



## CSR Report 2015: Detailed Data

### ■ Editorial Policy

This PDF discloses detailed data not presented in the *Toppan CSR Report 2015*.

The CSR report is edited in line with the seven core subjects set under ISO 26000, a guidance standard on social responsibility. In the *Detailed Data*, Toppan also uses the core subjects as its main titles.

### ■ Scope and Boundary

The data on Labor Practices covers Toppan Printing Co., Ltd. only. The scope of the environmental performance data is presented in the table below, which shows indicators assured by an independent assurance provider.

### ■ Reliability

KPMG AZSA Sustainability Co., Ltd. provides independent assurance for this PDF, along with the *Toppan CSR Report 2015*. The following are environmental performance indicators in the *Detailed Data* assured by the independent assurance provider.

### Environmental Performance Indicators Assured by an Independent Assurance Provider and Scope of the Environmental Performance Data

- ① Toppan Printing Co., Ltd. ("the Company")
- ② 16 domestic manufacturing subsidiaries subject to the Company's environmental targets
- ③ 19 domestic subsidiaries not subject to the Company's environmental targets
- ④ 25 overseas subsidiaries

Pages	Category	Data	Indicator Assured by an Independent Assurance Provider	Companies	Scope		
P. 2	The Environment	Values, Results, and Evaluation of Environmental Targets for Fiscal 2014 and Environmental Target Values for Fiscal 2015	✓	17	①, ②		
P. 3	Toppan's Environmental Burden	INPUT/OUTPUT Data by Business Field for Domestic Sites (subject to the environmental targets)	✓	17	①, ②		
P. 4		INPUT/OUTPUT Data by Business Field for Domestic Sites (not subject to the environmental targets)	✓	19	③		
P. 5		INPUT/OUTPUT Data by Business Field for Overseas Sites (not subject to the environmental targets)	✓	25	④		
		Environmental Impact and Environmental Efficiency	—	17	①, ②		
P. 5	Environmental Management Activities	ISO 14001 Certificates Obtained at Toppan Printing Co., Ltd. and Domestic Manufacturing Subsidiaries (subject to the environmental targets)	—	17	①, ②		
		ISO 14001 Certificates Obtained at Domestic Subsidiaries (not subject to the environmental targets)	—	19	③		
		ISO 14001 Certificates Obtained at Overseas Subsidiaries (not subject to the environmental targets)	—	25	④		
		Fiscal 2014 Results of Environmental Education	✓	38	①-③		
P. 6-8	Eco-protection Activities	Mitigating Global Warming	Numbers of Internal Environmental Audits and Issues in Need of Improvement	✓	38	①-③	
			Building a Recycling-oriented Society	Scope 1-3 Greenhouse Gas Emissions	✓	17	①, ②
				Mitigation of Global Warming through the Development of Energy-saving Measures	—	17	①, ②
				Energy Consumption	✓	17	①, ②
		Ratios by Energy Type (in terms of calorific value)		✓	17	①, ②	
		Electricity Consumption		✓	17	①, ②	
		Natural Gas Consumption		✓	17	①, ②	
		Kerosene Consumption		✓	17	①, ②	
		Fuel Efficiency of Vehicles Owned by Toppan Logistics	✓	1	Toppan Logistics Co., Ltd.		
		P. 8	Preventing Pollution / Controlling Chemical Substances	Ratios of Greenhouse Gas Emissions by Type (in tons of CO <sub>2</sub> equivalent)	✓	61	①-④
				Ratios of Greenhouse Gas Emissions by Source (in tons of CO <sub>2</sub> equivalent)	✓	61	①-④
P. 9	Promoting the Conservation of Biodiversity	Promotion of Waste Reduction and Recycling	—	17	①, ②		
		Waste Discharge per Unit of Production Value	✓	17	①, ②		
P. 10	Eco-creativity Activities	Fiscal 2014 Results of Waste Discharge and Recycling	✓	17	①, ②		
		Zero-emission Sites (TZERO-14)	—	38	①-③		
P. 11-12	Environmental Accounting	PRTR Data for Fiscal 2014	✓	17	①, ②		
		ECO-GREEN Purchasing	✓	17	①, ②		
	Green Procurement and Green Purchasing	List of Environmentally Friendly Products	—	17	①, ②		
		Capital Investment for Environmental Conservation	✓	51	—		
P. 12	Green Procurement and Green Purchasing	Environmental Conservation Benefit	✓	61	①-④		
		Green Procurement Standards for Paper and Level of Fulfillment	—	9 suppliers	—		
		Green Procurement Standards for Ink and Level of Fulfillment	—	4 suppliers	—		
		In-house Green Purchasing Standards and Levels of Fulfillment	✓	17	①, ②		

Note: Total values may not exactly match the sum totals of individual values, as decimals are rounded up or down.

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## Labor Practices

### Results in Human Asset Development

	Funds Spent on Training, etc. per Employee	Usage Rates of Toppan Training Centers*1	
		Kawaguchi	Yugawara
Fiscal 2012	64,482 yen	49.3%	32.6%
Fiscal 2013	82,318 yen	51.5%	39.2%
Fiscal 2014	77,654 yen	60.8%	28.2%

\*1 Number of days the training centers were used in a year (including use by subsidiaries and affiliated companies).

### Retention Rates for Recruits

(Percentage of fiscal 2012 hires still working at Toppan)

	Male	Female
Hired on April 1, 2012	165	61
Still with Toppan as of April 1, 2015	150	58
Retention rate	91%	95%
Average for males and females	92%	
Percentage who leave the Company before working three years	8%	

### Main Leave Systems / Measures to Support Work-Life Balance and Foster the Next Generation

<b>Stock Leave</b>	Employees can accumulate up to 50 days of annual paid leave (exercisable within two years from the date the days are granted). Employees are eligible to use their stock leave for medical treatment for themselves or their dependents, healthcare or nursing care for their families, recovery-work in the aftermath of unexpected disasters, and so on.
<b>Childcare Leave</b>	Both mothers and fathers are eligible for fulltime childcare leave consecutively until the first March 31 after their child reaches the age of 12 months. (As of March 31, 2015, twenty-three male employees have taken childcare leave on a cumulative basis.) The first five days of childcare leave can be taken as paid leave. From the sixth day, employees on leave receive 10% of their regular salaries from the Company (until their child reaches the age of 18 months) and subsidies of 30,000 yen a month from the Toppan Group Fraternal Benefit Society. They can also work for shorter hours (maximum reduction of two hours per day) or select a flextime or irregular working schedule from the date of their return to the job until their child completes the third year of elementary school. The Company subsidizes certain childcare costs and provides childcare-related information through a consultation office.
<b>Rehiring of Employees who Leave the Company to Raise Children</b>	Rehiring is guaranteed for an employee who resigns to deliver and raise a child, provided that the employee has worked for Toppan for more than three consecutive years up to the date of resignation. A resigned employee who meets this condition will remain eligible for rehiring until May 1 of the year when the child enters elementary school.
<b>Nursing Care Leave</b>	Employees are entitled to take leave for nursing care. The maximum consecutive leave and maximum reduction in a working day are one year and two hours, respectively, for every family member requiring nursing care. The Toppan Group Fraternal Benefit Society pays a 30,000-yen subsidy per month as assistance during the leave. The Company subsidizes certain nursing care costs and provides nursing care-related information.
<b>Leave for Child Healthcare</b>	Employees can take up to 10 days of leave a year, regardless of the number of children they are raising. (Five days can be taken as paid leave, either as full days or half-day allotments, as necessary.)
<b>Volunteer Leave</b>	Employees can take volunteer leave to engage in socially beneficial activities for up to one year. Employees on volunteer leave receive an allowance.
<b>Staggered Work-hours</b>	An employee can adjust daily working hours upward or downward by up to one hour to avoid rush-hour commutes during pregnancy and by up to two hours for childcare (until his or her child completes the third year of elementary school).
<b>Dependent Family Allowance</b>	For employees with children, the Company pays a monthly allowance of 20,000 yen for each child. This allowance is discontinued on the first April 1 to arrive after the child's 18th birthday. (No limit for the number of children is applied.)
<b>Partial Subsidization of Babysitter Expenses</b>	The Toppan Group Fraternal Benefit Society subsidizes 50% of babysitter expenses (up to 5,000 yen per day) for up to 90 days a year.
<b>Other Systems</b>	The Toppan Group Health Insurance Union offers a lump-sum allowance for childbearing and childrearing. It also provides free one-year subscriptions to the monthly childrearing magazine <i>Baby and Mommy</i> and runs a consultation office for employees with questions about the health of the body and mind.

## The Environment

### Values, Results, and Evaluation of Environmental Targets for Fiscal 2014 and Environmental Target Values for Fiscal 2015

Environmental Targets	Management Indicators	Fiscal 2014				Environmental Target Values for Fiscal 2015
		Target Values	Results	Achievement Rates	Evaluation	
1. Mitigation of global warming Reduce CO <sub>2</sub> emissions	CO <sub>2</sub> emissions	620 kilotons	593 kilotons	104.3%	A	613 kilotons
	CO <sub>2</sub> emissions per unit of sales	0.70 tons/million yen	0.72	97.1%	B	0.70 tons/million yen
2. Action for building a recycling-oriented society Reduce final landfill waste disposal	Final landfill waste disposal	375 tons	373 tons	100.5%	A	240 tons
3. Conservation of the atmospheric environment Reduce VOC emissions into the atmosphere	VOC emissions into the atmosphere	4,527 tons	3,935 tons	113.1%	S	4,000 tons

Evaluation criteria

S: Results achieved far surpass the targets (achievement rate [%]  $\geq$  105)

A: Targets achieved (100  $\leq$  achievement rate [%] < 105)

B: Activities fully carried out, but targets unachieved (70  $\leq$  achievement rate [%] < 100)

C: Activities insufficient (achievement rate [%] < 70)

Achievement rates: 200 - (values actually achieved / target values)  $\times$  100 [%]

### Medium-and-long-term Environmental Targets for Fiscal 2020

① Mitigation of global warming	•Reduce CO <sub>2</sub> emissions by 20% compared to the fiscal 2008 level (751 kilotons → 600 kilotons: -151 kilotons)
② Action for building a recycling-oriented society	•Reduce final landfill waste disposal by 87% compared to the fiscal 2008 level (1,584 tons → 206 tons: -1,378 tons)
③ Conservation of the atmospheric environment	•Reduce VOC emissions into the atmosphere by 70% compared to the fiscal 2008 level (7,326 tons → 2,198 tons: -5,128 tons)

## Toppan's Environmental Burden\*1

### INPUT/OUTPUT Data by Business Field for Domestic Sites (subject to the environmental targets)

Category	Chief Component	Information & Communication	Living Environment	Material Solutions	Non-production sites	Total	
INPUT	Material	Total input (tons)	663,928	528,554	76,715	0	1,269,197
		Papers (tons)	645,840	336,169	11,009	0	993,019
		Plastic (tons)	2,294	140,157	22,699	0	165,149
		Glass (tons)	0	1	8,825	0	8,826
		Ink, solvent (tons)	13,025	36,032	20,383	0	69,440
		Other (tons)	2,769	16,195	13,799	0	32,764
	Energy	Total energy consumption (1,000 GJ)	3,477	4,634	4,831	645	13,586
		Primary energy [fuel] (1,000 GJ)	1,239	1,495	899	91	3,725
		Secondary energy [electricity, steam] (1,000 GJ)	2,238	3,138	3,931	554	9,862
	Water	Water consumption (1,000 m <sup>3</sup> )	845	1,772	4,366	350	7,333
		Industrial water (1,000 m <sup>3</sup> )	294	626	262	4	1,186
		Municipal water (1,000 m <sup>3</sup> )	349	453	225	334	1,360
		Groundwater (1,000 m <sup>3</sup> )	202	693	3,879	0	4,775
		Rainwater used (1,000 m <sup>3</sup> )	1	0	0	12	13
		Use of water circulated on premises (1,000 m <sup>3</sup> )	6	19	3,604	0	3,629
	Chemical substances	Handling of chemical substances designated under the PRTR law (tons)	665	1,773	2,123	2	4,463
	Atmosphere	CO <sub>2</sub> emission (t-CO <sub>2</sub> )	149,773	218,570	198,738	26,011	593,092
		CO <sub>2</sub> emission [fuel] (t-CO <sub>2</sub> )	63,719	97,624	47,561	4,716	213,618
		CO <sub>2</sub> emission [electricity, steam] (t-CO <sub>2</sub> )	86,054	120,947	151,177	21,295	379,474
		Emission of ozone-depleting substances (ODP-kg)	0	65	1	0	66
		Emission of dioxins (mg-TEQ)	3	1	0	0	4
Release of chemical substances designated under the PRTR law (tons)		38	111	36	1	185	
VOC emission into the atmosphere (tons)*2		579	2,619	738	0	3,935	
Water and soil environments	Total effluent discharge (1,000 m <sup>3</sup> )	530	1,340	4,010	338	6,218	
	Into public water system (1,000 m <sup>3</sup> )	9	910	3,704	0	4,624	
	Into sewage system (1,000 m <sup>3</sup> )*3	520	429	306	338	1,594	
	BOD (kg)	10	941	9,772	0	10,722	
	COD (kg)	0	2,131	6,965	0	9,096	
	Nitrogen discharge (kg)	0	2,395	11,803	0	14,198	
	Phosphorous discharge (kg)	0	530	381	0	911	
	Release of chemical substances designated under the PRTR law (tons)	0	0	0	0	0	
Waste	Total discharge (tons)	120,470	93,631	24,177	3,940	242,218	
	Recycled (tons)	120,306	93,075	24,122	3,708	241,212	
	Final landfill disposal (tons)	15	173	57	128	373	

\*1 Energy consumption associated with fuel consumption is calculated using the conversion factor specified in the year 2000 amendment of the Act on the Rational Use of Energy of Japan. The primary energy input associated with electricity consumption is calculated uniformly as 0.00983 GJ/kWh. CO<sub>2</sub> emissions are calculated by the method specified in the Guidelines for Calculating Greenhouse Gas Emissions from Businesses (2003) issued by the Ministry of the Environment of Japan. CO<sub>2</sub> emissions associated with electricity consumption are calculated uniformly as 0.378 t-CO<sub>2</sub>/MWh. CO<sub>2</sub> emissions associated with electricity consumption at overseas sites, however, are calculated based on the CO<sub>2</sub> emission conversion factors (applied to specific countries for the year of 2000) published by the Greenhouse Gas Protocol Initiative. CO<sub>2</sub> emissions (fuel) include CO<sub>2</sub> emissions associated with combustibles burned in incinerators. The total discharge of waste includes industrial waste of no value and waste materials of value sold or transferred as resources (both generated in association with business activities).

\*2 Emissions into the atmosphere are calculated in conformance with the standards established by the Japan Federation of Printing Industries (JFPI) and the Japan Electronics and Information Technology Industries Association (JEITA).

\*3 Includes 19,943 m<sup>3</sup> of spring water from the premises of the Akihabara Sales Building.

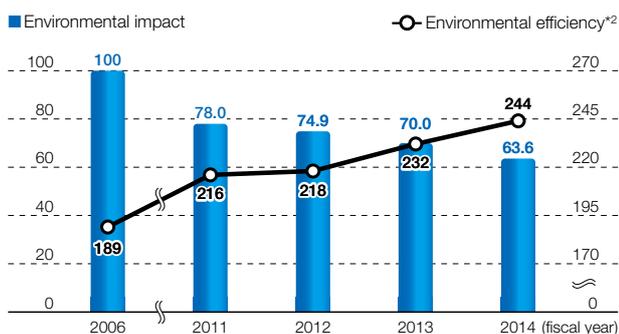
**INPUT/OUTPUT Data by Business Field for Domestic Sites (not subject to the environmental targets)**

Category	Chief Component	Information & Communication	Living Environment	Material Solutions	Non-production sites	Total		
INPUT	Material	Total input (tons)	514,881	7,584	69,697	0	592,161	
		Papers (tons)	502,001	2,926	1,618	0	506,546	
		Plastic (tons)	3,335	3,385	65,892	0	72,613	
		Glass (tons)	0	0	84	0	84	
		Ink, solvent (tons)	7,539	1,016	1,160	0	9,714	
	Other (tons)	2,006	257	942	0	3,205		
	Energy	Total energy consumption (1,000 GJ)	2,251	218	903	0	3,371	
		Primary energy [fuel] (1,000 GJ)	197	50	71	0	318	
		Secondary energy [electricity, steam] (1,000 GJ)	2,053	168	832	0	3,053	
	Water	Water consumption (1,000 m <sup>3</sup> )	1,486	24	913	31	2,455	
		Industrial water (1,000 m <sup>3</sup> )	35	0	0	0	35	
		Municipal water (1,000 m <sup>3</sup> )	219	24	60	31	334	
		Groundwater (1,000 m <sup>3</sup> )	1,217	0	853	0	2,070	
		Rainwater used (1,000 m <sup>3</sup> )	16	0	0	0	17	
		Use of water circulated on premises (1,000 m <sup>3</sup> )	1	0	20	0	22	
	Chemical substances	Handling of chemical substances designated under the PRTR law (tons)	8	43	48	0	100	
	OUTPUT	Atmosphere	CO <sub>2</sub> emission (t-CO <sub>2</sub> )	89,955	9,063	36,474	0	135,492
			CO <sub>2</sub> emission [fuel] (t-CO <sub>2</sub> )	10,997	2,605	4,483	0	18,085
			CO <sub>2</sub> emission [electricity, steam] (t-CO <sub>2</sub> )	78,958	6,458	31,991	0	117,407
Emission of ozone-depleting substances (ODP-kg)			0	0	1	0	1	
Emission of dioxins (mg-TEQ)			0	0	0	0	0	
Release of chemical substances designated under the PRTR law (tons)			0	1	0	0	1	
VOC emission into the atmosphere (tons)			498	8	798	0	1,304	
Water and soil environments		Total effluent discharge (1,000 m <sup>3</sup> )	924	14	818	27	1,782	
		Into public water system (1,000 m <sup>3</sup> )	747	4	809	3	1,563	
		Into sewage system (1,000 m <sup>3</sup> )	177	10	8	24	220	
		BOD (kg)	516	0	6,069	0	6,585	
		COD (kg)	1,099	0	0	62	1,161	
		Nitrogen discharge (kg)	661	0	0	0	661	
	Phosphorous discharge (kg)	69	0	0	0	69		
Waste	Release of chemical substances designated under the PRTR law (tons)	0	0	1	0	1		
	Total discharge (tons)	56,733	2,816	10,257	624	70,431		
	Recycled (tons)	56,332	2,814	10,126	624	69,896		
	Final landfill disposal (tons)	46	0	10	0	57		

**INPUT/OUTPUT Data by Business Field for Overseas Sites (not subject to the environmental targets)**

Category	Chief Component	Information & Communication	Living Environment	Material Solutions	Non-production sites	Total	
INPUT	Material	Total input (tons)	344,103	62,823	14,046	—	420,972
		Papers (tons)	334,718	36,745	27	—	371,490
		Plastic (tons)	556	9,843	28	—	10,427
		Glass (tons)	5	0	7,107	—	7,112
		Ink, solvent (tons)	4,954	15,149	1,656	—	21,759
		Other (tons)	3,870	1,086	5,228	—	10,184
	Energy	Total energy consumption (1,000 GJ)	1,204	917	2,866	—	4,987
		Primary energy [fuel] (1,000 GJ)	125	405	37	—	568
		Secondary energy [electricity, steam] (1,000 GJ)	1,079	512	2,829	—	4,419
	Water	Water consumption (1,000 m <sup>3</sup> )	1,022	140	1,937	—	3,099
		Municipal water (1,000 m <sup>3</sup> )	1,005	121	1,877	—	3,003
		Groundwater (1,000 m <sup>3</sup> )	17	19	60	—	96
		Rainwater used (1,000 m <sup>3</sup> )	0	0	0	—	0
	Atmosphere	CO <sub>2</sub> emission (t-CO <sub>2</sub> )	91,782	58,243	180,646	—	330,670
		CO <sub>2</sub> emission [fuel] (t-CO <sub>2</sub> )	7,979	23,562	2,450	—	33,991
		CO <sub>2</sub> emission [electricity, steam] (t-CO <sub>2</sub> )	83,802	34,681	178,195	—	296,679
		Emission of ozone-depleting substances (ODP-kg)	0	0	42	—	42
	Water and soil environments	Total effluent discharge (1,000 m <sup>3</sup> )	929	109	1,540	—	2,579
		Into public water system (1,000 m <sup>3</sup> )	101	15	177	—	294
Into sewage system (1,000 m <sup>3</sup> )		828	94	1,363	—	2,285	
BOD (kg)		0	531	383	—	914	
COD (kg)		880	715	1,091	—	2,686	
Nitrogen discharge (kg)		127	0	292	—	419	
Phosphorous discharge (kg)		0	0	1	—	1	
Waste	Total discharge (tons)	61,530	13,242	4,897	—	79,670	
	Recycled (tons)	59,635	9,668	4,525	—	73,829	
	Final landfill disposal (tons)	1,895	3,247	305	—	5,447	

## Environmental Impact and Environmental Efficiency\*1



\*1 The value in fiscal 2006 = 100 (baseline); Recalculated with non-production sites excluded.

\*2 Net sales / environmental impact

## Environmental Management Activities

### ISO 14001 Certification

(67 systems at 131 sites, as of March 31, 2015)

■ ISO 14001 Certificates Obtained at Toppan Printing Co., Ltd. and Domestic Manufacturing Subsidiaries (subject to the environmental targets)

Operational Site (Division or Manufacturing Subsidiary)	Registrar	Registration Date
Material Solutions Division	JQA	Jul. 1998
Toppan Cosmo, Inc. [Kashiwa Plant and Satte Plant of Toppan Decor Products Inc.]	ICL	Mar. 2000
Akihabara Office (Living Environment Division)	JQA	Mar. 2001
Tokyo-based sites (Information & Communication Manufacturing Subdivision)	SAI GLOBAL	Feb. 2002
Fukusaki Plant [including Wakayama Plant and Fukusaki Plant of Toppan Plastic Co., Ltd.] (Toppan Packaging Products Co., Ltd.)	JQA	Jul. 2002
Takino Site	JQA	Oct. 2002
Azusawa Site, Atago Site, Niiza Site, Kawaguchi Site, Sakado Site (Toppan Logistics Co., Ltd.)	ICL	Oct. 2002
Gunma Plant (Toppan Packaging Products Co., Ltd.)	JQA	Jul. 2003
Asaka Plant	SAI GLOBAL	Dec. 2003
Mito Plant (Toppan Prosprint Co., Ltd.)	JSA	Jan. 2004
Saitama Plant, Miyagi Plant, Sano Plant (Toppan Containers Co., Ltd.)	JQA	Apr. 2004
Chugoku & Shikoku Subdivision [including Fukuyama Plant of Toppan Joho Kako Co., Ltd. and Hiroshima Office]	ICL	Oct. 2004
Nishinohon Division	JQA	Nov. 2004
Higashinohon Division	ICL	Mar. 2005
Toppan Technical Research Institute	JQA	May 2005
Sapporo Plant, Chitose Plant (Hokkaido Subdivision)	ICL	Jun. 2005
Satte Plant [including Koshigaya Plant] (Toppan Plastic Co., Ltd.)	SAI GLOBAL	Dec. 2006
Ranzan Plant, Kyushu Plant (Toppan Packaging Service Co., Ltd.)	JQA	Feb. 2007
Sagamihara Plant (Toppan Packaging Products Co., Ltd.)	SAI GLOBAL	Mar. 2007
Saga Plant (Toppan Plastic Co., Ltd.)	ICL	Nov. 2007
Fukuoka Plant (Toppan Packaging Products Co., Ltd.)	ICL	Oct. 2008
Head office, Kansai branch (Toppan Techno Co., Ltd.)	SAI GLOBAL	Mar. 2009
Sodegaura Beverage Plant (Toppan Packaging Service Co., Ltd.)	SAI GLOBAL	Apr. 2009
Fukuoka Plant (Toppan Communication Products Co., Ltd.)	ICL	Oct. 2009
Nagoya Plant (Chubu Division)	JQA	Dec. 2010
Mikkabi Plant (Toppan Packaging Products Co., Ltd.)	SAI GLOBAL	Nov. 2010
Tamana Plant (Toppan Packaging Products Co., Ltd.)	ICL	Mar. 2012
Matsusaka Plant (Chubu Division)	JQA	Mar. 2012
Itami Plant (Toppan Packaging Products Co., Ltd.)	JQA	Sep. 2012

■ ISO 14001 Certificates Obtained at Domestic Subsidiaries (not subject to the environmental targets)

Operational Site (Group Company)	Registrar	Registration Date
Total Media Development Institute Co., Ltd.	JSA	Mar. 2001
Head office, Saitama Plant (Livretch Co., Ltd.)	JCQA	Jul. 2001
Fukushima Plant [including Takino Plant, Sagamiara Plant] (Toppan TDK Label Co., Ltd.)	RB-ISO	Nov. 2001
R&D Center (Toppan Forms Co., Ltd.)	JQA	Mar. 2004
Toppan Forms Tokai Co., Ltd.	JQA	Aug. 2004
Toppan Forms Kansai Co., Ltd.	JQA	Apr. 2007
Toppan Forms Nishinohon Co., Ltd.	JQA	Jan. 2005
Hino Plant (Toppan Media Printec Tokyo Co., Ltd.)	JSA	Nov. 2005
Zama Plant (Toppan Media Printec Tokyo Co., Ltd.)	JACO	Sep. 2009
Kansai Tosho Printing Co., Ltd.	JQA	Jun. 2005
Tosho Printing Co., Ltd.	JQA	May 2003
Head office, Kochi Plant (Ortus Technology Co., Ltd.)	BV	Feb. 2008
Toppan Forms (Sanyo) Co., Ltd.	JQA	Oct. 2009
Gunma Plant (Tamapoly Co., Ltd.)	JQA	Feb. 2011
Toppan Forms Central Products Co., Ltd.	JQA	Sep. 2011
Mita Plant (Tamapoly Co., Ltd.)	JQA	Jan. 2012
Tokyo Logistics Co., Ltd.	JIA-QA	Aug. 2010

■ ISO 14001 Certificates Obtained at Overseas Subsidiaries (not subject to the environmental targets)

Group Company	Registrar	Registration Date
Toppan Photomasks France SAS	LRQA	Oct. 2000
Toppan Photomasks, Inc. [Santa Clara, Round Rock]	LRQA	Nov. 2001
Siam Toppan Packaging Co., Ltd.	MASCI	Apr. 2002
Toppan Printing Co., (H.K.) Ltd.	DNV	May 2002
Toppan Chunghwa Electronics Co., Ltd.	SGS	Oct. 2003
Toppan Photomasks Germany GmbH	LRQA	Oct. 2004
Toppan CFI (Taiwan) Co., Ltd.	SGS	Nov. 2004
Kaohsiung Plant of Toppan CFI (Taiwan) Co., Ltd.	SGS	Nov. 2010
P.T. Indonesia Toppan Printing	LRQA	Nov. 2004
Toppan Photomasks Korea Limited	LRQA	Feb. 2005
Toppan Photomasks Co., Ltd. Shanghai	LRQA	Feb. 2005
Toppan SMIC Electronics (Shanghai) Co., Ltd.	BSI	Feb. 2007
Toppan Leefung Printing (Shanghai) Co., Ltd.	CCCI	Apr. 2007
Toppan Yau Yue Paper Products (Shenzhen) Co., Ltd.	SGS	Nov. 2007
Shanghai Toppan Printing Co., Ltd.	NQA	Jul. 2008
Toppan Leefung Changcheng Printing (Beijing) Co., Ltd.	ZDHY	Nov. 2009
Toppan Yau Yue Paper Products (Dongguan) Co., Ltd.	MIC	Jan. 2009
Toppan Leefung Printing Limited (H.K.)	CNAS	Mar. 2009
Toppan Leefung Packaging & Printing (Dongguan) Co., Ltd.	CNAS	Mar. 2009
Toppan Excel Printing (Guangzhou) Company Limited	CTC	May 2009
Toppan Excel Printing (Meizhou) Co., Ltd.	CQC	Sep. 2013
Toppan Security Printing Pte. Ltd.	TUV	Aug. 2010
Toppan Yau Yue Packaging (Shenzhen) Co., Ltd.	SGS	May 2012
Toppan Leefung Printing (Shenzhen) Co., Ltd.	SGS	May 2012

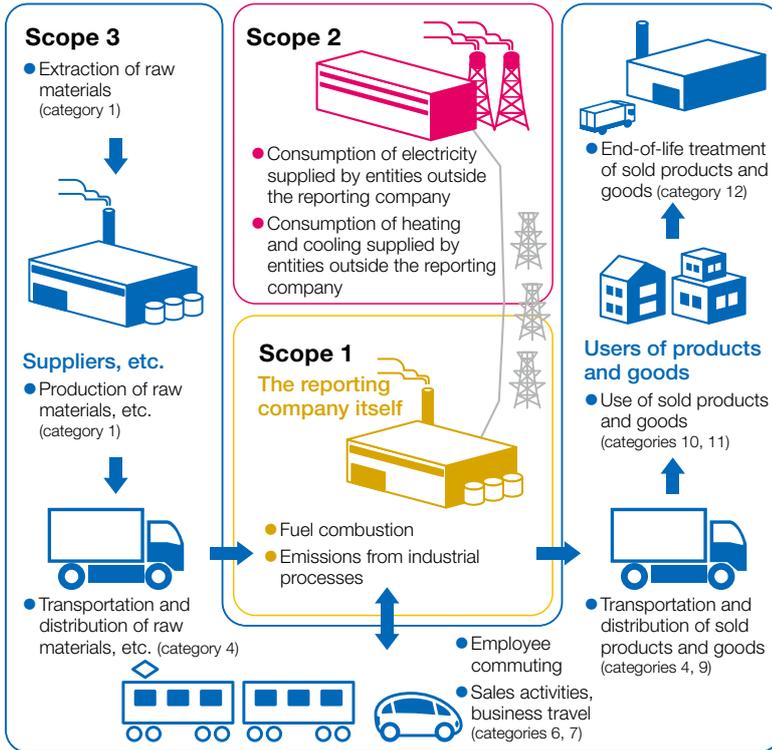
## Fiscal 2014 Results of Environmental Education

Training	Number of Trainees
New employee training: General environmental education	268
E-learning program: CSR/environment for fiscal 2014	19,695
Toppan Business School (1 course)	41
Toppan Challenge School (14 courses)	72
Internal environmental auditor training program	72

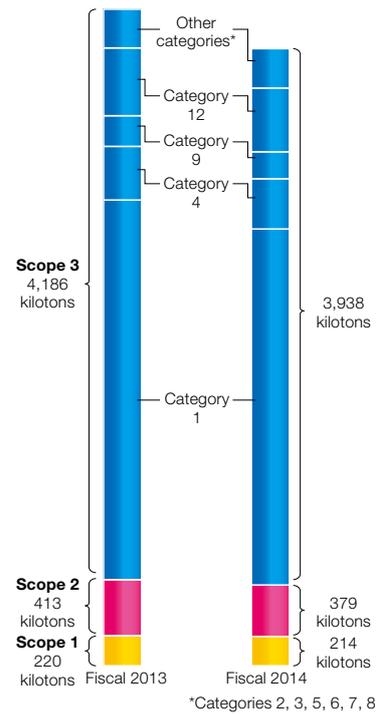
## Numbers of Internal Environmental Audits and Issues in Need of Improvement

Domestic sites audited	60 sites
Issues in need of improvement identified at domestic sites	168 issues
Domestic sites reviewed	4 sites

**Mitigating Global Warming**  
**Calculating Scope 3 Emissions**



**Scope 1-3 Greenhouse Gas Emissions**



Emissions Type	
Direct emissions (Scope 1)	Direct emissions from industrial processes or fuels consumed at the reporting company
Indirect emissions (Scope 2)	Indirect emissions associated with the consumption of electricity, heating, or cooling purchased or acquired by the reporting company

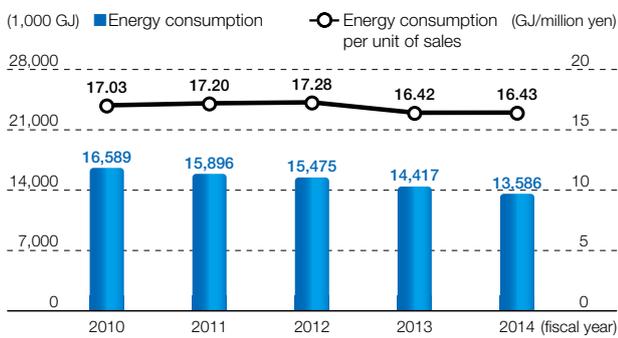
Indirect Emissions Not Included in Scope 2 (Scope 3)			Calculation Method	
Category	Activity	Description	Activity Quantity	Basic Unit from
Category 1	Purchased goods and services	Emissions associated with activities up to the point of the production of raw materials, components, goods, sales-related materials, or the like purchased or acquired by the reporting company	Materials purchased or acquired (by weight)	CFP-DB*1
Category 2	Capital goods	Emissions that occur during the construction or production of capital goods purchased or acquired by the reporting company	Capital investments in equipment by business field	MOE-DB*2
Category 3	Fuel- and energy-related activities (not included in scope 1 or scope 2)	Emissions associated with the procurement of fuels supplied by entities outside the reporting company or fuels necessary for the generation, etc. of electricity, heating, cooling, etc. consumed by the reporting company	1. Electricity, steam consumption 2. Fuel consumption	1. MOE-DB 2. CFP-DB
Category 4	Upstream transportation and distribution	Emissions associated with logistics up to the point of the arrival of incoming raw materials, components, goods, sales-related materials, or the like purchased or acquired by the reporting company; transportation and distribution of products sold by the reporting company	1. Freight ton-kilometers as a designated shipper classified under the Energy Saving Act of Japan 2. Estimated freight ton-kilometers of procurement logistics	1. Energy Saving Act of Japan 2. CFP-DB
Category 5	Waste generated in operations	Emissions associated with the transportation and treatment of waste generated at the reporting company	Waste discharge by type	MOE-DB
Category 6	Business travel	Emissions associated with business travel by employees	Business travel expenses by transport mode	MOE-DB
Category 7	Employee commuting	Emissions associated with the commuting of employees between their homes and worksites	Commuter fares or petrol costs	MOE-DB
Category 8	Upstream leased assets	Emissions associated with the operation of assets leased by the reporting company (lessee), excluding scope 1 and scope 2 emissions	Electricity and gas consumed at tenant premises	Emission factors by business
Category 9	Downstream transportation and distribution	Emissions associated with the transportation, storage, loading, and retail of sold products after delivery to customers	Estimated freight ton-kilometers by product	CFP-DB
Category 10	Processing of sold products	Emissions associated with the processing of sold intermediate products by downstream companies	Excluded from calculation because there are no scenarios or units that apply universally to Toppan's diversified products	
Category 11	Use of sold products	Emissions associated with the end use of sold products by users (consumers, downstream companies)	Not applicable	
Category 12	End-of-life treatment of sold products	Emissions associated with the transportation and treatment of sold products at the end of their life by users (consumers, downstream companies)	Waste disposal by product (estimated)	CFP-DB
Category 13	Downstream leased assets	Emissions associated with the operation of assets owned by the reporting company (lessor)	Not applicable	
Category 14	Franchises	Emissions from franchise members	Not applicable	
Category 15	Investments	Emissions related to the operation of investments	Excluded from calculation	

Notes ● Toppan calculates its scope 3 emissions for categories 1-9 and 12.  
 ● The calculation boundary covers Toppan Printing Co., Ltd. and 17 domestic manufacturing subsidiaries subject to the Company's environmental targets.  
 ● For "freight ton-kilometers as a designated shipper classified under the Energy Saving Act of Japan" in category 4, "business travel" in category 6, and "employee commuting" in category 7, Toppan has estimated total values across the calculation boundary in terms of the proportion of production volumes or employee numbers based on the values counted for organizations whose activities are quantifiable.  
 \*1 CFP-DB: Standard database (ver. 1.01) of the Japan Environmental Management Association for Industry (JEMA) CFP Communication Program  
 \*2 MOE-DB: Emission unit database for calculating greenhouse gas emissions, etc. of organizations throughout the supply chain (ver. 2.0) issued by the Ministry of the Environment (MOE) of Japan

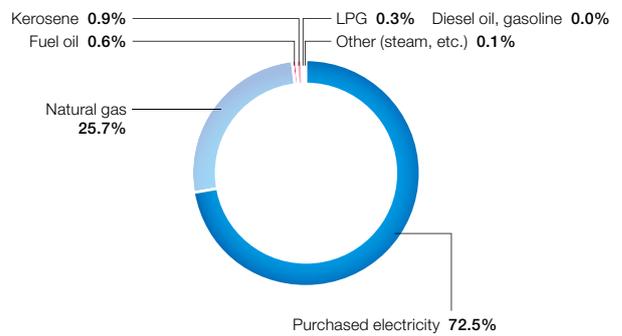
## Mitigation of Global Warming through the Development of Energy-saving Measures

	Main Measure in Fiscal 2014	Reduction Result (t-CO <sub>2</sub> /year)	Main Plan for Fiscal 2015	Reduction Target (t-CO <sub>2</sub> /year)
Information & Communication	<ul style="list-style-type: none"> <li>Reduced gas consumption by replacing existing printers with high-efficiency alternatives (Kawaguchi)</li> <li>Replaced existing compressors with high-efficiency alternatives (Sakado)</li> </ul>	1,413	<ul style="list-style-type: none"> <li>Replace existing gas refrigerating machines with electric types (Itabashi)</li> <li>Replace existing refrigerating machines with high-efficiency alternatives (Sakado)</li> </ul>	628
Living Environment	<ul style="list-style-type: none"> <li>Replaced existing boilers with high-efficiency alternatives (Sakado)</li> <li>Replaced existing air conditioners with high-efficiency alternatives (Mikkabi)</li> </ul>	796	<ul style="list-style-type: none"> <li>Replace existing gas refrigerating machines with electric types (Matsusaka)</li> <li>Replace existing injection molding machines with high-efficiency alternatives (Toppan Plastic Satte)</li> </ul>	1,649
Material Solutions	<ul style="list-style-type: none"> <li>Applied inverter control for cooling-water pumps (Shiga)</li> <li>Reduced gas consumption through vapor recovery using a cogeneration system (TKP Satte)</li> </ul>	2,024	<ul style="list-style-type: none"> <li>Replace existing gas refrigerating machines with electric types (Niigata)</li> <li>Replace existing boilers with high-efficiency alternatives (Niigata)</li> </ul>	1,296
Non-production sites	<ul style="list-style-type: none"> <li>Arranged individual air-conditioning environments (Toppan Technical Research Institute)</li> </ul>	130	<ul style="list-style-type: none"> <li>Replace existing compressors with high-efficiency alternatives (Toppan Technical Research Institute)</li> </ul>	5
Total	—	4,362	—	3,578

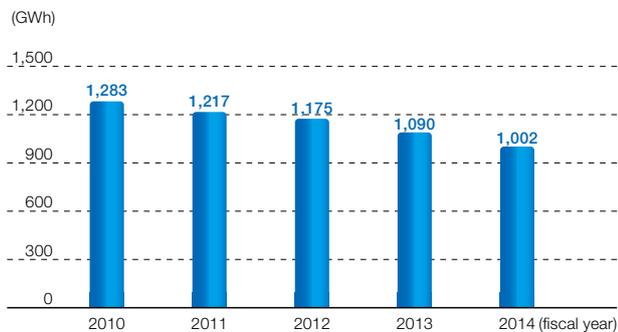
### Energy Consumption



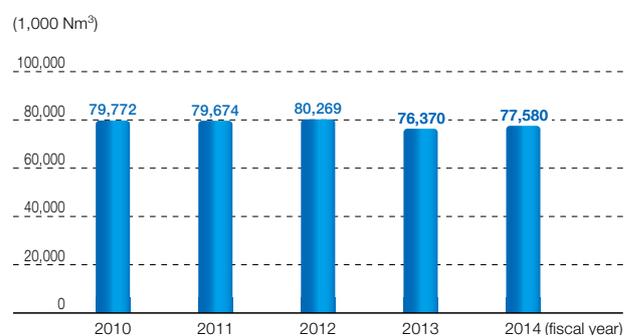
### Ratios by Energy Type (in terms of calorific value)



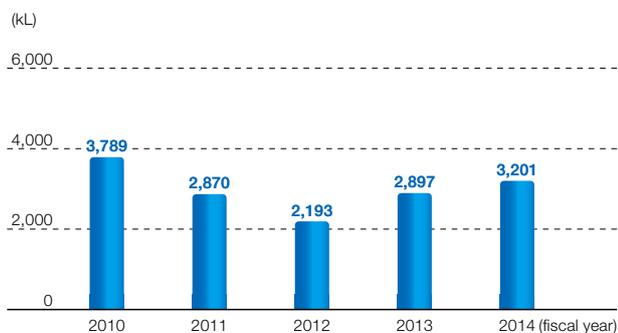
### Electricity Consumption



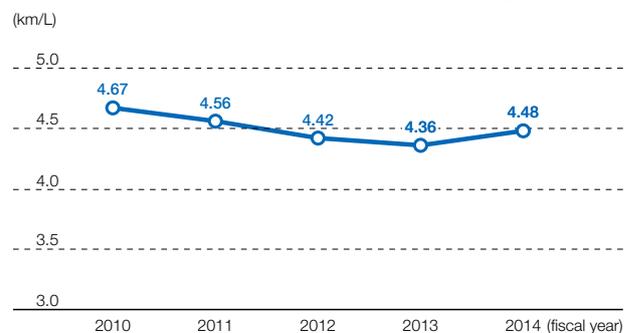
### Natural Gas Consumption



### Kerosene Consumption



### Fuel Efficiency of Vehicles Owned by Toppan Logistics



## Ratios of Greenhouse Gas Emissions by Type (in tons of CO<sub>2</sub> equivalent)

Fiscal Year	CO <sub>2</sub>	SF <sub>6</sub>	N <sub>2</sub> O	CH <sub>4</sub>	Total
2014	99.40%	0.07%	0.40%	0.13%	1,065,744 t-CO <sub>2</sub>

## Ratios of Greenhouse Gas Emissions by Source (in tons of CO<sub>2</sub> equivalent)

Fiscal Year	Scope 1		Scope 2	Total
	Fuel Consumption	Non-energy-derived Greenhouse Gases	Electricity, Steam Consumption	
2014	23.16% (246,877 t-CO <sub>2</sub> )	2.37% (25,307 t-CO <sub>2</sub> )	74.46% (793,560 t-CO <sub>2</sub> )	100% (1,065,744 t-CO <sub>2</sub> )

Notes ● Calculated by the method specified in the Guidelines for Calculating Greenhouse Gas Emissions from Businesses (2003) issued by the Ministry of the Environment of Japan.

● The greenhouse gas (GHG) emissions from domestic sites (subject to and not subject to the environmental targets) and overseas sites in fiscal 2014 are based on calculations of emissions of energy-derived CO<sub>2</sub> and non-energy-derived CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFC, PFC, SF<sub>6</sub>, and NF<sub>3</sub>. GHG emissions accounting for 0.01% or more of total emissions in CO<sub>2</sub>-equivalent values from the subject sites (namely, emissions associated with dry etching, waste burned in incinerators, combusted refuse-derived fuel, and fuel consumed in cogeneration systems) are included.

## Building a Recycling-oriented Society

### Promotion of Waste Reduction and Recycling

	Main Measure in Fiscal 2014	Reduction Result (tons/year)	Main Plan for Fiscal 2015	Reduction Target (tons/year)
Information & Communication	Asaka: Increased the recycling of used paper and waste plastics by separating waste Takino: Reduced the discharge of waste paper by making paper loss more transparent	-302	Ranzan: Reduce the generation of waste wood by repeatedly using pallets for carrying materials in the plant Kawaguchi: Reduce the generation of waste plastics by disseminating and sharing information about waste separation in the plant	-38
Living Environment	Fukusaki: Processed aluminum-deposition films into valuable resources Sagamihara: Reduced the discharge of waste paper by identifying processes that discharge waste	-3,798	Sapporo: Promote material recycling by collecting metals from waste liquids Fukaya: Reduce landfill waste disposal by recycling difficult-to-treat substances	-2,885
Material Solutions	Satte: Reduced the discharge of waste oil by thoroughly separating used oil Mie [Kameyama]: Reduced the volume of waste alkali by concentrating it	-309	Shiga: Process films and other waste plastics into valuable resources Niigata: Separate waste metals for reuse as valuable resources	-190
Non-production sites	Nishinohon (Osaka): Reduced the discharge of non-industrial waste by thoroughly separating recyclable papers and plastics	-24	Toppan Logistics: Separate cardboard, stretch films, and used paper (shredder scraps, hanging tags, copy paper, etc.) for reuse as valuable resources	-20
Total	—	-4,433	—	-3,133

Note: Includes measures to reduce waste discharge per unit of production value, improve the material recycling rate, reduce final landfill waste disposal, and expand the number of certified zero-emission sites.

## Waste Discharge per Unit of Production Value

(tons/million yen)



## Fiscal 2014 Results of Waste Discharge and Recycling

Type of Waste	Waste Discharged (tons)	Ratio	Recycling Rate	Primary Reusage
Waste paper	182,823	75.5%	99.9%	Recycled paper
Waste plastic	26,760	11.0%	99.3%	Plastic materials, RPF*1
Waste oil	6,708	2.8%	99.4%	Recycled oil, fuel
Sludge	6,281	2.6%	98.9%	Roadbed materials
Waste metal	5,125	2.1%	99.9%	Metal materials
Waste alkali	4,443	1.8%	99.3%	Neutralizer
Waste acid	4,426	1.8%	97.9%	Neutralizer
Waste wood	2,723	1.1%	99.0%	Woodchip, paper materials
Cinder	1,040	0.4%	96.1%	Roadbed materials
Other	917	0.4%	73.0%	—
Waste glass	703	0.3%	90.8%	Glass materials
Food waste	269	0.1%	83.2%	Feed
Total	242,218	100.0%	99.6%	—

\*1 Refuse Paper & Plastic Fuel (RPF): Solid fuel primarily made from refuse paper and plastic waste

**Zero-emission Sites (TZERO-14) (59 sites approved in July 2014)**

Operational Site (Division or Group Company)	Total Waste Generation in Fiscal 2013 (tons)	Waste Recycled in Fiscal 2013 (tons)	Recycling Rate in Fiscal 2013 (%)	Rank
Sapporo Plant (Hokkaido Subdivision)	2,205	2,205	100.00	S
Sendai Plant (Higashinihon Division)	4,436	4,406	99.33	A+
Itabashi Site	7,148	7,113	99.51	S
Asaka Site [Commercial Printing, Publications Printing] (Toppan Communication Products Co., Ltd.)	2,164	2,163	99.95	S
Asaka Site (Toppan Joho Kako Co., Ltd.)				
Asaka Securities Printing Plant (Toppan Communication Products Co., Ltd.)	3,162	3,162	100.00	S
Kawaguchi Site	43,530	43,530	100.00	S
Sakado Site	27,110	27,110	100.00	S
Ranzan Plant (Toppan Communication Products Co., Ltd.)	752	752	100.00	S
Nagoya Plant (Chubu Division)	6,928	6,922	99.92	S
Takino Plant (Toppan Communication Products Co., Ltd.)	6,928	6,875	99.23	A+
Takino Securities Printing Plant (Toppan Communication Products Co., Ltd.)	996	982	98.58	A
Fukuoka Plant (Toppan Communication Products Co., Ltd.)	5,671	5,671	100.00	S
Itabashi Plant (Toppan Joho Kako Co., Ltd.)	8,505	8,505	100.00	S
Fukuyama Plant (Toppan Joho Kako Co., Ltd.)	2,154	2,119	98.38	A
Oyodo Plant (Toppan Communication Products Co., Ltd.)	331	329	99.35	A+
Chitose Plant (Hokkaido Subdivision)	3,574	3,516	98.36	A
Sagamihara Plant (Toppan Packaging Products Co., Ltd.)	17,567	17,567	100.00	S
Matsusaka Plant (Toppan Packaging Products Co., Ltd.)	3,125	3,073	98.35	A
Takino Plant (Toppan Packaging Products Co., Ltd.)	5,166	5,166	100.00	S
Fukusaki Plant (Toppan Plastic Co., Ltd.)	390	390	100.00	S
Itami Plant (Toppan Packaging Products Co., Ltd.)	8,005	7,943	99.23	A+
Fukuoka Plant (Toppan Packaging Products Co., Ltd.)	6,101	6,099	99.97	S
Toppan office inside Fukuren Co., Ltd.	89	89	100.00	S
Mikkabi Plant (Toppan Packaging Products Co., Ltd.)	3,450	3,450	100.00	S
Tamana Plant (Toppan Packaging Products Co., Ltd.)	5,014	5,014	100.00	S
Miyagi Plant (Toppan Containers Co., Ltd.)	3,599	3,596	99.92	S
Sano Plant (Toppan Containers Co., Ltd.)	3,975	3,949	99.35	A+
Saitama Plant (Toppan Containers Co., Ltd.)	9,126	9,057	99.25	A+
Kumagaya Site (Toppan Containers Co., Ltd.)	348	347	99.84	S
Koshigaya Plant (Toppan Plastic Co., Ltd.)	186	185	99.54	S
Satte Plant (Toppan Plastic Co., Ltd.)	411	411	99.82	S
Wakayama Manufacturing Section (Fukusaki Plant of Toppan Plastic Co., Ltd.)	124	124	100.00	S
Saga Plant (Toppan Plastic Co., Ltd.)	235	234	99.84	S
Ranzan Plant (Toppan Packaging Service Co., Ltd.)	563	563	100.00	S
Sodegaura Beverage Plant (Toppan Packaging Service Co., Ltd.)	961	961	100.00	S
Kyushu Plant (Toppan Packaging Service Co., Ltd.)	119	119	100.00	S
Mito Plant (Toppan Prosprint Co., Ltd.)	6,629	6,623	99.92	S
Koto Plant (Toppan Prosprint Co., Ltd.)	1,371	1,370	99.94	S
Satte Plant (Toppan Functional Products Co., Ltd.)	532	532	100.00	S
Fukaya Plant (Toppan Functional Products Co., Ltd.)	2,443	2,426	99.29	A+
Kashiwa Plant (Toppan Decor Products Inc.)	337	337	100.00	S
Satte Plant (Toppan Decor Products Inc.)	5,363	5,363	100.00	S
Toppan Harima Products Co., Ltd.	804	804	100.00	S
Asaka Plant (Toppan Material Products Co., Ltd.)	172	172	100.00	S
Shiga Plant (Toppan Material Products Co., Ltd.)	2,115	2,115	100.00	S
Shiga Plant (Toppan TOMOEGAWA Optical Films Co., Ltd.)	451	451	100.00	S
Mie Plant [Kameyama] (Toppan Material Products Co., Ltd.)	2,544	2,544	100.00	S
Mie Plant [Hisai] (Toppan Material Products Co., Ltd.)	2,672	2,672	100.00	S
Niigata Plant (Toppan Material Products Co., Ltd.)	4,409	4,408	99.99	S
Kumamoto Plant (Toppan Material Products Co., Ltd.)	3,726	3,726	100.00	S
Toppan Technical Research Institute (Toppan Printing Co., Ltd.)	393	391	99.34	A+
Sakado Distribution Processing Center (Toppan Logistics Co., Ltd.)	684	684	100.00	S
Sagamihara Plant (Toppan TDK Label Co., Ltd.)	400	398	99.53	S
Takino Plant (Toppan TDK Label Co., Ltd.)	415	409	98.60	A
Fukushima Plant (Toppan TDK Label Co., Ltd.)	2,250	2,208	98.15	A
Gunma Plant (Tamapoly Co., Ltd.)	2,731	2,684	98.29	A
Mita Plant (Tamapoly Co., Ltd.)	2,753	2,753.16	100.00	S
Saitama Plant (Livrettech Co., Ltd.)	6,909	6,893.57	99.78	S
Hino Plant (Toppan Media Printec Tokyo Co., Ltd.)	943	943	100.00	S
Zama Plant (Toppan Media Printec Tokyo Co., Ltd.)	1,913	1,902	99.41	A+

Note: Toppan approves operational sites as zero-emission sites based on a three-level grading system according to their recycling rates.

S-rank site: recycling rate of 99.5% or over; A+-rank site: recycling rate of 99% or over and less than 99.5%; A-rank site: recycling rate of 98% or over and less than 99%

Operational sites satisfying any of the above criteria were approved as zero-emission sites in July 2014.

## Preventing Pollution / Controlling Chemical Substances

### PRTR Data for Fiscal 2014

(Unit: kg/year)

PRTR No.	Chemical Substance	Handled	Released	Released			Total Transferred
				1. Atmosphere	2. Water	3. Soil	
20	2-aminoethanol	2,811	0	0	0	0	2,772
44	Indium and its compounds	4,754	0	0	0	0	3
53	Ethylbenzene	26,755	3,744	3,744	0	0	103
59	Ethylenediamine	2,602	0	0	0	0	2,602
60	Ethylenediaminetetraacetic acid (754 kg handled in fiscal 2013)	7,854	0	0	0	0	4,406
71	Ferric chloride	1,282,846	4	0	4	0	1,167,682
76	Epsilon-caprolactam	1,788	0	0	0	0	158
80	Xylene	59,174	4,779	4,779	0	0	105
87	Chromium and chromium (III) compounds	26,224	9	0	9	0	18,382
88	Chromium (VI) compounds	15,962	0	0	0	0	863
151	1,3-dioxolane	15,419	771	771	0	0	2,103
213	N,N-dimethylacetamide	1,488	61	61	0	0	268
243	Dioxins (mg-TEQ)	994	1	1	0	0	993
245	Thiourea	1,016	0	0	0	0	0
272	Copper salts (water-soluble, except complex salts)	174,370	198	0	198	0	64,638
275	Sodium dodecyl sulfate	1,061	0	0	0	0	9
296	1,2,4-trimethylbenzene	85,232	11,141	11,141	0	0	15,498
297	1,3,5-trimethylbenzene	5,366	1,066	1,066	0	0	3,258
300	Toluene	2,609,538	162,920	162,920	0	0	348,922
308	Nickel	61,346	0	0	0	0	0
309	Nickel compounds	21,679	9	0	9	0	18,686
405	Boron compounds	1,680	0	0	0	0	19
411	Formaldehyde	4,501	0	0	0	0	0
412	Manganese and its compounds	7,908	20	0	20	0	2,577
420	Methyl methacrylate	6,652	204	204	0	0	427
438	Methylnaphthalene	14,386	73	73	0	0	0
448	Methylenebis(4,1-phenylene) diisocyanate	20,422	0	0	0	0	391
	Total	4,462,834	185,000	184,760	240	0	1,653,873

Notes: •Period covered: April 1, 2014–March 31, 2015

- Operational sites covered: Sites that handle more than 1.0 ton of Class I designated chemical substances per year (or specified Class I designated chemical substances in excess of 0.5 tons per year)
- The total transfer is the sum of transfers into waste and sewage systems.

## Promoting the Conservation of Biodiversity

### ECO-GREEN Purchasing

Fiscal Year	2010	2011	2012	2013	2014
Number of Cases	2,703	2,825	2,561	2,484	2,867

Note: ECO-GREEN is a toilet paper composed of about 50% used Cartocan paper.

## Eco-creativity Activities

### List of Environmentally Friendly Products (94 products as of March 2015)

Business Field	Product	Standard Categories
Information & Communication	Ecothrough card	Suitability for disposal
	Bulky Waste Processing Sticker	Resource saving (reduced use of materials)
	Eco Pack (life-size POP display)	Resource saving (reduced use of materials)
	Paper Desk Calendar	Use of recycled materials
	Ecology Calendar	Use of recycled materials
	Non-vinyl Chloride Lenticular Lens	Suitability for disposal
	Eco Pack Multipanel	Reusability
	Eco Floor Sticker	Suitability for disposal
	Eco Pack End Panel	Resource saving
	Eco Pack Stand (round type)	Resource saving
	Disk Tottokun Series	Resource saving, prolonged product life, recyclability, suitability for disposal
	Ultra-thin DM (brochures, etc.)	Resource saving, reduced energy consumption in production, recyclability
	Eco Pack Multipanel Mini	Reusability, prolonged product life, recyclability, easy separation and disassembly
	Multicube POP	Reusability, prolonged product life, recyclability, easy separation and disassembly
	Green Bankbook	Recyclability, suitability for disposal
	KAMICARD®	Biodegradability, use of safe materials, resource saving, recyclability
	KAMI-RFID CARD	Recyclability, use of safe materials, resource saving, easy separation and disassembly
Material Solutions	Flip chip ball grid array [FC-BGA] substrate (halogen free)	Suitability for disposal
	Toppan Ecowall	Reduced release of chemical substances, use of safe materials, suitability for disposal
	TOPPAN ECO SHEET	Reduced release of chemical substances, extension of product life
	GL Family	Use of sustainable resources, resource-saving efforts, visualization of environmental burden
	NaturArt	Reduced use of chemical substances, reduced use of hazardous substances, use of sustainable resources, extension of product life
	101 COORDINATION FLOOR REPREA	Reduced release of chemical substances, long-life products
	GX Film	Use of sustainable resources, resource-saving efforts
	Color filter (resin black matrix [BM])	Use of safe materials, energy saving, reduced release of chemical substances, suitability for disposal
	Palladium pre-plated leadframe	Use of safe materials, reduced release of chemical substances, suitability for disposal
	Flip chip ball grid array [FC-BGA] substrate (lead free)	Use of safe materials, reduced release of chemical substances, suitability for disposal
	Solar cell backsheet	Energy saving, prolonged product life
	Printed Decorative Paper (Coated Paper)	Reduced use of chemical substances, reduced use of hazardous substances
	Printed Decorative Paper (Coated Paper FSC-certified)	Use of sustainable resources, reduced use of chemical substances, reduced use of hazardous substances
	Printed Decor Paper for HPL/LPL (Saturated Grade Paper)	Reduced use of chemical substances, reduced use of hazardous substances, reduced release of chemical substances
	Printed Decor Paper for HPL/LPL (Saturated Grade Paper FSC-certified)	Use of sustainable resources, reduced use of chemical substances, reduced use of hazardous substances, reduced release of chemical substances
	Transfer paper for padded floors	Reduced use of chemical substances, reduced use of hazardous substances, reduced release of chemical substances
	Lower-VOC wallpaper (TOP)	Reduced use of chemical substances, reduced use of hazardous substances, reduced release of chemical substances
	SnapFit	Reduced use of chemical substances, reduced use of hazardous substances, use of sustainable resources, extension of product life
	101 Coordination Floor REPREA eco	Reduced use of chemical substances, reduced use of hazardous substances, use of sustainable resources, extension of product life, labeling with environmental logos
	FORMANO	Reduced use of chemical substances, reduced use of hazardous substances, environmentally friendly disposal, reduced release of chemical substances, extension of product life
	FORTINA	Reduced use of chemical substances, reduced use of hazardous substances, environmentally friendly disposal, reduced release of chemical substances, extension of product life
	101 ECO FUNEN	Reduced use of chemical substances, reduced use of hazardous substances, environmentally friendly disposal, reduced release of chemical substances, extension of product life
	TOPPAN MATERIAL WOOD (TOP)	Reduced use of chemical substances, reduced use of hazardous substances, use of recycled materials, environmentally friendly disposal, reduced release of chemical substances, extension of product life

Business Field	Product	Standard Categories
Living Environment	Smart Deli Bag	Reduced environmental burden during use
	Stand-up pouch for refill	Resource-saving efforts
	Bottled Pouch	Resource-saving efforts
	Plastic container made from recycled materials	Use of recycled materials
	Ecogloss (environmentally friendly gloss finishing)	Recycling
	TT Paper Can	Easy separation and disassembly
	Ecotainer	Recycling, improvement in transport efficiency
	TL-PAK	Recycling, improvement in transport efficiency
	EP-PAK (EP-GL)	Improvement in transport efficiency, recycling
	EP-PAK (AI)	Improvement in transport efficiency
	Stand-up Laminated Tube	Resource-saving efforts
	Recyclen Cap	Recycling
	AP Carton	Improvement in transport efficiency
	Micro Flute	Resource-saving efforts, recycling
	TP-Tray	Recycling, use of sustainable resources
	Corrugated Board Cushioning Material	Recycling
	AD-Case	Resource-saving efforts
	Cartocan	Use of sustainable resources, recycling, visualization of environmental burden
	Cup made from recycled paper	Use of recycled materials
	Cup made from non-wood pulp paper	Use of sustainable resources
	Cylindrical Paper Container	Improvement in transport efficiency, resource-saving efforts
	GL-C Bottle	Resource-saving efforts
	Jar Plus	Resource-saving efforts, recycling
	Tray All	Recycling
	GL Film Lined Paper Cup	Use of sustainable resources
	Double-wall Barrier Paper Cup	Resource-saving efforts
	Oil-proof Paper	Recycling
	In-mold Barrier Cup	Extension of product life, improvement in transport efficiency
	Easy Peel-off Thermo-label	Recycling
	Eco Band	Reusability
	Water-based Cold Seal	Reduced use of hazardous substances, reduced energy consumption in production
	Eco Flat Cup	Use of sustainable resources
	Alugas	Use of sustainable resources
	Food container made from heat-resistant paper	Use of sustainable resources
	Paper carton with tamper-evident closure	Resource-saving efforts
	Clear UV-blocking Film	Use of sustainable resources
	BIOAXX (molding product)	Use of sustainable resources
	EL-Case	Resource-saving efforts, recycling
	Paper cup made from pulp from forest-thinning operations	Use of sustainable resources
	Eco Paper Bottle	Use of sustainable resources, recycling
	Packaging material using low-migration type adhesives	Reduced use of hazardous substances
	Cylindrical paper-complex container for refill	Use of sustainable resources
High-resistance Flexible Pouch	Resource-saving efforts, improvement in transport efficiency	
BIOAXX (label)	Use of sustainable resources	
Aluminum-free Lid Material	Use of sustainable resources	
Heat-insulating paper cup with foamed layer	Reduced use of hazardous substances, reduced energy consumption in production	
Multi-layer Blow Tube	Resource-saving efforts	
Steam-release Packaging	Reduced environmental burden during use	
Air Hold Pouch	Resource-saving efforts	
BIOAXX (flexible packaging material)	Use of sustainable resources, resource saving, environmentally friendly disposal, visualization of environmental burden	
Square-bottomed Gazette Pouch	Improvement in transport efficiency, resource saving, environmentally friendly disposal	
Flexible packaging material using recycled materials	Use of recycled materials, procurement of materials with lower environmental burden, reduced energy consumption in production, environmentally friendly disposal, visualization of environmental burden	
Sosogi Jozu	Resource saving, improvement in transport efficiency, environmentally friendly disposal	
Preform for PET bottles	Improvement in transport efficiency, visualization of environmental burden	

## Environmental Accounting

### Capital Investment for Environmental Conservation (million yen)

Item	Major Content	Fiscal 2014	Increase/Decrease from Fiscal 2013	Average for the Last Five Years
1	Investment in equipment to prevent pollution	1,877	1,584	949
2	Investment in equipment to conserve the global environment	425	-944	793
3	Investment in equipment to circulate resources	247	118	464
4	Investment in equipment to carry out environmental management activities	36	-35	98
Total		2,585	723	2,303

Note: The data for fiscal 2013 and earlier are adjusted based on revised calculation methods.

### Environmental Conservation Benefit

Item	Major Content	Increase/Decrease*1	Fiscal 2014
Energy	Total energy consumption (1,000 GJ)	-866	21,945
Water	Water consumption (1,000 m <sup>3</sup> )	-358	12,887
Atmosphere	CO <sub>2</sub> emission (1,000 t-CO <sub>2</sub> )	-37	1,059
	Emission of ozone-depleting substances (ODP-t)	2	109
Water and soil environments	Emission of dioxins (mg-TEQ)	-1	4
	Total effluent discharge (1,000 m <sup>3</sup> )	-202	10,579
Waste	BOD (tons)	0	18
	COD (tons)	-3	13
	Total discharge (1,000 tons)	-13	392

\*1 Increases and decreases from fiscal 2013

## Green Procurement and Green Purchasing

### Green Procurement Standards for Paper and Level of Fulfillment

Green Principle	Level 1	Level 2	Fiscal 2014 Result**2
1. Using recycled paper	Paper that uses at least 60% recycled pulp plus forest-certified pulp for the remaining portion, or an overall rating of more than 80 points	Paper that uses at least 50% recycled pulp, or forest-certified paper, tree-free paper, or paper made with pulp from forest-thinning operations	4.2%
2. Considering the degree of whiteness	• Below about 80% for non-coated paper; Not applicable for products with an overall rating of more than 80 points, or for fancy or colored paper		
3. Considering the volume of coating	• Below about 30 g/m <sup>2</sup> (both faces); Not applicable for products with an overall rating of more than 80 points, or for art paper		
4. Reducing component properties obstructive to waste paper recycling	Non-usage of printing materials with waste paper recyclability rankings of B, C, or D	Non-usage of printing materials with waste paper recyclability rankings of C or D	
5. Procuring from manufacturers proactively engaged in paper recycling	Procurement from manufacturers who proactively use waste paper as a raw material for recycled paper		
Consideration: The reduction of paper weight	Reduction in weight as far as possible based on the purposes of use of printed materials		

Note: Result under the Green Standards for Offset Printing Services (April 25, 2013 amendment) of the Japan Federation of Printing Industries (JFPI)

\*\*2 Level 1 or 2 paper used (kg) / offset paper purchased (kg)

### Green Procurement Standards for Ink and Level of Fulfillment

Green Principle	Level 1	Level 2	Fiscal 2014 Result**3
1. Avoiding the use of substances harmful to the human body	Conformance with the NL regulations of the Japan Printing Ink Makers Association		96.3%
2. Avoiding the use of substances known to generate hazardous substances	Non-usage of chloride-based resins		
3. Considering chemical substances designated under the PRTR law	Non-usage of substances designated under the PRTR law	Identification of substances designated under the PRTR law (via MSDSs)	
4. Controlling VOC emissions (for offset ink, excluding heat-set ink for web press)	Non-VOC ink or UV ink	Vegetable oil ink or soybean oil ink	
5. Using sustainable resources (for heat-set ink for web press)	Vegetable oil ink or soybean oil ink		
6. Reducing component properties obstructive to waste paper recycling	Non-usage of printing materials with waste paper recyclability rankings of B, C, or D	Non-usage of printing materials with waste paper recyclability rankings of C or D	

Note: Result under the JFPI Green Standards for Offset Printing Services (April 25, 2013 amendment)

\*\*3 Level 1 or 2 ink used (kg) / offset ink purchased (kg)

### In-house Green Purchasing Standards and Levels of Fulfillment

Product	Standard	Fiscal 2014 Result
Copy machines and printers	Configured to automatically revert to low-power mode or off mode	87.9%
PCs	Configured to automatically revert to low-power mode or off mode	100%
Stationery and office goods	Products listed in eco-friendly product catalogues of manufacturers	80.6%