# KOKUYO

KOKUYO Group CSR Report 2017 CSR Data



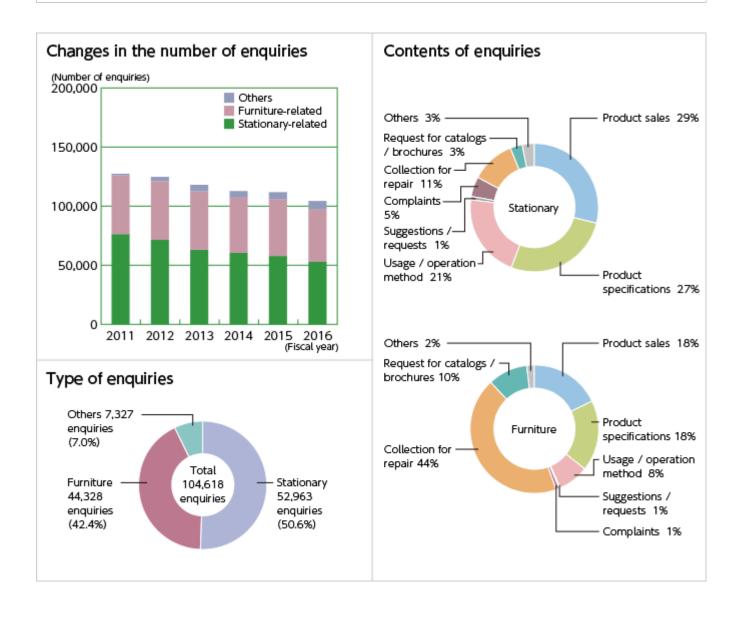
### **Society**

#### ■ Reporting period

January 1 to December 31 of the applicable year (The results are current as of December 31)



#### Reflecting the views of customers



### **Employee-Related Data**

### Non-consolidated/consolidated

		Subject	2013	2014	2015	2016
Number of Executives	Inside	Non- consolidated	3	5	5	5
and Directors	Outside	Non- consolidated	3	4	3	3
Number of	Inside	Non- consolidated	2	2	2	2
Auditors	Outside	Non- consolidated	2	2	2	2
	Male	Consolidated	4,660	5,071	4,877	4,811
	Female	Consolidated	1,739	1,602	1,791	1,785
	Total	Consolidated	6,399	6,673	6,668	6,596
Number of employees  * Including	Male	Non- consolidated	207	222	1,501	1,509
regular employees and certain	Female	Non- consolidated	133	126	486	490
contracted employees	Total	Non- consolidated	340	348	1,987	1,999
	Foreign employees in domestic establishments	Non- consolidated	14	4	16	15
Number of non-regular employees  * Figures within brackets are the percentage of non-regular employees		Consolidated	2,159 (25.23%)	2,153 (24.39%)	2,232 (25.07%)	2,244 (25.38%)
Employment rate of physically challenged persons		Special subsidiaries	2.24%	2.14%	2.12%	2.11%

#### **Major Companies**

Subjects: KOKUYO Co., Ltd., KOKUYO Marketing Co., Ltd., Kaunet Co., Ltd., KOKUYO Engineering & Technology Co., Ltd., KOKUYO Logitem Co., Ltd., KOKUYO Supply Logistics Co., Ltd.

		2013	2014	2015	2016
	Under 30	308	281	280	288
	30-39	867	765	676	654
Number of employees	40-49	1,600	1,563	1,550	1,524
by age group	50-59	694	704	800	826
	60 or older	103	131	148	182
	Total	3,572	3,444	3,454	3,474
	Male	44.28	44.86	45.46	45.87
Average age (years)	Female	37.64	37.75	38.35	38.82
	Average	42.95	43.42	44.02	44.42
Average length of	Male	18.91	19.15	19.74	20.12
continuous service	Female	13.56	13.41	13.96	14.32
(years)	Average	17.84	17.99	18.57	18.93
	Male	20	32	35	40
Graduate recruitment (persons)	Female	19	22	26	18
(регесть)	Total	39	54	61	58
	Male	37	33	13	24
Mid-career recruitment (persons)	Female	10	8	5	13
([61.661.6])	Total	47	41	18	37
Turnovor rate	Male	1.29%	1.23%	1.38%	1.15%
Turnover rate  * Excluding mandatory	Female	3.63%	3.17%	3.87%	2.16%
retirement	Total	1.75%	1.61%	1.89%	1.36%
Post appointments	(Male) Executives and higher	28	29	20	23
	(Male) 164 Department heads		122	122	122
	(Male) Section chiefs	738	715	733	723
	(Male) Sub-section chiefs	1,181	1,072	1,083	1,100

		2013	2014	2015	2016
	(Female) Executives and higher	0	1	2	1
	(Female) Department heads	1	1	3	3
	(Female) Section chiefs	29	29	33	38
	(Female) Sub-section chiefs	157	176	182	206
Post appointments	(Female) Percentage of workforce in management positions(section chiefs and higher)	3.22%	3.46%	4.04%	4.63%
	(Foreign nationals) Executives and higher	0	0	0	0
	(Foreign nationals) Department heads	0	0	0	0
	(Foreign nationals) Section chiefs	2	1	2	1
	(Foreign nationals) Sub-section chiefs	3	4	4	6
	Male	2	1	0	0
Number of employees taking child-care leave	Female	64	64	80	83
taning crima data todayo	Total	66	65	80	83
Number of employees	Male	0	0	1	1
Number of employees taking nursing-care	Female	0	0	0	1
leave	Total	0	0	1	2
Paid leave acquisition rate  ** Number of days taken in current year (including portion carried forward from preceding year) / Number of days granted in current year (not including portion carried forward from preceding year)		45.94%	49.96%	46.28%	48.20%
Yearly education and employee	-	57,330	52,305	35,570	41,914

#### **Labor Health and Safety**

Subjects: KOKUYO Co., Ltd. Mie Factory and Shibayama Factory, KOKUYO Product Shiga Co., Ltd., KOKUYO MVP Co., Ltd., IWAMI Paper Industry Co., Ltd.

	2013	2014	2015	2016
Number of work-related accident cases	5	7	11	4
Work-related accident frequency rate *1	2.26	3.12	5.04	1.87
Work-related accident severity rate*2	0.03	0.06	0.00	0.01
Number of work-related accident days of absence	72	139	7	20

<sup>\*</sup> From 2016, the work-related accident case calculations are limited to accidents requiring one or more days absence from work (excluding commuting accidents).

×1\	Work-related accident frequency rate =	
Nu	umber of employees involved in accidents requiring absence from work	
-	Total number of working hours	× 1,000,000

% 2 Work-related accident severity rate =

Number of work-days lost

\_\_\_\_\_× 1,000

Total number of working hours

#### **Environmental Performance Data**

#### ■ Reporting period

Fiscal 2016 (January 1 to December 31, 2016)

#### ■ 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

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

However, since the targets for 2016 were set for those companies in Group A shown in the table below, only data on this group has been disclosed.

		Consolidated subsidiaries	Other subsidiaries and affiliates
		KOKUYO Co., Ltd.	
В	Α	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 Vietnam Co., Ltd., KOKUYO Malaysia Sdn. Bhd., KOKUYO Finance Co., Ltd. KOKUYO & Partners Co., Ltd.	KOKUYO K Heart Co., Ltd., KOKUYO-IK (Thailand) Co., Ltd., KTL
		LmD International Co., Ltd., Actus Co., Ltd., 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. Bhd., KOKUYO Vietnam Trading Co., Ltd., KOKUYO Camlin 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., Heartland Co., Ltd.

A: The scope of coverage up to fiscal 2011 was Group A and included KOKUYO Co., Ltd., 12 consolidated subsidiaries, and 3 other subsidiaries and affiliates.

Even though KOKUYO S&T and KOKUYO Furniture were integrated with KOKUYO Co., Ltd. in October 2015, there has been no impact on the environmental performance data disclosed.

B: The scope of coverage from fiscal 2012 is Group B and includes KOKUYO Co., Ltd., 21 consolidated subsidiaries, and 10 other subsidiaries and affiliates for fiscal 2016.

### 2016 Results

Environmental	Goals and re	Evaluation	
policy	Goals	Results	Evaluation
Prevention of global	Reduction of CO₂ emissions Total year-on-year reduction in volume: +1.5% (Excluding impact of production: ▲1.4%)	▲3.0% (Excluding impact of production: ▲2.3%)	0
warming	Year-on-year reduction in unit energy consumption: ▲ 0.4% (compared to 2010: ▲ 14.0%)	Per unit of sales: ▲3.1% (compared to 2010: ▲16.4%)	0
Resource saving and recycling	Improve recycling rate in relation to total waste volume  Business offices: 96.8% and over  Construction sites: 84.3% and over	<ul><li>Business offices: 96.9%</li><li>Construction sites: 81.6%</li></ul>	O <b>A</b>
Procurement, development, and provision of eco- friendly products	Maintain eco x zero	Maintained	0
Information disclosure and communication	Publication of CSR report	The CSR Report 2016 received the Award of Excellence at the 20th Environmental Communication Awards (two consecutive years).	0
Environmental management	ISO14001: Complete the transition to the 2015 version	Completed the transition to the 2015 version  Good points: 4 cases  Matters pointed out for improvement: None  Opportunities for improvement: 21 cases	0

<sup>\*</sup> As goals have been set based on Group A for organizations subject to reporting, the results for such organizations are disclosed.

#### **Environmental Friendliness Efficiency Indicators**

The KOKUYO Group designates unique environmental friendliness efficiency indicators as indices that can 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 loads and correspond to the following four items.

- 1. CO<sub>2</sub> emissions
- 2. Final waste disposal
- Usage of chemical substances subject to PRTR regulations
- 4. Water usage

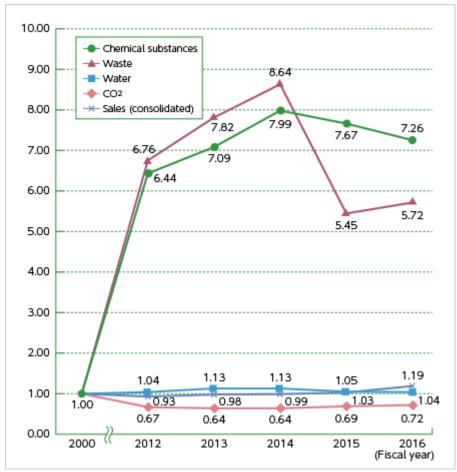
### Environmental friendliness efficiency indicator =

Current fiscal year (Sales / Environmental load data)

Baseline fiscal year (Sales / Environmental load data)

Fiscal 2000 is taken as the baseline for each indicator and the progress status for each fiscal year can be determined.

#### **Environmental friendliness efficiency indicators**



- \*\* The scope of reporting coverage up to fiscal 2011 was Group A, and from fiscal 2012, it was expanded to Group B.
- 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**

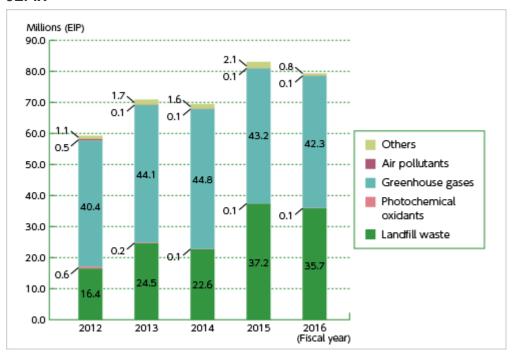
JEPIX (Japan Environmental Policy Priorities Index) is a method of quantifying the individual amount of different types of environmental loads, such as greenhouse gas emissions and air pollutants, as single indicators called Environmental Impact Points (EIP). The EIP is calculated

#### Environmental impact point (EIP) =

Σ (environmental loads x environmentally friendliness factors)

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 obtaining the sum total of them all.

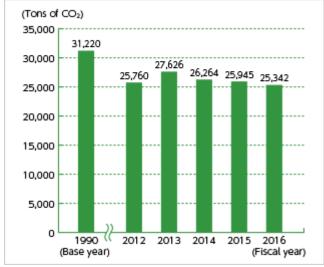
#### **JEPIX**



- \*\* The scope of reporting coverage up to fiscal 2011 was Group A, and from fiscal 2012, it was expanded to Group B.
- \*\* 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.

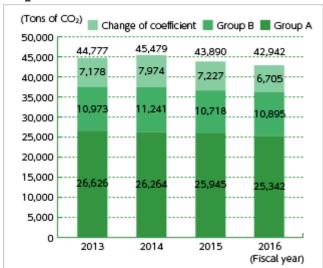
#### **Global Warming Preventive Measures**

#### CO<sub>2</sub> emissions transition



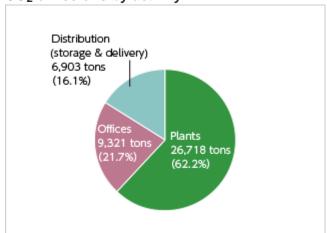
\* The above figures are for Group A.

#### CO<sub>2</sub> emissions transition

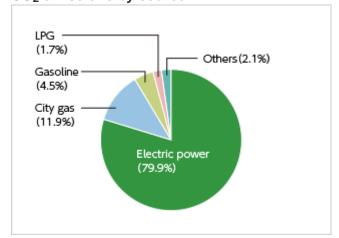


\* The above figures are for Group B.

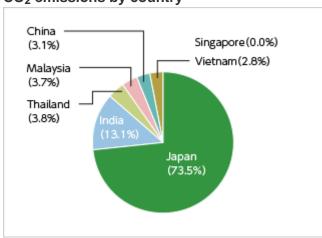
#### CO<sub>2</sub> emissions by activity



#### CO<sub>2</sub> emissions by source

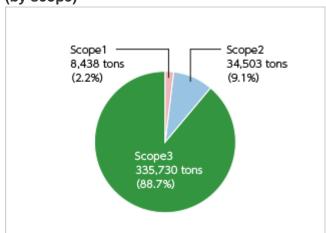


#### CO<sub>2</sub> emissions by country



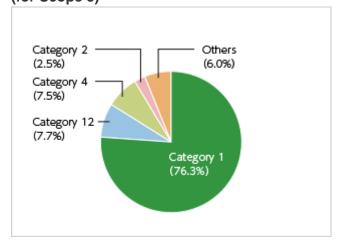
# Greenhouse gases emitted by the supply chain

(by scope)



# Greenhouse gases emitted by the supply chain

(for Scope 3)



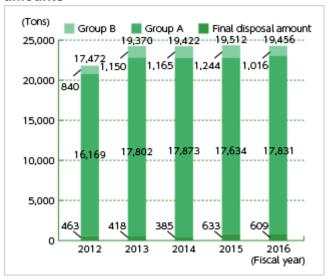
10

#### Scope 3 categories and emissions

Category		Applicable/ Not applicable	Reason for non-applicability	Scope 3 emissions	As percentage of total
Category 1	Purchased products / services	Applicable	-	256,042	76.3%
Category 2	Capital goods	Applicable	-	8,362	2.5%
Category 3	Fuel not included in Scope 1 or 2 and energy-related activities	Applicable	-	3,883	1.2%
Category 4	Shipping and delivery (upstream)	Applicable	-	25,045	7.5%
Category 5	Waste materials generated by businesses	Applicable	-	3,273	1.0%
Category 6	Business trips	Applicable	-	857	0.3%
Category 7	tegory 7 Commuting by workers		-	2,281	0.7%
Category 8	Jory 8 Leased assets (upstream)		Included in Scope 1 / 2	-	0.0%
Category 9	Shipping and delivery (downstream)	Not applicable	Included in Category 4	-	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%
Category 11	Use of sold products	Applicable	-	7,774	2.3%
Category 12	Discarding of sold products	Applicable	-	25,864	7.7%
Category 13	Leased assets (downstream)	Applicable	-	2,349	0.7%
Category 14	Category 14 Franchises		No franchises	-	0.0%
Category 15	Investments	Not applicable	No investments	-	0.0%
Total	-	-	-	335,730	-

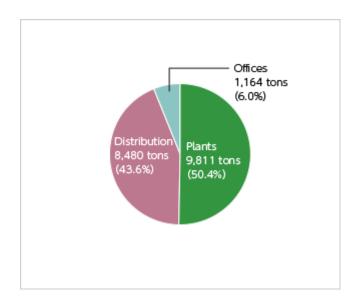
#### **Resource Saving and Recycling**

# Waste materials: Recycling and final disposal amounts

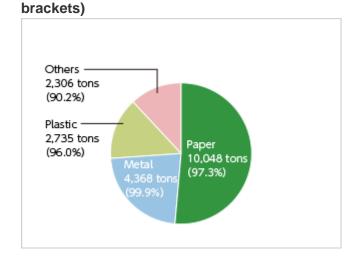


From fiscal 2012, the scope of reporting coverage was expanded to Group B.

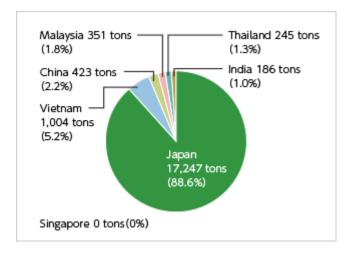
#### Waste materials by activity



# Waste material types (Recycling rate in



#### **Emissions by country**



#### **Chemical Substances Subject to PRTR Law**

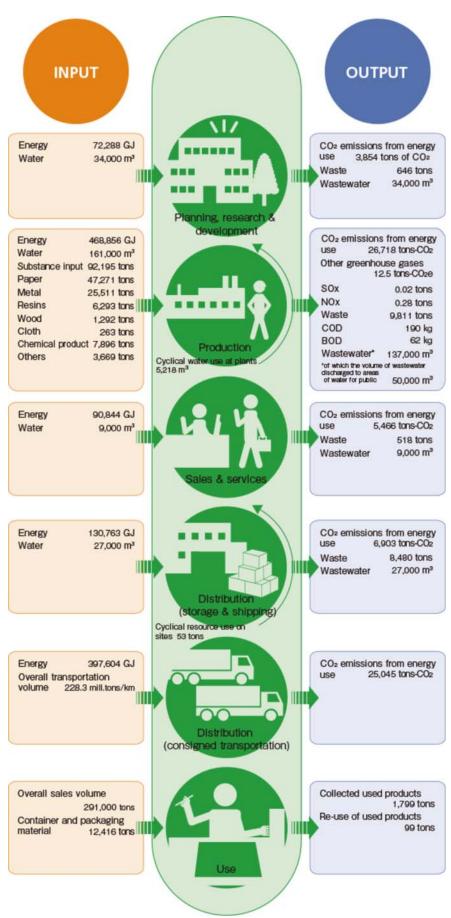
				,	Vol. released				
Official No.	Chemical name	Vol. handled (kg)	Vol. released into air (kg)	Vol. released into public bodies of water (kg)	Vol. released into sewers (kg)	Vol. sent to landfill (kg)	Sub-total (kg)	Vol. treated (kg)	Vol. consumed (kg)
1	Zinc compounds (water-soluble)	107.2	0.0	0.0	0.0	0.0	0.0	107.2	0.0
20	2-aminoethanol	70.0	66.5	3.5	0.0	0.0	70.0	0.0	0.0
53	Ethylbenzene	1.0	1.0	0.0	0.0	0.0	1.0	0.0	0.0
71	Ferric chloride	16,260.0	0.0	0.0	0.0	0.0	0.0	16,260.0	0.0
80	Xylene	39.9	33.6	0.0	0.0	0.0	33.6	0.0	6.3
125	Chlorobenzene	5.4	0.1	0.0	0.0	0.4	0.4	0.0	5.0
134	Vinyl acetate	440.9	23.6	3.5	2.2	14.2	43.6	0.0	397.3
181	Dichlorobenzene	3.6	3.6	0.0	0.0	0.0	3.6	0.0	0.0
207	2,6-Di-tert-butyl-4-cresol	5.4	0.0	0.0	0.0	0.0	0.0	0.0	5.4
235	Water-soluble salts of bromic acid	815.3	815.3	0.0	0.0	0.0	815.3	0.0	0.0
296	1,2,4-trimethylbenzene	0.9	0.9	0.0	0.0	0.0	0.9	0.0	0.0
297	1,3,5-trimethylbenzene	0.3	0.3	0.0	0.0	0.0	0.3	0.0	0.0
300	Toluene	117.0	14.8	0.0	0.0	0.9	15.7	88.7	12.6
302	Naphthalene	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
306	Hexamethylene diacrylate	18.0	0.0	0.0	0.0	0.0	0.0	0.0	18.0
309	Nickel compounds	17.2	0.0	0.0	0.0	12.0	12.0	0.0	5.2
354	Di-n-butyl phthalate	231.4	0.0	0.0	0.0	0.5	0.5	0.0	230.9
392	N-hexane	158.9	158.9	0.0	0.0	0.0	158.9	0.0	0.0
403	Benzophenone	20.2	0.0	0.0	0.0	0.0	0.0	0.0	20.2
407	Poly(oxyethylene)alkyl ether(alkyl C=12-15)	797.6	499.2	68.4	0.0	230.0	797.6	0.0	0.0
410	Poly(oxyethylene)nonylphenyl ether	19.8	19.8	0.0	0.0	0.0	19.8	0.0	0.0
447	Methylenebis(4,1- cyclohexylene)diisocyanate	151.3	0.0	0.0	0.0	0.0	0.0	0.0	151.3
448	Methylenebis(4,1- phenylene)diisocyanate	31.8	31.8	0.0	0.0	0.0	31.8	0.0	0.0
Total		19,313.0	1,669.3	75.4	2.2	258.0	2,004.9	16,455.9	852.3

<sup>\*\*</sup> The volume of PRTR Law Class I Designated Chemical Substances that were used, handled, released, transferred, disposed, recycled, and consumed by the business establishments 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).

<sup>\* &</sup>quot;Volume treated" refers to those PRTR designated substances that were treated on site by incineration, neutralization, breaking down, reactive process, etc.

<sup>\* &</sup>quot;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**



\* The above figures are for Group B.

#### Input items

iliput itellis		
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. 4.2 (April 2016) (Ministry of the Environment, Ministry of Economy, Trade and Industry).
Water	1,000 m³	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
CO <sub>2</sub> emissions from energy use	Tons of CO <sub>2</sub>	CO <sub>2</sub> emissions from the use of electricity, gas, oil, and heat. * See Global Warming Preventive Measures.  Coefficients based on the Act on Promotion of Global Warming Countermeasures (actual emission coefficients for each power company for fiscal 2014 and 2015) were used to calculate the CO <sub>2</sub> emissions from power consumption in Japan. 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 CO <sub>2</sub> emissions from power consumption overseas.  Values presented in the Greenhouse Gas Emission Calculation and Reporting Manual, Ver. 4.2 (April 2016) (Ministry of the Environment, Ministry of Economy, Trade and Industry) were used to calculate CO <sub>2</sub> 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) CO <sub>2</sub> emissions.
Other greenhouse gases	Tons of CO <sub>2</sub> e	Emissions of greenhouse gases (CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O) related to production activities, but excluding such emissions from energy sources, have been converted to a CO <sub>2</sub> 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. 4.2 (April 2016).
SO <sub>x</sub> , NO <sub>x</sub>	Tons	Emissions from smoke- and soot-producing facilities at manufacturing plants
Waste	Tons	The volume of discharged waste (emissions) is the total amount of waste and valuable substances discharged from business establishments.  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.  The final waste volume is the total volume of those discharged waste (emissions) that have been disposed of either by simple incineration or direct landfill. * See Resource Saving and Recycling.  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.
Wastewater	1,000 m³	Wastewater discharged to areas of water for public use and into the sewage system
COD, BOD	(kg)	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

#### 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	m³	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)

ltem		ent-related ments	Co	ests	Eff	ects	То	tal
	2015	2016	2015	2016	2015	2016	2015	2016
Pollution prevention	158	125	876	7,283	0	0	1,034	7,408
Global warming prevention	2,768	916	505	259	▲3,162	▲210	111	965
Resource saving and recycling	1,640	98	27,891	30,731	▲16,663	▲13,840	12,867	16,989
Procurement and provision of eco-friendly products	0	0	11,575	8,744	0	0	11,575	8,744
Survey and research into environmental technology	0	0	49	569	0	0	49	569
Environmental communication	0	0	3,187	1,893	0	0	3,187	1,893
Setting up management structures	0	0	2,896	3,699	0	0	2,896	3,699
Environmental damage response	0	0	287	43	0	0	287	43
Total	4,566	1,139	47,265	53,221	▲19,825	▲14,050	32,006	40,309

 $<sup>{\</sup>it **}$  The above figures are for Group B.

#### Breakdown of economic effects

ltem	Content of countermeasures	2015	2016
Global warming prevention	The effect of introducing energy-saving facilities	▲1,518	<b>▲</b> 71
	The effect of improving operations	▲1,644	▲139
Resource saving and recycling	Income from sorting and recycling of waste materials	▲14,488	▲13,840
	Waste reduction	▲275	0
Procurement and provision of eco- friendly products	Cost reductions achieved through the use of recycled items	▲1,900	0
Total		▲19,825	▲14,050



I
nter
ution
r
er
<u> </u>
ution
on
Center
Center
tion
n .
r
nter
Center
enter
er
r

No.	Company name	Site name	
41		Head Office	
42		Tohoku Branch	
43	KOKUYO Engineering &	Chubu Branch	
44	Technology	Kansai Office	
45		Hiroshima Office	
46		Kyushu Branch	
47		Head Office	
48		Tachikawa Office	
49		Chiba Office	
50		Saitama Office	
51		Yokohama Office	
52		Nagano Office	
53		Matsumoto Office	
54		Nagoya Office	
55		Shizuoka Office	
56		Osaka Office	
57		Umeda Office	
58	KOKINO Mariladia	Kyoto Office	
59	KOKUYO Marketing	Kobe Office	
60		Wakayama Office	
61		Hiroshima Office	
62		Yamaguchi Office	
63	-	Matsue Office	
64		Fukuoka Office	
65		Nagasaki Office	
66		Kagoshima Office	
67		Miyazaki Office	
68		Kumamoto Office	
69		Oita Office	
70		Okinawa Office	
71	KTL	Head Office	
72	KOKUYO (Malaysia)	Head Office	
73	KOKUYO-IK Thailand	Head Office	
74	KOKUYO Camlin	Samba	
75	KOKUYO Camlin	Tarapur Unit1	
76	KOKUYO Commerce (Shanghai)	Head Office	
77	KOKUYO Commerce (Shanghai)	Shanghai Factory	
78	KOKUYO Commerce (Shanghai)	Beijing Office	
79	KOKUYO Commerce (Shanghai)	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 five 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)

### Re

#### **Reports on Business Sites Overseas**

Information on 9 plants located in Thailand, Malaysia, Vietnam, China, and India (5 plants) are hereby disclosed. CO<sub>2</sub> emissions increased due to higher production at plants in Malaysia and India for fiscal 2016.

- \* CO2 emissions were calculated by applying the emission coefficient for each country.
- KOKUYO-IK (Thailand)
- KOKUYO (Malaysia)
- KOKUYO Vietnam

- KOKUYO COMMEREC (SHANGHAI) CO.,LTD Shanghai Factory
- KOKUYO Camlin (Tarapur Factory, India)
- KOKUYO Camlin (Taloja Factory, India)

- , KOKUYO Camlin (Vasai Factory, India)
- , KOKUYO Camlin (Samba Factory, India)
- KOKUYO Camlin (Jammu 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 m²



Inputs		2015	2016
Energy (GJ)	Volume of energy inputs	93,619	94,093
	Fuel	35,714	35,306
	Electricity	57,905	58,787
Water resources (m³)	City/well water	36,323	36,802
Outp	uts	2015	2016
	CO <sub>2</sub>	4,699	4,650
Atmospheric emissions (t)	SO <sub>x</sub>	0.02	0.02
	NO <sub>x</sub>	0.24	0.28
	Total waste volume	1,236	1,328
Waste emissions (t)	Reuse/heat recovery	1,235	1,327
	Final disposal	1	1
	Volume of effluent	32,985	33,709
Emissions into bodies of water (m³)	Emissions into public water areas	32,985	33,709
	Emissions into sewage systems	-	-
	Hydrogen ion concentration (PH)	7.2~7.7	7.3~8.1
Restricted items emitted into bodies of	COD(mg/L)	12.8	6.8
water	BOD(mg/L)	2.1	2.1
	SS(mg/L)	2.9	4.3

# **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 m²



Inputs		2015	2016
Energy (GJ)	Volume of energy inputs	130,228	120,595
	Fuel	64,255	59,229
	Electricity	65,974	61,366
Water resources (m³)	City/well water	18,326	16,282
Outp	uts	2015	2016
	CO <sub>2</sub>	6,644	6,087
Atmospheric emissions (t)	SO <sub>x</sub>	-	-
	NO <sub>x</sub>	-	-
	Total waste volume	2,779	2,482
Waste emissions (t)	Reuse/heat recovery	2,779	2,482
	Final disposal	0	0
	Volume of effluent	12,370	11,114
Emissions into bodies of water (m³)	Emissions into public water areas	4,838	3,357
	Emissions into sewage systems	7,532	7,757
	Hydrogen ion concentration (PH)	7.0	7.6
Restricted items emitted into bodies of	COD(mg/L)	6.0	2.0
water	BOD(mg/L)	1.0	1.5
	SS(mg/L)	0.5	2.6

# **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 m²



Inputs		2015	2016
	Volume of energy inputs	62,034	60,819
Energy (GJ)	Fuel	1,092	1,207
	Electricity	60,943	59,612
Water resources (m³)	City/well water	5,833	6,063
Outp	uts	2015	2016
	CO <sub>2</sub>	3,297	3,157
Atmospheric emissions (t)	SO <sub>X</sub>	-	-
	NO <sub>x</sub>	-	-
	Total waste volume	2,472	2,415
Waste emissions (t)	Reuse/heat recovery	2,472	2,415
	Final disposal	0	0
	Volume of effluent	5,781	6,031
Emissions into bodies of water (m³)	Emissions into public water areas	-	-
, <i>,</i>	Emissions into sewage systems	5,781	6,031
	Hydrogen ion concentration (PH)	6.7~9.3	6.7~9.3
Restricted items emitted into bodies of	COD(mg/L)	2.8	2.7
water	BOD(mg/L)	1.5	1.4
	SS(mg/L)	2.4	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 m²	



Inputs		2015	2016
	Volume of energy inputs	16,598	15,401
Energy (GJ)	Fuel	1,057	679
	Electricity	15,541	14,722
Water resources (m³)	City/well water	8,974	8,997
Outp	uts	2015	2016
	CO <sub>2</sub>	1,179	1,079
Atmospheric emissions (t)	SO <sub>x</sub>	-	-
	NO <sub>x</sub>	-	-
	Total waste volume	939	901
Waste emissions (t)	Reuse/heat recovery	932	893
	Final disposal	7	8
	Volume of effluent	8,974	8,997
Emissions into bodies of water (m³)	Emissions into public water areas	-	-
	Emissions into sewage systems	8,974	8,997
	Hydrogen ion concentration (PH)	Not subject to regulation	Not subject to regulation
Restricted items emitted into bodies of water	COD(mg/L)	Not subject to regulation	Not subject to regulation
	BOD (mg / L)	Not subject to regulation	Not subject to regulation
	SS(mg/L)	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 m²



Inputs		2015	2016
Energy (GJ)	Volume of energy inputs	13,691	14,117
	Fuel	690	557
	Electricity	13,001	13,560
Water resources (m³)	City/well water	4,026	4,122
Outp	uts	2015	2016
	CO <sub>2</sub>	966	985
Atmospheric emissions (t)	SO <sub>x</sub>	-	-
,,	NO <sub>x</sub>	-	-
	Total waste volume	406	420
Waste emissions (t)	Reuse/heat recovery	406	420
	Final disposal	0	0
	Volume of effluent	4,026	4,122
Emissions into bodies of water (m³)	Emissions into public water areas	4,026	4,122
	Emissions into sewage systems	-	-
	Hydrogen ion concentration (PH)	6.9	6.1
Restricted items emitted into bodies of water	COD(mg/L)	Not subject to regulation	Not subject to regulation
	BOD(mg/L)	1.2	1.5
	SS(mg/L)	6.8	3.3

# **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 m²	



Inputs		2015	2016
	Volume of energy inputs	33,576	32,017
Energy (GJ)	Fuel	645	612
	Electricity	32,931	31,406
Water resources (m³)	City/well water	18,073	17,628
Outp	uts	2015	2016
	CO <sub>2</sub>	1,713	1,615
Atmospheric emissions (t)	SO <sub>x</sub>	-	-
, ,	NO <sub>x</sub>	-	-
	Total waste volume	170	186
Waste emissions (t)	Reuse/heat recovery	136	158
	Final disposal	34	28
	Volume of effluent	14,458	14,102
Emissions into bodies of water (m³)	Emissions into public water areas	-	-
	Emissions into sewage systems	14,458	14,102
Restricted items emitted into bodies of water	Hydrogen ion concentration (PH)	7.9	7.8
	COD(mg/L)	162.5	93.9
	BOD(mg/L)	26.9	16.7
	SS(mg/L)	45.5	51.8

# 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 m²



Inputs		2015	2016
	Volume of energy inputs	22,450	23,750
Energy (GJ)	Fuel	6,749	6,190
	Electricity	15,700	17,560
Water resources (m³)	City/well water	5,696	12,857
Outp	uts	2015	2016
	CO <sub>2</sub>	1,426	1,513
Atmospheric emissions (t)	SO <sub>x</sub>	-	-
.,	NO <sub>x</sub>	-	-
	Total waste volume	330	351
Waste emissions (t)	Reuse/heat recovery	330	351
	Final disposal	0	0
	Volume of effluent	2,502	2,614
Emissions into bodies of water (m³)	Emissions into public water areas	1,234	1,184
	Emissions into sewage systems	1,268	1,429
Restricted items emitted into bodies of water	Hydrogen ion concentration (PH)	7.5	7.9
	COD(mg/L)	28.7	32.6
	BOD (mg / L)	6.2	13.6
	SS(mg/L)	6.1	5.2

### **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 m²



Inputs		2015	2016
	Volume of energy inputs	35,698	33,347
Energy (GJ)	Fuel	607	531
	Electricity	35,092	32,816
Water resources (m³)	City/well water	11,931	8,514
Outp	uts	2015	2016
	CO <sub>2</sub>	1,328	1,187
Atmospheric emissions (t)	SO <sub>x</sub>	-	-
	NO <sub>x</sub>	-	-
	Total waste volume	1,140	1,004
Waste emissions (t)	Reuse/heat recovery	883	767
	Final disposal	257	237
	Volume of effluent	9,545	6,811
Emissions into bodies of water (m³)	Emissions into public water areas	-	-
	Emissions into sewage systems	9,545	6,811
Restricted items emitted into bodies of water	Hydrogen ion concentration (PH)	7.26	7.20
	COD(mg/L)	82.7	89.3
	BOD (mg / L)	49.9	40
	SS(mg/L)	Not subject to measurement	Not subject to measurement

### **KOKUYO COMMEREC (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 m²

Inputs		2015	2016
	Volume of energy inputs	10,933	11,017
Energy (GJ)	Fuel	-	812
	Electricity	10,933	10,205
Water resources (m³)	City/well water	2,212	1,930
Outp	out	2015	2016
	CO <sub>2</sub>	813	806
Atmospheric emissions (t)	SO <sub>x</sub>	-	-
	NO <sub>x</sub>	-	-
	Total waste volume	690	423
Waste emissions (t)	Reuse/heat recovery	572	400
	Final disposal	118	24
	Volume of effluent	1,991	1,737
Emissions into bodies of water (m³)	Emissions into public water areas	-	-
	Emissions into sewage systems	1,991	1,737
	Hydrogen ion concentration (PH)	Not subject to measurement	Not subject to measurement
Restricted items emitted into bodies of water	COD(mg/L)	Not subject to measurement	Not subject to measurement
	BOD (mg / L)	Not subject to measurement	Not subject to measurement
	SS(mg/L)	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 m²

Inputs		2015	2016
	Volume of energy inputs	33,568	31,750
Energy (GJ)	Fuel	1,197	734
	Electricity	32,371	31,015
Water resources (m³)	City/well water	42,428	21,163
Outp	uts	2015	2016
	CO <sub>2</sub>	3,033	2,928
Atmospheric emissions (t)	SO <sub>x</sub>	-	-
	NO <sub>x</sub>	-	-
	Total waste volume	88	100
Waste emissions (t)	Reuse/heat recovery	88	99
	Final disposal	0	1.3
	Volume of effluent	12,828	21,163
Emissions into bodies of water (m³)	Emissions into public water areas	754	564
` '	Emissions into sewage systems	12,074	20,599
Restricted items emitted into bodies of water	Hydrogen ion concentration (PH)	7.5	6.4
	COD(mg/L)	74.0	97.0
	BOD(mg/L)	14.0	20.0
	SS(mg/L)	23.0	19.0

# **KOKUYO Camlin (Taloja Factory, India)**

Location	M.I.D.C Taloja Navi Mumbai - 410 208
Principal products	Ink, stick glue, etc.
Commencement of operations	April 1996
Site area	3,801 m²

Inputs		2015	2016
Energy (GJ)	Volume of energy inputs	2,752	3,415
	Fuel	188	225
	Electricity	2,565	3,189
Water resources (m³)	City/well water	8,281	8,580
Outp	uts	2015	2016
	CO <sub>2</sub>	246	312
Atmospheric emissions (t)	SO <sub>X</sub>	-	-
	NO <sub>x</sub>	-	-
	Total waste volume	0.5	0.5
Waste emissions (t)	Reuse/heat recovery	0	0
	Final disposal	0.5	0.5
	Volume of effluent	8,281	8,580
Emissions into bodies of water (m³)	Emissions into public water areas	-	-
	Emissions into sewage systems	8,281	8,580
Restricted items emitted into bodies of water	Hydrogen ion concentration (PH)	5.8	7.4
	COD(mg/L)	28.0	76.0
	BOD(mg/L)	10.0	25.0
	SS(mg/L)	46.0	13.0

### **KOKUYO Camlin (Vasai Factory, India)**

Location	Rajprabha Udyog Nagar Building No. 4, Golani Naka, Walive, Vasai (East) DistThane - 401 30
Principal products	Markers, ballpoint pens, gel pens, correction pens, mechanical pencils, etc.
Commencement of operations	2009
Site area	3,528 m²

Inputs		2015	2016
Energy (GJ)	Volume of energy inputs	9,358	11,063
	Fuel	285	246
	Electricity	9,073	10,817
Water resources (m³)	City/well water	544	553
Outputs		2015	2016
	CO <sup>2</sup>	847	1,021
Atmospheric emissions (t)	SO×	-	-
	NO×	-	-
	Total waste volume	36.5	64.4
Waste emissions (t)	Reuse/heat recovery	10.2	15.4
	Final disposal	26.3	49.0
	Volume of effluent	544	553
Emissions into bodies of water (m³)	Emissions into public water areas	-	-
	Emissions into sewage systems	544	553
Restricted items emitted into bodies of water	Hydrogen ion concentration (PH)	Not subject to regulation	Not subject to regulation
	COD(mg/L)	Not subject to regulation	Not subject to regulation
	BOD (mg / L)	Not subject to regulation	Not subject to regulation
	SS(mg/L)	Not subject to regulation	Not subject to regulation

### **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 m²

Inputs		2015	2016
Energy (GJ)	Volume of energy inputs	8,378	10,606
	Fuel	1,170	1,967
	Electricity	7,208	8,639
Water resources (m³)	City/well water	9,466	9,660
Outp	Outputs		2016
	CO <sub>2</sub>	735	937
Atmospheric emissions (t)	SO <sub>x</sub>	-	-
	NO <sub>x</sub>	-	-
	Total waste volume	39.1	66.1
Waste emissions (t)	Reuse/heat recovery	38.7	64.2
	Final disposal	0.4	2
	Volume of effluent	9,466	9,660
Emissions into bodies of water (m³)	Emissions into public water areas	-	-
	Emissions into sewage systems	9,466	9,660
Restricted items emitted into bodies of water	Hydrogen ion concentration (PH)	7.3	7.3
	COD(mg/L)	114.0	102.0
	BOD(mg/L)	22.5	18.0
	SS(mg/L)	52.0	18.0

### **KOKUYO Camlin (Jammu Factory, India)**

Location	101, Gangyal Industrial Area Phase II Jammu - 180 004
Principal products	Art supplies
Commencement of operations	April 2012
Site area	-

Inputs		2015	2016
Energy (GJ)	Volume of energy inputs	5,494	1,903
	Fuel	551	315
	Electricity	4,944	1,588
Water resources (m³)	City/well water	9,600	3,600
Outp	Outputs		2016
	CO <sub>2</sub>	489	169
Atmospheric emissions (t)	SO <sub>x</sub>	-	-
	NO <sub>x</sub>	-	-
	Total waste volume	1.6	13.8
Waste emissions (t)	Reuse/heat recovery	0	13.8
	Final disposal	1.6	0
	Volume of effluent	9,600	3,600
Emissions into bodies of water (m³)	Emissions into public water areas	9,600	3,600
	Emissions into sewage systems	-	-
Restricted items emitted into bodies of water	Hydrogen ion concentration (PH)	Not subject to regulation	Not subject to regulation
	COD(mg/L)	Not subject to regulation	Not subject to regulation
	BOD (mg / L)	Not subject to regulation	Not subject to regulation
	SS(mg/L)	Not subject to regulation	Not subject to regulation

