

CSR Report 2014: Detailed Data

■ Editorial Policy for this CSR Report 2014: Detailed Data

This PDF discloses detailed data not presented in the *Toppan CSR Report 2014*.

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

■ Scope and Boundary of this PDF

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 2014*. The following are environmental performance indicators in this *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 18 domestic manufacturing subsidiaries subject to the Company's environmental targets
- ③ 19 domestic subsidiaries not subject to the Company's environmental targets
- ④ 22 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 2013 and Environmental Target Values for Fiscal 2014	✓	19	①, ②
P. 3	Toppan's Environmental Burden	INPUT/OUTPUT Data by Business Field for Domestic Sites (subject to the environmental targets)	✓	19	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)	✓	22	④
		Environmental Impact and Environmental Efficiency	—	19	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)	—	19	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)	—	22	④
		Fiscal 2013 Results of Environmental Education	✓	19	①, ②
		Numbers of Internal Environmental Audits and Issues in Need of Improvement	✓	60	①–④
P. 6	Eco-protection Activities	Greenhouse Gas Emissions across the Entire Value Chain	✓	19	①, ②
		Mitigation of Global Warming through the Development of Energy-saving Measures	—	19	①, ②
		Energy Consumption	✓	19	①, ②
		Ratios by Energy Type (in terms of calorific value)	✓	19	①, ②
		Electricity Consumption	✓	19	①, ②
		Natural Gas Consumption	✓	19	①, ②
		Kerosene Consumption	✓	19	①, ②
		Fuel Efficiency of Vehicles Owned by Toppan Logistics	✓	1	Toppan Logistics Co., Ltd.
		Ratios of Greenhouse Gas Emissions by Type (in tons of CO ₂ equivalent)	✓	60	①–④
		Ratios of Greenhouse Gas Emissions by Source (in tons of CO ₂ equivalent)	✓	60	①–④
P. 8	Building a Recycling-oriented Society	Promotion of Waste Reduction and Recycling	—	19	①, ②
		Waste Discharge per Unit of Production Value	✓	19	①, ②
		Fiscal 2013 Results of Waste Discharge and Recycling	✓	19	①, ②
P. 9		Zero-emission Sites (TZERO-13)	—	19	①, ②
P. 10	Preventing Pollution / Controlling Chemical Substances	PRTR Results for Fiscal 2013	✓	19	①, ②
	Promoting the Conservation of Biodiversity	ECO-GREEN Purchasing	✓	19	①, ②
P. 11	Eco-creativity Activities	List of Environmentally Friendly Products	—	19	①, ②
P. 12	Environmental Accounting	Capital Investment for Environmental Conservation	✓	53	—
		Environmental Conservation Benefit	✓	60	①–④
	Green Procurement and Green Purchasing	Green Procurement Standards for Paper and Level of Fulfillment	—	14 suppliers	—
		Green Procurement Standards for Ink and Level of Fulfillment	—	4 suppliers	—
		In-house Green Purchasing Standards and Levels of Fulfillment	✓	19	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*1	Usage Rates of Toppan Training Centers*2	
		Kawaguchi	Yugawara
Fiscal 2011	66,787 yen	55.2%	43.4%
Fiscal 2012	64,482 yen	49.3%	32.6%
Fiscal 2013	82,318 yen	51.5%	39.2%

*1 Toppan established a new training center in Yugawara, Kanagawa Prefecture in fiscal 2011 and renovated its existing training center in Kawaguchi, Saitama Prefecture in the same year.

*2 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 2011 hires still working at Toppan)

	Male	Female
Hired on April 1, 2011	136	58
Still with Toppan as of April 1, 2014	129	47
Retention rate	95	81
Average for males and females	91%	
Percentage who leave the Company before working three years	9%	

The Environment

Values, Results, and Evaluation of Environmental Targets for Fiscal 2013 and Environmental Target Values for Fiscal 2014

Environmental Targets	Management Indicators	Fiscal 2013				Environmental Target Values for Fiscal 2014
		Target Values	Results	Achievement Rates	Evaluation	
1. Mitigation of global warming •Reduce CO ₂ emissions	•CO ₂ emissions	688 kilotons	632 kilotons	108.1%	S	620 kilotons
	•CO ₂ emissions per unit of sales	0.75 tons/million yen	0.72 tons/million yen	103.9%	A	0.70 tons/million yen
2. Action for building a recycling-oriented society •Reduce final landfill waste disposal •Reduce waste generation per unit of production value	•Final landfill waste disposal	455 tons	483 tons	93.8%	B	375 tons
	•Waste generation per unit of production value	0.735 tons/million yen	0.731 tons/million yen	100.5%	A	—
3. Conservation of the atmospheric environment •Reduce VOC emissions into the atmosphere	•VOC emissions into the atmosphere	4,762 tons	4,238 tons	111.0%	S	4,527 tons
	•VOC emissions into the atmosphere per unit of production value	0.0128 tons/million yen	0.0121 tons/million yen	105.5%	S	—
4. Waste reduction •Control waste generation	•Material recycling rate	92.7%	92.5%	99.8%	B	—
5. Chemical substance management •Reduce the handling amount of chemical substances designated under the Pollutant Release and Transfer Register (PRTR) law of Japan	•Handling amount of chemical substances designated under the PRTR law	6,828 tons	5,269 tons	122.8%	S	—
	•Handling amount of chemical substances designated under the PRTR law per unit of production value	0.0183 tons/million yen	0.0150 tons/million yen	117.8%	S	—
6. Initiatives to conserve biodiversity •Promote conservation during paper procurement and at operational sites	•Operational sites for land-use assessment	4 sites	4 sites	100.0%	A	—
	•Percentage of lumber legally obtained by suppliers (out of all lumber used as a material for paper that Toppan procures)	100%	100%	100.0%	A	—
7. Environmental contribution through products •Develop and expand the sales of environmentally friendly products	•Total sales of environmentally friendly products (Cartocan, etc.)	218.9 billion yen	244.6 billion yen	111.7%	S	—
8. Facilitation of environmental communication •Maintain effective communication	•Issuance rate for <i>Site Eco Reports</i> *3	100%	100%	100.0%	A	—
9. Prevention of environmental risk •Establish and observe new in-house control standards	•Percentage of in-house control standards that are newly established	100%	73%	73.0%	B	—
10. Enrichment of environmental education	•Rate of course completion in e-learning-based programs	100%	98%	98.1%	B	—
11. Environmental conservation at overseas production sites	•Establishment of in-house standards	Trial assessment using the in-house standard values	Checked the in-house management indicators	—	C	—

*3 Toppan independently determines which operational sites are required to issue *Site Eco Reports*.

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: For environmental targets #1, 2, 3, 5: 200 – (values actually achieved / target values) \times 100 [%]; for environmental targets #4, 7, 8, 9, 10: (values actually achieved / target values) \times 100 [%]

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)	760,166	557,764	38,340	0	1,356,270
		Papers (tons)	740,347	339,339	617	0	1,080,302
		Plastic (tons)	2,408	147,584	9,775	0	159,766
		Glass (tons)	0	2	9,176	0	9,177
		Ink, solvent (tons)	15,406	51,090	4,891	0	71,388
		Other (tons)	2,005	19,750	13,882	0	35,637
	Energy	Total energy consumption (1,000 GJ)	3,729	4,386	5,645	657	14,417
		Primary energy [fuel] (1,000 GJ)	1,330	1,226	1,050	98	3,704
		Secondary energy [electricity, steam] (1,000 GJ)	2,399	3,160	4,595	559	10,713
	Water	Water consumption (1,000 m ³)	915	1,755	4,589	367	7,627
		Industrial water (1,000 m ³)	308	559	268	8	1,144
		Municipal water (1,000 m ³)	370	493	224	346	1,434
		Groundwater (1,000 m ³)	235	702	4,097	0	5,035
		Rainwater used (1,000 m ³)	2	0	0	13	15
		Use of water circulated on premises (1,000 m ³)	5	21	3,698	0	3,724
	Chemical substances	Handling of chemical substances designated under the PRTR law (tons)	865	2,060	2,341	2	5,269
	Atmosphere	CO ₂ emission (t-CO ₂)	160,651	212,744	232,456	26,554	632,404
		CO ₂ emission [fuel] (t-CO ₂)	68,395	90,537	55,773	5,051	219,757
		CO ₂ emission [electricity, steam] (t-CO ₂)	92,255	122,207	176,682	21,502	412,647
Emission of ozone-depleting substances (ODP-kg)		12	59	1	0	72	
Emission of dioxins (mg-TEQ)		4	1	0	0	5	
Release of chemical substances designated under the PRTR law (tons)		51	171	21	0	243	
VOC emission into the atmosphere (tons)*2		653	3,418	167	0	4,238	
OUTPUT	Water and soil environments	Total effluent discharge (1,000 m ³)	547	1,292	4,146	355	6,340
		Into public water system (1,000 m ³)	8	831	3,837	0	4,677
		Into sewage system (1,000 m ³)*3	539	461	309	355	1,663
		BOD (kg)	9	1,417	11,479	0	12,905
		COD (kg)	0	937	10,031	0	10,968
		Nitrogen discharge (kg)	0	2,667	12,106	0	14,773
		Phosphorous discharge (kg)	0	539	447	0	986
	Release of chemical substances designated under the PRTR law (tons)	0	0	0	0	0	
	Waste	Total discharge (tons)	128,191	93,919	30,443	3,338	255,891
		Recycled (tons)	127,971	93,163	30,425	3,007	254,566
Final landfill waste disposal (tons)		41	384	12	46	483	

*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. CO₂ emissions are calculated by the method specified in the Guidelines for Calculating Greenhouse Gas Emissions from Businesses (2003) from the Ministry of the Environment of Japan. CO₂ emissions associated with electricity consumption are calculated uniformly as 0.378 t-CO₂/MWh. CO₂ emissions associated with electricity consumption at overseas sites, however, are calculated based on the CO₂ emission conversion factors (applied to specific countries for the year of 2000) published by the Greenhouse Gas Protocol Initiative. CO₂ emissions (fuel) include CO₂ 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 25,952 m³ of spring water from the premises of the Sales Building.

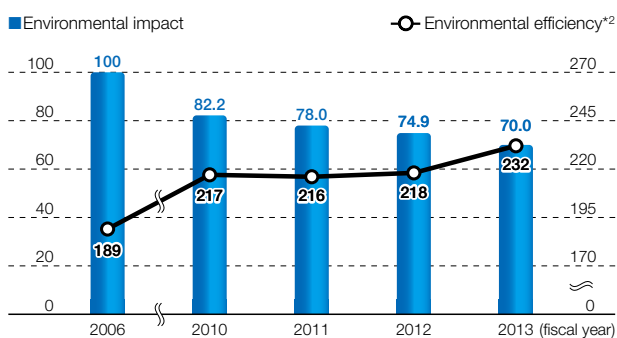
INPUT/OUTPUT Data by Business Field for Domestic Sites (not subject to the environmental targets)

Category	Chief Component	Information & Communication	Living Environment	Material Solutions	Non-production sites	Total		
INPUT	Material	Total input (tons)	519,437	78,713	475	0	598,625	
		Papers (tons)	505,826	4,606	9	0	510,441	
		Plastic (tons)	3,420	71,367	43	0	74,830	
		Glass (tons)	0	0	71	0	71	
		Ink, solvent (tons)	7,810	1,867	0	0	9,677	
	Other (tons)	2,380	874	352	0	3,606		
	Energy	Total energy consumption (1,000 GJ)	2,309	730	406	0	3,445	
		Primary energy [fuel] (1,000 GJ)	214	80	47	0	341	
		Secondary energy [electricity, steam] (1,000 GJ)	2,095	650	359	0	3,105	
	Water	Water consumption (1,000 m ³)	1,540	72	857	33	2,502	
		Industrial water (1,000 m ³)	27	0	0	0	27	
		Municipal water (1,000 m ³)	244	72	15	33	364	
		Groundwater (1,000 m ³)	1,257	0	842	0	2,099	
		Rainwater used (1,000 m ³)	11	0	0	0	11	
		Use of water circulated on premises (1,000 m ³)	0	0	20	0	20	
	Chemical substances	Handling of chemical substances designated under the PRTR law (tons)	8	43	44	0	95	
	OUTPUT	Atmosphere	CO ₂ emission (t-CO ₂)	92,413	29,172	17,082	0	138,666
			CO ₂ emission [fuel] (t-CO ₂)	11,850	4,167	3,282	0	19,298
			CO ₂ emission [electricity, steam] (t-CO ₂)	80,563	25,005	13,800	0	119,368
Emission of ozone-depleting substances (ODP-kg)			9	0	0	0	9	
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)			542	809	2	0	1,353	
Water and soil environments	Total effluent discharge (1,000 m ³)	958	52	784	28	1,822		
	Into public water system (1,000 m ³)	775	31	782	4	1,591		
	Into sewage system (1,000 m ³)	184	21	2	24	231		
	BOD (kg)	486	123	3,518	0	4,127		
	COD (kg)	1,174	0	0	68	1,243		
	Nitrogen discharge (kg)	172	0	0	0	172		
	Phosphorous discharge (kg)	3	0	0	0	3		
	Release of chemical substances designated under the PRTR law (tons)	0	0	1	0	1		
Waste	Total discharge (tons)	58,092	11,909	775	1,096	71,872		
	Recycled (tons)	56,500	11,475	738	1,096	69,809		
	Final landfill waste disposal (tons)	44	25	1	0	70		

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)	384,548	44,161	13,664	—	442,373
		Papers (tons)	372,052	28,978	19	—	401,049
		Plastic (tons)	1,235	3,468	7	—	4,709
		Glass (tons)	3	0	6,883	—	6,885
		Ink, solvent (tons)	5,796	10,839	1,603	—	18,239
		Other (tons)	5,462	877	5,152	—	11,491
	Energy	Total energy consumption (1,000 GJ)	1,225	784	2,939	—	4,949
		Primary energy [fuel] (1,000 GJ)	142	353	128	—	623
		Secondary energy [electricity, steam] (1,000 GJ)	1,083	432	2,811	—	4,325
	Water	Water consumption (1,000 m ³)	1,029	104	1,982	—	3,116
		Municipal water (1,000 m ³)	1,008	104	1,928	—	3,040
		Groundwater (1,000 m ³)	21	0	54	—	76
		Rainwater used (1,000 m ³)	0	0	0	—	0
	Atmosphere	CO ₂ emission (t-CO ₂)	93,060	47,911	184,688	—	325,659
		CO ₂ emission [fuel] (t-CO ₂)	8,932	20,240	7,651	—	36,823
		CO ₂ emission [electricity, steam] (t-CO ₂)	84,128	27,672	177,036	—	288,836
		Emission of ozone-depleting substances (ODP-kg)	0	0	26	—	26
	Water and soil environments	Total effluent discharge (1,000 m ³)	923	73	1,623	—	2,619
		Into public water system (1,000 m ³)	102	0	178	—	280
Into sewage system (1,000 m ³)		821	73	1,445	—	2,339	
BOD (kg)		0	0	708	—	708	
COD (kg)		993	0	2,560	—	3,553	
Nitrogen discharge (kg)		143	0	49	—	192	
Phosphorous discharge (kg)	0	0	0	—	0		
Waste	Total discharge (tons)	61,182	12,089	4,784	—	78,055	
	Recycled (tons)	59,226	9,098	4,464	—	72,788	
	Final landfill waste disposal (tons)	1,956	2,991	320	—	5,267	

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

(69 systems at 132 sites, as of March 31, 2014)

■ 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.]	ASR	Mar. 2000
Akihabara Office (Living Environment Division)	JQA	Mar. 2001
Tokyo-based sites (Information and Communication Manufacturing Subdivision)	SAI GLOBAL	Feb. 2002
Fukusaki Plant [including Toppan Packs Co., Ltd. and Wakayama Plant of Toppan Plastic Co., Ltd.] (Toppan Packaging Products Co., Ltd.)	JQA	Jul. 2002
Takino Plants (Information and Communication Division, Living Environment Division)	JQA	Oct. 2002
Nishigaoka Site [including Kawaguchi transport department] (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
Koto Plant (Toppan Prosprint Co., Ltd.)	JQA	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
Fukaya Plant [including Satte Site] (Toppan Functional Products Co., Ltd.)	JQA	Mar. 2010
Nagoya Plant (Chubu Division)	JQA	Dec. 2010
Mikkabi Site (Toppan Packs Co., Ltd.)	SAI GLOBAL	Nov. 2010
Tamana Plant (Toppan Packs Co., Ltd.)	ICL	Mar. 2012
Matsuzaka Plant (Toppan Packaging Products Co., Ltd.)	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.)	JQA	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.)	JQA	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	BSI	Feb. 2007
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 2013 Results of Environmental Education

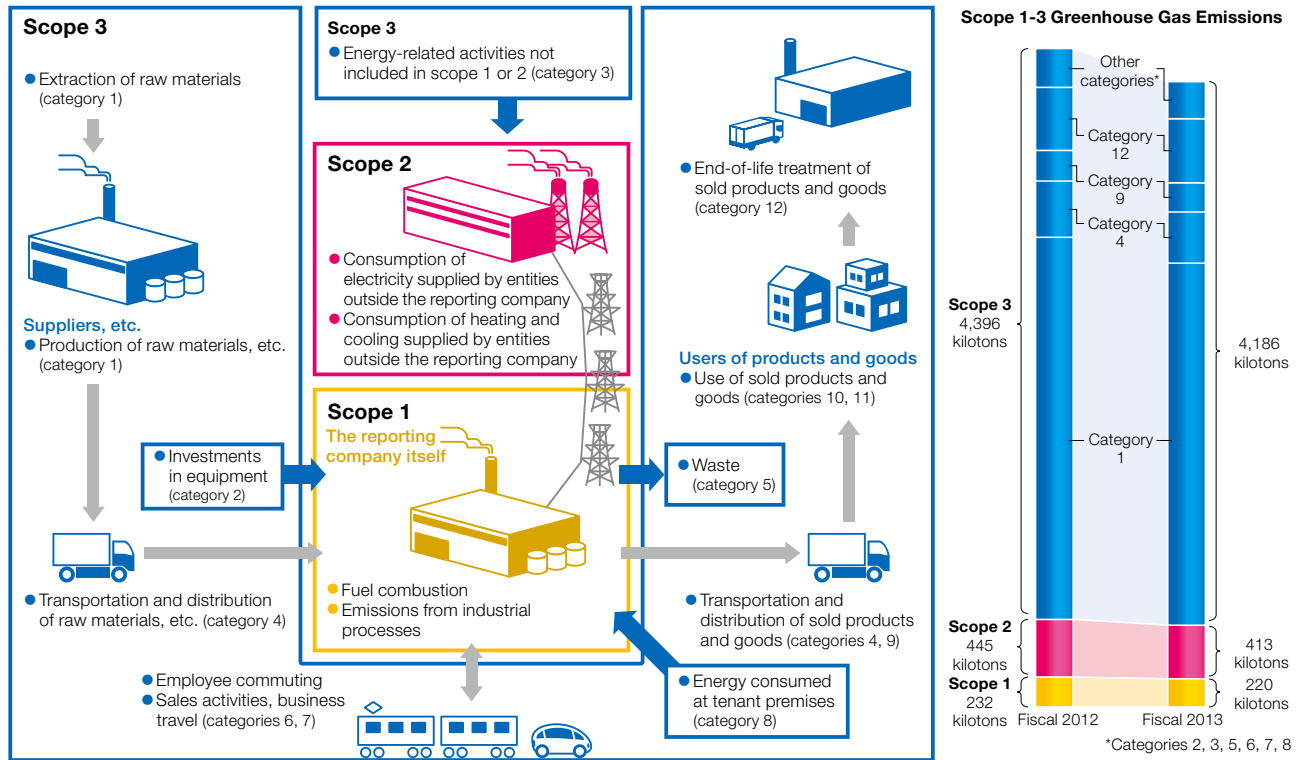
Training	Number of Trainees
New employee training: General environmental education	259
E-learning: Group-wide EMS education for fiscal 2013	21,388
Toppan Business School (4 courses)	69
Toppan Challenge School (14 courses)	86
Internal environmental auditor training program	91

Numbers of Internal Environmental Audits and Issues in Need of Improvement

Domestic sites audited	69 sites
Issues in need of improvement identified at domestic sites	241 issues
Domestic sites reviewed	4 sites
Overseas sites audited	2 sites
Issues in need of improvement identified at overseas sites	17 issues

Mitigating Global Warming

Greenhouse Gas Emissions across the Entire Value Chain



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 trips by employees	Business travel expenses by transport mode	MOE-DB
Category 7	Employee commuting	Emissions associated with the transportation 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 company
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 18 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.

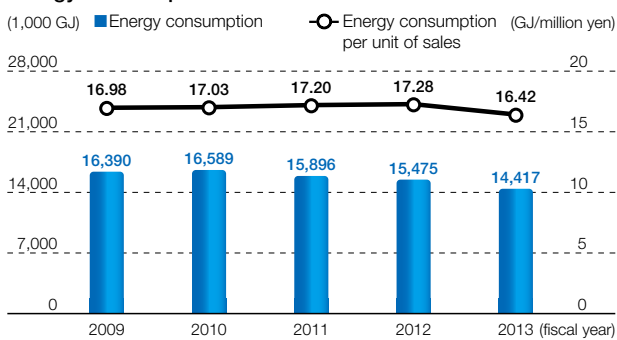
*1 CFP-DB: Standard database (ver. 1.01) of the Japan Environmental Management Association for Industry (JEMAI) CFP Communication Program

*2 MOE-DB: Emission unit database for calculating the greenhouse gas emissions, etc. of organizations throughout the supply chain (ver. 2.0) from the Ministry of the Environment (MOE) of Japan

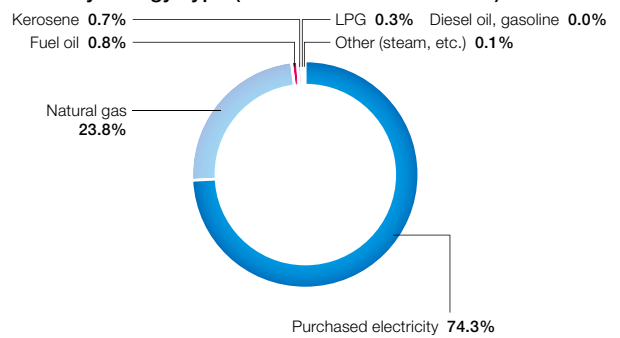
Mitigation of Global Warming through the Development of Energy-saving Measures

	Main Measure in Fiscal 2013	Reduction Result (t-CO ₂ /year)	Main Plan for Fiscal 2014	Reduction Target (t-CO ₂ /year)
Information & Communication	Kawaguchi: Lowered the preset furnace temperature for deodorizing equipment Itabashi: Used free cooling systems to replace turbo refrigerating machines	-134	Asaka Securities Printing: Replace absorption refrigerating machines with module chillers Sendai: Introduce one-fluid humidifiers	-165
Living Environment	Sagamihara: Replaced existing compressors with high-efficiency alternatives Fukusaki: Replaced existing packaged air conditioners with high-efficiency alternatives	-210	Toppan Plastic Wakayama, Matsuzaka: Install insulating jackets to heat-radiating areas on forming machines Toppan Containers Saitama: Insulate steam piping and replace existing traps with high-efficiency alternatives	-229
Material Solutions	Shiga, Mie [Kameyama]: Applied inverter control for cold/warm-water pumps	-188	Shiga: Apply inverter control for cold-water pumps Satte: Replace existing compressors with high-efficiency alternatives	-247
Non-production sites	Toppan Technical Research Institute: Controlled the number of pumps in operation; controlled the variable flow	-39	Toppan Technical Research Institute: Establish automatic energy-saving controls in clean rooms	-14
Total	—	-571	—	-655

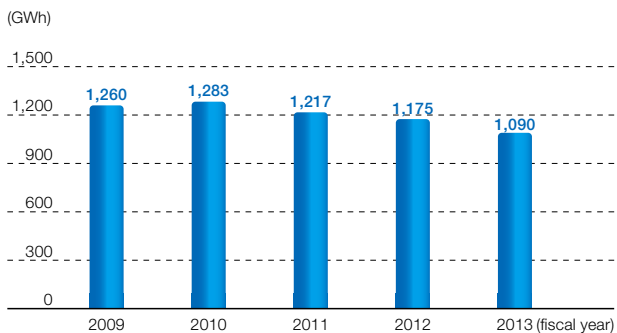
Energy Consumption



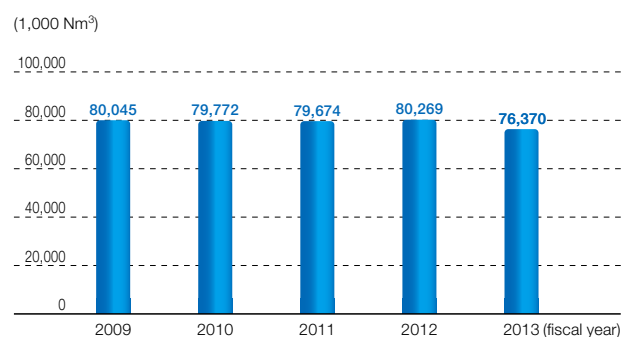
Ratios by Energy Type (in terms of calorific value)



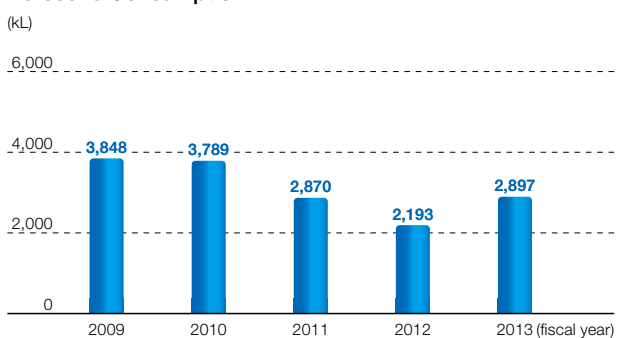
Electricity Consumption



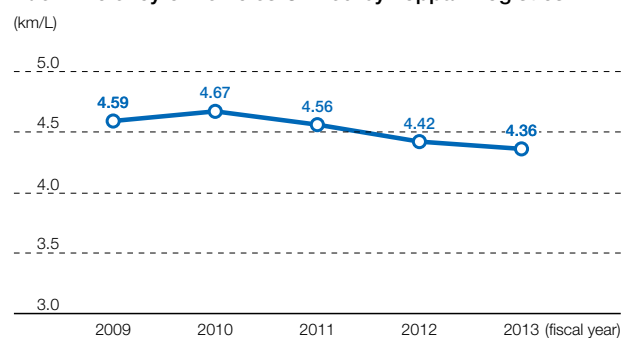
Natural Gas Consumption



Kerosene Consumption



Fuel Efficiency of Vehicles Owned by Toppan Logistics



Ratios of Greenhouse Gas Emissions by Type (in tons of CO₂ equivalent)

Fiscal Year	CO ₂	SF ₆	N ₂ O	CH ₄	Total
2013	99.73%	0.03%	0.22%	0.02%	1,099,758 t-CO ₂

Ratios of Greenhouse Gas Emissions by Source (in tons of CO₂ equivalent)

Fiscal Year	Scope 1		Scope 2	Total
	Fuel Consumption	Waste Incineration	Electricity, Steam Consumption	
2013	22.94% (252,244 t-CO ₂)	2.42% (26,663 t-CO ₂)	74.64% (820,851 t-CO ₂)	100% (1,099,758 t-CO ₂)

Notes: ● Calculated by the method specified in the Guidelines for Calculating Greenhouse Gas Emissions from Businesses (2003) from the Ministry of the Environment and Ministry of Economy, Trade and Industry of Japan.

● For greenhouse gas (GHG) emissions in fiscal 2013 from domestic sites (both subject to and not subject to the environmental targets) and overseas sites, Toppan calculated emissions of energy-derived CO₂ and other types of GHG (CH₄, N₂O, HFC, PFC, SF₆, and non-energy-derived CO₂) and included GHG emissions that accounted for 0.01% or more out of total emissions in CO₂ equivalent units from the sites subject to the calculation (namely, emissions associated with dry etching, waste burned in incinerators, and fuel consumed in cogeneration systems).

Building a Recycling-oriented Society

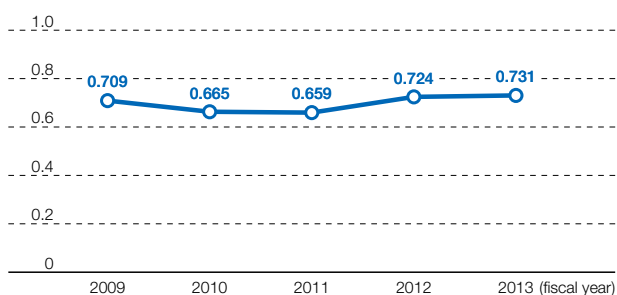
Promotion of Waste Reduction and Recycling

	Main Measure in Fiscal 2013	Reduction Result (tons/year)	Main Plan for Fiscal 2014	Reduction Target (tons/year)
Information & Communication	Itabashi: Reduced the discharge of waste liquids through the use of concentrators Takino: Reduced the discharge of waste paper through the reduction of paper loss	-245	Asaka: Increase the recycling of used paper and waste plastics through the separation of waste Takino: Reduce the discharge of waste paper by making paper loss more transparent	-182
Living Environment	Fukusaki: Recycled aluminum-deposition composite products Fukuoka: Recycled waste plastics	-2,399	Fukusaki: Process aluminum-deposition films into valuable resources Sagamihara: Reduce the discharge of waste paper by identifying processes that discharge waste	-1,014
Material Solutions	Mie: Reduced the discharge of sludge (waste activated carbon) Shiga: Recycled sludge	-134	Satte: Reduce the volume of waste liquid from aqueous ink using concentrators Mie [Kameyama]: Reduce the volume of waste alkali by concentrating it	-609
Non-production sites	Koishikawa Building: Promoted paperless meetings Shibaura Building: Reduced the discharge of paper waste from copy machines and printers	-43	Shibaura Building: Separate used paper, waste metals, plastics, and other materials for reuse as valuable resources	-19
Total	—	-2,821	—	-1,824

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 2013 Results of Waste Discharge and Recycling

Type of Waste	Waste Discharged (tons)	Ratio	Recycling Rate	Primary Reusage
Waste paper	192,869	75.4%	99.8	Recycled paper
Waste plastic	24,712	9.7%	99.2	Plastic materials, RPF*1
Waste acid	7,834	3.1%	98.4	Neutralizer
Sludge	6,966	2.7%	99.5	Roadbed materials
Waste oil	6,729	2.6%	99.4	Recycled oil, fuel
Waste metal	5,963	2.3%	99.5	Metal materials
Waste alkali	5,112	2.0%	99.3	Neutralizer
Waste wood	2,675	1.0%	99.9	Chip, paper materials
Cinder	1,423	0.6%	91.5	Roadbed materials
Other	763	0.3%	51.8	—
Waste glass	590	0.2%	94.4	Glass materials
Food waste	255	0.1%	86.4	Feed
Total	255,891	100.0%	99.5	—

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

Zero-emission Sites (TZERO-13) (61 sites approved in August 2013)

Operational Site (Division or Group Company)	Total Waste Generation in Fiscal 2012 (tons)	Waste Recycled in Fiscal 2012 (tons)	Recycling Rate in Fiscal 2012 (%)	Rank
Sapporo Plant (Hokkaido Subdivision)	2,298	2,298	100.00	S
Sendai Plant (Higashinihon Division)	4,355	4,299	98.73	A
Itabashi Site	7,305	7,271	99.53	S
Asaka Site [Commercial Printing, Publications Printing] (Toppan Communication Products Co., Ltd.)	4,678	4,676	99.97	S
Asaka Site (Toppan Joho Kako Co., Ltd.)				
Asaka Securities Printing Plant (Toppan Communication Products Co., Ltd.)	3,313	3,313	100.00	S
Kawaguchi Site	43,723	43,723	100.00	S
Sakado Site	26,576	26,576	100.00	S
Ranzan Plant (Toppan Communication Products Co., Ltd.)	814	814	99.98	S
Nagoya Plant (Chubu Division)	6,699	6,694	99.91	S
Takino Plant (Toppan Communication Products Co., Ltd.)	10,339	10,265	99.29	A+
Takino Securities Printing Plant (Toppan Communication Products Co., Ltd.)	1,035	1,023	98.89	A
Fukuoka Plant (Toppan Communication Products Co., Ltd.)	5,398	5,398	100.00	S
Itabashi Plant (Toppan Joho Kako Co., Ltd.)	12,901	12,900	100.00	S
Fukuyama Plant (Toppan Joho Kako Co., Ltd.)	3,710	3,684	99.31	A+
Sansei Printing Ltd.	33	33	100.00	S
Oyodo Plant (Toppan Communication Products Co., Ltd.)	328	326	99.37	A+
Chitose Plant (Hokkaido Subdivision)	4,358	4,295	98.55	A
Gunma Plant (Toppan Packaging Products Co., Ltd.)	6,075	6,008	98.89	A
Sagamihara Plant (Toppan Packaging Products Co., Ltd.)	17,720	17,720	100.00	S
Sagamihara Site (Toppan Packs Co., Ltd.)				
Matsuzaka Plant (Toppan Packaging Products Co., Ltd.)	3,006	2,986	99.35	A+
Takino Plant (Toppan Packaging Products Co., Ltd.)	4,890	4,890	100.00	S
Fukusaki Plant (Toppan Plastic Co., Ltd.)	339	339	100.00	S
Itami Plant (Toppan Packaging Products Co., Ltd.)	7,883	7,834	99.39	A+
Fukuoka Plant (Toppan Packaging Products Co., Ltd.)	5,855	5,855	100.00	S
Toppan office inside Fukuren Co., Ltd.	77	77	100.00	S
Mikkabi Site (Toppan Packs Co., Ltd.)	3,542	3,542	100.00	S
Tamana Plant (Nishinihon Site of Toppan Packs Co., Ltd.)	4,228	4,206	99.47	A+
Miyagi Plant (Toppan Containers Co., Ltd.)	3,686	3,665	99.43	A+
Sano Plant (Toppan Containers Co., Ltd.)	3,990	3,948	98.97	A
Saitama Plant (Toppan Containers Co., Ltd.)	8,827	8,764	99.28	A+
Kumagaya Site (Toppan Containers Co., Ltd.)	319	319	99.93	S
Koshigaya Plant (Toppan Plastic Co., Ltd.)	53	53	100.00	S
Satte Plant (Toppan Plastic Co., Ltd.)	441	441	100.00	S
Wakayama Manufacturing Section (Fukusaki Plant of Toppan Plastic Co., Ltd.)	127	127	100.00	S
Saga Plant (Toppan Plastic Co., Ltd.)	242	241	99.88	S
Ranzan Plant (Toppan Packaging Service Co., Ltd.)	533	533	100.00	S
Sodegaura Beverage Plant (Toppan Packaging Service Co., Ltd.)	666	656	98.51	A
Kyushu Plant (Toppan Packaging Service Co., Ltd.)	114	114	100.00	S
Mito Plant (Toppan Prosprint Co., Ltd.)	6,473	6,465	99.88	S
Koto Plant (Toppan Prosprint Co., Ltd.)	1,514	1,512	99.93	S
Satte Plant (Toppan Functional Products Co., Ltd.)	688	688	100.00	S
Fukaya Plant (Toppan Functional Products Co., Ltd.)	2,090	2,082	99.63	S
Kashiwa Plant (Toppan Decor Products Inc.)	298	298	100.00	S
Satte Plant (Toppan Decor Products Inc.)	5,447	5,447	100.00	S
Toppan Harima Products Co., Ltd.	579	579	100.00	S
Asaka Plant (Toppan Electronics Products Co., Ltd.)	295	295	100.00	S
Shiga Plant (Toppan Electronics Products Co., Ltd.)	3,591	3,569	99.41	A+
Shiga Plant (Toppan TOMOEGAWA Optical Products Co., Ltd.)				
Mie Plant [Kameyama] (Toppan Electronics Products Co., Ltd.)	2,642	2,642	100.00	S
Mie Plant [Hisai] (Toppan Electronics Products Co., Ltd.)	2,657	2,657	100.00	S
Niigata Plant (Toppan Electronics Products Co., Ltd.)	11,272	11,272	100.00	S
Niigata Plant (NEC Toppan Circuit Solutions, Inc.)				
Kumamoto Plant (Toppan Electronics Products Co., Ltd.)	3,629	3,629	100.00	S
Toyama Plant (NEC Toppan Circuit Solutions, Inc.)	3,005	3,005	100.00	S
Toyama Plant (Toppan Electronics Products Co., Ltd.)				
Toppan Technical Research Institute (Toppan Printing Co., Ltd.)	409	406	99.26	A+
Sakado Distribution Processing Center (Toppan Logistics Co., Ltd.)	303	303	100.00	S
Hino Plant (Toppan Media Printec Tokyo Co., Ltd.)	987	986	99.91	S
Zama Plant (Toppan Media Printec Tokyo Co., Ltd.)	1,979	1,954	98.72	A
Saitama Plant (Livretch Co., Ltd.)	7,100	7,088	99.83	S
Mita Plant (Tamapoly Co., Ltd.)	2,646	2,646	100.00	S
Takino Plant (Toppan TDK Label Co., Ltd.)	400	394	98.60	A
Sagamihara Plant (Toppan TDK Label Co., Ltd.)	443	443	99.89	S
Gunma Plant (Tamapoly Co., Ltd.)	2,732	2,684	98.24	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 August 2013.

Preventing Pollution / Controlling Chemical Substances

PRTR Results for Fiscal 2013

(Unit: kg/year)

PRTR No.	Chemical Substance	Handled	Released	Released			Total Transferred
				1. Atmosphere	2. Water	3. Soil	
20	2-aminoethanol	12,947	0	0	0	0	2,123
30	Linear alkylbenzenesulfonate and chlorides	1,094	0	0	0	0	315
44	Indium and its compounds	12,912	0	0	0	0	3
53	Ethylbenzene	18,990	2,698	2,698	0	0	112
59	Ethylenediamine	3,286	0	0	0	0	3,231
71	Ferric chloride	1,563,023	3	0	3	0	1,386,144
76	ϵ -caprolactam	2,095	0	0	0	0	209
80	Xylene	48,074	4,037	4,037	0	0	205
87	Chromium and trivalent chromium compounds	31,417	16	0	16	0	18,164
88	Hexavalent chromium compounds	17,547	7	0	6	0	886
151	1,3-dioxolane	13,585	2,934	2,934	0	0	2,703
243	Dioxins (mg-TEQ)	885	1	1	0	0	884
272	Copper salts (water-soluble, except complex salts)	260,535	187	0	187	0	75,122
275	Sodium dodecyl sulfate	1,294	0	0	0	0	31
296	1,2,4-trimethylbenzene	75,220	9,239	9,239	0	0	1,664
297	1,3,5-trimethylbenzene	5,695	1,043	1,043	0	0	198
300	Toluene	3,001,756	222,425	222,425	0	0	382,530
306	Hexamethylene diacrylate	1,006	0	0	0	0	0
308	Nickel	67,727	0	0	0	0	0
309	Nickel compounds	18,350	13	0	13	0	16,122
395	Water-soluble salts of peroxodisulfuric acid	57,661	0	0	0	0	0
405	Boron compounds	1,715	0	0	0	0	16
411	Formaldehyde	5,050	14	14	0	0	32
412	Manganese and its compounds	7,281	17	0	17	0	405
420	Methyl methacrylate	7,926	569	569	0	0	454
438	Methylnaphthalene	16,174	78	78	0	0	0
448	Methylenebis(4,1-phenylene) diisocyanate	16,316	0	0	0	0	160
	Total	5,268,676	243,279	243,037	242	0	1,890,829

Notes: •Period covered: April 1, 2013–March 31, 2014

•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	2009	2010	2011	2012	2013
Number of Cases	2,634	2,703	2,825	2,561	2,484

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 2014)

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
	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 ECOSHEET	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	
101 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	
ECOFUNEN	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
	Eco Flat Cup	Reduced energy consumption in production
	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 2013	Increase/Decrease from Fiscal 2012	Total Sum for the Last Five Years
1	Investment in equipment to prevent pollution	294	-181	802
2	Investment in equipment to conserve the global environment	1,369	527	999
3	Investment in equipment to circulate resources	129	-309	421
4	Investment in equipment to carry out management activities	71	7	89
Total		1,862	44	2,311

Environmental Conservation Benefit

Item	Major Content	Increase/Decrease*1	Fiscal 2013
Energy	Total energy consumption (1,000 GJ)	-1,094	22,811
Water	Water consumption (1,000 m ³)	-5,585	13,244
Atmosphere	CO ₂ emission (1,000 t-CO ₂)	-77	1,097
	Emission of ozone-depleting substances (ODP-t)	-47	106
	Emission of dioxins (mg-TEQ)	-13	5
Water and soil environments	Total effluent discharge (1,000 m ³)	-5,647	10,781
	BOD (tons)	-26	18
	COD (tons)	0	16
Waste	Total discharge (1,000 tons)	-13	406

*1 Increases and decreases from fiscal 2012

Green Procurement and Green Purchasing

Green Procurement Standards for Paper and Level of Fulfillment

Green Principle	Level 1	Level 2	Fiscal 2013 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, forest-certified paper, tree-free paper, or paper made with pulp from forest-thinning operations	5.0%
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 ² (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 2013 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		97.0%
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 2013 Result
Copy machines and printers	Configured to automatically revert to low-power mode or off mode	88.2%
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	82.5%