

## Protecting and Conserving the Environment

### Data on CO<sub>2</sub>

#### Total GHG Emissions by Scope

	2016	2017	2018	2019	2020
Scope 1	164,769	174,342	160,520	151,504	123,133
Scope 2	955,338	962,229	930,471	891,734	816,973

(t-CO<sub>2</sub>)

\* Figures for 2019/2020 obtained third party verification.

### Data on Energy

#### Energy Consumption by Region in 2020

	Electricity	Gas	Oil	Other (steam, wide area heating and air conditioning)
Japan	4,266	1,017	216	210
Americas	329	123	4	0
Europe	304	152	275	65
Asia and Oceania (except Japan)	1,611	55	22	56
Total	6,510	1,346	517	331

(TJ)

\* Electricity includes the amount generated by renewable energy sources.

\* Figures obtained third party verification.

#### Use of Renewable Energy by Region in 2020

	Electric power (MWh)	Geothermal power (TJ)
Japan	669	0
Americas	5,988	0
Europe	70,246	17
Asia and Oceania (except Japan)	573	0
Total	77,476	17

### Data on Waste

#### Recovery Volume by Type of Waste in 2020

Type of Waste	Type of Recovery Treatment	Recovery Amount (t)
Paper	Cardboard, paper used by office equipment, toilet paper, raw material for paper products, building board, roadbed materials, etc.	15,721
Plastics	Raw materials for plastic products and other applications, roadbed materials, cement materials, fuels, blast furnace reducing agents, soil improvement agents, etc.	15,814
Metals	Raw materials for metals, roadbed materials, etc.	19,911
Oils, acids and alkalis	Cement materials, fuels, roadbed materials, reuse of oils, chemicals and solvents, etc.	9,149
Sludge	Cement materials, construction materials, aggregates, metal materials, organic fertilizers, compost, etc.	6,284
Wood	Construction boards, bedding for plants, pulp materials, fuels, fertilizers, etc.	3,221
Glass and ceramics	Glass materials, roadbed materials, cement, metal materials, etc.	193
Others	Combustion aid, roadbed materials, soil improvement agents, iron-making materials, metal materials, etc.	9,701
Total		79,995

#### Landfill Amount of General Waste Generated by Business Activities

	2016	2017	2018	2019	2020
General landfill waste generated by business activities	2,840	2,656	2,923	2,725	2,506

(t)

## Atmospheric Emissions

### SOx and NOx Emissions

(t)

	2016	2017	2018	2019	2020
SOx	0.6	1.2	1.1	1.0	0.8
NOx	62.1	61.7	56.1	52.9	47.9

## Data on Water Resources

### Total Wastewater Discharge

(1,000m<sup>3</sup>)

	2016	2017	2018	2019	2020
Japan	4,108	4,491	4,377	4,221	4,083
Outside Japan	3,433	3,306	3,086	3,116	2,671

### Wastewater Amount by Discharge Route in 2020

(1,000m<sup>3</sup>)

	Rivers	Sewerage System	Total
Japan	837	3,246	4,083
Outside Japan	315	2,356	2,671
Total	1,152	5,602	6,755

### 2020 Water Quality Data

(t)

	2020
SS	134
BOD	182

### Water Consumption in 2020 by Type

(1,000m<sup>3</sup>)

	Public Water	Industrial Water	Groundwater	Total
Japan	1,463	2,472	1,134	5,068
Outside Japan	2,490	637	231	3,358
Total	3,952	3,108	1,365	8,426

### Use of Recycled Water and Recycling Rate in 2020

	Recycled Water (1,000m <sup>3</sup> )	Recycling Rate (%)
Japan	1,315	26.0
Outside Japan	38	1.1
Total	1,353	16.1

\* Figures obtained third party verification.

## 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* <sup>1</sup>	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)* <sup>2</sup>	October 2003

\*1 Excludes use in semiconductor manufacturing.

\*2 Discontinued use in Japan in December 2001.

## Data Summary

### Amount of Chemical Substances in 2020

	Amount (t)
Japan	7,024
Outside Japan	846
Total	7,870

### VOC Emissions in 2020

	VOC Emissions (t)
Japan	108
Outside Japan	144
Total	252

### 2020 List of Chemical Substances Subjected to the PRTR Act

Statutory No.	Name of Substance	Emissions Volume		Transfer Volume		
		Atmosphere	Public Water	Sewerage System	Waste	Waste Recyclables
7	N-butyl acrylate	3	0	0	0	18,269
20	2-aminoethanol	358	0	5	44	13,399
31	Antimony and its compounds	4	0	0	0	183
53	Ethylbenzene	416	1	0	0	17,842
71	Ferric chloride	0	0	0	0	116,080
80	Xylene	6,025	2	0	4,022	134,217
125	Monochlorobenzene	53	0	0	129	4,152
128	Methyl chloride	3	0	0	0	0
150	1,4-dioxane	217	0	0	0	332
202	Diphenylamine	0	0	0	0	36
232	N,N-dimethylformamide	165	0	0	0	193
240	Styrene	202	0	0	0	63,113
259	Tetraethylthiuram disulfide	0	0	0	0	0
296	1,2,4-trimethylbenzene	3,852	1	0	0	5,042
298	Tolylene diisocyanate	0	0	0	0	415
299	Toluidin	2	0	0	0	0
300	Toluene	5,770	163	0	15	29,720
306	Hexamethylene diacrylate	0	0	0	0	48
308	Nickel	11	0	0	320	1,074
309	Nickel compounds	0	0	0	8	1,029
343	Pyrocatechol	26	0	0	0	3,946
349	Phenol	71	0	0	3	274
374	Hydrogen fluoride and its water-soluble salts	3	4	2,052	0	225
395	Water-soluble salts of peroxodisulfuric acid	0	0	42	0	4,664
408	Poly (oxyethylene) octylphenyl ether	0	0	0	37	676
412	Manganese and its compounds	0	0	0	0	287
438	Methylnaphthalene	47	0	0	0	268
448	Methylenebis (4,1-phenylene) diisocyanate	0	0	0	1	8,947

## Environmental Accounting

We quantitatively ascertain the costs of environmental conservation in our business activities, the outcomes of such activities, and the economic effect associated with environmental conservation measures.

### Environmental Conservation Costs

(Billions of yen)

Category		Details of Key Activities	2020	
			Investment* <sup>1</sup>	Cost* <sup>2</sup>
(1) Business Area Cost			2.47	7.34
Details	1. Pollution Prevention Cost	Air, water and soil pollution prevention, etc.	0.93	3.46
	2. Global Environmental Conservation Cost	Prevention of global warming, energy conservation, efficient logistics, etc.	1.25	1.72
	3. Resource Circulation Cost	Efficient resource use, waste reduction, sorting, recycling, etc.	0.28	2.16
(2) Upstream / Downstream Cost		Green procurement initiatives, product recycling* <sup>3</sup> , etc.	0.40	6.63
(3) Administration Cost		Environmental education, environmental management system, tree planting, information disclosure, environmental advertising, personnel, etc.	0.01	3.43
(4) R&D Cost* <sup>4</sup>		R&D for reducing environmental impact	0.01	0.13
(5) Social Activity Cost		Contributions to organizations, sponsorships, memberships, etc.	0.0	0.12
(6) Environmental Remediation Cost		Soil remediation	0.0	0.06
(7) Other		Other environmental protection-related costs	0.0	0.0
Total			2.89	17.72

\*1 Of total investment in depreciable assets, the amount spent for the purpose of environmental conservation

\*2 Of total costs, the amount incurred for the purpose of environmental conservation

\*3 In connection with the recycling of used products, expenses for product collection, storage, sorting, shipment, etc.

\*4 Expenses for basic research on environmental technologies.

### Environmental Conservation Benefit

Details of Benefit		Environmental Protection Indices	
		Index	Index Value (2020)
Benefit Related to Business Area Cost	Benefit related to resources input into business activities	Energy conservation (t-CO <sub>2</sub> )	48,698
	Benefit related to waste or environmental impact originating from business activities	Recycled resources volume (t)	79,995
Benefit Related to Upstream / Downstream Cost	Benefit related to goods and services produced from business activities	Product energy conservation amount (1,000 t-CO <sub>2</sub> )* <sup>5</sup>	2,337
		Recovery of used products (t)* <sup>6</sup>	53,437

\*5 CO<sub>2</sub> reduction resulting from energy-conservation technologies in electrographic multifunction devices and laser printers.

\*6 Amount of recovered copying machines, cartridges, etc. (including outsourced material recycling and thermal recovery).

### Economic Benefit Associated with Environmental Conservation Activities

(Billions of yen)

Details of Benefit		2020
Revenue	Sales revenue from waste recycling	1.82
Cost Reduction	Reduction in energy costs from energy conservation* <sup>7</sup>	2.00
	Reduction from green procurement	0.0
	Reduction in waste handling costs from resource conservation and recycling* <sup>8</sup>	1.95
Total		5.77

\*7 Reduction in power purchasing costs, etc., due to introduction of new equipment and energy conservation measures.

\*8 Reduction in external waste handling consignment costs due to introduction of new equipment and measures contributing to resource conservation, as well as gains on sales due to conversion of waste into recyclable materials, etc.

### Benefit of Upstream / Downstream Costs

(Billions of yen)

Details of Benefit	2020
Lower energy costs from reduced product energy consumption* <sup>9</sup>	643.1
Profit from used product recycling	52.5

\*9 Calculated as the reduction in energy consumption of electrographic multifunction devices and laser printers sold in 2020 (excluding production printers) × 12 yen/kWh (economic effect for the customer).

## Data Summary

### Operational Sites Covered in the Environmental Section

Name	Location
<b>Canon Inc. (1 company, 14 operational sites)</b>	
Headquarters (Shimomaruko)	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
<b>Marketing Headquarters in Japan (1 company)</b>	
Canon Marketing Japan Inc.	Tokyo
<b>Manufacturing Subsidiaries in Japan (23 companies)</b>	
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
Canon ANELVA Corporation	Kanagawa
Canon Machinery Inc.	Shiga
Canon Tokki Corporation	Niigata
Nagasaki Canon Inc.	Nagasaki
Canon Medical Systems Corporation	Tochigi
Canon Electron Tubes & Devices Co., Ltd.	Tochigi

Name	Location
<b>Manufacturing Subsidiaries Outside Japan (20 companies)</b>	
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
Canon Production Printing Netherlands B.V.	The Netherlands
Canon Production Printing Germany GmbH & Co. KG	Germany
Axis Communications AB	Sweden
Canon Electronics Vietnam Co., Ltd.	Vietnam
<b>Marketing Headquarters Outside Japan (5 companies)</b>	
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
<b>Other Companies Subject to Reporting (75 companies)</b>	
In Japan (20)	
Outside Japan (55)	

\* The scope of third-party verification of GHG includes the 124 companies covered in Canon's consolidated ISO certification and one other company not included in consolidated certification, all listed above.

\* Figures for 2017 onwards include data for Canon Medical Systems.

\* Some sites are excluded from data in the Environment Accounting section, such as sites having a low impact on total values.

## Product Standards Compliance

### 2020 Standards Compliance for Environmentally Conscious Products

	Law on Promoting Green Purchasing (Japan)	Eco Mark (Japan)	International ENERGY STAR® Program
Copying Machines/ Multifunction Devices (MFDs)	21/21 (100%)	21/21 (100%)	21/21 (100%)
Laser Printers	0/0 (—)	0/0 (—)	0/0 (—)
Inkjet Printers	10/10 (100%)	8/10 (80%)	10/10 (100%)

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

### 2020 Standards Compliance for Consumables

	Law on Promoting Green Purchasing (Japan)	Eco Mark (Japan)
Toner Cartridges	0/0 (—)	0/0 (—)
Ink Cartridges	18/18 (100%)	18/18 (100%)

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