

# Sustainability Data Book 2022

Annual Report 2022 Appendix

Year ended March 31, 2022  
**SCREEN Group**

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Statistics include the following companies:

- SCREEN Group: SCREEN Holdings Co., Ltd. and its 57 consolidated subsidiaries in Japan and overseas.
- SCREEN Group in Japan: SCREEN Holdings Co., Ltd. and its 26 consolidated subsidiaries in Japan.
- SCREEN Group overseas: 31 consolidated subsidiaries overseas.
- HD, SPE, GA, FT, PE, AS, IP: See key for abbreviations of company names below.

HD: SSCREEN Holdings Co., Ltd. SPE: SCREEN Semiconductor Solutions Co., Ltd.; GA: SCREEN Graphic Solutions Co., Ltd.;

FT: SCREEN Finetech Solutions Co., Ltd.; PE: SCREEN PE Solutions Co., Ltd.; AS: SCREEN Advanced System Solutions Co., Ltd.; IP: SCREEN IP Solutions Co., Ltd.

\* Data for the fiscal year ended March 31, 2018, includes data for SCREEN Manufacturing Support Solutions Co., Ltd., (absorbed by SCREEN MFG Service Co., Ltd., in January 2019).

\* Data for fiscal years prior to the fiscal year ended March 31, 2019 include data for SCREEN Business Support Solutions Co., Ltd. (taken over by SCREEN Business Expert Co., Ltd. in October 2019).

# Social Report

## Employees

### ● Number of employees by region

(Persons)

	2018	2019	2020	2021	2022
Japan	3,484	3,602	3,601	3,568	3,533
North America	384	430	422	409	403
Europe	508	497	474	460	454
Asia and Oceania	1,459	1,570	1,577	1,545	1,553
Total	5,835	6,099	6,074	5,982	5,943

Scope: SCREEN Group

### ● Number of employees

(Persons)

	2018	2019	2020	2021	2022	
Regular employee	Male	2,034	2,019	1,965	1,932	1,893
	Female	147	164	171	186	197
	Total	2,181	2,183	2,136	2,118	2,090
Contract employee	Male	19	24	34	4	3
	Female	0	0	0	2	2
	Total	19	24	34	6	5
Total	2,200	2,207	2,170	2,124	2,095	

Scope: HD, SPE, GA, FT, PE, AS, IP

### ● Average age of employees

(Age)

	2018	2019	2020	2021	2022
Male	45.5	44.9	44.6	44.8	44.9
Female	40.2	40.1	38.8	39.3	39.6
Total	45.1	44.6	44.2	44.3	44.4

Scope: HD, SPE, GA, FT, PE, AS, IP

### ● Average length of service per employee

(Years)

	2018	2019	2020	2021	2022
Male	20.1	19.1	18.7	18.8	18.8
Female	16.9	15.9	14.4	14.1	14.0
Total	19.9	18.9	18.3	18.4	18.4

Scope: HD, SPE, GA, FT, PE, AS, IP

### ● Average annual salary per employee

(Yen)

	2018	2019	2020	2021	2022
	9,554,000	9,623,000	8,805,000	8,364,000	8,395,000

Scope: HD, SPE, GA, FT, PE, AS, IP

Note: Rounded down to the nearest ¥1,000.

### ● Employee turnover

(Persons)

	2018	2019	2020	2021	2022	
Early retirement	Male	19	31	12	12	9
	Female	0	2	0	0	1
	Total	19	33	12	12	10
Own volition	Male	8	29	18	22	24
	Female	0	3	3	3	2
	Total	8	32	21	25	26
Company decision	Male	0	0	0	0	0
	Female	0	0	0	0	0
	Total	0	0	0	0	0
Employment transfer	Male	21	37	15	15	12
	Female	1	0	0	0	0
	Total	22	37	15	15	12
Other	Male	3	2	4	2	3
	Female	0	0	0	0	1
	Total	3	2	4	2	4

Scope: HD, SPE, GA, FT, PE, AS, IP

Notes 1: Excludes retirees. 2: "Early retirement" refers to employees who retired under the voluntary early retirement incentive program.

## Diversity

### Number of female employees

(Persons)

	2018	2019	2020	2021	2022
On professional career track	94	112	126	135	150
On clerical career track	53	52	45	51	47
Total	147	164	171	186	197

Scope: HD, SPE, GA, FT, PE, AS, IP

### Ratio of female and non-Japanese employees by post

(Persons)

2022		Management post (Of whom, General Managers or higher)	Corporate officers	Directors
Total		608	130	28
Ratio of female employees	Ratio of female employees	20	5	0
	Number of female employees	3.29%	3.85%	0.00%
Ratio of non-Japanese employees	Number of non-Japanese employees	4	0	0
	Ratio of non-Japanese employees	0.66%	0.00%	0.00%

Scope: HD, SPE, GA, FT, PE, AS, IP

Note: Director headcount includes outside directors, and corporate officer headcount includes presidents.

### Ratio of non-Japanese employees by employee

(Persons)

	2018	2019	2020	2021	2022
Non-Japanese	31	40	47	45	42
Ratio of non-Japanese employees	1.42%	1.83%	2.20%	2.12%	2.01%

Scope: HD, SPE, GA, FT, PE, AS, IP

### Employment of people with disabilities

(Persons)

		June 1, 2018	June 1, 2019	June 1, 2020	June 1, 2021	June 1, 2022
Number employed	Male	50	55	56	53	55
	Female	12.5	14	13	13	13
	Total	62.5	69	69	66	68
Employment ratio		2.35%	2.59%	2.61%	2.58%	2.65%

Scope: HD, SPE, GA, FT, PE, AS, IP

Note: From "Report on Employment of Disabled Persons," submitted to Minister of Health, Labour and Welfare

### Reemployment of after retirement age

(Persons)

		2018	2019	2020	2021	2022
Number of reemploying	Male	119	149	185	194	222
	Female	4	3	3	1	1
	Total	123	152	188	195	223

Scope: HD, SPE, GA, FT, PE, AS, IP

## Employment creation

### Recruitment results

(Persons)

		2018	2019	2020	2021	2022
New graduates	Male	47	55	51	42	44
	Female	7	11	21	10	8
	Total	54	66	72	52	52
Mid-career employees	Male	63	96	42	11	28
	Female	5	9	1	2	7
	Total	68	105	43	13	35
Ratio of mid-career hires among regular employees		55.7%	61.4%	37.4%	20.0%	40.2%

Scope: HD, SPE, GA, FT, PE, AS, IP

### Retention of new graduates three years after hiring

(%)

	Hired in 2015.4	Hired in 2016.4	Hired in 2017.4	Hired in 2018.4	Hired in 2019.4
Male	97.7	93.2	100.0	100.0	96.1
Female	100.0	100.0	71.4	90.9	100.0
Total	98.1	94.2	96.3	98.5	97.2

Scope: HD, SPE, GA, FT, PE, AS, IP

## Work-life balance

### ● Number of employees taking advantage of childcare-related systems

(Persons)

	2018	2019* <sup>1</sup>	2020	2021	2022
Number of employees who took maternity leave	2	6	5	8	11
Number of employees taking childcare leave (By year leave started)					
Male	1	57	69	58	68* <sup>2</sup>
Female	5	5	6	6	10
Total	6	62	75	64	78
Number of employees using a short working hours system due to childcare					
Male	2	1	1	1	1
Female	45	45	37	43	40
Total	47	46	38	44	41

Scope: HD, SPE, GA, FT, PE, AS, IP

\*1 Introduced spouse childcare leave system in the fiscal year ended March 31, 2019.

\*2 Of those taking childcare leave (male), 65 people took spouse childcare leave and 17 people used the childcare leave system. (14 people used both together).

### ● Ratio of employees taking childcare leave

(%)

	2018	2019	2020	2021	2022
Male	1.23	91.94	90.79	92.06	88.31
Female	100.00	100.00	100.00	100.00	100.00
Total	7.14	92.54	91.46	92.75	89.66

Scope: HD, SPE, GA, FT, PE, AS, IP

### ● Number of employees taking advantage of family care-related systems

(Persons)

	2018	2019	2020	2021	2022
Number of employees taking family care leave (short term)*					
Male	1	1	0	0	1
Female	0	1	0	0	1
Total	1	2	0	0	2
Number of employees taking family care leave (long term)*					
Male	1	0	0	0	0
Female	0	0	1	0	0
Total	1	0	1	0	0
Number of employees using a short working hours system due to family care					
Male	0	0	0	0	0
Female	0	1	1	0	0
Total	0	1	1	0	0

Scope: HD, SPE, GA, FT, PE, AS, IP

\*Family-Care Leave: up to 93 days in total under the law; Long-term Care Leave: 235 days from the day following the date of expiration of Family-Care Leave period.

### ● Percentage of annual paid leave taken by employees

(%)

	2018	2019	2020	2021	2022
	74.5	80.8	83.4	78.9	81.1

Scope: HD, SPE, GA, FT, PE, AS, IP

Notes: 1. Percentage of annual paid leave days (23 days per year) taken.

2. Only general staff.

### ● Percentage of employees with collective bargaining rights

(%)

	2018	2019	2020	2021	2022
	61.0	63.2	64.3	64.8	65.0

Scope: HD, SPE, GA, FT, PE, AS, IP

## Occupational health and safety

### ● Number of occupational accidents

(Unit)

	2018	2019	2020	2021	2022
SCREEN Group in Japan	21	14	6	9	10
Occupational accidents at partner companies (SCREEN Group in Japan)	7	16	18	10	13
Occupational accidents resulting in four or more days of lost work	1	4	6	4	6
Occupational accidents points* (points)	350	570	530	420	470

Scope: SCREEN Group in Japan and partner companies (Japan)

Occupational accidents: Work-related injury, illness or death that leads any treatment at medical institution.

\*Internal points system for occupational accidents (target: less than 250 points).

### ● Number of occupational accidents

(Unit)

	2018	2019	2020	2021	2022
SCREEN Group in Japan	9	7	12	7	18
Occupational accidents at partner companies (SCREEN Group in Japan)	3	1	8	10	6

Incidents: Fire, explosion, gas leak, chemical outflow, collapse or collision, that is not leading to injuries or deaths, and resulting damage to facilities, machinery or equipment. Also, a traffic accident (property damage only).

### ● Health examination rate

	2018	2019	2020	2021	2022
Periodic health examination rate (%)	100	100	100	100	100
Health examination rate for employees posted overseas (%)	90	94	69	70	80

Scope: HD, SPE, GA, FT, PE, AS, IP

### ● Sick day rate

(Unit)

	2018	2019	2020	2021	2022
Sick day rate*	0.590	0.615	0.795	0.686	0.779

Scope: Through the fiscal year ended March 31, 2019, HD, SPE, GA, FT, PE, AS, and IP; starting with the fiscal year ended March 31, 2020, SCREEN Group in Japan

\*Sick day rate = Total number of sick days / Total number of working days for employed workers × 100

### ● Frequency rate of occupational accidents

	2017*	2018*	2019*	2020*	2021*
Frequency rate of occupational accidents	0.00	0.25	0.00	0.22	0.24
〈Reference〉 Industry average of manufacturers in Japan (Source: Ministry of Health, Labor and Welfare)	1.02	1.20	1.20	1.21	1.31
〈Reference〉 Industry average of manufacturers of electrical equipment in Japan (Source: Ministry of Health, Labor and Welfare)	0.45	0.58	0.54	0.52	0.54

Scope: HD, SPE, GA, FT, PE, AS, IP

Note: Frequency rate = [(Number of injuries or deaths / hours worked) × 1,000,000] indicates number of injuries or deaths from occupational accidents per 1 million hours of work.

\*Year as listed refers to the calendar year from January 1 to December 31. For example, 2016 represents January 1 to December 31, 2016. This is consistent with the average calculation period used by the Ministry of Health, Labor and Welfare.

### ● Severity rate of occupational accidents

	2017*	2018*	2019*	2020*	2021*
Severity rate of occupational accidents	0.00	0.00	0.00	0.01	0.00
〈Reference〉 Industry average of manufacturers in Japan (Source: Ministry of Health, Labor and Welfare)	0.08	0.10	0.10	0.07	0.06
〈Reference〉 Industry average of manufacturers of electrical equipment in Japan (Source: Ministry of Health, Labor and Welfare)	0.02	0.02	0.01	0.05	0.01

Scope: HD, SPE, GA, FT, PE, AS, IP

Note: Severity rate = [(Days of work lost / total working hours) × 1,000] indicates number of days lost per 1,000 hours of work.

\*Years not listed as of the end of March refer to calendar years. For example, 2016 represents January 1 to December 31, 2016. This is consistent with the average calculation period used by the Ministry of Health, Labor and Welfare.

### ● Number of recipients of occupational health and safety education

(Persons)

	2018	2019	2020	2021	2022
Health and safety education (new employees / mid-career hires)	82	104	117	67	131
Follow-up health and safety education (new employees / mid-career hires)	82	100	105	53	100
Health and safety education for management	38	38	27	33	28
Foreman education	31	3	46	17	27
OHSMS risk assessor education	88	40	37	62	49

Scope: SCREEN Group in Japan

## Code of Conduct training / CSR activities

### ● CSR charter training

(%)

	2018	2019	2020	2021	2022
E-learning completion rate	86.5	92.0	—	94.5	94.7
CSR Talk participation rate	81.8	81.0	86.3	87.0	84.0

Scope: SCREEN Group in Japan

### ● CSR activities

The Screen Group actively promotes industry-academia-government collaboration. In addition to Kyoto Prefecture, with which we have concluded a partnership agreement, we collaborate with the national government, local communities, universities, and educational institutions to carry out a variety of activities that contribute to society.

#### Environmental conservation

- In 2018, signed an "agreement on preserving forest uses" as part of CSR activities in the area of environmental preservation, and are cooperating in promoting the "Kyoto Model Forest program" and advancing functions of forests that benefit the public good such as recharge of groundwater sources.
- Since 2018, participating in the "Kyoto Life and Culture Collaborative Rejuvenation Project" promoted by the City of Kyoto. We are promoting the cultivation of endangered rare plants by planting garden beds at our Head Office location (in Kyoto).
- Since 2016, we have been a sponsor of the Kyoto Municipal zoo as a feed sponsor.
- In 2016, we began sponsoring the Lake Biwa Museum's renovation project, and from 2020, we are sponsoring the Lake Biwa Museum Micro Aquarium's "Aquarium Supporter".

#### Support for the development of the next generation and education

- We will be actively involved in human resource development based on a comprehensive cooperation agreement with Kyoto University of Advanced Science.
- We have signed an agreement with Kyoto Institute of Technology for comprehensive technology exchange and are working to solve problems in the local community through implementation of technology within society.
- We have concluded a comprehensive cooperation agreement with the Doshisha Business School and are collaborating to promote an "MBA Education Functional Enhancement Project" through Industry-Academia Collaboration.
- We signed an agreement on comprehensive partnership and collaboration in data science and other areas with Kyoto Women's University.
- We assigned a "Meister CEO of High School" to Hikone Technical High School, an accredited school under the "Meister System" of the Ministry of Education, Culture, Sports, Science, and Technology.
- We attended the "corporate CSR practice exercise" at Ryukoku University and engaged students in a dialog.
- Since 2009, we have been providing educational support for elementary school students through Manufacturing Workshop Learning at the Kyoto Manufacturing Hall of Fame.
- Since 2007, SCREEN HD Korea Co., Ltd. has been offering scholarships to local youth.

#### Support and promotion of science and culture

- Since 2019, we have been sponsoring the "Kyoto Football Association", which is dedicated to promoting and fostering the development of soccer and other sports in Kyoto Prefecture.
- In 2018, we began volunteering as an organization and have been sponsoring the Kyoto Marathon since 2019; the 2022 event was held online, with participants running where they want to due to the Corona disaster.
- Since 2019, we have been supporting "Sanga Tsunagari-tai," a hands-on program in which Kyoto Sanga F.C. sends instructors to elementary school classes to help students learn communication skills and other skills through soccer.
- Since 2018, we have been supporting Koji Yamazaki, a member of the Japanese national field hockey team. We also sponsor "Blue Sticks Shiga" field hockey team based in Hikone City, Shiga Prefecture.
- Since 2014, we've been sponsoring the "Kyoto Ladies Open", a golf tournament that is part of the JLPGA Step Up Tour.

#### Support and promotion of science and culture

- Since 2018, we have been a sponsor of the museum partner system of the Kyoto National Museum.
- We have been sponsoring the Very Special Arts Festival in Kyoto, which has been hosted by Kyoto Prefecture since 2000 as a place where people with disabilities can make the most of their individuality and talent.
- We displayed several original exhibits featuring semiconductor-related technologies at the "Summer Experiential Special Exhibit" hosted by the Kyoto Municipal Science Center for Youth.
- Since 2017, we have been supporting the NPO "Genius Art KYOTO (Research Organization for the Promotion of Art for the Physically Challenged)" for the purpose of supporting artistic activities by people with disabilities.

#### Other promotion and support

- We donated to eight orphanages in Kyoto Prefecture of 1,080 kg of rice harvested from rice cultivation which we began as a result of our participation in the Kyoto Model Forest program.
- Since 2021, we have been making donations to Kyoto and Shiga prefectures to support medical personnel involved in the fight against novel coronavirus infection.
- We regularly renew our stores of emergency food, and since 2018, we have donated the surplus to Food Bank Shiga to support people in need.
- SCREEN SPE Korea Co., Ltd. has been providing ongoing support to families with children suffering from various illnesses and diseases to enable them to lead healthy lives.
- We donated 200,000 euros to the United Nations High Commissioner for Refugees (UNHCR) as humanitarian aid for people who have been displaced by the war in Ukraine and the surrounding region.
- Since 2010, we have been supporting the "TABLE FOR TWO" initiative, in which one school lunch is delivered to a child in a developing country for every designated meal consumed in our cafeteria. Since 2010, we have provided a total of more than 180,000 meals.
- We are a sponsor of the Museum of Astronomical Telescopes which preserves and displays valuable astronomical telescopes.
- We collected and sent in used stamps in support of the "PHP Thoughtfulness for Others" campaign.
- We hold a memorial service every December at the Ako Gishi (the deceased of the Ako clan) hair tower on the grounds of our head office.
- The SCREEN Group conducts regular cleanups around each of our facilities.

## Awards and certifications (related to CSR)

### ● Awards and Certifications

		Recipient	Award giving organization	Content of award or recognition	Result
May	2021	PE	Otsu Chapter, Shiga Prefecture Labor Standards Association	Class 2 Certificate of Accident-free Record	Certified
June	2021	Yasu Plant	Japan Association for Safety of Hazardous Materials	Japan Association for Safety of Hazardous Materials Director's Award	Commended
June	2021	SEQT	Koriyama Regional Fire Safety and Disaster Preparedness Association	Worksite Award	Commended
July	2021	SCREEN Holdings Co.,Ltd.	Kumamoto Prefecture and Town of Mashiki	Kumamoto earthquake recovery assistance	Commended
October	2021	SCREEN Holdings Co.,Ltd.	Wis Works, Inc.	Bronze Award, Company Newsletter Awards 2021	Awarded
November	2021	SCREEN Holdings Co.,Ltd.	Japan Institute of Invention and Innovation	Patent Office Commissioner's Award and Invention Encouragement Award, FY2021 Kinki Regional Invention Awards	Awarded
March	2022	FEBACS	Ministry of Economy, Trade, and Industry	Recognized in METI's Health and Productivity Management Organization Recognition Program SME category (Bright 500)	Certified
March	2022	SCREEN Holdings Co.,Ltd.	Shiga Prefecture	Three Stars, FY2021 Shiga Biodiversity Initiative Certification	Certified
March	2022	SCREEN Holdings Co.,Ltd.	Ministry of Economy, Trade, and Industry	Recognized in METI's Health and Productivity Management Organization Recognition Program	Certified
March	2022	SCREEN Group	Clarivate	Top 100 Global Innovators 2022	Awarded

# Environmental Report

## Management system

### ● ISO certification status

As of July 31, 2022

		ISO9001	ISO14001	ISO45001	ISO50001	ISO22301	ISO/IEC27001
Holding company	SCREEN Holdings Co.,Ltd.		Acquired	Acquired	Acquired	Acquired	
Business operating companies	SCREEN Semiconductor Solutions Co., Ltd.	Acquired	Acquired	Acquired	Acquired	Acquired	
	SCREEN Graphic Solutions Co., Ltd.	Acquired	Acquired	Acquired	Acquired		Acquired
	SCREEN Finetech Solutions Co., Ltd.	Acquired	Acquired	Acquired	Acquired	Acquired	
	SCREEN PE Solutions Co., Ltd.	Acquired	Acquired	Acquired	Acquired		
	SCREEN IP Solutions Co., Ltd.		Acquired	Acquired	Acquired		
Manufacturing	SCREEN SPE Tech Co., Ltd.	Acquired	Acquired	Acquired			
	SCREEN SPE Works Co., Ltd.	Acquired	Acquired	Acquired			
	SCREEN SPE Quartz Co., Ltd.	Acquired	Acquired	Acquired			
	SCREEN MFG Service Co., Ltd.		Acquired	Acquired			
Services	SCREEN SPE Service Co., Ltd.	Acquired	Acquired	Acquired			
	SCREEN GP Service Japan East Co., Ltd.	Acquired	Acquired	Acquired			Acquired
	SCREEN GP Service Japan West Co., Ltd.	Acquired	Acquired	Acquired			Acquired
	FEBACS Co., Ltd.	Acquired	Acquired	Acquired			
	SCREEN PE Engineering Co., Ltd.	Acquired	Acquired	Acquired			
Others	SCREEN GP Japan Co., Ltd.		Acquired	Acquired			
	SCREEN ICT Software Co., Ltd.		Acquired	Acquired			Acquired
	SCREEN Logistics Co., Ltd.		Acquired	Acquired			
	SCREEN System Service Co., Ltd.		Acquired	Acquired			Acquired
	SCREEN Creative Communications Co., Ltd.	Acquired	Acquired	Acquired			
	SCREEN Business Expert Co., Ltd.		Acquired	Acquired	Acquired	Acquired	

Scope: SCREEN Group in Japan

		ISO9001	ISO14001	ISO45001
Manufacturing	SCREEN GP Hangzhou	Acquired	Acquired	
	Laser Systems & Solutions of Europe SASU	Acquired		
Others	SCREEN HD Korea	Acquired		

Scope: SCREEN Group overseas

### ● ISO certification acquisition rates

(%)

ISO9001	ISO9001 in business operating companies, manufacturing and service companies in Japan	65
ISO9001	in overseas manufacturing sites	50
ISO14001	in main sites and group companies in Japan	90
ISO14001	in overseas manufacturing sites	20
ISO50001	in main manufacturing sites in Japan	100
ISO45001	in main sites and group companies in Japan	90
ISO45001	in overseas manufacturing sites	20

### ● Legal compliance and reported complaints

2018	No particular issues arose.
2019	SCREEN Semiconductor Solutions Co., Ltd. Fluorocarbon Emission Restriction Law Waste disposal operators were not notified that equipment to be disposed of contained fluorocarbons. As a result, said fluorocarbons were not processed appropriately when equipment was disposed of (Hikone Plant). One case
2020	No particular issues arose.
2021	No particular issues arose.
<b>2022</b>	<b>No particular issues arose.</b>

Scope: SCREEN Group in Japan



## Environmental accounting

### ● Environmental protection costs

Category		Protection costs (Million yen)				Amount invested (Million yen)			
		2019	2020	2021	2022	2019	2020	2021	2022
1. Cost within business area	1. Pollution prevention: Wastewater treatment facilities, air treatment facilities	177	165	231	115	92	64	32	90
	2. Environmental preservation: Inverters, facilities for preventing global warming	57	63	76	97	88	84	8	818
	3. Resource circulation: Appropriate waste disposal	73	83	81	79	0	0	0	0
2. Upstream / downstream costs	Recycled product business	805	506	778	826	0	0	0	0
3. Administration costs	Analysis and measurement, environmental management education	185	166	286	199	9	4	71	4
4. R&D costs	Development of environmentally friendly products	2,283	2,153	2,151	2,404	0	0	0	0
5. Social initiative costs	Publishing report, environmental beautification initiatives	32	18	24	22	15	8	8	0
6. Costs associated with resolving environmental damages		16	15	73	14	0	0	0	0
Total		3,623	3,169	3,700	3,756	204	159	120	912

Scope: SCREEN Group in Japan

### ● Environmental preservation effects

Category	Amount (Metric tons)				Cost (Million yen)			
	2019	2020	2021	2022	2019	2020	2021	2022
Effects of reduction efforts on volume of chemical substances used	▲5	9	1	1	▲6	13	1	1
Effects of reduction efforts on amount of energy used(CO <sub>2</sub> e)	2,628	1,453	2,999	5,370	44	33	▲6	▲25
Effects of reduction efforts on volume of waste	▲97	435	▲224	▲806	▲1	5	▲3	▲10
Effects of resource conservation*	8	2	5	9	1,106	666	1,136	1,366
Total					1,143	717	1,128	1,332

Scope: SCREEN Group in Japan

\*Amount of products reused and income from paper and cardboard sold.

## Greenhouse gases

### ● CO2 emissions

(Metric tons CO<sub>2</sub>e)

	2018	2019	2020	2021	2022
Scope1 + 2 (based on market standards)					
SCREEN Group	54,776	50,566	54,794	50,670	<b>44,661</b>
SCREEN Group in Japan	51,145	47,939	48,025	45,957	<b>39,933</b>
SCREEN Group overseas	3,630	2,627	6,769	4,713	<b>4,727</b>
SCREEN Group in Japan					
Weight of product shipment (Metric tons CO <sub>2</sub> e/metric tons)	6.72	6.12	7.09	7.00	
SCREEN Group					
Sales unit (Metric tons CO <sub>2</sub> e/hundred million yen)	16.1	13.9	17.0	15.8	<b>10.8</b>
Scope1					
SCREEN Group	12,234	11,617	12,596	10,614	<b>11,023</b>
SCREEN Group in Japan	11,861*	11,375*	10,560*	9,950*	<b>10,416*</b>
SCREEN Group overseas	373	242	2,037	664	<b>607</b>
Scope2 (based on market standards)					
SCREEN Group	42,542	38,949	42,198	40,056	<b>33,638</b>
SCREEN Group in Japan	39,284*	36,564*	37,465*	36,007*	<b>29,517*</b>
SCREEN Group overseas	3,258	2,385	4,733	4,049	<b>4,121</b>
Scope 2 (location-based)					
SCREEN Group	42,878	44,221	47,161	46,682	<b>44,538</b>

(Thousand metric tons CO<sub>2</sub>e)

Scope3					
SCREEN Group	2,720	3,189	2,597	2,633	<b>3,160</b>
By category					
1. Products / services to purchase	425	482	391	366	<b>484</b>
2. Capital goods	(Not calculated)	72.5	24	7.84	<b>40</b>
3. Fuel and energy-related activities	(Not calculated)	5.39	5.91	9.03	<b>9.08</b>
4. Transportation / distribution (upstream)	0.822*	0.877*	0.795	0.863	<b>0.759</b>
5. Waste generated from business and manufacturing sites	0.791	0.986	1.12	0.556	<b>0.746</b>
6. Business trips	1.95	0.793	0.79	0.778	<b>0.773</b>
7. Employee commuting (by car in Japan only)	2.31	2.78	2.77	2.73	<b>2.71</b>
8. Lease assets (upstream)	(Included in Scope1, 2)	(Included in Scope1, 2)	(Included in Scope1, 2)	(Included in Scope1, 2)	(Included in Scope1, 2)
9. Transportation / distribution (downstream)	(Not calculated)	20.0	21	27.3	<b>35.6</b>
10. Processing of sold products	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
11. Use of sold products (Metric tons CO <sub>2</sub> e / 10 years)	2,306	2,603	2,149*	2,218*	<b>2,586*</b>
12. Disposal of sold products	19.5	0.522	0.501	0.139	<b>0.155</b>
13. Lease assets (downstream)	(Included in category 11)	(Included in category 11)	(Included in category 11)	(Included in category 11)	(Included in category 11)
14. Franchise	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
15. Investment	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
Scope1+2 (based on market standards) +3					
SCREEN Group	2,775	3,239	2,652	2,684	<b>3,205</b>

For the fiscal year ended March 31, 2022, total GHG emissions for the Group as a whole were 44,661 metric tons CO<sub>2</sub>e, a decrease of approximately 11.9% from the previous year.

Note: Scope 1 is greenhouse gas (GHG) emissions from fuel use. Scope 2 is GHG emissions from power use. Internationally recognized standards are used for calculating and reporting GHG emissions under the greenhouse gas (GHG) Protocol.

Scope 3 is indirect GHG emissions that occur in the company's value chain. Values calculated from among 15 categories have been tabulated.

The calculation method for Scope 3 Category 1 was revised for the fiscal year ended March 31, 2022. Values for previous years have been revised accordingly.

In addition, the 2019 values of Scope3 other than Category 1 have been corrected.

\*Conducted third-party verification of greenhouse gas emissions (GHG third-party verification).

Scope1 SCREEN Group in Japan: 10,416 metric tons CO<sub>2</sub>e (covers carbon dioxide emissions from energy sources; does not include emissions associated with fuel use in mobile vehicles)

Scope 2 SCREEN Group in Japan: 29,517 metric tons CO<sub>2</sub>e

Scope 3 Category 11: 2,586,000 metric tons CO<sub>2</sub>e

● Renewable energy consumption

(MWh)

		2018	2019	2020	2021	2022
Green energy purchases	SCREEN Group	0	0	0	0	15,034
	SCREEN Group in Japan	0	0	0	0	14,659
	SCREEN Group overseas	0	0	0	0	375
Green energy certificates	SCREEN Group	0	0	1,706	1,662	1,651
	SCREEN Group in Japan	0	0	1,706	1,662	1,651
	SCREEN Group overseas	0	0	0	0	0
Solar cell power generation	SCREEN Group	366	354	366	348	324
	SCREEN Group in Japan	366	354	366	348	324
	SCREEN Group overseas	0	0	0	0	0
Total	SCREEN Group	366	354	2,072	2,010	17,008
	SCREEN Group in Japan	366	354	2,072	2,010	17,008
	SCREEN Group overseas	0	0	0	0	0

The Head Office, Hikone Plant, and Taga Plant introduced renewable power in January 2022.

● Energy consumption

(MWh)

		2018	2019	2020	2021	2021
Electricity	SCREEN Group	83,984	89,377	99,019	98,466	98,434
	SCREEN Group in Japan	76,684	81,712	86,944	87,812	89,222
	SCREEN Group overseas	7,300	7,665	12,075	10,654	9,212
Town gas	SCREEN Group	50,921	49,988	54,045	43,314	47,499
	SCREEN Group in Japan	49,085	48,796	44,779	41,805	45,340
	SCREEN Group overseas	1,836	1,192	9,266	1,509	2,159
LPG	SCREEN Group	251	306	274	276	294
	SCREEN Group in Japan	251	306	274	274	274
	SCREEN Group overseas	0	0	0	2	20
Heavy oil	SCREEN Group	0	0	582	691	627
	SCREEN Group in Japan	0	0	0	0	0
	SCREEN Group overseas	0	0	582	691	627
Kerosene	SCREEN Group	7,530	5,732	5,763	5,739	4,738
	SCREEN Group in Japan	7,530	5,732	5,763	5,739	4,706
	SCREEN Group overseas	0	0	0	0	32
Total	SCREEN Group	142,686	145,403	159,683	148,486	151,592
	SCREEN Group in Japan	133,550	136,546	137,760	135,630	139,542
	SCREEN Group overseas	9,136	8,857	21,923	12,856	12,050

● Reduction measures targeting GHG emissions: Major initiatives

	Measure	Site	Reduction	
			GHG reduction results	Cost-cutting
2020	Upgraded absorption chillers	Hikone	GHG reduction results	221.7 metric tons CO <sub>2</sub> e/year
			Cost-cutting	¥5,190,000
	Upgraded absorption chillers (installed turbo chillers)	Taga	GHG reduction results	932.6 metric tons CO <sub>2</sub> e/year
			Cost-cutting	¥12,052,000
	Upgraded air conditioning heat source equipment (Absorption hot and chilled water generator)	Kyoto Minami	GHG reduction results	41.2 metric tons CO <sub>2</sub> e/year
			Cost-cutting	¥1,440,000
Green energy certificates		GHG reduction results	600.5 metric tons CO <sub>2</sub> e/year	
		Cost-cutting	–	
GHG absorbed by SCREEN's forest protection activities (Kyoto Model Forest)		GHG reduction results	9.2 metric tons CO <sub>2</sub> e/year	
		Cost-cutting	–	
2021	Renewal of air conditioners	Rakusai	GHG reduction results	17.7 metric tons CO <sub>2</sub> e/year
			Cost-cutting	¥257,000
	Replacement of air conditioners	Kumiyama	GHG reduction results	25.4 metric tons CO <sub>2</sub> e/year
			Cost-cutting	¥836,000
	Renovation of elevator	Kumiyama	GHG reduction results	1.4 metric tons CO <sub>2</sub> e/year
			Cost-cutting	¥44,000
Replacement of air conditioners	SCREEN SPE Works	GHG reduction results	9.7 metric tons CO <sub>2</sub> e/year	
		Cost-cutting	¥212,000	
Green energy certificates		GHG reduction results	565.1 metric tons CO <sub>2</sub> e/year	
		Cost-cutting	–	
GHG absorbed by SCREEN's forest protection activities (Kyoto Model Forest)		GHG reduction results	3.3 metric tons CO <sub>2</sub> e/year	
		Cost-cutting	–	
2022	Adoption of LED lighting fixtures	Each site	GHG reduction results	470.9 metric tons CO <sub>2</sub> e/year
			Cost-cutting	¥14,158,000
	Replacement of air conditioners	Each site	GHG reduction results	108.9 metric tons CO <sub>2</sub> e/year
			Cost-cutting	¥3,141,000
	Replacement of HVAC system	Rakusai	GHG reduction results	32.0 metric tons CO <sub>2</sub> e/year
			Cost-cutting	¥1,062,000
	Upgraded heat source equipment	Hikone	GHG reduction results	581.7 metric tons CO <sub>2</sub> e/year
			Cost-cutting	¥9,067,000
	Fuel conversion (from kerosene to town gas)	Yasu Plant	GHG reduction results	430.0 metric tons CO <sub>2</sub> e/year
			Cost-cutting	¥22,200,000
	Green energy certificates		GHG reduction results	597.7 metric tons CO <sub>2</sub> e/year
			Cost-cutting	–
	GHG absorbed by SCREEN's forest protection activities (Kyoto Model Forest)		GHG reduction results	5.6 metric tons CO <sub>2</sub> e/year
			Cost-cutting	–

Note: Emission factors are those of the relevant year. Monetary amounts are calculated based on electricity costs.

## Transportation and logistics

● GHG emissions from logistics operations: Mode of transportation

(Metric tons CO<sub>2</sub>e)

	2018	2019	2020	2021	2022
Vehicles	819	884	794	863	758
Ships	3.2	3.9	0.4	0.3	0.2
Railroads	0	0	0	0	0

Scope: SCREEN Group in Japan

● Reduction in GHG emissions resulting from modal shift: Product transportation

	Number of shipments					GHG reductions (Metric tons CO <sub>2</sub> e)				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Marine transport	39	23	7	5	4	26.8	13.8	1.2	1.0	0.7
Rail transport	0	0	0	0	0	0	0	0	0	0

Scope: SCREEN Group in Japan

● Number of trucks involved in transportation

	2018	2019	2020	2021	2022
Number of trucks involved in product transportation	4,471	4,363	3,915	4,034	4,484
Number of trucks used for coastal shipping	39	23	7	5	4

Scope: SCREEN Group in Japan

● Environmental consideration for the transportation packaging

Year	Initiative	Result
2017	Reuse of cushioning materials at parts centers	Reuse of 927 kg of cushioning materials
	Promotion of ESPIE packaging using reinforced cardboard as packaging for the transportation of semiconductor and LCD fabrication equipment	Reduction of 356 metric tons in wooden materials used The rate of reduction in total use of wooden materials came to 11%*1
	Reduction in wooden materials, owing to revision of packaging sizes	Reduction of 25.75 metric tons in wooden materials used
2018	Reuse of cushioning materials at parts centers	Reuse of 837 kg of cushioning materials
	Promotion of ESPIE packaging using reinforced cardboard as packaging for the transportation of semiconductor and LCD fabrication equipment	Reduction of 225 metric tons in wooden materials used The rate of reduction in total use of wooden materials came to 7.9%*1
	Reduction in wooden materials, owing to revision of packaging sizes	Reduction of 31.23 metric tons in wooden materials used
2019	Reuse of cushioning materials at parts centers	Reuse of 1,338 kg of cushioning materials
	Promotion of ESPIE packaging using reinforced cardboard as packaging for the transportation of semiconductor and LCD fabrication equipment	Reduction of 163 metric tons in wooden materials used The rate of reduction in total use of wooden materials came to 6.3%*1
	Reduction in wooden materials, owing to revision of packaging sizes	Reduction of 31.38 metric tons in wooden materials used
2020	Reuse of cushioning materials at parts centers	Reuse of 1,138 kg of cushioning materials
	Promotion of ESPIE packaging using reinforced cardboard as packaging for the transportation of semiconductor and LCD fabrication equipment	Reduction of 73 metric tons in wooden materials used The rate of reduction in total use of wooden materials came to 7.9%*1
	Reduction in wooden materials, owing to revision of packaging sizes	Reduction of 32 metric tons in wooden materials used
2021	Reuse of cushioning materials at parts centers	Reuse of 571 kg of cushioning materials
	Reduction in use of bubble-wrap packaging in the transportation of semiconductor equipment	Reduction of 6 metric tons in use of bubble-wrap packaging*2
2022	Reuse of cushioning materials at parts centers	Reuse of 643 kg of cushioning materials

\*1 Percentage decrease = Reduction in use of wooden materials due to use of ESPIE (reinforced cardboard packaging) / Total amount of wooden materials used in packaging for export x 100

\*2 Revision of packing methods and implementation of safe transport and delivery of products without using bubble-wrap packaging. Converting to ESPIE to regularize packaging. Reduction in wooden materials thanks to revision of packaging sizes to eliminate measurement.

## Chemical substances

● Substances subject to the PRTR Act

Substance name	Cabinet order number	Usage (metric tons)				
		2018	2019	2020	2021	2022
Ferric chloride	71	49.3	47.4	45.4	46.4	22.1
Hydrogen fluoride and its salts	374	8.2	9.4	8.5	6.6	11.4

Scope: SCREEN Group in Japan

"Ferric chloride" and "Hydrogen fluoride and its metric water-soluble salts" are subject to reporting under the PRTR Law.

Note: We reported annual use of more than 0.5 metric tons.

Substance name	Amount of movement (metric tons)								
	Emissions to the atmosphere			Emissions to the water system			Recovery as waste		
	2020	2021	2022	2020	2021	2022	2020	2021	2022
Ferric chloride	0	0	0	0	0	0	45.4	46.4	22.1
Hydrogen fluoride and its salts	0	0	0	0	0	0	8.5	6.6	11.4

Scope: SCREEN Group in Japan

Note: We reported annual use of more than 0.5 metric tons.

● PCB processing status

Type	2018	2019	2020	2021	2022
High-voltage capacitors	0	0	0	0	0
Low-voltage capacitors	0	0	0	0	0
Fluorescent light ballasts*1	179	179	0	0	0
Transformers*2	0	0	0	1	0
Reactors	0	0	0	0	0
Capacitors	0	0	0	0	0

Scope: SCREEN Group in Japan

\*1 Completion of disposal of fluorescent light ballasts (fiscal year ended March 31, 2020)

\*2 Disposed as waste resulting from equipment upgrade. (fiscal year ending March 31, 2022).

## Waste / recycling

### ● Waste and valuable materials disposal volume

(Metric tons)

	2018	2019	2020	2021	2022
SCREEN Group	2,696	2,765	2,304	2,586	3,462
SCREEN Group in Japan	2,495	2,592	2,157	2,385	3,187
SCREEN Group overseas	201	173	146	201	275
Recycling rate (SCREEN Group in Japan) (%)	95.4	95.0	96.4	94.4	96.7
Volume of waste for final disposal (SCREEN Group in Japan)	115	129	77	135	105

### ● Breakdown of waste

(Metric tons)

	2018	2019	2020	2021	2022
Volume of hazardous waste	195.1	222.4	187.8	160.2	149.5
Sludge waste	525.7	413.4	354.4	366.7	415.2
General-purpose paper	27.3	52.5	16.2	19.5	0.0
Waste plastic	186.4	249.8	276.0	363.3	511.3
Cardboard	50.2	46.3	37.0	14.0	16.6
Cloth, wood scrap	124.2	204.0	200.5	172.1	231.1
Waste alkali	15.7	18.8	18.9	11.5	10.3
Scrap metal	30.2	85.6	10.4	19.2	71.6
Paper	75.4	105.6	75.2	72.3	81.2
Waste oil	59.1	56.4	60.0	64.1	79.8
Ceramics, glass	19.1	18.5	22.1	20.5	27.8
Electrical wiring, PCBs	1.2	1.8	0.0	0.0	0.1
Burnable waste	9.0	8.1	10.0	9.4	15.1
Waste film	26.3	30.1	18.3	0.0	0.0
Batteries	0.8	1.4	2.7	0.7	0.9
Waste acid	63.8	24.9	30.3	48.6	76.6
Waste fluorescent lighting	3.1	1.6	2.3	1.9	2.5
Others	10.7	9.3	7.8	4.7	5.8

Scope: SCREEN Group in Japan

### ● Breakdown of valuable materials

(Metric tons)

	2018	2019	2020	2021	2022
Cardboard	198.5	304.4	301.2	296.7	454.6
Metal	499.1	381.7	237.1	472.1	709.8
General-purpose paper	251.8	258.4	200.8	211.2	279.0
Plastic	32.1	25.7	7.3	2.5	34.7
Film	0.0	0.0	0.0	0.0	0.0
Glass (wafers)	0.9	1.3	2.6	1.9	2.4
Magazines, catalogs	76.2	29.6	25.7	23.1	0.0
Others	13.4	40.3	52.3	29.0	11.2

Scope: SCREEN Group in Japan

## Water

### Water withdrawals

(Thousand m<sup>3</sup>)

		2018	2019	2020	2021	2022
SCREEN Group	Third party sources	2,062	2,102	2,084	2,044	2,035
	Groundwater	1	0	2	3	3
	Total	2,063	2,102	2,087	2,046	2,038
SCREEN Group in Japan	Industrial water	1,697	1,703	1,726	1,707	1,713
	Service water	316	328	324	305	298
	Groundwater	1	0	2	3	3
	Total	2,013	2,030	2,052	2,015	2,014
SCREEN Group overseas	Service water	50	72	35	31	24
	Total	50	72	35	31	24
6 main sites in Japan				2,026*	1,987*	1,989*

\*Underwent third-party verification regarding water withdrawal at six main sites in Japan

6 main sites: Hikone Plant, Head Office, Rakusai Site, Taga Plant, Yasu Plant, Kumiya Plant

### Water discharges

(Thousand m<sup>3</sup>)

		2018	2019	2020	2021	2022
SCREEN Group	Fresh surface water	1,767	1,747	1,782	1,740	1,723
	Groundwater	0	0	0	0	0
	Third party destinations	253	300	258	268	277
	Total	2,020	2,047	2,040	2,007	2,001
SCREEN Group in Japan	Fresh surface water	1,767	1,747	1,782	1,739	1,723
	Groundwater	0	0	0	0	0
	Third party destinations	204	229	224	237	250
	Total	1,971	1,976	2,006	1,976	1,977
SCREEN Group overseas	Third party destinations	50	71	34	31	24
	Total	50	71	34	31	24

### Water consumption

(Thousand m<sup>3</sup>)

		2018	2019	2020	2021	2022
SCREEN Group	Total	43	54	46	39	37

### Ultra-pure water consumption

(Thousand m<sup>3</sup>)

		2018	2019	2020	2021	2022
SCREEN Group		641	627	613	607	620

### BOD and COD emissions

(Metric tons)

		2018	2019	2020	2021	2022
BOD* <sup>1</sup>		3.5	3.7	3.3	5.3	2.8
COD* <sup>2</sup>		1.7	1.5	1.4	1.5	1.3

\*1 Scope: SCREEN Group overseas: Hikone Plant, Rakusai Site, Taga Plant, Yasu Plant, Kumiya Plant

\*2 Scope: Hikone Plant, Yasu Plant

## Emissions to the atmosphere

### SOx and NOx emissions

(Metric tons)

		2018	2019	2020	2021	2022
SOx		0.0	0.0	0.0	0.0	0.0
NOx		3.4	2.4	1.9	2.6	2.9

Scope: SCREEN Group in Japan

### VOC emissions

(Metric tons)

		2018	2019	2020	2021	2022
VOC		305	280	284	226	169

Scope: Hikone Plant, Taga Plant

## Reducing environmental impacts of products

### ● Number of Green Products and percentage of total sales

	2018	2019	2020	2021	2022
Number of green products	137	144	152	163	<b>166</b>
Percentage of total sales (%)	95	94	92	93	<b>92</b>

Green Products: Certified as a "Green Product" by comparing energy savings, resource conservation, biodegradability, recycling, environmental protection and safety, and information availability to standard products.

Visit the following website to learn more about certified green products: [www.screen.co.jp/en/sustainability/environment/products](http://www.screen.co.jp/en/sustainability/environment/products)

## Technical foundation

### Patents

#### ● Number of patents held by region

(Unit)

	2018	2019	2020	2021	2022
Japan	2,196	2,232	2,320	2,221	<b>2,373</b>
North America	819	860	938	1,063	<b>1,161</b>
Europe	258	300	343	274	<b>313</b>
Asia and Oceania	1,489	1,740	2,103	2,409	<b>2,826</b>
Total	4,762	5,132	5,704	5,967	<b>6,673</b>

#### ● Patent allowance rates

(%)

	2018	2019	2020	2021	2022
Japan	88	90	88	88	<b>91</b>
Overseas	88	91	91	87	<b>92</b>
Total	88	90	90	88	<b>92</b>

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