

1. Kuraray Group (total of 2. Kuraray Group in Japan and 3. Kuraray Group outside Japan^{*1})

(Coverage: 99.7%)

	Unit	FY2018	FY2019	FY2020	FY2021	FY2022	
GHG emissions (Scope1+Scope2) ^{*2}	1,000 t-CO ₂ e	3,188	3,231	3,045	3,020	2,896	
Scope1 emissions	1,000 t-CO ₂ e	2,000	2,060	2,045	1,973	1,877	
Scope2 emissions	1,000 t-CO ₂ e	1,188	1,170	1,000	1,047	1,020	
Energy consumption (crude oil equivalent)	1,000 kl	1,077	1,089	1,002	1,075	1,065	
Water intake	1,000 m ³	136,631	149,239	133,385	138,876	144,720	
Tapwater	1,000 m ³	6,626	4,480	3,969	4,021	3,434	
Subterranean river water	1,000 m ³	41,012	42,430	40,841	37,296	31,609	
Groundwater	1,000 m ³	30,463	28,442	29,301	30,614	32,774	
Industrial water	1,000 m ³	11,748	15,200	15,958	16,246	17,940	
Seawater (including Rainwater)	1,000 m ³	46,782	58,686	43,316	50,698	58,964	
Wastewater	1,000 m ³	119,169	130,566	117,781	125,910	135,014	
SOx emissions	tons	1,431	1,676	1,082	1,243	1,013	
NOx emissions	tons	2,218	2,253	2,093	2,150	1,939	
Substances covered under JCIA's voluntary PRTR management program	Emissions	tons	1,637	1,416	1,254	1,359	1,261
	Transfer	tons	8,884	12,213	8,693	9,558	8,583
Waste materials	Generated	tons	164,953	173,495	164,162	164,431	147,490
	Utilized (recycled)	tons	116,889	121,478	121,852	124,946	104,195
	Unutilized (including landfill)	tons	47,783	52,017	42,310	39,485	43,295
	Landfill	tons	25,313	27,958	20,921	19,640	21,762

*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	FY2018	FY2019	FY2020	FY2021	FY2022
GHG emissions (Scope1+Scope2)		1,000 t-CO ₂ e	1,320	1,310	1,229	1,340	1,236
Scope1 emissions		1,000 t-CO ₂ e	1,138	1,121	1,067	1,163	1,047
Scope2 emissions		1,000 t-CO ₂ e	182	189	162	177	189
Energy consumption (crude oil equivalent)		1,000 kl	455	452	422	452	430
Raw materials used		1,000 tons	675	643	581	622	537
Water intake		1,000 m ³	80,065	80,156	80,159	78,755	75,533
Tapwater		1,000 m ³	540	540	551	564	555
Subterranean river water		1,000 m ³	41,012	42,430	40,841	37,296	31,609
Groundwater		1,000 m ³	27,838	25,828	26,731	27,993	30,213
Industrial water		1,000 m ³	2,414	3,056	3,885	4,670	5,016
Seawater (including Rainwater)		1,000 m ³	8,261	8,302	8,150	8,233	8,140
Wastewater		1,000 m ³	72,831	69,770	73,604	73,224	70,502
Rivers		1,000 m ³	37,915	34,601	36,849	37,874	35,838
Sea area		1,000 m ³	32,405	32,694	34,276	32,595	31,716
Public sewage		1,000 m ³	2,511	2,474	2,480	2,754	2,949
SOx emissions		tons	350	550	280	396	338
NOx emissions		tons	1,779	1,771	1,624	1,663	1,497
Soot and dust emissions		tons	32	31	32	31	44
COD emissions		tons	555	513	516	482	474
VOC emissions		tons	871	836	691	856	770
Substances covered under JCIA's voluntary PRTR management program		tons	1,004	967	805	985	894
Emissions		tons	1,203	1,108	911	1,292	1,555
Transfer		tons	393	394	306	365	366
Substances covered under PRTR law		tons	658	653	444	623	616
Emissions		tons	658	653	444	623	616
Transfer		tons	658	653	444	623	616
Waste materials		tons	88,677	91,785	88,479	88,479	74,699
Generated		tons	88,677	91,785	88,479	88,479	74,699
Utilized (recycled)		tons	86,406	88,837	85,620	85,279	71,441
Unutilized (including landfill)		tons	1,989	2,948	2,859	3,201	3,258
Landfill		tons	330	365	616	655	628

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	FY2018	FY2019	FY2020	FY2021	FY2022
GHG emissions (Scope1+Scope2)		1,000 t-CO ₂ e	1,310	1,301	1,221	1,331	1,227
(inside number: CO ₂ emissions)		1,000 t-CO ₂ e	1,286	1,275	1,193	1,306	1,217
Energy consumption (crude oil equivalent)		1,000 kl	450	448	418	447	425
Raw materials used		1,000 tons	660	628	566	606	522
Water intake		1,000 m ³	79,310	79,356	79,465	78,008	74,793
Wastewater		1,000 m ³	72,149	69,025	72,961	72,525	69,817
SOx emissions		tons	350	550	280	395	338
NOx emissions		tons	1,779	1,770	1,623	1,662	1,497
Soot and dust emissions		tons	31	31	32	31	44
COD emissions		tons	554	512	516	482	468
Ozone-layer depleting substance emissions		tons of CFC equivalent	0.0	0.4	0.0	0.0	0.0
Substances covered under JCIA's voluntary PRTR management program		tons	902	855	719	862	774
Emissions		tons	1,201	1,042	859	1,238	1,499
Transfer		tons	392	394	306	365	366
Substances covered under PRTR law		tons	658	594	398	573	565
Emissions		tons	658	594	398	573	565
Transfer		tons	658	594	398	573	565
Waste materials		tons	87,003	90,262	86,951	86,922	72,934
Generated		tons	87,003	90,262	86,951	86,922	72,934
Utilized (recycled)		tons	85,083	87,623	84,554	84,278	70,254
Unutilized (including landfill)		tons	1,638	2,639	2,397	2,643	2,680
Landfill		tons	159	110	253	293	252

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 m²
 (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	FY2018	FY2019	FY2020	FY2021	FY2022
GHG emissions (Scope1+Scope2)		1,000 t-CO ₂ e	626	650	572	627	592
(inside number: CO ₂ emissions)		1,000 t-CO ₂ e	624	649	571	626	591
Energy consumption (crude oil equivalent)		1,000 kl	191	199	174	194	184
Raw materials used		1,000 tons	127	128	92	112	108
Water intake		1,000 m ³	21,424	21,796	20,788	21,692	20,312
Wastewater		1,000 m ³	19,246	19,482	19,701	19,491	18,335
SOx emissions		tons	106	259	92	199	160
NOx emissions		tons	1,144	1,157	956	1,050	959
Soot and dust emissions		tons	14	14	11	12	15
COD emissions		tons	193	179	173	140	138
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	Emissions	tons	480	473	389	478	465
	Transfer	tons	356	327	289	280	290
Substances covered under PRTR law	Emissions	tons	271	280	207	281	277
	Transfer	tons	207	201	187	167	178
Waste materials	Generated	tons	25,425	25,748	23,900	23,708	18,998
	Utilized (recycled)	tons	24,606	24,719	23,135	22,876	18,217
	Unutilized (including landfill)	tons	818	1,029	765	832	781
	Landfill	tons	33	24	51	38	58

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 m²
 (3) ISO 14001: Certification No. JQA-EM1213 (Certified on December 22, 2000)

Main products:	Polyester fiber, Poval film
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		Unit	FY2018	FY2019	FY2020	FY2021	FY2022
GHG emissions (Scope1+Scope2)		1,000 t-CO ₂ e	106	106	117	157	99
(inside number: CO ₂ emissions)		1,000 t-CO ₂ e	85	84	93	135	91
Energy consumption (crude oil equivalent)		1,000 kl	42	38	43	42	32
Raw materials used		1,000 tons	23	25	20	22	20
Water intake		1,000 m ³	7,072	7,769	8,315	6,076	2,831
Wastewater		1,000 m ³	6,555	7,674	8,299	5,993	2,670
SOx emissions		tons	51	58	24	30	13
NOx emissions		tons	87	93	90	92	43
Soot and dust emissions		tons	2.7	1.8	5.9	2.6	4.2
COD emissions		tons	44	51	46	36	22
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	Emissions	tons	29	29	36	35	35
	Transfer	tons	40	36	59	56	44
Substances covered under PRTR law	Emissions	tons	0.1	0.1	0.3	0.2	0.5
	Transfer	tons	0.2	0.2	1.2	4.8	3.2
Waste materials	Generated	tons	13,178	14,479	14,734	13,318	8,271
	Utilized (recycled)	tons	13,145	14,461	14,589	13,130	8,169
	Unutilized (including landfill)	tons	33	18	146	188	101
	Landfill	tons	29	18	123	188	96

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 m²
- (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	FY2018	FY2019	FY2020	FY2021	FY2022
GHG emissions (Scope1+Scope2)		1,000 t-CO ₂ e	193	183	187	186	178
(inside number: CO ₂ emissions)		1,000 t-CO ₂ e	192	182	187	186	177
Energy consumption (crude oil equivalent)		1,000 kl	58	57	55	56	52
Raw materials used		1,000 tons	29	28	26	23	21
Water intake		1,000 m ³	14,503	14,344	15,805	13,960	13,795
Wastewater		1,000 m ³	12,535	12,558	14,020	12,525	12,812
SOx emissions		tons	154	142	134	138	143
NOx emissions		tons	407	404	450	377	362
Soot and dust emissions		tons	9	9	9	11	15
COD emissions		tons	23	21	15	16	11
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	Emissions	tons	144	141	114	117	92
	Transfer	tons	4.3	4.8	66	231	447
Substances covered under PRTR law	Emissions	tons	2.8	3.8	2.8	2.7	2.2
	Transfer	tons	4.3	3.4	2.7	8.7	8.7
Waste materials	Generated	tons	13,802	14,486	13,411	14,047	11,842
	Utilized (recycled)	tons	13,572	14,281	13,207	13,818	11,812
	Unutilized (including landfill)	tons	220	205	203	229	29
	Landfill	tons	14	14	13	28	25

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 m²
- (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	FY2018	FY2019	FY2020	FY2021	FY2022
GHG emissions (Scope1+Scope2)		1,000 t-CO ₂ e	139	136	132	135	139
(inside number: CO ₂ emissions)		1,000 t-CO ₂ e	138	134	131	134	138
Energy consumption (crude oil equivalent)		1,000 kl	65	63	62	63	65
Raw materials used		1,000 tons	319	312	304	299	233
Water intake		1,000 m ³	33,160	32,281	31,572	33,181	34,752
Wastewater		1,000 m ³	30,651	26,160	27,875	31,158	32,459
SOx emissions		tons	10	18	3	0.4	0.3
NOx emissions		tons	61	58	54	59	60
Soot and dust emissions		tons	0.0	0.4	0.0	0.0	0.2
COD emissions		tons	191	160	181	179	178
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	Emissions	tons	112	110	106	104	105
	Transfer	tons	386	357	220	294	310
Substances covered under PRTR law	Emissions	tons	63	64	63	59	58
	Transfer	tons	313	296	165	233	233
Waste materials	Generated	tons	16,531	17,785	16,801	17,445	16,336
	Utilized (recycled)	tons	15,796	16,723	15,912	16,180	15,099
	Unutilized (including landfill)	tons	463	1,062	889	1,265	1,238
	Landfill	tons	28	27	34	29	30

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

- (1) Address: 36, Touwada, Kamisu City, Ibaraki Prefecture
 (2) Site area: 408,000 m²
 (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	FY2018	FY2019	FY2020	FY2021	FY2022
GHG emissions (Scope1+Scope2)		1,000 t-CO ₂ e	201	196	176	188	189
(inside number: CO ₂ emissions)		1,000 t-CO ₂ e	201	196	175	188	189
Energy consumption (crude oil equivalent)		1,000 kl	82	79	72	80	80
Raw materials used		1,000 tons	136	109	94	119	116
Water intake		1,000 m ³	2,703	2,726	2,531	2,625	2,654
Wastewater		1,000 m ³	2,773	2,760	2,673	2,957	3,133
SOx emissions		tons	7.7	7.0	6.0	7.0	7.0
NOx emissions		tons	53	52	48	54	47
Soot and dust emissions		tons	4.0	3.0	3.0	3.0	9.0
COD emissions		tons	101	99	99	110	118
Ozone-layer depleting substance emissions		tons of CFC equivalent	0.0	0.4	0.0	0.0	0.0
Substances covered under JCIA's voluntary PRTR management program	Emissions	tons	124	94	74	128	77
	Transfer	tons	414	317	224	376	408
Substances covered under PRTR law	Emissions	tons	41	38	32	21	27
	Transfer	tons	135	93	43	160	141
Waste materials	Generated	tons	11,580	11,846	11,451	11,464	11,744
	Utilized (recycled)	tons	11,532	11,537	11,080	11,349	11,227
	Unutilized (including landfill)	tons	48	309	371	115	517
	Landfill	tons	0.8	10.0	18	3	38

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 m²
 (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	FY2018	FY2019	FY2020	FY2021	FY2022
GHG emissions (Scope1+Scope2)		1,000 t-CO ₂ e	39	24	31	33	25
(inside number: CO ₂ emissions)		1,000 t-CO ₂ e	39	24	31	33	25
Energy consumption (crude oil equivalent)		1,000 kl	9.6	8.9	9.6	9.8	9.9
Raw materials used		1,000 tons	26	25	29	30	23
Water intake		1,000 m ³	420	410	433	454	430
Wastewater		1,000 m ³	312	312	317	326	337
SOx emissions		tons	20	67	21	21	14
NOx emissions		tons	26	6	25	31	26
Soot and dust emissions		tons	1.5	3.3	2.8	1.8	1.4
COD emissions		tons	1.9	1.5	1.4	1.0	0.8
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	Emissions	tons	14	8	1	0.6	0.5
	Transfer	tons	0.0	0.0	0.0	0.0	0.0
Substances covered under PRTR law	Emissions	tons	13	7	0	0.3	0.3
	Transfer	tons	0.0	0.0	0.0	0.0	0.0
Waste materials	Generated	tons	6,378	5,797	6,519	6,800	5,641
	Utilized (recycled)	tons	6,328	5,781	6,505	6,793	5,636
	Unutilized (including landfill)	tons	51	15	14	7	6
	Landfill	tons	51	15	14	7	6

2-2. Domestic Affiliated Companies

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

		Unit	FY2018	FY2019	FY2020	FY2021	FY2022
GHG emissions (Scope1+Scope2)		1,000 t-CO ₂ e	11	9	8	9	9
(inside number: CO ₂ emissions)		1,000 t-CO ₂ e	11	9	8	9	9
Energy consumption (crude oil equivalent)		1,000 kl	4.9	4.5	4.2	4.7	4.6
Raw materials used		1,000 tons	15	15	15	16	15
Water intake		1,000 m ³	755	801	694	746	740
Wastewater		1,000 m ³	682	745	644	698	685
SOx emissions		tons	0.1	0.2	0.2	0.2	0.2
NOx emissions		tons	0.5	0.6	0.5	0.5	0.4
Soot and dust emissions		tons	0.1	0.1	0.1	0.1	0.1
COD emissions		tons	0.4	0.7	0.6	0.4	6.0
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	Emissions	tons	102	112	86	123	120
	Transfer	tons	2.4	66	51	54	56
Substances covered under PRTR law	Emissions	tons	0.9	0.2	0.1	0.2	0.1
	Transfer	tons	0.5	59	46	49	50
Waste materials	Generated	tons	1,674	1,523	1,528	1,558	1,765
	Utilized (recycled)	tons	1,323	1,214	1,066	1,000	1,187
	Unutilized (including landfill)	tons	351	308	462	557	578
	Landfill	tons	171	255	363	362	377

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

- (1) Address: 4330, Osa, Tarui-cho, Fuwa-gun, Gifu Prefecture
- (2) Site area: 74,900 m²
- (3) ISO 14001: Certification No. JQA-EM2934 (Certified on January 17, 2003)

Main products:	Hoses, driving pipes, laminates, compounds
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		Unit	FY2018	FY2019	FY2020	FY2021	FY2022
GHG emissions (Scope1+Scope2)		1,000 t-CO ₂ e	3.4	3.0	2.5	2.6	2.5
(inside number: CO ₂ emissions)		1,000 t-CO ₂ e	3.4	3.0	2.5	2.6	2.5
Energy consumption (crude oil equivalent)		1,000 kl	1.7	1.5	1.3	1.6	1.5
Raw materials used		1,000 tons	8	8	7	8	7
Water intake		1,000 m ³	641	696	607	656	645
Wastewater		1,000 m ³	642	696	607	656	645
SOx emissions		tons	0.0	0.0	0.0	0.0	0.0
NOx emissions		tons	0.2	0.2	0.1	0.1	0.0
Soot and dust emissions		tons	0.0	0.0	0.0	0.0	0.0
COD emissions		tons	0.0	0.7	0.6	0.4	0.8
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	Emissions	tons	98	109	85	120	119
	Transfer	tons	0.0	65	51	53	55
Substances covered under PRTR law	Emissions	tons	0.0	0.0	0.0	0.0	0.0
	Transfer	tons	0.5	59	46	49	50
Waste materials	Generated	tons	716	607	575	566	612
	Utilized (recycled)	tons	680	462	330	308	375
	Unutilized (including landfill)	tons	36	144	245	257	237
	Landfill	tons	28	143	238	251	230

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

- (1) Address: 56, Noune, Maruoka-cho, Sakai-gun, Fukui prefecture
- (2) Site area: 22,950 m²
- (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	FY2018	FY2019	FY2020	FY2021	FY2022	
GHG emissions (Scope1+Scope2)	1,000 t-CO ₂ e	3.5	2.9	2.8	3.2	2.8	
(inside number: CO ₂ emissions)	1,000 t-CO ₂ e	3.5	2.9	2.8	3.1	2.8	
Energy consumption (crude oil equivalent)	1,000 kl	1.6	1.4	1.3	1.6	1.4	
Water intake	1,000 m ³	41	43	30	35	34	
Wastewater	1,000 m ³	37	41	30	35	32	
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	Emissions	tons	4.7	2.1	1.1	1.9	1.6
	Transfer	tons	2.4	1.1	0.5	1.0	0.8
Substances covered under PRTR law	Emissions	tons	0.9	0.2	0.1	0.1	0.1
	Transfer	tons	0.5	0.1	0.0	0.1	0.0
Waste materials	Generated	tons	271	229	206	216	193
	Utilized (recycled)	tons	247	208	193	201	178
	Unutilized (including landfill)	tons	24	21	14	15	15
	Landfill	tons	6.1	6.8	0.3	1.1	1.2

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 m²

Main products:	Industrial resin belts
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	Unit	FY2018	FY2019	FY2020	FY2021	FY2022	
GHG emissions (Scope1+Scope2)	1,000 t-CO ₂ e	0.3	0.5	0.4	0.5	0.6	
(inside number: CO ₂ emissions)	1,000 t-CO ₂ e	0.3	0.5	0.4	0.5	0.6	
Energy consumption (crude oil equivalent)	1,000 kl	0.1	0.2	0.2	0.2	0.2	
Raw materials used	1,000 tons	0.1	0.1	0.1	0.2	0.4	
Water intake	1,000 m ³	3.0	4.0	4.0	4.2	4.6	
Wastewater	1,000 m ³	3.0	4.0	4.0	4.2	4.6	
SOx emissions	tons	0.1	0.2	0.2	0.2	0.2	
NOx emissions	tons	0.3	0.4	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	5.2	
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	Emissions	tons	0.1	0.3	0.2	0.2	0.0
	Transfer	tons	0.0	0.0	0.0	0.0	0.0
Substances covered under PRTR law	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	25	58	44	49	63
	Utilized (recycled)	tons	24	55	40	47	60
	Unutilized (including landfill)	tons	0.8	3.1	3.3	2.0	2.8
	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	FY2018	FY2019	FY2020	FY2021	FY2022	
GHG emissions (Scope1+Scope2)	1,000 t-CO ₂ e	1,868	1,921	1,816	1,680	1,660	
Scope1 emissions	1,000 t-CO ₂ e	862	939	978	810	830	
Scope2 emissions	1,000 t-CO ₂ e	1,006	981	838	870	830	
Energy consumption (crude oil equivalent)	1,000 kl	622	637	580	623	635	
Water intake	1,000 m ³	56,565	69,082	53,226	60,121	69,187	
Tapwater	1,000 m ³	6,086	3,940	3,418	3,457	2,879	
Subterranean river water	1,000 m ³	0	0	0	0	0	
Groundwater	1,000 m ³	2,624	2,614	2,570	2,622	2,560	
Industrial water	1,000 m ³	9,334	12,144	12,073	11,576	12,924	
Seawater (including Rainwater)	1,000 m ³	38,521	50,384	35,166	42,466	50,824	
Wastewater	1,000 m ³	46,338	60,796	44,177	52,687	64,512	
SOx emissions	tons	1,081.1	1,126	801	848	676	
NOx emissions	tons	439	482	469	487	441	
Chemical substances	Emissions	tons	633	449	449	374	
	Transfer	tons	7,680	11,105	7,782	8,266	7,028
Waste materials	Generated	tons	76,277	81,710	75,683	75,951	72,792
	Utilized (recycled)	tons	30,483	32,641	36,232	39,667	32,754
	Unutilized (including landfill)	tons	45,793	49,069	39,451	36,284	40,038
	Landfill	tons	24,983	27,593	20,305	18,985	21,133

<Overseas locations covered>

EVAL Europe N.V.
 Kuraray Europe GmbH, PVA/PVB Division
 Kuraray Europe GmbH, Trosifol Division
 Kuraray Europe GmbH, OOO Trosifol
 Kuraray Europe GmbH, Holesov works
 Kuraray America Inc. EVAL BU
 Kuraray America Inc. SEPTON BU
 Kuraray America Inc. PVOH BU
 Kuraray America Inc. Fayetteville works
 Kuraray America Inc. La Porte works
 Kuraray America Inc. Washington works
 Kuraray America Inc. Plantic
 Kuraray America Inc. Vectran
 Kuraray Korea Ulsan works
 Kuraray Asia Pacific Pte.Ltd.
 MonoSol, LLC. La Porte Plant
 MonoSol, LLC. Portage Plant
 MonoSol, LLC. Duneland Plant
 MonoSol, LLC. Indy Plant
 MonoSol, LLC. Hartlebury Plant
 Plantic Technologies Ltd. (Australia)

Kuraray Magictape (Shanghai) Co., Ltd.
 Kuraray Methacrylate (Zhang Jia Gang) Co., Ltd.
 Kuraray GC Advanced Materials Co., Ltd.
 Kuraray Advanced Chemicals (Thailand) Co., Ltd.
 Calgon Carbon Corp., Big Sandy Plant
 Calgon Carbon Corp., Pearl River Plant
 Calgon Carbon Corp., Gila Bend Plant
 Calgon Carbon Corp., Neville Island Plant
 Calgon Carbon Corp., Columbus Plant
 Calgon Carbon Corp., North Tonawanda Plant
 Calgon Carbon Corp., E&A Facilities
 Calgon Carbon Corp., Suzhou Plant
 Chemviron, Parentis Plant
 Chemviron, Feluy Plant
 Chemviron, Saint Bazile Plant
 Chemviron, Riom Montagnes Plant
 Chemviron, Legnago Plant
 Chemviron, Tipton Plant
 Chemviron, Foggia Plant
 Chemviron, Ashton Plant
 Chemviron, Durham Plant

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	FY2018	FY2019	FY2020	FY2021	FY2022
Carbon dioxide (CO ₂)	1,000 t-CO ₂ e	1,976	2,035	2,018	1,947	1,866
Methane (CH ₄)	1,000 t-CO ₂ e	1.3	1.5	1.5	0.6	0.4
Nitrous oxide (N ₂ O)	1,000 t-CO ₂ e	22	23	25	24	9
Hydrofluorocarbons (HFCs)	1,000 t-CO ₂ e	0.8	1.2	0.8	1.2	1.3
Perfluorocarbons (PFCs)	1,000 t-CO ₂ e	0.0	0.0	0.0	0.0	0.0
Sulfur hexafluoride (SF ₆)	1,000 t-CO ₂ e	0.0	0.0	0.4	0.0	0.0
Nitrogen trifluoride (NF ₃)	1,000 t-CO ₂ e	0.0	0.0	0.0	0.0	0.0

<Sales intensity>

- The chart below shows the annual trend of the sales intensity of environmental load, and figures are based on FY2019 as 100, targeting 5% or more reduction by FY2026.

(Coverage: 99.7%)

	Unit	FY2018	FY2019	FY2020	FY2021	FY2022
Sales intensity of energy consumption (Kuraray Group (overall))	-	-	100	-	-	82.8
Sales intensity of waste generation (Kuraray Group (overall))	-	-	100	-	-	72.0
Sales intensity of water resources (excluding seawater) (Kuraray Group (overseas))	-	-	100	-	-	74.4

<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	FY2018	FY2019	FY2020	FY2021	FY2022
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.