

ESG DATA



Governance

Structure of the Board of Directors

	As of Dec 2018
Number of Directors	15
Number of Outside Directors	2
Number of Independent Directors	2
Number of Female Director	0

Positions	Name	Number of attendance at meetings of the Board of Directors in FY2017
Representative Director and Chairman of the Board	Kiyotaka Shindo	13/14 93%
Representative Director of the Board, President and CEO	Susumu Yajima	14/14 100%
Representative Director of the Board and Executive Vice President	Ryoji Watari	14/14 100%
Representative Director of the Board and Executive Vice President	Kazuo Fuchigami	14/14 100%
Director of the Board and Senior Executive Officer	Hidehiko Aoyama	14/14 100%
Director of the Board and Senior Executive Officer	Yoshiaki Takeda	14/14 100%
Director of the Board and Senior Executive Officer	Shoji Fujiwara	9/10 90%
Director of the Board and Executive Officer	Yoshiki Koseki	14/14 100%
Director of the Board and Executive Officer	Masatoshi Kaku	14/14 100%
Director of the Board and Executive Officer	Ryuichi Kisaka	14/14 100%
Director of the Board and Executive Officer	Kazuhiko Kamada	14/14 100%
Director of the Board and Executive Officer	Hiroyuki Isono	14/14 100%
Director of the Board and Executive Officer	Koichi Ishida	Newly elected in June 2018
Director	Michihiro Nara	13/14 93%
Director	Nobuaki Terasaka	14/14 100%

Structure and Number of attendance of Nomination Committee

Positions	Name	Number of attendance at meeting of Nomination Committee from Apr to Dec in 2018
Representative Director and Chairman of the Board	Kiyotaka Shindo	1/1 100%
Representative Director of the Board, President and CEO	Susumu Yajima	1/1 100%
Director	Michihiro Nara	1/1 100%
Director	Nobuaki Terasaka	1/1 100%

Structure and Number of attendance of Compensation Committee

Positions	Name	Number of attendance at meeting of Compensation Committee from Apr to Dec in 2017
Representative Director and Chairman of the Board	Kiyotaka Shindo	2/2 100%
Representative Director of the Board, President and CEO	Susumu Yajima	2/2 100%
Director	Michihiro Nara	2/2 100%
Director	Nobuaki Terasaka	2/2 100%

Structure of Audit & Supervisory Board

	As of Dec 2018
Number of Audit & Supervisory Board members	5
Number of Outside Audit & Supervisory Board members	3
Number of Independent Outside Audit & Supervisory Board members	3

ESG DATA



Governance

Segment	millions of yen FY2017
Remuneration of the Company's Accounting Auditors	251
Remuneration of the Company's Accounting Auditors for non-audit service	6

Segment	thousands of yen FY2017
Total amount of political contributions	1,400

Segment	Shares of the Company shares, shareholders, % as of Mar 31 2018
Total number of shares authorized to be issued	2,400,000,000
Total number of shares issued	1,014,381,817
Treasury stock	23,373,302
Total number of shareholders	57,119
Foreign shareholding ratio	25.4

Major shareholders top10	thousand shares	%
Name of shareholder	shares held	% of total shares issued
The Master Trust Bank of Japan, Ltd. (Trust account)	78,849	7.4
Japan Trustee Services Bank, Ltd. (Trust account)	62,701	5.3
Japan Trustee Services Bank, Ltd. (Trust account 4)	35,676	3.7
Sumitomo Mitsui Banking Corporation	31,668	3.2
Nippon Life Insurance Company	25,658	2.6
Mizuho Bank, Ltd.	21,636	2.2
Oji Group Employee Stock-holding Association	19,861	2.1
Japan Trustee Services Bank, Ltd. (Trust account 9)	19,521	2.0
Japan Trustee Services Bank, Ltd. (Trust account 5)	17,187	1.8
The Norinchukin Bank	16,654	1.7

as of Sep 2018

Anti-corruption	case, yen
segment	FY2017
Number of staff dismissed due to non-compliance with anti-corruption policies	0
Cost of fines, penalties or settlements in relation to corruption	0
Provisions for fines and settlements in relation to corruption	0

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Social

Employee		person, %
segment	scope	as of Mar 31, 2018
Number of permanent employees	Consolidated	36,144
Number of temporary employees	Consolidated	2,781
Permanent employees voluntary turnover rates	Oji Holdings	1.06
	Oji MO	8.85

OjiMO= Oji Management Office

Human Rights		cases
segment	scope	FY2017
violations	Consolidated	13

Safety1		sites
segment	scope	as of Oct 2018
Number of sites acquired OHSAS18001 certification / Number of all worksites	Consolidated	domestic : 0 / 249 overseas: 8 / 73

Safety2						
segment	scope	2013	2014	2015	2016	2017
Frequency rate *1	Oji Group (Consolidated)	0.80	0.66	0.77	0.65	0.62
	domestic	0.73	0.54	0.51	0.63	0.79
	overseas	0.90	0.82	1.06	0.67	0.44
	manufacturing *3	0.94	1.06	1.06	1.15	1.02
	pulp, paper and paper product manufacturing *3	1.42	1.30	1.79	1.31	1.46
Severity rate *2	Oji Group (Consolidated)	-	-	0.55	0.10	0.09
	domestic	-	-	0.21	0.19	0.18
	overseas	-	-	0.93	0.01	0.01
	manufacturing *3	0.10	0.09	0.06	0.07	0.01
	pulp, paper and paper product manufacturing *3	0.38	0.19	0.35	0.04	0.24

*1 = number of occupational accident casualties(dead and injured - 1 or more workday lost) / total work hours x 1,000,000

The total work time is assumed to be 2,000 hours/ person

*2 = number of workday lost / total work hours x 1,000

fatalities and severe incidents =7,500 days, temporary work lost = lost calendar days x 300/365

*3 data from Ministry of Health, Labour and Welfare, segment of more than 100 person / site

Safety3						
segment	scope	2013	2014	2015	2016	2017
Number of work related lost time incidents *1	Oji Group *2	61	53	64	57	49
	domestic	36	26	26	32	33
	overseas	25	27	38	25	16
	Contractors *3	8	7	6	4	9
	domestic	8	7	6	4	9
	overseas	-	-	-	-	-
Number of work related fatalities and severe incidents *4	Oji Group	2	1	6	2	2
	domestic	1	1	2	1	1
	overseas	1	0	4	1	1
	Contractors	0	0	0	1	0
	domestic	0	0	0	1	0
	overseas	0	0	0	0	0
	Occasional entering contractors *5	0	1	1	0	2
domestic	0	0	0	0	1	
	overseas	0	1	1	0	1

*1 work related lost time incident : count 2 if 2 persons injured at one time

*2 Oji Group includes non - permanent employees like contract employees, part timers and dispatched employees

*3 Contractors : working in the site at all time

*4 sever incident :remained disabled more than 3 grade of graded list of appendix 1, Implementing regulations, Workmen's Accident Compensation Insurance Act

*5 Occasional entering contractors : entering the site occasionally and working temporarily

Social contribution		million yen
segment	scope	FY2017
Total Amount of corporate donations	Consolidated	412

*Not including political contribution

ESG DATA



Environment

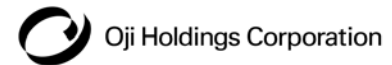
1. Data aggregation was performed in accordance with the Environment Accounting Guideline published by Japan's Ministry of the Environment
2. Companies covered: Oji Holdings, Oji Paper, Oji Materia, Oji F-Text, Oji Imaging Media, Oji Nepia, Oji Cornstarch, Oji Tac, Oji Container, Mori Shigyo Group, Oji Green Resources, Oji Forest and Products
3. Period : Apr 1 2017 to Mar 31 2018

Environment Conservation Cost			million yen	
Category		Main initiatives	Investment	Costs
(1) Environment conservation costs for curbing environment impact generated by production and service activities within business sites			8,389	19,254
breakdown	i Environment conservation management costs	Measures against air pollution, water pollution, noise and vibration, etc.	687	11,725
	ii Global environment conservation costs	Cultivating company-owned forests in Japan, forest plantation operations outside Japan, energy conservation investments	6,824	393
	iii Resource circulation costs	Efficient utilization of resources, costs for waste measures	879	7,136
(2) Costs for curbing environment impact generated upstream or downstream by production and service activities		Costs for purchasing low-sulfur fuel (balance amount)	0	307
(3) Environment conservation cost related to administrative activities		Employee education, ISO 14001 costs, costs for air and water analysis, costs for operating committees and other organizations, etc.	0	891
(4) Environment conservation costs related to R&D activities		Product development that contributes to environment conservation by promoting utilization of recovered paper, curbing environment impact that occurs during production, etc.	296	2,404
(5) Environment conservation costs related to social activities		Philanthropic programs, support for various environment groups, environment and sustainability reporting, Eco-Products exhibit, etc.	0	58
(6) Costs related to environment damage		Pollution impact levy (SOX)	0	556
Total			8,685	23,470

Economic benefit associated with environment conservation activities		million yen	
Effect	FY2017	Value	
Income from company-owned forests in Japan		303	
Cost reductions through energy conservation		1,756	
Income from recycling		3,338	
Total		5,397	

ESG DATA

Environment



Data calculation below covers Oji Group consolidated basis. If different, we added notices.

Greenhouse Gas *1

		FY2013	FY2014	FY2015	FY2016	FY2017	FY2018
Greenhouse Gas Emissions (kiloton CO _{2e}) *2		7,211	7,650	7,551	7,611	7,667	
Production intensity (ton CO _{2e} per ton product)		0.523	0.517	0.493	0.485	0.481	
Percentage reduction from base year 2013		—	1.2%	5.7%	7.3%	8.0%	—
Percentage reduction targeted		—	1.7%	3.4%	5.0%	7.9%	8.7%
SCOPE1	Emission (kiloton CO _{2e})	5,744	6,191	6,364	6,587	6,596	
	Intensity(ton CO _{2e} / sales million yen)	4.310	4.595	4.439	4.575	4.439	
SCOPE2	Emission (kiloton CO _{2e})	1,554	1,722	1,453	1,305	1,335	
	Intensity(ton CO _{2e} / sales million yen)	1.166	1.278	1.013	0.906	0.899	
SCOPE1+2	Emission (kiloton CO _{2e})	7,297	7,912	7,817	7,892	7,932	
	Intensity(ton CO _{2e} / sales million yen)	5.476	5.873	5.453	5.481	5.338	
Scope 1 breakdown by GHG type [kiloton CO _{2e}]	CO ₂	6,463	6,987	6,807	6,848	6,918	
	CH ₄	84	134	161	157	154	
	N ₂ O	749	790	847	885	859	
	HCF	N.A.	N.A.	N.A.	N.A.	N.A.	
	PFC	N.A.	N.A.	N.A.	N.A.	N.A.	
	SF ₆	N.A.	N.A.	N.A.	N.A.	N.A.	
	NF ₃	N.A.	N.A.	N.A.	N.A.	N.A.	
Total		7,297	7,912	7,817	7,892	7,932	

*1 GHG Emission Calculation

For domestic operating sites, based on 'Act on the Rational Use of Energy' , 'Act on Promotion of Global Warming Counter measured'
For overseas operating sites, based on GHG Protocol "Emission Factors from Cross-Sector Tools"

*2 Not including emission from transportation of products

Fuel, Electricity production, Energy consumption

		FY2013	FY2014	FY2015	FY2016	FY2017
Fuel type of using [electric power equivalent GWh] *3	Oil	4,079	3,823	3,418	4,096	4,334
	Coal	7,366	8,032	8,536	8,456	8,388
	Gas	3,264	3,955	3,867	4,087	4,202
	Purchased energy	3,612	4,587	4,067	3,868	3,922
	Biomass	21,387	28,156	29,552	30,145	31,801
	Waste	8,026	7,846	7,904	8,109	8,212
	Hydro	531	471	385	427	365
	Solar	1	6	11	10	10
Total		48,267	56,876	57,738	59,199	61,234
Total energy consumption	Consumption [Million liter Crude Oil equivalent]	4,785	5,655	5,637	5,789	5,870
	Intensity KL _{oil} /production ton	0.347	0.382	0.368	0.369	0.369
Production capacity by energy type [Mw]	Thermal *4					1,622
	Hydro					72
	Solar					4
Production capacity by energy type [Mw] Scope: Electricity production companies	Biomass					50.8
Fuel type of using [electric power equivalent GWh] Scope: Electricity production companies	Biomass					402.2
	Coal					10.0
	Crude oil					0.3
	Total					412.5

*3 Energy conversion

Based on heat generation amount of each fuel type, converted in crude oil and electric energy.

*4 Oji group's thermal electricity production

Thermal electricity production includes capacity of standby facilities.

And it is total amount of single combustion and mixed combustion of oil, coal, gas, biomass and waste.

ESG DATA

Environment



GHG SCOPE 3 FY2017

	Category	Coverage	Emissions (kilo t on CO _{2e})	%	scope	note
1	Purchased goods and services	Emission from activities in producing raw materials, parts, purchased goods and sales materials	3,937	71.4	Consolidated	
2	Capital goods	Emission from building and producing capital goods of our companies	234	4.2	Consolidated	
3	Fuel-and-energy-related activities (not included in scope 1 or 2)	Emission from purchasing fuel, electricity, heats and generating electricity	658	11.9	Consolidated	
4	Upstream transportation and distribution	Emission from transportation and distribution of raw materials, parts, purchased goods and sales materials to our companies	411	7.5	Consolidated	
5	Waste generated in operations	Emission from transportation and disposal of waste generated in our companies	92	1.7	Consolidated	
6	Business travel	Emission from business travel of employees	5	0.1	Consolidated	
7	Employee commuting	Emission from employees commuting	19	0.4	Consolidated	
8	Upstream leased assets	Emission from operation of leased assets that our companies leased (not included in scope 1 or 2)	0	0.0	Consolidated	Included in scope1,2
9	Downstream transportation and distribution	Emission from transportation, storage, loading and retail sales of products	0	0.0	Consolidated	Including category 4 Upstream transportation and distribution
10	Processing of sold products	Emission from processing of intermediate products by business operators	157	2.9	Consolidated	
11	Use of sold products	Emission from use of products by users (consumers, business operators)	0	0.0		Our group main sales products, paper products are not using energy when used, so GHG emission amount is regarded as zero when used.
12	End of life treatment of sold products	Emission from transportation and disposal of products when disposing by users (consumers, business operators)	0	0.0		Our group main sales products are paper products, it emit CO2 when disposed, but material wood absorbs CO2 when it grow, so emission amount is regarded as zero by offset.
13	Downstream leased assets	Emission from operating leased assets that our companies leased	<0.1	0.0		
14	Franchises	Emission by franchises	0	0.0		Our company is not franchiser, so emission of this category is regarded as zero
15	Investments	Emission related with investments management	0	0.0		Our company is not investment and financial organization, so emission of this category is regarded as zero.
	Total		5,514			

ESG DATA



Environment

Data calculation below covers Oji Group consolidated basis. If different, we added notices.

Number and Percentage of sites covered by recognized Environmental Management System

as of Mar 31, 2018	
Number of sites covered by ISO14001	181
Percentage of sites covered by ISO14001 (%) *	82.6

* In Oji Group, 219 worksites are promoting to obtain ISO 14001 and 181 worksites have obtained ISO 14001 certification.

FY2017	
Total costs of environmental fines and penalties	0 [not occurred]

Impact on water : Emission of Pollution materials (BOD, COD, SS)*1, Wastewater and Emission destination

		FY2013	FY2014	FY2015	FY2016	FY2017	FY2018
Target :Improve emission intensity of pollution materials more than 1% compared with the previous year							
BOD Biochemical oxygen demand	Emission (ton)	7,562	9,365	7,971	8,504	7,913	
	Intensity (kg/million yen)	5.68	6.95	5.56	5.91	5.33	
	achieved the target or not	—	x	○	x	○	1% or more
COD Chemical oxygen demand	Emission (ton)	35,334	37,348	34,784	34,719	35,215	
	Intensity (kg/million yen)	26.52	27.72	24.26	24.11	23.70	
	achieved the target or not	—	x	○	x	○	1% or more
SS Suspended solids	Emission (ton)	14,424	15,337	14,847	14,643	14,943	
	Intensity (kg/million yen)	10.82	11.38	10.36	10.17	10.06	
	achieved the target or not	—	○	○	○	○	1% or more
Destination and Amount of Wastewater [Kilo m3]	River and lake	284,433	288,216	284,400	285,278	285,470	
	Sea	370,035	363,355	361,834	357,688	358,113	
	Sewer	5,269	65,156	68,274	72,830	73,206	
	Amount of Wastewater	659,737	716,726	714,508	715,796	716,790	

*1 Data of pollution material covers all consolidated companies that be regulated with wastewater.

Amount of environment burden substances in emitted gas*2

		FY2013	FY2014	FY2015	FY2016	FY2017	FY2018
Target :Improve Intensity of SOX emission more than 1% compared with the previous year							
SOX	Emission (t on)	6,837	6,639	6,729	7,107	6,435	
	Intensity (emission kg/ million yen)	5.13	4.93	4.69	4.94	4.33	
	achieved the target or not	—	○	○	x	○	1% or more
NOX	Emission (t on)	9,520	9,888	10,617	11,093	11,206	
	Intensity (emission kg/ million yen)	7.14	7.34	7.41	7.70	7.54	
Dust	Emission (t on)	2,583	3,504	2,940	2,893	3,135	
	Intensity (kg/ million yen)	1.94	2.60	2.05	2.01	2.11	
Target : Keep VOC emission intensity level as FY2010 of "0.56"							
VOC Emission	VOC Emission (kg)	704,380	558,163	499,347	565,801	603,566	
	Intensity (emission kg/ million yen)	0.53	0.41	0.35	0.39	0.41	
	achieved the target or not	○	○	○	○	○	0.56 or less

*2 Data of SOX, NOX and Dust cover all consolidated companies that be regulated.

VOC Emission data cover all consolidated companies that submit PRTR.

Waste and PRTR Chemical Substances

		FY2013	FY2014	FY2015	FY2016	FY2017
Industrial waste generation	Domestic (kiloton)	1,519	1,544	1,517	1,484	1,494
	Overseas (kiloton)	835	1,177	1,202	1,279	1,288
	Total (kiloton)	2,354	2,721	2,719	2,762	2,782
	Intensity (generation ton / million yen)	1.77	2.02	1.90	1.92	1.87
Efficient use amount	Efficient use amount (kiloton)	2,254	2,552	2,563	2,618	2,617
Landfill amount (Final disposal amount)	Domestic (kiloton)	52	46	45	32	25
	Overseas (kiloton)	48	124	110	112	140
	Total (kiloton)	100	170	155	144	165
	Intensity (landfill kg / million yen)	75.11	125.95	108.33	100.17	111.22
Industrial waste efficient use ratio Target of FY2020 : Domestic 99% or more, Overseas 95% or more						
Efficient use ratio	Domestic	96.6%	97.0%	97.0%	97.9%	98.3%
	Overseas	94.2%	89.5%	90.8%	91.2%	89.1%
Hazardous waste generation amount	(t on)			28,623	25,115	23,252
	Intensity (generation kg / million yen)			19.97	17.44	15.65
PRTR Chemical substance released amount, transferred amount *3	(t on)	1,044	876	815	842	906
	Intensity (released kg / million yen)	0.78	0.65	0.57	0.59	0.61

*3 PRTR Data covers Oji Group facilities (Consolidated) that submit PRTR

Efficient use of resources

Water Resource and paper recycle

		FY2013	FY2014	FY2015	FY2016	FY2017	FY2018
Target : Improve intensity of water used 1% or more compared with the previous year							
Water withdrawal	(kilo m ³)	692,065	742,705	750,447	743,683	744,606	
	total intensity (water withdrawal kilo m3/ million yen)	0.519	0.551	0.523	0.517	0.501	
	achieved the target or not	—	x	○	○	○	1% or more
Breakdown of water withdrawal kilo m3	Surface water(river, lake, sea, brackish water)	394,735	436,638	440,475	436,914	436,108	
	Groundwater(well water, subsoil water)	150,675	156,658	148,509	150,227	150,091	
	Third party organization (water supply, city water)	146,655	149,408	161,463	156,542	158,408	
	Total	692,065	742,705	750,447	743,683	744,606	
Water Resource recycle	Recycled amount (kilo m3)	625,612	668,215	677,417	701,967	690,839	
	Recycled rate (%)	90%	90%	90%	94%	93%	
Paper recycle *4	Recycled amount (ton)	3,983,680	4,070,434	4,008,706	4,059,018	4,048,784	
	Recycled rate (%)	61.4%	62.9%	63.6%	63.5%	64.0%	

*4 Scope of Paper recycle : Oji Paper, Oji Materia, Oji F-Tex, Oji Nepia

ESG DATA



Environment

Scope of data calculation below are consolidated basis. If different, we added notices.

Release and Transfer of PRTR Chemical Substances FY 2017

Substance	unit	Handled amount including generated amount	Released amount	Transferred amount	Total released and transferred
Zinc compounds (water-soluble)	ton	10.5	1.4	0.9	2.3
2-Hydroxyethyl Acrylate	ton	6.4	-	0.003	0.003
n-Butyl acrylate	ton	13.5	1.8	0.1	1.9
Methyl acrylate	ton	11.7	1.5	0.3	1.8
2-Aminoethanol	ton	15.2	0.003	0.1	0.1
Asbestos	ton	1.1	-	1.1	1.1
Isoprene	ton	10.0	0.1	-	0.1
Ethylbenzene	ton	4.6	0.02	0.1	0.2
Ethylene oxide	ton	1.5	0.01	-	0.01
Ferric chloride	ton	100.6	-	-	-
Xylene	ton	51.0	0.7	0.6	1.3
Chromium and trivalent chromium compounds	ton	24.4	0.01	0.001	0.01
Chloroform	ton	12.3	12.3	-	12.3
Vinyl acetate	ton	494.2	4.8	0.7	5.5
2,2-Dibromo-2-cyanoacetamide	ton	62.1	27.7	0.3	28.0
Styrene	ton	112.0	0.01	0.2	0.2
Dioxins	mg-TEQ	875.4	327.9	547.5	875.4
Decanoic acid	ton	8.2	0.1	-	0.1
Sodium dodecyl sulfate	ton	3.2	1.9	-	1.9
1,2,4-Trimethylbenzene	ton	37.2	0.2	0.02	0.2
Toluene	ton	3,009.2	584.4	204.8	789.2
Hexamethylene diacrylate	ton	2.9	-	-	-
Nickel	ton	18.1	0.01	0.001	0.01
N-Vinylpyrrolidone	ton	5.4	-	0.003	0.003
Phenol	ton	6.4	0.02	0.2	0.3
Hydrogen fluoride and its water-soluble salts	ton	1.6	1.6	-	1.6
1-bromopropane	ton	3.4	3.2	0.2	3.4
n-Hexane	ton	15.8	0.5	0	0.8
Benzene	ton	20.1	18.0	-	18.0
Boron compounds	ton	221.2	18.6	2.2	20.8
Poly(oxyethylene) alkyl ether(alkyl C=12-15)	ton	10.2	3.4	0.2	3.6
Sodium poly(oxyethylene) dodecyl ether sulfate	ton	4.2	2.5	-	2.5
Formaldehyde	ton	1.7	0.8	0.04	0.8
Manganese and its compounds	ton	7.9	6.7	-	6.7
Methylnaphthalene	ton	317.3	1.6	-	1.6
Methylenebis(4.1-phenylene) = diisocyanate	ton	1.8	-	-	-
Total	ton	4,627	694	212	906

Data covers Oji Group facilities (Consolidated) that submit PRTR

Excluding dioxins, numbers prepared for substances of which one ton or more (0.5 tons or more Specified Class 1 Designated Chemical Substances) is handled (including amount produced).

" - " : no release and transfer

Total is rounded to the whole number.

Usage of main raw materials

raw materials		FY2013	FY2014	FY2015	FY2016	FY2017
Woodchip and lumber	kilo	9,497	13,267	13,424	13,936	14,090
Recovered paper	tons	4,457	4,666	4,573	4,481	4,540
Pulp		418	406	306	325	358
Purchased containerboard and corrugated sheet		2,736	3,027	2,941	2,994	3,069
total		17,107	21,366	21,243	21,736	22,057