

# Initiatives for the Environment

## Environmentally Conscious Management

Canon works to protect and conserve the environment throughout the product lifecycle.

Acting on the foundation of its approach to sustainability, Canon works to protect and conserve the global environment in line with the Canon Group Environmental Charter and the Canon Group Environmental Vision.

Considering the positive and negative, direct and indirect impacts of Group activities on the environment, Canon has identified four environmental material topics: climate change, resource efficiency, chemical substances, and biodiversity. We are moving ahead with a variety of initiatives to address these topics and challenges.

### Canon Group Environmental Vision

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 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.

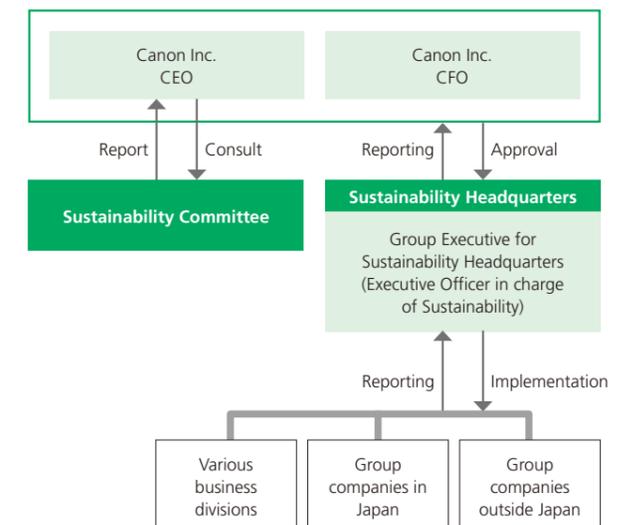
Identified material topics	Major initiatives
<b>Climate change</b> (Very important)	<ul style="list-style-type: none"> <li>Designing energy-efficient products</li> <li>Improving energy efficiency at operational sites</li> <li>Expanding use of renewable energy</li> <li>Reducing CO<sub>2</sub> emissions from logistics</li> <li>Contributing to society by reducing CO<sub>2</sub> emissions</li> </ul>
<b>Resource efficiency</b> (Very important)	<ul style="list-style-type: none"> <li>Reuse and recycling in five locations around the world</li> <li>Environmentally conscious design</li> <li>Reuse, recycling of hardware, consumables</li> <li>Reducing single-use plastics in packaging materials</li> <li>Reducing waste at operational sites</li> <li>Use of biomass and recycled plastics</li> <li>Energy-saving product design</li> </ul>
<b>Chemical substances</b> (Very important)	<ul style="list-style-type: none"> <li>Managing chemical substances in products</li> <li>Managing chemical substances in manufacturing processes</li> <li>Reducing discharge into air, water, and soil</li> </ul>
<b>Biodiversity</b> (Important)	<ul style="list-style-type: none"> <li>Sustainable use of water resources</li> <li>Sustainable use of forestry resources</li> <li>Canon Bird Branch Project</li> <li>Environmental protection activities rooted in various countries and regions</li> </ul>

### Global Environmental Promotion System

Led by the Sustainability Headquarters under the supervision of the CFO of Canon Inc., Canon Group is conducting environmental activities with the aim of achieving the Group's environmental targets and realizing our environmental vision. We use a global framework comprising Canon products operations and Canon Group companies in Japan and overseas. The Group Executive of the Sustainability Headquarters, a position occupied by an executive officer of Canon Inc., reports each month to the CFO (and to the CEO, if necessary) on all environmental activities to gain approval.

Moreover, based on the identification of the related risks and opportunities through the discussions of the Sustainability Committee, the direction and content of any sustainability-related matters requiring the response or engagement of Canon is approved by the CEO.

### Global environmental promotion system



# Climate Change

Canon is working to reduce CO<sub>2</sub> emissions at all stages of the product lifecycle.

**For 2050**  
**We aim to achieve net-zero CO<sub>2</sub> emissions for the entire product lifecycle (Scope 1-3).**

## Disclosure in Line with TCFD Recommendations

Canon accepts the recommendations of the final report of the Task Force on Climate-related Financial Disclosures (TCFD) and discloses climate-related information in accordance with the TCFD framework.

Governance	Strategy	Risk management
<p>The impact of climate changes on Canon, response plans and targets were discussed at the Climate Change Working Group (WG) under the Sustainability Committee. The Climate Change Working Group is comprised of senior managers from each business and corporate division. The content of discussions is reported to the Sustainability Committee, and after approval, it is reported to the CEO.</p> <p>To achieve these targets, the Sustainability Headquarters plays a central role in promoting activities throughout the Group. The progress of targets is reported to management every month, and the annual review is reported to the CEO.</p>	<p>Canon conducts scenario analysis based on the TCFD framework, which is recommended in non-financial disclosures, and recognizes the importance of both "mitigation" and "adaptation" to physical risks for Canon. We are working to achieve our GHG (Greenhouse Gas) emissions reduction targets and build a sustainable business model resilient to climate-related impacts.</p> <p>As climate-related risks and opportunities differ among the businesses of Canon's industry-oriented groups (Printing, Medical, Imaging, and Industrial), the Group reviewed the major climate-related risks and opportunities, their countermeasures and financial impact for the entire Group and each group.</p> <p>For details on the risk and opportunity factors affecting Canon and estimated financial impact, please see our annual securities report.  <a href="https://global.canon/en/ir/library/yuuhou.html">https://global.canon/en/ir/library/yuuhou.html</a></p>	<p>Our response to climate-related risks and opportunities is reflected in our Company-wide environmental targets and priority measures. At Canon, environmental initiatives are part of our management evaluation. The status of achievement of environmental targets and the results of environmental activities of each division are evaluated twice a year in the Environmental and Corporate Social Responsibility Performance Evaluation, which is implemented as an indicator of the Consolidated Performance Evaluation System for evaluating the performance of the Group's overall management. The results of the evaluation are reported to the CEO and other management. As a framework for continuous improvement of environmental assurance activities, Canon has established a common environmental management system in accordance with ISO14001 at all business sites around the world, and manages identified climatic risks in accordance with the PDCA cycle of ISO14001.</p> <ul style="list-style-type: none"> <li><b>PLAN</b> Set medium-term and annual environmental targets</li> <li><b>DO</b> Promote environmental assurance activities in cooperation with the activities of each division</li> <li><b>CHECK</b> Conduct environmental audits and environmental and CSR performance evaluations</li> <li><b>ACT</b> Continuously improve and enhance environmental assurance activities</li> </ul>

Indicators and targets		
Total GHG emissions (compared to 2022)	<b>2030 Targets</b>	<b>2024 Achievements</b>
	<b>42% reduction</b> for Scope 1 & 2, <b>25% reduction</b> for Scope 3 (category 1 and 11)	Scope 1 & 2: <b>12.8% reduction</b> Scope 3: <b>17.7% reduction</b>
Improvement in per-unit lifecycle CO <sub>2</sub> emissions index (compared to 2008)	<b>2030 Targets</b>	<b>2024 Achievements</b>
	<b>50% reduction</b>	<b>44.6% improvement</b>
Overall targets	<b>2024-2026 Targets</b>	<b>2024 Achievements</b>
	<b>3%-per-year average improvement</b> in lifecycle CO <sub>2</sub> emissions improvement index per product	<b>Average annual improvement of 3.76%</b> (2008-2024)

In Canon, the environmental targets are set in line with our three-year management plan and reviewed every year to determine whether changes are necessary. Under the overall target of a 3% average annual improvement in the index of lifecycle CO<sub>2</sub> emissions per product unit, our product target is a 3% average annual improvement in the index of CO<sub>2</sub> emissions per product unit associated with raw materials and product utilization. The operational site target includes target figures for reductions per basic unit in energy consumption.

In 2024, in terms of our SBTi, through the promotion of various energy-saving measures, the introduction of renewable energy, the adoption of smaller, lighter, and low-carbon emission components, we achieved a reduction of 12.6% in Scope 1 and 2, and 17.8% in Scope 3 (categories 1 and 11) compared to 2022.

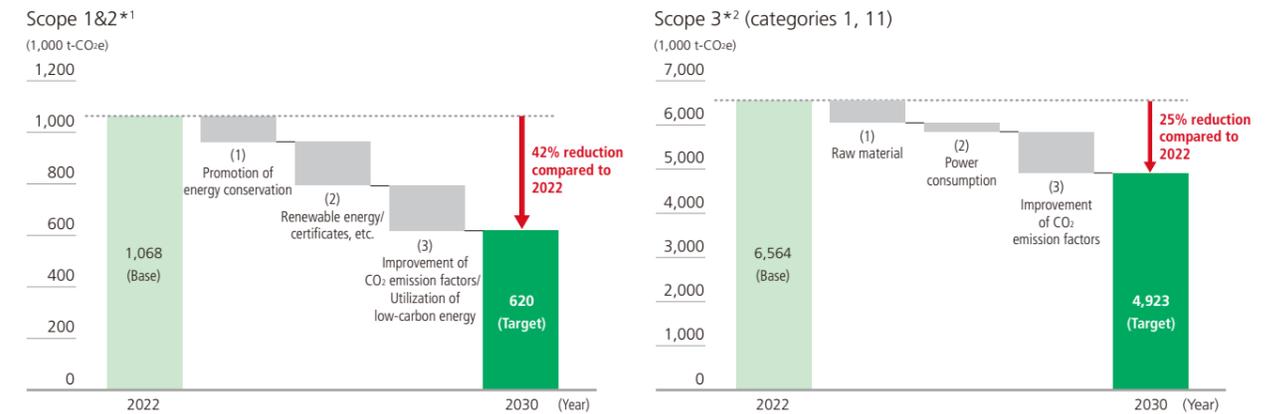
\* Science Based Targets initiative: A global body that promotes setting greenhouse gas emission reduction targets in line with climate science

## Canon's GHG Emissions-reduction Initiatives

Canon is working to reduce greenhouse gas emissions by assessing the impact of climate changes on the entire product lifecycle, from the manufacturing of materials and parts at suppliers, transportation to retailers, use by customers, and disposal and recycling.

The company aims to reduce its greenhouse gas emissions to net zero by 2050, and to reduce its Scope 1 and 2 emissions by 42% compared to 2022 and Scope 3 (category 1 and 11) emissions by 25% compared to 2022 by 2030. The target was verified by SBTi, an international initiative that recommends setting scientifically based GHG emissions reduction targets. To this end, we are promoting various initiatives, including the development of products using recycled materials, product downsizing and weight reduction, energy saving activities at production sites, energy saving during product use, product recycling, and efficient logistics.

### GHG emissions reduction



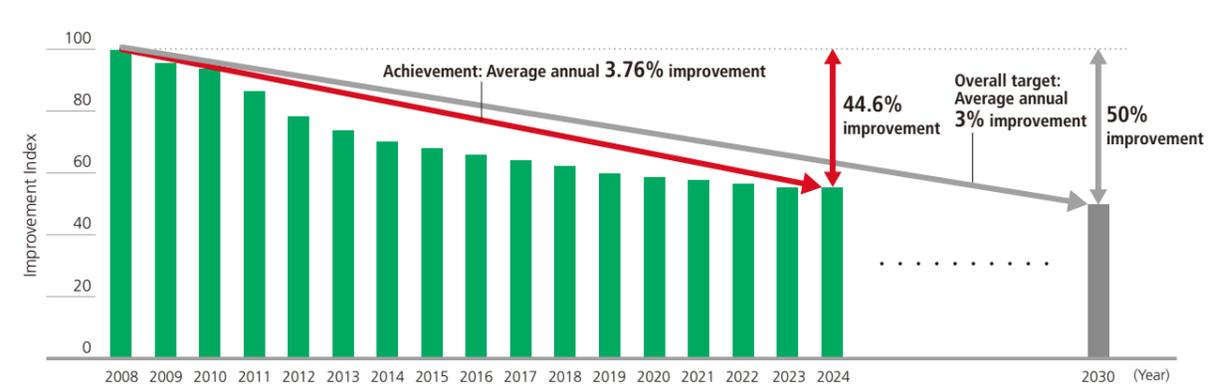
\*1 Scope 1: Direct emissions (city gas, LPG, diesel oil, kerosene, non-energy greenhouse gases, etc.)  
 Scope 2: Indirect emissions (electricity, steam, etc.)  
 \*2 Scope 3: Supply chain-related emissions (Category 1: Purchased goods and services, Category 11: Use of sold products)

Results for 2024 were 198,000 t-CO<sub>2</sub>e for Scope 1, 733,000 t-CO<sub>2</sub>e for Scope 2, and 7,173,000 t-CO<sub>2</sub>e for Scope 3, for total life cycle CO<sub>2</sub> emissions (Scopes 1, 2, and 3 total) of 8,104,000 t-CO<sub>2</sub>e.

## Index of Lifecycle CO<sub>2</sub> Emissions Per Product Unit

Since 2008, a 3% average annual improvement in the lifecycle CO<sub>2</sub> emissions improvement index per product (basic unit target) has been the Canon Group's overall environmental target. By consistently achieving this target, we expect to achieve a 50% improvement in 2030 compared to 2008. As of 2024, the average rate of improvement since 2008 had exceeded the target average at 3.76%, representing an improvement of 44.6% compared to 2008.

### Index of lifecycle CO<sub>2</sub> emissions per product unit (assuming 2008 as baseline of 100)



# Climate Change

## Climate Change Initiative

Canon seeks to consistently meet its environmental targets and, beyond that, is working toward net-zero CO<sub>2</sub> emissions from its business activities by 2050. To that end, we quantify emissions during the whole product lifecycle and use technology to reduce emissions at each stage.

## CO<sub>2</sub> Reduction Activities throughout the Product Lifecycle

### Green Platform

Canon has organized all the eco-conscious systems and technologies it has accumulated to date into a core technology base known as the Green Platform. Utilizing combinations of various in-house technologies, we undertake initiatives to help minimize environmental impact through decarbonization, development of the circular economy or other means for each product lifecycle stage, notably Design (energy efficiency, resource conservation, pro-recycling design, etc.), Production (less power/water consumption and waste, etc.) and Recycling (repair, re-use, recycling, etc.)



### Environmental Impact Reduction via Thorough Use of Simulation

Canon tests product designs by using simulation tools to recreate physical phenomena from the micro to macro level, such as the crumpling or the waviness of paper, or the way individual toner particles melt. For example, reducing the need for fabricating prototypes saves resources during development, while also enabling us to make lighter and more energy-efficient products by optimizing internal paper flows or visualizing heat losses. In turn, this translates to reduced environmental impact during transport and customer usage.

### Reducing Power Consumption in Production Using "Production Green Cost Management (GCM)"

At Canon, we use "GCM" to refer to the management framework we have developed that targets parallel reductions in costs and CO<sub>2</sub> emissions, alongside decarbonization efforts based on the development of green technologies. Within this framework, we focus on "production GCM" initiatives that aim to reduce the power used at the production stage. In this system, factory's energy data is automatically collected and plotted in graphs (visualization of electricity), which has facilitated not only the instant identification of wasteful operations (analysis of reduction potential), but also the systematic accumulation of data across the entire company, thereby enabling the immediate discovery of appropriate reduction measures (expansion of reduction measures).

### Use of Renewable Energy

Canon is working to expand the use of renewable energy in a variety of ways, taking into account the regional prevalence of renewable energy and the initiatives of each country. For example, we have installed solar panels on the premises of Canon Vietnam (Thang Long Factory), Canon Zhongshan Business Machines, and other sites, using the renewable energy generated.

In addition to these initiatives, by obtaining renewable energy certificates (REC), which securitize the environmental value of renewable energy, we were able to continue converting to renewable energy 100% of the power used in 2024 at five locations among the following four manufacturing companies for office MFDs, home inkjet printers, and large-format inkjet printers: Canon Suzhou, Canon Vietnam (Thang Long Factory and Tien Son Factory), Canon Hi-Tech Thailand (Ayutthaya Factory), and Canon Prachinburi Thailand. Sales marketing companies such as Canon Deutschland and Canon (China) are also using renewable energy certificates to ensure that 100% of electricity consumption in their offices comes from renewable energy sources. Such use of renewable energy earned Canon Europe and Canon UK an "excellent" evaluation under the BREEAM\* environmental assessment standard. As a result of these initiatives to use renewable energy, total worldwide renewable energy consumption by Canon Group companies was 307,846 MWh in 2024, roughly a 1.2 times increase over 2023.

\* Abbreviation for Building Research Establishment Environmental Assessment Method. An environmental sustainability assessment method developed by Britain's Building Research Institute that evaluates buildings under nine categories, including health and wellbeing, energy, and waste

# Resource Efficiency

Canon promotes recycling through the 3Rs: reduce, reuse, and recycle.

## Resource Efficiency

Canon seeks to recycle used products into new ones to maximize the value brought about by resource efficiency. 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 products with good-as-new quality.

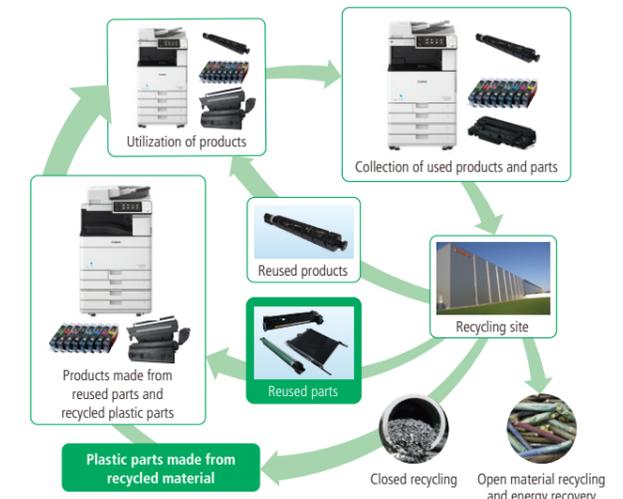
Currently, Canon has sites conducting recycling, in Japan, Germany, France, the United States, and China. We are continuing initiatives aimed at circulating resources within the same regions where they are consumed. Since 2008, we have reused 38,642 tons of products and parts directly and extracted 47,681 tons of plastic from used products for use as raw materials in new products. Going forward, we will continue to reinforce activities at Canon recycling sites around the world, contributing to both resource efficiency and the realization of a carbon-neutral society.

Amount of reused products and parts: **38,642 tons**  
 Amount of plastic used as raw material: **47,681 tons**

	2024 Targets* <sup>1</sup>	2024 Achievements* <sup>2</sup>
Operational Sites	Total waste generation per basic unit: 1% improvement	2.2% improvement

\*<sup>1</sup> Calculation based on average annual improvement rate of the three most recent years. The basic unit denominator is decided according to the characteristics of each operational site (production volume, effective floor area, workforce, etc.)  
 \*<sup>2</sup> For scope of data collection: <https://global.canon/en/sustainability/report/pdf/data-2024-e.pdf>

### Flowchart of resource efficiency



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

In February 2018, we opened the Canon Eco Technology Park. Based on a "clean and silent" design concept, which overturns the traditional image of recycling operations, the facility has implemented advanced systems to further boost recycling efficiency. The Canon Automated Recycling System for Toner Cartridges (CARS-T) is a process in which, after separation using a camera-based process, used toner cartridges are crushed and materials automatically separated for recycling of the main component, high-impact polystyrene (HIPS). The sorting purity of the recycled plastic reaches 99% or greater\* with the intensive use of various separation technologies at the different stages of the process. With the recycling system for ink cartridges (Canon Automated Recycling System for Ink Cartridges: CARS-I), a camera-based automatic sorting process is applied to used ink cartridges. The automated process line covers disassembly, pulverization and washing. Separated materials are re-used for ink cartridge components and packaging. Resources that cannot be recycled in product-to-product recycling are diverted to material recycling or thermal recovery processes to help maximize resource efficiency.



Canon Eco Technology Park



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

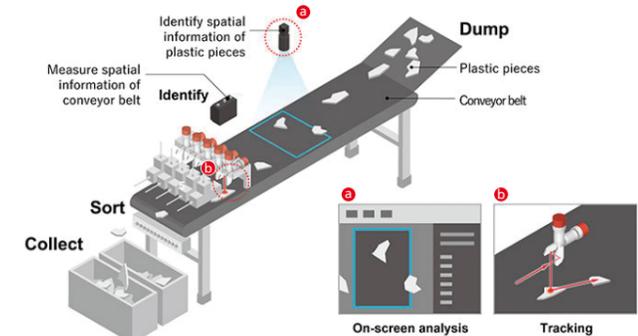
\* 99% or greater based on Canon's in-house sorting method

## Plastic Sorting Equipment that Revolutionizes Recycling with Proprietary Technology

Of the plastic discarded in our daily lives, approximately 20%\* is recycled as materials for new products (material recycling), while the rest is used as fuel or is left unused and incinerated. Since the purity of the plastic is important for recycling, it is necessary to accurately determine the type, such as ABS or polypropylene (PP). However, the black plastics used in home appliances and automotive interiors do not transmit or reflect visible light, making it difficult to identify the type of plastic using near-infrared spectroscopy, the current method for identifying plastics.

In June 2024, Canon began selling the TR-S1510, a plastic sorting system based on tracking-type Raman spectroscopy technology that is able to simultaneously sort black plastic pieces, which are difficult to distinguish, and other colored plastic pieces at recycling sites with high accuracy.

\* Source: "Production, Disposal, Recycling, and Treatment of Plastic Products in 2022," Plastic Waste Management Institute (in Japanese)



# Chemical Substances

Canon thoroughly manages chemical substances in products and those used in manufacturing processes.

## 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 discharge 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, we classify and rigorously manage chemical substances as shown in the table on the right. To ensure rigorous management and compliance with laws and regulations, the latest Canon Green Procurement Standards (Ver. 16.0), issued in July 2024, make even stronger demands of suppliers, clarifying the need to provide reliable chemical substance information.

### Chemical substance classification and management method

	Explanation
Prohibited substances	Chemical substances which cannot be used in products
Use-restricted substances	Chemical substances for which we are working to find alternatives by specific deadlines
Controlled substances	Chemical substances for which the amount should be monitored

	2024 Targets*1	2024 Achievements*2
Operational Sites	Emissions of controlled chemical substances per basic unit: 1%	0.9% deterioration

\*1 Calculation based on average annual improvement rate of the three most recent years. The basic unit denominator is decided according to the characteristics of each operational site (production volume, effective floor area, workforce, etc.)  
 \*2 For scope of data collection: <https://global.canon/en/sustainability/report/pdf/data-2025-e.pdf>

## Utilization and Development of the chemSHERPA System for Information Sharing 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 applicable regulations. After adopting the IEC62474\* international standard data scheme, Canon in 2017 began utilizing the chemSHERPA data scheme for information sharing, standardized under the initiative of Japan's Ministry of Economy, Trade and Industry.

\* 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 safety such as negative impact on human health, the environment, and flammable risk. Canon categorizes these substances and has put effective measures in place for each category.

### List of controlled chemical substances

Rank	Explanation
A	Substances specified by 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 (PFCs/HFCs/SF <sub>6</sub> ), other soil and groundwater pollutants, and substances that significantly impact people's health.
B	Greenhouse gases other than PFCs/HFCs/SF <sub>6</sub> , greenhouse gases for which global warming potential (GWP) has been determined by the IPCC, volatile organic compounds (VOCs), and other substances designated by Canon.
C	Chemical substances with defined compliance requirements, including compliance with reference values and the ascertainment of usage and storage quantities.

## Green Procurement and Guidance to Suppliers

In the environmental area, 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 view a supplier's environmental management as consisting of two interrelated elements: management of business activities, and management of parts and materials. We require that the supplier must operate effective environmental management in each of the four frameworks labeled A–D in the diagram to the right. If a supplier is found to have a negative impact on the environment, we immediately demand corrective action be taken and check the status of improvements made.

### Concept of green procurement standard requirements

	Environmental management system	Performance
Business activities	<b>A: Environmental management system for business activities</b> Construction and operation of an environmental management system for business activities	<b>B: Performance of business activities</b> Compliance with environment-related laws and regulations Compliance with other applicable legal requirements Non-use of prohibited substances Reduced use of substances targeted for reduced levels of use Preventative measures against soil and groundwater pollution
Parts & materials	<b>C: Management of chemical substances in products</b> Construction and operation of system for management of chemical substances in products	<b>D: Performance of parts and materials</b> No prohibited substances are contained No use-restricted substances are contained after a specified period

■ Evaluation of supplier (A-C) ■ Evaluation of parts and materials (D)

# Biodiversity

Under our Biodiversity Policy, we have formulated the slogan 'Nature Positive' and are pursuing activities rooted in local communities worldwide.

## Biodiversity Policy

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

Canon believes that actions to conserve biodiversity will prevent the loss of economic activity, create jobs and business, and lead to the Group's sustainable development. For this reason, we are currently assessing issues related to the natural environment, including our dependence on natural capital and our impact on such capital, and are steadily increasing our disclosure on these issues in accordance with the framework of the Task Force on Nature-related Financial Disclosures (TNFD).

▶ Canon Group Biodiversity Policy <https://global.canon/en/sustainability/environment/biodiversity/policy/>

## Water Resources Policy

At Canon, we rely on numerous water resources in our production processes. We have therefore formulated a Canon Group Water Resources Policy, and we work both to promote the effective use of water and to prevent water pollution. We also recognize that water is closely linked to climate change and other environmental issues, and we understand its impact on the environment. Based on our corporate philosophy of *kyosei*, at Canon we are working with various parties—including local communities and our suppliers—to reduce our use of water resources, and to minimize our impact on the environment.

## Initiatives for Sustainable Use of Water Resources

**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 further reduce water usage by improving production processes, raising water-usage efficiency and enhancing the quality of our water management.

**Water Recycling at Production Sites** Canon promotes the recycling of water resources. We promote the efficient use of water by making decisions on whether water can be recycled based on measurements using measuring instruments. Each site is taking on individual initiatives suited to their own unique circumstances. For example, taking into consideration its impact on the marine ecosystem of nearby Beppu Bay, which abounds with precious natural resources and habitats, the Kitsuki Plant of Oita Canon employs a fully closed wastewater system that discharges only rainwater. At Canon Ecology Industry, wastewater from equipment used in air conditioning and other infrastructure is treated and recycled for reuse in the production process of toner and ink cartridges.

Canon Inc., Taiwan's production site re-uses the wastewater from the cleaning equipment in the polishing process. We are also working to keep water consumption at our marketing sites to an appropriate level by measuring and monitoring the amount of water used at main sites. To reduce water consumption at its head office building through water recycling, Canon Marketing Japan is cooperating with the Shinagawa Grand Commons Community Development Council, an association of local business enterprises, in a reclaimed water utilization project under which recycled water supplied by the Tokyo Sewerage Bureau is used for flush toilets and other purposes.

In 2024, water consumption increased by 0.3% from the previous year to 8,693,000 m<sup>3</sup>. This reflected larger water volumes used in cooling for facility maintenance purposes and due to the higher prevailing temperatures, which more than offset the ongoing efforts of Canon Group sites to reduce water usage.

## 'Nature Positive' Initiatives at Canon

Biodiversity has come to be recognized in recent years as an issue facing global society as a whole, and the notion of 'nature positive' initiatives that seek not only to conserve but also restore biodiversity has gained attention. Canon has adopted the Group-wide slogan 'Nature Positive' to guide our collaboration with stakeholders at marketing and production sites in countries and regions worldwide in developing activities in line with local needs.

### Worldwide rollout of locally focused activities



Canon Bird Branch Project (Canon Group) Conservation of coral reefs (Canon Europe) Sustainable Environment Creation Program (Canon Canada) Wetlands Habitat Conservation for Migratory Birds (Canon Hong Kong) Forest Restoration Project (Canon Spain)

	2024 Targets*1	2024 Achievements*2
Operational Sites	Water usage per basic unit: 1%	0.6% improvement

\*1 Calculation based on average annual improvement rate of the three most recent years. The basic unit denominator is decided according to the characteristics of each operational site (production volume, effective floor area, workforce, etc.)  
 \*2 For scope of data collection: <https://global.canon/en/sustainability/report/pdf/data-2025-e.pdf>