

CSR Report 2016: Detailed Data



■ Editorial Policy

This PDF discloses detailed data not presented in the *Toppan CSR Report 2016*.

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 2016*. 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 15 domestic manufacturing subsidiaries subject to the Company's environmental targets
- ③ 19 domestic subsidiaries not subject to the Company's environmental targets
- ④ 21 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 2015 and Environmental Target Values for Fiscal 2016	✓	16	①, ②	
P. 3	Toppan's Environmental Burden	INPUT/OUTPUT Data by Business Field for Domestic Sites (subject to the environmental targets)	✓	16	①, ②	
P. 4		INPUT/OUTPUT Data by Business Field for Domestic Sites (not subject to the environmental targets)	✓	19	③	
		INPUT/OUTPUT Data by Business Field for Overseas Sites (not subject to the environmental targets)	✓	21	④	
P. 5		Environmental Impact and Environmental Efficiency	—	16	①, ②	
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P. 6	Eco-protection Activities	Fiscal 2015 Results of Environmental Education	✓	17	①-③	
		Numbers of Internal Environmental Audits and Issues in Need of Improvement	✓	19	①-③	
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			Energy Consumption	✓	16	①, ②
			Ratios by Energy Type (in terms of calorific value)	✓	16	①, ②
			Electricity Consumption	✓	16	①, ②
			Natural Gas Consumption	✓	16	①, ②
			Kerosene Consumption	✓	16	①, ②
P. 8		Building a Recycling-oriented Society	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)	✓	56	①-④
			Ratios of Greenhouse Gas Emissions by Source (in tons of CO ₂ equivalent)	✓	56	①-④
	Promotion of Waste Reduction and Recycling		—	16	①, ②	
P. 8	Building a Recycling-oriented Society	Waste Discharge per Unit of Production Value	✓	16	①, ②	
		Fiscal 2015 Results of Waste Discharge and Recycling	✓	16	①, ②	
P. 9	Eco-protection Activities	Zero-emission Sites (TZERO-15)	—	18	①-③	
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		Promoting the Conservation of Biodiversity	ECO-GREEN Purchasing	✓	16	①, ②
P. 11	Eco-creativity Activities	List of Environmentally Friendly Products	—	16	①, ②	
P. 12	Environmental Accounting	Capital Investment for Environmental Conservation	✓	52	—	
		Environmental Conservation Benefit	✓	56	①-④	
	Green Procurement and Green Purchasing	Green Procurement Standards for Paper and Level of Fulfillment	—	10 suppliers	—	
		Green Procurement Standards for Ink and Level of Fulfillment	—	4 suppliers	—	
		In-house Green Purchasing Standards and Levels of Fulfillment	✓	16	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 2013	82,318 yen	86.7%	63.1%
Fiscal 2014	77,654 yen	92.5%	42.9%
Fiscal 2015	79,251 yen	85.7%	45.1%

*1 Usage rates are calculated by dividing the number of days the training centers are used by the number of days the centers are available (excluding holidays, etc.)

Retention Rates for Recruits

(Percentage of fiscal 2013 hires still working at Toppan)

	Male	Female
Hired on April 1, 2013	152	83
Still with Toppan as of April 1, 2016	140	77
Retention rates	92%	93%
Average for male and female employees	92%	
Percentage who leave the Company before working three years	8%	

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

Stock Leave	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, fertility treatment, recovery-work in the aftermath of unexpected disasters, and so on.
Childcare Leave	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, 2016, a cumulative total of 183 male employees have taken childcare leave.) 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 fourth year of elementary school. The Company subsidizes certain childcare costs and provides childcare-related information through a consultation office.
Rehiring of Employees who Leave the Company to Raise Children	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.
Nursing Care Leave	Employees are entitled to take leave for nursing care. For every family member requiring care, an employee is entitled to one year of consecutive or aggregated leave and up to three years of other work-hour adjustments such as staggered working hours or two-hour working day reductions. The Toppan Group Fraternal Benefit Society pays a 30,000-yen subsidy per month as assistance during the leave. Toppan offers nursing care-related information and contracts consultants outside the Company to provide advice.
Leave for Child Healthcare	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.)
Volunteer Leave	Employees can take volunteer leave to engage in socially beneficial activities for up to one year. Employees on volunteer leave receive an allowance.
Staggered Work-hours	An employee can adjust daily working hours upward or downward by one hour to avoid rush-hour commutes during pregnancy and by two hours for childcare (until his or her child completes the fourth year of elementary school).
Dependent Family Allowance	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 20th birthday. (No limit for the number of children is applied.)
Partial Subsidization of Babysitter Expenses	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.
Other	The Toppan Group Health Insurance Union covers standard medical costs for childbirth. It also gives out a complimentary childrearing magazine 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 2015 and Environmental Target Values for Fiscal 2016

Environmental Targets	Management Indicators	Fiscal 2015				Environmental Target Values for Fiscal 2016
		Target Values	Results	Achievement Rates	Evaluation	
1. Mitigation of global warming Reduce CO ₂ emissions	CO ₂ emissions	613 kilotons	551 kilotons	110.2%	S	550 kilotons
2. Action for building a recycling-oriented society Reduce final landfill waste disposal	Final landfill waste disposal	240 tons	160 tons	133.3%	S	130 tons
3. Conservation of the atmospheric environment Reduce VOC emissions into the atmosphere	VOC emissions into the atmosphere	4,000 tons	3,684 tons	107.9%	S	3,400 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 ₂ 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 & Industry	Electronics	Non-production sites	Total	
INPUT	Material	Total input (tons)	665,131	544,107	20,778	0	1,230,015
		Papers (tons)	647,861	313,054	48	0	960,962
		Plastic (tons)	2,451	166,464	1,382	0	170,296
		Glass (tons)	0	80	7,051	0	7,131
		Ink, solvent (tons)	12,177	55,574	2,176	0	69,927
		Other (tons)	2,642	8,935	10,121	0	21,699
	Energy	Total energy consumption (1,000 GJ)	3,326	5,170	3,445	620	12,561
		Primary energy [fuel] (1,000 GJ)	1,158	1,984	359	88	3,589
		Secondary energy [electricity, steam] (1,000 GJ)	2,168	3,187	3,086	532	8,972
	Water	Water consumption (1,000 m ³)	840	1,580	3,540	340	6,300
		Industrial water (1,000 m ³)	278	469	262	6	1,015
		Municipal water (1,000 m ³)	356	568	37	323	1,285
		Groundwater (1,000 m ³)	204	544	3,241	0	3,988
		Rainwater used (1,000 m ³)	2	0	0	11	12
		Use of water circulated on premises (1,000 m ³)	7	16	3,485	0	3,508
	Chemical substances	Handling of chemical substances designated under the PRTR law (tons)	494	1,827	1,593	2	3,917
	Atmosphere	CO ₂ emission (t-CO ₂)	142,938	244,049	138,643	24,991	550,621
		CO ₂ emission [fuel] (t-CO ₂)	59,575	121,266	19,983	4,526	205,351
		CO ₂ emission [electricity, steam] (t-CO ₂)	83,363	122,783	118,660	20,465	345,270
Emission of ozone-depleting substances (ODP-kg)		26	5	4	9	44	
Emission of dioxins (mg-TEQ)		3	1	0	0	4	
Release of chemical substances designated under the PRTR law (tons)		33	103	2	1	138	
VOC emission into the atmosphere (tons)*2		538	3,112	35	0	3,684	
OUTPUT	Water and soil environments	Total effluent discharge (1,000 m ³)	441	1,152	3,146	308	5,047
		Into public water system (1,000 m ³)	10	723	2,914	0	3,647
		Into sewage system (1,000 m ³)*3	431	429	233	308	1,401
		BOD (kg)	11	2,908	8,462	0	11,380
		COD (kg)	0	2,671	5,633	0	8,304
		Nitrogen discharge (kg)	0	4,132	7,941	0	12,073
		Phosphorous discharge (kg)	0	540	273	0	812
	Release of chemical substances designated under the PRTR law (tons)	0	0	0	0	0	
	Waste	Total discharge (tons)	113,151	99,713	14,855	3,393	231,111
		Recycled (tons)	112,992	99,178	14,851	3,359	230,380
Final landfill disposal (tons)		16	114	7	24	160	

*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) issued by 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 7,922m³ of spring water from the premises of the Akihabara Sales Building.

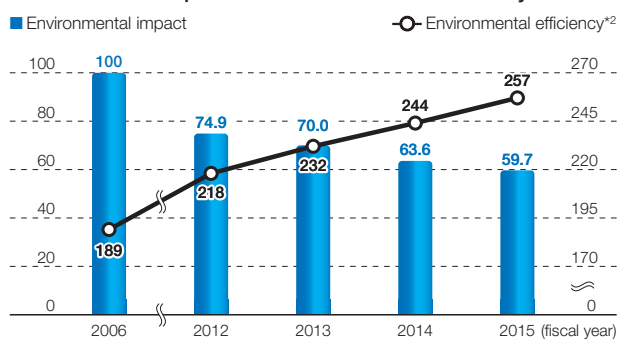
INPUT/OUTPUT Data by Business Field for Domestic Sites (not subject to the environmental targets)

Category	Chief Component	Information & Communication	Living & Industry	Electronics	Non-production sites	Total		
INPUT	Material	Total input (tons)	483,184	72,902	556	0	556,642	
		Papers (tons)	470,657	4,515	7	0	475,179	
		Plastic (tons)	3,310	65,249	2	0	68,562	
		Glass (tons)	0	0	52	0	52	
		Ink, solvent (tons)	7,214	2,260	149	0	9,624	
		Other (tons)	2,002	878	346	0	3,226	
	Energy	Total energy consumption (1,000 GJ)	2,202	675	435	0	3,312	
		Primary energy [fuel] (1,000 GJ)	187	67	46	0	300	
		Secondary energy [electricity, steam] (1,000 GJ)	2,015	608	389	0	3,012	
	Water	Water consumption (1,000 m ³)	1,115	66	939	0	2,120	
		Industrial water (1,000 m ³)	40	0	0	0	40	
		Municipal water (1,000 m ³)	240	66	15	0	321	
		Groundwater (1,000 m ³)	821	0	924	0	1,745	
		Rainwater used (1,000 m ³)	15	0	0	0	15	
		Use of water circulated on premises (1,000 m ³)	0	0	17	0	17	
	Chemical substances	Handling of chemical substances designated under the PRTR law (tons)	7	28	50	0	85	
	OUTPUT	Atmosphere	CO ₂ emission (t-CO ₂)	87,952	26,843	18,146	0	132,941
			CO ₂ emission [fuel] (t-CO ₂)	10,476	3,456	3,177	0	17,109
			CO ₂ emission [electricity, steam] (t-CO ₂)	77,476	23,387	14,969	0	115,833
Emission of ozone-depleting substances (ODP-kg)			0	0	0	0	0	
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)			509	825	3	0	1,338	
Water and soil environments		Total effluent discharge (1,000 m ³)	731	46	854	0	1,632	
		Into public water system (1,000 m ³)	524	30	852	0	1,406	
		Into sewage system (1,000 m ³)	207	16	2	0	226	
	BOD (kg)	485	117	7,158	0	7,761		
	COD (kg)	937	0	0	0	937		
	Nitrogen discharge (kg)	882	0	0	0	882		
	Phosphorous discharge (kg)	68	0	0	0	68		
	Release of chemical substances designated under the PRTR law (tons)	0	0	1	0	1		
Waste	Total discharge (tons)	55,453	10,802	1,228	587	68,070		
	Recycled (tons)	55,079	10,703	1,206	587	67,575		
	Final landfill disposal (tons)	42	10	1	0	52		

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

Category	Chief Component	Information & Communication	Living & Industry	Electronics	Non-production sites	Total		
INPUT	Material	Total input (tons)	158,620	151,459	65,494	—	375,573	
		Papers (tons)	149,906	114,877	41	—	264,825	
		Plastic (tons)	932	19,289	34	—	20,255	
		Glass (tons)	0	0	62	—	62	
		Ink, solvent (tons)	4,288	15,983	218	—	20,489	
		Other (tons)	3,494	1,310	65,138	—	69,942	
	Energy	Total energy consumption (1,000 GJ)	1,050	1,061	897	—	3,007	
		Primary energy [fuel] (1,000 GJ)	125	400	16	—	541	
		Secondary energy [electricity, steam] (1,000 GJ)	925	661	881	—	2,466	
	Water	Water consumption (1,000 m ³)	818	309	414	—	1,541	
		Municipal water (1,000 m ³)	818	282	356	—	1,456	
		Groundwater (1,000 m ³)	0	27	58	—	84	
		Rainwater used (1,000 m ³)	0	0	0	—	0	
	Atmosphere	CO ₂ emission (t-CO ₂)	79,797	68,338	59,476	—	207,611	
		CO ₂ emission [fuel] (t-CO ₂)	7,954	22,959	1,121	—	32,035	
		CO ₂ emission [electricity, steam] (t-CO ₂)	71,842	45,379	58,355	—	175,576	
		Emission of ozone-depleting substances (ODP-kg)	0	2	24	—	26	
	OUTPUT	Water and soil environments	Total effluent discharge (1,000 m ³)	745	254	341	—	1,341
			Into public water system (1,000 m ³)	42	11	181	—	234
Into sewage system (1,000 m ³)			703	243	161	—	1,107	
BOD (kg)			0	747	149	—	896	
COD (kg)			0	2,189	1,797	—	3,985	
Nitrogen discharge (kg)			0	0	110	—	110	
Phosphorous discharge (kg)			0	0	1	—	1	
Waste	Total discharge (tons)	46,587	27,571	2,025	—	76,183		
	Recycled (tons)	44,815	23,990	1,614	—	70,419		
	Final landfill disposal (tons)	1,529	3,203	343	—	5,075		

Environmental Impact and Environmental Efficiency*1



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

*2 Environmental efficiency = net sales / environmental impact

Environmental Management Activities

ISO 14001 Certification

(60 systems at 115 sites, as of March 31, 2016)

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
Electronics Division	ICL	Jul. 1998
Environmental Design Subdivision [Kashiwa Plant and Satte Plant of Toppan Decor Products Inc.] (Living & Industry Division)	ICL	Mar. 2000
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 Central Plant (Toppan Packaging Products Co., Ltd.)	JQA	Jul. 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 Subdivision	ICL	Mar. 2005
Toppan Technical Research Institute	JQA	May 2005
Sapporo Plant and Chitose Plant (Hokkaido Subdivision)	ICL	Jun. 2005
Satte Plant [including Koshigaya Plant] (Toppan Plastic Co., Ltd.)	SAI GLOBAL	Dec. 2006
Ranzan Plant and 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
Kyushu Subdivision (Nishinohon Division of Toppan Printing Co., Ltd.)	ICL	Oct. 2008
Head office and Kansai branch (Toppan Techno Co., Ltd.)	SAI GLOBAL	Mar. 2009
Sodegaura Beverage Plant (Toppan Packaging Service Co., Ltd.)	SAI GLOBAL	Apr. 2009
Fukaya Plant [including Satte Site] (Toppan Packaging Products Co., Ltd.)	ICL	Mar. 2010
Nagoya Plant (Chubu Division)	JQA	Dec. 2010
Mikkabi Plant (Toppan Packaging Products Co., Ltd.)	SAI GLOBAL	Nov. 2010
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 and Saitama Plant (Livretch Co., Ltd.)	JCQA	Jul. 2001
Fukushima Plant [including Takino Plant, Sagamihara Plant] (Toppan TDK Label Co., Ltd.)	RB-ISO	Nov. 2001
Central Research 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.	UKAS	May 2003
Head office and 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. [Round Rock]	LRQA	Nov. 2001
Siam Toppan Packaging Co., Ltd.	MASCI	Apr. 2002
Toppan Printing Co., (H.K.) Ltd.	DNV	May 2002
Toppan Chungghwa Electronics Co., Ltd.	SGS	Oct. 2003
PT. Indonesia Toppan Printing	LRQA	Nov. 2004
Toppan Photomasks Korea Limited	LRQA	Feb. 2005
Toppan Photomasks Co., Ltd. Shanghai	SGS	Feb. 2007
Toppan SMIC Electronics (Shanghai) Co., Ltd.	SGS	Feb. 2007
Toppan Leefung Printing (Shanghai) Co., Ltd.	CCCI	Apr. 2007
Shanghai Toppan Printing Co., Ltd.	NQA	Jul. 2008
Toppan Leefung Changcheng Printing (Beijing) Co., Ltd.	ZDHY	Nov. 2009
Toppan Leefung Printing Limited (H.K.)	CNAS	Mar. 2009
Toppan Leefung Packaging & Printing (Dongguan) Co., Ltd.	CTC	May 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 Leefung Printing (Shenzhen) Co., Ltd.	SGS	May 2012
Toppan Win Label Company Limited	CQC	Nov. 2012

Fiscal 2015 Results of Environmental Education

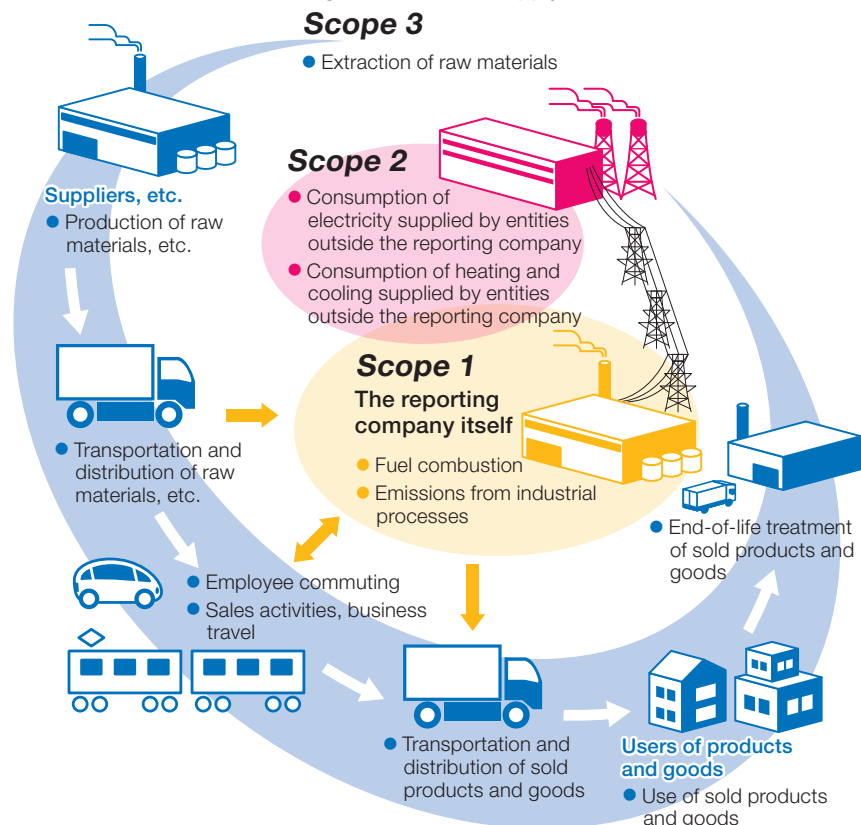
Training	Number of Trainees
New employee training: General environmental education	324
E-learning program: CSR/environment for fiscal 2015	22,419
Toppan Business School (1 course)	24
Toppan Challenge School (14 courses)	53
Internal environmental auditor training program	107

Numbers of Internal Environmental Audits and Issues in Need of Improvement

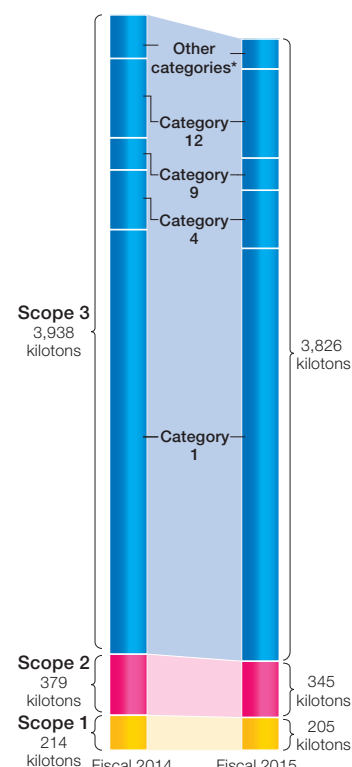
Domestic sites audited	59 sites
Issues in need of improvement identified at domestic sites	125 issues
Domestic sites reviewed	2 sites

Mitigating Global Warming

Greenhouse Gas Emissions throughout the Entire Supply Chain



Scope 1-3 Greenhouse Gas Emissions



Details of the Scope 1-3 Categories

Emissions Types	
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

			Calculation Methods	
			Activity Quantity	Basic Unit from
Indirect Emissions Not Included in Scope 2 (Scope 3)				
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*2
Category 2	Capital goods	Emissions that occur during the construction or production of capital goods purchased or acquired by the reporting company	Capital investments by business field	MOE-DB*1
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 and steam consumption 2. Fuel consumption	1. MOE-DB*1 2. CFP-DB*2
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*2
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*1
Category 6	Business travel	Emissions associated with business travel by employees	Business travel expenses by transport mode	MOE-DB*1
Category 7	Employee commuting	Emissions associated with the commuting of employees between their homes and worksites	Commuter fares or petrol costs	MOE-DB*1
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, or retailing of sold products after delivery to customers	Estimated freight ton-kilometers by product	CFP-DB*2
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*2
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 15 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 volume or employee numbers based on the values counted for organizations whose activities are quantifiable.

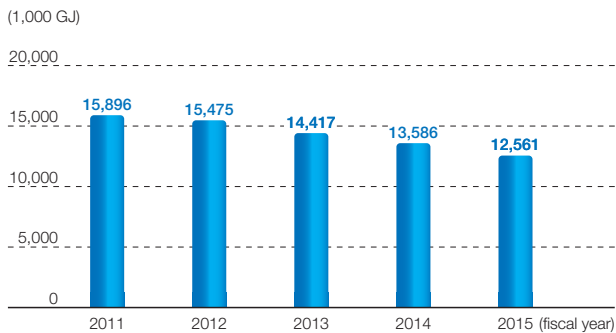
*1 MOE-DB: Emission unit database issued by the Ministry of the Environment of Japan for calculating the greenhouse gas emissions, etc. of organizations throughout the entire supply chain (ver. 2.0).

*2 CFP-DB: Standard database (ver. 1.01) of the Japan Environmental Management Association for Industry (JEMA) Carbon Footprint of Products (CFP) Communication Program

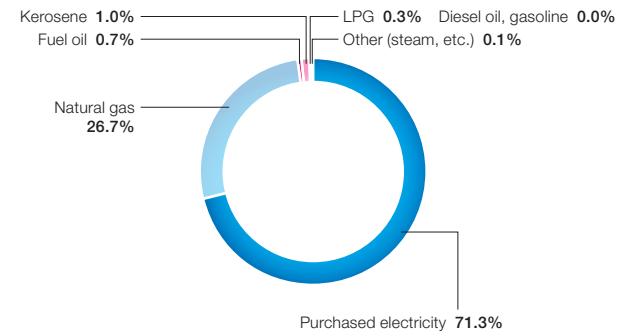
Mitigation of Global Warming through the Development of Energy-saving Measures

	Main Measures in Fiscal 2015	Reduction Result (t-CO ₂ /year)	Main Plans for Fiscal 2016	Reduction Target (t-CO ₂ /year)
Information & Communication	<ul style="list-style-type: none"> Replaced existing cooling machines with high-efficiency alternatives (Sakado) Replaced existing air-cooled chillers with high-efficiency alternatives (Sendai) 	1,929	<ul style="list-style-type: none"> Replace existing cooling machines with high-efficiency alternatives (Sakado) Replace existing compressors with low-pressure types (Ranzan) Replace existing air conditioners with high-efficiency alternatives (Asaka Securities Printing) 	859
Living & Industry	<ul style="list-style-type: none"> Reduced gas consumption by effectively using VOC fuel (Gunma Central) Replaced existing hydraulic molding machines with electric types (Harima) Reduced the gas consumption of ovens by effectively using waste heat (Fukaya) 	6,185	<ul style="list-style-type: none"> Replace existing cooling machines with high-efficiency alternatives (Toppan Packaging Products Fukuoka) Replace existing compressors with high-efficiency alternatives (Sagamihara) 	588
Electronics	<ul style="list-style-type: none"> Replaced existing cooling machines with high-efficiency alternatives (Niigata) Applied inverter control for cooling-water pumps (Kumamoto) 	948	<ul style="list-style-type: none"> Replace existing cooling machines with high-efficiency alternatives (Niigata, Shiga) Replace existing boilers with high-efficiency alternatives (Kumamoto) 	782
Non-production sites	<ul style="list-style-type: none"> Switched from mercury lamps to LED lamps (Ebie) 	189	<ul style="list-style-type: none"> Switch to LED lights (Toppan Technical Research Institute) 	1
Total	—	9,251	—	2,229

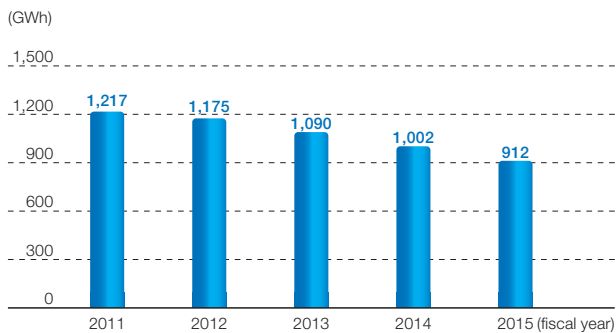
Energy Consumption



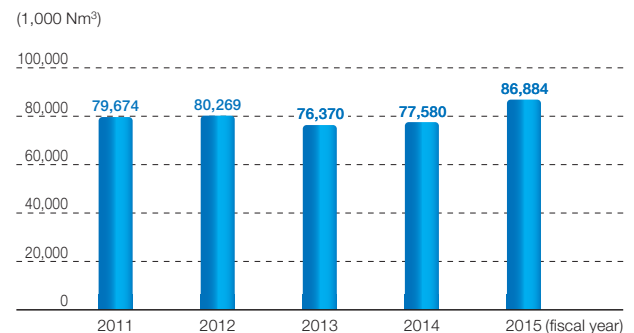
Ratios by Energy Type (in terms of calorific value)



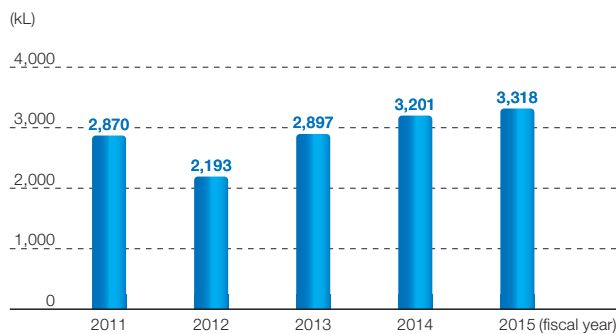
Electricity Consumption



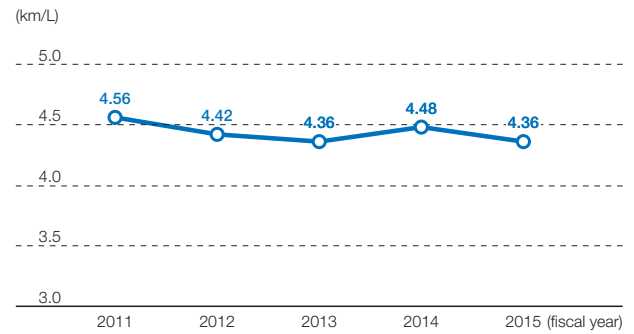
Natural Gas Consumption



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	CH ₄	N ₂ O	SF ₆	PFC	Total
2015	99.63%	0.11%	0.19%	0.04%	0.03%	894,595 t-CO ₂

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

Fiscal Year	Scope 1		Scope 2	Total
	Fuel Consumption	Non-energy-derived Greenhouse Gases	Electricity and Steam Consumption	
2015	26.50% (237,073 t-CO ₂)	2.33% (20,843 t-CO ₂)	71.17% (636,679 t-CO ₂)	100% (894,595 t-CO ₂)

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 2015 are based on calculations of emissions of energy-derived CO₂ and non-energy-derived CO₂, CH₄, N₂O, HFC, PFC, SF₆, and NF₃. GHG emissions accounting for 0.01% or more of total emissions in CO₂-equivalent values from these sites (namely, emissions associated with dry etching, dry ice consumed, waste burned in incinerators, combusted refuse-derived fuel, and fuel consumed in cogeneration systems) are included.

Calculated Level of Fluorocarbon Leakage

Fiscal Year	CO ₂
2015	1,990 t-CO ₂

Note: Calculated in conformance with the Act on Rational Use and Proper Management of Fluorocarbons enforced in April 2015 in Japan.

Building a Recycling-oriented Society

Promotion of Waste Reduction and Recycling

	Main Measures in Fiscal 2015	Reduction Result (tons/year)	Main Plans for Fiscal 2016	Reduction Target (tons/year)
Information & Communication	Ranzan: Reduced the generation of waste wood by repeatedly using pallets for carrying materials in the plant Kawaguchi: Reduced the generation of waste plastics by disseminating and sharing information about waste separation in the plant	-113	Takino: Reduce the discharge of waste oil by reusing residual ink Sakado: Reduce the discharge of food waste by installing garbage treatment units	-103
Living & Industry	Chitose: Promoted material recycling by collecting metals from waste liquids Fukaya: Reduced landfill waste disposal by recycling difficult-to-treat substances	-4,711	Takino: Reduce the discharge of waste paper by reducing initial paper loss during printing Fukusaki: Process aluminum-deposition films into valuable resources	-2,120
Electronics	Shiga: Processed films and other waste plastics into valuable resources Niigata: Separated waste metals for reuse as valuable resources	-767	Kumamoto: Salvage machinery parts and electrical components for reuse as valuable resources Tamana: Reduce the generation of waste wood by asking contractors to collect pallets for carrying materials in the plant	-140
Non-production sites	Toppan Logistics: Separated cardboard, stretch films, and used paper (shredder scraps, hanging tags, copy paper, etc.) for reuse as valuable resources	-83	Office buildings: Separate used paper for reuse as a valuable resource	-8
Total	—	-5,674	—	-2,371

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

Fiscal 2015 Results of Waste Discharge and Recycling

Type of Waste	Waste Discharged (tons)	Ratio	Recycling Rate	Primary Reusage
Waste paper	172,703	74.7%	99.9%	Recycled paper
Waste plastic	27,391	11.9%	99.3%	Plastic materials, RPF*1
Waste oil	6,422	2.8%	99.5%	Recycled oil, fuel
Sludge	5,811	2.5%	99.3%	Roadbed materials
Waste metal	4,408	1.9%	99.9%	Metal materials
Waste alkali	4,376	1.9%	99.7%	Neutralizer
Waste acid	4,803	2.1%	98.3%	Neutralizer
Waste wood	2,396	1.0%	100.0%	Woodchip, paper materials
Cinder	833	0.4%	98.6%	Roadbed materials
Other	998	0.4%	90.1%	—
Waste glass	622	0.3%	93.2%	Glass materials
Food waste	347	0.2%	87.2%	Feed
Total	231,111	100.0%	99.7%	—

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

Zero-emission Sites (TZERO-15) (58 sites approved in July 2015)

Operational Site (Division or Group Company)	Total Waste Generation in Fiscal 2014 (tons)	Waste Recycled in Fiscal 2014 (tons)	Recycling Rate in Fiscal 2014 (%)	Rank
Sapporo Plant (Hokkaido Subdivision)	2,290	2,290	100.00	S
Sendai Plant (Higashinihon Division)	4,478	4,466	99.73	S
Itabashi Site	7,075	7,040	99.51	S
Asaka Site [Commercial Printing, Publications Printing] (Toppan Communication Products Co., Ltd.)	4,043	4,040	99.51	S
Asaka Site (Toppan Joho Kako Co., Ltd.)				
Asaka Securities Printing Plant (Toppan Communication Products Co., Ltd.)	3,281	3,281	100.00	S
Kawaguchi Site	42,962	42,962	100.00	S
Sakado Site	27,982	27,982	100.00	S
Ranzan Plant (Toppan Communication Products Co., Ltd.)	736	736	100.00	S
Nagoya Plant (Chubu Division)	7,227	7,222	99.94	S
Takino Plant (Toppan Communication Products Co., Ltd.)	10,043	9,971	99.28	A+
Takino Securities Printing Plant (Toppan Communication Products Co., Ltd.)	919	903	98.27	A
Fukuoka Plant (Toppan Communication Products Co., Ltd.)	5,642	5,642	100.00	S
Fukuyama Plant (Toppan Joho Kako Co., Ltd.)	1,860	1,841	98.94	A
Oyodo Plant (Toppan Communication Products Co., Ltd.)	305	303	99.36	A+
Gunma Central Plant (Toppan Packaging Products Co., Ltd.)	7,111	7,091	99.73	S
Sagamihara Plant (Toppan Packaging Products Co., Ltd.)	16,633	16,633	100.00	S
Matsusaka Plant (Toppan Packaging Products Co., Ltd.)	3,132	3,096	98.86	A
Takino Plant (Toppan Packaging Products Co., Ltd.)	4,805	4,805	100.00	S
Fukusaki Plant (Toppan Packaging Products Co., Ltd.)	6,549	6,418	98.00	A
Fukusaki Plant (Toppan Plastic Co., Ltd.)	353	353	100.00	S
Itami Plant (Toppan Packaging Products Co., Ltd.)	7,677	7,604	99.05	A+
Fukuoka Plant (Toppan Packaging Products Co., Ltd.)	5,830	5,821	99.85	S
Miyata Plant (Toppan Packaging Service Co., Ltd.)	90	90	100.00	S
Mikkabi Plant (Toppan Packaging Products Co., Ltd.)	3,159	3,159	100.00	S
Tamana Plant (Toppan Packaging Products Co., Ltd.)	5,175	5,175	100.00	S
Miyagi Plant (Toppan Containers Co., Ltd.)	3,456	3,437	99.45	A+
Sano Plant (Toppan Containers Co., Ltd.)	3,601	3,567	99.07	A+
Saitama Plant (Toppan Containers Co., Ltd.)	9,128	9,062	99.27	A+
Koshigaya Plant (Toppan Plastic Co., Ltd.)	208	206	99.08	A+
Satte Plant (Toppan Plastic Co., Ltd.)	481	473	98.25	A
Wakayama Manufacturing Section (Fukusaki Plant of Toppan Plastic Co., Ltd.)	113	113	100.00	S
Saga Plant (Toppan Plastic Co., Ltd.)	230	230	100.00	S
Ranzan Plant (Toppan Packaging Service Co., Ltd.)	455	455	100.00	S
Sodegaura Beverage Plant (Toppan Packaging Service Co., Ltd.)	1,139	1,139	100.00	S
Kyushu Plant (Toppan Packaging Service Co., Ltd.)	123	123	100.00	S
Mito Plant (Toppan Prosprint Co., Ltd.)	4,790	4,784	99.89	S
Satte Plant (Toppan Packaging Products Co., Ltd.)	475	475	100.00	S
Kashiwa Plant (Toppan Decor Products Inc.)	573	573	100.00	S
Satte Plant (Toppan Decor Products Inc.)	5,202	5,202	100.00	S
Harima Plant (Toppan Plastic Co., Ltd.)	792	792	100.00	S
Kansai Bottling Co., Ltd.	92	92	100.00	S
Asaka Plant (Toppan Electronics Products Co., Ltd.)	174	174	100.00	S
Shiga Plant (Toppan Electronics Products Co., Ltd.)	989	989	100.00	S
Shiga Plant (Toppan TOMOEGAWA Optical Films Co., Ltd.)	511	511	100.00	
Mie Plant [Kameyama] (Toppan Electronics Products Co., Ltd.)	2,687	2,687	100.00	S
Mie Plant [Hisai] (Toppan Electronics Products Co., Ltd.)	2,507	2,507	100.00	S
Niigata Plant (Toppan Electronics Products Co., Ltd.)	4,996	4,996	100.00	S
Kumamoto Plant (Toppan Electronics Products Co., Ltd.)	3,773	3,773	100.00	S
Toyama Plant (Toppan Electronics Products Co., Ltd.)	210	210	100.00	S
Toppan Technical Research Institute (Toppan Printing Co., Ltd.)	433	431	99.44	A+
Sakado Distribution Processing Center (Toppan Logistics Co., Ltd.)	1,198	1,198	100.00	S
Sagamihara Plant (Toppan TDK Label Co., Ltd.)	407	407	99.88	S
Takino Plant (Toppan TDK Label Co., Ltd.)	360	360	99.99	S
Fukushima Plant (Toppan TDK Label Co., Ltd.)	2,049	2,047	99.90	S
Mita Plant (Tamapoly Co., Ltd.)	2,787	2,787	100.00	S
Tochigi Plant (Tamapoly Co., Ltd.)	2,344	2,299	98.08	A
Saitama Plant (Livrectech Co., Ltd.)	6,799	6,786	99.81	S
Hino Plant (Toppan Media Printec Tokyo Co., Ltd.)	824	824	100.00	S
Zama Plant (Toppan Media Printec Tokyo Co., Ltd.)	228	227	99.69	S

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 2015.

Preventing Pollution / Controlling Chemical Substances

PRTR Data for Fiscal 2015

(Unit: kg/year)

PRTR No.	Chemical Substance	Handled	Released	Released			Total Transferred
				1. Atmosphere	2. Water	3. Soil	
20	2-aminoethanol	6,071	0	0	0	0	5,464
44	Indium and its compounds	2,766	0	0	0	0	3
53	Ethylbenzene	16,537	1,125	1,125	0	0	839
57	Ethylene glycol monoethyl ether	1,023	117	117	0	0	136
59	Ethylenediamine	3,115	0	0	0	0	3,115
71	Ferric chloride	1,257,174	5	0	5	0	1,132,768
76	Epsilon-caprolactam	1,909	0	0	0	0	178
80	Xylene	47,053	1,638	1,638	0	0	627
87	Chromium and chromium (III) compounds	25,432	8	0	8	0	17,860
88	Chromium (VI) compounds	13,541	0	0	0	0	860
151	1,3-dioxolane	8,728	375	375	0	0	1,222
213	N,N-dimethylacetamide	1,666	36	36	0	0	262
243	Dioxins (mg-TEQ)	646	1	1	0	0	645
272	Copper salts (water-soluble, except complex salts)	175,435	99	0	99	0	71,386
296	1,2,4-trimethylbenzene	90,145	8,791	8,791	0	0	15,813
297	1,3,5-trimethylbenzene	5,175	0	0	0	0	2,746
300	Toluene	2,099,479	125,919	125,919	0	0	126,074
308	Nickel	68,610	0	0	0	0	0
309	Nickel compounds	19,328	8	0	8	0	17,511
392	N-hexane	1,431	164	164	0	0	190
405	Boron compounds	1,750	0	0	0	0	33
411	Formaldehyde	3,670	47	47	0	0	212
412	Manganese and its compounds	5,828	20	0	20	0	721
420	Methyl methacrylate	7,382	160	160	0	0	491
438	Methylnaphthalene	12,904	65	65	0	0	0
448	Methylenebis(4,1-phenylene) diisocyanate	40,587	0	0	0	0	3,075
	Total	3,916,740	138,577	138,438	140	0	1,401,587

Notes: • Period covered: April 1, 2015–March 31, 2016

- 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	2011	2012	2013	2013	2015
Number of Cases	2,825	2,561	2,484	2,867	2,811

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

Eco-creativity Activities

List of Environmentally Friendly Products (88 products as of March 2016)

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	
	Printed materials with environmental logos	Reduced use of chemical substances, reduced use of hazardous substances, use of recycled materials, use of sustainable resources, use of recyclable energy, carbon offsetting, labeling with environmental logos	
	Electronics	Flip chip ball grid array [FC-BGA] substrate (halogen free)	Suitability for disposal
		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	
Living & Industry	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 BARRIER	Use of sustainable resources, resource-saving efforts	
	Stand-up pouch	Resource-saving efforts	
	Bottled Pouch	Resource-saving efforts	
	Plastic container made from recycled materials	Use of recycled materials	
	TT Paper Can	Use of sustainable resources	
	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 (Exceptional*)	Use of sustainable resources, recycling, 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	
	GL-C Bottle	Resource-saving efforts	
	Jar Plus	Resource-saving efforts, recycling	
	GL FILM Lined Paper Cup	Use of sustainable resources	
	Double-wall Barrier Paper Cup	Resource-saving efforts	
	Fluorine-free oil-repellent paper	Recycling	
In-mold Barrier Cup	Extension of product life, improvement in transport efficiency		

Business Field	Product	Standard Categories
Living & Industry	Easy Peel-off Thermo-label	Recycling
	Eco Band	Reusability
	Eco Flat Cup	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
	Cylindrical paper-composite 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
	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
	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 (Exceptional*)	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 (Exceptional*)	Reduced use of chemical substances, reduced use of hazardous substances, use of sustainable resources, extension of product life, labeling with environmental logos
	Sosogi Jozu	Resource saving, improvement in transport efficiency, environmentally friendly disposal
	Preform for PET bottles	Improvement in transport efficiency, visualization of environmental burden
	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 (Exceptional*)	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
Smart Deli Bag	Reduced environmental burden during use	
Plastic UV ink container	Use of recycled materials, use of sustainable resources, improvement in transport efficiency, recycling	
Forest-certified-paper packaging	Use of sustainable resources, labeling with environmental logos	
Biodegradable plastic products	Use of biodegradable materials	
Cardboard with shrink wrap packaging	Resource saving, reduced energy consumption in production, improvement in transport efficiency, recycling	
Emergency magnesium air battery	Reduced use of chemical substances, reduced use of hazardous substances, use of sustainable resources, extension of product life, reduced environmental burden during use, recycling, environmentally friendly disposal	
FINE FEEL	Reduced use of chemical substances, reduced use of hazardous substances, resource saving, extension of product life, environmentally friendly disposal	

*Exceptional environmentally friendly product

Environmental Accounting

Capital Investment for Environmental Conservation (million yen)

Item	Major Content	Fiscal 2015	Increase/Decrease from Fiscal 2014	Average for the Last Five Years
1	Investment in equipment to prevent pollution	1,158	-719	913
2	Investment in equipment to conserve the global environment	1,259	835	993
3	Investment in equipment to circulate resources	231	-15	383
4	Investment in equipment to carry out environmental management activities	7	-28	58
Total		2,656	72	2,347

Note: The data for fiscal 2014 and earlier are adjusted based on revised calculation methods.

Environmental Conservation Benefit

Item	Major Content	Increase/Decrease*1	Fiscal 2015
Energy	Total energy consumption (1,000 GJ)	-3,064	18,881
Water	Water consumption (1,000 m ³)	-2,926	9,961
Atmosphere	CO ₂ emission (1,000 t-CO ₂)	-168	891
	Emission of ozone-depleting substances (ODP-t)	-82	26
Water and soil environments	Emission of dioxins (mg-TEQ)	-4	0
	Total effluent discharge (1,000 m ³)	-2,559	8,020
Waste	BOD (tons)	2	20
	COD (tons)	0	13
	Total discharge (1,000 tons)	-18	375

*1 Increases and decreases from fiscal 2014

Green Procurement and Green Purchasing

Green Procurement Standards for Paper and Level of Fulfillment

Green Principle	Level 1	Level 2	Fiscal 2015 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	2.2%
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 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 2015 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		96.9%
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 2015 Result
Copy machines and printers	Configured to automatically revert to low-power mode or off mode	90.0%
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	81.1%