

1. Kuraray Group (total of 2. Kuraray Group in Japan and 3. Kuraray Group outside Japan<sup>\*1</sup>)

(Coverage: 99.7%)

	Unit	FY2017	FY2018	FY2019	FY2020	FY2021
GHG emissions (Scope1+Scope2) <sup>*2</sup>	1,000 t-CO <sub>2</sub> e	2,362	3,188	3,231	3,045	3,020
Scope1 emissions	1,000 t-CO <sub>2</sub> e	1,240	2,000	2,060	2,045	1,973
Scope2 emissions	1,000 t-CO <sub>2</sub> e	1,122	1,188	1,170	1,000	1,047
Energy consumption (crude oil equivalent)	1,000 kl	955	1,050	1,058	975	1,048
Water intake	1,000 m <sup>3</sup>	131,299	136,630	149,237	133,284	138,755
Tapwater	1,000 m <sup>3</sup>	6,889	6,626	4,480	3,969	4,021
Subterranean river water	1,000 m <sup>3</sup>	42,211	41,012	42,430	40,841	37,296
Groundwater	1,000 m <sup>3</sup>	27,010	30,463	28,442	29,301	30,614
Industrial water	1,000 m <sup>3</sup>	6,806	11,748	15,200	15,958	16,246
Seawater (including Rainwater)	1,000 m <sup>3</sup>	48,382	46,781	58,685	43,215	50,578
Wastewater	1,000 m <sup>3</sup>	80,108	80,649	80,183	82,716	83,565
SOx emissions	tons	408	1,431	1,676	1,082	1,243
NOx emissions	tons	1,907	2,218	2,253	2,093	2,150
Substances covered under JCIA's voluntary PRTR management program	Number of items	-	82	85	80	77
Emissions	tons	1,855	1,637	1,416	1,254	1,359
Transfer	tons	7,799	8,884	12,213	8,693	9,558
Waste materials	Generated	123,792	164,953	173,495	164,162	164,431
Utilized (recycled)	tons	99,359	116,889	121,478	121,852	124,946
Unutilized (including landfill)	tons	23,489	47,783	52,017	42,310	39,485
Landfill	tons	9,356	25,313	27,958	20,921	19,640

\*1 Excluding head offices and business offices of overseas affiliated companies

\*2 Scope1 (direct emissions): GHG emissions generated by fuel combustion at the plants and other facilities of one's own company

Scope2 (indirect emissions): GHG emissions generated by the use of purchased energy such as electricity, heat, and steam supplied

by other companies

2. Kuraray Group in Japan (total of 2-1. Kuraray Co., Ltd. and 2-2. Domestic Affiliated Companies)

(Coverage: 100% (Water intake: 99.9%, Waste water: 99.8%))

		Unit	FY2017	FY2018	FY2019	FY2020	FY2021
GHG emissions (Scope1+Scope2)		1,000 t-CO <sub>2</sub> e	1,330	1,320	1,310	1,229	1,340
Scope1 emissions		1,000 t-CO <sub>2</sub> e	1,147	1,138	1,121	1,067	1,163
Scope2 emissions		1,000 t-CO <sub>2</sub> e	183	182	189	162	177
Energy consumption (crude oil equivalent)		1,000 kl	455	455	452	422	452
Raw materials used		1,000 tons	655	675	643	581	622
Water intake		1,000 m <sup>3</sup>	79,572	80,065	80,156	80,159	78,755
Tapwater		1,000 m <sup>3</sup>	472	540	540	551	564
Subterranean river water		1,000 m <sup>3</sup>	42,211	41,012	42,430	40,841	37,296
Groundwater		1,000 m <sup>3</sup>	26,970	27,838	25,828	26,731	27,993
Industrial water		1,000 m <sup>3</sup>	2,172	2,414	3,056	3,885	4,670
Seawater (including Rainwater)		1,000 m <sup>3</sup>	7,747	8,261	8,302	8,150	8,233
Wastewater		1,000 m <sup>3</sup>	71,312	72,831	69,770	73,604	73,224
Rivers		1,000 m <sup>3</sup>	37,303	37,915	34,601	36,849	37,874
Sea area		1,000 m <sup>3</sup>	31,563	32,405	32,694	34,276	32,595
Public sewage		1,000 m <sup>3</sup>	2,446	2,511	2,474	2,480	2,754
SOx emissions		tons	407	350	550	280	396
NOx emissions		tons	1,856	1,779	1,771	1,624	1,663
Soot and dust emissions		tons	33	32	31	32	31
COD emissions		tons	514	555	513	516	482
VOC emissions		tons	890	871	836	691	856
Substances covered under JCIA's voluntary PRTR management program							
Number of items		-	82	85	80	77	75
Emissions		tons	1,066	1,004	967	805	985
Transfer		tons	1,294	1,203	1,108	911	1,292
Substances covered under PRTR law							
Number of items		-	62	61	58	55	55
Emissions		tons	431	393	394	306	365
Transfer		tons	747	658	653	444	593
Waste materials							
Generated		tons	86,426	88,677	91,785	88,479	88,479
Utilized (recycled)		tons	83,163	86,406	88,837	85,620	85,279
Unutilized (including landfill)		tons	2,319	1,989	2,948	2,859	3,201
Landfill		tons	313	330	365	616	655

2-1. Kuraray Co., Ltd.

Includes 6 plants (Okayama, Kurashiki (Tamashima area), Saijo, Niigata, Kashima, Tsurumi), Kurashiki Research Center,

Tsukuba Research Center, Tokyo Head Office, Osaka Office, etc.

		Unit	FY2017	FY2018	FY2019	FY2020	FY2021
GHG emissions (Scope1+Scope2)		1,000 t-CO <sub>2</sub> e	1,319	1,310	1,301	1,221	1,331
(inside number: CO <sub>2</sub> emissions)		1,000 t-CO <sub>2</sub> e	1,296	1,286	1,275	1,193	1,306
Energy consumption (crude oil equivalent)		1,000 kl	451	450	448	418	447
Raw materials used		1,000 tons	639	660	628	566	606
Water intake		1,000 m <sup>3</sup>	78,791	79,310	79,356	79,465	78,008
Wastewater		1,000 m <sup>3</sup>	70,593	72,149	69,025	72,961	72,525
SOx emissions		tons	407	350	550	280	395
NOx emissions		tons	1,855	1,779	1,770	1,623	1,662
Soot and dust emissions		tons	33	31	31	32	31
COD emissions		tons	514	554	512	516	482
Ozone-layer depleting substance emissions		tons of CFC equivalent	0.0	0.0	0.4	0.0	0.0
Substances covered under JCIA's voluntary PRTR management program							
Number of items		-	82	85	80	75	73
Emissions		tons	976	902	855	719	862
Transfer		tons	1,292	1,201	1,042	859	1,238
Substances covered under PRTR law							
Number of items		-	62	61	58	55	54
Emissions		tons	431	392	394	306	365
Transfer		tons	746	658	594	398	543
Waste materials							
Generated		tons	84,756	87,003	90,262	86,951	86,922
Utilized (recycled)		tons	81,965	85,083	87,623	84,554	84,278
Unutilized (including landfill)		tons	1,847	1,638	2,639	2,397	2,643
Landfill		tons	163	159	110	253	293

2-1-1. Okayama Plant (including Kuraray Engineering Co., Ltd., Kuraray Kuraflex Co., Ltd., Kuraray Okayama Spinning Co., Ltd.,  
Kuraray Techno Co., Ltd.)

- (1) Address: 1-2-1, Kaigan-dori, Minami-ku, Okayama City, Okayama Prefecture  
 (2) Site area: 663,000 m<sup>2</sup>  
 (3) ISO 14001: Certification No. JQA-EM0796 (Certified on March 24, 2000)

Main products:	Kuralon, Kuralon K-II, Clarino (man-made leather), Kuraflex (dry-laid non-woven fabric), EVAL resin and film, Poval resin
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	Unit	FY2017	FY2018	FY2019	FY2020	FY2021	
GHG emissions (Scope1+Scope2)	1,000 t-CO <sub>2</sub> e	654	626	650	572	627	
(inside number: CO <sub>2</sub> emissions)	1,000 t-CO <sub>2</sub> e	652	624	649	571	626	
Energy consumption (crude oil equivalent)	1,000 kl	197	191	199	174	194	
Raw materials used	1,000 tons	139	127	128	92	112	
Water intake	1,000 m <sup>3</sup>	21,390	21,424	21,796	20,788	21,692	
Wastewater	1,000 m <sup>3</sup>	18,571	19,246	19,482	19,701	19,491	
SOx emissions	tons	209	106	259	92	199	
NOx emissions	tons	1,232	1,144	1,157	956	1,050	
Soot and dust emissions	tons	16	14	14	11	12	
COD emissions	tons	182	193	179	173	140	
Ozone-layer depleting substance emissions	tons of CFC equivalent	0.0	0.0	0.0	0.0	0.0	
Substances covered under JCIA's voluntary PRTR management program	Number of items	-	31	27	28	27	
	Emissions	tons	511	480	473	389	478
	Transfer	tons	316	356	327	289	280
Substances covered under PRTR law	Number of items	-	20	17	18	17	
	Emissions	tons	292	271	280	207	281
	Transfer	tons	210	207	201	187	167
Waste materials	Generated	tons	25,793	25,425	25,748	23,900	23,708
	Utilized (recycled)	tons	24,489	24,606	24,719	23,135	22,876
	Unutilized (including landfill)	tons	1,305	818	1,029	765	832
	Landfill	tons	26	33	24	51	38

2-1-2. Kurashiki Plant (including Kuraray Tamashima Co., Ltd., Kuraray Techno Co., Ltd.)

- (1) Address: 7471, Tamashima-otoshima, Kurashiki City, Okayama Prefecture  
 (2) Site area: 410,000 m<sup>2</sup>  
 (3) ISO 14001: Certification No. JQA-EM1213 (Certified on December 22, 2000)

Main products:	Polyester fiber, Poval film
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	Unit	FY2017	FY2018	FY2019	FY2020	FY2021	
GHG emissions (Scope1+Scope2)	1,000 t-CO <sub>2</sub> e	105	106	106	117	157	
(inside number: CO <sub>2</sub> emissions)	1,000 t-CO <sub>2</sub> e	85	85	84	93	135	
Energy consumption (crude oil equivalent)	1,000 kl	41	42	38	43	42	
Raw materials used	1,000 tons	23	23	25	20	22	
Water intake	1,000 m <sup>3</sup>	7,042	7,072	7,769	8,315	6,076	
Wastewater	1,000 m <sup>3</sup>	6,486	6,555	7,674	8,299	5,993	
SOx emissions	tons	33	51	58	24	30	
NOx emissions	tons	92	87	93	90	92	
Soot and dust emissions	tons	0.8	2.7	1.8	5.9	2.6	
COD emissions	tons	39	44	51	46	36	
Ozone-layer depleting substance emissions	tons of CFC equivalent	0.0	0.0	0.0	0.0	0.0	
Substances covered under JCIA's voluntary PRTR management program	Number of items	-	10	10	12	15	
	Emissions	tons	31	29	29	36	35
	Transfer	tons	76	40	36	59	56
Substances covered under PRTR law	Number of items	-	6	5	6	8	
	Emissions	tons	0.3	0.1	0.1	0.3	0.2
	Transfer	tons	0.1	0.2	0.2	1.2	4.8
Waste materials	Generated	tons	11,194	13,178	14,479	14,734	13,318
	Utilized (recycled)	tons	11,174	13,145	14,461	14,589	13,130
	Unutilized (including landfill)	tons	20	33	18	146	188
	Landfill	tons	19	29	18	123	188

2-1-3. Saijo Plant (including Kuraray Saijo Co., Ltd., Kuraray Techno Co., Ltd.)

- (1) Address: 892, Tsuitachi, Saijo City, Ehime Prefecture  
 (2) Site area: 541,000 m<sup>2</sup>  
 (3) ISO 14001: Certification No. JQA-EM1185 (Certified on December 15, 2000)

Main products:	Poval film, Melt-blown Non-woven fabric, VECTRAN polyarylate fiber, GENESTAR (heat resistant polyamide resin), Polyester filament, KURAGEL PVA gel
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	Unit	FY2017	FY2018	FY2019	FY2020	FY2021
GHG emissions (Scope1+Scope2)	1,000 t-CO <sub>2</sub> e	188	193	183	187	186
(inside number: CO <sub>2</sub> emissions)	1,000 t-CO <sub>2</sub> e	188	192	182	187	186
Energy consumption (crude oil equivalent)	1,000 kl	56	58	57	55	56
Raw materials used	1,000 tons	29	29	28	26	23
Water intake	1,000 m <sup>3</sup>	14,175	14,503	14,344	15,805	13,960
Wastewater	1,000 m <sup>3</sup>	12,435	12,535	12,558	14,020	12,525
SOx emissions	tons	148	154	142	134	138
NOx emissions	tons	397	407	404	450	377
Soot and dust emissions	tons	13	9	9	9	11
COD emissions	tons	22	23	21	15	16
Ozone-layer depleting substance emissions	tons of CFC equivalent	0.0	0.0	0.0	0.0	0.0
Substances covered under JCIA's voluntary PRTR management program	Number of items	-	16	16	17	17
	Emissions	tons	144	144	141	114
	Transfer	tons	4.6	4.3	4.8	66
Substances covered under PRTR law	Number of items	-	10	10	11	11
	Emissions	tons	2.8	2.8	3.8	2.8
	Transfer	tons	2.6	4.3	3.4	2.7
Waste materials	Generated	tons	14,547	13,802	14,486	13,411
	Utilized (recycled)	tons	14,304	13,572	14,281	13,207
	Unutilized (including landfill)	tons	232	220	205	203
	Landfill	tons	15	14	14	13

2-1-4. Niigata Plant (including Kuraray Noritake Dental Inc., Kuraray Techno Co., Ltd.)

- (1) Address: 2-28, Kurashiki-cho, Tainai City, Niigata Prefecture  
 (2) Site area: 924,000 m<sup>2</sup>  
 (3) ISO 14001: Certification No. JQA-EM0801 (Certified on March 31, 2000)

Main products:	Methacrylic resin for molding, Poval resin, Dental materials, KURARITY (acrylic thermoplastic elastomer)
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	Unit	FY2017	FY2018	FY2019	FY2020	FY2021
GHG emissions (Scope1+Scope2)	1,000 t-CO <sub>2</sub> e	139	139	136	132	135
(inside number: CO <sub>2</sub> emissions)	1,000 t-CO <sub>2</sub> e	138	138	134	131	134
Energy consumption (crude oil equivalent)	1,000 kl	65	65	63	62	63
Raw materials used	1,000 tons	324	319	312	304	299
Water intake	1,000 m <sup>3</sup>	33,330	33,160	32,281	31,572	33,181
Wastewater	1,000 m <sup>3</sup>	30,080	30,651	26,160	27,875	31,158
SOx emissions	tons	2	10	18	3	0.4
NOx emissions	tons	62	61	58	54	59
Soot and dust emissions	tons	0.0	0.0	0.4	0.0	0.0
COD emissions	tons	170	191	160	181	179
Ozone-layer depleting substance emissions	tons of CFC equivalent	0.0	0.0	0.0	0.0	0.0
Substances covered under JCIA's voluntary PRTR management program	Number of items	-	37	46	36	34
	Emissions	tons	120	112	110	106
	Transfer	tons	482	386	357	220
Substances covered under PRTR law	Number of items	-	27	30	25	24
	Emissions	tons	73	63	64	63
	Transfer	tons	423	313	296	165
Waste materials	Generated	tons	16,989	16,531	17,785	16,801
	Utilized (recycled)	tons	16,016	15,796	16,723	15,912
	Unutilized (including landfill)	tons	40	463	1,062	889
	Landfill	tons	36	28	27	34

2-1-5. Kashima Plant (including Kuraray Techno Co., Ltd.)

- (1) Address: 36, Touwada, Kamisu City, Ibaraki Prefecture  
 (2) Site area: 408,000 m<sup>2</sup>  
 (3) ISO 14001: Certification No. JQA-EM0364 (Certified on March 12, 1999)

Main products:	SEPTON (thermoplastic elastomer), HYBRAR (thermoplastic elastomer), GENESTAR (heat resistant polyamide resin), Industrial cleaner
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		Unit	FY2017	FY2018	FY2019	FY2020	FY2021
GHG emissions (Scope1+Scope2)		1,000 t-CO <sub>2</sub> e	190	201	196	176	188
(inside number: CO <sub>2</sub> emissions)		1,000 t-CO <sub>2</sub> e	190	201	196	175	188
Energy consumption (crude oil equivalent)		1,000 kl	80	82	79	72	80
Raw materials used		1,000 tons	100	136	109	94	119
Water intake		1,000 m <sup>3</sup>	2,461	2,703	2,726	2,531	2,625
Wastewater		1,000 m <sup>3</sup>	2,665	2,773	2,760	2,673	2,957
SOx emissions		tons	6.0	7.7	7.0	6.0	7.0
NOx emissions		tons	51	53	52	48	54
Soot and dust emissions		tons	2.0	4.0	3.0	3.0	3.0
COD emissions		tons	98	101	99	99	110
Ozone-layer depleting substance emissions		tons of CFC equivalent	0.0	0.0	0.4	0.0	0.0
Substances covered under JCIA's voluntary PRTR management program	Number of items	-	41	40	35	32	35
	Emissions	tons	163	124	94	74	128
	Transfer	tons	413	414	317	224	376
Substances covered under PRTR law	Number of items	-	25	26	22	21	24
	Emissions	tons	56	41	38	32	21
	Transfer	tons	110	135	93	43	130
Waste materials	Generated	tons	10,368	11,580	11,846	11,451	11,464
	Utilized (recycled)	tons	10,188	11,532	11,537	11,080	11,349
	Unutilized (including landfill)	tons	180	48	309	371	115
	Landfill	tons	1.6	0.8	10	18	3

2-1-6. Tsurumi Plant (Former Kuraray Chemical Co., Ltd. has been acquired by Kuraray Co., Ltd. since FY2017)

- (1) Address: 4342, Tsurumi, Bizen City, Okayama Prefecture  
 (2) Site area: 89,000 m<sup>2</sup>  
 (3) ISO 14001: Certification No. JQA-EM5426 (Certified on July 7, 2006)

Main products:	Activated carbon, high performance activated carbon
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		Unit	FY2017	FY2018	FY2019	FY2020	FY2021
GHG emissions (Scope1+Scope2)		1,000 t-CO <sub>2</sub> e	37	39	24	31	33
(inside number: CO <sub>2</sub> emissions)		1,000 t-CO <sub>2</sub> e	37	39	24	31	33
Energy consumption (crude oil equivalent)		1,000 kl	9.2	9.6	8.9	9.6	9.8
Raw materials used		1,000 tons	24	26	25	29	30
Water intake		1,000 m <sup>3</sup>	357	420	410	433	454
Wastewater		1,000 m <sup>3</sup>	291	312	312	317	326
SOx emissions		tons	8	20	67	21	21
NOx emissions		tons	21	26	6	25	31
Soot and dust emissions		tons	1.1	1.5	3.3	2.8	1.8
COD emissions		tons	1.8	1.9	1.5	1.4	1.0
Ozone-layer depleting substance emissions		tons of CFC equivalent	0.0	0.0	0.0	0.0	0.0
Substances covered under JCIA's voluntary PRTR management program	Number of items	-	10	5	5	5	5
	Emissions	tons	6	14	8	0.5	0.6
	Transfer	tons	0.0	0.0	0.0	0.0	0.0
Substances covered under PRTR law	Number of items	-	6	4	4	4	4
	Emissions	tons	6	13	7	0.3	0.3
	Transfer	tons	0.0	0.0	0.0	0.0	0.0
Waste materials	Generated	tons	5,745	6,378	5,797	6,519	6,800
	Utilized (recycled)	tons	5,680	6,328	5,781	6,505	6,793
	Unutilized (including landfill)	tons	65	51	15	14	7
	Landfill	tons	65	51	15	14	7

2-2. Domestic Affiliated Companies

Including Kuraray Plastics Co., Ltd., Kuraray Fastening Co., Ltd., Kuraray Trading Co., Ltd., etc.

		Unit	FY2017	FY2018	FY2019	FY2020	FY2021
GHG emissions (Scope1+Scope2)		1,000 t-CO <sub>2</sub> e	11	11	9	8	9
(inside number: CO <sub>2</sub> emissions)		1,000 t-CO <sub>2</sub> e	11	11	9	8	9
Energy consumption (crude oil equivalent)		1,000 kl	4.9	4.9	4.5	4.2	4.7
Raw materials used		1,000 tons	15	15	15	15	16
Water intake		1,000 m <sup>3</sup>	783	755	801	694	746
Wastewater		1,000 m <sup>3</sup>	719	682	745	644	698
SOx emissions		tons	0.3	0.1	0.2	0.2	0.2
NOx emissions		tons	0.9	0.5	0.6	0.5	0.5
Soot and dust emissions		tons	0.2	0.1	0.1	0.1	0.1
COD emissions		tons	0.4	0.4	0.7	0.6	0.4
Ozone-layer depleting substance emissions		tons of CFC equivalent	0.0	0.0	0.0	0.0	0.0
Substances covered under JCIA's voluntary PRTR management program	Number of items	-	6	7	7	7	8
	Emissions	tons	90	102	112	86	123
	Transfer	tons	2.4	2.4	66	51	54
Substances covered under PRTR law	Number of items	-	3	4	3	3	4
	Emissions	tons	0.9	0.9	0.2	0.1	0.2
	Transfer	tons	0.4	0.5	59	46	49
Waste materials	Generated	tons	1,671	1,674	1,523	1,528	1,558
	Utilized (recycled)	tons	1,199	1,323	1,214	1,066	1,000
	Unutilized (including landfill)	tons	472	351	308	462	557
	Landfill	tons	150	171	255	363	362

2-2-1. Ibuki Plant, Kuraray Plastics Co., Ltd.

- (1) Address: 4330, Osa, Tarui-cho, Fuwa-gun, Gifu Prefecture
- (2) Site area: 74,900 m<sup>2</sup>
- (3) ISO 14001: Certification No. JQA-EM2934 (Certified on January 17, 2003)

Main products:	Hoses, driving pipes, laminates, compounds
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		Unit	FY2017	FY2018	FY2019	FY2020	FY2021
GHG emissions (Scope1+Scope2)		1,000 t-CO <sub>2</sub> e	3.3	3.4	3.0	2.5	2.6
(inside number: CO <sub>2</sub> emissions)		1,000 t-CO <sub>2</sub> e	3.3	3.4	3.0	2.5	2.6
Energy consumption (crude oil equivalent)		1,000 kl	1.6	1.7	1.5	1.3	1.6
Raw materials used		1,000 tons	8	8	8	7	8
Water intake		1,000 m <sup>3</sup>	682	641	696	607	656
Wastewater		1,000 m <sup>3</sup>	682	642	696	607	656
SOx emissions		tons	0.1	0.0	0.0	0.0	0.0
NOx emissions		tons	0.5	0.2	0.2	0.1	0.1
Soot and dust emissions		tons	0.1	0.0	0.0	0.0	0.0
COD emissions		tons	0.3	0.0	0.7	0.6	0.4
Ozone-layer depleting substance emissions		tons of CFC equivalent	0.0	0.0	0.0	0.0	0.0
Substances covered under JCIA's voluntary PRTR management program	Number of items	-	5	5	5	5	7
	Emissions	tons	85	98	109	85	120
	Transfer	tons	0.0	0.0	65	51	53
Substances covered under PRTR law	Number of items	-	2	2	2	2	4
	Emissions	tons	0.0	0.0	0.0	0.0	0.0
	Transfer	tons	0.0	0.5	59	46	49
Waste materials	Generated	tons	547	716	607	575	566
	Utilized (recycled)	tons	510	680	462	330	308
	Unutilized (including landfill)	tons	37	36	144	245	257
	Landfill	tons	30	28	143	238	251

2-2-2. Kuraray Fastening Co., Ltd.

- (1) Address: 56, Noune, Maruoka-cho, Sakai-gun, Fukui prefecture  
 (2) Site area: 22,950 m<sup>2</sup>  
 (3) ISO 14001: Certification No. JQA-EM3326 (Certified on August 22, 2003)

Main products:	MAGICTAPE (hook and loop fastener), MAGILOCK (molded plastic hook and loop fastener)
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	Unit	FY2017	FY2018	FY2019	FY2020	FY2021	
GHG emissions (Scope1+Scope2)	1,000 t-CO <sub>2</sub> e	4.0	3.5	2.9	2.8	3.2	
(inside number: CO <sub>2</sub> emissions)	1,000 t-CO <sub>2</sub> e	4.0	3.5	2.9	2.8	3.1	
Energy consumption (crude oil equivalent)	1,000 kl	1.6	1.6	1.4	1.3	1.6	
Water intake	1,000 m <sup>3</sup>	34	41	43	30	35	
Wastewater	1,000 m <sup>3</sup>	33	37	41	30	35	
SOx emissions	tons	0.0	0.0	0.0	0.0	0.0	
NOx emissions	tons	0.0	0.0	0.0	0.0	0.0	
Soot and dust emissions	tons	0.0	0.0	0.0	0.0	0.0	
COD emissions	tons	0.0	0.0	0.0	0.0	0.0	
Ozone-layer depleting substance emissions	tons of CFC equivalent	0.0	0.0	0.0	0.0	0.0	
Substances covered under JCIA's voluntary PRTR management program	Number of items	-	3	2	2	2	
	Emissions	tons	4.8	4.7	2.1	1.1	1.9
	Transfer	tons	2.4	2.4	1.1	0.5	1.0
Substances covered under PRTR law	Number of items	-	2	1	1	1	
	Emissions	tons	0.9	0.9	0.2	0.1	0.1
	Transfer	tons	0.4	0.5	0.1	0.0	0.1
Waste materials	Generated	tons	269	271	229	206	216
	Utilized (recycled)	tons	250	247	208	193	201
	Unutilized (including landfill)	tons	20	24	21	14	15
	Landfill	tons	0.7	6.1	6.8	0.3	1.1

2-2-3. Okayama Plant, Kuraray Trading Co., Ltd.

- (1) Address: 1099, Aza-Shinden, Oaza-Kawabe, Mabi-cho, Kibi-gun, Okayama Prefecture  
 (2) Site area: 5,780 m<sup>2</sup>

Main products:	Industrial resin belts
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	Unit	FY2017	FY2018	FY2019	FY2020	FY2021	
GHG emissions (Scope1+Scope2)	1,000 t-CO <sub>2</sub> e	0.5	0.3	0.5	0.4	0.5	
(inside number: CO <sub>2</sub> emissions)	1,000 t-CO <sub>2</sub> e	0.5	0.3	0.5	0.4	0.5	
Energy consumption (crude oil equivalent)	1,000 kl	0.2	0.1	0.2	0.2	0.2	
Raw materials used	1,000 tons	0.1	0.1	0.1	0.1	0.2	
Water intake	1,000 m <sup>3</sup>	4.0	3.0	4.0	4.0	4.2	
Wastewater	1,000 m <sup>3</sup>	4.0	3.0	4.0	4.0	4.2	
SOx emissions	tons	0.2	0.1	0.2	0.2	0.2	
NOx emissions	tons	0.4	0.3	0.4	0.4	0.4	
Soot and dust emissions	tons	0.1	0.1	0.1	0.1	0.1	
COD emissions	tons	0.0	0.0	0.0	0.0	0.0	
Ozone-layer depleting substance emissions	tons of CFC equivalent	0.0	0.0	0.0	0.0	0.0	
Substances covered under JCIA's voluntary PRTR management program	Number of items	-	2	2	2	2	
	Emissions	tons	0.2	0.1	0.3	0.2	0.2
	Transfer	tons	0.0	0.0	0.0	0.0	0.0
Substances covered under PRTR law	Number of items	-	0	0	0	0	
	Emissions	tons	0.0	0.0	0.0	0.0	0.0
	Transfer	tons	0.0	0.0	0.0	0.0	0.0
Waste materials	Generated	tons	41	25	58	44	44
	Utilized (recycled)	tons	40	24	55	40	43
	Unutilized (including landfill)	tons	1.2	0.8	3.1	3.3	1.7
	Landfill	tons	0.0	0.0	0.0	0.0	0.0

3. Kuraray Group outside Japan (Locations stated below)

(Coverage: 99.5%, excluding head offices and business offices of overseas affiliated companies)

	Unit	FY2017	FY2018	FY2019	FY2020	FY2021
GHG emissions (Scope1+Scope2)	1,000 t-CO <sub>2</sub> e	1,032	1,868	1,921	1,816	1,680
Scope1 emissions	1,000 t-CO <sub>2</sub> e	93	862	939	978	810
Scope2 emissions	1,000 t-CO <sub>2</sub> e	939	1,006	981	838	870
Energy consumption (crude oil equivalent)	1,000 kl	500	595	606	553	596
Water intake	1,000 m <sup>3</sup>	51,727	56,564	69,081	53,125	60,000
Tapwater	1,000 m <sup>3</sup>	6,417	6,086	3,940	3,418	3,457
Subterranean river water	1,000 m <sup>3</sup>	0	0	0	0	0
Groundwater	1,000 m <sup>3</sup>	40	2,624	2,614	2,570	2,622
Industrial water	1,000 m <sup>3</sup>	4,635	9,334	12,144	12,073	11,576
Seawater (including Rainwater)	1,000 m <sup>3</sup>	40,635	38,520	50,383	35,065	42,345
Wastewater	1,000 m <sup>3</sup>	8,795	7,818	10,413	9,112	10,342
SOx emissions	tons	0.7	1,081	1,126	801	848
NOx emissions	tons	51	439	482	469	487
Substances covered under JCIA's voluntary PRTR management program	Number of items	-	11	11	11	11
Emissions	tons	790	633	449	449	374
Transfer	tons	6,504	7,680	11,105	7,782	8,266
Waste materials	Generated	tons	37,366	76,277	81,710	75,683
Utilized (recycled)	tons	16,196	30,483	32,641	36,232	39,667
Unutilized (including landfill)	tons	21,170	45,793	49,069	39,451	36,284
Landfill	tons	9,043	24,983	27,593	20,305	18,985

<Overseas locations covered>

<ul style="list-style-type: none"> <li>    EVAL Europe N.V.</li> <li>    Kuraray Europe GmbH, PVA/PVB Division</li> <li>    Kuraray Europe GmbH, Trosifol Division</li> <li>    Kuraray Europe GmbH, OOO Trosifol</li> <li>    Kuraray Europe GmbH, Holesov works</li> <li>    Kuraray America Inc. EVAL BU</li> <li>    Kuraray America Inc. SEPTON BU</li> <li>    Kuraray America Inc. PVOH BU</li> <li>    Kuraray America Inc. Fayetteville works</li> <li>    Kuraray America Inc. La Porte works</li> <li>    Kuraray America Inc. Washington works</li> <li>    Kuraray America Inc. Plantic</li> <li>    Kuraray America Inc. Vectran</li> <li>    Kuraray Korea Ulsan works</li> <li>    Kuraray Asia Pacific Pte. Ltd.</li> <li>    MonoSol, LLC. La Porte Plant</li> <li>    MonoSol, LLC. Portage Plant</li> <li>    MonoSol, LLC. Duneland Plant</li> <li>    MonoSol, LLC. Indy Plant</li> <li>    MonoSol, LLC. Hartlebury Plant</li> </ul>	<ul style="list-style-type: none"> <li>    Plantic Technologies Ltd. (Australia)</li> <li>    Kuraray Magictape (Shanghai) Co., Ltd.</li> <li>    Kuraray Methacrylate (Zhang Jia Gang) Co., Ltd.</li> <li>    Calgon Carbon Corp., Big Sandy Plant</li> <li>    Calgon Carbon Corp., Pearl River Plant</li> <li>    Calgon Carbon Corp., Gila Bend Plant</li> <li>    Calgon Carbon Corp., Neville Island Plant</li> <li>    Calgon Carbon Corp., Columbus Plant</li> <li>    Calgon Carbon Corp., North Tonawanda Plant</li> <li>    Calgon Carbon Corp., E&amp;A Facilities</li> <li>    Calgon Carbon Corp., Suzhou Plant</li> <li>    Chemviron, Parentis Plant</li> <li>    Chemviron, Feluy Plant</li> <li>    Chemviron, Saint Bauzile Plant</li> <li>    Chemviron, Riom Montagnes Plant</li> <li>    Chemviron, Legnago Plant</li> <li>    Chemviron, Tipton Plant</li> <li>    Chemviron, Foggia Plant</li> <li>    Chemviron, Ashton Plant</li> <li>    Chemviron, Durham Plant</li> </ul>
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#### 4. Other Environmental Data

##### <GHG emissions per type of gas>

- The chart below shows the breakdown of the Kuraray Group's Scope1 (direct emissions: GHG emissions generated by fuel combustion at the plants and other facilities of one's own company) emissions per type of gas.
- Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) (AR4-100 year) is applied to the Global Warming Potential (GWP).

(Coverage: 99.7%)

	Unit	FY2017	FY2018	FY2019	FY2020	FY2021
Carbon dioxide (CO <sub>2</sub> )	1,000 t-CO <sub>2</sub> e	1,217	1,976	2,035	2,018	1,947
Methane (CH <sub>4</sub> )	1,000 t-CO <sub>2</sub> e	1.3	1.3	1.5	1.5	0.6
Nitrous oxide (N <sub>2</sub> O)	1,000 t-CO <sub>2</sub> e	21	22	23	25	24
Hydrofluorocarbons (HFCs)	1,000 t-CO <sub>2</sub> e	0.8	0.8	1.2	0.8	1.2
Perfluorocarbons (PFCs)	1,000 t-CO <sub>2</sub> e	0.0	0.0	0.0	0.0	0.0
Sulfur hexafluoride (SF <sub>6</sub> )	1,000 t-CO <sub>2</sub> e	0.0	0.0	0.0	0.4	0.0
Nitrogen trifluoride (NF <sub>3</sub> )	1,000 t-CO <sub>2</sub> e	0.0	0.0	0.0	0.0	0.0

##### <GHG emissions intensity index>

- The chart below shows the annual trend of the Kuraray Group's GHG emissions intensity index (net sales, production), and the formula is as follows:

GHG emissions intensity index (net sales)=GHG emissions (t-CO<sub>2</sub>e)/Net sales (million yen)

GHG emissions intensity index (production)=GHG emissions (t-CO<sub>2</sub>e)/Production volume (tons)

(Coverage: 99.7%)

	Unit	FY2017	FY2018	FY2019	FY2020	FY2021
GHG emissions intensity index (net sales)	t-CO <sub>2</sub> /million yen	4.7	5.1	5.5	5.7	4.9
GHG emissions intensity index (production)	t-CO <sub>2</sub> /ton	1.9	1.9	2.1	2.3	2.1

##### <Production intensity index compared to the previous year>

- The chart below shows the annual trend of the Kuraray Group's production intensity index compared to the previous year.
- Production intensity index is a value obtained by dividing converted production volume by environmental load, and figures are an index based on FY2016 as 100, targeting 1% or more improvement from the previous year.
- Converted production volume is a production volume converted from the production volume of each product as the production volume of the reference product using a conversion factor determined based on the environmental load intensity of each product in the reference year. As Kuraray manufactures products that vary in the environmental load intensity, it uses a converted production volume for each product.
- The formula is as follows:

GHG emission intensity index (Kuraray Group in Japan)=Converted production volume/GHG emissions

Energy intensity index (Kuraray Group outside Japan)=Converted production volume/Energy consumption

Water intensity index (Kuraray Group outside Japan)=Production volume/Water usage (except seawater)

(Coverage: 99.7%)

	Unit	FY2017	FY2018	FY2019	FY2020	FY2021
Production intensity index compared to the previous year (Kuraray Group in Japan)	-	2.9%	-3.5%	-1.7%	-10.9%	7.7%
Energy intensity index compared to the previous year (Kuraray Group outside Japan)	-	-7.5%	9.1%	-5.9%	0.2%	-0.3%
Water intensity index compared to the previous year (Kuraray Group outside Japan)	-	-4.5%	-20.1%	-7.6%	-4.6%	9.5%

##### <Number of cases of violation of environmental laws and regulations>

- The chart below shows the annual trend of the number of cases of the Kuraray Group's violation of environment-related laws and regulations.
- There have been no leakages, etc. that materially affect the external environment.
- Excluding minor and temporary cases exceeding standard limits and other environmental issues.

(Coverage: 99.7%)

	Unit	FY2017	FY2018	FY2019	FY2020	FY2021
Kuraray Group in Japan	-	0	0	0	0	0
Kuraray Group outside Japan	-	0	0	0	0	0

- Scope of regulations

Kuraray Group in Japan: including the Water Pollution Prevention Act, Act on Special Measures concerning Conservation of the Environment of the Seto Inland Sea as well as related ministerial orders, prefectural ordinances, municipal ordinances and pollution prevention agreements, etc.

Kuraray Group outside Japan: including government laws and regulations, local regulations, etc.

- The volume and quality of wastewater are managed pursuant to laws and regulations, etc. of the country where the plant, etc. is located both in and outside Japan.