

Environmental Performance Data

■ **Reporting Period**

Fiscal 2020 (January 1 to December 31, 2020)

■ **Guidelines Used for Reference**

Ministry of the Environment, Environmental Report Guidelines (2012 Edition)
 Ministry of the Environment, Environmental Accounting Guidelines (2005 Edition)
 Global Reporting Initiative (GRI), Sustainability Reporting Guidelines

■ **Organizational Units Covered**

From 2012, the scope of coverage was extended to all consolidated subsidiaries.

	Consolidated Subsidiaries	Other Subsidiaries and Affiliates
Japan	KOKUYO Co., Ltd.	KOKUYO K Heart Co., Ltd., Heartland Co., Ltd., IWAMI Paper Industry Co., Ltd., KOKUYO Hokkaido Sales Co., Ltd., KOKUYO Tohoku Sales Co., Ltd., KOKUYO Kitakanto Sales Co., Ltd., KOKUYO Tokai Sales Co., Ltd., KOKUYO Hokuriku-Niigata Sales Co., Ltd., KOKUYO Sanyo-Shikoku Sales Co., Ltd.
	Kaunet Co., Ltd., KOKUYO Marketing Co., Ltd., KOKUYO Supply Logistics Co., Ltd., KOKUYO Logitem Co., Ltd., KOKUYO Product Shiga Co., Ltd., KOKUYO MVP Co., Ltd., LmD International Co., Ltd., Actus Co., Ltd., KOKUYO Finance Co., Ltd, KOKUYO & Partners Co., Ltd.	
Overseas	KOKUYO Vietnam Co., Ltd., KOKUYO Malaysia Sdn. Bhd., KOKUYO (Shanghai) Management Co., Ltd., KOKUYO Commerce (Shanghai) Co., Ltd., KOKUYO Furniture (China) Co., Ltd., KOKUYO Design Consultants (Shanghai) Co., Ltd., KOKUYO International Asia Co., Ltd., KOKUYO International (Malaysia) Sdn Hbd, KOKUYO Vietnam TRADING Co.,Ltd., Kokuyo Camlin Limited	KOKUYO-IK(Thailand) Co., Ltd.

Scope of Report: KOKUYO Co., Ltd., 20 consolidated subsidiaries, and 10 affiliates
 KOKUYO Engineering & Technology was integrated with KOKUYO Co., Ltd. in July 2019, but there has been no impact on the environmental performance data disclosed

 **2020 Results**

Environmental Policy	Goals and Results for 2020		Evaluation
	Goals	Results	
Prevention of global warming	Reduction of CO ₂ emissions Total year-on-year reduction in volume: +1.4% (Excluding impact of production: -0.9%)	-15.5% (Excluding impact of production: -2.3%)	○
	Reduction of unit energy consumption Year-on-year reduction: -1.0%	Per unit of sales: -6.0%	○
Resource Conservation and Recycling	Improve recycling rate in relation to total waste volume <ul style="list-style-type: none"> Business offices: 96.6% and over Construction sites: 88.0% and over 	• Business offices: 96.6%	○
		• Construction sites: 82.0%	×
Procurement, development, and provision of eco-friendly products	Maintain eco x zero	Maintained	○
Information disclosure and communication	Publication of CSR report 2020	Publication of CSR report 2020	○
Environmental management	ISO 14001: Regular inspection in 2015	Regular inspection results <ul style="list-style-type: none"> Strong point: 1 cases Good points: 2 cases Matters pointed out for improvement: 0 cases Opportunities for improvement: 26 cases 	○

*1 Targets are applicable to the following companies:

KOKUYO Co., Ltd.; Kaunet Co., Ltd.; KOKUYO Marketing Co., Ltd.; KOKUYO Engineering & Technology Co., Ltd.; KOKUYO Supply Logistics Co., Ltd.; KOKUYO Logitem Co., Ltd.; KOKUYO Product Shiga Co., Ltd.; KOKUYO MVP Co., Ltd.; KOKUYO K Heart Co., Ltd.; KOKUYO VIETNAM Co., Ltd.; KOKUYO (MALAYSIA) Sdn. Bhd.; and KOKUYO-IK (THAILAND) Co., Ltd.

Environmental Friendliness Efficiency Indicators

The KOKUYO Group designates unique environmental friendliness efficiency indicators as indices to comprehensively evaluate financial performance and impact on the global environment.

These indicators show the extent to which products and services are being offered to society with respect to specific environmental load and correspond to the following four items.

1. CO²emissions
2. Final waste disposal
3. Usage of chemical substances subject to PRTR regulations
4. Water usage

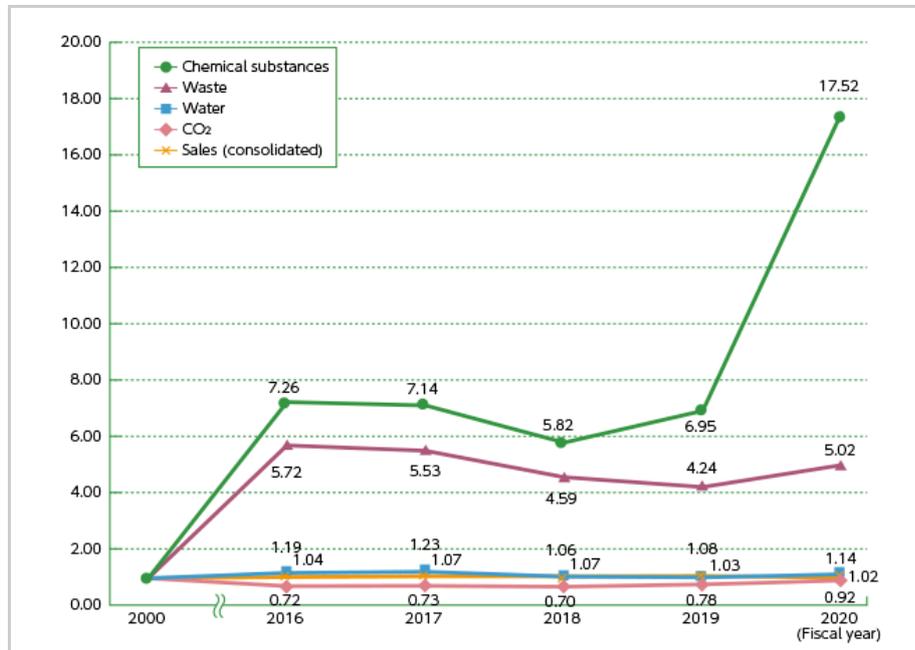
Environmental friendliness efficiency indicator =

$$\frac{\text{Current fiscal year (Sales / Environmental load data)}}{\text{Baseline fiscal year (Sales / Environmental load data)}}$$

$$\frac{\text{Current fiscal year (Sales / Environmental load data)}}{\text{Baseline fiscal year (Sales / Environmental load data)}}$$

Using fiscal 2000 as the baseline for each indicator, the progress status for each fiscal year can be determined.

Environmental Friendliness Efficiency Indicators



* Chemical substances were calculated according to the amount of PRTR Law Class I Designated Chemical Substances used and handled by the business establishments subject to notification under the PRTR Law.

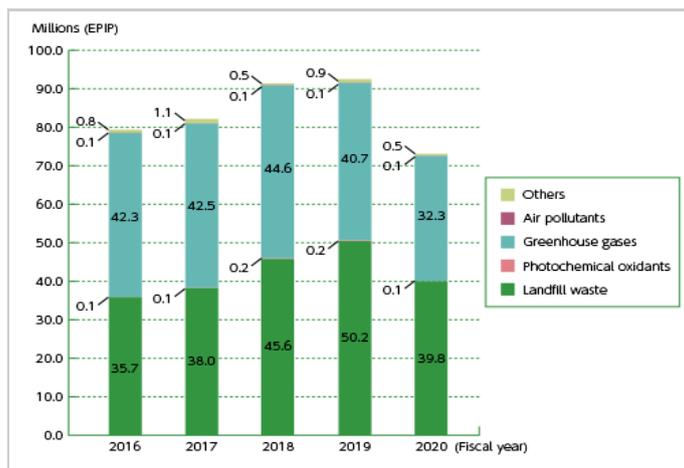
* The third party verification pointed out that a part of the data on waste materials of KOKUYO Vietnam was omitted from the report calculations. From 2015, this data is included in the report.

JEPIX

JEPIX (Japan Environmental Policy Priorities Index) is a method of quantifying the individual amount of different types of environmental loads, such as greenhouse gas emissions and air pollutants, as single indicators called Environmental Impact Points (EIP). The EIP is calculated by multiplying the environmental load of each environmentally harmful chemical by the integrated coefficient, which is calculated from the ratio between Japan's environmental policy target and the actual amount of emissions (environmental friendliness factor), and then obtaining the sum total of them all.

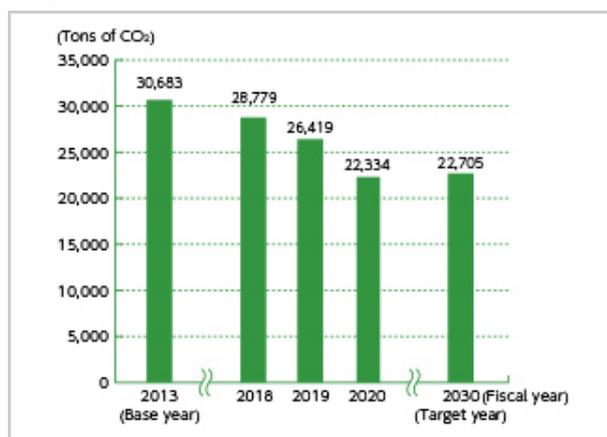
$$\text{Environmental impact point (EIP)} = \sum (\text{environmental loads} \times \text{environmentally friendliness factors})$$

JEPIX



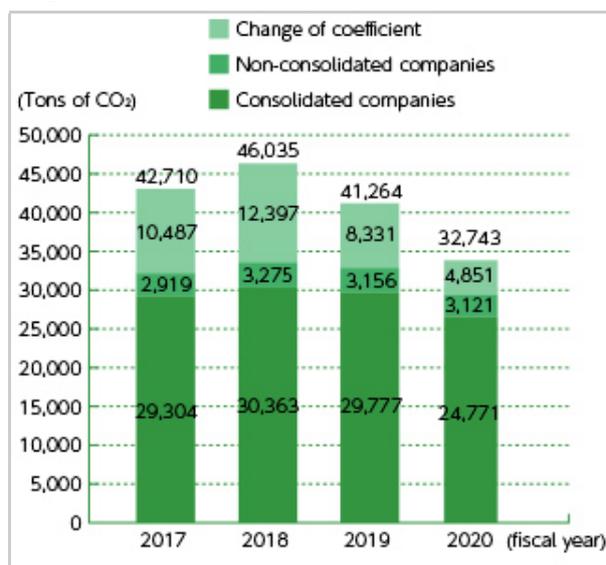
Global Warming Preventive Measures

CO₂ Emission Transitions



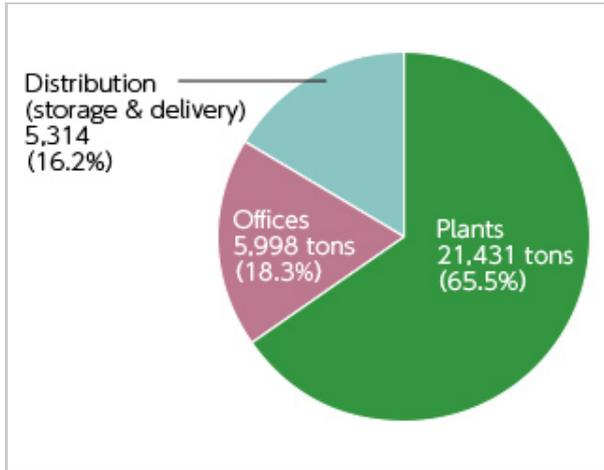
* Electricity-based emission factors are calculated using the basic emission factors of the relevant electrical power companies for each given year

CO₂ emission transitions



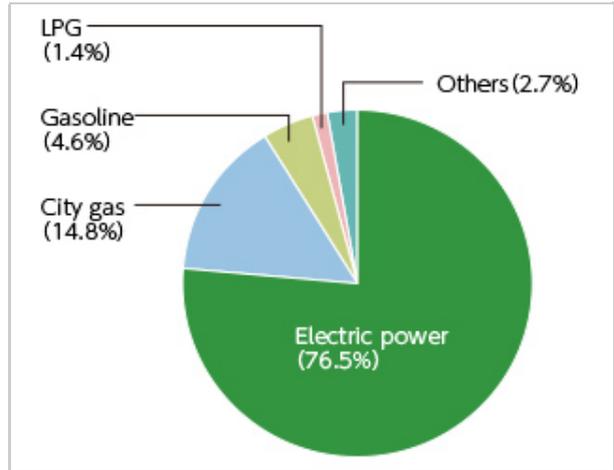
* Differences due to changes in emission factors are calculated using the average emission factors of all power sources in 2000 (0.378kg-CO₂/kwh).

CO₂ emission by source



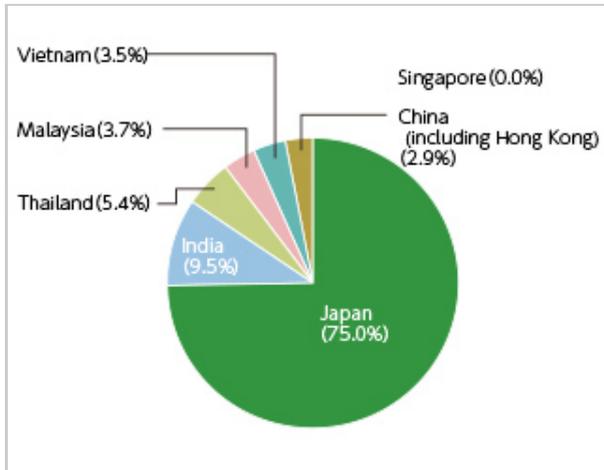
* Market-based

CO₂ emission by source



* Market-based

CO₂ emissions by country



* Calculations were made according to the standard electrical power emission factors of each country (location-based).

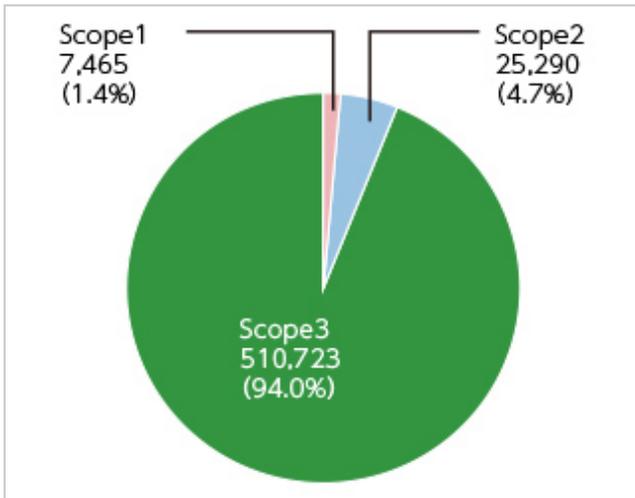
CO₂ emissions by country

	Tons of CO ₂ emissions	Percentage of total
Japan	24,900	75.0%
India	3,169	9.5%
Thailand	1,782	5.4%
Malaysia	1,215	3.7%
Vietnam	1,147	3.5%
China (including Hong Kong)	969	2.9%
Singapore	5	0.0%
Total	33,189	100.0%

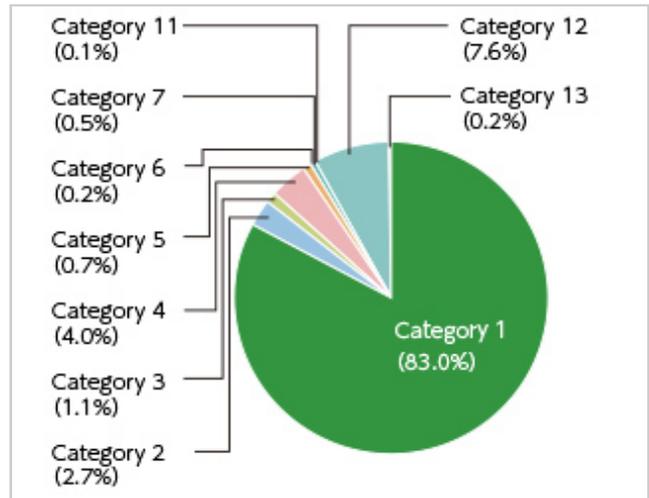
Scope 3 categories and emissions

Category		Applicable/ Not applicable	Reason for Non- applicability	Scope 3 Emissions	As Percentage of Total	As Percentage of Total Emissions
Category 1	Purchased products / services	Applicable	-	423,833	83.0%	78.0%
Category 2	Capital goods	Applicable	-	13,760	2.7%	2.5%
Category 3	Fuel not included in Scope 1 or 2 and energy-related activities	Applicable	-	5,449	1.1%	1.0%
Category 4	Shipping and delivery (upstream)	Applicable	-	20,490	4.0%	3.8%
Category 5	Waste materials generated by businesses	Applicable	-	3,571	0.7%	0.7%
Category 6	Business trips	Applicable	-	895	0.2%	0.2%
Category 7	Commuting by workers	Applicable	-	2,363	0.5%	0.4%
Category 8	Leased assets (upstream)	Not applicable	Included in Scope 1 / 2	-	0.0%	0.0%
Category 9	Shipping and delivery (downstream)	Not applicable	Included in Category 4	-	0.0%	0.0%
Category 10	Processing of sold products	Not applicable	KOKUYO is a manufacturer of completed products and does not deal with intermediate products	-	0.0%	0.0%
Category 11	Use of sold products	Applicable	-	504	0.1%	0.1%
Category 12	Discarding of sold products	Applicable	-	39,020	7.6%	7.2%
Category 13	Leased assets (downstream)	Applicable	-	838	0.2%	0.2%
Category 14	Franchises	Not applicable	No franchises	-	0.0%	0.0%
Category 15	Investments	Not applicable	No investments	-	0.0%	0.0%
Total	-	-	-	510,723	-	-

Greenhouse gases emitted by the supply chain (by scope) (Tons of CO₂)

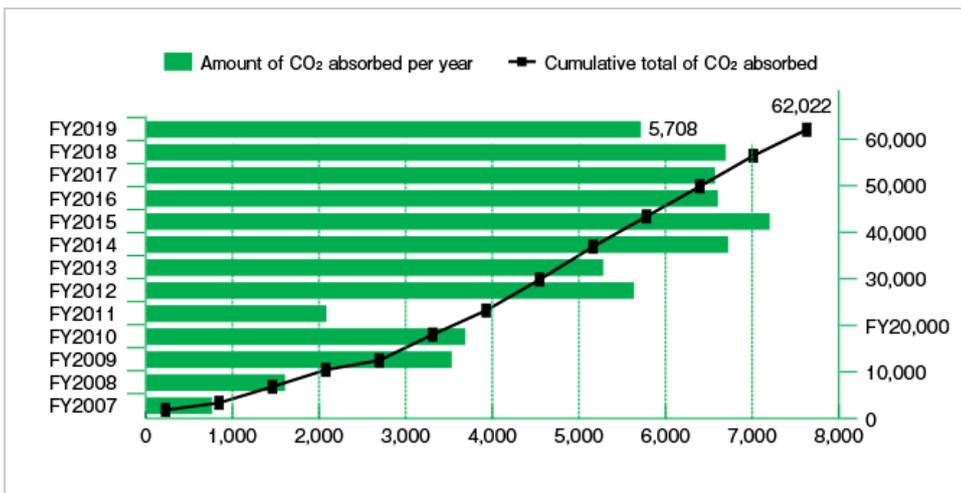


Greenhouse gases emitted by the supply chain (for Scope 3)



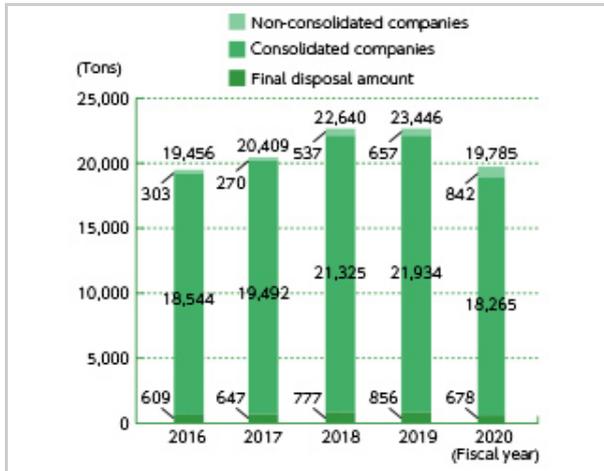
Amount of CO₂ absorbed by Yui no Mori

Amount of CO₂ absorbed by Yui no Mori (cumulative total)

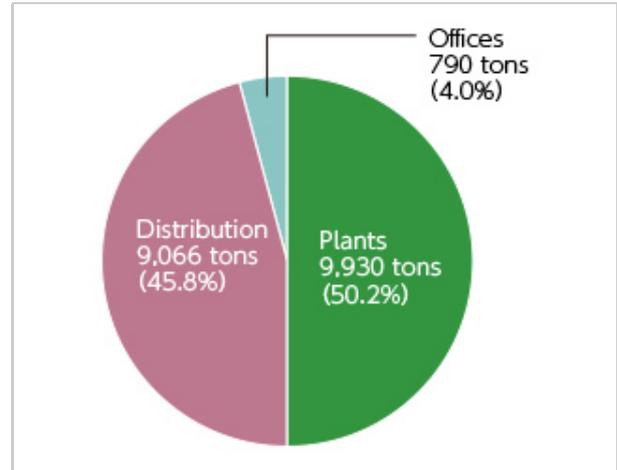


Resource Saving and Recycling

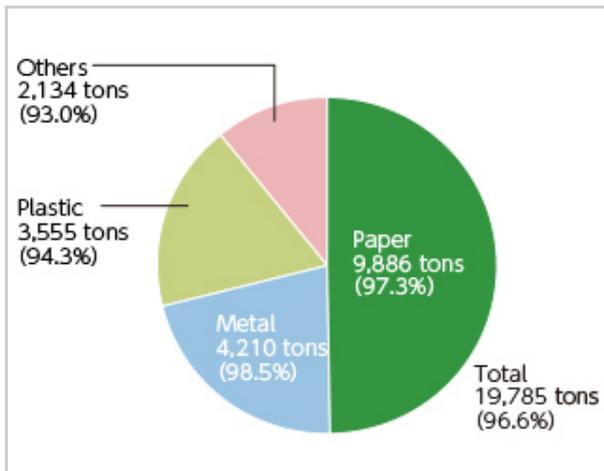
Waste Materials: Recycling and Final Disposal Amounts



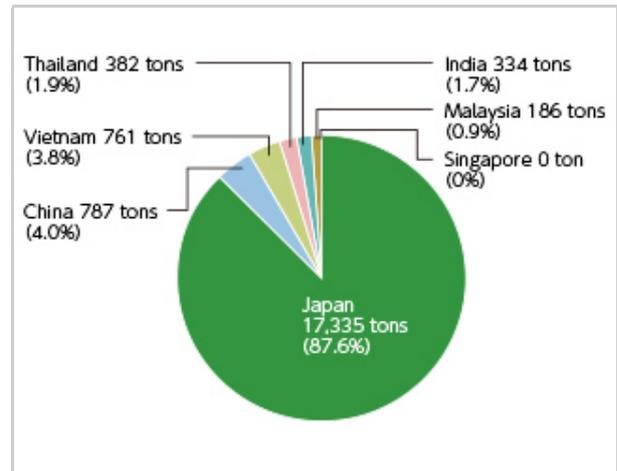
Waste Materials by Activity



Waste material types (Recycling rate in brackets)



Emissions by Country



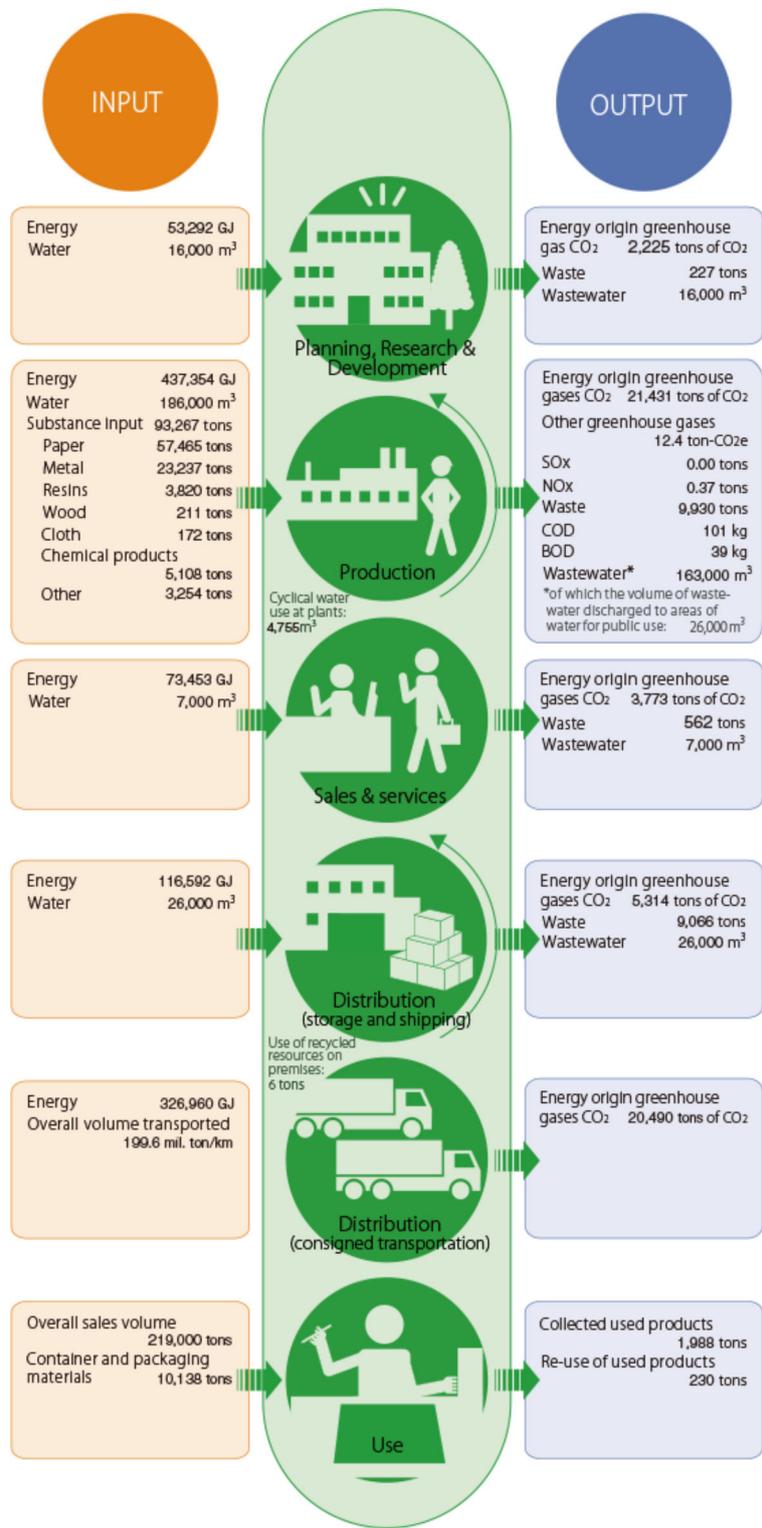
 Chemical Substances Subject to PRTR Law

Official No.	Chemical name	Vol. handled (kg)	Vol. Released					Vol. Treated (kg)	Vol. Consumed (kg)
			Vol. Released into Air (kg)	Vol. Released into Public Bodies of Water (kg)	Vol. Released into Sewers (kg)	Vol. Sent to Landfill (kg)	Sub-total (kg)		
1	Zinc compounds (water-soluble)	84.8	0.0	0.0	0.0	0.0	0.0	84.8	0.0
20	2-aminoethanol	100.8	0.0	0.0	0.0	0.0	0.0	100.8	0.0
30	直鎖アルキルベンゼンスルホン酸及びその塩	60.0	0.0	0.0	0.0	60.0	60.0	0.0	0.0
53	Ethylbenzene	14.9	14.9	0.0	0.0	0.0	14.9	0.0	0.0
57	Ethylene glycol monoethyl ether	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
71	Ferric chloride	5,408.0	0.0	0.0	0.0	0.0	0.0	0.0	5,408.0
80	Xylene	22.4	22.3	0.0	0.0	0.0	22.3	0.0	0.1
82	銀及びその水溶性化合物	0.5	0.0	0.0	0.0	0.0	0.0	0.5	0.0
87	Chromium and trivalent chromium compounds	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3
125	Chlorobenzene	10.0	5.1	0.0	0.3	0.3	5.7	0.0	4.3
134	Vinyl acetate	198.0	19.9	3.1	7.9	11.9	42.8	0.0	155.2
235	Water-soluble salts of bromic acid	292.7	0.0	0.0	0.0	0.0	0.0	292.7	0.0
300	Toluene	166.1	17.6	0.0	5.7	5.5	28.8	13.1	124.1
302	Naphthalene	7.3	0.0	0.0	0.2	0.2	0.4	0.0	7.0
309	Nickel compounds	4.4	0.0	0.0	0.0	0.0	0.0	4.4	0.0
333	ヒドラジン	1.4	0.0	0.0	0.0	0.0	0.0	1.4	0.0
354	Di-n-butyl phthalate	254.7	0.0	0.0	3.2	3.2	6.5	0.0	248.2
392	N-hexane	26.5	23.2	0.0	0.0	0.0	23.2	0.0	3.3
403	Benzophenone	11.9	0.0	0.0	0.0	0.3	0.3	0.0	11.6
407	Poly(oxyethylene)alkyl ether(alkyl C=12-15)	696.9	0.6	0.0	0.0	188.8	189.4	152.6	354.9
410	Poly(oxyethylene)nonylphenyl ether	11.7	0.0	0.0	0.0	0.2	0.2	0.0	11.5
411	ホルムアルデヒド	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
412	Manganese and its compounds	11.9	0.5	0.0	0.0	4.2	4.8	0.0	7.1
448	Methylenebis(4,1-cyclohexylene)diisocyanate	249.4	0.0	0.0	0.0	0.0	0.0	0.0	249.4

Official No.	Chemical name	Vol. handled (kg)	Vol. Released					Vol. Treated (kg)	Vol. Consumed (kg)
			Vol. Released into Air (kg)	Vol. Released into Public Bodies of Water (kg)	Vol. Released into Sewers (kg)	Vol. Sent to Landfill (kg)	Sub-total (kg)		
453	Molybdenum and its compounds	192.6	0.0	0.0	0.0	0.0	0.0	0.0	192.6
Total		7,827.2	104.2	3.1	17.3	274.7	399.3	650.3	6,777.6

- * The volume of PRTR Law Class I Designated Chemical Substances that were used, handled, released, transferred, disposed, recycled, and consumed by the business establishments (in Japan) subject to notification under the PRTR Law. For the calculation methods, see the Ministry of the Environment/Ministry of Economy, Trade and Industry's PRTR Release Estimation Methods Manual, version 4.1 (March 2011).
- * "Volume treated" refers to those PRTR designated substances that were treated on site by incineration, neutralization, breaking down, reactive process, etc.
- * "Volume consumed" refers to the volume of PRTR designated substances that were modified by way of reaction into other substances, incorporated into products or moved off-site with products.

Environmental Load Material Flow



Input items

Indicator	Unit	Calculation method
Volume of energy used	GJ	Power, gas (city gas, LPG, natural gas), oil (gasoline, light oil, kerosene, fuel oil A), heat (hot water, cold water) The power unit calorific values are the daytime and nighttime power values stated in the Enforcement Regulations of the Act on the Rational Use of Energy (effective from April 1, 2008). The unit calorific values of gas, oil, and heat are those values presented in the Greenhouse Gas Emission Calculation and Reporting Manual, Ver. 4.4 (July 2019 (Ministry of the Environment, Ministry of Economy, Trade and Industry)).
Water	1,000 m ³	Tap water, water for industrial use
Substance Input	Tons	The volume of raw materials used to manufacture KOKUYO products
Overall Sales Volume	10,000 tons	Data from furniture and stationery products
Container and Packaging Materials	Tons	The volume of packaging materials used to package products

Output Items

Indicator	Unit	Calculation Method
CO₂ Emissions from Energy Use	Tons of CO ₂	<p>CO₂ emissions from the use of electricity, gas, oil, and heat. * See Global Warming Preventive Measures.</p> <p>Coefficients based on the Act on Promotion of Global Warming Countermeasures (adjusted emission coefficients for each power company for fiscal 2016 and 2017) were used to calculate the CO₂ emissions from power consumption in Japan.</p> <p>Coefficients for each country covered on the GHG Protocol website, released by the World Business Council For Sustainable Development (WBCSD) and the World Resources Institute (WRI), were used to calculate the CO₂ emissions from power consumption overseas.</p> <p>Values presented in the Greenhouse Gas Emission Calculation and Reporting Manual, Ver. 4.4 (July 2019) (Ministry of the Environment, Ministry of Economy, Trade and Industry) were used to calculate CO₂ emissions from the use of gas, oil, and heat. The ton/kilo method and the fuel consumption method were both used to calculate the distribution (consigned transportation) CO₂ emissions.</p>
Other Greenhouse Gases	Tons of CO ₂ e	<p>Emissions of greenhouse gases (CO₂, CH₄, N₂O) related to production activities, (in Japan), but excluding such emissions from energy sources, have been converted to a CO₂ basis. Emission coefficient values were taken from the Ministry of the Environment and the Ministry of Economy, Trade and Industry's Greenhouse Gas Emission Calculation and Reporting Manual, Ver. 4.4 (July 2019).</p>
SO₂">x, NO₂">x	Tons	<p>Emissions from smoke- and soot-producing facilities at manufacturing plants (in Japan)</p>
Waste	Tons	<p>The volume of discharged waste (emissions) is the total amount of waste and valuable substances discharged from business establishments.</p> <p>The recycle volume is the total of the volume of discharged waste (emissions) that has been recycled through material or thermal recycling, and the volume of valuable substances.</p> <p>The final waste volume is the combined total of the recycling residue and the volume of waste directly disposed of in landfills, out of the total volume of discharged waste (solid waste). * See Resource Saving and Recycling.</p> <p>If industrial waste has been calculated by cubic measurement, conversion factors (reference) for converting cubic measurements of industrial waste into weights as stated in a notice released by the Ministry of the Environment (December 27, 2006; Env. Ind. Waste Issue No. 061227006) were used.</p>
Wastewater	1,000 m ³	<p>Wastewater discharged to areas of water for public use and into the sewage system</p>
COD、BOD	kg	<p>Of plants in Japan, the volume of effluent discharged to areas of water for public use by plants with a legal obligation to measure water quality</p>

Other items

Indicator	Unit	Calculation Method
Overall Transportation Volume	Tons/km	The total of the following outsourced transportation volumes: total domestic transportation in Japan including the transportation of furniture products, store fixtures, stationery products, transportation of catalog sales by Kaunet, and transportation of Actus products; and transportation of products between overseas sites and within Malaysia.
Cyclical Water Use at Plants	m ³	The volume of water used in a cyclical way (i.e. recycled) on business premises
Cyclical Resource Use on Sites	Tons	The volume of recycled resources, such as packaging materials, on the business premises of KOKUYO Logitem Co., Ltd. and KOKUYO Supply Logistics Co., Ltd.
Collected Used Products	Tons	The volume of used products collected from customers by KOKUYO Logitem Co., Ltd.
Re-use of Used Products	Tons	The volume of re-used products from the used products collected from customers by KOKUYO Logitem Co., Ltd.

Environmental Accounting

Environmental Accounting

(Unit: Ten thousand of yen)

Item	Environment-related Investments			Costs			Effects			Total		
	2018	2019	2020	2018	2019	2020	2018	2019	2020	2018	2019	2020
Pollution prevention	0	0	0	2,095	5,549	3,963	0	0	0	2,095	5,549	3,963
Global warming prevention	2,784	6,477	11,842	2,875	11,642	8,363	▲2,472	▲2,052	▲1,923	403	9,589	6,440
Resource saving and recycling	0	0	0	34,235	34,826	42,117	▲29,254	▲19,359	▲15,315	4,981	15,466	26,802
Procurement and provision of eco-friendly products	0	0	0	8,684	4,016	3,181	0	0	0	8,684	4,016	3,181
Survey and research into environmental technology	0	0	0	26	167	184	0	0	0	26	167	184
Environmental communication	0	0	0	1,793	1,836	1,442	0	0	0	1,793	1,836	1,442
Setting up management structures	0	0	0	4,904	6,551	5,851	0	0	0	4,904	6,551	5,851
Environmental damage response	0	0	0	0	0	0	0	0	0	0	0	0
Total	2,784	6,477	11,842	54,613	64,586	65,100	▲31,726	▲21,412	▲17,237	22,887	43,175	47,863

Breakdown of economic effects

Item	Content of countermeasures	2018	2019	2020
Global warming prevention	Effects of introducing energy-saving facilities	▲1,344	▲1,043	▲703
	Effects of solar power generation	▲990	▲980	▲1,009
	Effects of improving operations	▲138	▲29	▲211
Resource saving and recycling	Cost reductions achieved through the use of recycled items	▲29,254	▲19,318	▲15,313
	廃棄物の削減			▲2
	Cost reductions achieved through the promotion of recycling		▲41	
Total		▲31,726	▲21,412	▲17,237

 Sites with ISO 14001 Certification

No.	Company Name	Site Name	No.	Company Name	Site Name
1	KOKUYO	Head Office (including XT and WS)	37	Kaunet	Head Office
2		Tokyo Shinagawa Office	38		Tokyo Shinagawa Office
3		Tokyo Shinagawa SST Office	39		Sapporo Distribution Center
4		Tokyo Kasumigaseki Office	40		East Japan Distribution Center
5		Nagoya Office	41		Central Japan Distribution Center
6		Osaka Umeda Office	42		West Japan Distribution Center
7		Mie Factory	43		Fukuoka Distribution Center
8		Shibayama Factory	44		Head Office
9	KOKUYO K Heart	Head Office	45	Tachikawa Office	
10	KOKUYO MVP	Tottori Factory	46	Chiba Office	
11		Aoya Factory	47	Saitama Office	
12	KOKUYO Product Shiga	Head Office	48	Yokohama Office	
13	KOKUYO Logitem	Head Office	49	Nagano Office	
14		Sendai Distribution Center	50	Matsumoto Office	
15		Gunma Distribution Center	51	Nagoya Office	
16		Central Japan Delivery and Distribution Center	52	Shizuoka Office	
17		Central Japan Delivery Center	53	Umeda Office	
18		Shin Chiba Distribution Center	54	Kyoto Office	
19		Shiga Distribution Center	55	Kobe Office	
20		Mie Distribution Center	56	Wakayama Office	
21		Ina Distribution Center	57	Hiroshima Office	
				58	Yamaguchi Office
			59	Matsue Office	
			60	Fukuoka Office	

No.	Company Name	Site Name	
22		Chubu Delivery and Distribution Center	
23		Toyama Distribution Center	
24		Fujiwara Distribution Center	
25		Komono Distribution Center	
26		Kansai Delivery and Distribution Center	
27		Okayama Distribution Center	
28		Kyushu Distribution Center	
29		KOKUYO Supply Logistics	Head Office
30			Ibaraki Distribution Center
31			Metropolitan Area Integrated Distribution Center
32	Kyushu Integrated Distribution Center		
33	Chubu Integrated Distribution Center		
34	Shiga National Distribution Center		
35	Kinki Integrated Distribution Center		
36	Osaka Nanko Distribution Center		

No.	Company Name	Site Name
61		Nagasaki Office
62		Miyazaki Office
63		Kagoshima Office
64		Kumamoto Office
65		Oita Office
66		Okinawa Office
67	KOKUYO (Malaysia)	Head Office
68	KOKUYO-IK Thailand	Head Office
69	KOKUYO Camlin	PATALGANGA PLANT
70		TARAPUR PLANT
71		SAMBA PLANT
72	KOKUYO Commerce (Shanghai)	Head Office
73		Shanghai Factory
74		Beijing Office
75		Shenzhen Office

Reports by Business Sites

KOKUYO measures the impact on the natural environment of the activities of its principal business sites in Japan and overseas and uses this information when considering appropriate policies, setting objectives, and carrying out other activities.

Reports on Business Sites in Japan

KOKUYO discloses such information on seven manufacturing plants in Japan.

* In the tables featured in this report, the figure "0" indicates that numbers have been rounded off to zero. Also, "-" indicates that there are no figures corresponding to the given item.

* CO₂ emissions were calculated by applying the emission coefficient for each power company.

* Wastewater emissions are disclosed herein only for those business sites where measurements of such emissions are required by law; however, since abnormal pH values were detected at the KOKUYO Product Shiga site in fiscal 2007, its emissions have been measured and disclosed voluntarily.

▷ KOKUYO(Mie Plant)	▷ KOKUYO (Shibayama Plant)	▷ KOKUYO Product Shiga
▷ KOKUYO MVP (Tottori Factory)	▷ KOKUYO MVP (Aoya Factory)	IWAMI Paper Industry Co., Ltd. (Headquarters Factory)
IWAMI Paper Industry Co., Ltd. (Ato Factory)		

Reports on Business Sites Overseas

Information on 7 plants located in Thailand, Malaysia, Vietnam, China, and India (3 plants) are hereby disclosed. CO₂ emissions increased due to higher production at plants in Malaysia and India for fiscal 2016.

* Kokuyo Camlin (India) Talaja Factory and Jammu Factory have been closed.

* CO₂ emissions were calculated by applying the emission coefficient for each country.

▷ KOKUYO-IK (Thailand)	▷ KOKUYO (Malaysia)	▷ KOKUYO Vietnam
KOKUYO COMMERC (SHANGHAI) CO.,LTD Shanghai Factory	▷ KOKUYO Camlin (Tarapur Factory, India)	▷ KOKUYO Camlin (Patalganga Factory, India)
▷ KOKUYO Camlin (Samba Factory, India)		

KOKUYO (Mie Plant)

Location	2012 Nishitawara, Nabari-shi, Mie
Principal products	Steel desks, low partitions, etc.
Commencement of operations	May 1993
Site area	145,977 m ²



Inputs		2018	2019	2020
Energy (GJ)	Volume of energy inputs	113,465	115,536	95,839
	Fuel	44,272	45,574	38,137
	Electricity	69,193	69,962	57,702
Water resources (m ³)	City/well water	44,200	62,624	61,718
Outputs		2018	2019	2020
Atmospheric emissions (t)	CO ₂	5,953	5,567	4,410
	SO ^x	0.03	0	0
	NO ^x	0.48	0.34	0.37
Waste emissions (t)	Total waste volume	1,386	1,568	1,196
	Reuse/heat recovery	1,385	1,565	1,194
	Final disposal	1	4	3
Emissions into bodies of water (m ³)	Volume of effluent	34,971	37,361	28,416
	Emissions into public water areas	34,971	37,361	28,416
	Emissions into sewage systems	-	-	-
Restricted items emitted into bodies of water	Hydrogen ion concentration (PH)	6.6~7.9	7.0~7.6	7.4~7.9
	COD (mg / L)	20	10	13
	BOD (mg / L)	2	3	2
	SS (mg / L)	10.0	2.0	2.0

KOKUYO (Shibayama Plant)

Location	3155-4 Ohdai, Shibayama-machi, Sanbu-gun, Chiba
Principal products	Room dividers, low partitions, cabinets, etc.
Commencement of operations	June 1994
Site area	73,734 m ²



Inputs		2018	2019	2020
Energy (GJ)	Volume of energy inputs	120,215	119,547	106,889
	Fuel	61,358	61,296	51,978
	Electricity	58,857	58,251	54,911
Water resources (m ³)	City/well water	15,011	15,593	13,192
Outputs		2018	2019	2020
Atmospheric emissions (t)	CO ₂	5,920	5,838	5,155
	SO ^x	-	-	-
	NO ^x	-	-	-
Waste emissions (t)	Total waste volume	2,694	2,455	2,315
	Reuse/heat recovery	2,694	2,455	2,315
	Final disposal	0	0	0
Emissions into bodies of water (m ³)	Volume of effluent	9,879	10,462	8,755
	Emissions into public water areas	4,285	4,787	3,631
	Emissions into sewage systems	5,594	5,675	5,124
Restricted items emitted into bodies of water	Hydrogen ion concentration (PH)	7.2/6.9	7.4/6.9	7.7
	COD (mg / L)	2.2	4.6	1.2
	BOD (mg / L)	2.0	0.8	0.0
	SS (mg / L)	2.6	8.8	0.0

KOKUYO Product Shiga

Location	312 Kamigano, Aisho-cho, Echi-gun, Shiga
Principal products	Notebooks, plain paper copy paper, carbon duplication books, loose-leaf supplies, etc.
Commencement of operations	October 1980
Site area	114,294 m ²



Inputs		2018	2019	2020
Energy (GJ)	Volume of energy inputs	60,413	57,477	50,171
	Fuel	1,258	1,129	1,003
	Electricity	59,154	56,348	49,167
Water resources (m ³)	City/well water	6,869	6,123	4,741
Outputs		2018	2019	2020
Atmospheric emissions (t)	CO ₂	2,788	2,196	1,757
	SO ^x	-	-	-
	NO ^x	-	-	-
Waste emissions (t)	Total waste volume	2,549	2,436	2,215
	Reuse/heat recovery	2,549	2,436	2,215
	Final disposal	0	0	0
Emissions into bodies of water (m ³)	Volume of effluent	6,819	6,076	4,633
	Emissions into public water areas	-	-	-
	Emissions into sewage systems	6,819	6,076	4,633
Restricted items emitted into bodies of water	Hydrogen ion concentration (PH)	7.0~8.2	7.1~9.3	6.6~9.1
	COD (mg / L)	8.2	12.0	5.7
	BOD (mg / L)	7.4	6.0	8.6
	SS (mg / L)	3.4	5.8	2.9

KOKUYO MVP (Tottori Factory)

Location	2-201 Minami, Koyama-cho, Tottori-shi, Tottori
Principal products	Custom-made stationery
Commencement of operations	September 2007 (Predecessor company, KOKUYO Office Supplies Industrial, began operations in December 1962)
Site area	38,389 m ²



Inputs		2018	2019	2020
Energy (GJ)	Volume of energy inputs	16,949	15,959	15,220
	Fuel	958	952	542
	Electricity	15,991	15,007	14,677
Water resources (m³)	City/well water	8,331	10,500	6,989
Outputs		2018	2019	2020
Atmospheric emissions (t)	CO ₂	1,150	1,018	889
	SO ^x	-	-	-
	NO ^x	-	-	-
Waste emissions (t)	Total waste volume	943	946	926
	Reuse/heat recovery	928	932	911
	Final disposal	15	14	15
Emissions into bodies of water (m³)	Volume of effluent	8,331	10,500	6,989
	Emissions into public water areas	-	-	-
	Emissions into sewage systems	8,331	10,500	6,989
Restricted items emitted into bodies of water	Hydrogen ion concentration (PH)	Not subject to regulation	Not subject to regulation	Not subject to regulation
	COD (mg / L)	Not subject to regulation	Not subject to regulation	Not subject to regulation
	BOD (mg / L)	Not subject to regulation	Not subject to regulation	Not subject to regulation
	SS (mg / L)	Not subject to regulation	Not subject to regulation	Not subject to regulation

KOKUYO MVP (Aoya Factory)

Location	1114 Aoya, Aoya-cho, Tottori-shi, Tottori
Principal products	Custom made stationery
Commencement of operations	September 2007 (Predecessor company, KOKUYO Office Supplies Industrial, Aoya Factory, began operations in April 2000)
Site area	34,607 m ²



Inputs		2018	2019	2020
Energy (GJ)	Volume of energy inputs	14,324	12,898	12,395
	Fuel	1,694	882	532
	Electricity	12,630	12,016	11,863
Water resources (m ³)	City/well water	4,696	4,755	4,724
Outputs		2018	2019	2020
Atmospheric emissions (t)	CO ₂	957	813	719
	SO ^x	-	-	-
	NO ^x	-	-	-
Waste emissions (t)	Total waste volume	428	399	380
	Reuse/heat recovery	428	399	379
	Final disposal	0	1	1
Emissions into bodies of water (m ³)	Volume of effluent	4,696	4,755	4,724
	Emissions into public water areas	4,696	4,755	4,724
	Emissions into sewage systems	-	-	-
Restricted items emitted into bodies of water	Hydrogen ion concentration (PH)	Not subject to regulation	Not subject to regulation	Not subject to regulation
	COD (mg / L)	Not subject to regulation	Not subject to regulation	Not subject to regulation
	BOD (mg / L)	Not subject to regulation	Not subject to regulation	Not subject to regulation
	SS (mg / L)	Not subject to regulation	Not subject to regulation	Not subject to regulation

IWAMI Paper Industry Co., Ltd. (Headquarters Factory)

Location	I-378 Ushiroda, Tsuwano-cho, Kanoashi-gun, Shimane
Principal products	Letter paper, receipt, vocabulary notebook, memo pad, etc.
Commencement of operations	October 1918
Site area	5,382m ²



Inputs		2018	2019	2020
Energy (GJ)	Volume of energy inputs	3,096	3,359	2,733
	Fuel	489	482	374
	Electricity	2,607	2,877	2,359
Water resources (m ³)	City/well water	467	524	398
Outputs		2018	2019	2020
Atmospheric emissions (t)	CO ₂	200	202	159
	SO _x	-	-	-
	NO _x	-	-	-
Waste emissions (t)	Total waste volume	58	113	70
	Reuse/heat recovery	58	112	70
	Final disposal	0	0	0
Emissions into bodies of water (m ³)	Volume of effluent	467	524	398
	Emissions into public water areas	-	-	-
	Emissions into sewage systems	467	524	398
Restricted items emitted into bodies of water	Hydrogen ion concentration (PH)	6.3~7.5	6.4~8.0	6.0~8.4
	COD (mg / L)	Not subject to regulation	Not subject to regulation	Not subject to regulation
	BOD (mg / L)	Not subject to regulation	Not subject to regulation	Not subject to regulation
	SS (mg / L)	Not subject to regulation	Not subject to regulation	Not subject to regulation

IWAMI Paper Industry Co., Ltd. (Ato Factory)

Location	586-3 Atotokusa, Yamaguchi-shi, Yamaguchi
Principal products	Resume form, manuscript paper, slip pad, report paper, etc
Commencement of operations	October 1918



Inputs		2018	2019	2020
Energy (GJ)	Volume of energy inputs	7,580	7,707	7,597
	Fuel	486	263	169
	Electricity	7,093	7,444	7,428
Water resources (m ³)	City/well water	845	664	718
Outputs		2018	2019	2020
Atmospheric emissions (t)	CO ₂	361	158	290
	SO ^x	-	-	-
	NO ^x	-	-	-
Waste emissions (t)	Total waste volume	146	297	311
	Reuse/heat recovery	146	297	311
	Final disposal	0	0	0
Emissions into bodies of water (m ³)	Volume of effluent	845	664	718
	Emissions into public water areas	845	664	718
	Emissions into sewage systems	-	-	-
Restricted items emitted into bodies of water	Hydrogen ion concentration (PH)	7.2~7.6	6.9~7.4	6.8~7.6
	COD (mg / L)	Not subject to regulation	Not subject to regulation	Not subject to regulation
	BOD (mg / L)	Not subject to regulation	Not subject to regulation	Not subject to regulation
	SS (mg / L)	Not subject to regulation	Not subject to regulation	Not subject to regulation

KOKUYO-IK (Thailand)

Location	529 Moo 4 Bangpoo Industrial Estate Soi 8C, T. Praksa, A. Muang, Samutprakam 10280 Thailand
Principal products	Clear books (transparent document holders), PP (plain paper) files, tape adhesives, etc.
Commencement of operations	December 1996
Site area	12,679 m ²



Inputs		2018	2019	2020
Energy (GJ)	Volume of energy inputs	35,574	34,666	37,442
	Fuel	529	481	343
	Electricity	35,044	34,184	37,099
Water resources (m³)	City/well water	16,857	18,545	14,739
Outputs		2018	2019	2020
Atmospheric emissions (t)	CO ₂	1,792	1,653	1,782
	SO ^x	-	-	-
	NO ^x	-	-	-
Waste emissions (t)	Total waste volume	218	139	382
	Reuse/heat recovery	185	106	351
	Final disposal	33	33	30
Emissions into bodies of water (m³)	Volume of effluent	13,488	14,836	11,840
	Emissions into public water areas	-	-	-
	Emissions into sewage systems	13,488	14,836	11,840
Restricted items emitted into bodies of water	Hydrogen ion concentration (PH)	6.9	7.1	6.7
	COD (mg / L)	189	252.2	225.9
	BOD (mg / L)	59.5	15.0	122.2
	SS (mg / L)	48.5	8.8	8.5

KOKUYO (Malaysia)

Location	Lots 79 & 83, Persiaran Bunga Tanjung 1, Senawang Industrial Park 70400 Seremban, Negeri Sembilan Darul Khusus, Malaysia
Principal products	Steel desks, low partitions, cabinets, etc.
Commencement of operations	October 1999
Site area	58,000 m ²



Inputs		2018	2019	2020
Energy (GJ)	Volume of energy inputs	25,531	24,194	18,671
	Fuel	8,186	8,186	6,115
	Electricity	17,345	16,008	12,555
Water resources (m ³)	City/well water	14,067	16,470	10,980
Outputs		2018	2019	2020
Atmospheric emissions (t)	CO ₂	1,604	1,479	1,143
	SO ^x	-	-	-
	NO ^x	-	-	-
Waste emissions (t)	Total waste volume	342	288	186
	Reuse/heat recovery	244	237	131
	Final disposal	97	51	55
Emissions into bodies of water (m ³)	Volume of effluent	2,548	2,562	2,166
	Emissions into public water areas	1,061	1,090	996
	Emissions into sewage systems	1,487	1,472	1,170
Restricted items emitted into bodies of water	Hydrogen ion concentration (PH)	7.7	7.5	7.1
	COD (mg / L)	24.3	22.7	27.9
	BOD (mg / L)	7.6	7.3	7.9
	SS (mg / L)	8.6	12.9	6.4

KOKUYO Vietnam

Location	Land Plot B2-B7, Nomura-Haiphong IZ, An Duong Dist., Haiphong City, Vietnam
Principal products	Notebooks, flat files, files for thick covers, tack labels, etc.
Commencement of operations	November 2006
Site area	51,544 m ²



Inputs		2018	2019	2020
Energy (GJ)	Volume of energy inputs	31,292	32,320	26,486
	Fuel	574	559	421
	Electricity	30,718	31,761	26,065
Water resources (m ³)	City/well water	10,339	11,731	10,740
Outputs		2018	2019	2020
Atmospheric emissions (t)	CO ₂	1,116	1,181	967
	SO ^x	-	-	-
	NO ^x	-	-	-
Waste emissions (t)	Total waste volume	1,034	990	761
	Reuse/heat recovery	827	616	564
	Final disposal	206	374	197
Emissions into bodies of water (m ³)	Volume of effluent	8,271	9,397	8,592
	Emissions into public water areas	-	-	-
	Emissions into sewage systems	8,271	9,397	8,592
Restricted items emitted into bodies of water	Hydrogen ion concentration (PH)	7.0	7.3	7.3
	COD (mg / L)	135.73	131.3	316
	BOD (mg / L)	68.2	52.475	157.0
	SS (mg / L)	80.13	88.15	150.5

KOKUYO COMMERC (SHANGHAI) CO.,LTD Shanghai Factory

Location	No.128 RenJie RD, FengXian District, Shanghai,P.R,China 201402
Principal products	Adhesive-bound notebooks, spiral notebooks, twin-ring notebooks, report pads, etc.
Commencement of operations	August 2012
Site area	27,457.7 m ²



Inputs		2018	2019	2020
Energy (GJ)	Volume of energy inputs	10,677	11,009	10,925
	Fuel	523	669	480
	Electricity	10,153	10,340	10,445
Water resources (m ³)	City/well water	2,742	1,975	1,455
Output		2018	2019	2020
Atmospheric emissions (t)	CO ₂	783	691	685
	SO ^x	-	-	-
	NO ^x	-	-	-
Waste emissions (t)	Total waste volume	564	774	787
	Reuse/heat recovery	519	737	760
	Final disposal	45	37	28
Emissions into bodies of water (m ³)	Volume of effluent	1,893	1,778	1,313
	Emissions into public water areas	-	-	-
	Emissions into sewage systems	1,893	1,778	1,313
Restricted items emitted into bodies of water	Hydrogen ion concentration (PH)	Not subject to measurement	Not subject to measurement	Not subject to measurement
	COD (mg / L)	Not subject to measurement	Not subject to measurement	Not subject to measurement
	BOD (mg / L)	Not subject to measurement	Not subject to measurement	Not subject to measurement
	SS (mg / L)	Not subject to measurement	Not subject to measurement	Not subject to measurement

KOKUYO Camlin (Tarapur Factory, India)

Location	MIDC Tarapur, Tal- Palghar, Dist- Thane, Pin- 401506
Principal products	Art supplies, poster colors, crayons, lead for mechanical pencils, etc.
Commencement of operations	April 1974
Site area	10,045 m ²

Inputs		2018	2019	2020
Energy (GJ)	Volume of energy inputs	40,810	37,657	21,018
	Fuel	745	903	542
	Electricity	40,065	36,754	20,476
Water resources (m ³)	City/well water	31,589	25,158	20,263
Outputs		2018	2019	2020
Atmospheric emissions (t)	CO ₂	3,769	2,706	1,512
	SO ^x	-	-	-
	NO ^x	-	-	-
Waste emissions (t)	Total waste volume	104.4	138.5	105.1
	Reuse/heat recovery	104.4	138.5	105.1
	Final disposal	0	0	0
Emissions into bodies of water (m ³)	Volume of effluent	31,589	25,158	20,263
	Emissions into public water areas	-	-	-
	Emissions into sewage systems	31,589	25,158	20,263
Restricted items emitted into bodies of water	Hydrogen ion concentration (PH)	8.2	7.13	6.52
	COD (mg / L)	12.0	43.0	59.0
	BOD (mg / L)	3.0	10.0	13.0
	SS (mg / L)	10.0	16.0	38.0

KOKUYO Camlin (Patalganga Factory, India)

Location	MIDC, Village-Chavane, Taluka-Panvel, Dist-Raigad-410 220, Maharashtra, India
Principal products	Writing instrument (Marker, pencil pen, correction pen, Gel pen, sketch pen) Ink, crayon
Commencement of operations	April 2017
Site area	10,040 m ²



Inputs		2018	2019	2020
Energy (GJ)	Volume of energy inputs	26,630	30,787	15,350
	Fuel	2,084	2,360	1,324
	Electricity	24,546	28,427	14,026
Water resources (m ³)	City/well water	27,963	29,726	29,688
Outputs		2018	2019	2020
Atmospheric emissions (t)	CO ₂	2,422	2,209	1,101
	SO _x	-	-	-
	NO _x	-	-	-
Waste emissions (t)	Total waste volume	277.7	218.2	169
	Reuse/heat recovery	277.7	218.2	169
	Final disposal	0	0	0
Emissions into bodies of water (m ³)	Volume of effluent	0	0	0
	Emissions into public water areas	-	-	-
	Emissions into sewage systems	-	-	-
Restricted items emitted into bodies of water	Hydrogen ion concentration (PH)	7.3	7.2	7.3
	COD (mg / L)	8.0	81.6	8.0
	BOD (mg / L)	3.0	20.0	2.0
	SS (mg / L)	22.0	65.0	6.0

KOKUYO Camlin (Samba Factory, India)

Location	Lane No. 9, Sidco, Phase - 1 I.G.C., Samba- 184 121
Principal products	Art supplies
Commencement of operations	January 2008
Site area	10,040 m ²

Inputs		2018	2019	2020
Energy (GJ)	Volume of energy inputs	10,489	9,512	5,219
	Fuel	1,118	1,013	516
	Electricity	9,371	8,499	4,703
Water resources (m ³)	City/well water	3,288	3,870	2,563
Outputs		2018	2019	2020
Atmospheric emissions (t)	CO ₂	947	681	374
	SO ^x	-	-	-
	NO ^x	-	-	-
Waste emissions (t)	Total waste volume	111.1	86.9	59.9
	Reuse/heat recovery	104.6	86.9	59.9
	Final disposal	6.5	0	0
Emissions into bodies of water (m ³)	Volume of effluent	3,288	3,870	2,563
	Emissions into public water areas	-	-	-
	Emissions into sewage systems	3,288	3,870	2,563
Restricted items emitted into bodies of water	Hydrogen ion concentration (PH)	7.4	7.2	7.4
	COD (mg / L)	144.0	69.0	88.0
	BOD (mg / L)	18.0	16.0	17.0
	SS (mg / L)	84.1	19.0	19.0