between relevant parties, including families, GPs, work colleagues, occupational health physicians, HR representatives and support staff, from the time an employee goes on leave until some time after they have returned to work, we have established a system of measures to reduce the number of leave days taken and prevent leave recurrence.

Mental Healthcare System for Canon Inc. and Group Companies in Japan



* EAP: Employee Assistance Program

Mental Health Education Programs

Employee Education	We provide mental health training to employees in their first and second year of employment. This training informs employees about self-monitoring and lifestyle improvement methods, as well as approaches to stress reduction. The training also covers support systems both inside and outside the company. In addition, we hold self-care seminars based on the unique needs of each operational site.
Mental Health Training for Managers	We host mental health training for all managers. This training covers methods of communication and points of caution with the aim of reinforcing the importance of managing their own health while also working to create healthy workplaces. We standardized the training curriculum across the Group and offer e-learning to make it easier for managers to participate.
Nurturing Occupational Healthcare Staff	We have held mental health skill-development training for occupational healthcare staff since 2013 to strengthen their response, support, and teamwork abilities. We conducted this training four times in 2017, focusing on the topics of reduced leave and difficult cases. Almost all human resource and health support managers working at Canon Inc. or Group company operational sites in Japan have received this training.

Measures to Prevent Lifestyle Diseases or Prevent Their Progression

Canon Inc. and Canon Group companies in Japan carry out lifestyle checks during regular annual medical examinations with the aim of preventing lifestyle diseases. Based on the results of these checks, we have set improvement targets for each company in order to help employees improve their health and prevent the progression of lifestyle diseases that may already be present.

In 2017, Canon extended the awareness program conducted in 2016 to educate employees about the links between quality of sleep and productivity at work. As part of the program, employees with sleep-related anxiety were provided with equipment to help visualize sleep quality, and personalized guidance was provided to employees at high risk of developing sleep apnea syndrome. Our annual survey of employees showed higher awareness of the benefits of good sleep, with 63.3% reporting a "feeling of rest from sleep" (an increase of 10 points over 2007 figure when we started the survey).

In 2016, Canon Inc. and Canon Group companies in Japan banned smoking at all operational sites. The reported smoking rate for Group companies in Japan in 2017 was 23.8%, a 3-point decline compared with 2015.

Cancer-Related Measures in Cooperation with Canon Health Insurance Union

In terms of cancer-related measures, Canon works together with the Canon Health Insurance Union to conduct primary prevention in the form of raising awareness and encouraging employees to improve their lifestyles, secondary prevention in the form of early detection and treatment, and tertiary prevention in the form of appropriate treatment and assistance with work-treatment balance. Canon also strives to raise awareness of cancer screening and to maintain an environment that makes it easy for employees to undergo screening.

In 2017, we continued efforts to offer ongoing encouragement and support and to build more effective cancer screening systems centered on the Canon Health Insurance Union. We plan to conduct a communication/awareness campaign targeted at employees prior to the launch of an upgraded system. Efforts will also continue to reduce the number of employee deaths from cancer and to keep medical fees in check.

Expansion of Health Management Programs at Group Companies Outside Japan

Canon conducts various health management programs at its Group companies outside Japan as part of its health promotion initiatives for employees. Each Group company also actively conducts its own initiatives suited to the characteristics of the company.

An occupational health physician from Canon Inc. has made a total of 17 visits to Group company sites in Asia to help upgrade the health management systems provided for local employees and those on temporary transfer. The consultants evaluated the health support systems on offer in each region, based on visits to local medical institutions to see differences in medical standards and discussions with employees on temporary transfer. As part of the health management provided by overseas Group companies in Europe, the Americas, Asia and Oceania, regular teleconferences are also held with local HR management to share relevant information and determine what assistance each region requires.

This approach ensures the smooth global development of policies and plans related to OHS and health management, while enabling support to be tailored to regional circumstances and needs.

In 2017, we also conducted an OHS and health management audit covering 16 overseas Group sites to assess the status of Canon's OHS programs outside Japan. The information gained will be used to support health management activities in these regions.

Examples of Health Management Programs at Group Companies Outside Japan

Group Companies	Health management policy/event
Canon China	<ul style="list-style-type: none"> Regular health checks Health information newsletter EAP services
Canon Inc., Taiwan	<ul style="list-style-type: none"> Aerobic exercise promotional event Healthy eating class Blood-pressure management class Dieting-related event
Canon Opto (Malaysia)	<ul style="list-style-type: none"> Blood drive Health consultation Health seminars
Canon Hi-Tech (Thailand)	<ul style="list-style-type: none"> Lifestyle habit improvement program (covering diet/exercise, etc.) Healthy cooking class (for general workers and staff working in canteen)
Canon Vietnam	<ul style="list-style-type: none"> Health consultation with doctor Lecture on women's diseases Lecture on pregnancy Employee dormitory programs: yoga, karate
Canon Giessen	<ul style="list-style-type: none"> Health promotion program
Canon Bretagne	<ul style="list-style-type: none"> Nutrition class Exercise class
Canon Virginia	<ul style="list-style-type: none"> Cholesterol seminar Food labels seminar Diet seminar Holiday eating seminar



Health seminar at Canon Opto (Malaysia)

Human Resource Development and Personal Growth

We provide every employee the opportunity to build and advance their career.

Human Resource Development System

One of the key strategies in Phase V of the Excellent Global Corporation Plan is to cultivate globally competent human resources capable of performing duties while maintaining a global perspective. Under this key strategy, Canon is developing human resources that can contribute to its global operations in various fields, such as management, technology development, and manufacturing.

Developing Globally Minded Personnel

With 383 operational sites* worldwide as of the end of 2017, the globalization of Canon's operations is proceeding apace. Against this backdrop, we are stepping up training to develop a globally minded workforce, given the urgent task to develop human resources with leadership abilities that can be utilized on the international stage.

* The number of operational sites includes consolidated subsidiaries and equity-method affiliates.

Enhancing Senior Leadership at Group Companies Outside Japan

Canon offers Global Leadership Training to senior management of Group companies outside Japan in order to share the company's management philosophy and develop leaders skilled at innovation in a global environment.

Vitalizing Human Resources Through International Assignments

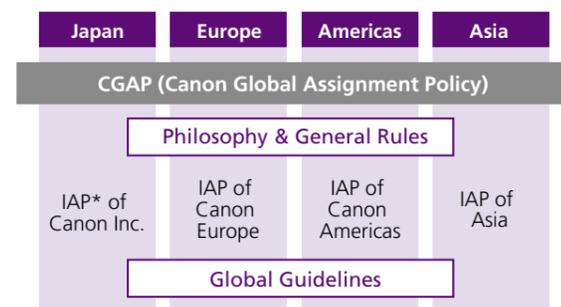
Canon established the Canon Global Assignment Policy (CGAP) as an international assignment system for its Group companies worldwide to stimulate international personnel exchanges, not only from Japan to other countries, but also from other countries to Japan, and internationally between the US and Asia, for example. The goal of this program is to promote global business cooperation and the development of human resources capable of functioning at the global level.

CGAP is a global personnel policy shared by our Group companies, and personnel assignment policies in each respective region are based upon it. Combining these policies allows us to further promote personnel exchanges and to share basic philosophies and structures, while providing for flexibility in dealing with the special characteristics of each region, such as laws and culture.

For example, in Europe and the United States we have the US/Europe Exchange Program, which enables employees with at least three years of service to participate in a personnel exchange for a period of one year, and in Asia we have the ASIA CGAP, which is a one-year training program in Europe and the United States for developing executive management candidates from Asia.

As of the end of 2017, a total of 1,286 employees were deployed on international assignments under these programs.

Canon Global Assignment Policy (CGAP)



* IAP: International Assignment Policy

Numbers on Assignment Under CGAP (as of the end of 2017)

From \ To	Americas	Europe	Asia and Oceania	Japan	Total
Americas	0	4	0	2	6
Europe	3	17	1	1	22
Asia and Oceania	0	1	37	37	75
Japan	363	179	641	0	1,183
Total	366	201	679	40	1,286

Internationalization Training for Young Employees

In order to help employees acquire language and international business skills, Canon Inc. has established a system to allow employees to gain overseas work experience early in their careers.

For example, the Asia Trainee Program enables recruits who are 30 years old or younger to engage in practical study at local companies in Asia. After about five months of language training at university, the trainees spend about

one year gaining practical experience at Asian affiliates. The program started in 1995, and by the end of 2017, cumulative 106 employees had taken part.

The Europe-US Trainee Program dispatches young employees to Europe and the United States. Started in 2012, the program had thus far provided training to a total of 52 employees, up to the end of 2017. For employees dispatched to non-English speaking areas, we offer language education and practical training similar to the Asia Trainee Program, and expect that they will play an important role in developing our business in such markets as South America and Russia.

The Overseas Study Program for Technicians is intended to develop engineers and technicians who can function internationally, as well as enable them to acquire skills that they can use to contribute to Canon's core businesses in the future. This program began in 1984, and up to the end of 2017, a total of 114 employees had participated in the program, studying at universities in the US and Europe. In line with our strategy to improve our R&D organization in the US and Europe, we plan to select approximately 10 employees each year for overseas study.



Asia trainees at a local Canon subsidiary in Asia

Fostering Experts in Various Fields

Development of Human Resources in Engineering

Canon promotes the retention and development of engineering human resources in order to continually generate innovation as a manufacturer.

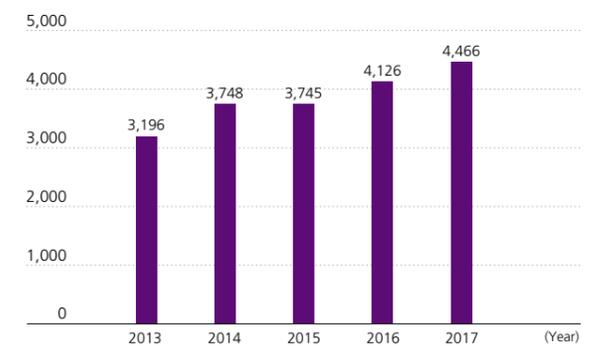
For example, Canon Inc. has training systems in place for each of its specializations, including machinery, electronics, optics, materials, and software, to support the development of next-generation human resources in engineering.

A committee for the development of engineering human resources has been set up for each of the five core specializations noted above. These committees develop rank-based training programs, from new hires to junior engineers and all the way up to veteran leaders, as well as conduct courses and carry out other initiatives. We also

offer training in specialized areas not represented by these committees, such as analytical technology.

In 2017, a total of 162 programs and 290 classes were held in these specializations, with 4,466 engineers from Group companies in Japan taking part.

Number of Participants in Technical Training



* Including participants of WBT (Web Based Training) from 2014

Development of Global Human Resources in Manufacturing

At Canon, we seek to foster skilled manufacturing personnel at each overseas production site as we press on toward sustainable development of a global production system in harmony with the international community.

Specifically, we are focusing on developing human resources who support production activities, mainly through the Monozukuri Advancement Center of Canon Inc. In 2017, a total of 566 employees who work in overseas production sites took part in training programs organized by the Monozukuri Advancement Center.

In order to promote training at overseas sites, Canon also focuses on instructor-development training that seeks to develop instructors for technological and technical skills training as well as workplace management training. In 2017, instructor-development training was held on 22 occasions, with a total of 96 employees participating.

In 2017, as part of using diverse training approaches, we began distance training utilizing a dedicated video conferencing system to provide a link with overseas sites for sharing information in real time. Over the year, a total of 195 employees took part in 15 distance-training sessions at 7 sites outside Japan.

A technical skills testing program, featuring the same standards as in Japan, has also been established at overseas sites with the goal of improving technical skills development.

In 2017, testing was carried out for seven types of work skills, including injection molding, board mounting, and

pressing, at a total of 11 sites in Thailand, Vietnam, China, and Malaysia, with 455 employees participating.

Canon Inc.'s Human Resource Development System

To motivate employees and enhance skill specialization, Canon Inc. maintains an educational system for rank-based, elective and self-development training.

Rank-based training enhances knowledge and skills required for carrying out the duties of each job grade, and fosters awareness of required actions defined by our guiding principles. Furthermore, general employees take business skills training as a supplement to rank-based training. Elective training supports employees' acquisition of knowledge and skills necessary for fulfilling their duties, and self-development training provides participants with knowledge and skills for their personal development.

These training programs also cover such issues as harassment prevention and compliance in order to develop trustworthy employees.

Our goal is to further reinforce efforts to systematically cultivate the next generation at Canon, concentrating on the development of management-oriented, globally minded and technologically skilled human resources.

Canon Inc.'s Career Development Support Programs

■ Enhanced Management Training

In 2017, we instituted the LEAD Program (Canon Leadership Development Program) aimed at cultivating the next generation of Canon's leadership. With LEAD, based on assessments of suitability at each level of management, we aim to provide the right training to managers before promotion to executive posts. The focus is on fostering leadership abilities based on a business-oriented mindset while also reinforcing other management skills.

■ Regular Performance and Career Reviews

Under the position-based pay system, we evaluate the conduct of each employee as well as the extent to which assigned duties are fulfilled, with the results reflected in wages and human-resource development initiatives. Supervisors assign duties to their employees at the start of the year and both parties meet in an interview format to discuss and verify the details. During a mid-year interview, the supervisor checks on progress and adds or removes duties and revises targets as needed. At the end of the year, both parties evaluate the achievements for that particular year.

Evaluations are based on two factors: first, the extent to which an employee fulfills assigned duties, basically focusing on work results and the processes used to reach those results; and second, whether their actions meet expectations as an employee of an "excellent global company." When discussing the evaluation, supervisors offer advice and guidance on improving results and the employee's conduct. This enables employees to objectively understand their own strengths and weaknesses, which aids them in achieving further growth. Also, during the interviews, supervisors and employees discuss career matters, providing supervisors valuable insight into the career vision and aspirations of employees, which they can then utilize in future development plans.

■ Career Matching System

Canon Inc. has also established an internal career matching system to support its employees in pursuing satisfying careers. The system matches the right people to the right jobs, promotes internal mobility of human resources, and brings greater vitality to the company. In 2017, 116 employees were transferred through this system.

In 2015, we launched a career matching system featuring a combination of internal recruitment and training. Employees who do not have the experience to do so but wish to take on new work challenges can apply through our "training-type" career matching system. This system provides training opportunities to gain requisite skills, and then offers positions based on their skill level. The training period is up to five months, depending on the type of work. In 2017, 17 employees were transferred to new workplaces under this system.

■ Other Career Development Support

Canon Inc. offers various e-learning courses throughout the year to encourage personal development and assist those with career development aspirations. Since 2014, from July to September, we have also set our work hours forward half an hour, and organized self-development support

events for better work-life balance. We provide seminars outside work hours to assist employees in learning a language, gaining a qualification or promoting their health. Many employees take part in these various activities.

Canon also provides learning opportunities to employees unable to attend training due to locational or time constraints. We ensure all sites have the same access to events, by dispatching in-house instructors, for example.

On average, Canon Inc. employees spent about 18 hours in training in 2017. Related training costs per employee incurred by Canon amounted to ¥167,000.

Self-Development E-Learning Programs

	2013	2014	2015	2016	2017
Number of programs	52	199	318	343	307
Number of participants	746	6,766	9,999	9,938	5,987

2017 Event Report

Theme	Event name	Number of sessions	Participants
Language skills	English ability diagnostic test	7	291
Global awareness	Cross-Cultural Exchange Seminar	2	50
Interpersonal skills	Motivational seminar	7	504

■ Post-Retirement Career and Life-Plan Training

Canon holds Creative Life Seminars for employees when they reach the ages of 45, 50, and 54 in order to help them plan for their retirement years. By providing employees with an opportunity to think about their life plan and career plan at an early stage, we help them to systematically plan and prepare for life after the age of 60. The content of the Creative Life Seminar varies according to the age of attendees. The first seminar focuses on financial planning for stable living in the future. The second helps participants to build an optimized career plan for the rest of their employment and subsequent retirement. The third addresses life planning from various perspectives, including personal development after retirement, budgeting, health, etc.

Career and Life Plan Seminar Participants in 2017

	45-yr-olds	50-yr-olds	54-yr-olds
Participants	171	403	1,106 (774 employees, 332 spouses)

Canon Inc.'s Human Resource Development System

Job Grade / Position	Rank-based Training	Selective Programs	Elective Training (incl. e-learning)	Self-development	
M	Group Executive	Canon Management School			
	Senior General Manager/ Plant Manager	Principal Staff Engineer	LEAD III	Global Leadership Training, Training for Group company presidents	
	General Manager	Senior Staff Manager	LEAD II	Training for production managers	
	Manager	Staff Manager	LEAD I	Training for overseas managers	
G	Assistant Manager/ Foreman	Senior Engineer/ Associate Staff Manager	Training for newly appointed assistant managers and foremen	Production-related department training	
			Training for newly appointed G4 level employees		
			Training for newly appointed G3 level employees	Training for global staff	
	General employee		Training for newly appointed G2 level employees	Asia/Europe-US Trainee Program, Overseas Study Program for Technicians	
T			Training for newly appointed G1 level employees		
			Training for newly hired employees, Training for mid-career hires		
Unofficial graduate hires			Online course for unofficial graduate hires		

Promoting CKI Activities for Individual and Organizational Growth

While reinforcing its guiding principle of the *San-ji* (Three Selves) Spirit, Canon is also promoting CKI*1 activities to help realize individual and organizational growth at the same time as delivering operational results.

Canon introduced technology KI*2 in 1999 as part of moves to promote organizational vitality led by a specialist subcommittee of the Business Reform Committee focused on development systems. The project was later upgraded to the organizational level in 2004, with efforts led by in-house consultants starting to assist more energized communication and enhanced business process transparency within the targeted divisions. This initiative has evolved into a program of CKI activities, backed by the in-house consultants giving full support and following up CKI at divisions. It includes managerial skills training for all new appointees to the rank of Manager; an annual CKI Forum to share related case studies; and analyses of workplace climate. Prior to 2018, the CKI activities had helped a total of 15,000 people in 439 divisions including 14 Canon Group companies in Japan.

*1 CKI: Canon Knowledge-intensive staff Innovation
 *2 Technology KI (Knowledge-intensive staff Innovation) is a BPR methodology developed by the JMA Group that aims to build intellectual productivity and organizational vitality through changes to daily business activities.

Various Certification and Award Programs

Canon has established certification and award programs to honor Group employees for their outstanding achievements.

At the Canon Summit Awards, Canon honors Group companies, departments, teams and individual employees who have made a major contribution to the development of the company in terms of activities or products.

Canon recognizes employees with numerous other accolades: the Invention Award to honor employees' contributions to inventions and intellectual property; the Quality Award for contributions to quality improvement; the Production Innovation Award for outstanding activities leading to production-related innovations; the Canon Meister Certification/Commendation for contributions to

advancements in manufacturing using a wide range of skills; the Canon Master Craftsman certification for outstanding skills that Canon should pass down; the Environment Award for excellent environmental practices; and the Procurement Innovation Award for activities that greatly contribute to enhancing procurement functions.

Certifications and Awards in 2017

Canon Summit Awards	4 products, 1 activity
Invention Award	39 (290 award winners)
Quality Award	1 Most Excellent Award 3 Excellent Awards 2 Review Committee Award
Production Innovation Award	2 Production Innovation Excellence Awards 8 Production Innovation Merit Awards (4 Merit Awards, 4 Focus Awards)
Skilled Technician Award	2 Canon Master Craftsman
Canon Meister Certification/Commendation	1 Expert Grade S recipient 12 Grade 1 recipients (Cumulative totals: 74 Expert Grade S, 332 Expert Grade 1 recipients)
Environment Award	1 Most Excellent Award 3 Excellent Awards
Procurement Innovation Award	4 Excellent Awards 3 Honorable Mentions

Certifications and Awards in 2018 (As of March 31, 2018)

Production Innovation Award	2 Production Innovation Excellence Awards 6 Production Innovation Merit Awards
Skilled Technician Award	1 Canon Master Craftsman
Canon Meister Certification/Commendation	Certification/Commendation 17 Grade 1 recipients (Cumulative totals: 74 Expert Grade S, 349 Expert Grade 1 recipients)

Data Summary (As of December 31, 2017)

Number of Canon Group Employees

	2013	2014	2015	2016	2017
Japan	69,825	69,201	68,325	72,913	73,665
Europe	22,577	22,356	24,826	25,511	25,623
Americas	18,744	18,029	17,635	19,160	18,448
Asia and Oceania	83,005	82,303	78,785	80,089	80,040
Total	194,151	191,889	189,571	197,673	197,776

Breakdown of Employees (Canon Inc.)

	2013	2014	2015	2016	2017	
Total number of employees	26,114	26,409	26,360	26,246	26,075	
By gender	Male	22,173	22,430	22,370	22,261	22,027
	Female	3,941	3,979	3,990	3,985	4,048
By age group	Under 30	3,727	3,404	3,193	2,922	2,853
	30s	7,778	7,764	7,508	7,253	6,924
	40s	8,049	8,072	7,843	7,772	7,419
	50s	5,912	6,409	6,919	7,280	7,747
	60 and over	648	760	897	1,019	1,132
By classification or contract type	Advisory directors	12	15	10	10	22
	Regular employees	23,913	23,833	23,591	23,316	23,302
	Employees assigned from outside the company	1,424	1,692	1,758	1,803	1,478
	Contract workers	702	807	929	1,047	1,159
	Part-time workers	27	25	25	19	73
	Others	36	37	47	51	41

Number of New Hires and Employees Leaving the Company (Canon Inc.)

	2013	2014	2015	2016	2017	
Newly hired employees	Male	372	377	368	316	472
	Female	73	86	81	70	106
	Total	445	463	449	386	578
Employees leaving the company/turnover rate	Employees leaving the company	191	228	291	281	369
	Turnover rate (%)	0.8	0.9	1.1	1.1	1.5

Breakdown of Executives (Canon Inc.)

	2013	2014	2015	2016	2017	
By gender	Male	40	41	43	46	48
	Female	-	-	1	2	2

Composition of Executives by Age (Canon Inc.)

	50s	60s	70s	80s	
By gender	Male	24	20	3	1
	Female	2	0	0	0

Base Salary and Total Salary per Employee by Gender (Canon Inc.)

	Female: Male	
Base pay	Management	100:105
	Non-management employees	100:117
Total pay	Management	100:106
	Non-management employees	100:121

* The compensation system is the same for men and women. Differences are due to such factors as age and grade level.

ODNJ Award for Excellence Received for CKI Activities

In June 2017, Canon Inc. received the ODNJ Award for Excellence from the OD Network Japan (ODNJ), an NPO involved in promoting organization development and related research. The award recognized the impact of CKI activities, and in-house consultants' expertise to build an excellent system of organization development (OD) in the company.





Miraisha Programme developing imaging skills in Africa (→P101)

Social Contribution

Management Approach

Under its corporate philosophy of *kyosei* and through community relationships, Canon seeks to find solutions to issues faced by communities around the globe.

Why it Matters

Today, our world faces a mountain of social issues that include global warming and other environmental issues, an increasing frequency of natural disasters, and issues related to poverty and economic disparity. Sustainable social development requires countries, regions, governments and enterprises to overcome various barriers to unite the world in tackling these problems. Companies play an increasingly important role in addressing these issues, which are also expressed in the Sustainable Development Goals (SDGs) adopted by the United Nations. With ESG (environment, social and governance) used in corporate valuation more and more, there is a growing expectation that corporations will cultivate meaningful links with society, and with local communities especially, in their business activities. For example, issues such as poverty and educational inequality could affect corporate recruitment capabilities or restrict the global market if left unaddressed. Recognizing this, Canon reinvests profits back into local communities, not only to gain trust through social contribution activities, but also because we believe that such efforts are essential to sustainable development.

GRI102-11 GRI102-15 GRI103-1 GRI103-2



Canon's Approach

GRI103-1 GRI103-2

Social contribution activities have molded Canon's corporate culture since its earliest days. In 2012, we formulated the Canon Group CSR Activity policy to clarify the direction of the Group's CSR activities. Based on this policy, we continue to draw on Group resources, which include advanced technological strengths, global business deployment expertise, and diverse, specialized human resources, to engage in activities tailored to the characteristics and issues of each region. These activities are focused on the following six areas.

For example, in the field of education and science, recent years have seen a drift away from science in the form of decreasing interest in science and technology and a reduction in opportunities to study optics systematically in Japan, Canon's major production base. To support the education of the next generation, Canon is engaged in a variety of initiatives to stimulate interest among children in optics and other sciences.

In other areas, we engage in various activities tailored to the local needs.

Overview of Material Issues and Activities in 2017

GRI103-3

Humanitarian Aid and Disaster Relief

In 2017, Canon continued to make financial donations and help raise funds for people affected by major natural disasters worldwide, such as the torrential rains that led to flooding in northern Kyushu in July 2017. We are working to enhance such activities based on ideas from partner organizations.

Environmental Conservation

Canon believes in addressing environmental issues from a long-term perspective. Besides promoting environmental protection activities in local communities in 2017, we also continued to organize environmental outreach classes linked to various themes, such as printer cartridge recycling, to help children better understand the importance of the environment.

Social Welfare

Recognizing that social welfare issues vary widely by region, Canon engages in various welfare activities with the aim of creating environments in which all people can lead satisfying lives. In 2017, we continued activities to support people with disabilities and assist the sound development of children around the world.

Local Communities

As a corporate citizen with deep roots in local communities, Canon engages in cross-cultural activities and school construction to help develop the knowledge base and diverse values of children. In 2017 also, we endeavored to stay in close communication with local communities and to implement contribution programs, including an initiative to use photos to promote cross-cultural exchange.

Education and Science

Canon supports the development of the next generation, drawing on its cutting-edge technologies. We organized a range of customized programs in 2017, from hands-on classes in robot programming for students in Japan (where programming will become a part of the core curriculum from 2020).

Art, Culture and Sports

As a company that pursues imaging technologies that evoke and encourage a wealth of human emotions and feelings, Canon is contributing to the development of visual culture. Along with initiatives to assist the preservation or restoration of cultural assets in Japan and Europe in 2017, we continued to support other programs.

Relationship between Canon's Social Contribution Activities and SDGs

Canon's social contribution activities contribute to the achievement of several SDGs (right). Of particular note, all of our activities in these fields contribute to SDG 4.

And, the results of our stakeholder survey revealed that expectations for activities contributing to SDG 3,4,5 and 11 are relatively high.



Humanitarian Aid and Disaster Relief

We contribute to the recovery and reconstruction, humanitarian aid of areas affected by natural disasters.

Donations and Fundraising Helping Disaster-Affected Areas Through Donations and Fundraising

Canon provides aid to areas affected by natural disasters around the world through various supports such as monetary donations and fundraising activities. After assessing the need and viability of sending aid with the assistance of our operational sites closest to any given disaster, we do our best to offer timely relief. We also conduct follow-up assessments of our activities through close communication with NGOs, NPOs and other partners to facilitate related improvements. In the case of long-term aid, we are careful to take appropriate action in each phase of a project.

In 2017, Canon made the contributions shown in the following table. Following the torrential rains that affected northern Kyushu in July, in addition to financial donations, we sent drinking water and other emergency supplies to the region. Canon Group employees in the Kyushu area also volunteered to help remove mud and clean up houses. Other Group companies assisted through employee donations and various other support activities, including sales of specialty goods from the affected region or providing special menus helping the region in their staff canteen.

Disaster-Related Donations in 2017

Month	Purpose	Amount
Jan	Southern Thailand (floods)	THB650,000 (emergency relief)
Jul	Northern Kyushu, Japan (torrential rains)	JPY5,000,000
Aug	Zhuhai, China (floods)	RMB100,000
Sep	U.S. (hurricanes)	USD100,000
Sep	Mexico (earthquakes)	MXN500,000
Nov	Malaysia (floods)	MYR115,000

Charity Book Fair

Canon Inc. has held its Charity Book Fair annually since 1997. Employees of the Canon Group in Japan, along with their families, donate unwanted books, CDs, and DVDs for sale at an in-house bazaar. The proceeds, matched by the company under a matching gift program, are donated to groups that support education and medical services in Asia. In 2017, about ¥1.14 million was collected and shared among four NPOs.

Participating in UNHCR, WFP and Other UN Efforts

Canon Inc. is a special sponsor of the UNHCR Refugee Film Festival, held annually by UNHCR Representation in Japan and Japan for UNHCR*. In 2017, making use of our technical expertise, we helped design and print the panels displayed in a UNHCR photo exhibition about the Refugee Olympic Team that competed in the 2016 Olympic Games in Rio de Janeiro. As well as photos of the athletes in competition, the exhibits covered aspects of their daily lives and the situation in their native countries. The exhibition has toured 43 different parts of Japan, attracting more than 10,000 visitors.

Expanding the circle of support, 167 of our employees and their families participated in WFP Walk the World, a charity walk in support of the activities of the World Food Programme (WFP).

* The national partner of UNHCR in Japan

Supporting Disaster Recovery Efforts Ongoing Recovery Support Following the Great East Japan Earthquake and Greater Cooperation with Disaster-Affected Communities

Canon offers ongoing support to areas that have been severely affected by the March 2011 Great East Japan Earthquake. A Tohoku Recovery and Reconstruction Promotion Office dedicated to promoting recovery in the Tohoku region was established at Canon Marketing Japan's Sendai branch to encourage effective, long-term support activities while keeping the changing issues of the area in mind. Through this office, Canon is working to deepen partnerships with surrounding municipal governments affected by the earthquake. Canon also collects information through NPOs, NGOs, and social welfare associations.

We are focusing especially on using the power of photography to assist regional recovery. In 2017, we continued to host events called "Fukushima Community Support" and "Smile for the Future Project" and we held 10 photography classes for people from the disaster-affected areas.

Environmental Conservation

We contribute to nature conservation so the next generation can inherit a rich natural environment.

Educational Support for Children Holding Environmental Outreach Classes to Teach Children About the Importance of the Environment

As part of efforts to realize a sustainable society, Canon organizes environmental outreach classes in which students learn about the importance of recycling by studying the recycling of printer consumables. Looking at the characteristics of things, the classes teach children how science can save the planet through recycling. More than 6,900 participants have taken part in a total of 121 classes since the program started in 2011.

These classes use active learning methods, providing ample opportunity for children to develop their skills in thinking, speaking, listening, and assessing. Specifically, the children are divided into teams to conduct some sorting experiments with four types of materials, including steel and different sizes of plastic. They learn how to sort these materials efficiently, making use of their special characteristics.

In 2016, Canon was recognized for this program, receiving the First Award for Excellence at the Seventh Career Education Awards sponsored by the Ministry of Economy, Trade and Industry. And in 2017, the program was accredited by the Tokyo Organising Committee of the



An environmental outreach class held at an elementary school

Olympic and Paralympic Games as "Tokyo 2020 Nationwide Participation Programme".

Eyes on Yellowstone Program Supporting Wildlife and Ecosystem Conservation

Through the Eyes on Yellowstone program, Canon U.S.A. supports the activities of the NPO Yellowstone Forever to protect and conserve Yellowstone National Park. We provide them with Canon network camera systems and digital cameras to support their advanced research and educational activities using the latest technologies. Canon's cumulative financial support over the past 20 years for this project totals more than U.S.\$7 million, making Canon the single largest corporate donor supporting Yellowstone wildlife.

Social Welfare

We contribute to social welfare through the power of photographs

Helping to Find and Rescue Missing Children Through the Power of Photographs

Canon U.S.A. supports the activities of the National Center for Missing & Exploited Children (NCMEC), an NPO engaged in the recovery of missing children in the United States. When a child goes missing, a photograph is the most vital piece of information for the search. Canon U.S.A. has donated more than 2,500 digital cameras, scanners, printers, and other equipment to help law enforcement agencies quickly disseminate photographs and information regarding missing children.

Including the proceeds of a charity event held in January, Canon U.S.A. donated a total of U.S.\$437,444 to NCMEC in 2017. Donations over the past 20 years total around ¥850 million.

Canon Blind Project, Photography Class for the Visually Impaired in Thailand

Since 2010, Canon Marketing Thailand has been supporting the Canon Blind Project, a photography class for the visually impaired, in cooperation with Pict4All, a group of volunteer photographers. This project provides opportunities for visually impaired students to elevate self-expression skills by learning to express their thoughts and feelings using photography as a tool. Canon Marketing Thailand supports the project by providing cameras, printers and photographic equipment for the visually impaired.

Following its corporate philosophy of *kyosei*, Canon will continue to contribute to society through its business activities.

Local Communities

As a good corporate citizen with deep roots in local communities, we assist the sound development of children living in those communities.

Canon Image Bridge Project Fosters Youth Exchange Through Imaging

Some years ago, Canon China launched a project called Image: Light of Hope to foster cultural exchange using the power of imaging. In 2013, Canon China expanded the scope of the project to include all of Asia, renaming it the Canon Image Bridge Project.

Under this project, youth from across Asia create “exchange cards” that include photographs they have taken along with brief messages. These cards are then delivered to children living in other areas of Asia. The ingenuity of the project to foster cross-cultural exchange through photographs has received high praise from local communities and earned Canon a number of CSR-related awards. Through 2017, a total of 8,393 youths in 10 countries and regions in Asia prepared 14,090 exchange cards, helping to build friendships that transcend national and regional borders.

In conjunction with students graduating from the Canon Hope Elementary School* in Banbishan, Hebei Province, China, local employees volunteered to visit the school to take commemorative photos and to teach the students about photography and printing technology.

* Canon Hope Elementary Schools: Through 2017, Canon has helped to build a total of 10 schools in impoverished regions of China to provide local children with better educational opportunities.

Miraisha Programme Aims to Increase Employment Opportunities for the People of Africa by Improving Their Skills in Imaging Technology

Since December 2014, Canon Europe has been expanding its *Miraisha* Programme, a social investment initiative in Africa. *Miraisha* is a portmanteau of the Japanese word “mirai,” meaning future, and the Swahili word “maisha,” meaning life. Through the program, Canon aims to improve skills and increase employment opportunities for local young people in Africa’s growing photography, video and print industries. Canon Europe and Canon Central and North Africa (CCNA) have together facilitated workshops of photography and film-making and Professional Print Excellence in several African countries including Kenya, Ghana, Nigeria, Ethiopia and Uganda. Through partnerships with local organizations, educational institutions and event organizers, and with the assistance of Canon Ambassadors, the *Miraisha* Programme has so far delivered training to more than 3,000 workshop participants.

In 2017, over 70 events were held, and workshops have trained more than 100 participants. A training program was also introduced to develop local photographers and video producers as Canon-accredited trainers for the *Miraisha* Programme. As of the end of 2017, a total of 16 people had participated in this program, with four being accredited as Canon Certified *Miraisha* trainers. One of the selected trainers who was working through the training program has even become a fulltime employee of CCNA.

Canon Institute for Global Studies, Dedicated to Conquering the Problems Faced by Humankind

The Canon Institute for Global Studies is a non-profit private-sector think tank established as a general incorporated foundation in 2008 in commemoration of Canon Inc.’s 70th anniversary.

In this age of globalization, the Canon Institute for Global Studies approaches Japanese economic issues associated with the global economy and plots out Japan’s future position in the world. It also aims to draw up strategic policy proposals based on analyses of present world conditions. The institute brings together researchers with diverse backgrounds in business, academia, and government to exchange ideas and information and to expand its global activities.

Focused on three main research areas—macroeconomics; natural resources, energy, and the environment; and foreign affairs and national security—the institute disseminates information and policy proposals based on scientifically valuable research. Symposiums, conferences, lectures, and seminars are held to present results and also to facilitate active discussions between researchers and policymakers from Japan and other countries.

In December 2017, the institute held a symposium entitled “Fiscal/Social Security Symposium: Analyzing the Financial Crisis.” Participants discussed how to respond to any crisis that could be described as a fiscal collapse and related approaches to economic recovery over three different time frames (extreme short term, short term, and longer term).

Besides continuing and upgrading existing activities, plans for 2018 include extending the *Miraisha* Programme to countries such as Ivory Coast, Senegal and Cameroon, while also establishing program links with educational institutions in Nigeria.

The *Miraisha* Programme is helping Canon Europe to engage with local communities in Africa while enhancing competitiveness in industries in the African market. By collaborating with distribution and training partners, including the development of local trainers, Canon Europe is using its core imaging skills to help people in Africa to make a living in professional photography, film and print—sectors which are expected to grow in the future.

The 4E’s Project in India

Canon India carries out the 4E’s Project in cooperation with a local NGO, Charities Aid Foundation (CAF) India. The project provides various forms of assistance in the fields of eye care, education, environment, and empowerment to less privileged villages in the vicinity of the Canon India office.

As a manufacturer of ophthalmic equipment, Canon is dedicated to making advancements in the field of eye care, in particular by facilitating comprehensive eye screening to help those with vision impairments. Cataracts are a major cause of visual impairment in India, and yet 80% of these cases can be prevented or treated. To bridge this gap, Canon India opens vision centers in adopted villages and provides examinations as well as treatment. In 2017, a total of 2,237 people attended these eye clinics, of whom 950 received free eyeglasses and 310 were treated for eye conditions in hospital.

In terms of educational initiatives, 620 primary school students from four villages received support through the

program. This included efforts to create better learning environments by upgrading toilet facilities and providing safe drinking water. In 2017, a new initiative called “Learning Beyond Books” was also introduced.

By organizing excursions to an aquarium, planetarium, and Canon India office, this initiative aims to expand the students’ knowledge of the outside world and help them dream bigger.

In terms of environmental initiatives, tree-planting and paper-recycling programs were continued. In addition, the program assisted the installation of 100 solar-powered streetlamps in the state of Rajasthan in partnership with the Indian government.

In the field of empowerment, Canon partnered with SOS Children’s Villages of India, a local childcare NGO. Canon India CSR along with around 200 employees sponsored 200 SOS village children for a year through their financial contributions.

These activities were recognized in the 4th CSR Impact Awards sponsored by NGOBOX. Canon India won an award in the Employee Volunteering Initiative category.



Young program beneficiaries

Sharing CSR Information Through Instagram

From July 2017, Canon began sharing the CSR activities of Group companies using the popular global social media platform Instagram, which is optimized for sharing photos. Instagram has broad appeal: in 2017, the number of young people and other users exceeded 800 million worldwide. The photos posted on Canon’s official CSR Instagram account help convey the mood of our CSR activities in each region as well as the enthusiasm of participants. The links between each activity and the SDGs are indicated in the posts to help stimulate a sympathetic response to, and deeper understanding of, our CSR activities.



(Ref.) Canon’s official CSR Instagram account @canon_csr

Education and Science

As a manufacturer and world leader in technology, we support the development of the next generation.

Educational Support for Children Young People Programme Harnesses the Power of Positive Visual Storytelling

Canon Group companies in Europe, the Middle East, and Africa (EMEA) conduct the Young People Programme where the young people are equipped with the skills and tools to harness the power of positive visual storytelling to drive social change. Using the Sustainable Development Goals (SDGs) proposed by the United Nations as a framework, we give young people the opportunity to talk about the global issues that affect their futures.

In 2017, the program focused on the six countries: Finland, Germany, Italy, Poland, Russia and the UK. In Germany, Canon Ambassador photographer Daniel Etter talked to young participants on the power of photos and video for communicating. The program also featured a lecture by a UN representative on the purpose of the SDGs and how youth could contribute locally.

In 2018, Canon plans to expand the scope of the program to include at least 15 countries, continuing to provide the right tools and coaching to young people, we're helping to bring their stories to life and are committed to making sure their voices are heard.



Workshop participants

Local program to improve educational environment for children: "For the Next Generation"

Canon Vietnam and Canon Marketing Vietnam promote various activities through For the Next Generation, a local program to improve the educational environment for children, who will serve as the next generation of Vietnam.

The Friendship School Chain Project, one of the most

well known of these activities, works to construct classrooms and donate desks and chairs to schools in rural areas where infrastructure development is slow moving.

Project volunteers regularly visit recipient schools to help with infrastructure renovation such as building tables and chairs, school repainting, and to present donations of school supplies. Over the ten years since its launch in 2007, the project has spread to 88 schools in 28 provinces.

Canon Vietnam also provides scholarships to talented high school and university students from underprivileged families, loans bicycles to students who need to commute long distances, and conducts environmental classes at elementary schools.

Canon Vietnam's aim in these activities is to have employees work directly with children and local people as volunteers. The activities provide valuable opportunities for employees to deepen connections with the community and with each other.

Light Laboratory a Fun Place to Learn

Canon Inc. hosts the Light Laboratory educational program for children through a partnership with Japan Science Foundation.

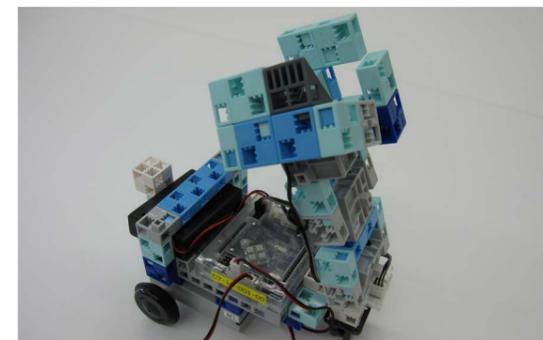
The program aims to spark children's interest in science and technology by providing a place where they can enjoy learning. The Light Laboratory explains the science behind the optics technologies found in Canon products in an easy-to-understand way, through the history of cameras and various experiments. The experiment using a laser beam to show the refraction and scattering of light by a lens drew gasps of admiration. The experiment on long-exposure photography prompted some children from school tour groups to wish they could do it in school.

Held in the Experiment Stadium corner of The Science Museum (Tokyo), operated by the Foundation, 8,073 children experienced the wonders of the Light Laboratory in 2017.

Robot Programming Class to Communicate ICT Basics to Elementary Students

In anticipation of programming becoming a compulsory subject in Japan from 2020, in August 2017 Canon Imaging Systems (CIS) organized a "Robot Programming Class" for eight elementary school students at its Niigata head office. With support from CIS employees, the students used computers to program robots to throw dice. The class

concluded with a game to see which of the programmed robots could get the highest score by throwing the dice furthest. Students expressed their impressions of the class afterwards with such comments as, "I enjoyed creating my own program," and "It was fun getting (the robot) to make a human movement."



One of the robots created by students

Utsunomiya Office where the Optics R&D Center is located, to successfully establish the Center for Optical Research & Education (CORE) at the university. Since CORE was established in 2007, a total of 421 students have completed the optics course. In 2017, Canon dispatched six lecturers, including three visiting professors, to enhance the educational system. Canon will continue to support CORE and the development of optics technologies.

Special Design Classes for Global HR Development

With the aim of fostering the next generation of human resources, Canon has teamed up with universities around the world to hold special design classes.

In 2017, Canon conducted a special course at Zhejiang University in China at the request of the Japan Institute of Design Promotion. Held in a workshop format over eight days, the course proved to be a mutually beneficial exchange: the students received valuable design instruction while Canon gathered information on student needs. Canon also organized other special lectures at five Japanese universities.

Internship Program for Students

Canon Inc. has an internship program that aims to support the career development of students. Canon offered 11 internships to students on administrative, technical or specialist tracks in 2017. A total of 240 students have benefited from the program to date.

Support for Universities Supporting the Development of Optics Technologies Underlying Major Industries Through Industry-Academia Collaboration

Optics technology is essential to a variety of major industries. Opportunities for the systematic study of optics in Japan, however, have been on the decline. To remedy this situation, Canon actively supported Utsunomiya University, which has a strong relationship with Canon's

Supporting Research Activities that Contribute to the Sustainable Development of Humankind Through the Canon Foundation

Canon established the Canon Foundation in 2008 with the aim of contributing to the ongoing prosperity and well-being of humankind through a wide range of support activities for both organizations and individuals engaged in research, business or education in various academic fields, most notably science and technology. The Canon Foundation has established two research grant programs, the Creation of Industrial Infrastructure grant and Pursuit of Ideals grant, both of which are open to researchers working at universities and other public research institutions throughout Japan.

In 2017, we held the fifth Pursuit of Ideals symposium in July, and the sixth Creation of Industrial Infrastructure research results presentation in August, providing opportunities for grant recipients to report on research progress. Twelve projects were selected for Creation of Industrial Infrastructure grants in 2017, while three were chosen for Pursuit of Ideals grants on the theme of food. A total of ¥240 million in grants was awarded.

Moreover, to make research-related results and other information available to the public, the Canon Foundation Library has published four volumes containing articles by researchers. Our related PR campaign is providing local media with information on regional revitalization-linked research.

Reference: Please refer to the Canon Foundation website for the details of FY2018 research grants (<http://www.canon-foundation.jp/eng/index.html>).

Art, Culture and Sports

As a company that contributes to the development of visual culture, we engage in activities to foster the richness of human feelings and emotions.

Contributing to the Promotion of Art and Culture

Preserving Cultural Assets for Future Generations and Putting Them on Display Through the Tsuzuri Project

Canon and Kyoto Culture Association (NPO) launched the Cultural Heritage Inheritance Project, commonly known as the Tsuzuri Project, in 2007.

The initiative seeks to make facsimiles of Japanese cultural assets such as folding screens and *fusuma* (Japanese sliding doors) by first photographing them with a digital camera, then processing the image with precise color-correction technology using a proprietary system, and printing the image on a large-format inkjet printer. Finally, with the application of traditional craft techniques from Kyoto, such as gold leafing and mounting, the reproduction, which is as close to the original as possible, is complete. These facsimiles are presented to former owners, related temples, museums, and local governments. The project has been highly acclaimed for both preserving important Japanese cultural assets and exhibiting high-resolution facsimiles to the public.

In 2017, facsimiles were presented to the Kyoto National Museum of two works owned by the Asian Art Museum of San Francisco, namely *Tatars Playing Polo and Hunting* attributed to Kano Soshu and *Landscape of the Four Seasons* by Shikibu Terutada. Two other Tsuzuri Project works went on display in special installations at the Tokyo National Museum from July to September 2017 in an event called "Diving into Screen Paintings." The facsimiles were *Pine Trees* by Hasegawa Tohaku, which is classed as a Japanese National Treasure, and *Cranes* by Ogata Korin.



Pine Trees (high-resolution facsimiles) exhibited at "Diving into Screen Paintings"

The exhibits used cutting-edge projection technology to immerse visitors in the worlds created by the iconic images, originally painted on folding screens.

Reference: The Tsuzuri Project <https://global.canon/en/tsuzuri/>
The Tsuzuri Project (Cultural Heritage Inheritance Project) has been certified as a "Tokyo 2020 Nationwide Participation Programme" by the Tokyo Organising Committee of the Olympic and Paralympic Games.

Océ Elevated Printing Technology Used in Restoration of Ancient Egyptian Cultural Heritage

Canon Group company Océ contributed to efforts to restore part of the tomb of the Ancient Egyptian 19th Dynasty monarch Seti I in the Valley of the Kings using its advanced elevated printing technology. In collaboration with Factum Arte, Océ deployed this digital technology to assist the NPO Factum Foundation for Digital Technology in Conservation in recording and replicating this cultural asset of global significance. Elevated printing technology enabled

production of reliefs up to 15mm thick for walls, columns and sarcophagi. The restored items went on display in a special exhibition hosted by the Antikenmuseum in Basel, Switzerland, from October 2017 to May 2018. Elsewhere, Océ is also using its technical expertise to create reproductions of art works by famous Dutch painters such as Rembrandt, Vincent van Gogh and Vermeer, and to support the production of signage, maps and Braille displays for the blind and visually impaired persons.

Canon Junior Photographers Classes Foster Environmental Awareness and Develop Creative Sensitivities

Canon Junior Photographers is a photography class for children based on the theme of nature. The objectives of the project are to raise children's awareness about the environment and to develop their creative sensitivities. Since the program's inception in 2004, as many as 20,000 children all over Japan have taken part in Canon Junior Photographers classes.

In 2017, classes were held in 36 locations nationwide. The 1,755 participants first took part in a digital photography class led by professional photographers or Canon employees, after which they were able to take their own pictures while enjoying the beauty of nature. Following the photo shoots, participants printed their photographs and showed them to the group. Their photographs were also shown at photo exhibitions held at participating schools and other places.

Canon Photography Contest, New Cosmos of Photography, Discovers Talented New Photographers

Canon started New Cosmos of Photography in 1991 as a project to support art and culture. The aim of the project is to

discover, nurture, and support up-and-coming photographers exploring the potential of photographic expression.

The contest seeks submissions in print, still image, or video format, that regardless of genre express creativity and a new, original point of view. To date, 27,406 people (groups) have submitted entries. A number of these entrants have become well-known photographers both in Japan and abroad. In 2017, of the 1,705 entrants, one was selected for the Grand Prix, six for Excellence Awards, and eleven for Honorable Mention Awards. Canon hopes to continue helping up-and-coming photographers take the first step in their pursuit of new photographic expression through New Cosmos of Photography.

Contributing to the Promotion of Sports Future Nadeshiko Project to Support the Development of Female Soccer Players

As part of its sports promotion efforts, Canon Inc. has supported Canon Cup Junior Soccer, a futsal competition for elementary school boys and girls in Japan, since 2001. Recognizing the growing need to develop the level of girls soccer in Japan, in 2014 we decided to focus on supporting girls soccer. We are a special corporate sponsor for the Canon Girls-eight, a U-12 girls soccer tournament involving eight-member teams, and Canon Girls Camp, a U-13 girls soccer training camp, through our partnership with the Future Nadeshiko Project hosted by the Japan Football Association (JFA).

In 2017, we took various photographs at tournament and training camp venues, and supplied them to the JFA, players, and coaches. We put them up on our support website, Canon Girls Soccer Web. This has helped to publicize girls soccer in Japan and, we hope, will lead to its growth.

Support for Tokyo 2020 Paralympic Games

Canon Inc. is supporting Tokyo 2020 Paralympic Games through photography as a Tokyo 2020 Gold Partner in the Still Cameras and Desktop Reprographic Hardware product category. In July 2017, Canon supported a photography seminar held at Machida Municipal Athletic Stadium, providing photographic equipment and helping to run the seminar. The event was sponsored by The Nippon Foundation Paralympic Support Center.

The seminar attendees comprised university students taking part in a public relations project to support the Paralympic Sports National Federations as PR interns. Canon invited sports photographer Adam Pretty of Getty Images, the official photography agency for the International Olympic Committee (IOC) and International Paralympic Committee (IPC), to teach the seminar. After discussing how to photograph major sporting events based on his extensive field experience, Mr. Pretty challenged the students to take images of Paralympic athletes in action. A group of 17 Canon employees volunteered to assist with the event by helping the students and recording what happened.



Sports photographer Adam Pretty provides instruction to students

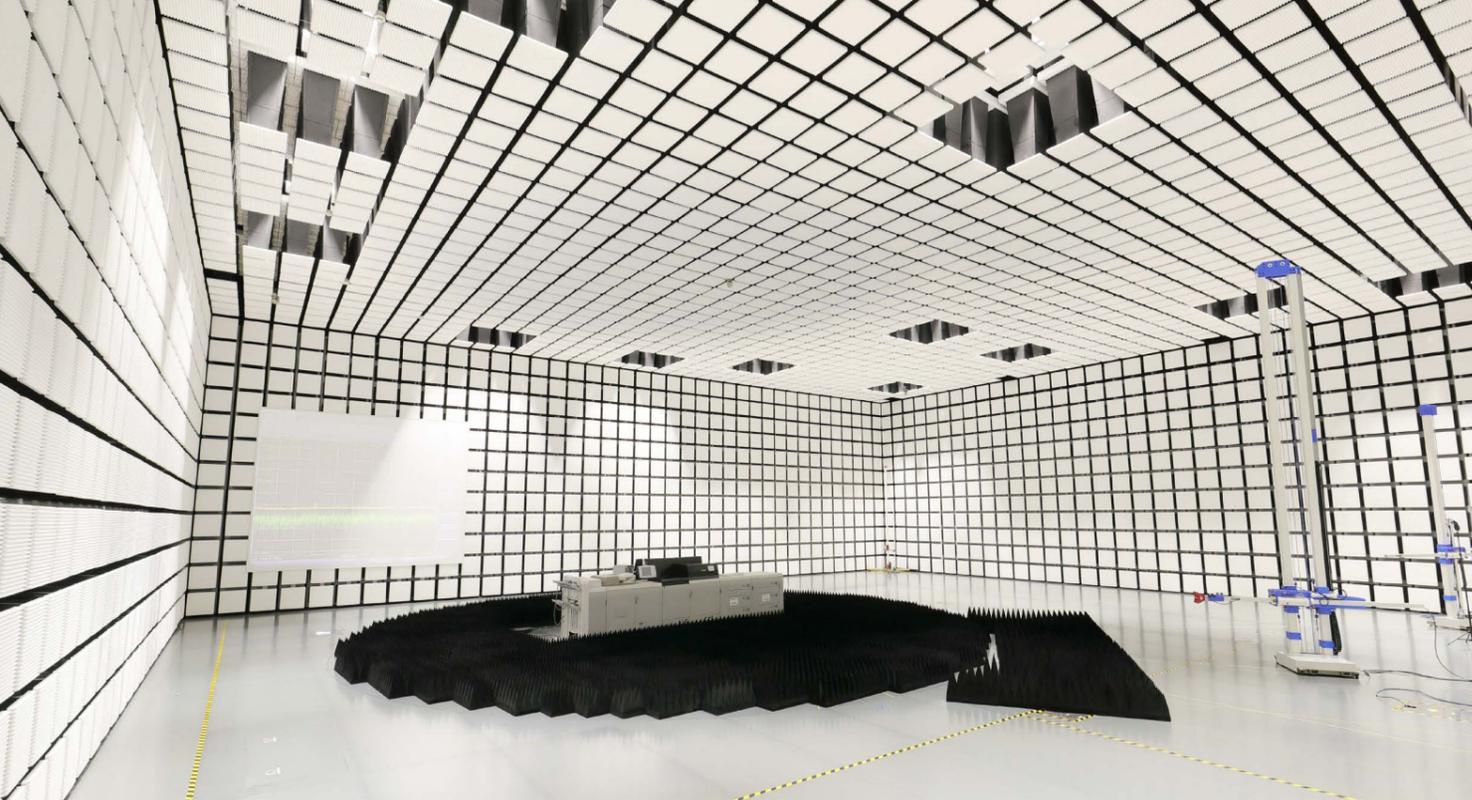
Comment from Tokyo National Museum

The high-resolution facsimiles created by the Tsuzuri Project bring classic artworks to life

The Tokyo National Museum exhibits Japanese and Oriental cultural assets. The vast range of old artworks and antiquities can make them inaccessible to the public. As a museum, we try to do various things to make it easier for people to connect with the exhibits. Since 2011, we have used the Tsuzuri Project facsimiles in special annual workshops and other events that enable people to experience folding screen artworks and gain an appreciation of how they were used by people several centuries ago. For the "Diving into Screen Paintings" event that we held in the summer of 2017, we installed a facsimiles of the National Treasure *Pine Trees* by Hasegawa Tohaku in a viewing room lined with tatami mats. Adults and children alike found the exhibit fascinating because the technology coupled with the high quality of the facsimiles gave them a multi-sensory experience of this work of art. The technology used by the Tsuzuri Project enabled an installation design that provided a new experience in terms of art appreciation, and that at the same time contributed greatly to our work.



Ms. Maki Kobayashi
Museum Education
Department
Tokyo National Museum



One of the largest semi-anechoic chambers in Japan where we carry out tests on large products (→P112)

Product Responsibility

Management Approach

We do our utmost to ensure product safety and improve usability while at the same time working to add greater value to our products and build customer trust.

Why it Matters

Canon offers a diverse range of products globally for both consumers and businesses. Many of these products relate directly to people's lives and public safety, such as network cameras and those used in the life sciences.

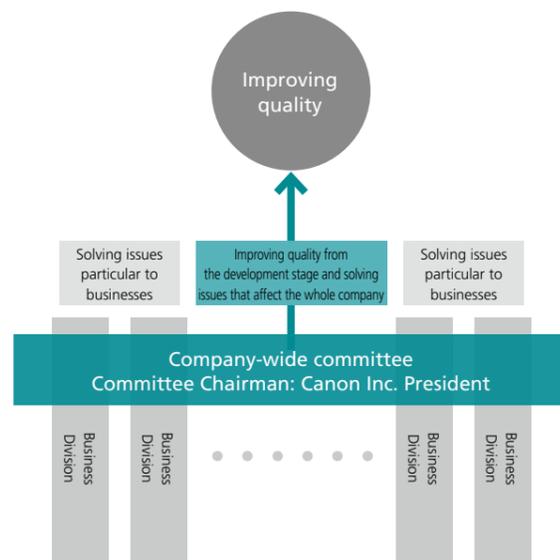
Product responsibility—the concept of providing products that customers can use safely, and with confidence and satisfaction, in ways that contribute to the betterment of society—has become increasingly important. Amid rising customer expectations for technological innovation and burgeoning safety and environmental concerns, success in satisfying these needs has a substantial impact on corporate activities. In particular, a serious quality issue affecting customer safety that results from a defective product or service can negatively impact the business financially or erode trust in the brand.

Conversely, supplying high-quality products that meet customer needs, and developing innovative technologies to satisfy emerging requirements can yield immense opportunities for growth.

GRI102-11 GRI102-15 GRI103-1 GRI103-2

Our Impact:

Canon initiatives related to product responsibility



Canon's Approach

GRI103-1 GRI103-2

Canon's basic mission when it comes to quality is to ensure that customers have "no complaints, no trouble," and we work hard to ensure "Canon Quality" throughout the entire Group. In line with this creed, we created a quality management system that follows the requirements of the ISO9001 international standard, and we strive to improve quality across the entire product lifecycle, from planning and development to production and after-sales service.

Along with establishing in-house product safety technical standards that are stricter than regulatory requirements, we created a system for gathering comments and requests from Canon users worldwide, which we share with relevant divisions, as means to improve our products and ensure safety.

As part of the goal of Canon's medium- to long-term business plan to "reinforce/expand new businesses while creating future businesses," we also aim to leverage our superior technical expertise to drive innovation in a range of areas and meet our product responsibility.

In addition, we are working to promote greater accessibility in Canon products worldwide by ensuring different customers can use them easily and with confidence. These initiatives include designing product manuals to make them easier to understand and actively adopting Universal Design principles in product development.

Overview of Material Issues and Activities in 2017

GRI103-3

Quality management

To ensure product safety, we are taking steps to reinforce internal legal/regulatory compliance systems across all Canon Group divisions, while also promoting activities to improve quality assurance from the development stage. In 2017, we set up a company-wide committee chaired by the President of Canon Inc. and including senior managers from each business group focused on improving product quality from the development stage. Using this framework, we are working to eliminate quality issues by promoting the active adoption of best QA practice across all business divisions. We also continue to promote quality training for all employees and expand our awareness-raising activities.

Ensuring Product Safety

In order to ensure our customers can use our products with safety and peace of mind, we go beyond legally prescribed standards with our QA management. In addition to establishing our own safety standards, we have prepared an environment where we can thoroughly and accurately evaluate product safety.

Improving Product Usability

Canon strives to develop products that different customers can use easily and with confidence. In 2017, we continued a range of initiatives aimed at improving the usability of products, services and apps, including field-testing and interviews to gain customer feedback, an in-house product tester system, and evaluations by usability experts.

Related SDGs

Canon's various activities relating to product responsibility contribute to the achievement of SDG 12, "Ensure sustainable consumption and production patterns." The results of a stakeholder survey we conducted showed that in the field of responsible manufacturing, expectations are high for Canon's contribution towards realizing SDG 12.



Quality Management

We strive to improve quality across the entire product lifecycle in order to provide customers with satisfying products.

Approach to Quality

Canon's basic mission when it comes to quality is to ensure that customers have "no claims, no trouble." To achieve this, we promote our motto of "Canon Quality" both inside and outside the company, as part of our dedication to realizing customer safety, peace of mind, and satisfaction.

We also conduct companywide activities to improve quality across the entire Canon Group at every stage, from product planning to design and development, production trials, production, sales, and after-sales service.

We thoroughly check quality in each process, from design and development to the start of production, while also ensuring that continual improvements in quality are achieved by sharing quality information and customer feedback obtained from sales and after-sales service points with divisions in charge of product planning, design, and development.



Canon Quality

Safety+Smartness+Satisfaction

Product quality slogan: "Customer Safety, Peace of Mind and Satisfaction through Canon Quality"

Quality Assurance System

In order to fully realize "Canon Quality," Canon has established a quality management system* that combines the requirements of ISO9001, an international quality management standard, with work mechanisms unique to Canon.

Using our in-house quality management system as a base, the various Headquarters divisions at Canon Inc. work in cooperation with the Global Quality Management Center and Canon Group companies worldwide to implement appropriate QA systems in compliance with the legal and regulatory standards of each country and region.

Supplementing the vertically integrated activities of each business division to solve division-specific quality issues, in 2017 Canon Inc. established a committee to focus on improving quality at the product development stage. Chaired by the President and including members from top management of each business division, this body aims to address quality management issues across the company through group consultation and by advancing horizontal integration.

Through these various activities, Canon will continue to pursue "quality first" while looking to maintain and improve internal QA capabilities.

* The in-house regulations governing Canon's quality management system are recognized by the International Register of Certificated Auditors (IRCA) as an alternative standard to ISO9001.

Training and Educational Activities

Making a Total Commitment to Canon Quality

In order to maintain outstanding quality, each employee belonging to product-related divisions must always be mindful of quality in every aspect of their work.

At Canon, we strive to educate and foster greater awareness of quality among all employees by continually sharing our basic philosophy and motto on quality and by conducting Group-wide surveys on quality awareness.

Canon has designated November as Quality Month, and each year in November holds the Quality Fair and Quality Awards to recognize exceptional activities that have improved quality, and share them throughout the Group.

In Canon's 2017 Quality Awards, the top prize went to a Group company that makes copying machine/printer chemicals for a highly innovative system it developed that utilizes big data and the IoT to the fullest to automatically detect quality defects.

Other awards were given in recognition of innovative IT-based programs used not only to discover product defects but to correct them as well. The activities were introduced using panel presentations at the Quality Fair to raise awareness among employees. The event also featured seminars where frontline staff involved in the award-winning activities could explain them in detail. By sharing best practice in this way, we aim to improve quality across the entire Canon Group.

Continuing and Expanding Quality Education

Canon provides the Canon Quality Basic Course highlighting the importance of quality on an ongoing basis.

In 2017, we expanded the tiered training curriculum for use throughout the Canon Group to include rank-based training up to managerial level in addition to the existing training program for new employees.

In addition, to improve the effectiveness of this training, we customized a training program for each division, taking into account specific situations and issues needing to be addressed, and also actively conduct on-site training. Concerning the guidebooks used as teaching materials, because it is important that employees have a clear understanding of the Canon way of thinking, not just at Canon Inc., but at all companies within the Canon Group, including overseas offices, we created multilingual versions of the Canon Quality Introductory Guide, which contains our philosophy on quality. We also developed an online version of the Canon Quality Guidebook, which is used to foster understanding of all of our quality activities.

Promoting Product Safety Education

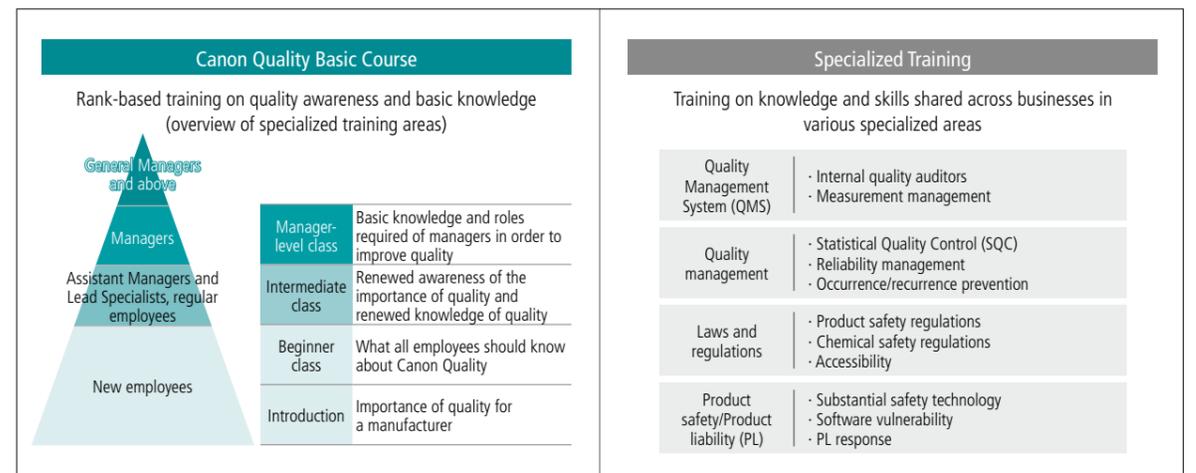
Canon conducts product safety training based on its quality education system, encouraging employees to be thorough in ensuring product safety and preventing product accidents.

In addition to conducting training that examines such issues as product safety regulations, chemical safety regulations, product liability laws, and substantial safety technology, we also conduct a condensed product safety-training course for new employees covering topics from these courses. Canon Inc. conducts e-learning activities to promote thorough understanding of the Voluntary Action Plan for Product Safety on an ongoing basis. In addition to these kinds of employee training programs, we also continually provide safety information, such as safety cautions when making repairs or exchanging parts, to Group companies involved with product sales, repair, and service.

In 2017, these training courses were held a total of 13 times.

Courses on accident-prevention strategies began in 2016 and were held a total of nine times in 2017. We also focused attention on compliance by expanding opportunities for training that include e-learning courses on product safety regulations pertaining to electricity, electromagnetic waves, and chemicals.

2017 Quality Training System



Ensuring Product Safety

We have set strict standards for managing quality that go beyond legal and regulatory requirements to ensure customers can use our products with complete peace of mind.

Voluntary Action Plan Based on the Basic Policy on Product Safety

Canon believes one of its most important missions as a manufacturer is to provide safe products that offer peace of mind and satisfaction. With this in mind, we formulated a Basic Policy on Product Safety that Group companies in Japan strictly adhere to.

Moreover, based on this policy, Canon Inc. and Group companies in Japan formulate and follow individual Voluntary Action Plans for Product Safety suited to their business format, working to ensure product safety while remaining customer-focused.

Moreover, we comply fully with government laws and notices, and have developed a system for immediate reporting, for example, in the unlikely event of an accident involving one of our products.

2017 Activities Scorecard for Canon Inc.

- Management review by the president based on the Voluntary Action Plan for Product Safety (conducted annually since 2008)
- Revised nine regulatory documents pertaining to product safety, including regulatory compliance procedures for both products and chemical substances
- Revised six in-house standards documents, including standards for product and chemical safety
- Continued efforts to raise awareness among customers about smoke emission from counterfeit batteries and the safe handling of electric cords and plugs, etc.
- Continued implementation of product safety training and emphasis on the importance of product safety during basic training on quality
- Continued implementation of updated e-learning course for all employees to promote understanding of the Voluntary Action Plan for Product Safety

Establishment of In-House Product Safety Technical Standards

Canon regards the provision of safe products as one of the most fundamental and important missions of a manufacturer. We therefore require that all Canon products comply with our own Product Safety Technical Standards (for substantial safety*), which take into account customer perspectives on product use, together with legally stipulated product safety standards.

For example, we employ plastics that are more flame resistant than the law requires, and we implement double-protection schemes for important safety-related components. We regularly revise these standards in light of technological advances as well as changes in how customers use our products, and changes in requests regarding safety and quality.

Based on these technical standards, we strictly enforce quality management in terms of safety at the design, evaluation, and production stages. We withhold from the market any products not meeting these exacting standards and ensure that all of our products are safe for use.

* Substantial safety: This means safety not only in terms of what is required by laws and statutes, but any safety issue that can reasonably be expected to arise during customer use.

Main Approaches to Safety Technology

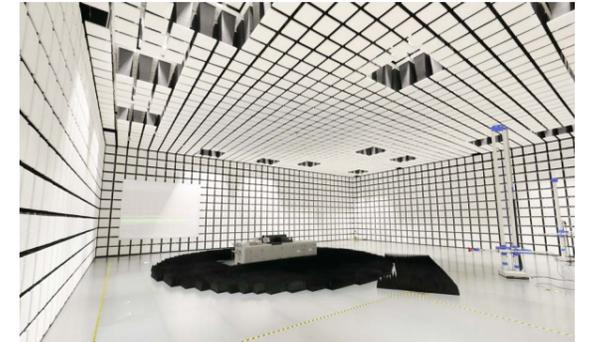
- Conduct safety assessments that address human factors (physical function, abilities, thinking and behavior), taking into account the variety of possible operations a user may perform
- Engage in joint development with manufacturers of essential safety-related components, such as non-combustible parts and non-fail protective components, and employ those meeting the requirements of Canon's Qualification System for Parts and Components
- Conduct safety-confirmation testing based on abnormal voltage waveforms in commercial power supplies confirmed in regions around the world where Canon products are sold
- Hypothesize abnormalities, such as component failure, and conduct stricter safety-evaluation testing than is required by the laws of each country or region

Quality Assessment During Development Creation of Assessment Environment for the Delivery of Safe Products

Canon Inc. has set up testing facilities compliant with public standards and relevant laws to accurately and thoroughly assess the safety of products in terms of electromagnetic interference (EMI), noise, flame resistance ratings, volatile organic compounds (VOCs), genotoxicity, and electrical safety.

Canon has also obtained certification in public standards such as ISO*¹/IEC*² and UL*³, enabling certified testing to be carried out in-house according to highly precise measurements. Specifically, Canon is equipped with the industry's leading testing technology, including semi-anechoic chambers for EMI testing that are among the largest and best in Japan, a verification laboratory for testing the fire safety and ignition propensity of large products, shielded rooms, and semi-anechoic chambers for acoustic noise testing. In addition to EMC testing*⁴, Canon is able to conduct in-house all testing necessary for applying for Blue Angel*⁵ certification.

*1 ISO: International Organization for Standardization, a non-governmental organization that formulates international industrial and commercial standards
 *2 IEC: International Electrotechnical Commission, an international standardization group that formulates standards on electrical and digital technologies
 *3 UL: Underwriters Laboratories, Inc., a company that conducts independent testing and certification of the safety of products that pass its assessment tests based on its own product safety standards established to standardize function and safety
 *4 EMC (Electromagnetic Compatibility) testing: Consists of testing for electromagnetic interference caused by a product or its power source that may affect the operation of other equipment, and testing for electromagnetic susceptibility of the product itself that may result in malfunction
 *5 Blue Angel: Launched in Germany as the world's first environmental labeling (ecolabeling) system



EMI measurement of products in a semi-anechoic chamber



Flammability verification laboratory for large products

Safety Assessment Initiatives

Safety Assessments of Chemical Substances Released from Products

Canon assesses the chemical emissions from its printers, multifunctional devices (MFDs), projectors, and other products. Our assessments include measurements of data necessary for acquisition of Germany's Blue Angel environmental label.

We also measure volatile organic compounds (VOCs) for which exposure limits have been set both within Japan and internationally. We verify that emission levels meet our in-house standards, which match or even exceed those set worldwide.

The in-house laboratory conducting these assessments has received accreditation from Germany's Federal Institute for Materials Research and Testing (BAM) and is therefore capable of conducting the assessments required for applications for Blue Angel certification. It has also received ISO/IEC 17025 and 28360 accreditation to conduct measurements in a fair and neutral manner.

Starting in 2017, large equipment that had been excluded from the UFP-related standards for receiving the Blue Angel mark will be required to meet those standards. Canon will also continue to respond in a timely manner to regulatory developments such as the introduction of the stricter ECMA-328* standard.

We consider protection of our customers and the environment to be of the highest priority. We are currently reviewing our processes and promoting efficiency through automation in order to shorten the assessment period.

* ECMA-328: Ecma International is the organization that sets standards for the information and communications systems sector globally. -328 is a category that governs chemical emission rates from electronic equipment.

Safety Assessments of Ink, Toner, and Other Consumables

Canon assesses the safety of its ink, toner, and other consumables, enabling customers to use its printers and MFDs with confidence.

For example, with regard to the materials for ink and toner, we carry out assessments related to genotoxicity, which is thought to be closely linked to carcinogenicity, using bacterial reverse mutation tests and in vitro mammalian cell micronucleus tests. Regarding the latter, starting in August 2014, Canon has been able to conduct in-house assessments of the water-insoluble materials used in many Canon products.

Canon's testing laboratories are highly reliable and have been certified by Japan's Ministry of Health, Labour and Welfare as in compliance with Good Laboratory Practice (GLP)* standards in the Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. (Chemical Substances Control Law). Canon's laboratories also comply with GLP standards set by the Organization for Economic Cooperation and Development (OECD). Furthermore, Canon became the first in Japan to have its in vitro mammalian cell micronucleus test certified as in compliance with the GLP standards in the Chemical Substances Control Law.

As part of making customer safety our top priority, we have also tried to make testing more efficient. In 2017, we installed more advanced equipment to boost efficiency further. We will continue to promote a range of initiatives to ensure customer safety and security.

* Good Laboratory Practice (GLP)
The standard for the management, testing and reporting of facilities and organizations that operate as testing agencies conducting chemical substance safety assessments. Testing according to GLP standards ensures reproducibility and data reliability. GLP standards set by the OECD were enacted in 1981, and since then, member countries have developed domestic laws and regulations based on these standards. Facilities certified as compliant under Japan's GLP standards in the Chemical Substances Control Law must have their certification renewed every three years, which involves receiving a new conformity screening prior to the expiration of the certification's validity period.



In vitro mammalian cell micronucleus test

Assessing the Safety of Chemicals Through Animal Testing

In some cases, animal testing is an effective means of verifying the impact a chemical may have on human health or the environment. Certain laws and regulations in Japan and other countries require the submission of animal test data as part of statutory chemical safety assessments.

In light of this, Canon conducts animal testing through a third-party specialist institution, but only in cases where it cannot obtain existing data externally with regard to the chemicals used in its toners and inks, and no alternative is available. This approach is stipulated in our in-house rules on the safety of chemical products and in the Three Rs* for animal testing.

Canon will continue to gather information and conduct analysis on novel approaches and evaluation methods that do not require animal testing so that alternative forms of evaluation can be conducted.

* The Three Rs: An internationally accepted set of guiding principles for the use of animals in testing proposed in 1959
Reduction: Reduce the number of animals used in testing
Refinement: Minimize the suffering of animals
Replacement: Use alternative methods to animal testing

Qualification System for Electronic Parts to Ensure Safety and Reliability

Canon considers it essential to maintain and improve the quality and reliability of every component, including integrated circuits and various electronic parts, to ensure products are safe and reliable. We have developed our own in-house quality certification system for electronic parts.

When selecting parts under this system, we evaluate reliability and structural soundness in accordance with standards for each type of part, ultimately using only electronic parts that meet these standards of quality.

In recent years, the market environment has undergone significant changes, including the consolidation or closure of electronic part manufacturers and the relocation of plants. In response, to ensure appropriate quality levels are maintained, we have upgraded the change management capabilities of Canon's in-house quality certification system. Canon is also working on enhancing its evaluation technologies to keep pace with advancements in electronic parts. This includes high-precision nondestructive evaluation technologies such as X-ray CT scans, and more detailed processing and observation technologies, as well as measurement technologies for higher-speed LSI.

Software Security and Response to Vulnerabilities

More and more of Canon's products, including multifunctional devices and cameras, are being connected to other products via networks, greatly enhancing convenience. At the same time, cybersecurity risks, such as leaks of personal or confidential information from a network-connected device, have increased.

In response to such risks, Canon installs security functions for network-compatible products during software development and conducts various types of vulnerability testing. We have also worked to raise awareness about security, vulnerabilities, and risks, and to standardize companywide approaches to testing methods.

In 2017, to allow accurate risk assessments about the loading of security functions, Canon began applying unified technical standards for application during product development. We also introduced the Vulnerability Assessment Check-Sheet as a quality confirmation requirement at the time of production release approval. This parameter sheet is now used at Canon Inc. for vulnerability verification processes.

Moreover, recognizing the importance of minimizing the impact on customers when a vulnerability is found after products have been shipped, we strive to grasp and publish necessary information about any such issues in a timely manner. Accordingly, we have established a system to investigate market trends on vulnerability, including the products of other companies, and to quickly share information internally to prevent similar problems from occurring in our own products.

After-Sales Support Online Support Services

In order to facilitate the resolution of issues, Canon provides customer-support services globally through its websites.

On these websites, customers can access support information, including FAQs, product specifications, and user manuals, and can download the latest software and drivers. Support information and software based on common content for worldwide use, as well as local content that has been added by marketing subsidiaries, are made available on our company websites in their respective languages.

Customer usage is continuously monitored and survey information analyzed, with feedback going to the divisions that created the relevant content. We continuously update the content based on frequently searched keywords, making it easier for customers to find what they are looking for.

In connection with the spread of mobile devices (including smartphones) in recent years, Canon is making efforts to optimize display screens, making online support services easier to use.

Enhancing After-Sales Service Worldwide

After-sales service is critical for customers to enjoy long-term use of Canon products. We are therefore expanding our after-sales service network on a global scale in order to offer the same level of prompt, reliable support in every market worldwide.



A Canon China customer service center

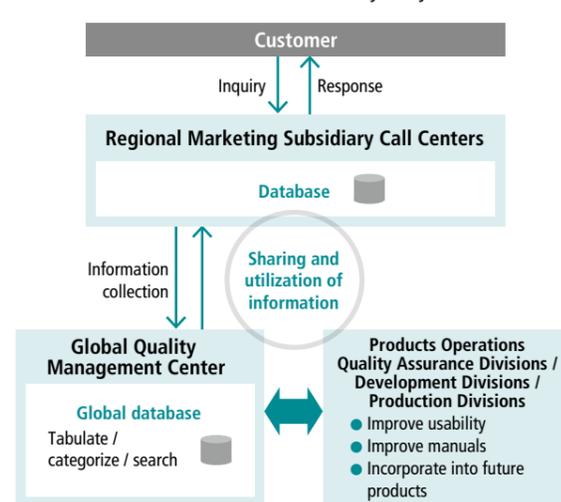
Utilizing Feedback from Market Data Analysis in Product Improvements

In order to achieve the highest level of customer satisfaction, Canon incorporates user feedback in addition to conducting product evaluations from the customer's perspective at the development stage.

One way we do this is through the Call Information Collection and Analysis System, updated in 2015. This is a system to collect customer feedback and requests received by call centers at our marketing subsidiaries worldwide. The development and production divisions and marketing subsidiaries can view this information at any time, helping them improve quality, revise user manuals, and develop better products. The results of call analyses are fed back to development teams who then use that information to improve customer convenience by, for example, improving displays on product control panels or simplifying methods for connecting to wireless LANs.

The system currently covers 29 countries and regions in Japan, the Americas, Europe, Asia, and Oceania.

Call Information Collection and Analysis System



Responding to Product Safety and Quality Issues

Although Canon strives to prevent product safety and quality issues, in the event that one does arise, it has in place a framework that ensures a prompt and appropriate response, including causal investigation, free repair, and information disclosure.

We keep our customers informed about product safety as well as quality issues and remedial procedures by placing product advisory statements in various newspapers and on our website.

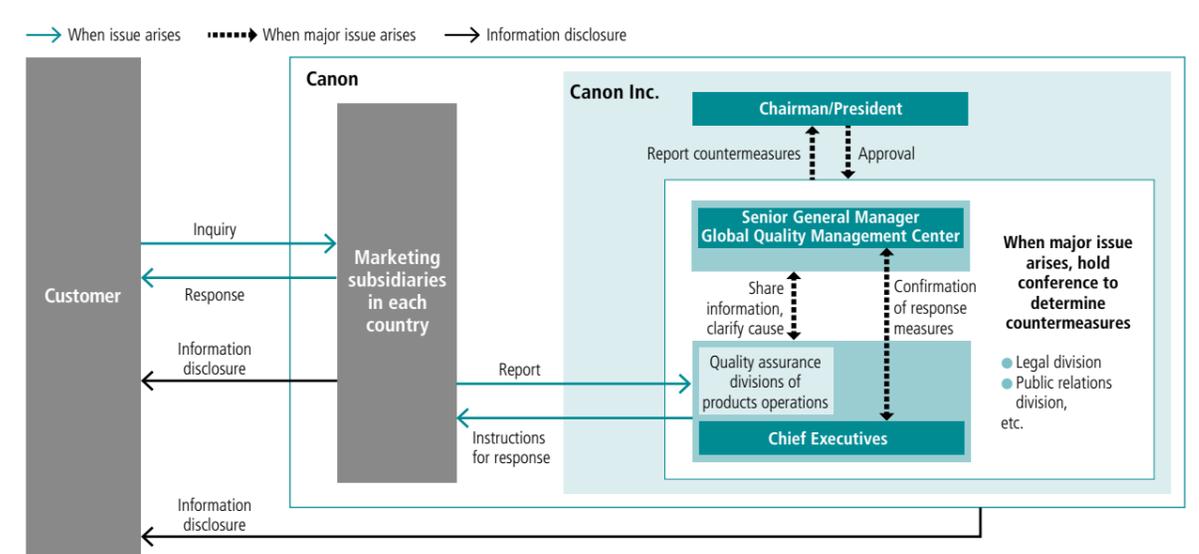
In 2017, no product advisory statements were placed on our website. We did, however, post three quality notices.

Process for Responding to Quality Issues

When quality issues arise, the marketing subsidiaries in each country, which serve as contact points for customers, file reports with the quality assurance division of the respective Canon Inc. products operations. The quality assurance division then investigates the cause of the issue and looks into countermeasures. Moreover, in the event of a major issue, related products operations, the Global Quality Management Center, legal division, and public relations division are consulted concerning response measures, and the matter is reported to the chairman/president.

When notification is made to customers via a company notice or Canon websites, we provide instructions to each marketing subsidiary in regions where the relevant product is sold, and, as a general rule, simultaneously release the information worldwide.

Flowchart of Countermeasures to Quality Issues



Improving Product Usability

We strive to develop products that different customers can use easily and with confidence.

Providing Information on the Appropriate Use of Products

Pursuing Usability for Canon Products

With the aim of making products easy to operate, Canon conducts user tests through an in-house employee-based product tester system in the product development stage. We also ask in-house specialists to give us their assessment.

We objectively test human factors, including physical characteristics, perception, judgment, and operational skills, to develop products that customers can use comfortably and with ease. In a dedicated test room, we have installed equipment that allows clear, detailed observation and recording of the behavior and actions of testers as they operate devices.



User testing via our in-house product tester system

The Rapiim Eye 10 manual was highly praised for features such as multiple illustrations along with optimized font sizes and layouts, which made this product manual for medical professionals, characteristically filled with difficult, specialized jargon, easier to read and understand.

Applying Universal Design in Product Development

Canon strives to create people-friendly products by pursuing functionality, operability, and convenience from the customer's perspective in actual usage situations. As part of this effort, we have adopted a universal design approach through which we endeavor to create products from a customer perspective from the design stage onward, facilitating use by all customers, regardless of age, gender, nationality, or physical ability. At Canon, we approach product design and development from the perspective of making the customer "look like a natural."

For example, we conduct user-centric testing of displays, audible alerts, and voice guidance in our product controls, and check the extent to which terminology, icons, and other features match the perceptions of customers, so as to evaluate usability, accessibility, safety, comfort, and other criteria. Information obtained via such testing is valuable in the development of more user-friendly products.

Canon will continue to develop products for a wider range of customers. Planned improvements include efforts to improve the visibility of visual information.



Analyzing the usability of products based on the physical conditions of users

Preparing Manuals that Are Easy to Understand

Along with improved product usability, Canon also works to increase the quality of user manuals to assist customers in using its products easily and safely.

In 2017, the user manual for the Rapiim Eye 10 protein analyzer made by Canon Medical Systems won a Safety Award and an Honorable Mention Award at the 2017 Japan Manual Contest. Sponsored by the Japan Technical Communicators Association, and regarded as the most prestigious event of its kind in Japan, the contest aims to improve manual quality and develop the skills of manual writers.

Promoting Our Universal Design Project

Aiming to further encourage efforts in universal design, Canon established a universal design policy and a companywide Universal Design Project (UDP).

Based on the policy and project, we prepared a booklet that addresses the physical characteristics of users and various issues that arise during product use, and distributed it throughout the development division. We also created pamphlets and set up a website to inform customers about the UDP initiatives under way at Canon. Through such means, we are sharing information on universal design both inside and outside the company.

In partnership with the Japan Braille Library, Canon has conducted research into the everyday challenges faced by the visually impaired. We aim to use such feedback to develop better products.

Product Accessibility

Canon is working to increase the accessibility of its products. Accessible products are those designed for easy use by all, including the elderly and persons with disabilities.

Section 508 of the United States Rehabilitation Act requires that agencies of the federal government only purchase products that meet stipulated accessibility standards. The results of Section 508 accessibility evaluations of Canon products have been collected into a VPAT* and made available on the Canon U.S.A. website.

Similar legislation is now being developed in Europe as well. Canon is committed to regularly gathering the latest information, and to developing products that are compliant with the accessibility requirements of each country.

* VPAT: Voluntary Product Accessibility Template, a document that evaluates how accessible a particular product is according to Section 508 standards.

imageRUNNER ADVANCE Series Is Easy to Use, Even for the Visually Impaired

The imageRUNNER ADVANCE series of multifunction devices for offices features voice guidance and voice recognition for basic commands, allowing for easier use by the visually impaired. Pinch-in and pinch-out touch features for the LCD operation screen have also been added to enable people with low vision to operate these devices by increasing the size of buttons and words on the display.



Product development with consideration for the visually impaired

Management Structure

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Corporate Governance

Fundamental Policy

In order to establish a sound corporate governance structure and continuously raise corporate value, Canon believes that it is essential to improve management transparency and strengthen management supervising functions. At the same time, a sense of ethics and mission held by each executive and employee of a company is very important in order to achieve continuous corporate growth and development.

Details of Canon Inc.'s corporate governance structure are available on the company's official website and the Tokyo Stock Exchange website under "an overview of Corporate Governance at Canon Inc."

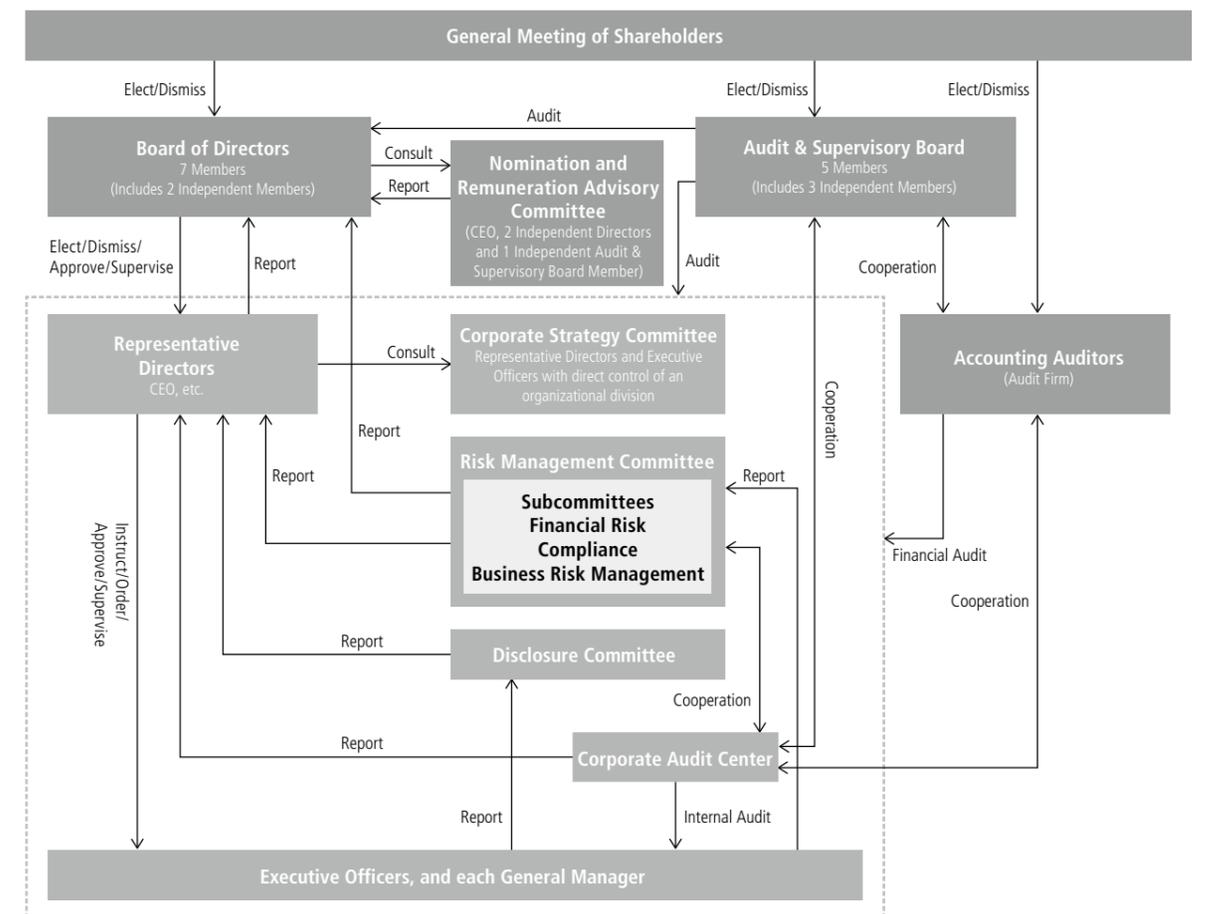
Reference: An overview of Corporate Governance at Canon Inc.
<https://global.canon/en/ir/strategies/governance.html>

Governance Structure

Fundamental Policy

Canon is globally expanding its businesses in various fields, including office equipment, consumer products, medical equipment, and industrial equipment, and aims to aggressively expand into new business fields in the future. In order to make prompt decisions in each business field, and make important decisions for the entire Canon Group or matters that straddle several business fields from a company-wide perspective and at the same time secure appropriate decision making and execution of operation, the Company judges the corporate governance structure below to be effective.

Corporate Governance Structure (As of April 1, 2018)



Board of Directors

While the focus of the organizational structure of the Board of Directors is on Representative Directors that oversee company-wide business strategies or execution such as the CEO, COO, CFO, CTO, and Representative Directors or Executive Directors that oversee multiple business fields or headquarters functions, in order to secure sound management, two or more Independent Outside Directors are appointed. The Board of Directors, in accordance with laws and regulations, makes important decisions and supervises the execution of duties by officers.

Except for the above, the CEO and other Representative Directors are active in decision making and execution, and under the command and supervision of the Representative Directors, Executive Officers that are elected through resolution of the Board of Directors make decisions and execute operations of each business field or function.

The Board of Directors consists of seven members: five Representative Directors from inside the company and two Outside Directors that qualify as Independent Directors. Additionally, there are 36 Executive Officers, including two females and one non-Japanese.

Audit & Supervisory Board

As a body which is in charge of the audit of operations, under the principles of autonomy, which is independent from the Board of Directors, Canon Inc. has full-time Audit & Supervisory Board Members that are familiar with Canon Inc.'s businesses or its management structure, and Independent Outside Audit & Supervisory Board Members that have extensive knowledge in specialized areas such as law, finance and accounting. The Audit & Supervisory Board, which is composed of these individuals, cooperates with Canon Inc.'s accounting auditors and internal audit division, oversees the status of duty execution of operations and corporate assets to secure the soundness of management.

The Audit & Supervisory Board consists of five individuals, three of which are Independent Outside Audit & Supervisory Board Members. In accordance with auditing policies and plans decided at Audit & Supervisory Board meetings, the Audit & Supervisory Board Members attend Board of Directors' meetings, Corporate Strategy Committee meetings, etc., receive reports from directors and employees, review documents related to important decisions, and conduct audits by investigating, etc., the situation of businesses and property of Canon Inc. and its subsidiaries. In this way, the Audit & Supervisory Board conducts strict audits of directors' execution of duty, including the status of development of the internal control system.

Procedure for Selecting Directors

Canon Inc. established the "Nomination and Remuneration Advisory Committee," a non-statutory committee, which consists of the CEO, two Independent Outside Directors and one Independent Outside Audit & Supervisory Board Member. At the time, Director and Audit & Supervisory

Board Member candidates are nominated and Executive Officers are selected (includes the selection of the successor of chief executive officer), the CEO recommends candidates thereof from among individuals that have been recognized as having met the prescribed requirements, and the Committee checks the fairness and validity of such recommendations prior to submission to and deliberation by the Board of Directors.

Additionally, as for Audit & Supervisory Board Member candidates, prior to deliberation of the Board of Directors, consent of the Audit & Supervisory Board shall be acquired.

Corporate Strategy Committee, Risk Management Committee, and Disclosure Committee

Canon Inc. established the Corporate Strategy Committee, consisting of Representative Directors and some Executive Officers. Among items to be decided by the CEO, the Committee undertakes prior deliberations on important matters pertaining to Canon Group strategies. Outside Directors and Audit & Supervisory Board Members attend Corporate Strategy Committee meetings and are able to express their own opinions.

Based on a resolution passed by the Board of Directors, Canon set up the Risk Management Committee, which formulates policy and action proposals regarding improvement of the Canon Group risk management system. The Risk Management Committee consists of three entities: the Financial Risk Management Subcommittee, which is tasked with improving systems to ensure reliability of financial reporting; the Compliance Subcommittee, which is tasked with promoting corporate ethics and improving legal compliance systems; and the Business Risk Management Subcommittee, which is charged with improving systems to manage overall business risks, including risks related to product quality and information leak. The Risk Management Committee verifies the risk management system's improvement and implementation and reports the status to the CEO and the Board of Directors.

In addition, the Disclosure Committee was established to undertake deliberations pertaining to information disclosure, including content and timing, to ensure important corporate information will be disclosed in a timely and accurate manner.

Function, Role, and Appointment of Outside Directors and Outside Audit & Supervisory Board Members

Canon Inc. established the "Independence Standards for Independent Directors/Audit and Supervisory Board Members" resolved by the Board of Directors with the consent of all Audit & Supervisory Board Members, in order to clarify the standards for ensuring independence of Independent Directors/Audit & Supervisory Board Members of Canon Inc., taking into consideration Japan's Corporate Governance Code (Principle 4.9) and the independence criteria set by securities exchanges in Japan. The standards

Outside Directors and Outside Audit & Supervisory Board Member

	Name	Reasons for Appointing
Outside Directors	Kunitaro Saida	Kunitaro Saida was elected as an Outside Director so that Canon Inc.'s management may utilize his high-level expertise and wealth of experience gained from his distinguished career as Superintending Prosecutor of High Public Prosecutors Offices (in Takamatsu, Hiroshima and Osaka) and later as an attorney in corporate legal affairs, as well as serving as an Outside Director and an Outside Audit & Supervisory Board Member for other companies.
	Haruhiko Kato	Haruhiko Kato has, over many years, had a distinguished career in fiscal operations of the national government as Director-General of the Tax Bureau in the Ministry of Finance, and Commissioner of National Tax Agency. He was elected as an Outside Director so that Canon Inc.'s management may utilize his high-level expertise and wealth of experience gained from his managerial experience as President of Japan Securities Depository Center, Incorporated.
Outside Audit & Supervisory Board Members	Tadashi Ohe	Tadashi Ohe has been engaged for many years in corporate legal affairs as an attorney and as a professor specializing in legal research. Canon Inc. elected him as an Outside Audit & Supervisory Board Member as it desires to leverage his considerable experience and high level of expert knowledge about corporate legal affairs to further enhance the Company's auditing system.
	Hiroshi Yoshida	Hiroshi Yoshida has been engaged for many years in corporate accounting as a certified public accountant. Canon Inc. elected him as an Outside Audit & Supervisory Board Member as it desires to leverage his considerable experience and high level of expert knowledge about corporate accounting to further enhance Canon Inc.'s auditing system.
	Koichi Kashimoto	Koichi Kashimoto has, over many years, been involved in business management of a major life insurance company, has served as a supervisor of general affairs including legal affairs, and furthermore has extensive international experience. Canon Inc. elected him as an Outside Audit & Supervisory Board Member given expectations that he will utilize such knowledge and experience in performing audits encompassing the entire Group, including its overseas operations.

are posted on Canon's official website. All of Canon's Outside Directors and Outside Audit & Supervisory Board Members satisfy the standards for independence, and assume roles that contribute to the maintenance and improvement of Board of Directors' transparency and accountability.

In addition, all of our Outside Directors and Outside Audit & Supervisory Board Members are Independent Directors/Audit & Supervisory Board Members as notified to each stock exchange in Japan.

Reference: Independence Standards for Independent Directors/Audit and Supervisory Board Members
<https://global.canon/en/ir/strategies/governance.html>

Internal Audit Divisions

The Corporate Audit Center, the company's internal auditing team, as an independent and specialized organization and in accordance with internal audit rules, conducts audits and evaluations and provides guidance on such matters as compliance with laws and the internal control system. Furthermore, the Corporate Audit Center is primarily responsible for audits covering such areas as quality, the environment, and information security, and conducts them in collaboration with the divisions in charge. Additionally, based on senior executive management policy, for all work processes, audits must be conducted from a specialized viewpoint and there are plans to increase the number of members from 75 (as of April 1, 2018) to strengthen auditing functions.

Cooperation between Audit & Supervisory Board Members and Internal Auditing

The Audit & Supervisory Board Members and the Audit & Supervisory Board receive from the Corporate Audit Center each outline of their internal audit plan before conducting each audit as well as reports about important auditing items. After the internal audit is conducted, the Audit &

Supervisory Board Members and the Audit & Supervisory Board hear reports on all audit results and evaluations. Furthermore, close cooperation between Audit & Supervisory Board Members and Internal Auditing is promoted through, for example, monthly meetings between Audit & Supervisory Board Members and the head of the Corporate Audit Center where information and opinions are exchanged.

Cooperation between Audit & Supervisory Board Members and Accounting Auditors

The Audit & Supervisory Board Members and the Audit & Supervisory Board receive from the accounting auditors an outline of their audit plan before conducting each audit as well as explanations about important auditing items. The Audit & Supervisory Board Members and the Audit & Supervisory Board confirm the validity of these items. The Audit & Supervisory Board Members receive from the accounting auditors reports on the internal control system, accounting audits, and quarterly reviews, and they also conduct timely exchanges of opinion with the accounting auditors on such subjects as the results of audits and reviews, the accounting auditors' understandings of the company's internal control systems, including how they are being implemented and maintained, and risk evaluations. Furthermore, in addition to observing audits and attending results presentations as necessary, Audit & Supervisory Board Members hold meetings with accounting auditors in charge of auditing Group companies in Japan and abroad, and endeavor to fully grasp audit conditions.

The Audit & Supervisory Board Members and the Audit & Supervisory Board also confirm the validity of the quality management systems of audits, receiving detailed explanations about this from accounting auditors. With the aim of monitoring the independence of accounting auditors, Canon introduced an Audit & Supervisory Board preapproval system for the content of auditing contracts and remuneration.

Executive Compensation

The remuneration of Representative Directors and Executive Directors consists of a basic remuneration, which is a fixed amount, paid each month, as compensation for execution of duties required in accordance with their role, a bonus that is linked to the Company's business performance in each business year, and a stock-type compensation stock option plan to provide an incentive to improve midium- to long-term performance and raise corporate value.

As for Outside Directors and Audit & Supervisory Board Members, remuneration is limited to the basic remuneration, which is a fixed amount, paid each month.

The Company established the "Nomination and Remuneration Advisory Committee," a non-statutory committee, which consists of the CEO, two Independent Outside Directors, and one Independent Outside Audit & Supervisory Board Member. The Committee examined the rationale of the remuneration system, including calculation standards of the basic remuneration and the bonus, and the granting standards of stock-type compensation stock option plan and reported to the Board of Directors that they considered such remuneration system reasonable, at the meeting of the Board of Directors held in January 2018.

The basic remuneration and bonus amount for each Director and Executive Officer is determined by the Board of Directors in accordance with calculation standards examined by the "Nomination and Remuneration Advisory Committee."

The total amount of basic remuneration and stock-type compensation stock option plan for Directors is within the limit of the remuneration amount that is resolved by the general meeting of shareholders.

As for the bonus for Directors, the payment is fixed provided that the proposal about such payment submitted at the ordinary general meeting of shareholders is approved.

Remuneration for individual Audit & Supervisory Board Members is determined through discussion among the Audit & Supervisory Board Members within the limit of the remuneration amount resolved by the general meeting of shareholders.

Policy for Constructive Dialogue with Shareholders

Policy

For sustainable growth and to help improve corporate value over a medium- to long-term perspective, Canon Inc. has constructive dialogue with shareholders through the ordinary general meeting of shareholders, corporate strategy conferences, financial results conferences, and interviews with major institutional investors.

The Structure to Promote Dialogue

Finance & accounting (Investor Relations (IR)), legal affairs and corporate communications are responsible for working together and promoting dialogue. The Executive Vice President & CFO oversees the entire structure to promote dialogue.

For analysts and institutional investors, the CEO hosts a corporate strategy conference at the beginning of the year. Other than this, the CFO hosts quarterly financial results conferences. For individual investors, conferences are held when appropriate and on Canon's official website, specific pages containing information* about corporate strategy, financial results, and financial data, etc., have been set up using descriptions that are easy to understand.

Additionally, Canon Inc. works for dialogue with domestic and overseas analysts and institutional investors, arranging interview opportunities appropriately. For details, see "an overview of Corporate Governance at Canon Inc."

As for the opinions or demands that are obtained through dialogue with shareholders, accordingly, the department in charge reports to the CEO and the CFO will report important ones to the CEO or the Board of Directors.

* Reference: Information for Canon Inc. investors <https://global.canon/en/ir/>

Controlling Insider Information

Canon Inc. has set the "Rules on Prevention of Insider Trading," which establishes thorough control of undisclosed material information and provides the procedure for information disclosure.

2017 Executive Compensation by Executive Category, Type of Compensation, and Number of Executives

Category of Position	Number of Directors and Audit & Supervisory Board Members (persons)	Remuneration and Other Amounts by Classification (millions of yen)		Remuneration and Other Amounts (millions of yen)
		Basic Remuneration	Bonus	
Directors (excl. Outside Directors)	5	742	111	853
Outside Directors	2	49	-	49
Audit & Supervisory Board Members (excl. Outside Audit & Supervisory Board Members)	2	56	-	56
Outside Audit & Supervisory Board Members	4	62	-	62

* The above number of Outside Audit & Supervisory Board Members includes 1 Outside Audit & Supervisory Board Member who has retired at the conclusion of the Ordinary General Meeting of Shareholders for the 116th Business Term held on March 30, 2017.
 ** "Bonus" represents the accrued director's bonuses.

Risk Management

Canon's Approach to Risk Management

Canon Inc. recognizes that the improvement and implementation of a risk management system to deal with serious risks that the Canon Group may face in the course of business is extremely important to ensure the proper operation of the Group and to continually improve corporate value.

Risk Management System

Canon Inc. has established a risk management committee based on a resolution of the Board of Directors. Chaired by the Executive Vice President, the committee has established three subcommittees: the Financial Risk Management Subcommittee, Compliance Subcommittee, and Business Risk Management Subcommittee.

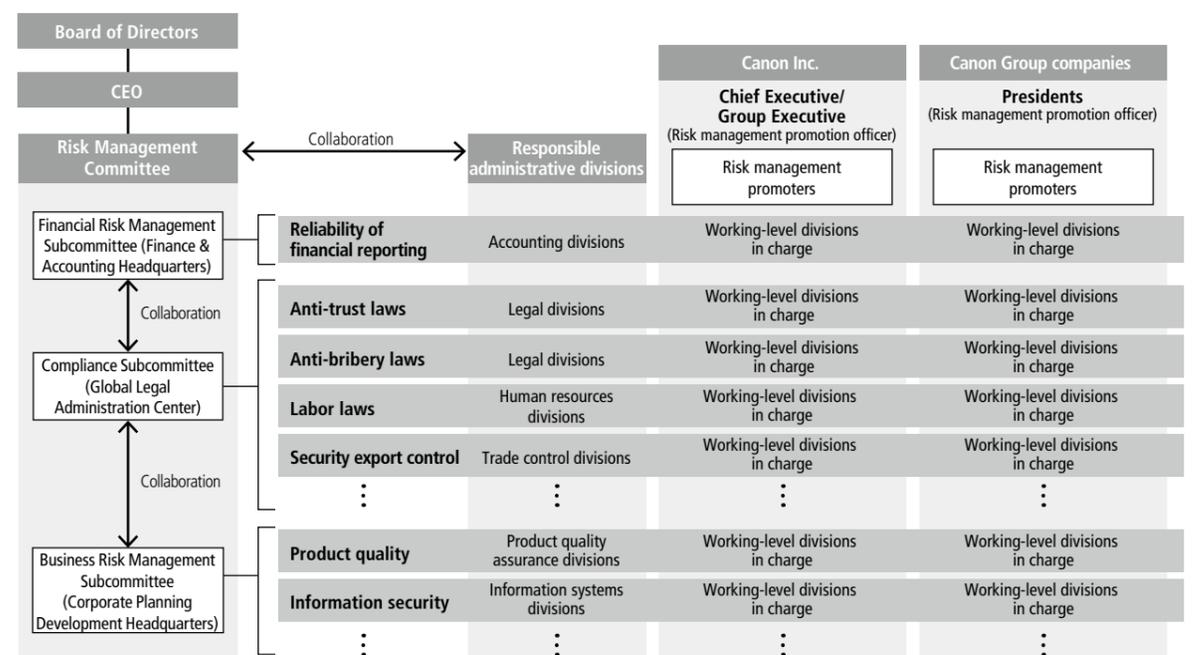
The Risk Management Committee develops various measures to promote the Canon Group's risk management activities, including identifying any significant risks (violations of laws and regulations, inappropriate financial reporting, quality issues or information leaks, etc.) that the Canon Group may face in the course of business.

The committee also creates an annual basic policy for risk management activities and, after obtaining the approval of the Board of Directors, carries out risk management activities within Canon Inc. divisions and Group companies. The committee evaluates the improvement and implementation of the risk management system for each division and Group company, and reports the results of such evaluations to the CEO and Board of Directors. Results of evaluations conducted in 2017 showed no major flaws in the system.

Processes for Improvement and Implementation of Risk Management System



Risk Management Promotion System



In line with the basic policy prepared by the committee, in their capacity as risk management promotion officer, the heads of Canon Inc. divisions and presidents of Canon Group companies each formulate an annual risk management plan for their own division or Group company, and assume responsibility for promoting related risk management activities. Risk management promoters appointed within each division and Group company assist risk management promotion officers in coordinating risk management practices.

Additionally, Canon Inc. administrative divisions with jurisdiction over miscellaneous risks associated with business activities, including the legal division, human resources division, security trade control division, and quality assurance division, control and support the risk management activities of each division and Group company.

Group-Wide Risk Management Communication

During training for newly appointed Canon Group executives conducted by the human resources division, Canon Inc. educates them on the importance of autonomously improving and implementing a risk management system at each company and the role of executives in improving and implementing such system.

Similarly, when the human resources division conducts training for newly appointed general managers and managers, it educates them on the importance of the system to manage legal risk and the role of management in constructing such system.

In addition, an intranet website provides employees of Canon Inc. and Group companies with timely information, including the Canon Group's approach regarding risk management and updates on activities.

Financial Risk Management

The Financial Risk Management Subcommittee carries out activities to strengthen internal controls pertaining to financial risks for the entire Canon Group, including compliance with Japan's Companies Act and Financial Instruments and Exchange Act as well as the United States' Sarbanes-Oxley Act.

We endeavor to make qualitative improvements in ensuring the reliability of the Group's financial reporting. We support independent initiatives and self-driven educational activities at Group companies as they implement the PDCA cycle (review business procedures for financial risk).

As a result of these initiatives, Canon's accounting auditor determined that the company's internal controls related to financial reporting were effective in fiscal 2017.

Compliance

The Compliance Subcommittee works to promote corporate ethics across the Group in accordance with the Canon Group Code of Conduct, and to improve the Group's legal risk management system.

Sections of the Canon Group Code of Conduct (Extract)

Management Stance

1. Contribution to Society

- Provision of excellent products
- Protection of consumers
- Preservation of the global environment
- Social and cultural contributions
- Communication

2. Fair Business Activities

- Practice of fair competition
- Observance of corporate ethics
- Appropriate disclosure of information

Code of Conduct for Executives and Employees

1. Compliance with Corporate Ethics and Laws

- Fairness and sincerity
- Legal compliance in performance of duties
- Appropriate interpretation of applicable laws, regulations and company rules

2. Management of Corporate Assets and Property

- Strict management of assets and property
- Prohibition against improper use of company assets and property
- Protection of the company's intellectual property rights

3. Management of Information

- Management in compliance with rules
- Prohibition against personal use of confidential and proprietary information
- Prohibition against insider trading
- Prohibition against the unlawful acquisition of confidential or proprietary information pertaining to other companies
- Appropriate use of confidential and proprietary information pertaining to other companies

4. Conflicts of Interests / Separation of Personal and Company Matters

- Avoidance of conflicts of interests
- Prohibition against seeking, accepting or offering improper gifts, entertainment, or other benefits
- Prohibition against acquisition of pre-IPO shares

5. Maintenance and Improvement of Working Environment

- Respect for the individual and prohibition against discrimination
- Prohibition against sexual harassment
- Prohibition against bringing weapons or drugs to the company workplace

Promoting Corporate Ethics

■ Canon Group Code of Conduct and Compliance Card

Canon established the Canon Code of Conduct in 1992, and later updated it as the Canon Group Code of Conduct in 2001. It clarifies the Canon Group's management stance and standards that Canon Group executives and employees must

comply with in their duties. In addition to Japanese, the Code of Conduct has been translated into many languages, including English, French and Chinese, and adopted by a resolution of the Board of Directors of each Canon Group company, which also strives to ensure that it is known and practiced by all.

In addition, a portable Compliance Card has been created in Japanese and many other languages, including English, French and Chinese, and given out to Group executives and employees inside and outside Japan. Written on one side of the card is the *San-ji* (Three Selves) Spirit, which has been the guiding principle of the company since its founding, and on the other side is a compliance test that enables employees to carry out self-questioning of their actions on a daily basis.



Compliance Card

■ Corporate Ethics and Compliance Training

Canon Inc. carries out corporate ethics and compliance training for employees suited to the circumstances and conditions of the region where they operate.

For example, Canon Inc. conducts corporate ethics and compliance training as part of rank-based training for newly appointed general managers and managers as well as new employees.

Additionally, Canon Inc. and its subsidiaries in Japan have since 2004 designated a Compliance Week twice a year—once in the first half of the year and the other in the second half—in order to foster discussions in the workplace about compliance issues. Through these efforts, we strive to develop and improve operational processes to ensure that employees are aware of compliance and abide by the law.

■ Whistleblower System

Canon Inc. has established a hotline to receive information related to compliance issues. The confidentiality of callers is strictly maintained, and they are guaranteed not to suffer any unfair treatment for using the hotline. We continually work to encourage use of the system by raising awareness of the hotline services, using such means as an intranet compliance website and compliance training.

Hotlines have been established at nearly all Group companies inside and outside Japan. Canon Inc. receives regular reports from Group companies on the operational status of their whistleblower system.

Legal Risk Management System

At Canon, we have identified significant legal risks that the Canon Group may face in the course of business (for example, violations of anti-trust laws, anti-bribery laws and export control regulations) by considering the potential likelihood and impacts on Canon's business. To minimize these risks, we are working to improve a system to ensure legal compliance by improving operational workflows and rules, providing training on laws for related employees, and conducting audits and checks.

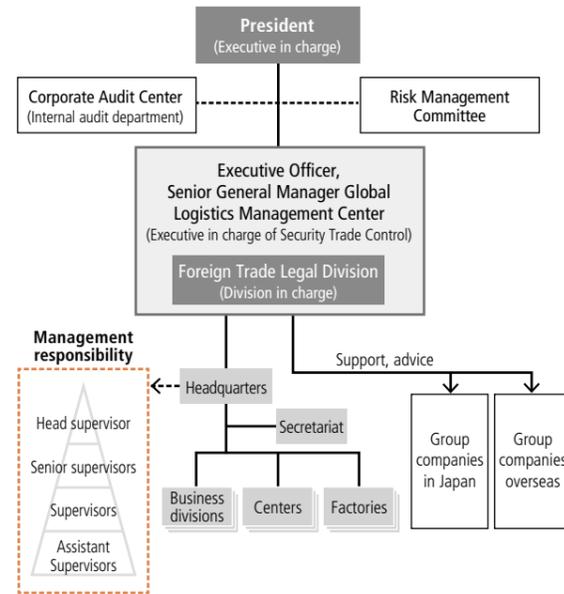
■ Strict Compliance with Export Control Regulations

Canon Inc. has established a security trade control framework headed by the president and overseen by the Foreign Trade Legal Division within the Global Logistics Management Center. This ensures that we can implement proper security trade controls in compliance with strict regulations on the export of goods and technologies for civil use that could be diverted for use in weapons of mass destruction or conventional weaponry.

The Foreign Trade Legal Division works with divisions involved with individual goods and technologies to double-check such issues as whether export goods and technologies are controlled by regulations, or whether counterparties are engaged in the development of weapons of mass destruction. We have also established and revised Security Trade Control Guidelines, and hold regular briefings and training sessions for relevant persons at Canon Inc. and Group companies in Japan to further educate employees about the importance of security trade control. We also provide Group companies with templates for company rules, training materials for employees, and support via the help desk to help these companies establish control frameworks and rules.

Such thorough internal controls at each Group company ensure that the Canon Group doesn't violate security trade control laws. Canon Inc. has also maintained a bulk export license from Japan's Ministry of Economy, Trade and Industry continuously since 1990. This license is granted only to exporters who exercise strict controls.

Canon Inc.'s Security Trade Control System



Training on Security Trade Control in 2017

Category	Subject	Number of sessions
Rank-based	New employee training	1
	New general manager training	2
	New manager training	2
	New staff manager training	2
	Employee seminars on trade controls	4
Expatriates	International staff training	7
Canon Group	Expert training for security trade control employees	3
	Global e-learning (Japanese, English, Chinese and Thai languages)	Ongoing

Compliance with Anti-Trust Laws

Canon recognizes that compliance with anti-trust laws, which apply to all of its business activities, from product development to production, sales and after-sales service, is absolutely vital.

Business divisions of Canon Inc. and sales and service companies of the Canon Group inside and outside Japan conduct regular training for employees of divisions exposed to the risk of anti-trust violations to educate them about anti-trust laws, give examples of legal violations, and provide everyday operational compliance guidance. Employees are encouraged to make use of Canon's anti-trust law hotline (connected to the Legal Division) when unsure of how to interpret or apply anti-trust laws.

Prevention of Bribery

The Canon Group Code of Conduct clearly stipulates that Canon will not receive benefits in the form of gifts or entertainment that exceed the social norm, or provide similar benefits to other parties.

Canon carries out regular training for employees of divisions involved with negotiations between public officials and business partners to inform them about the latest regulatory trends (including provisions to prevent bribery of public officials outside Japan) in major countries and details of the Code of Conduct.

Promoting Business Risk Management

The Business Risk Management Subcommittee is responsible for mitigating serious operational risks.

Action policies and plans for each serious risk are decided in cooperation with the responsible administrative divisions for the entire Canon group and implemented throughout Canon Inc. business divisions and Group companies, along with the promotion of risk mitigation activities.

Ensuring Complete Information Security

Recognizing that information security is a vital management task, Canon has established an appropriate management system for the entire Group, in accordance with the fundamental principles of information security regulations. The steps that we take under this system include measures to prevent leaks of confidential information, handle external cyberattacks, bolster information security at production facilities, and provide information security training to raise employee awareness.

Since 2005, Canon has had external certification, ISO27001, for its information security management systems.

Information Security Management System Operations

The Information Security Committee is the decision-making body for information security measures at Canon. It is chaired by the senior executive with responsibility for information security, namely the Group Executive in charge of the Information & Communication Systems Headquarters. The latter is responsible for implementing measures determined by the Information Security Committee to manage this issue across the Canon Group.

If an information security incident occurs, the matter must be reported to the Information & Communication Systems Headquarters. It may also be reported to the Risk Management Committee, depending on circumstances (→P124).

The Information & Communication Systems Headquarters formulated the Canon Group Information Security Rules to ensure the same level of measures and a consistent

approach to information security are applied across the Canon Group globally. Each Group company creates regulations and guidelines based on these rules in line with its needs, and conducts related training and awareness activities. Periodic inspections are also carried out to assess the status of each Group company's information security measures and enable improvements or revisions as needed.

In 2017, information security checks were carried out at 21 Group companies in Japan and 19 Group companies overseas. These inspections found that each company's system was sound and in good working order.

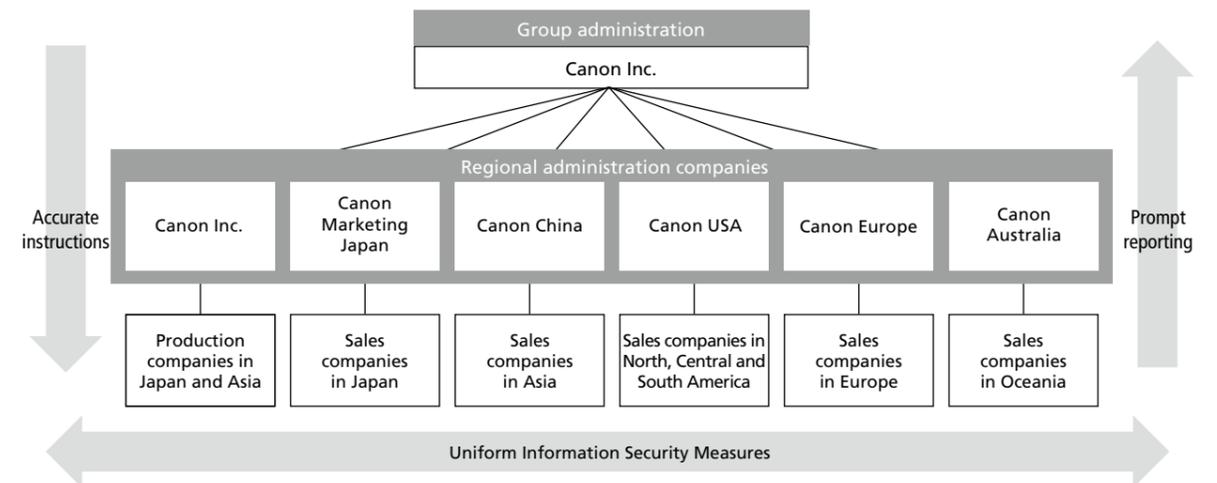
Canon will maintain an expedient and smooth communication channel with its Group companies and make every effort to ensure that its mechanisms can identify and remedy issues based on regular information security checks.

CSIRT*, a dedicated team for dealing with information security incidents, was created within Canon Inc.'s Information & Communication Systems Headquarters in 2015. At that time, Canon joined the Nippon CSIRT Association (NCA) to strengthen collaboration with CSIRTs in other companies.

Canon plans to reinforce its information security systems further by strengthening countermeasures in response to information security incidents, while also seeking to prevent more widespread damage by developing early-detection capabilities and promoting collaboration with outside organizations.

* CSIRT: Computer Security Incident Response Team. This is a dedicated, organized group that deals with incidents involving computer security.

Global Information Security System Organization



Information System Security Measures

Canon implements measures to safeguard the three elements of information security: confidentiality, integrity, and availability*¹.

As part of measures to prevent the leakage of confidential data, we ensure the most important information is stored using a dedicated, access-controlled system with reinforced security and auto-recorded user activity. In addition, we have established an environment in which employees can safely access the company's information assets while away on a business trip, and we have also placed restrictions on email attachments and taking company computers and storage media offline.

As part of measures against cyberattacks, we use monitoring systems to identify any suspicious emails with possible malware*² attachments. We also attempt to monitor unauthorized online communications from internal sources as part of stopping attacks from causing more widespread damage.

In 2018, we also plan to initiate further risk mitigation measures in anticipation of a heightened risk of cyberattacks ahead of Rugby World Cup 2019™, Japan and the Olympic and Paralympic Games Tokyo 2020.

*1 Confidentiality: Enable only authorized personnel to access information.
 Integrity: Ensure data and processing methods are accurate and cannot be modified without authorization.
 Availability: Make data accessible to authorized personnel when needed.
 *2 Malware: malicious software (including computer viruses and ransomware) created with the deliberate intention of performing unauthorized or harmful operations

Security Measures for Production Facilities

Canon implements security measures for its production facilities to ensure malware, cyberattacks or other information security issues do not reduce productive capacity or otherwise disrupt production plans.

In the past, corporate mainframes or online information systems were the major targets for cyberattacks. Today, the growing use of off-the-shelf OS software and networks means that production facilities attract the same level of information security risk. A separate approach is needed for production systems because production lead-times are longer than the customer support periods for off-the-shelf OS software. In 2017, we began undertaking critical information security audits for Canon Inc. and Canon Group production companies in Japan. We also began monitoring the networks linked to important facilities and production lines for any unauthorized activity.

We plan to extend these measures to Group production companies based overseas to ensure Canon Group production facilities worldwide can operate safely without disruption.

Information Security Training to Raise Employee Awareness

In order to maintain and improve information security, Canon is focusing on raising awareness among the employees who use information systems.

Both regular and mid-career hires are thoroughly trained on Canon's information security measures and rules through group training. In addition, all employees undergo annual information security training using our e-learning system.

In 2017, roughly 26,000 employees—equivalent to Canon Inc.'s total workforce—received information security training. This included training to develop information security literacy*, including how to deal with suspicious emails, measures to prevent email misdirection, and other IT protocols. In addition, special training sessions based on a targeted email attack were conducted involving roughly 71,000 Canon Inc. and Group company employees to provide practical instruction in responding appropriately to suspicious emails so widespread damage is avoided.

* Information security literacy: knowledge and skills needed to implement proper information security measures

Protecting Personal Information

Canon recognizes that personal information is an important asset, and that protecting this asset is one of its social responsibilities.

At Canon Inc., we have created rules to safeguard personal information, including a Personal Information Protection Policy and Personal Information Protection Rules, and conduct training and audits regularly as part of our system to prevent leaks of information.

Starting in 2015, we expanded the scope of these activities to include all Group companies, creating a centralized management system covering the entire Canon Group. As a result, there were no incidents involving the loss or leakage of personal information at Canon Inc. or any of its Group companies in 2017. Canon did not receive any privacy infringement complaints from customers in 2017.

Canon Inc. and Group companies in Japan have also implemented measures to deal with Japan's new Social Security and Tax Number System (referred to as the "My Number" system), which was introduced in Japan in 2016, in an appropriate manner. To this end, the entire Group in Japan formulated My Number Handling Rules, My Number Regulations, and a detailed handling procedure manual. In particular, our measures regarding physical and technological security are more stringent than those mandated by law, and we continue to collaborate with the IT division on this matter.

Going forward, Canon will regularly monitor its management of "My Number" and other personal information while reviewing operations as needed to make appropriate improvements.

Bolstering Physical Security

Aiming to strengthen physical security, Canon has been working to establish physical-security systems at each of its operational sites based on the following three policies:

- Establish and put into practice at operational sites an overall design from the viewpoint of crime prevention, disaster prevention, and safety to optimize entry and exit routes for all persons.
- Fully implement strict internal and external security measures to comprehensively prevent company assets (physical objects, information, etc.) from being removed, suspicious objects from being brought in, and suspicious individuals from entering.
- Limit entry to certain areas to people who have been authorized by area managers, and integrate management of room entry and exit logs.

Physical Security Promotion System

Canon has established Canon Security Guidelines that outline policies and rules regarding room entry and exit management and other aspects of physical security. We have also been proactively implementing security measures according to these guidelines, and revising the guidelines as needed. Each Canon site is now responsible for drafting a self-checklist that complies with the guidelines and also takes into account the unique security risks of each region in order to check the adequacy of its security protocols. In this way, each site implements security measures tailored to changes in its own environment.

In addition, the Group has adopted an Integrated Entry and Exit Management System and a control system that comprehensively manage surveillance cameras and sensors as part of Canon's efforts to strengthen physical security across the entire Group.

Due to the serious risk to society posed by toxic materials, we have developed a particularly thorough audit system, covering all Canon Group sites in Japan. Improvements and revisions to toxic materials security measures are implemented based on audit results.

Learning from the terrorist incidents in Paris and Belgium, Canon has stepped up its security efforts in order to quickly detect suspicious persons and suspicious objects with the aim of preventing indiscriminate terrorist attacks against companies considered to be soft targets. We are also working more closely with the police, fire departments, and other government agencies to heighten vigilance in detecting risks.

Post-Disaster Business Continuity Plan

Responding to the Risk of Damage to Infrastructure

Canon believes that establishing a system to ensure that business operations can continue after a natural disaster or emergency represents one of the most important social responsibilities of any company. Based on this recognition, we have formulated a business continuity plan (BCP)*¹ and Canon Group Disaster Preparedness Guidelines, and are working hard on advancing business continuity measures for disasters, including upgrading buildings constructed according to old aseismic design standards, concluding disaster agreements with local communities, and developing systems for collecting information and reporting.

Due to the critical importance of our Shimomaru headquarters in Tokyo, Japan, as the home base for all Group operations, we have rebuilt all on-site buildings, established a crisis control center, installed backup generators, stockpiled fuel, equipment, and supplies, and established a multiplex communication system. Moreover, we set up a Disaster Recovery Center*² to back up information systems to ensure that the core IT system will operate securely in the event of a disaster.

We have updated all Group company facilities in Japan, setting up emergency communications equipment and support structures, and inculcated a sense of readiness in our employees through practical disaster-preparedness training. We also have systems that use data from Canon surveillance cameras installed at each Group site so any damage caused by natural disasters or other emergencies can be evaluated swiftly. Furthermore, we have prepared a leader's manual in order to safeguard human life immediately following a natural disaster or fire, prevent secondary disasters, and protect company assets. Using this manual as a model, Group companies are also creating localized manuals based on the unique risks in the areas where they operate to facilitate the smooth restoration of services in the event of a disaster. Last year, 35 operational sites conducted 36 emergency drills based on these manuals.

*1 Business Continuity Plan (BCP): an action plan that includes measures to provide for the continuation of a minimal level of business in the event of fire, accident, or other such event, and to restore operations promptly
 *2 Disaster Recovery Center: a facility prepared for data backup in the event of a system breakdown due to a disaster

System to Promote Responses to Infrastructure Disaster Risk and Goals

Organization in charge	Facility Management Headquarters (Facility Management Division)
Policy	Conduct drills to verify that manuals prepared by individual sites are effective. Revise manual where there are shortcomings to improve ability to respond in an emergency.
Goals	Each operational site to conduct a drill once a year

Canon Group Response to Risk of Infrastructure Damage

2014	<ul style="list-style-type: none"> Established monthly communications drills at headquarters and individual business locations /Group companies using satellite phones Disaster Provision Standards created following enactment of Tokyo Metropolitan Ordinance on Measures for Stranded Persons
2015	<ul style="list-style-type: none"> Continued communications drills mentioned above Conducted training exercise to set up disaster recovery headquarters in event of major natural disaster at Shimomaruko headquarters Stocked nonfood provisions (emergency blankets and portable toilets) based on Disaster Provision Standards
2016	<ul style="list-style-type: none"> Increased frequency of central disaster recovery headquarters training exercises (focused on earthquakes and floods in 2016) to twice yearly
2017	<ul style="list-style-type: none"> Created and distributed a disaster-prevention video detailing how to prevent fire after an earthquake Carried out semiannual tests of disaster preparedness at home with participation of 18,000 Canon Group employees in Japan Conducted natural disaster hazard checks at each operational site

Disaster Agreement with Ota Ward, Tokyo

Canon Inc. has concluded a disaster agreement with Ota Ward, Tokyo, where its Shimomaruko headquarters is located. In line with the request of the Disaster Prevention Section of Ota Ward, under the agreement, our newest facilities, including a lecture hall, gymnasium and heliport, can be offered in the case of an emergency situation. We will continue to work closely with local governments to fulfill the role of a disaster-response base in the local community.

Disaster Agreement with Susono City, Shizuoka Prefecture

In July 2016, Canon Inc.'s Fuji-Susono Research Park concluded a disaster agreement with Susono City, Shizuoka Prefecture, offering support in the event of a major disaster. Susono City is working to create an urban environment resilient to disaster. Under the agreement, if there is a major earthquake in Susono City, the two parties will offer mutual support and cooperate in relief and recovery activities, such as providing food aid and permission to travel along designated disaster roads.

Proper Payment of Taxes

Canon believes that, as a multinational corporation with operations spanning the globe, the proper payment of taxes in the countries and regions where it operates is one of its most fundamental and important social responsibilities. Accordingly, Canon abides by the following principles on tax matters. In 2017, Canon was not subject to any material meaningful fines or negative tax-related judgments or assessments.

1. Pay taxes properly in accordance with tax-related laws and ordinances.
2. Ensure that tax accounting and other related processes are carried out unfailingly, according to law.
3. Develop tax-related governance systems and work to raise awareness about tax compliance.
4. Adhere to common international rules on international taxation (guidelines set by the Organization for Economic Co-operation and Development and the United Nations), and ensure that actions are in compliance with the tax laws of each country.

Corporate Income Taxes

	2013	2014	2015	2016	2017
Taxes on income before income taxes (hundred million yen)	1,081	1,180	1,161	827	980
Effective tax rate on income before income taxes (%)	31.1	30.8	33.4	33.8	27.7

Supply Chain Management

Fundamental Procurement Policies

Canon is enhancing its cooperative relationships with suppliers through implementation of the EQCD concept*1, which stipulates the timely delivery of high-quality products at reasonable prices to customers worldwide, while taking the environment into consideration.

Canon has formulated and widely published its Procurement Policy, and is endeavoring to build good relations with suppliers by deepening their understanding of Canon's basic stance toward procurement.

In keeping with its corporate philosophy of *kyosei*, Canon carries out procurement activities that give due consideration to society while also continually taking steps to further evolve its ecofriendly green procurement*2 practices.

*1 EQCD concept: This is Canon's basic product development policy. "E" stands for environment: Companies are not qualified to manufacture goods if they are incapable of environmental assurance. "Q" stands for quality: Companies are not qualified to market goods if they are incapable of providing quality products. "C" and "D" stand for cost and delivery: Companies are not qualified to compete if they are incapable of meeting cost and delivery requirements.

*2 Green procurement: Favoring the procurement of materials and products that have a lower environmental impact (→P45).

Procurement Policy

Following its corporate philosophy of *kyosei*, Canon aims, as a truly global company, to contribute to the prosperity and wellbeing of the world by developing, manufacturing and marketing useful products, raising profits, and achieving sound corporate growth and development.

The Procurement Division adopts a global perspective in purchasing quality, appropriately priced merchandise in a timely manner. This facilitates improvements in product quality and reductions in prices, and positions us to work with our suppliers to meet customer needs.

1. We comply with all applicable laws and regulations as well as corporate ethics, and operate in a manner that is protective of the environment.
2. We are open to any and all suppliers, and promote fair and free competition in accordance with the principles of faith and trust.
3. We improve manufacturing by mutual growth with reliable, quality suppliers, which are selected through a fair evaluation process.

Fair and Transparent Dealings Reinforcing Compliance in Procurement

Canon not only complies with laws and regulations on procurement globally, but also ensures complete fairness and transparency in dealings with its suppliers.

Specifically, the Canon Group Procurement Code of Conduct for Executives and Employees in Charge of Procurement outlines appropriate actions that persons in charge of procurement as well as executives and employees responsible for placing orders should keep closely in mind in order to maintain high standards when it comes to legal compliance and corporate ethics. Also, Canon's business processes are uniform across its global network based on a common set of detailed rules on procurement practices in place for Canon Group companies both inside and outside Japan.

To ensure consistency and uniformity across the company, special internal controls sections have been set up within procurement divisions to maintain the rules, monitor compliance, and provide training for employees.

Main Procurement Compliance Initiatives

2007	Set up specialized internal controls sections within procurement divisions
2013	Upgraded existing procurement code of conduct and formulated Canon Group Procurement Code of Conduct for Executives and Employees in Charge of Procurement
2014	Established detailed procurement operation rules for entire Canon Group

Promoting Open Procurement to Companies Worldwide

In line with our Procurement Policy, which outlines our intent to open our doors equally to suppliers worldwide and conduct business in a fair and impartial manner, we promote open procurement and invite proposals from suppliers not already in our network.

Canon operates the Suppliers Proposal Site within its main company website with the purpose of collecting information, including products handled and manufacturing consignment information, from companies worldwide (excluding intellectual property such as designs, ideas and inventions). Products proposed on this site are now being used in Canon products.

We will continue to give careful consideration to all future proposals based on established rules.

Reference: Suppliers Proposal Site
https://proposal.in.canon.co.jp/wwcc/WWCCD800.aspx?PRM_CF_LANGUAGE=0

Socially Responsible Procurement

In a world of increasingly global supply chains, many social and environmental problems have been identified, including the use of forced or child labor and issues relating to environmental protection, which mainly affect emerging economies.

We formulated the Canon Supplier CSR Guidelines to promote socially responsible procurement across the Canon Group in partnership with suppliers. Together we engage in global procurement activities that take into account human rights, labor, health and safety, compliance and the environment to promote sustainable procurement across the entire supply chain.

We have set up a channel to receive feedback from suppliers. On our CSR website, suppliers can submit opinions and requests by sending a message on the page entitled "We welcome your comments on our CSR Activities."

Reference: We welcome your comments on our CSR Activities
<https://global.canon/en/contact/csr/csr-form-e.html>
 Reference: Canon Supplier CSR Guidelines
<https://global.canon/en/procurement/social.html>

Supplier Evaluations and Ongoing Surveys Incorporating Environmental and Social Perspectives

When beginning dealings with a new supplier, we review whether the supplier meets Canon's standards in such areas as financial position, management system (quality/cost/delivery date/manufacturing capacity), corporate ethics (legal compliance, product safety, management of confidential information, human rights, labor, occupational health and safety, and intellectual property rights protection, etc.) and global environmental conservation. Only suppliers who meet these standards are registered on our supplier list, along with existing procurement partners.

With regard to "human rights and labor," an area of high interest to stakeholders in recent years, survey items are set with reference to International Labor Organization (ILO) standards and the guidance of the Responsible Business Alliance (RBA), formerly known as the Electronic Industry Citizenship Coalition (EICC). We confirm whether appropriate consideration is given to such issues as child labor, forced labor that includes trafficking of persons, discrimination, minimum wage, working hours, and employee communication. In addition, in the environment field, we are pursuing green procurement of parts and materials for products from suppliers on the condition that they fulfill the Canon Green Procurement Standards.

As part of Canon's thorough approach to supply chain management, we conduct an annual survey of all companies registered on our supplier list. The survey covers a wide range of initiatives, including social and environmental aspects. We undertake a comprehensive evaluation of our suppliers based on the survey results and transaction performance, and reflect the results in the supplier list, giving preference to high-scoring suppliers. We also provide guidance and education to low-scoring suppliers to aid improvement.

In line with these efforts, Canon requires that its suppliers ask the same of their upstream suppliers (tier two suppliers for Canon).

■ Main Items Surveyed

- Financial position
- Business continuity management (BCM) in case of an emergency
- Environmental-conservation activities
- Compliance with conflict minerals issues
- Corporate ethics (legal compliance, product safety, management of confidential information, human rights, labor, occupational health and safety, and intellectual property rights protection, etc.)

Reference: How to become a supplier
<https://global.canon/en/procurement/procedure.html>
 Reference: Green Procurement
<https://global.canon/en/procurement/green.html>

Cooperation with Suppliers

Canon holds "business trends briefings" for suppliers at each Canon Inc. operational site and each Group production site, asking for their understanding of procurement policies and cooperation with business plans.

Through such communication, we aim to share information with suppliers, strengthen collaboration, and grow together.

Addressing the Issue of Conflict Minerals

Certain minerals—notably tantalum, tin, gold and tungsten—that originate in the Democratic Republic of the Congo (DRC) and adjoining countries in Africa are used in many industrial products through global supply chains. Trade in some of these minerals is alleged to be funding armed groups in the DRC and adjoining countries who are instigating grave abuses of human rights, environmental destruction, and illegal mining. They are termed "conflict minerals."

In response, the United States enacted legislation requiring listed companies to confirm that conflict minerals that could fund these armed groups are not being used in their supply chains, and to provide related public disclosures. The legislation went into effect in January 2013.

Seeking to ensure that customers can use its products with peace of mind, Canon is working together with business partners and industry groups with the aim of avoiding the use of conflict minerals that could fund armed groups. As a listed company, Canon is required to submit a Conflict Minerals Report annually by the end of May with the U.S. Securities and Exchange Commission (SEC) detailing the status of Canon Group activities to address the issue of conflict minerals.

Reference: Conflict Minerals Report
<https://global.canon/en/csr/conflict/index.html>

Due Diligence

Canon identifies any products that could contain any of four minerals and conducts inquiries to its suppliers to trace the origin of the minerals back to its upstream supply chain regarding the parts and materials of the identified products. Then, Canon undertakes due diligence to identify the risks of funding armed groups relating to conflict minerals.

The surveys utilize the Conflict Minerals Reporting Template (CMRT), an industry standard published by the Responsible Minerals Initiative (RMI).

In fiscal 2017, Canon sent CMRT-based surveys to roughly 3,000 suppliers with a response rate of about 90%.

Within the scope of the responses, there was nothing to clearly suggest that the Canon Group's purchasing of parts

Canon Supplier CSR Guidelines

Pursuant to the Canon Group Basic Procurement Policy and the Canon Group CSR Basic Statement, we set forth the Canon Supplier CSR Guidelines to promote global procurement activities that take social needs into full consideration. Accordingly, we ask our suppliers to conduct the below initiatives

I. Consideration of human rights, labor, and health and safety of employees

- (1) Respect fundamental human rights of employees and do not discriminate against them based on such factors as race, nationality, gender, religion, and creed
- (2) Endeavor to utilize diverse human resources
- (3) Do not engage in child labor or forced labor (including human trafficking)
- (4) Promote sincere dialogue between employees and management in accordance with the laws and regulations of the country/region of location

- (5) Pay employees wages equal to or greater than legally mandated wages in accordance with the laws and regulations of the country/region of location
- (6) Prevent excessive overtime work and grant appropriate holidays
- (7) Ensure occupational health and safety at the workplace, and prevent occupational injuries

II. Sound and fair business activities

- (1) Comply with the laws, regulations and social norms of each country and region where business activities are conducted
- (2) Do not perform acts that obstruct fair, transparent and free competition
- (3) Manage and protect confidential information and personal information

- (4) Endeavor to prevent infringements of the intellectual property rights of others
- (5) Ensure thoroughness in security trade control in accordance with the laws and regulations of the country/region of location
- (6) Do not engage in corruption in all its forms including bribery
- (7) Endeavor to avoid complicity in armed insurgencies or anti-social forces
- (8) Endeavor to disclose relevant and accurate corporate information

III. Environmental preservation

- (1) Comply with the Canon Green Procurement Standards
- (2) Endeavor to minimize environmental burden through initiatives aimed at conserving energy, conserving resources, eliminating hazardous substances, and preserving biodiversity

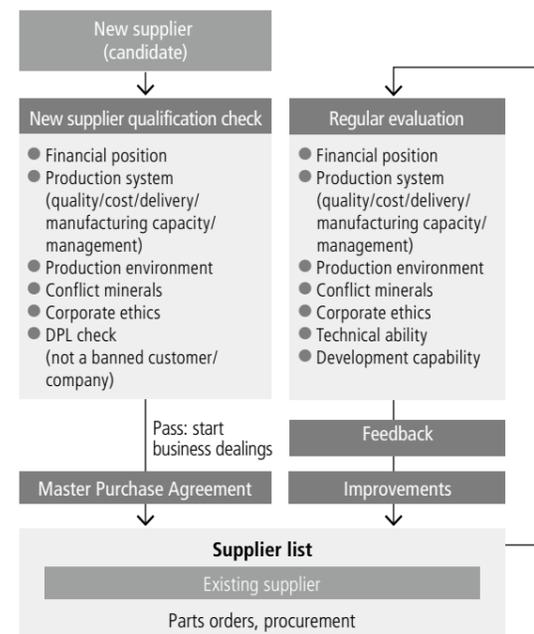
IV. Guarantee of continuance of corporate and business activities

- (1) Endeavor to preserve high level in quality, cost, delivery and technical aspects
- (2) Provide safe and secure products, parts, materials, services, etc.

V. Request to your suppliers for their cooperation

- (1) Request to your suppliers that they cooperate with initiatives for social responsibility, including those that concern human rights, labor, safety, legal compliance, the environment and product quality/safety

Supplier Evaluation System



and materials contributed to funding armed groups. However, recognizing the innate difficulties involved in identifying smelters and country of origin of minerals or lacking clarity in many responses due to its complicated supply chain, Canon is making efforts to improve the accuracy and efficiency of the inquiries.

Cooperation with Industry Groups

Since April 2015, Canon has supported the activities of the RMI, an international program focused on addressing the issue of conflict minerals.

In Japan, as a member of the Responsible Minerals Trade Working Group (RMTWG) of the Japan Electronics and Information Technology Industries Association (JEITA), Canon supports activities of the JEITA briefings for firms in the electronics industry supply chain and sending letters to smelters urging them to accept RMI audits. Canon is also a member of the Conflict Free Sourcing Working Group (CFSWG), which cooperates with JEITA and leading Japanese automakers.

Independent Assurance Report

Canon undergoes audits by independent private sector experts to gain independent assurance on whether the Canon Group's initiatives on conflict minerals sourcing conform with international standards. An independent assurance report is attached to the Conflict Minerals Report filed with the SEC.

Basic Approach of the Canon Group Regarding Conflict Minerals (Excerpt)

Seeking to ensure that customers can use Canon products with peace of mind, the Canon Group is working together with business partners and industry entities to identify the history of minerals used in its products with the aim of avoiding the use of conflict minerals.

The Canon Group would like our business partners to understand the international circumstances surrounding the conflict minerals issue and support us in not using conflict minerals. By cooperating with surveys and audits conducted by Canon Group companies, we expect our business partners, as members of the global supply chain, to join the Canon Group in carrying out the responsible procurement of necessary minerals.

Reference: Basic Approach of the Canon Group Regarding Conflict Minerals
<https://global.canon/en/csr/conflict/policy.html>

Compliance with UK Modern Slavery Act

The Modern Slavery Act that was enacted in the UK in 2015 mandates enterprises operated in UK with a certain scale to publish annual statements detailing the risk of forced labor, human trafficking and child labor within their own operations and supply chain. Annual statements are published by Europe-based Canon Group companies that fall within the scope of the law, based on the information on human rights risk assessments conducted by Canon Group production sites and suppliers.

In compliance with this legislation, annual statements are also published by Canon Medical Systems (CMSC) and Axis Communications.

Reference: Canon Europe Ltd., Canon Europa N.V., and Canon (UK) Ltd. Modern Slavery Act Statement
<https://canon.ssl.cdn.sdlmedia.com/636359670045186850CE.pdf>
 Reference: CMSC Slavery and Human Trafficking Statement
https://global.medical.canon/about/corporate/Slavery_and_Human_Trafficking_Statement
 Reference: Axis Modern Slavery Act Transparency Statement 2017
https://www.axis.com/files/sales/Axis_Modern_Slavery_Act_Transparency_Statement_2017.pdf

Intellectual Property Management

Canon's Approach to Intellectual Property

Since its establishment, Canon has actively engaged in technology research and development, achieving solid growth as an R&D-oriented company in creating markets and customer segments by developing products with proprietary technologies.

This history underpins our belief that the achievements of R&D activities are products and intellectual property (IP). At Canon, the purpose of IP activities is clearly defined as being to support business development. We aim to make a practical contribution to realizing technologies of benefit to society through the creation and utilization of IP assets based on the fruits of varied research, from basic patents related to essential core next-generation technologies to essential patents linked to common technologies that are vital for social infrastructure.

Basic Policy of Canon IP Activities

- IP activities are vital to support business operations
- The fruits of R&D are products and IP
- Intellectual property rights of other companies should be respected and handled appropriately.

Respecting Intellectual Property Rights

Canon takes a strict, consistent approach against counterfeit goods and intellectual property infringements. At the same time, we respect the intellectual property rights of other companies. We have established clear rules to ensure that our products do not infringe on rights held by others.

More specifically, we conduct thorough investigations of third-party patents to prevent use of intellectual property held by others without permission. Such thorough investigations of third-party rights occur at all stages, from R&D onward, based on cooperation between the R&D division involved in the technology and the department responsible for intellectual property rights.

By conducting thorough investigations of third-party patents, Canon smoothly and appropriately enters into partnerships with other companies and external research institutions for cross-licensing or joint research projects. This enables Canon to achieve greater results than it could attain by using only its own patents.

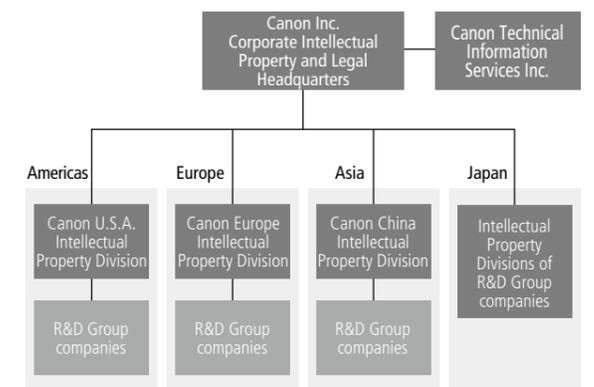
Canon Group Intellectual Property Management System

To carry out Canon's business activities consistent with its intellectual property strategy, intellectual property rights management has been centralized under the direction of the Corporate Intellectual Property and Legal Headquarters at Canon Inc. We manage the Group's intellectual property rights from the standpoint of optimizing the overall intellectual property portfolio.

For example, when concluding a patent licensing agreement with another company (a third party), the Corporate Intellectual Property and Legal Headquarters approves the agreement only after making adjustments reflecting merits for the entire Group. This step ensures that the Group maintains an appropriate intellectual property portfolio. We review our portfolio regularly to ensure that only necessary rights are being reserved.

As a Managing Executive Officer, the Group Executive of Canon Inc.'s Corporate Intellectual Property and Legal Headquarters makes decisions regarding the use of intellectual property from a management perspective, and coordinates with other business divisions.

Intellectual Property Management System



Management to Strengthen Group Companies

The respective roles and responsibilities of Canon Inc.'s Corporate Intellectual Property and Legal Headquarters and the intellectual property divisions at each Group company, along with the process for formulating policies on other shared activities and issues are determined by Canon's management rules.

Moreover, persons in charge at the Corporate Intellectual Property and Legal Headquarters are assigned to or visit Group companies to improve global intellectual property activities and develop human resources.

In-house Intellectual Property Education

Canon Inc. provides intellectual property training so its employees understand the importance of intellectual property and adhere to Canon's intellectual property policies. This occurs at various stages: during training for new employees, during intellectual property training aimed at development, and during training for newly appointed managers and general managers.

Applying for Patents around the Globe

Canon places importance on applying for patents on a global basis, and as of the end of 2017, had approximately 90,000 patents and utility models worldwide.

When filing patent applications outside Japan, our teams develop detailed patent-filing strategies based on regional business strategies, technologies and product trends to assess countries/regions where patents are required. We have focused on filing patent applications for the US market due to its large scale and preponderance of high-tech companies. Canon has ranked in the top five for US patent registrations in each of the past 32 years. In 2017, we ranked third overall and were the patent leader among Japanese companies for the 13th consecutive year.

Top 5 Companies Acquiring U.S. Patents in 2017

Rank	Company	Number of patents
1	IBM	9,043
2	Samsung Electronics	5,837
3	Canon	3,285
4	Intel	3,023
5	LG Electronics	2,701

* Figures were based on preliminary data released by IFI CLAIMS Patent Services, a U.S. research company specialized in patent information (As of January 2018).

Working with Governments and Other Companies

Promoting Cooperation with Intellectual Property Policies

In order to strengthen international competitiveness through the use of intellectual property, the creation of a nationwide IP strategy for Japan is absolutely imperative. Having served in a variety of roles relating to intellectual property in Japan, Canon has made various proposals to Japan Patent Office and other government agencies as a member of the Intellectual Property Committee of Japan Business Federation, Japan Intellectual Property Association and International Association for the Protection of Intellectual Property Japan (AIPPI-JAPAN).

Currently, the Group Executive of Canon Inc.'s Corporate Intellectual Property and Legal Headquarters serves on the Evaluation, Planning and Verification Committee of the Japanese government's Intellectual Property Strategy Headquarters. He is a member of the Subcommittee on Unfair Competition Prevention of the Ministry of Economy, Trade and Industry of Japan's Industrial Structure Council Intellectual Property Committee, and chairs AIPPI-JAPAN. He also actively lobbies for IP policy in Japan. The Group Executive also serves as the Chairman of the International Association for the Protection of Intellectual Property Japan.

In this capacity he is able to proactively exchange views with the World Intellectual Property Organization (WIPO) and Commissioners of Patents in the United States, China, South Korea and Europe, enabling him to lobby for international IP policy.

Mitigating Patent Litigation Risk through Collaboration with Other Companies

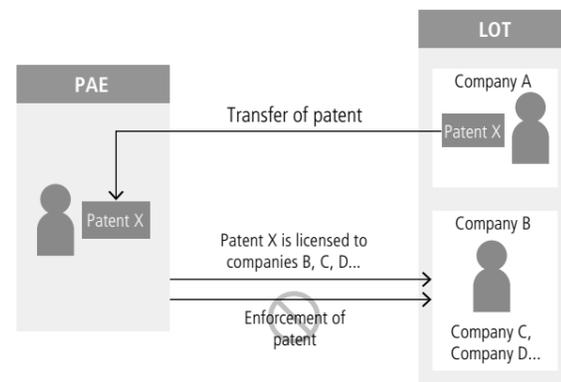
In recent years, due to the sudden increase in the number of patents, there has been a sharp rise in patent lawsuits initiated by Patent Assertion Entities (PAEs). PAEs have no actual business operations and instead attempt to receive large settlements from operating companies. PAEs initiate more than half of the several thousand patent lawsuits filed annually in the United States.

In 2014, Canon established the License on Transfer Network (LOT Network) together with Google and other companies to curb lawsuits by PAEs.

When a LOT Network member company transfers a patent to a PAE, the license for that patent is granted to other member companies without requiring any compensation. This reduces the risk of litigation from PAEs.

As of April 2018, 218 companies who own more than 1,000,000 patent assets belonged to the network.

License on Transfer Network (LOT Network)



Brand Management

Canon's Approach to Brand Management

Every Canon employee understands that the Canon brand is the symbol of the company's commitment to customers and gaining the confidence and trust of society. Our corporate mission also involves being a manufacturer that supplies high-quality, convenient products that provide customer satisfaction and are a pleasure to use, and providing optimal solutions and services to meet customer needs.

Proper brand management is vital to ensure that customers and society are not adversely affected by improper handling of Canon's corporate logos within the Group or misuse of these logos by third parties.

Canon therefore established the Brand Management Committee as a deliberative body charged with establishing rules for enhancing the value of the Canon brand and resolving brand-related issues. The Brand Management Division was established to serve as the secretariat for the committee and is comprised of persons in charge of branding from each division. This framework allows us to respond promptly to various brand issues as they arise.

The Brand Management Committee discusses the appropriateness of trade names and product names from a brand perspective as well as use of the Canon trademark, providing appropriate advice and support to relevant persons.

Brand Management Rules

Canon has formulated a set of brand management rules, including the Canon Mark Basic Rules, to ensure that its employees use the Canon brand in compliance with regulations and enhance the value of the Canon brand through the trust of customers and society. From 2016 to 2017, Canon conducted a comprehensive review of these rules in light of societal shifts as well as brand-related feedback, both internal and external. To make them easier to understand, rules on the handling of trade names, trademarks, and domain names, as well as the Canon logo, were consolidated into a single set of guidelines, along with new stipulations relating to corporate identity and external use of "Canon" that had not previously been covered by the rules. To disseminate this information across the entire Canon Group, we sent notices to Group companies, publicized the changes on our company intranet, and briefed the brand management divisions of each regional marketing headquarters.

Promoting Awareness of the Canon Brand

Canon carries out brand education programs at all Group companies in the regions where it operates to ensure that all employees fully understand the Canon brand and act with propriety and in accordance with pertinent rules. Such education raises the awareness that "Each and every employee embodies the Canon brand." For example, at Canon Inc., we incorporate brand education into the rank-based training curriculum and also strive to raise awareness utilizing the company's intranet system.

An increasing number of companies have been joining the Group in recent years through M&A, making it important for everyone within the Group to share the same culture and goal awareness. In light of this situation, we are focusing on internal branding so as to increase Group vitality through a shared recognition of the Canon brand. In 2017, we reviewed workflows and simplified documentation so the Brand Management Committee could operate more quickly and smoothly.

We will continue to conduct awareness campaigns aimed at employees in charge of product branding in individual business divisions, and conduct awareness campaigns for all employees assigned outside Japan (7 sessions, 217 participants in 2017) during training to further improve brand management capabilities across the Group.

Measures to Tackle Counterfeiting

Counterfeit products cannot be overlooked as they not only damage the brand but may also lead to economic losses arising from malfunctions and inferior quality, and in the worst case, cause injury to or endanger the lives of customers who purchased a product trusting in the Canon brand.

We are actively carrying out anti-counterfeit measures. We crack down on factories that manufacture counterfeits and retail locations that sell them, while cooperating with customs authorities to stop their importation. We work with customs authorities on various initiatives, including dispatching employees to serve as lecturers for authenticity seminars for customs officers, and for anti-counterfeit training programs hosted by customs authorities. Moreover, following a rise in the volume of counterfeit products sold on e-commerce websites, we are also working to create mechanisms to remove counterfeit products from the Internet.

Stakeholder Engagement

Basic Approach

Canon thinks it is important to have ongoing dialogue with its diverse stakeholders to communicate the company's thinking to them and to listen carefully to their own feedback with the aim of deepening mutual understanding. We consequently strive to maintain close communication with stakeholders using departments in charge at Group companies worldwide as points of contact. Responding to the issues identified based on the opinions we receive,

Stakeholder	Main Communication Methods	Main Initiatives in 2017	Topics of Interest
Educational/ Research Institutions	<ul style="list-style-type: none"> Joint research Presentations at international conferences and technical groups Business introductions Participation in surveys and studies Outreach classes and instructor dispatch Onsite briefings at schools and school visits (university/technical college level) 	<ul style="list-style-type: none"> Instructors dispatched to Utsunomiya University (Japan), Center for Optical Research and Education (15 times) Chuo University (Japan) classes held on intellectual property law and corporate law Environmental classes held at elementary schools (37 times) Recruitment visits organized to universities (approx. 80 times) Outreach classes held at universities, research institutions and other Canon Foundation grant recipients (17 occasions) Visits to promote joint research initiatives between industry and academia (15 times) <p>Other efforts to maintain regular communications with educational and research institutions included onsite briefings held at universities to introduce Canon and its business operations (approx. 100 times) and collaborative R&D conducted with university hospitals in Japan.</p>	<ul style="list-style-type: none"> Optical technology Cutting-edge technology Joint research Environmental education related to recycling technology
Employees	<ul style="list-style-type: none"> Labor-management meetings Information sharing from top management (intranet, in-house magazine, executive meetings, site visits) Training programs Employee surveys Human resource hotline Whistleblower system Safety and Health Committee Internal award system Summer festivals and other events 	<ul style="list-style-type: none"> Labor-management meetings held (11 times) Employee surveys conducted (once every two years) Information security seminars held (12 times) Environmental training conducted <p>Various other initiatives were implemented to help make individual workplaces more rewarding. Monthly workplace safety committee meetings were also held as part of efforts to build a framework for utilizing employee feedback.</p>	<ul style="list-style-type: none"> Improve working environments Develop workplace safety set-up Develop personnel evaluation set-up Build understanding of management policies Develop employee welfare set-up Cultivate high internal morale
NGOs/NPOs	<ul style="list-style-type: none"> Collaborative projects, including volunteer activities 	<ul style="list-style-type: none"> Support provided for UNHCR Refugee Film Festival and UNHCR photo exhibition about the Refugee Olympic Team that competed in the 2016 Olympic Games in Rio de Janeiro sponsored and organized by UNHCR Representation in Japan and Japan for UNHCR* Biodiversity conservation initiatives (such as <i>Furusato Project</i>—Linking Our Dream to the Future) Canon Bird Branch Project <p>Continuous support was provided for humanitarian and disaster-relief activities based on information gathered from organizations (including NGOs/NPOs and social welfare associations) working in disaster-affected areas; other support included various collaborative biodiversity and green procurement initiatives.</p> <p>* The National partner of UNHCR in Japan</p>	<ul style="list-style-type: none"> Ecosystem protection/conservation Issues affecting global society such as refugee issues and poverty Aiding disaster-struck areas
Embassies/ Foreign Governments	<ul style="list-style-type: none"> Involvement in international exchanges and events Cooperation with events commemorating the establishment of diplomatic relations with Japan 	<ul style="list-style-type: none"> Courtesy calls and participation in hearings or other meetings organized in response to requests from embassies and foreign governments (over 50 times) Ongoing active participation in international discussions and events designed to improve bilateral relations 	<ul style="list-style-type: none"> Addressing social issues at the national and international levels
Local Communities	<ul style="list-style-type: none"> Social-contribution activities, including community cleanups Emergency disaster-relief assistance Participation in disaster-preparedness and crime-prevention drills Involvement in local groups/organizations Participation in local events and volunteer activities Environmental education and awareness activities 	<ul style="list-style-type: none"> Involvement in various community-based social contribution activities, including area clean-ups and educational, sports and cultural programs Activities to protect and conserve local ecosystems, such as tree-planting programs <p>Other efforts continue to be made to deepen ties with local communities through support for drills aimed at improving traffic safety and disaster preparedness.</p>	<ul style="list-style-type: none"> Protection/conservation of local community ecosystems Contributions to local communities through business operations Understanding local communities Fulfilling responsibilities as corporate citizen to participate in local community activities

we deal appropriately with the needs of each region, and at the same time, we are sharing the important issues related to global management throughout the Group and working to resolve the issues. Here, we introduce our methods of communicating with stakeholders and introduce some specific initiatives. This report covers all stakeholders that Canon believes are of high importance in terms of its business activities.

Stakeholder	Main Communication Methods	Main Initiatives in 2017	Topics of Interest
Shareholders/ Investors	<ul style="list-style-type: none"> General Meeting of Shareholders Briefings for institutional investors Individual meetings with institutional investors Briefings for individual investors Disclosure of information on website for investors Publication of corporate reports/brochures for investors 	<ul style="list-style-type: none"> Financial results announcements, corporate strategy briefings (5 times) Publication of the Canon Annual Report and Sustainability Report Establish business introduction pages with additional ESG information, renewal of website aimed at investors Expanding disclosure of information through such means as revised documents explaining financial results Quick release of documents relating to the general meeting of shareholders in full 	<ul style="list-style-type: none"> Medium-to-long-term management strategy aimed at achieving continued growth Business activity trends and results Financial condition ESG initiatives
Suppliers	<ul style="list-style-type: none"> Online supplier surveys Briefings on business trends Technology exhibitions by suppliers Promotion of green procurement 	<ul style="list-style-type: none"> Annual survey conducted covering finance, corporate information and business ethics Briefings held on business trends (9 times) Supplier product/technology exhibitions hosted (once) Collecting and managing product information for products containing chemical substances through chemSHERPA 	<ul style="list-style-type: none"> Understanding of Canon Group procurement standards Implementation of procurement standards Product/technology trends General business activity trends Improve efficiency of the chemical substance information transmission scheme.
Customers	<ul style="list-style-type: none"> Corporate website Technology exhibitions and other events Assistance at service centers Factory tours and showroom tours Corporate reports, brochures Response to inquiries by telephone and email Support for reducing environmental impact 	<ul style="list-style-type: none"> Environmental website information upgraded Corporate stand organized at EcoPro 2017 Business briefings held for customers <p>Other efforts to build customer trust include onsite product servicing for corporate clients and regular follow-up calls.</p>	<ul style="list-style-type: none"> General environmental/CSR activities General business-related information on technology, production, products and services Response to customer feedback/complaints Administrative policies to deal with social problems at a national and local government level.
National/Local Governments	<ul style="list-style-type: none"> Exchange of opinions with government agencies on business environment and national policies Exchange of opinions centered on local government Policy recommendations through economic organizations and industry groups Cooperation in surveys and questionnaires such as government statistics 	<ul style="list-style-type: none"> Opportunities to exchange opinions with government agencies and municipalities, including visits, hearings and meetings (over 250 times) <p>Other activities include ongoing active cooperation in the evaluation of actual business conditions and related issues, and efforts to implement economic policies relating to intellectual property, trade, taxation, labor, the environment and other areas.</p>	<ul style="list-style-type: none"> Government policies on social issues at national and local levels
Other Companies	<ul style="list-style-type: none"> Collaborative projects 	<ul style="list-style-type: none"> Joint research with other companies and outsourcing of development work 	<ul style="list-style-type: none"> Industry trends Addressing social issues that affect multiple industry sectors Product/technology trends

Third-Party Opinion



Project Co-ordinator,
Sustainable Production and
Consumption Department,
Wuppertal Institute for Climate,
Environment, Energy
www.wupperinst.org

Dr. Justus von Geibler

Does Canon walk the talk?

Many large companies talk about responsibility and sustainability. But do they walk the talk? Are their actions aligned with their aspirations? While responsibility and sustainability can seem intangible, sustainability reports can provide concrete insights and drive companies' actions on sustainability. Therefore, I greatly appreciate the opportunity to be involved in the commentary process for Canon's sustainability report. It is a great chance to review and discuss the draft report, and to support Canon's reporting process.

Compared to last year's report I see two important changes with regard to the report's quality and credibility: First, the specification of the new material topic "Responding to people and society as a good corporate citizen" in the report; and second, the stronger links between Canon's business strategy and the Sustainable Development Goals. Therefore, I focus my commentary on these two main changes.

A New Material Topic

The topic "Responding to people and society as a good corporate citizen" already appeared in last year's report, and has now been identified as additional material topic for Canon (→P7–8). It addresses Canon's responsiveness to stakeholders and efforts to behave as a corporate citizen on issues such as employment, human rights, product liability and social contribution. The report presents various related proactive activities. These include information on the annual stakeholder survey (→P10, 14), the new Canon Group CSR Basic Statement (→P11), the management approaches in the CSR Reporting session (→P73–74, P97–98, P107–108), and various actions within the section on the Management Structure, for example, with regard to Risk Management, Compliance, and Stakeholder Engagement.

I greatly welcome the elaboration on the new topic since current conditions of growing uncertainty, complexity, and ambiguity in corporate decision-making environments urge companies to strengthen engagement with their stakeholders. The topic addresses crucial foundations of corporate behavior and complements well the other two material topics on innovative advancement. All three themes together are highly relevant for Canon as a global technology provider in different markets and supply chains, and a wide variety of internal and external stakeholders with diverse interests and expectations. In future reports, I would appreciate seeing the new topic presented in a more succinct way and backed-up with the results of detailed risk analyses, similar to those presented for the environmental material topic (→P34).

Linking business strategy and SDGs

The second main change is the stronger presentation of links between Canon's business strategy and the Sustainable Development Goals (SDGs). I greatly appreciate this change, which is notable in various sections. Both the Message from Management (→P3–4) and the Section "Relationship with SDGs" (→P9–10) illustrate the strategic relevance of the SDGs for Canon's business strategy more prominently than last year's report. The establishment of the new core businesses which connect to 'safety and security' is an indication of Canon's progress towards its ambition of contributing to a sustainable global society. Additionally, the relevance of the SDGs in the external stakeholder views and the "Activity Highlights" is more apparent. I also welcome the concise information on the supply chains in the CSR Management section (→P13). I suggest Canon should go even further in specifying the links between business and sustainability strategy, for example, by defining ambitions and activities with more specific links to the Excellent Global Corporation Plan and its key strategies. Additionally, I would be pleased to see more quantified information on Canon's contribution to the SDGs in future reports.

Significant progress in reporting quality

In conclusion, Canon has in my view again managed to meaningfully enhance the quality and credibility of its sustainability report. My congratulations to Canon and the reporting team for their valuable work. I look forward to Canon's continued advancement in walking the talk.

Third-Party Review Process

Over the many years that Canon has been providing sustainability reports to its stakeholders, the company has worked to develop its approach to reporting and its relationship with stakeholders. Since 2003, Canon has invited various external experts to review and comment on its sustainability report. This process aims to provide meaningful, credible external feedback, and aspires to meet international good practice standards.

Dr. Justus von Geibler has provided comment to Canon's reporting every year since 2008. Via a series of video conferences and written comments, Dr. von Geibler provided input at several points during Canon's report preparation process. The dialogues provide the basis for a degree of stakeholder engagement with Canon – on reporting, on the company's performance, and on Canon's relationships with stakeholders.

Basis for the commentator's opinions

Canon has used the Global Reporting Initiative (GRI) to inform its report development for many years. In 2018, Canon is incorporating the GRI Sustainability Reporting Standards (2016). This third-party commentary process is once again based on a portion of the GRI's four Reporting Principles relating to Defining Report Content*:

- **Materiality.** Does the Canon report reflect the company's significant economic, environmental and social issues?
- **Stakeholder Inclusiveness.** Does the report explain how Canon has responded to the reasonable expectations and interests of their stakeholders?
- **Sustainability Context.** Does the report present Canon's performance in the wider context of sustainability issues and impacts?
- **Completeness.** Is the report's coverage sufficient to reflect the company's sustainability impacts and enable readers to assess Canon's performance?

* A more complete description and guidance is available at <https://www.globalreporting.org/standards/gri-standards-download-center/gri-101-foundation/>

Using these principles as a guideline, Dr. von Geibler assessed the extent to which the Canon report meets his expectations in terms of:

- The appropriateness of the content selected for the Canon Sustainability Report 2018
- The quality of the treatment of individual topics in the report
- The overall quality, balance and relevance of the report as a whole

Sancroft International and its chief executive, Judy Kuszewski, provided advice and support to Canon by defining terms of reference for the third-party opinions, facilitating relationships with Dr. von Geibler and assisting Canon in presenting the results in its sustainability report. Readers should be advised that neither Sancroft nor Dr. von Geibler functions as an assurance provider, but as well-informed, independent sustainability professionals with a keen interest in engaging with Canon and supporting the transparency and accountability of its reporting.

What Canon and the commentator discussed

Through the video conference process and written submissions, Dr. von Geibler and Canon staff discussed reporting expectations, key areas of interest and impressions of the draft Canon report.

The main topics of discussion included the following, with Canon participants' responses and views shown alongside:

In addition, there was extensive discussion of how best to present and illustrate complex ideas, including Canon's contribution to the Sustainable Development Goals, through the use of language, pictures and graphical elements.

Dr. von Geibler's full statement can be seen at "Third-Party Opinion" (→P141).

Topics	Third-party comment	Canon views
Validating and refining the material topics around which the Canon report is framed	Canon's efforts to improve its materiality analysis and create a clearer link between sustainability and the business are notable. Canon can improve the clarity of its material topics by defining its ambitions and activities with stronger reference to the Excellent Global Corporation Plan, the <i>Kyosei</i> concept and the UN Sustainable Development Goals.	We improved the explanation of the relationship between our business plan, corporate philosophy and materiality in "our business plan and sustainability" (P7-8), following the results of this dialog. We describe our approaches and contributions toward the SDGs in each category of "CSR reporting" (P23-118). Moreover, we discuss the feedback from our stakeholder questionnaire on the SDGs, and also illustrate specific activities related to each SDGs goal in the SDGs chart (P9-10).
Canon's strategy for sustainability and the Sustainable Development Goals (SDGs)	The UN Sustainable Development Goals appear to be viewed as an expression of society's expectations, but they also present business opportunities. If Canon sees these opportunities as well, this changes how the SDGs are referenced in the materiality analysis.	We have promoted various CSR activities such as protection of human rights and contributions to local communities 'as an expression' of our role as a corporate citizen, following our corporate philosophy "Kyosei". On the other hand, we have set our ambition towards a grand strategic transformation to accelerate growth from 2016. In particular, our new core businesses that we aim to reinforce and expand such as healthcare and network cameras can contribute directly to addressing society's needs for 'safety and security', which are targeted by the SDGs. We will work hard to enrich our report contents from the perspective of our business growth and sustainability in the near future.
Social responsibility through the supply chain	Canon's disclosure of concise information on the supply chain in the CSR management is welcomed.	We have included information on our various social responsibility activities across our supply chain, responding to increasing attention from our stakeholders on such topics as the environment, human rights and labor issues.
Linking materiality to strategy, business activities and performance	The future report presentation can strengthen the relationships between sustainability and Canon's business by presenting material topics together with their Management Approach, innovation activities, contribution to the SDGs and performance.	As the scope of the newly introduced materiality topic "Responding to people and society as a good corporate citizen" is very wide, we have presented the details of our activities for the various individual topics separately. In future reports, we would like to seek clearer and more comprehensive presentation for our readers.

About Sancroft

Sancroft is a sustainability consultancy that works with the world's biggest brands to improve their environmental and social performance. Sancroft advises on sustainability strategy, resource management, ethical trade, human rights, sustainability reporting and stakeholder engagement. Judy Kuszewski is Sancroft's chief executive. She is also chair of the Global Sustainability Standards Board, the independent governance committee of the Global Reporting Initiative responsible for GRI's Sustainability Reporting Standards.

Third-Party Assurance

Canon has received third-party assurance from Lloyd's Register Quality Assurance Limited (LRQA), when calculating direct GHG emissions (Scope 1), indirect GHG emissions that originate from energy (Scope 2) and other indirect GHG emissions (Scope 3).



Assurance Statement related to GHG Emissions Inventory 2017 prepared for CANON Group

Terms of Engagement

This Assurance Statement has been prepared for CANON INC.

Lloyd's Register Quality Assurance Ltd. (LRQA) was commissioned by CANON INC. (30-2 Shimomaruko 3-Chome, Ota-ku, Tokyo 146-8501, Japan) to assure CANON Group's GHG Emissions Inventory for the calendar year 2017, that is, 01 January to 31 December 2017 (hereafter referred to as "the Report").

The Report relates to direct GHG emissions (Scope 1¹), energy indirect GHG emissions (Scope 2¹) and other indirect GHG emissions (Scope 3 – Categories² 1 to 15).

Management Responsibility

CANON INC.'s management was responsible for preparing the Report and for maintaining effective internal controls over the data and information disclosed. LRQA's responsibility was to carry out an assurance engagement on the Report in accordance with our contract with CANON INC.

Ultimately, the Report has been approved by, and remains the responsibility of CANON INC.

LRQA's Approach

Our verification has been conducted in accordance with ISO 14064-3:2006, 'Specification with guidance for validation and verification of greenhouse gas assertions' to provide limited assurance that GHG data as presented in the Report have been prepared in conformance with ISO 14064-1:2006 'Specification with guidance at the organizational level for quantification and reporting of greenhouse gas emissions and removals' and taking into account the Greenhouse Gas Protocol, 'Corporate Value Chain (Scope 3) Accounting and Reporting Standard.'

To form our conclusions, the assurance engagement was undertaken as a sampling exercise and covered the following activities:

- conducted site visits to CANON INC.'s head office in Tokyo and Oita Canon Materials Inc. in Oita Prefecture, Japan;
- interviewed key personnel responsible for the management of GHG emissions data and information and for the preparation of the Report at the above sites;
- reviewed processes for the management of GHG emissions data and information included in the Report; and
- verified GHG emissions data and information at an aggregated level made available at the head office and back to the original sources at the above sites visited.

Level of Assurance & Materiality

The opinion expressed in this Assurance Statement has been formed on the basis of a limited level of assurance and at a materiality of the professional judgment of the Verifier.

LRQA's Opinion

Based on LRQA's approach nothing has come to our attention that would cause us to believe that the total direct GHG emissions and energy indirect GHG emissions and other indirect

¹ Scope 1 and 2 emissions are as defined in The Greenhouse Gas Protocol – A Corporate Accounting and Reporting Standard.
² The categories of Scope 3 emissions are as defined in the Greenhouse Gas Protocol – Corporate Value Chain (Scope 3) Accounting and Reporting Standard, Table 5.3.



GHG emissions disclosed in the Report as summarized in Table 1 below are not materially correct and that the Report has not been prepared in conformance with ISO 14064-1:2006 and taking into account the GHG Protocol: Corporate Value Chain (Scope 3) Accounting and Reporting Standard.

LRQA's Recommendations

- CANON INC. should continue efforts for implementing quality assurance and quality control (QA/QC) systems for the GHG data and information management. This is particular to ensuring effective internal verification processes at both the corporate and member company levels.
- CANON INC. should validate the applied GHG removal factor against the actual performance data to further demonstrate reliability. This is particular to the estimations made when the GHG removal equipment has been installed in CANON INC.'s semiconductor manufacturing company.

Dated: 1 May 2018

Takahiro Iio
Lead Verifier
On behalf of Lloyd's Register Quality Assurance Limited
Japan Business Centre, Queen's Tower A10th Floor, 2-3-1 Minatomirai
Nishi-ku, Yokohama 220-6010, Japan

LRQA Reference No: YKA4005113

Table 1. Summary of CANON Group's GHG Emissions Inventory 2017

Scope of GHG emissions	Tonnes CO ₂ e
Direct GHG emissions (Scope 1)	174,342
Energy indirect GHG emissions (Scope 2, Market-based)	987,485
Energy indirect GHG emissions (Scope 2, Location-based)	1061,341
Other indirect GHG emissions (Scope 3)	7,568,749
Note 1: Scope 2, Location-based and Scope 2, Market-based are defined in the GHG Protocol Scope 2 Guidance, 2015	
Note 2: Scope 3 includes Category 1 to 15.	

This Assurance Statement is subject to the provisions of this legal section:

This Assurance Statement is only valid when published with the Report to which it refers. It may only be reproduced in its entirety.

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Due to inherent limitations in any internal control, it is possible that fraud, error, or non-compliance with laws and regulations may occur and not be detected. Further, the verification was not designed to detect all weakness or errors in internal controls so far as they relate to the requirements set out above as the verification has not been performed continuously throughout the period and the verification carried out on the relevant internal controls were on a test basis. Any projection of the evaluation of control to future periods is subject to the risk that the processes may become inadequate because of changes in conditions, or that the degree of compliance with them may deteriorate.

The English version of this Assurance Statement is the only valid version. Lloyd's Register assumes no responsibility for versions translated into other languages.

In the case of any conflict between the English and Japanese versions of this legal section, the English version shall prevail.

Major Awards, Citations, and Association Memberships

The Canon Group has received numerous awards for its products and corporate activities from various organizations in Japan and overseas.

Major Awards and Citations

Date of Award	Region	Award/Citation	Product or Feature	Sponsor
March 2017	Japan	Award for Companies Promoting Experience-Based Learning Activities for Youth: Ministry of Education, Culture, Sports, Science and Technology	Joint school memory project between Canon Marketing Japan and Pentel	Ministry of Education, Culture, Sports, Science and Technology
April 2017	Europe	Winner of Technical Image Press Association Awards for 23rd consecutive year	Digital SLR camera "EOS 5D Mark IV", interchangeable lens "EF24-105mm f/4L IS II USM", digital camcorders "XC15"	Technical Image Press Association
July 2017	Japan	Incorporation into MSCI Japan Empowering Women Index	Superior company activity in gender diversity	MSCI
	Japan	The 47th Machine Design Award	Large format inkjet printer "imagePROGRAF PRO-2000/PRO-4000"	Nikkan Kogyo Shimbun
August 2017	Europe	EISA Awards 2017-2018	Digital SLR cameras "EOS 5D Mark IV", "EOS 77D", ultra-wide-angle zoom lens "EF16-35mm f/2.8L III USM"	European Imaging and Sound Association (EISA)
October 2017	Japan	2017 Good Design Award	Digital SLR camera "EOS 5D Mark IV", micro satellite "CE-SAT-I", digital sheet-fed press "Océ VarioPrint 6330" series, etc. (Total 13 products)	Japan Institute of Design Promotion
	Americas	Technology & Engineering Emmy® Awards	Impressive lineup of the 4K field production zoom lenses for large-format, single-sensor cameras	The Academy of Television Arts & Sciences
November 2017	Asia	2017 DFA Design for Asia Awards, Bronze Award	Mirrorless camera "EOS M5"	Hong Kong Design Centre
December 2017	Japan	Minister of the Environment Prize in The 6th Contest for Corporate Activities on Biodiversity	The Furusato Project—Linking Our Dream to the Future, biodiversity preservation	Contest for Corporate Activities on Biodiversity Committee
January 2018	Japan	1st among manufacturing companies in Nikkei Inc.'s Environmental Management Survey	Resource recycling for "product to product", etc.	Nikkei Inc.
February 2018	Europe	Winner of iF Design Awards for 24th consecutive year	Digital SLR camera "EOS 5D Mark IV", mirrorless camera "EOS M5", etc. (Total 6 products)	iF International Forum Design GmbH
	Japan	Director-General's Prize, the Agency for Natural Resources and Energy in the Energy Conservation Grand Prize, FY2017	Promoting energy conservation activities to the whole company	The Energy Conservation Center, Japan
	Americas	2018 copier MFP Line of the Year	Office multifunction device "imageRUNNER ADVANCE" series	Keypoint Intelligence
April 2018	Americas	Winner of ENERGY STAR® 2018 Partner of the Year - Product Brand Owner Award for 3rd consecutive year	Contribution to promoting energy conservation	United States Environmental Protection Agency (EPA)

Main Association Memberships and Participating External Initiatives

- Keidanren (Japan Business Federation)
- Japan Electronics and Information Technology Industries Association (JEITA)
- Japan Business Machine and Information System Industries Association (JBMIA)
- Camera & Imaging Products Association (CIPA)
- Semiconductor Equipment Association of Japan (SEAJ)
- Japan Machinery Center for Trade and Investment (JMC)
- Japan Center for Economic Research (JCER)
- Economic Research Institute for ASEAN and East Asia (ERIA)
- Nippon Computer Security Incident Response Team Association (CSIRT)
- World Business Council for Sustainable Development (WBCSD)
- Responsible Minerals Initiative (RMI)
- Japan Intellectual Property Association (JIPA)
- License on Transfer Network
- The Federation of Electric Power Companies of Japan
- International Energy Agency (IEA)
- chemSHERPA
- Ink cartridge Satogaeri Project

Credit Rating by Key Agencies

(As of December 31, 2017)

Recognized for its solid financial standing and consistent ability to generate cash flow, Canon Inc. is rated among the highest of any Japanese corporation— even higher than Japanese government bonds.

	Long Term	Short Term
S&P	AA-	A-1+
Moody's	Aa3	—
Rating and Investment Information, Inc.	AA+	—

Tokyo 2020 Nationwide Participation Programme

The following Canon initiatives are Tokyo 2020 Nationwide Participation Programme certified by the Tokyo Organising Committee of the Olympic and Paralympic Games.

- Furusato Project—Linking Our Dream to the Future (→P65)
- The Tsuzuri Project (Cultural Heritage Inheritance Project) (→P105)
- Environmental Outreach Classes (→P100)

Canon Group Directory

Main Group Companies We conduct business globally, with operational sites in more than 50 countries and regions.

*Company name: As of March 31, 2018

Japan (Consolidated subsidiaries 63)

Canon Precision Inc.
Fukushima Canon Inc.
Canon Medical Systems Corporation
Toshiba Electron Tubes & Devices Co., Ltd.
Canon Chemicals Inc.
Canon Components, Inc.
Canon Electronics Inc.
Canon Finetech Nisca Inc.
Canon Tokki Corporation
Canon ANELVA Corporation
Nagahama Canon Inc.
Canon Machinery Inc.
Oita Canon Materials Inc.
Oita Canon Inc.
Nagasaki Canon Inc.
Miyazaki Canon Inc.
Canon Marketing Japan Inc.
Canon System & Support Inc.
Canon IT Solutions Inc.
Canon Medical Finance Co., Ltd.

Europe (Consolidated subsidiaries 167)

Canon Bretagne S.A.S.
Axis Communications AB
Océ Technologies B.V.
Océ Printing Systems GmbH & Co.KG
Axis AB
Canon Europa N.V.
Canon Europe Ltd.
Canon Ru LLC
Canon (UK) Ltd.
Canon Deutschland GmbH
Canon (Schweiz) AG
Canon Nederland N.V.
Canon France S.A.S.
Canon Middle East FZ LLC
Canon Italia S.p.A.
Canon Medical Systems Europe B.V.

Americas (Consolidated subsidiaries 53)

Canon Virginia, Inc.
Canon U.S.A., Inc.
Canon Canada Inc.
Canon Solutions America, Inc.
Canon Financial Services, Inc.
Canon Medical Systems USA, Inc.

Asia and Oceania (Consolidated subsidiaries 93)

Canon Dalian Business Machines, Inc.
Canon (Suzhou) Inc.
Canon Zhongshan Business Machines Co., Ltd.
Canon Zhuhai, Inc.
Canon Inc., Taiwan
Canon Vietnam Co., Ltd.
Canon Hi-Tech (Thailand) Ltd.
Canon Prachinburi (Thailand) Ltd.
Canon Business Machines (Philippines), Inc.
Canon Opto (Malaysia) Sdn. Bhd.
Canon Medical Systems Manufacturing Asia Sdn. Bhd.
Canon (China) Co., Ltd.
Canon Hongkong Co., Ltd.
Canon Singapore Pte. Ltd.
Canon India Pvt Ltd.
Canon Australia Pty Ltd.

Reference: Canon Group Directory
<https://global.canon/en/corporate/information/group/>

Canon Group's System for Sharing CSR Information

Every year Canon publishes a Japanese- and English-language version of its Canon Sustainability Report covering the Canon Group's CSR activities. More detailed information is released in a timely manner on Canon's website. Additionally, each Canon Group company around the world shares information tailored to the region through websites and various reports.

Canon Marketing Japan's website on CSR and CSR report (Japanese website only)
<https://cweb.canon.jp/csr/>

Canon China's website on sustainability and the environment
<http://www.canon.com.cn/corp/csr/>

Canon Australia and Canon New Zealand's website for sustainability and the environment and sustainability report
<https://www.canon.com.au/about-canon/sustainability>



Canon Sustainability Report (This publication)

Website on CSR
<https://global.canon/en/csr/>

Website on the environment
<https://global.canon/en/environment/>

Canon Europe's website on sustainability
https://www.canon-europe.com/about_us/sustainability/

Canon

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