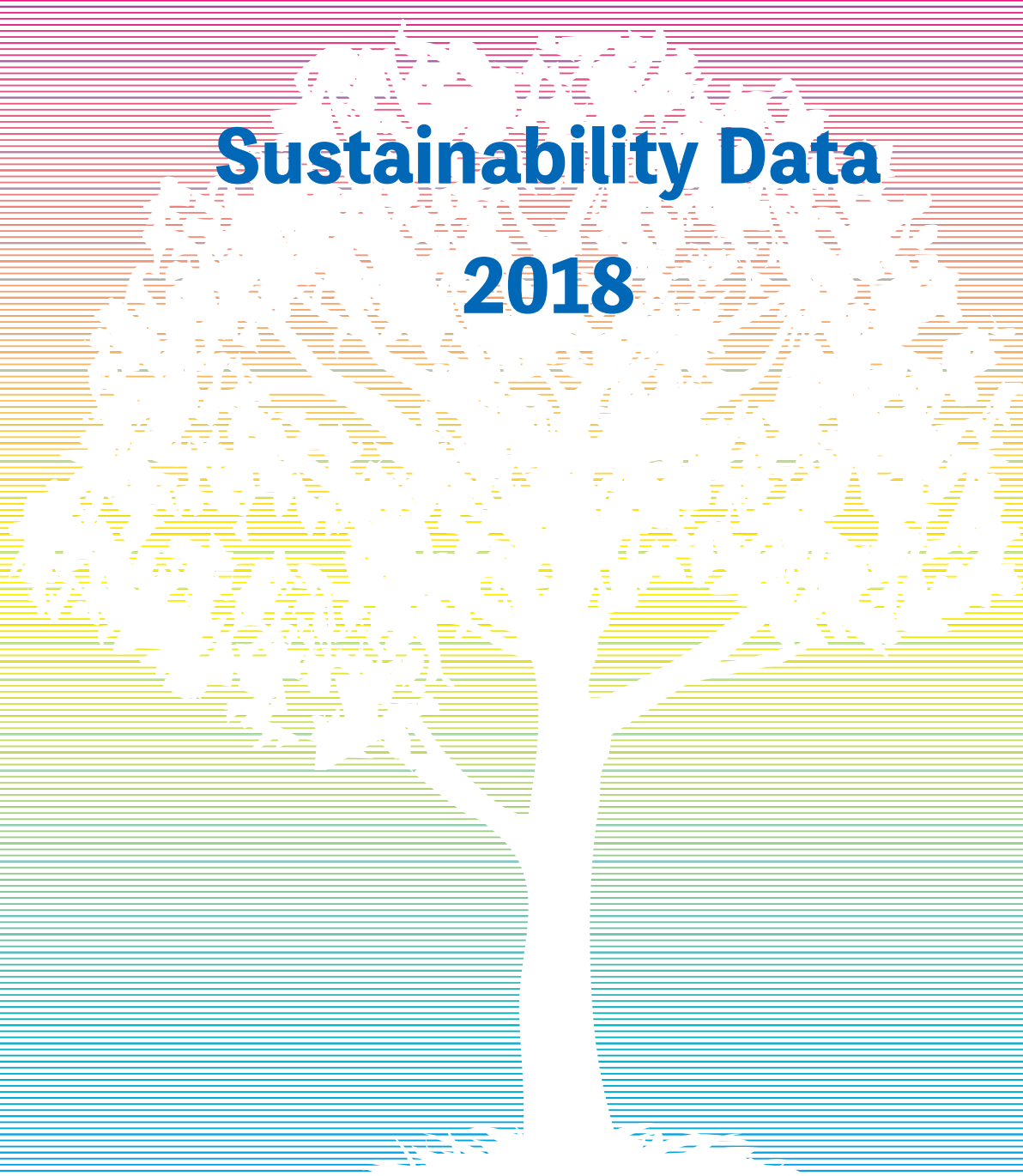


Sustainability Data
2018



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Sustainability Data 2018

This report presents comprehensive sustainability data with a focus on various sorts of performance data and information on environmental, social, and governance (ESG) issues.

Period Covered This report mainly covers activities in fiscal 2017 (from April 2017 to March 2018), though information on prior and later years is also included in parts.

Scope and Boundary Toppan Printing Co., Ltd. and its Group entities consolidated for accounting purposes. The information on personnel principally applies to personnel within Toppan Printing Co., Ltd., the parent company. For details on the scope of the environmental performance data, see the List of Indicators Assured by an Independent Assurance Provider shown on page 2.

Publication Dates (English version) Previous report, December 2017; Current report, December 2018; Next report, December 2019 (planned)

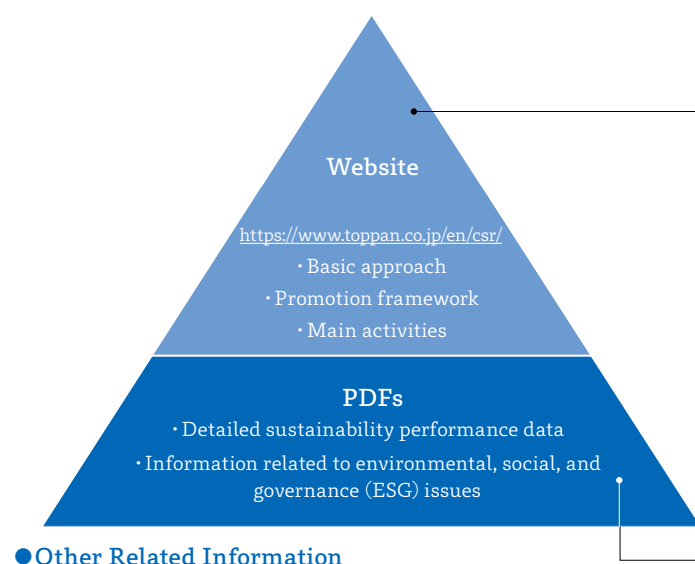
Contact Information

Sustainability Promotion Office, Public Relations Division, Toppan Printing Co., Ltd. (Tokyo, Japan)

Email: csr@toppan.co.jp

Sustainability Information Disclosure System

Toppan reports the Group's sustainability initiatives in line with the seven core subjects set under the International Organization for Standardization (ISO) 26000 standard, a globally recognized set of guidelines on social responsibility. Information relevant to the sustainability activities has been disclosed using timely and appropriate methods that make the best use of information media such as PDFs and the Toppan website.



Other Related Information

- Corporate information: <https://www.toppan.co.jp/en/>
- IR information: <http://www.toppan.co.jp/en/ir/>



Sustainability Section of Toppan Website

This website section presents Toppan's sustainability initiatives, from the Group's basic approach to sustainability to its activities in fiscal 2017. *Sustainability Data 2018* (PDF) and various other forms of detailed performance data are posted here.



Sustainability Data 2018

This PDF presents Toppan's basic approach and promotion framework relevant to sustainability activities, various other sustainability performance data, and information related to environmental, social, and governance (ESG) issues.

Guidelines

This report has been edited according to the Environmental Reporting Guidelines (fiscal year 2012 version) issued by the Ministry of the Environment of Japan and prepared in accordance with the "Global Reporting Initiative (GRI) Standards: Core option" in the "GRI 102: General Disclosures."

List of Indicators Assured by an Independent Assurance Provider

The following sustainability performance indicators in this report (*Sustainability Data 2018 PDF*) are assured by KPMG AZSA Sustainability Co., Ltd., an independent assurance provider.

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

- ① Toppan Printing Co., Ltd. (“the Company”)
 - ② 15 domestic subsidiaries under the control of the Company or the Company’s business divisions and subsidiaries with production facilities (subject to the Company’s environmental targets)
 - ③ 21 domestic Group companies (not subject to the Company’s environmental targets)
 - ④ 23 overseas subsidiaries of the Company (not subject to the Company’s environmental targets)
 - ⑤ 8 overseas Group subsidiaries (not subject to the Company’s environmental targets)
- 68 companies and subsidiaries in total**

On the following pages every indicator assured by an independent assurance provider is marked with an assurance stamp .

Page	Category		Data	Indicator Assured by an Independent Assurance Provider	Companies	Scope		
P16	Human Rights	Promoting Positive Action	Female Managerial and Supervisory Staff	○	1	①		
		Number of Recruits	Total number of regular recruits (percentage of women); Number of mid-career recruitments of experienced female personnel	○	1	①		
P21	Labor Practices	Employee Work and Health & Safety	Information on Personnel	Number of female directors	○	1	①	
			Number of female employees	○	1	①		
			Average tenure	○	1	①		
P24		Occupational Health and Safety	Deaths from occupational accidents; frequency rate; severity rate	○	1	①		
P51	The Environment	Basic Approach	ISO 14001 environmental management system certification	–	60	①-④		
P52			Single-year Environmental Targets	Values, Results, and Evaluation of Environmental Targets (CO ₂ ; waste; VOC)	○	16	①, ②	
			Medium-and-long-term Environmental Targets	CO ₂ Emissions	○	16	①, ②	
					Final Landfill Waste Disposal	○	16	①, ②
					VOC Emissions into the Atmosphere	○	16	①, ②
P53				Evaluating Domestic Environmental Impact based on LIME	Environmental Impact and Environmental Efficiency in Japan	–	16	①, ②
P54				Environmental Performance Data	Types of Environmental Impact by Business Field	–	16	①, ②
P55				Environmental Performance Data	Major Types of Environmental Burden (Total burden; covering Group companies around the world)	○	68	①-⑤
P56				Environmentally Friendly Products	Major Types of Environmental Burden (subject to the environmental targets in Japan)	○	16	①, ②
P57					Results of Environmental Education	–	16	①, ②
					Numbers of Internal Environmental Audits and Issues in Need of Improvement	–	19	①-③
P58				Environmental Accounting	Capital Investment for Environmental Conservation	–	67	①-⑤
					Environmental Conservation Benefit	–	68	①-⑤
P59				Green Procurement and Green Purchasing	Green Procurement Standards for Paper and Level of Fulfillment	–	11 suppliers	–
					Green Procurement Standards for Ink and Level of Fulfillment	–	4 suppliers	–
	In-house Green Purchasing Standards and Levels of Fulfillment	–			16	①, ②		
P62		CO ₂ Emissions	Total sales of environment-related businesses	–	68	①-⑤+1		
			Group-wide emissions, including emissions associated with Group subsidiaries around the world	○	68	①-⑤		
P63		Energy Consumption	Emissions subject to the environmental targets in Japan	○	16	①, ②		
			Group-wide energy consumption, including consumption associated with Group subsidiaries around the world	○	68	①-⑤		
P64	Mitigation of Global Warming	Scope 1-3 Greenhouse Gas Emissions	Energy consumption subject to the environmental targets in Japan	○	16	①, ②		
			Fuel Efficiency of Vehicles Owned by Toppan Logistics	–	1	Toppan Logistics Co., Ltd.		
P66		Greenhouse Gas Emissions	Greenhouse gas emissions by category	○	156	All Group entities consolidated for accounting purposes		
			Percentages of Greenhouse Gas Emissions by Type (in tons of CO ₂ equivalent)	○	68	①-⑤		
P69	Building of a Recycling-oriented Society	Zero-emission Efforts	Percentages of Greenhouse Gas Emissions by Source (in tons of CO ₂ equivalent)	○	68	①-⑤		
			Calculated Level of Fluorocarbon Leakage	–	68	①-⑤		
			Material Input	○	68	①-⑤		
P70			Water Consumption (Water Consumption; Effluent Discharge)	○	68	①-⑤		
			Waste Discharge and Recycling	○	68	①-⑤		
P73	Control of Chemical Substances		Zero-emission Sites	–	18	①-③		
			VOC Emissions into the Atmosphere	○	16	①, ②		
P77	Pollution Control		PRTR Data	○	16	①, ②		
			Monitoring Soil and Groundwater Pollution	–	21	①-③		
P80	Biodiversity	Approaches to Forest Management Certification	Preventing Pollution; Approach to Environmental Compliance	–	21	①-③		
			FSC® and PEFC Certification	–	68	①-⑤		
P81			ECO-GREEN Purchasing	–	16	①, ②		

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

Executive Message



The outlook for the world economy in fiscal 2017 remained uncertain as a consequence of the slowdown of the Chinese market, growing protectionist policies in the U.S., and other concerns elsewhere. In the Japanese economy, meanwhile, ongoing improvements in corporate earnings, employment, and income underpinned a gradual recovery overall.

Turning to the big picture, rapid progress in groundbreaking technologies such as the Internet of Things (IoT), big data, and artificial intelligence (AI) is transforming social norms and values drastically. The paradigm shifts brought by these technologies are redefining every industry in the world.

Industrial revolutions have generally taken place every hundred years in the history of commercial manufacturing. Now, however, we are jumping forward in the historical cycle: just 50 or so years after entering the third industrial revolution, we are already moving into the fourth, the information revolution. Paradigm shifts are being seen in all kinds of industries, including printing, the core activity of the Toppan Group.

Creating the Value of the Future

We at the Toppan Group cannot ensure our ongoing growth if we stay wedded to conventional norms, values, and business models. For a business, the commitment to realizing a sustainable society has become more crucial than ever before. Our Group is now required to innovate itself to create new value and deliver benefits for the global community.

If we are to realize a sustainable society for tomorrow, I am convinced that Toppan will have to execute a rigorous sustainability strategy to help solve social issues while ensuring the ongoing growth of the Group. We are striving to solve social issues through value creation in collaboration with our stakeholders using the printing technologies we have built up since our foundation in 1900. We are also working to grow as a corporation that creates social value by identifying the value of the future and making it a reality through planning and creativity.

Evolving as a Corporation that Creates
Social Value for a Sustainable Society

Shingo Kaneko

President & Representative Director

Toppan has been participating in the United Nations Global Compact and supporting its 10 principles of human rights, labour, environment, and anti-corruption since September 2006. I will continue espousing the United Nations Global Compact and directing our sustainability activities based on this global policy initiative.

As an invaluable guideline to fulfill our social responsibility, we incorporated the International Organization for Standardization (ISO) 26000 Guidance on Social Responsibility (globally recognized standard for organizations) into our sustainability management practices in fiscal 2011. We have been pushing forward with sustainability activities accordingly by piecing together a clear picture of the social issues we should help solve and the social responsibilities we should fulfill. The ISO 26000 standard condenses various social issues to address. Our measures to tackle these issues correspond to the requirements of the United Nations Global Compact.

In September 2015, the countries of the United Nations adopted a series of Sustainable Development Goals (SDGs) as core steps for “Transforming our World: the 2030 Agenda for Sustainable Development.” We will be analyzing how our Group’s businesses are relevant to the 17 SDGs with a view to identifying material issues to be addressed more assertively in our ongoing sustainability activities and further intensifying our measures to achieve these material targets.

With Our Stakeholders

At the Toppan Group we have reviewed our information disclosure system to enable stakeholders to better understand our activities in addressing the diversifying environmental, social, and governance (ESG) issues of the day. I am eager to hear your candid opinions about our sustainability activities.

We will keep up our work towards the creation of a sustainable society by evolving as a corporation that creates social value. We rely on your ongoing support and guidance.

Toppan's Sustainability Initiatives

Evolving as a Corporation that Creates Social Value

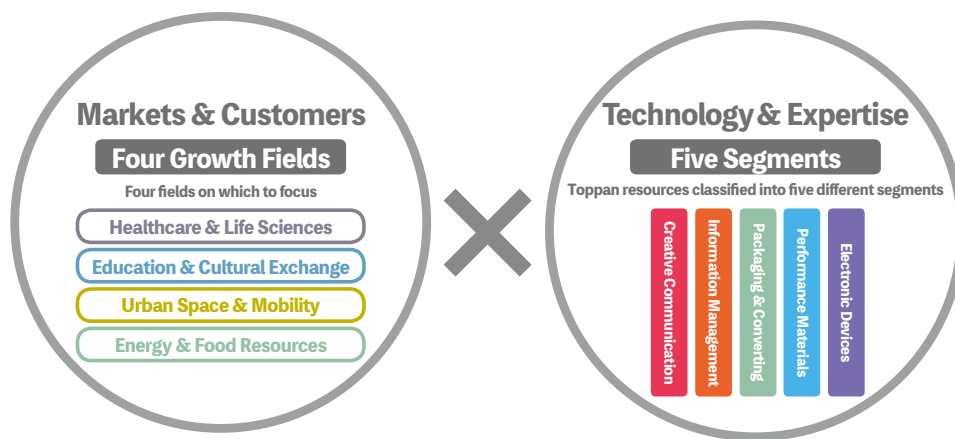
The Toppan Group strives to evolve as a corporation that creates social value towards the realization of a sustainable society. TOPPAN VISION 21 sets forth the basic concepts and direction for the ongoing growth of the Group in harmony with society and the global environment. The vision consists of a "Corporate Structure" and a set of "Business Fields."

The Corporate Structure is made up of three elements: Toppan's Corporate Philosophy, the Corporate Creed, and the Conduct Guidelines. The Corporate Philosophy specifies ideals and the most important values and concepts for the Group. The Corporate Creed expresses the standards to be kept foremost in mind when

performing business operations. The Conduct Guidelines set out the basic concepts and behavioral norms for Toppan employees both as businesspeople and as members of society.

The Business Fields, meanwhile, are made up of two categories: "Technology & Expertise" and "Markets & Customers." The former category encompasses accumulated Toppan knowledge and technologies classified into five resource-based segments. The latter focuses on four key fields for growth: Healthcare & Life Sciences, Education & Cultural Exchange, Urban Space & Mobility, and Energy & Food Resources. The Toppan Group strives to create social value in these four growth fields and five resource-based business segments by providing societies with an array of products, services, and solutions developed through inclusive relationships with stakeholders.

■ Toppan's Business Fields



Toppan's Sustainability Activities

The Toppan Group undertakes sustainability activities in accordance with the principles of the United Nations Global Compact and the guidelines of the ISO 26000 Guidance on Social Responsibility, a globally recognized standard for organizations. The United Nations Sustainable Development Goals (SDGs) have also been incorporated into the Group's sustainability activity targets. Toppan will commit to addressing the social issues targeted by the SDGs in order to promote the continual development of the Group as a creator of social value.

The SDGs, a set of shared global development agendas, were adopted by 193 countries at the UN General Assembly held in September 2015. The SDGs encompass 17 goals and 169 targets focused on social issues for the international community to commit to achieving by 2030. Private-sector businesses around the world are expected to join policy initiatives to help solve the social issues under the SDGs.

Since its foundation in 1900, Toppan has supported various

client companies in their efforts to overcome business challenges. The solutions Toppan offers to meet the ever-changing needs of markets and clients have been based on specialist knowledge and expertise of every variety derived from printing over many decades. Toppan shapes the Group's current Business Fields by applying printing technologies on all fronts.

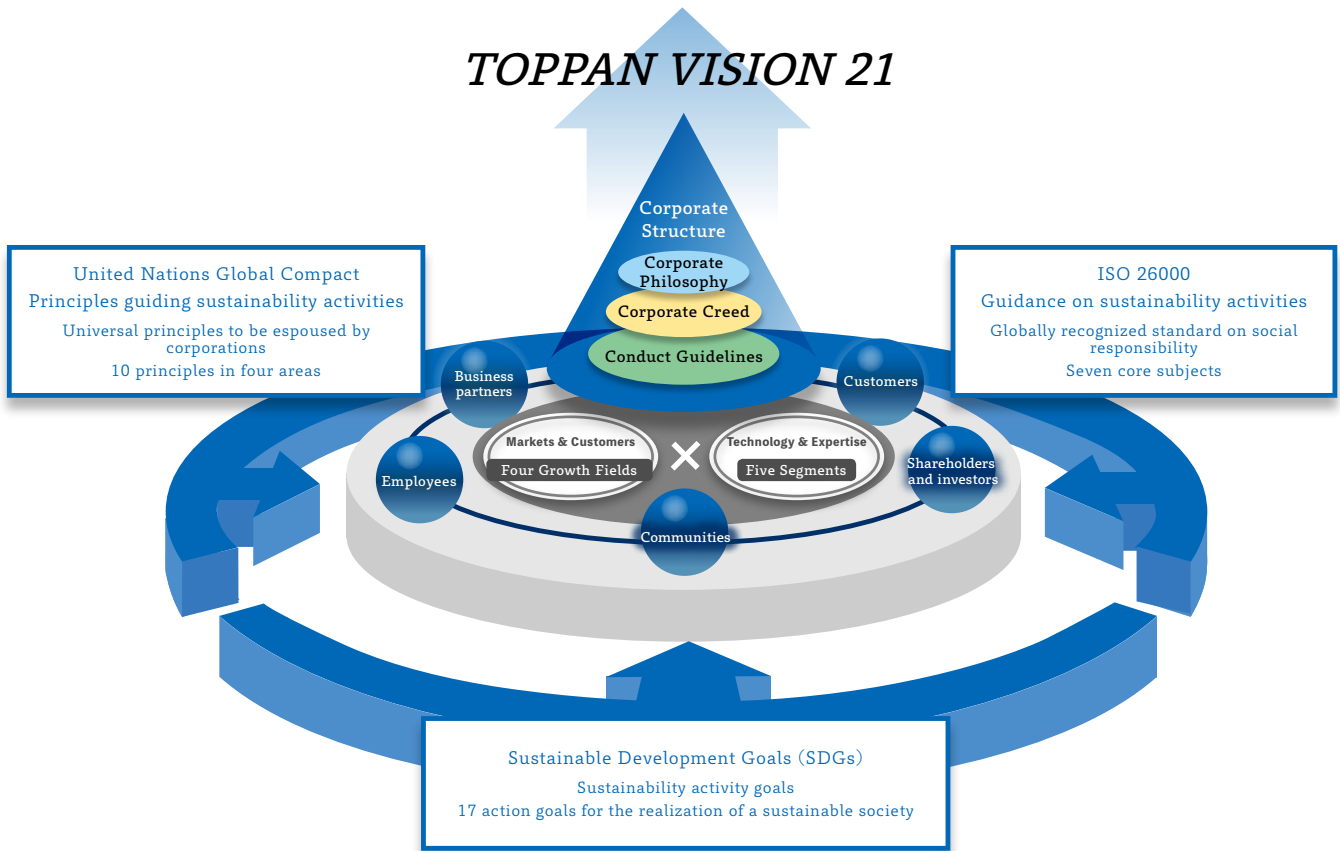
In working with client companies as a partner to tackle their business challenges, the Toppan Group gains opportunities to help solve global social issues through its core B2B business models. The social issues targeted under the SDGs are the very issues the Group should address. Toppan will advance its sustainability activities towards the solution of the SDGs by integrating these development agendas into Group management in consideration of the opportunities they offer and the risks they pose.

Toppan will be reviewing the 17 SDGs and 169 targets to select material issues for the Group to address by analyzing the relevant connections linking the SDGs with the operations and Business Fields of the Group. The Toppan Group plans to develop a clear roadmap to achieve these material targets.

■ Toppan's Approach to Sustainability

A sustainable society
A corporation that creates social value

TOPPAN VISION 21



SUSTAINABLE DEVELOPMENT GOALS
17 GOALS TO TRANSFORM OUR WORLD



Ten Principles of the United Nations Global Compact
<https://www.unglobalcompact.org/what-is-gc/mission/principles>

United Nations Global Compact
<https://www.unglobalcompact.org/>

Sustainable Development Goals (SDGs)
<https://www.un.org/sustainabledevelopment/sustainable-development-goals/>

■ **Directors, Board of Directors, and Various Meetings**

Toppan's Board of Directors is composed of 17 Company directors and three external directors, two of whom are independent officers (as of the end of March 2018). Board meetings are held monthly and whenever a pressing matter requires action or deliberation. Especially important matters are deliberated beforehand by the Management Committee, a body made up of directors nominated by the President & Representative Director. The goal is to lay weight on managerial efficiency in business decision-making. Toppan has also adopted an executive officer system to clarify the authority and responsibilities of those in charge of business execution and enable prompt responses to changes in business circumstances. An Advisory Committee for Nomination and Remuneration for directors has also been in place since fiscal 2017. The Company partially revised its executive officer system in May 2018.

■ **Strengthening Audit Functions**

The Management Audit Office is a body established independently from the business divisions of the Company. Working from legal and rational viewpoints, the office conducts fair and objective audits on the administrative and operational systems of management activities and the practical status of the Company's operations. The office provides feedback to the relevant departments on issues identified, proposes measures for improvement, and reports the audit results to the President & Representative Director, directors in charge of relevant departments, and audit & supervisory board members.

The Compliance Department in the Legal Affairs & Intellectual Property Division spearheads the Company's initiatives to ensure the strict observance of laws and regulations and to firmly establish ethical business practices. The department is responsible

■ **Mechanism for Promoting Sustainability Initiatives**

The divisions of the head office work in collaboration with each other to promote sustainability activities under the President & Representative Director and the Director in charge of Sustainability.

Each division confirms the materiality of action points in line with the seven core subjects set under ISO 26000. The divisions devise action plans and carry out measures while sharing information about the issues they are addressing and the progress they are making. The head office divisions also coordinate and share information with Group companies to advance Group-wide sustainability initiatives.

Every year Toppan organizes a training course on sustainability management for new employees and e-learning-based, Group-wide basic education for employees of the Company and the other main companies of the Group.

■ **Audit & Supervisory Board, Board Members, and Audit Firm**

As of the end of March 2018, Toppan has five audit & supervisory board members, including three external members who are independent officers. Along with their own board meetings, the board members attend meetings of the Board of Directors, meetings of the Management Committee, and other important meetings on risk management. These board members systematically manage the implementation of audits of operational sites and Group companies in close cooperation with the audit firm and internal audit-related departments of the Company. By these means, they audit and advise the Company from a preventive perspective to ensure the legality of the operations of the directors and departments and smooth and appropriate corporate management in line with company policies and regulations. They also regularly convene a meeting of audit & supervisory boards from related companies to improve the effectiveness of the audits by board members across the Group. Toppan has had KPMG AZSA LLC verify the propriety of the Company's accounts through audits in order to enhance the reliability and transparency of the Company's financial information.

for ensuring that employees are fully informed of the Conduct Guidelines, organizing employee education on compliance with applicable laws, and implementing internal audits on information security. The department also reports to the Audit & Supervisory Board on legal violations and misconduct, such as collusion, illicit trading, bribery, and other forms of corruption.

Toppan addresses such issues via the Toppan Group Helpline, an internal reporting system open to all Group employees for use when a legal violation or improper conduct comes to light. The Ecology Center in the Manufacturing Management Division, meanwhile, oversees environmental activities across the Group, conducts internal audits at operational sites, and monitors the progress of their improvements.

■ **Toppan's Sustainability Promotion Structure**



Main Activities and Relevant Information

Revision of the Executive Officer System

Toppan introduced an executive officer system and set up an Advisory Committee for Nomination and Remuneration for directors in an effort to upgrade its existing corporate governance structure in fiscal 2016.

The Company reviewed the executive officer system and partially

revised the rules on executive officers in fiscal 2017. The amended rules stipulate that a director in charge of business execution shall concurrently serve as an executive officer in order to clarify the segregation of duties in corporate management and business execution.

■ List of Directors and Corporate Auditors (as of June 30, 2018)

	Name	Male / Female	Current position	Independence	First year as director or corporate auditor	Tenure in years	Attendance at the Board of Directors meeting	Number of shares of the Company held
1	Naoki Adachi	Male	Chairman & Representative Director		1993	25	18/18	271,526
2	Shingo Kaneko	Male	President & Representative Director		2003	15	18/18	180,779
3	Hideharu Maro	Male	Executive Vice President & Representative Director		2009	9	18/18	80,919
4	Yukio Maeda	Male	Directors & Executive Vice Presidents		2016	2	18/18	107,697
5	Shinichi Ohkubo	Male	Directors & Executive Vice Presidents		2005	13	18/18	153,055
6	Atsushi Ito	Male	Directors & Senior Managing Executive Officers		2007	11	17/18	108,253
7	Makoto Arai	Male	Directors & Senior Managing Executive Officers		2008	10	18/18	110,037
8	Naoyuki Matsuda	Male	Directors & Senior Managing Executive Officers		2010	8	18/18	84,181
9	Sumio Ezaki	Male	Directors & Senior Managing Executive Officers		2011	7	13/18	51,011
10	Nobuaki Sato	Male	Directors & Managing Executive Officers		2010	8	17/18	66,637
11	Taro Izawa	Male	Directors & Managing Executive Officers		2011	7	18/18	62,405
12	Yasuhiko Yamano	Male	Directors & Managing Executive Officers		2011	7	18/18	51,676
13	Tetsuro Ueki	Male	Directors & Managing Executive Officers		2015	3	18/18	17,850
14	Norio Yamanaka	Male	Directors & Managing Executive Officers		2017	1	13/13	26,664
15	Mitsuhiro Nakao	Male	Directors & Managing Executive Officers		2017	1	13/13	33,834
16	Takashi Kurobe	Male	Director & Executive Officer Newly appointed on June 29, 2018		2018	-	-	10,040
17	Kunio Sakuma	Male	Director	External	2010	8	16/18	3,000
18	Yoshinobu Noma	Male	Director	External Independent	2010	8	16/18	69,086
19	Ryoko Toyama	Female	Director	External Independent	2016	2	16/18	0
1	Jitsumei Takamiyagi	Male	Senior Audit & Supervisory Board Member		2014	4	18/18	-
2	Seishi Tanoue	Male	Audit & Supervisory Board Member		2015	3	18/18	-
3	Hiroyuki Shigematsu	Male	Audit & Supervisory Board Member	External	2014	4	18/18	-
4	Keiko Kakiuchi	Female	Audit & Supervisory Board Member	External	2016	2	18/18	-
5	Haruo Kasama	Male	Audit & Supervisory Board Member Newly appointed on June 28, 2018	External	2018	-	-	-

Average tenure in years	6.58
Percentage of female executives	8.33%
Average attendance rate	97.7%

Management Audits

The Management Audit Office carried out 28 operation audits in fiscal 2017 and conducted maintenance and operational evaluations of internal controls over financial reporting for all business divisions and main subsidiaries.

The audit results are regularly reported to the representative directors, directors in charge of the relevant organizations, and the audit & supervisory board members.

Remuneration to Directors and Audit & Supervisory Board Members

The total annual remuneration to directors and total annual remuneration to audit & supervisory board members were 1,082 million yen and 74 million yen, respectively, in fiscal 2017. Please see the section covering corporate governance in the securities report (in Japanese) for details on the method used to determine remunerations and remuneration-related information.

Risk Management

Basic Approach

The Toppan Group views the accurate detection and appropriate management of impending risks as a corporate social responsibility.

In keeping with this view, the Group has identified and taken steps to mitigate quality-related incidents, natural disasters, and other types of risk requiring action to limit the possibility of

adverse impact on business operations. When a risk actually arises, Toppan immediately collects necessary information and takes comprehensive and strategic countermeasures under the Group's risk management structure to minimize losses, ensure business continuity, and maintain the trust of society.

Promotion Framework

■ Division-specific Risk Management Structure

In accordance with the Rules on Risk Management, the Toppan Group has set up a risk management structure under which the responsibilities for risk management are allotted to specific divisions in the head office based on the types of risk involved. The

directors in charge of each relevant division are responsible for taking measures to prevent, avoid, and correct each risk. When a significant risk requiring action arises somewhere in the Group, the responsible director reports it to the Board of Directors.

■ Risks to Be Managed and the Relevant Head Office Divisions in Charge

Type	Risks to Be Managed	Divisions in Charge
Product-related incidents or product liability	Quality-related incidents	Manufacturing Management Div.
Accidents or disasters related to company operations	Accidents or disasters related to fires, explosions, etc.	Manufacturing Management Div.
	Illegal activities related to the storage of solvents, dangerous chemicals, etc.	Manufacturing Management Div.
	Occupational accidents, traffic accidents, or other accidents involving employees	Personnel & Labor Relations Div.
	Incidents related to notes or accounts receivable	Finance & Accounting Div.
	Legal problems with orders received	Legal Affairs & Intellectual Property Div.
	Leakage of personal information or confidential information	Information Security Div.
	Interruption of business operations by cyber attacks	Information Security Div.
Environmental problems	Accidents related to main computer systems	ICT Management Div.
	<ul style="list-style-type: none"> • Violations of environmental laws or regulations • Environmental impact levels exceeding applicable regulatory standards • Illegal disposal of industrial waste 	Manufacturing Management Div.
Climate change and water risks (transition risks)	<ul style="list-style-type: none"> • Transition risks • GHG emission pricing, strengthened obligations for emission reporting, or higher incidence of climate-related lawsuits • Risks related to the transition to a low-carbon economy or replacement of existing products by low-carbon alternatives • Changes in customer behavior or increases in material costs • Widespread public disapproval of the industry or changes in the attitudes of customers or society 	Manufacturing Management Div.
Natural disasters	Physical risks	<ul style="list-style-type: none"> • Escalation of typhoons, hurricanes, floods, or other natural disasters caused by extreme weather • Shifts in global climate patterns such as rising sea levels or increasing average temperatures
	Material losses or personal accidents suffered by customers or the Company due to earthquakes, wind or water damage, lightning, etc.	Personnel & Labor Relations Div.
Related to the Companies Act of Japan	Spreading of new strains of influenza	Personnel & Labor Relations Div.
Improper practices in disclosing information in financial reporting	Shareholder derivative lawsuits or hostile takeovers	Legal Affairs & Intellectual Property Div.
Legal violations or misconduct	False reporting or improper statements	Finance & Accounting Div.
	Violations of the Subcontract Law of Japan or illegal transactions with business partners	Manufacturing Management Div.
	Improper conduct related to accounting, taxes, or payments (fictitious orders, etc.)	Finance & Accounting Div.
	Sexual harassment, discrimination, violations of the Labor Standards Act of Japan, etc.	Personnel & Labor Relations Div.
	Misappropriation or other improper conduct	Personnel & Labor Relations Div.
Infringements of intellectual property rights	Collusion, insider trading, violations of the Subcontract Law of Japan, illicit import or export transactions, or bribery	Legal Affairs & Intellectual Property Div.
	Infringements of patents, trademarks, or copyrights	Legal Affairs & Intellectual Property Div.
Relationships with antisocial organizations	Unreasonable demands from antisocial organizations or transactions conducted between subcontractors or suppliers and antisocial organizations	Legal Affairs & Intellectual Property Div.
Defamation, slander, or other criminal damages	Acts of violence against the Company (threats, kidnapping, theft, etc.)	Personnel & Labor Relations Div.
Risks in overseas business activities	<ul style="list-style-type: none"> • Product-related incidents, sexual harassment, dismissals, environmental problems, fires, natural disasters, etc. • Damage to human or physical assets of customers or the Company caused by international conflicts, terrorism, etc. 	Corporate Planning Div. Personnel & Labor Relations Div.

Directors overseeing divisions in charge

<https://www.toppan.co.jp/en/corporateinfo/officer.html>

■ Risk Management Liaison Meeting

All of the personnel in charge of risk management in the head office divisions assemble on a regular basis to share information at the Risk Management Liaison Meeting. When a risk actually arises, the responsible persons from relevant head office divisions convene an extraordinary meeting to take necessary management actions and develop preventive measures.

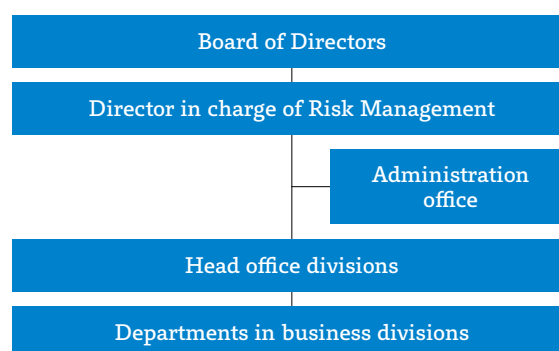
■ Risk Management

The Toppan Group manages individual risks specific to organizations such as business divisions, subsidiaries, and Group companies.

Specifically, the Group performs annual risk surveys to determine all types of risk that require action. The frequency and severity of possible risks are assessed, and countermeasures are formulated based on the assessment results. Midway through the fiscal year, the Group monitors the progress of mitigation measures designed at the beginning of the year. As the administration office, the Compliance Department in the Legal Affairs & Intellectual Property Division takes the time every year to identify serious types of risk that could exert significant adverse impact on management. The responsible head office divisions spearhead efforts to plan countermeasures and take comprehensive measures required for the management of the risks determined to be serious. The Director in charge of Risk Management regularly reports the outcomes of the measures taken to the Board of Directors.

The Toppan Group identified the following 15 types of serious risk in fiscal 2018.

■ Risk Management Structure



- | | | |
|---|--|--|
| 1. Fires or occupational accidents | 6. Leakage of personal information or confidential information | 11. Damage to human or physical assets caused by natural disasters |
| 2. Risks involved in Group control | 7. Interruption of business operations by cyber attacks | 12. Investment loss |
| 3. Risks involved in overseas business activities | 8. Quality-related incidents | 13. Infringements of intellectual property rights |
| 4. Non-performing inventory assets or long-term inventories | 9. Soil or groundwater pollution | 14. Legal violations |
| 5. Incidents related to notes or accounts receivable | 10. Problems related to labor affairs (including long working hours) | 15. Bribery or corruption |

BCP/BCM

Basic Approach

The Toppan Group manufactures a wide variety of products necessary for everyday lives. Many manufacturers that procure from the Group, for example, use Toppan packaging products such as cartons, food packaging materials, and detergent and shampoo bottles. A large earthquake or other disaster may interrupt the supply of these products, causing considerable impact on customer companies and consumers.

To mitigate negative impact, Toppan has been conducting business continuity management (BCM) activities under the Group's Basic Plan for Countermeasures against Earthquake Disasters. These activities aim to ensure the safety of employees, minimize damage to the Group, and maintain a steady supply of products and services to customers when a wide-scale disaster strikes.

Promotion Framework

■ Promotion System

The Toppan Group takes comprehensive measures to address the risks posed by large-scale disasters under the leadership of the BCP Promotion Office in the head office Legal Affairs & Intellectual Property Division. The office coordinates with persons in charge of business continuity planning (BCP) at head office divisions and business divisions across Japan. The Group has also acquired ISO 22301 certification and consistently enhances its competence for business continuity by implementing the following measures.

- Operational-site-based evacuation drills, employee fire response training, and drills using a communication system to check the safety of employees and their families
- Stockpiling of water, food, and other emergency supplies to support local communities and commuters who will have no means to return to their homes
- Japan-wide BCP Meetings (semiannual) and Group Company BCP Liaison Meetings (semiannual)
- Preparations for the startup and operation of emergency task forces
- Establishment of an alternate structure in the Kansai area in preparation for the disaster scenario of an earthquake striking directly beneath the Tokyo Metropolitan Area
- Regular review of action procedures during a wide-scale disaster and disaster-simulation drills

In the event of a natural disaster, Toppan will immediately set up emergency task forces at the head office in Tokyo and operational sites in the disaster-stricken region and take necessary actions based on the Group's business continuity plans.

■ Promotion Mechanism

Everybody must remain calm and take prompt action in the event of a wide-scale disaster. Critical for Toppan is to keep each and every employee aware. The Group focuses on holding business continuity management (BCM) training for new employees and veterans, fostering BCM-qualified personnel with specialist knowledge and expertise in business continuity management, and organizing other forms of BCM education. Toppan also repeats various BCM training to enhance employee preparedness for dealing with emergency situations.

The Group determines the business continuity competencies of business partners by surveying material suppliers and subcontractors involved in production. The head office holds workshops for business partners to encourage them to cooperate with Toppan in performing BCM activities.

Toppan carries out an annual self-review with checklists to assess the Group's BCM activities. Management reviews reported to senior management are conducted in every business division to upgrade the activities.

Main Activities and Relevant Information

More than 100 BCM Drills at 52 Departments and Group Sites across Japan

The Toppan Group is aware of the special importance of drills in facilitating business continuity management (BCM) activities. Group sites organize regular comprehensive disaster-preparedness drills to perennially rehearse the actions to be taken during actual wide-scale disasters: the initial damage assessment and safety verification, the evacuation procedures, the employees' journeys back home from their workplaces on foot, and the distribution of stockpiled supplies. Toppan also focuses efforts on a task-force operation simulation drill developed and designed by the Group to promptly start up and operate the task force in the event of a disaster. In this simulation drill, Group employees form an actual task force equipped with information collection tools, an emergency IP wireless communication system, and other hardware arranged in advance according to the procedures formulated in the Group's

business continuity plans.

This drill has deepened employee awareness of the roles of the task force. Regular improvements and repeated reviews of the points identified in the drill have enhanced the skills required of employees for the handling of emergency conditions caused by a large-scale disaster.



Task force operation drill
(Fukaya Plant)



Task force operation drill
(Hokkaido Subdivision)

BCP Workshops for Business Partners

The lessons learned from past earthquake disasters have renewed Toppan's awareness of the importance of business continuity planning (BCP) throughout the supply chain. On November 27, 2017, the Group invited an expert to lecture at a workshop for business partners on effective BCP. In total, 21 participants from 15 companies exchanged views in a workshop program for identifying BCP issues they are likely to face. They also learned about the significance of business continuity plan formulation, the details of the training and drills carried out in the Toppan Group, and the tools prepared for sharing damage information in emergency conditions. The participants spoke highly of the training overall. One was pleased to have "reinforced my awareness of the importance of information-sharing and good teamwork with Toppan in the event of an emergency situation." Another found "the session very productive" and "gleaned important hints on approaches for addressing BCP issues through discussion with other participants

who tackle similar challenges."

The strong demand for regular sessions has encouraged the Toppan Group to continue holding workshops for more business partners. Toppan seeks to enhance the corporate value of the Group by further solidifying its business foundations and reciprocating the trust of customer companies through these workshops and ongoing BCP and BCM activities of various other types.



ISO 22301 Certification for Security-related Business Operations

After the Great East Japan Earthquake struck in 2011, many companies were forced to halt their business operations due to damage incurred by suppliers of production materials. The experience alerted client companies in every kind of industry to the importance of business continuity management (BCM) within the Toppan Group as a partner with links to their own businesses. The Group began strident efforts to formulate business continuity plans immediately after the earthquake to meet their expectations. Toppan has since applied BCP across the Group and continued BCM activities through a plan-do-check-act (PDCA) cycle. To

cement the trust of client companies, Toppan acquired ISO 22301 certification for its security-related business (card issuing operations, direct-mail creation, operations related to securities production, and back-office operations entrusted to Toppan) in February 2018. The ISO 22301 is an internationally recognized standard on business continuity management systems. The Group will extend the scope of the certification to include other operations based on the assessment of client demands and market trends.

Human Rights

Basic Approach

The Toppan Group regards human rights as a paramount principle in its business activities and sustainability initiatives.

The Group operates business under the foundational concept of respect for people. To ensure this foundational concept, Toppan calls for respect for basic human rights as one of the behavioral

norms set under the Conduct Guidelines for Toppan personnel.

The guideline stipulations include respecting people's personalities and individuality, prohibiting discrimination and harassment, and prohibiting child labor and forced labor.

■ Supporting the Principles of Human Rights Manifested in the United Nations Global Compact

Toppan has been participating in the United Nations Global Compact and therefore supporting its two principles of human rights since 2006. The Group also espouses the United Nations

Guiding Principles of Business and Human Rights and implements the human rights due diligence process and other initiatives for human rights.

Human Rights

Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights; and
Principle 2: make sure that they are not complicit in human rights abuses.

Labour

Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;
Principle 4: the elimination of all forms of forced and compulsory labour;
Principle 5: the effective abolition of child labour; and
Principle 6: the elimination of discrimination in respect of employment and occupation.

Environment

Principle 7: Businesses should support a precautionary approach to environmental challenges;
Principle 8: undertake initiatives to promote greater environmental responsibility; and
Principle 9: encourage the development and diffusion of environmentally friendly technologies.

Anti-Corruption

Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.



■ Labor-Management Initiatives for Human Rights

Toppan's labor union and management undertake various measures for labor-related human rights based on a fundamental policy stated in a collective labor agreement.

The Toppan Printing Labour Union and Toppan's management have concluded the collective labor agreement in order to ensure stable labor-management relations, maintain and improve working conditions, and secure the corporate concord. This agreement sets forth a fundamental policy between labor and management, the rules governing union activities and labor-management negotiations, and employment conditions such as wages and working hours.

The Toppan Printing Labour Union is run by members from Toppan and nine Group companies. The union and the management have concluded an agreement to impose a uniform set of liability-related clauses (rules governing union activities and labor-management negotiations) on all 10 companies.

The Toppan Group has also been taking measures to avoid

human rights violations in the form of negative impact on the lives of people living near its operational sites. For example, the Group promotes environmental conservation initiatives based on The Toppan Group Declaration on the Global Environment and the Basic Policy on Biodiversity.

Fundamental Policy under the Collective Labor Agreement

As a fundamental policy between labor and management, Article 1 of the collective labor agreement, the General Principles, stipulates that the Company and union shall contribute to society through business operations and collectively work for the benefit of the Company and long-term stability of the livelihood of employees. Labor and management both uphold this policy as a common goal. Article 2 of the agreement clearly states that the union has all the rights established by law, specifying that the Company shall respect the union's rights to organize and collectively bargain and act.

More details on Toppan's environmental conservation initiatives
<https://www.toppan.co.jp/en/csr/environment/>

Conduct Guidelines
<https://www.toppan.co.jp/en/corporateinfo/vision/shishin.html>

Ten Principles of the United Nations Global Compact
<https://www.unglobalcompact.org/what-is-gc/mission/principles>

United Nations Global Compact
<https://www.unglobalcompact.org/>

The Toppan Group Declaration on the Global Environment (in Japanese)
https://www.toppan.co.jp/library/japanese/csr/files/pdf/The_Toppan_Group_Declaration_on_the_Global_Environment.pdf

Basic Policy on Biodiversity (in Japanese)
<https://www.toppan.co.jp/library/japanese/csr/files/pdf/2013/biodiversity.pdf>

Promotion Framework

The Personnel & Labor Relations Division, Legal Affairs & Intellectual Property Division, Manufacturing Management

Division, and other head office divisions collaborate to implement various measures for human rights.

■ Training on the Conduct Guidelines

Respect for basic human rights is positioned as Basic Principle 1 of Chapter 1 of the Conduct Guidelines, the standards of behavior for Toppan personnel. Conduct Guidelines Promotion Leaders continue to disseminate this principle at their workplaces. The Toppan Group educates employees on human rights through first-year training, e-learning-based programs, and other training sessions.

■ Operating Hotlines (helpline & power/sexual harassment helpdesk)

Toppan operates a Toppan Group Helpline through which Group employees can report human rights issues or violations. Toppan also runs a helpdesk in the head office Personnel & Labor Relations Division to deal with power harassment, sexual harassment, and any other forms of harassment.

The Toppan Group has also set up a Supplier Hotline, a portal for receiving reports from business partners on human rights issues or violations committed by the Group's procurement departments.

More details on the Toppan Group Helpline
https://www.toppan.co.jp/en/csr/fair_practices.html#link

Supplier Hotline
https://www.toppan.co.jp/en/corporateinfo/our_suggestion/supplier_hotline.html

■ Self-determination on the Career Path / In-house Staff Recruitment

Toppan provides every employee with equal opportunity for skill improvement through an in-house staff recruitment system and the Challenging Job System, a self-directed program to encourage employees to set out their career development plans. The Company expects these systems to nourish a problem-solving, can-do mindset throughout the widening arenas in which the Toppan workforce operates. The Challenging Job System is also used to measure employee satisfaction. Every year employees fill out a five-stage self-evaluation, which they submit to their superior and the Personnel Department. In fiscal 2017 employees were asked to indicate their level of satisfaction with their current job on a 5-level scale. 86.4% of responses were level 3 or above, which indicates satisfaction.

■ Employment of Persons with Disabilities

Toppan promotes the hiring of persons with disabilities in collaboration with a special subsidiary, Tokyo Metropolitan Government (T.M.G.) Prepress Toppan Co., Ltd. Toppan and T.M.G. Prepress Toppan support the ongoing hiring and employment of

■ CSR Procurement

The Toppan Group asks business partners to comply with the Procurement Standards Concerning Human Rights, Labor, the Environment, and Anti-Corruption under the Toppan Group CSR Procurement Guidelines. Business partners continue to work with the Group to undertake initiatives to promote respect for human rights.

Toppan Group CSR Procurement Guidelines (second edition)
https://www.toppan.co.jp/library/english/corporateinfo/files/csr/2014/proc2014_en01.pdf

More details on Toppan's CSR procurement
<https://www.toppan.co.jp/en/csr/procurement.html>

■ Pursuing Diversity Management

Toppan pursues diversity management with a focus on equal opportunity to innovate and create value by engaging diverse human assets* and nurturing their capabilities to maximum potential.

The Company promotes positive action to bring out the full potential of individual employees and assign them to more diverse positions regardless of gender. Women play important roles in widening arenas and the Company strives to ensure equal treatment in promotion to managerial positions.

*Toppan values its employees as precious "human assets."

■ Providing an Open Environment for Recruitment

Toppan hires diverse persons of both genders and of many nationalities, ages, and levels of physical and mental ability through recruitment channels such as the regular hiring of new graduates from universities and high schools and the year-round hiring of persons with disabilities and experienced personnel in the middle of their careers. To reach out to diverse persons, Toppan publicizes its working styles in company orientation sessions and via its website and other media.

persons with disabilities by devising procedures and routines that empower them to perform wide-ranging jobs in ways better suited to their capabilities.

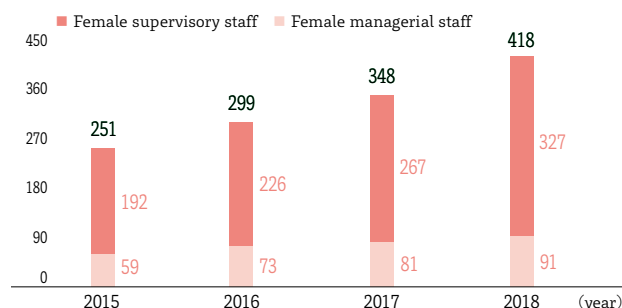
*Every indicator assured by an independent assurance provider is marked with an assurance stamp .

Main Activities and Relevant Information

Promoting Positive Action



Toppan promotes positive action to bring out the full potential of individual employees and assign them to more diverse positions regardless of gender. Women play important roles in wider arenas and the Company strives to ensure equal treatment in promotion to managerial positions. As of April 2018, Toppan has appointed 91 female employees to managerial positions and 327 female employees to supervisory positions. With these appointments, Toppan has attained an 8.9% ratio of women among managerial and supervisory staff. Toppan will continue to promote positive action, aiming to raise the number of female managerial and supervisory staff to 464 by fiscal 2020, a two-fold increase compared to fiscal 2014 (232 as of March 31, 2015).

■ Female Managerial and Supervisory Staff (as of April)



Number of Recruits

■ Number of Recruits

		Fiscal 2016	Fiscal 2017	Fiscal 2018	
Regular recruitment of new graduates from universities and graduate schools	Sales, administration, etc.	Male	98	105	102
		Female	73	65	86
	Technical	Male	102	115	86
		Female	35	36	45
Regular recruitment of new graduates from high schools and colleges of technology	Male	3	1	6	
	Female	33	33	30	
Total number of regular recruits (percentage of women) 		344 (41.0%)	355 (37.7%)	355 (45.4%)	
Mid-career recruitment of experienced personnel 	Male	56	55	—	
	Female	20	22	—	

Employment of Persons with Disabilities

■ Employment of Persons with Disabilities

	Fiscal 2016	Fiscal 2017	Fiscal 2018
Employees	250	253	274
Percentage of total workforce*	2.07%	2.06%	2.25%

*The percentage is calculated based on the total number of regular employees (as of June 1) as a denominator. The total number was presented in the Disabled Persons Employment Report in accordance with Article 8 of the Japanese Law for Employment Promotion, etc. of the Disabled.

SPORTRAIT Sports-Themed Website for the Disabled

Toppan has operated the SPORTRAIT website since 2015. This website provides competition rules and athlete information related to sports for the disabled as a means to raise awareness, spread acceptance, and encourage expansion of this sports category. Through SPORTRAIT, website visitors learn the attraction of sports

for the disabled. Toppan hopes to raise awareness, pursuing a goal of 7,500 page views per month by fiscal 2020.

Employee Work and Health & Safety

Basic Approach

Toppan values its employees as precious “human assets” and understands how deeply it depends on them. The Company is convinced that human assets perform to their full potential when they are vigorous, earnest, and driven.

To support motivated, vigorous, and earnest work, Toppan promotes positive working conditions and healthcare and safety measures in cooperation with the labor union and Toppan Group Health Insurance Union (“the health insurance union”).

For employee health and safety in particular, the Group formulated a Basic Policy on Health and Safety in 2010 and a Health Management Declaration in October 2015. Various measures have been undertaken ever since.

The Health Management Declaration clarifies future health management policies for maintaining and enhancing the health of Group employees. From a viewpoint of “health and productivity management*,” this declaration visualizes and reorganizes health promotion measures and action plans previously organized by the

Group and the health insurance union separately. The declaration pursues dual aims. The first is to promote enhanced health for employees and their families through various approaches, such as activities to support work-life balance. The second is to contribute to society through health-related businesses that support health promotion activities undertaken in communities.

The Basic Policy on Health and Safety, meanwhile, enunciates a “safety first” principle as a top priority for the entire Toppan workforce, including both regular and contract employees, towards the complete elimination of occupational accidents. The Group has maintained its efforts to eliminate occupational accidents in fiscal 2018.

*The term “health and productivity management®” is a registered trademark of the Workshop for the Management of Health on Company and Employee.

Health Management Declaration (in Japanese)
https://www.toppan.co.jp/corporateinfo/our_suggestion/sengen.html

Basic Policy on Health and Safety (in Japanese)
https://www.toppan.co.jp/corporateinfo/our_suggestion/safety-policy.html

Promotion Framework

The Labor Relations Department and Personnel Department in the head office Personnel & Labor Relations Division coordinate with general affairs departments in business divisions across the Company to develop various measures on labor matters in consultation with the labor union. The Personnel & Labor Relations

Division, meanwhile, spearheads employee health and safety initiatives in cooperation with the labor union, the health insurance union, and general affairs departments in business divisions across the Company.

■ Labor-Management Partnership

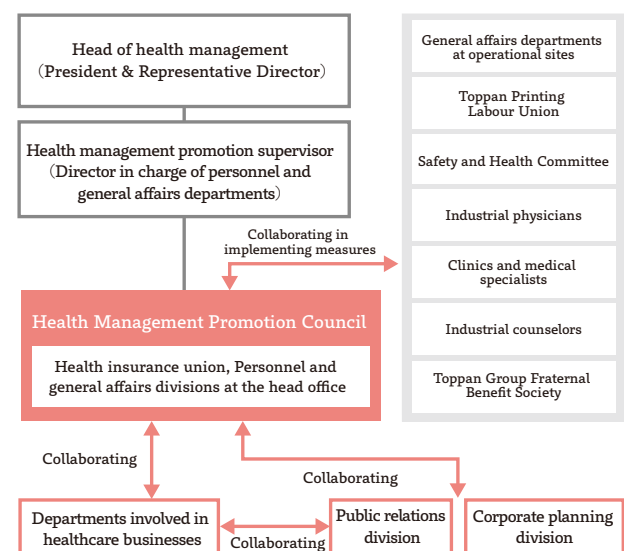
Toppan's labor union and management respect each other's positions as partners with shared ideals. They have been working together on various issues on an equal footing. Business councils are convened as Company-wide and operational-site-based forums to discuss wide ranging managerial issues. Several special committees are also convened to deliberate pertinent issues of the day. Standing committees meet to discuss issues such as working hour reductions, wages, and health and safety. Individual labor-management committees meet when necessary to discuss specially designated subjects such as the creation of a working environment amenable to enhanced job satisfaction.

Toppan has adopted a union shop system. In principle, all non-managerial employees belong to the labor union as members.

■ Committing to Health Management

The Toppan Group has formulated a structure for promoting “health and productivity management*” by establishing a Health Management Promotion Council overseen by the President & Representative Director as the head of health management. Representatives from the Group and the health insurance union meet to engage in constructive discussions on various healthcare measures. A healthcare-guidance brochure for Group employees illustrates the diverse outputs from the council.

■ Structure for Health Management Promotion



*The term “health and productivity management®” is a registered trademark of the Workshop for the Management of Health on Company and Employee.

■ Supporting Work-Life Balance

At the ongoing business councils and labor-management committees to support work-life balance, Toppan's labor representatives and management exchange opinions and deliberate measures to further shorten overtime working-hours and comply with the revised Labor Standards Act of Japan. They have also been analyzing actual overtime practices, reviewing the use of recently adopted working systems, and examining the introduction of new systems.

Labor and management at each operational site also discuss approaches to creating more accommodating workplace environments that encourage employees to take leave. The measures they have devised and implemented are tailored to the actual working conditions at their sites.

■ Efforts to Support Employees with Children

Toppan has striven to create a working environment in which employees can achieve better work-life balance. It does so by providing systems for childcare and nursing care leave, reduced working hours, higher family allowances for dependents, and various other benefits for employees.

From fiscal 2015 Toppan began paying a full salary for the first five days of childcare leave taken by male employees, in order to support employees with children by encouraging the use of the childcare leave system. In fiscal 2016 the eligibility period for preferential work shifts such as reduced working hours for employees with childcare responsibilities was extended to the end

■ Announcing a Common Employer's Action Plan

Toppan Printing Co., Ltd. has published a common employer's action plan based on the Act on Advancement of Measures to Support Raising Next-Generation Children of Japan.

This act specifies respective responsibilities of central and local governments, employers, and citizens of Japan in their efforts to create healthy environments for the upbringing of children who are to lead coming generations. The act stipulates that, as of its enactment on April 1, 2005, these four parties are expected to intensively and systematically engage in childrearing initiatives.

The common employer's action plan, meanwhile, aims to develop a working environment that supports balanced work and family life for employees with young children. Employers are expected to design a plan primarily to arrange varied working conditions for diverse employees, including those not raising children.

Common Employer's Action Plan (fourth term) of Toppan Printing Co., Ltd. (in Japanese)
https://www.toppan.co.jp/library/japanese/csr/files/pdf/2018/koudou_4-20180713.pdf

of a child's fourth year of elementary school (surpassing the age-three requirement imposed under the applicable Japanese law).

Toppan has also been developing the "Hagukumi (nurturing) Program" since fiscal 2012. This program supports the wellbeing of employee parents by providing therapeutic activities for parents on childcare leave, activities to share the know-how necessary for maintaining good balance between working and raising children, and activities to give employees in various positions opportunities to learn about and consider the importance of work-family balance. The Hagukumi Program received the Minister of State for Gender Equality Award at the Kids Design Award 2016 in Japan.

■ Hagukumi (nurturing) Program



■ Efforts to Support Employees Bearing Nursing Care Responsibilities

Toppan's labor union and management employ systems to help employees maintain good balance between work and care at home. These systems create an environment where employees can concentrate on work without worrying about care for family members at home. After reviewing the results of employee questionnaires on nursing care, Toppan relaxed the eligibility requirements for nursing-care-related systems, designed ways to enable employees to more flexibly adjust their working hours for care, enhanced financial support during nursing care leave, and provided more information on work-care balance. Along with system enhancements in these four areas, the Company

allows care-giving employees to commute to and from work by Shinkansen bullet train in certain cases. The Toppan intranet also provides employees with nursing care information in a timely manner conducive to the achievement of good work-care balance in accordance with the latest legal amendments and other social developments.

Toppan has held a seminar on nursing care for employees at operational sites in Tokyo to facilitate understanding and relieve concern about care burdens for family members at home. The Company will organize this seminar at more sites outside of Tokyo in the years to come.

■ Four Approaches in Employee Support Systems for Good Work-Care Balance

Eligibility requirements for nursing-care-related systems	<p>Eligible members from employee families are in need of long-term care or support under one of the following conditions:</p> <ul style="list-style-type: none"> ● "In need of long-term care" as specified in the Child and Family Care Leave Act of Japan ● "In need of long-term care" as specified in the Long-term Care Insurance System of Japan ● "In need of support" as specified in the Long-term Care Insurance System of Japan
Ways to more flexibly adjust working hours for care	<ul style="list-style-type: none"> ● Nursing care leave ● Reduced working hours for nursing care (reduced working hours, flexible work schedules, reduced number of prescribed working days per week) <ul style="list-style-type: none"> *Nursing care leave and reduced working hours for nursing care can be taken in installments. *Employees are allowed to switch between the two systems. ● Days off for nursing care ● Commuting by Shinkansen bullet train for family care reasons
Financial support during nursing care leave	<ul style="list-style-type: none"> ● Allowance for nursing care leave (40% of the employee's average wage) ● Entitlement for paid days off for nursing care
Provision of information on work-care balance	<ul style="list-style-type: none"> ● Launch of an intranet site to provide information on work-care balance This site provides employees with general knowledge about work-care balance and information on support systems available at the Company, public nursing-care-related systems, and so on. ● Launch of a nursing-care consultation desk run by outside experts The Company commissions an external professional body to offer unlimited, free-of-charge nursing-care consultation to employees on a contract basis. Employees can also use fee-based agency services such as watch-over visits or administrative processes handled by dedicated staff at care facilities and hospitals.

■ Occupational Health and Safety

Safety masters, safety personnel, employees in charge of engineering and safety, and other safety experts have been deployed to Group sites across Japan to strengthen safety promotion systems. Based on the Basic Policy on Health and Safety, Toppan organizes extensive safety education of various types for the Group's workforce, including both regular and contract employees. This includes thorough training for foremen and risk assessments to upgrade the intrinsic safety of machines and equipment for every worker across the Group.

Anzen Dojo safety training facilities outfitted to simulate dangers and alert employees at the workplace were set up at two overseas Group sites in fiscal 2017, one in China and another in Thailand. The *dojo* facilities have been operated for several years domestically at the Kawaguchi Plant in Saitama Prefecture, Takino Plant in Hyogo Prefecture, and Fukuoka Plant in Fukuoka Prefecture.

Anzen Dojo initiatives (in Japanese)

https://www.toppan.co.jp/corporateinfo/our_suggestion/safety-policy/anzendojo.html



■ Measures for Mental Healthcare

Toppan undertakes the following measures to prevent mental health problems at the workplace.

- A stress check system and e-learning-based programs to help individuals better perceive and cope with the stresses affecting them
- An Art Salon workshop to refresh minds and bodies through the act of artistic creation
- Rank-based training and handbooks to prevent or promptly detect and treat mental problems
- Counseling rooms where employees can receive advice from in-house counselors in a comfortable, pressure-free setting
- Advisory agreements concluded with mental healthcare specialists
- A new employment regulation defining rehabilitation programs that support employees returning from mental healthcare leave by helping them to return to work more seamlessly

Toppan recognizes that the most effective strategy to administer fundamental prevention measures for mental health problems is to enable employees to improve their physical and mental conditions by having the means and wherewithal to better understand themselves, communicate skillfully, and adopt positive lifestyle habits. The Company has been organizing mental healthcare programs such as workshops arranged in cooperation with workplaces.

■ Overview of Mental Healthcare Activities

	Self-care	Line Care (by managers and supervisors)	Care Using Resources within the Workplace	Care Using Resources outside the Workplace
Fundamental prevention Creation of job satisfaction	<ul style="list-style-type: none"> ● Assertion ● Career development ● Good physical and mental condition 	<ul style="list-style-type: none"> ● Dialogue skills ● Target management ● Operational reform and improvement 	<ul style="list-style-type: none"> ● Participation in in-house seminars 	<ul style="list-style-type: none"> ● Participation in external seminars
Primary prevention Prevention	<ul style="list-style-type: none"> ● Self-development 	<ul style="list-style-type: none"> ● Attendance management ● Improvement of workplaces 	<ul style="list-style-type: none"> ● Participation in rank-based training programs ● Activities by the Safety and Health Committee 	<ul style="list-style-type: none"> ● Participation in external seminars
	Stress check system	Test administration and understanding of current conditions	Improvement of workplaces	Interviews and guidance
Secondary prevention Early detection and early response	<ul style="list-style-type: none"> ● Early counseling and consultation 	<ul style="list-style-type: none"> ● Recommendation for early consultation 	<ul style="list-style-type: none"> ● Consultation with industrial physicians and public health nurses 	<ul style="list-style-type: none"> ● Hospitals and EAPs*
Tertiary prevention Steps to limit severity and prevent recurrence	<ul style="list-style-type: none"> ● Ongoing treatment 	<ul style="list-style-type: none"> ● Return-to-work program ● Personnel reassignment 	<ul style="list-style-type: none"> ● Periodic interviews by industrial physicians 	<ul style="list-style-type: none"> ● Treatment by a specialist physician

*Employee assistance programs (EAPs): The EAPs shown above are counseling and training programs run by an external specialist body under contract with the Company and the Toppan Group Health Insurance Union.

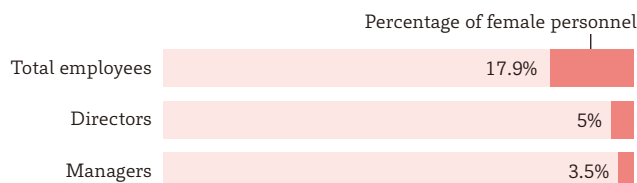
Main Activities and Relevant Information

Information on Personnel

■ Number of Personnel (as of March 31) 

		Directors	Management Class	Supervisors	Total Employees	Average Tenure	Average Age	Sum Total Employees	Part-time Workers	Dispatched Staff
Fiscal 2015	Male	26	1,989	1,843	7,576	15.4	42.9	8,993	562	203
	Female	0	59	192	1,417	9.8	34.2			
Fiscal 2016	Male	18	2,158	1,932	7,930	15.1	43.4	9,551	502	237
	Female	1	71	224	1,621	9.3	34.3			
Fiscal 2017	Male	19	2,201	1,914	7,964	15.2	43.6	9,699	451	246
	Female	1	79	266	1,735	9.3	34.6			

■ Fiscal 2017 Rank-based Percentages of Female Personnel (%)

■ Reasons for Leaving*¹

	Fiscal 2015	Fiscal 2016	Fiscal 2017
Personal reasons	184 (39)	206 (54)	217 (62) ²
Retirement	94 (0)	85 (1)	120 (1)
Requested by the company	0 (0)	0 (0)	0 (0)
Other	92 (3)	83 (3)	108 (20)
Total	370 (42)	374 (58)	445 (83)
Turnover rate	4.0%	3.8%	4.5%

*1 The number of female employees who left the Company is shown in parentheses.

*2 Five female and 31 male employees took advantage of Toppan's support system for employees who pursue new careers after leaving the Company.

■ Retention Rates for Recruits
(Percentage of fiscal 2015 hires still working at Toppan)

	Male	Female
Hired on April 1, 2015	195	111
Still with Toppan as of April 1, 2018	178	97
Retention rates	91%	87%
Average for male and female employees	90%	
Percentage who leave the Company before working three years	10.1%	

■ Average Annual Salary

	Fiscal 2015	Fiscal 2016	Fiscal 2017
Average annual salary	6,697,391 yen	6,956,597 yen	6,910,163 yen

Listed in the 2018 Health & Productivity Stock Selection and Recognized as a Health & Productivity Organization

Toppan Printing Co., Ltd. was listed in the 2018 Health & Productivity Stock Selection under a program operated by the Japanese Ministry of Economy, Trade and Industry (METI) and the Tokyo Stock Exchange (TSE) to select TSE-listed enterprises with outstanding “health and productivity management*” programs. Under another program jointly conducted by METI and members of Japanese health insurance organizations, Toppan has been selected for two years running (fiscal 2017 and 2018) to join the Health & Productivity “White 500” (large enterprise) category, a group of organizations recognized for their excellent achievements in advancing health and productivity management.

Under the Health & Productivity Stock Selection program, METI and TSE have been jointly selecting outstanding TSE-listed enterprises that are strategically engaged in healthcare initiatives for employees and their families from a management perspective on a one-company-per-industry basis in Japan.

Under the Certified Health & Productivity Management Organization Recognition Program, meanwhile, METI has been recognizing excellent enterprises and other organizations advancing

health and productivity management as Health & Productivity organizations. The Nippon Kenko Kaigi (Japan health conference) conducts this recognition program by assessing organizations for their engagement in initiatives to overcome the healthcare-related challenges of communities and to promote the health-conscious activities recommended by the Kaigi.

In the 2018 Health & Productivity Stock Selection, Toppan was recognized for its work in collaboration with the Group’s on-site clinics, industrial physicians, and the labor union to develop working environments amenable to enhanced job satisfaction. Toppan’s healthcare solutions were also praised for their contribution to the maintenance and enhancement of public health.



TOPPAN NEWSROOM (in Japanese)

<https://www.toppan.co.jp/news/2018/02/newsrelease180220.html>

*The term “health and productivity management” is a registered trademark of the Workshop for the Management of Health on Company and Employee.

Toppan Sports Festival 2017

The Toppan Sports Festival 2017 was held in the Saitama Super Arena on October 1, 2017. This labor-management event was planned, organized, and run by mostly younger employees of the Group. Some 4,300 employees and family members came to take part in various games and events.

To enhance job satisfaction at the workplace, the Toppan

Group organizes site-based labor-management events designed to strengthen bonds between colleagues. Toppan also holds a Group-wide sporting event every two years to facilitate communication, build a sense of unity, and heighten an understanding of the Group among employee families.



Annual Paid Leave Used

	Fiscal 2015	Fiscal 2016	Fiscal 2017
Average paid leave used (days)	8.6	9.6	10.3
Average ratio*	45.1%	50.8%	55.1%

*Average ratio = average paid leave used / average paid leave granted

Main Leave Systems and Family Benefits

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

Stock Leave	If annual paid leave is left unused for two years after it is granted, up to 50 days of the leave can be accumulated as stock leave. 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 taken consecutively until their child reaches the age of two years. 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 two years) 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. The union also gives out a complimentary childrearing magazine and runs a consultation office for employees with questions about the health of the body and mind.

Employees Taking Maternity or Childcare Leave

	Fiscal 2015	Fiscal 2016	Fiscal 2017
Employees taking maternity leave	85	105	111
Employees taking childcare leave*	295 (160)	300 (173)	334 (160)

*The number of male employees who took childcare leave is shown in parentheses.

Seminars for Good Balance between Work and Care at Home

Toppan sites in Tokyo have been holding seminars to help employees maintain a good balance between work and care at home since fiscal 2016. Outside experts from a nursing-care consultation service with which Toppan has a contract are invited to lead seminar courses. The guest lecturers present general knowledge on nursing care and tips for achieving good work-care balance. Toppan personnel also inform participants of support systems available at the Company, such as nursing care leave and reduced working hours for nursing care, as well as intranet sites and other information sources on nursing care. The Company plans to organize seminars at operational sites in the Kansai area

for the first time in fiscal 2018. As these seminars are held in more sites, they will help create an environment where employees can concentrate on work without having to worry about care burdens for family members at home.



Expanding *Anzen Dojo* Overseas

Two new *Anzen Dojo* safety-training facilities were opened at Toppan Group sites in the last two years: one at Siam Toppan Packaging Co., Ltd. in Thailand in October 2017; another at Toppan Leefung Packaging & Printing (Dongguan) Co., Ltd. in China in January 2018.

The new overseas facilities leveraged the Group's expertise on safety education cultivated at similar *dojos* in Japan. Both facilities are equipped with safety-related displays and danger simulators optimally selected for the working conditions at their sites. The Group trains on-site safety masters and regularly holds safety sessions for frontline operators according to the same operational scheme applied in Japan.

Approximately 2,500 Group employees around the world took safety training at *Anzen Dojo* facilities in fiscal 2017. On a

cumulative basis, training has been provided to more than 25,000 people at the facilities since they opened.



TOPPAN NEWSROOM

<https://www.toppan.co.jp/en/news/2018/03/newsrelease180308.html>

Company-wide Mental Stress Checks

Toppan began providing Company-wide mental health checkups well before stress checks in organizations were required by Japanese legislation. Toppan has implemented a web-based checking system across the Company since fiscal 2017. This system enables results to be confirmed by people taking the tests and those administrating them as soon as the checkups are completed. Toppan will promptly provide necessary care to any employee identified as demonstrating a high level of stress.

An e-learning program on stress was also arranged online. A total of 20,687 Group employees participated in the course in fiscal 2017.

A cross-organizational analysis of checkup results, meanwhile, allows the Company to determine detailed organization-specific trends in mental well-being and variations between different organizations across the Company. This analysis identifies workplaces with higher health risk and ensures that the results are shared with department heads to prompt further efforts towards

improved working environments.

In fiscal 2018 Toppan will introduce a Quick Survey Sheet (with 80 questions) on New Forms of Occupational Stress. The new survey sheet, together with Toppan's original mental health survey questions, will provide data the Company needs to enhance mental healthcare for employees and delve more deeply into the sources of stress within Toppan's organizations.

Mental stress check results are valuable data for fully understanding the mental health status of Toppan's organizations as well as its individual employees. Toppan continues to use these data to steadily work towards the creation of workplaces free of mental illnesses.



Occupational Health and Safety

In fiscal 2017 the Toppan Group continued undertaking safety activities towards the complete elimination of occupational accidents. There have been no occupational accidents leading to

the death of an employee or contract worker in the Toppan Group in the last three years.

	2015	2016	2017
Deaths from occupational accidents	0	0	0
Frequency rate ¹	0.05	0.000	0.000
Severity rate ²	0.001	0.000	0.000

*1 Number of occupational accidents requiring employee leave, per million cumulative actual working hours (reflects the frequency of occupational accidents)

*2 Number of workdays lost as a consequence of occupational accidents, per thousand cumulative actual working hours (reflects the severity of occupational accidents)

Safety Meetings

The Personnel & Labor Relations Division (Health, Safety & Fire Safety Promotion Department) coordinates with the Manufacturing Management Division in safety meetings to assess and deliberate the safety measures applied to machines and equipment and the

activities undertaken to mitigate health and safety risks.

Safety meetings were held at 21 operational sites across Japan in fiscal 2017. Meetings were also held at four sites in the U.S. and five sites in China in fiscal 2017.

Human Asset Development

Basic Approach

Labor shortages are anticipated throughout various industries in Japan. Toppan is convinced that maximizing the performance of the workforce as an asset of society will help solve social issues.

Mindful of how deeply it depends on its employees, Toppan fosters individuals with ambition and integrity who will go on to become

the driving force towards the realization of *TOPPAN VISION 21*. Toppan would like to contribute to society as a corporation blessed with human assets with excellent communication skills and heightened awareness and sensibilities.

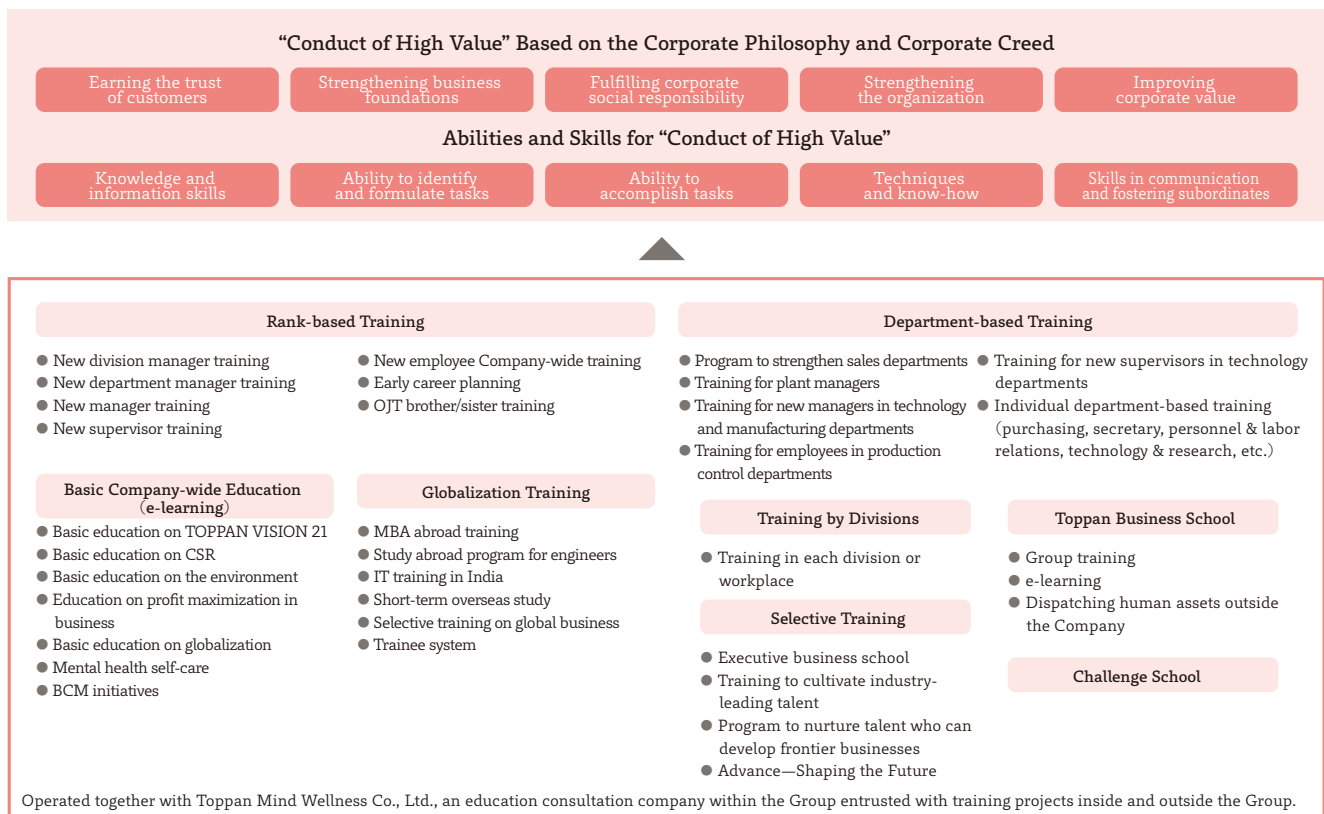
Promotion Framework

■ Toppan University

The Human Resource Development Center in the head office Personnel & Labor Relations Division coordinates with persons in charge of human asset development at departments throughout the Company to institute training programs. These programs to develop and nurture human assets are organized systematically around

Toppan University, a simple platform that strives to foster leaders while supporting the skill improvement and career enhancement of employees through basic and special programs, a leadership program, and a personal empowerment program.

■ Systematic Human Asset Development Programs



Toppan has established training centers in Kawaguchi, Saitama Prefecture and Yugawara, Kanagawa Prefecture to nurture human assets. These centers are venues for various training sessions and interaction between Toppan personnel.

In April of 2017 Toppan launched the Human Resource Development Laboratory as a research base to develop innovative personnel training programs that apply brain research, neuroscience, analysis of physical condition, and various technologies. This laboratory will be used as a platform to design and implement programs that foster human assets with excellent communication skills and heightened sensibilities. The Company plans to improve individual productivity and facilitate the individual development of the Toppan workforce via this platform.

The Company also operates a training management system that offers training tools and information on various learning courses. Employees can review records of their own training online via the e-learning programs. Toppan has also surveyed every employee with a questionnaire on the Company's human asset development programs to reflect the results in future development plans.



Human Resource Development Laboratory

Main Activities and Relevant Information

Results of Human Asset* Development Programs in Fiscal 2017

Program	Outline	Number of Employee Participants (cumulative)
Toppan Business School	A series of programs to provide self-development training with group and e-learning-based courses. A wide range of training is available, from courses to learn basic knowledge and skills in business to advanced courses to enhance specialist skills.	3,186
Challenge School	A program to provide self-development training with correspondence-learning courses to acquire knowledge and skills.	4,633
E-learning-based Group-wide basic education	E-learning-based programs to give every Group employee the opportunity to learn requisite business knowledge.	82,924
Selective training on global business	A program to equip employees with fundamental qualities for global business such as linguistic aptitude, cross-cultural competency, and consensus building.	31
Trainee system	A system to deploy young employees to overseas affiliates for one year of language immersion and practical training in day-to-day business activities, primarily to enhance their linguistic aptitude and cross-cultural competency.	10
JICA Japan Overseas Cooperation Volunteers	A program to dispatch Toppan employees to emerging and developing countries via the trainee system to work as Japan Overseas Cooperation Volunteers for the Japan International Cooperation Agency (JICA).	2
Short-term open programs at IMD	A program to send employees involved in international business to short-term open courses at the International Institute for Management Development (IMD; one of the world's top-ranked business schools) in Lausanne, Switzerland to acquire practical training in leadership, the tenacity required to follow through on projects to completion, and other capabilities required in global business.	2

*Toppan values its employees as precious "human assets."

Fiscal 2017 Human Asset Development Expenditure

	Expenditure on Training, etc. per Employee	Usage Rates of Toppan Training Centers*	
		Kawaguchi	Yugawara
Fiscal 2015	79,251 yen	85.7%	45.1%
Fiscal 2016	70,783 yen	87.0%	45.8%
Fiscal 2017	70,730 yen	87.6%	46.2%

*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.)

Strict Compliance

Basic Approach

Legal compliance in business operations is an indispensable prerequisite for every corporation to fulfill its responsibilities to society.

Toppan established the Conduct Guidelines as a set of compliance standards in June 2000, the centennial of Toppan Printing Co., Ltd. These guidelines set forth standards for Toppan personnel's behavior based on the Corporate Philosophy and principles of legal compliance.

In November 2010 Toppan completely revised the guidelines

into the Toppan Group Conduct Guidelines, a set of common principles that all Group companies around the world are required to observe for the assurance of strict compliance. These Group-wide guidelines are reviewed every year to adjust to changes in business environments, social conditions, and other circumstances relevant to the Group. Any revision of the guidelines is subject to a resolution by the Board of Directors of Toppan Printing Co., Ltd.

Toppan Group Conduct Guidelines

<https://www.toppan.co.jp/en/corporateinfo/vision/shishin.html>

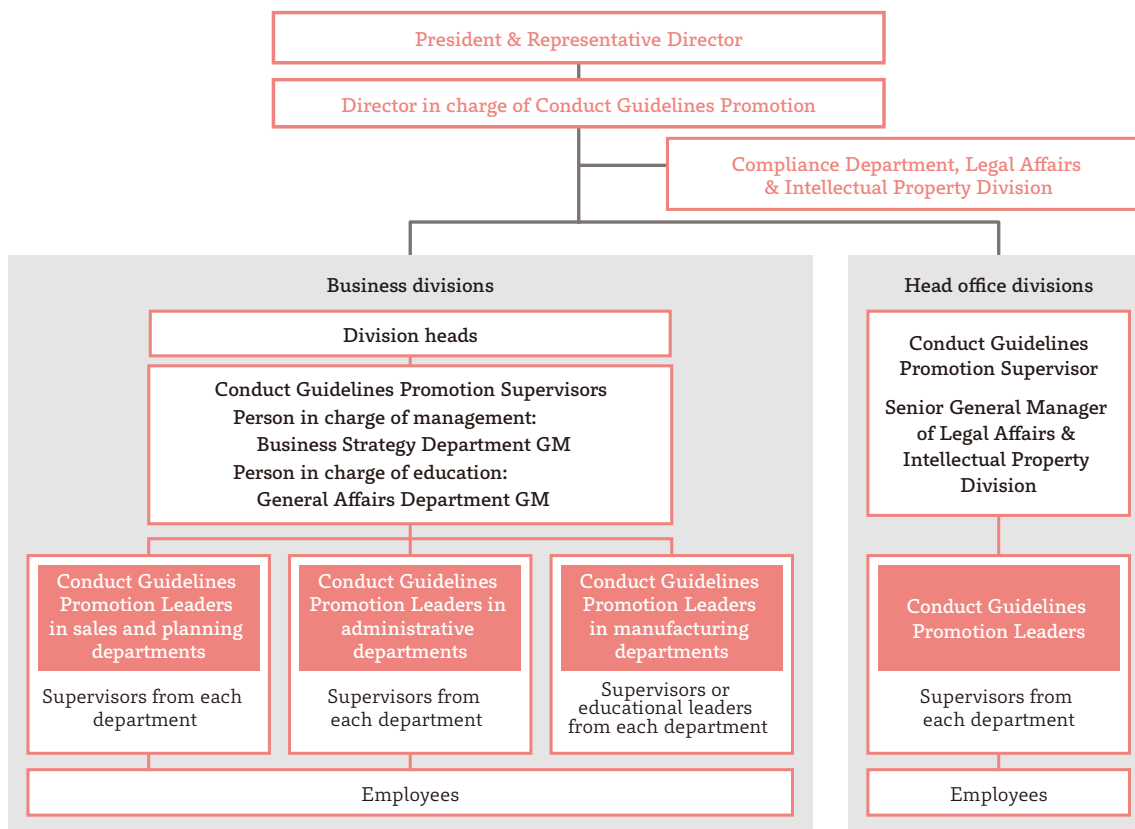
Promotion Framework

■ Compliance Promotion Structure

Toppan believes that the strict observance of the Conduct Guidelines directly links to legal compliance. The Group has been operating a Conduct Guidelines Promotion Leader system to ensure full observance of the guidelines in daily operations. The Conduct

Guidelines Promotion Leaders at workplaces initiate guideline compliance activities under the Director in charge of Conduct Guidelines Promotion.

■ Structure to Promote the Conduct Guidelines



■ Compliance Training

Toppan organizes group training for Conduct Guidelines Promotion Leaders every year. The Group devises ways to enhance the effectiveness of training sessions through activities such as group discussions using case methods describing actual incidents.

Toppan gives every employee in Japan a Conduct Guidelines Casebook, a Q&A style casebook describing situations that can arise in daily work. The casebook is used in various guideline promotion activities. The Leaders, for example, use it to disseminate the guidelines at their workplaces. The Group also posts regular Conduct Guideline Notifications on themes relevant to the guidelines in order to heighten employee awareness and call attention to compliance-related issues. Toppan has been holding seminars, producing posters, and implementing other compliance promotion activities to ensure strict compliance among Group employees.

■ Training for Compliance with Transaction-related Laws and Regulations

To enforce compliance with major transaction-related laws and regulations in Japan, the Toppan Group has been comprehensively preventing improper import and export transactions and ensuring compliance with the Subcontract Law. Toppan conducts regular training and audits on compliance with the subcontract law for departments and Group companies that engage in subcontracting transactions. The Group also continues holding training sessions and carrying out audits focused on export controls under the Foreign Exchange and Foreign Trade Act.

Regardless of level of risk, Toppan bases its transactions on the observance of standards related to such issues as legal and regulatory compliance, fair operating practices, and bribery prevention, as stipulated in the Toppan Group CSR Procurement Guidelines, which apply to all suppliers, subcontractors, and intermediaries. To provide training on the Guidelines and monitor the status of their observance, Toppan fully informs suppliers and subcontractors of them, holds briefings, and conducts questionnaires.

CSR Procurement

https://www.toppan.co.jp/library/english/csr/files/pdf/2018/csr2018_detail-en.pdf#page=33

■ Anti-Corruption Initiatives

Toppan conforms to the anti-corruption principle set out by the United Nations Global Compact. The Conduct Guidelines, a code to be observed by all Toppan employees, include wide-ranging policies on corruption prevention, including the prohibition of collusion, illicit transactions, and other corrupt practices. All employees are kept fully informed of the Conduct Guidelines through regular activities led by Conduct Guidelines Promotion Leaders, who have received relevant training. The Conduct Guidelines Casebook distributed to all employees enhances awareness through case studies of corrupt conduct. Messages from executives to the entire workforce also address the issues of strict compliance and the prevention of corruption. In terms of bribery prevention, in fiscal 2016 the Group formulated an anti-corruption framework led by the Director in charge of Legal Affairs as the chief anti-bribery manager. A set of anti-bribery rules was also established in the same year to ensure strict anti-bribery practices.

For more intensive anti-bribery control, Toppan has tightened the procedures that employees use to request entertainment for and gift-giving to public officials and the like in line with the anti-bribery rules and guidelines. In fiscal 2017 Toppan conducted e-learning-based programs and provided Group employees with a Q&A style casebook describing specific examples.

■ Training to Prevent Infringements of Intellectual Property

Protection and management of intellectual property is a crucial issue for Toppan, a group of companies operating in the three fields of Information & Communication, Living & Industry, and Electronics. The Group devotes strict attention to measures to prevent the infringement of copyrights, trademarks, and other intellectual property rights of other parties while obtaining patents for its own technologies and business models.

Apart from in-house special training, Toppan holds regular training sessions for employees of the Toppan Group and its business partners. Participants in these sessions acquire basic legal knowledge on intellectual property rights by reviewing case histories in design work and other operations involving intellectual property issues within the Group.

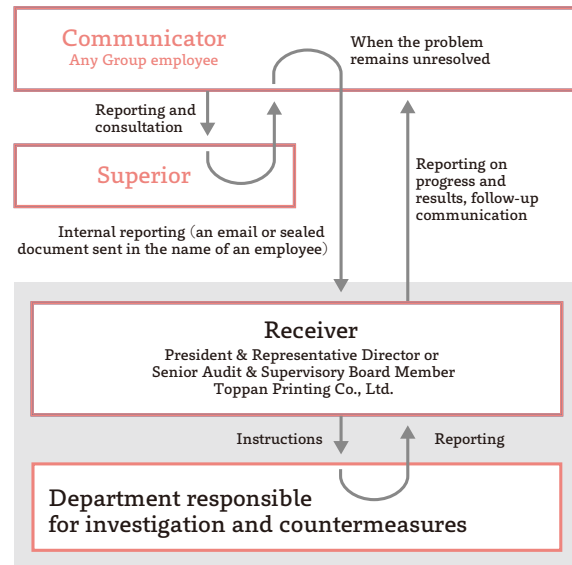
Internal Reporting System

When an employee discovers a legal violation or improper conduct somewhere in the Toppan Group, he or she is to report it to his/her superior for deliberation as a basic rule. If the employee's superior fails to resolve the problem, the employee is encouraged to call the Toppan Group Helpline, the Group's internal reporting system. The helpline is open for use by all Group employees, including dispatched staff and part-time workers. This system allows the Group to ensure strict compliance with the Toppan Group Conduct Guidelines by promptly identifying legal violations and improper acts and properly dealing with them.

Compliance in fiscal 2017

Toppan was not involved in any serious incidents or violations of laws or regulations in the course of business in fiscal 2017.

Toppan Group Helpline



Main Activities and Relevant Information

Conduct Guidelines Promotion Leader System

Seven hundred and thirty-three Conduct Guidelines Promotion Leaders (the “Leaders”) were deployed across the Group in fiscal 2017, including 95 women (13.0% of the Leaders). A cumulative total of 9,055 employees have worked as Leaders since the system was launched in fiscal 2004.

Toppan held 85 training sessions across Japan for 1,042 Leaders

	Number of Newly Deployed Leaders	Number of Female Leaders Deployed (Percentage)	Cumulative Total Number of Leaders
Fiscal 2015	754	66 (8.8%)	7,581
Fiscal 2016	741	82 (11.1%)	8,322
Fiscal 2017	733	95 (13.0%)	9,055

from Toppan and Group companies in fiscal 2017.

The Compliance Department in the Legal Affairs & Intellectual Property Division sent out 12 Conduct Guideline Notifications on topics relevant to the Conduct Guidelines in fiscal 2017 to ensure strict compliance at the workplace under the Leaders.

Anti-Corruption Initiatives

As indicated in the list of serious risks, Toppan identifies “Bribery or corruption” as a risk that could have a particularly significant impact on management and takes appropriate measures to address such risk. The Toppan Group established a set of anti-bribery rules and guidelines to ensure strict anti-bribery practices in March 2017.

E-learning-based, Group-wide education on anti-bribery practices was arranged for 8,515 employees in fiscal 2017. Toppan also worked to ensure compliance with the internal application procedure for offering entertainment or gifts to public officials and

the like.

In April 2018 Toppan revised the guidelines and issued a Q&A style casebook describing specific cases of bribery to equip employees with the awareness required to strictly avoid committing bribery themselves. Overseas business and public sector projects are deemed to have a comparatively high level of corruption-related risk. This is addressed with opportunities for specific training on prevention of corruption, such as training for related personnel on preventing collusion, cartels, and bribery.

Compliance with Transaction-related Laws and Regulations

Toppan regularly organizes transaction-related training and monitors and audits how business transactions are being handled. Both activities are key to preventing improper import and export transactions and ensuring compliance with the Subcontract Law of Japan.

In fiscal 2017, a total of 333 employees participated in group

sessions focused on export controls under the Foreign Exchange and Foreign Trade Act, 494 employees were trained on compliance with the subcontract law, and 1,100 employees took a course on export controls via the e-learning system. The Group also audited the observance of export controls in 15 departments and compliance with the subcontract law in 25 departments.

Number of Internal Reports

The Toppan Group Helpline was used in four cases in fiscal 2017. Every case was properly handled and followed up with necessary countermeasures to prevent recurrence.

Reviewing the Toppan Group Conduct Guidelines

The Legal Affairs & Intellectual Property Division reviews the Toppan Group Conduct Guidelines every year.

In its review of fiscal 2017, the division concluded that the guidelines were appropriate and required no revision.

CSR Procurement

Basic Approach

Sustainability initiatives can be completed only when implemented throughout the entire supply chain.

The Toppan Group therefore promotes CSR procurement in cooperation and collaboration with business partners as a means of implementing sustainability initiatives throughout the entire supply chain. The concept of CSR procurement is applied not just to material and raw material suppliers, but to subcontractors, intermediaries, and all other elements of the supply chain.

The Toppan Group CSR Procurement Guidelines are a set of principles the Group observes to drive this endeavor. These guidelines consist of the Basic Procurement Policy, a conceptual framework to be closely observed by every Toppan employee involved in procurement operations, and the CSR Procurement Standards, a set of requirements to be satisfied by every business partner. The CSR Procurement Standards are composed of the Basic Procurement Standards and the Procurement Standards Concerning Human Rights, Labor, the Environment, and Anti-Corruption.

Turning to the environment, the Toppan Group's basic policy takes an assertive approach to the sustainable use of resources by avoiding or minimizing the impact on biodiversity during raw material procurement.

Toppan Group CSR Procurement Guidelines (second edition)
https://www.toppan.co.jp/library/english/corporateinfo/files/csr/2014/proc2014_en01.pdf

Toppan Group Standards for the Management of Chemical Components of Raw Materials (ver. 4.4)
https://www.toppan.co.jp/library/english/corporateinfo/files/csr/2018/proc2018_en04.pdf

Basic Policy on Biodiversity (in Japanese)
<https://www.toppan.co.jp/library/japanese/csr/files/pdf/2013/biodiversity.pdf>

Toppan Group Paper Procurement Guidelines for the Sustainable Use of Forest Resources (second edition) (in Japanese)
https://www.toppan.co.jp/library/japanese/corporateinfo/files/csr/2014/proc2014_06.pdf

Promotion Framework

The Purchasing Center in the head office Manufacturing Management Division and other procurement departments across the Group take the initiative in advancing CSR procurement in close coordination with business partners.

The center and departments have undertaken a host of CSR procurement initiatives focused on business partners, including the following: briefing of business partners on the Toppan Group CSR Procurement Guidelines; surveys with questionnaires to check the

efforts of business partners to comply with the Group's procurement standards on human rights, labor, the environment, and anti-corruption; and ongoing efforts to conclude basic sale and purchase agreements with business partners stipulating the observance of the Group's procurement guidelines.

The Toppan Group also controls chemical components throughout the entire supply chain based on the Standards for the Management of Chemical Components of Raw Materials.

■ Promoting Compliance in Procurement Departments

CSR procurement initiatives should be built upon trust between businesses. Toppan therefore regularly monitors whether the Group's procurement departments operate properly in accordance with the Basic Procurement Policy in their transactions with business partners.

Toppan has also set up a Supplier Hotline on its corporate website as a portal for receiving reports from business partners involved in the Group's procurement operations. The hotline is open for use by all business partners of the Group.

The Toppan Group targets sustainable procurement based on

the Basic Policy on Biodiversity. The policy stipulates a proactive approach to the sustainable use of resources by avoiding or minimizing the impact on biodiversity in the procurement of raw materials. For the sustainable use of forest resources in line with the basic policy, the Group has cooperated with paper suppliers (business partners) to ensure that the lumber they use for paper production is legally obtained.

Supplier Hotline
https://www.toppan.co.jp/en/corporateinfo/our_suggestion/supplier_hotline.html

Main Activities and Relevant Information

Briefing on Procurement Guidelines and Concluding Basic Sale and Purchase Agreements

As of the end of fiscal 2017, Toppan has briefed 2,100 business partners on the Toppan Group CSR Procurement Guidelines. The Group has also promoted the implementation of CSR initiatives throughout the entire supply chain by asking business partners to conclude basic sale and purchase agreements stipulating the observance of the guidelines. As of fiscal 2017, agreements have been concluded with 72% of the business partners that sell the Group goods and services worth more than 10 million yen a year. Our goal is to raise this figure to 100% by fiscal 2025.

Turning to the environment, the Toppan Group promotes CSR procurement in line with specific standards such as the Standards for the Management of Chemical Components of Raw Materials and the Paper Procurement Guidelines for the Sustainable Use of Forest Resources.

■ Briefing Sessions on CSR Procurement Guidelines

	Fiscal 2015	Fiscal 2016	Fiscal 2017
Number of business partners briefed	21	7	25
Cumulative total of business partners	2,068	2,075	2,100

■ Percentage of Basic Sale and Purchase Agreements with CSR Procurement Provisions Concluded (with business partners supplying goods and services worth more than 10 million yen a year)

	Fiscal 2015	Fiscal 2016	Fiscal 2017
Cumulative percentage of agreements (out of the business partners targeted)	62%	68%	72%

Verifying the Legality of Lumber as a Paper Material

The Toppan Group established a Basic Policy on Biodiversity and posted it on the Toppan website*¹ in May 2010.

The basic policy stipulates that “we will take a proactive approach to sustainable use by avoiding or minimizing the impact on biodiversity” during raw material procurement operations. For paper procurement, for example, the Group has surveyed the legality of lumber as a paper material as a means of promoting the sustainable use of forest resources.

Our surveys confirmed that on a purchase price basis, manufacturers representing more than 90% our procurement sourced lumber used in paper through legal channels. The Group surveyed 24 sites of 18 business partners around the world in fiscal 2017 to confirm that all of the procured lumber was obtained legally. In yen terms, these 24 partner sites supplied 92.3% of the paper used by Toppan in fiscal 2017.

■ Results of Surveys to Verify the Legality of Lumber as a Paper Material (Paper manufacturers representing 90% of paper on a purchase price basis)

	Fiscal 2015	Fiscal 2016	Fiscal 2017
Number of business partners surveyed	29	20	18* ²
Purchase price basis	99.9%	99.6%	92.3%
Percentage of lumber sources verified as legal	100%	100%	100%

*1 <http://www.toppan.co.jp/en/csr/environment/biodiversity.html>

*2 Survey of paper suppliers assessed as having the highest risk over the most recent three-year period

Monitoring Compliance in Procurement Departments

The Toppan Group regularly monitors whether its procurement departments operate properly in accordance with the Basic Procurement Policy in their transactions with business partners. In Fiscal 2017 the Group used the results of a questionnaire survey of 13 business partners to improve compliance in procurement operations.

Toppan has also set up the Supplier Hotline*, a portal for receiving reports from business partners, on its website.

*https://www.toppan.co.jp/en/corporateinfo/our_suggestion/supplier_hotline.html

■ Monitoring Results

	Fiscal 2015	Fiscal 2016	Fiscal 2017
Number of business partners that filled out the questionnaire	8	10	13
Cumulative total number of business partners monitored	93	103	116

Participating in the Green Purchasing Network

The Green Purchasing Network (GPN) of Japan was established in 1996 as a loose-knit network of businesses, civilian organizations, government agencies, and other entities proactively engaged in green purchasing practices. GPN is convinced that green purchasing plays a critical role in the formation of a market for eco-products on a scale sufficient to facilitate eco-product development. GPN believes that green purchasing will contribute significantly to the realization of a sustainable society.

As a GPN member, Toppan provides printing services based on the GPN Ordering Guidelines for Printing Services.



*<http://www.gpn.jp/english/index.html>

Initiatives for Products and Services

Basic Approach

Quality assurance for products at the Toppan Group is a concern for every department, not only the departments directly responsible for production. Departments involved in marketing, R&D, planning, design, sales, and shipment all contribute to quality. This is why Toppan describes quality assurance as a total activity (“total quality assurance”) and strives to improve product quality and manage product safety throughout the Group. For the maintenance and improvement of product quality, the Group has established a Basic Stance on Product Safety Management and a set of Basic Guidelines on Product Safety Management to securely manage the safety of the products Toppan manufactures.

The Global environmental challenge is another crucial social issue requiring Toppan's committed efforts. To propel sustainable consumption, the Group markets environmentally friendly products and services and visualizes CO₂ emissions associated with the products and services Toppan develops. Toppan and Group companies endeavor to contribute to the realization of sustainable consumption under The Toppan Group Declaration on the Global Environment.

The Toppan Group also realizes the social value of universal design (UD). Since its launch of a pioneering UD packaging consulting service in 1999, Toppan has been consistently designing and producing attractive, easy-to-use UD packaging and communication tools for as many people as possible in every Business Field of the Group.

The Toppan Declaration on Universal Design and Toppan's Seven Principles on Universal Design (both established in 2010) define

UD as a guiding philosophy for developing products and services that “help realize a society with a high appreciation of diversity.” By embracing UD approaches, Toppan assigns greater weight to dialogue with diverse people and the concerns of people with different physical abilities and perceptions while considering usage scenarios and design parameters such as understandability and usability.

Basic Stance on Product Safety Management

We promote product safety management throughout the Group by securing safety and improving the quality of our products based on the Basic Principles of Conduct Guidelines and the principles of corporate social responsibility as a protector of user* safety and health.

*User: Includes both customer companies and end-user consumers.

Basic Stance on Product Safety Management / Basic Guidelines on Product Safety Management

https://www.toppan.co.jp/en/corporateinfo/our_suggestion/product_safety.html

The Toppan Group Declaration on the Global Environment (in Japanese)

https://www.toppan.co.jp/library/japanese/csr/files/pdf/The_Toppa_Group_Declaration_on_the_Global_Environment.pdf

Toppan Declaration on Universal Design / Toppan's Seven Principles on Universal Design (in Japanese)

<https://www.toppan.co.jp/csr/consumers/ud.html>

Promotion Framework

The Quality Assurance Center in the head office Manufacturing Management Division holds a Japan-wide conference of quality assurance departments every three months. Conference participants clarify various challenges related to safety management and quality assurance for products and monitor the progress of key initiatives to mitigate quality loss and further improve product quality.

Every Group site consistently enhances its quality management system (ISO 9001) to bolster product safety management. The Quality Assurance Center organizes seminars on ISO 9001 and training sessions for internal auditors every year. These training sessions aim to constantly improve quality management systems

underpinning total quality assurance across the Group.

Toppan has arranged e-learning-based training programs for all Group employees and rank-based educational curriculums to heighten employee awareness and facilitate a deeper understanding of Toppan's environmentally friendly products and initiatives for carbon-offsetting and carbon footprint of products (CFP) services. The Ecology Center in the head office Manufacturing Management Division compiles and discloses information on registered environmentally friendly products.

ISO 9001 Accreditation and Certification (in Japanese)

https://www.toppan.co.jp/corporateinfo/our_suggestion/iso/iso9001.html

■ Assuring Product Quality

The quality assurance department in each business division handles complaints and claims from customers. When a serious product-related incident occurs, Toppan sets up an emergency taskforce in line with the Group's rules on risk management to rapidly and properly handle the issue, giving the top priority to user safety. The Group has also established rules on corrective actions for claims from customers in accordance with ISO 9001. Based on these rules, the quality assurance departments determine fundamental causes, take optimal countermeasures, and prevent recurrence through the standardization of corrective actions.

The Quality Assurance Center compiles monthly data on customer claims and cases of product quality loss from business divisions and assesses the progress of improvement activities. For serious product-related incidents, the center examines the validity of recurrence-prevention measures and the status of

efforts to sustain these measures. The Toppan Group has also adopted a certified approval system for food packaging requiring exacting quality assurance for safety and sanitation to ensure that the operational sites of Toppan and partner companies can manufacture containers and packages only after undergoing audits with checklists in conformance with the Quality Assurance Guidelines for Food Packaging.

■ CFP and Carbon-offset Services

The Ecology Center supports training sessions and promotional efforts for employees in marketing and sales promotion departments relevant to the carbon footprint of products (CFP) and carbon-offset services for printed materials and events.

Main Activities and Relevant Information

Initiatives for Product Safety

The Toppan Group has established a Basic Stance on Product Safety Management and Basic Guidelines on Product Safety Management to secure the safety management of the products it manufactures.

Every Group site continues improving its quality management system (ISO 9001) to bolster product safety management. The

head office held training sessions for internal auditors in fiscal 2017. Four hundred and twenty-nine employees took part in the sessions to learn the ISO 9001:2015 requirements for formulating a quality management system integrated with business processes. All Group sites in Japan succeeded in migrating from ISO 9001 to ISO 9001:2015 certification.

Certified Approval System for the Production of Food Packaging

Food packaging requires exacting quality assurance for safety and sanitation. The Toppan Group has adopted a certified approval system to ensure that the operational sites of Toppan and partner companies can manufacture containers and packages only after undergoing audits with checklists in conformance with the Quality Assurance Guidelines for Food Packaging. Toppan carried out accreditation audits for packaging operations at 14 sites inside and outside the Group in fiscal 2017.

■ Audits for the Food Filling/Packing Businesses

Audit Points

- Agreements with client companies
- Quality assurance systems
- Management of equipment and inspection devices
- Management of safety and sanitation
- Steps to prevent the admixture of different products
- Steps to safeguard against insect infestations
- Steps to prevent the admixture of foreign substances
- Steps to prevent the outflow of defective products
- Steps to prevent contamination
- Traceability
- Food defense
- Education and training
- Maintenance of systems and frameworks for product safety and quality

Operational Sites Audited

- Primary food filling/packing businesses
 - 4 sites run by manufacturing subsidiaries
 - 10 sites run by production business partners

Conducting CFP Quantifications and Applying for Carbon-offset Certification for Printed Materials and Events

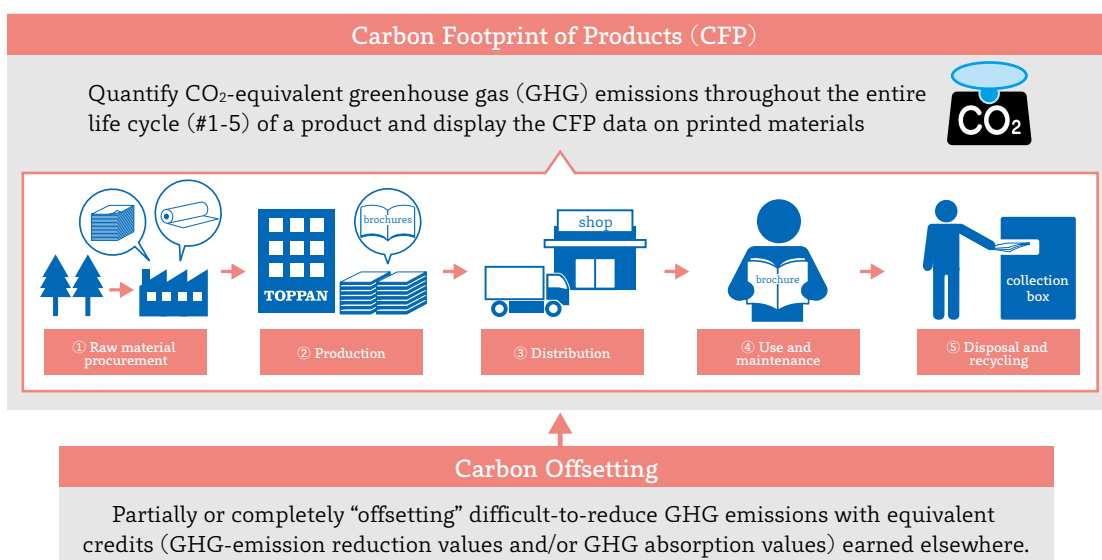
The Toppan Group has been visualizing CO₂ emissions associated with printed materials and events through carbon footprint of products (CFP) and carbon offsetting initiatives. The Group's one-stop service for client companies covers every step from CFP quantification to carbon-offset certification for printed materials and events. This procedure has also been applied to the Group's own products and events. In fiscal 2017 the Group conducted CFP quantifications for a total of 23 products, services, and events.

In self-initiated activities, the Group applied for carbon-offset certifications based on the quantified CFP data for the *Toppan CSR Report 2017* (Japanese version) and Toppan booth at Eco-Pro 2017. The greenhouse gas (GHG) emissions associated with the brochure and exhibition were offset by a Sustainable Development Goals (SDG)-linked credit (originating from power generation using FSC-

certified wood refuse in the Amazon basin, Brazil) provided by the Gold Standard Foundation under the United Nations Clean Development Mechanism (CDM). Toppan used this mechanism to contribute to relevant sustainable development targets such as climate security and stable power supply.

The Group has also offset CO₂-equivalent GHG emissions associated with in-house biodiversity-focused educational events and environment-focused meetings such as the National Eco-protection Meeting and Toppan Group Environmental Meetings in Japan. Toppan supported the recovery of Kumamoto from the earthquake disaster of 2016 through these carbon-offsetting initiatives by applying a J-VER credit, a credit originating from CO₂ absorption using lumber from thinning operations in forests owned by Kumamoto Prefecture.

■ Framework for CFP and Carbon Offsetting



■ CFP information in the *Toppan CSR Report 2017* (in Japanese)

https://www.cfp-japan.jp/common/pdf_permission/001513/CR-BS05-17014.pdf

■ Carbon offsetting for the Toppan Group's environmental meetings (in Japanese)

http://offset.env.go.jp/sengen/cof/detail/sengen_957.html

■ Toppan Group Environmental Meeting held in 2017 (in Japanese)

<https://japancredit.go.jp/cp/13/>



Toppan Group Environmental Meeting

Editorial UD Solutions

In October 2016 the Toppan Group established the UD Communication Laboratory, an organization tasked with augmenting the social value of knowledge in universal design (UD) and knowhow in communication design. The UD Communication Laboratory supports client companies in their efforts to solve diversity-related challenges of various kinds.

In fiscal 2017 the laboratory launched a series of Editorial UD (E-UD) solutions to provide counseling on information tools. The E-UD information service pursues a wholly optimized system for developing effective information tools based on an original method that schematizes every process of information editing from UD perspectives.

E-UD solutions allow client companies to deliver information more effectively by enabling improvements based on exhaustive assessments of their information tools. The assessments are based on five evaluation points focused on criteria ranging from individual elements of expression to overall tool organization. E-UD solutions help clients create information tools that are easier-to-read, easier-to-understand, and more effective for diverse people, including the elderly, the physically and mentally disabled, busy businesspeople, and parents with young children.

■ Five Evaluation Points in Editorial UD Solutions

- ① **Information governance: Tool organization**
Whether or not the tool is appropriately positioned in accordance with expected roles, etc.
- ② **Information architecture: Page composition**
Whether or not information is easy to find and the reader stays with the tool.
- ③ **User interface: Page layout**
Whether or not the tool imposes a lighter load on the reader and facilitates the reader's instinctive understanding.
- ④ **Look & feel: Graphic expression**
Whether or not the tool strikes a balance between accessibility and attractive design.
- ⑤ **Plain wording: Text expression**
Whether or not the tool delivers important information promptly and necessary information appropriately.

Consumer Protection

Basic Approach

Toppan has reinforced safeguards to prevent leaks and outflows of personal information in the diverse processes in which it is handled within the Group by restricting the handling of personal information to tightly secured areas that satisfy rigorous criteria for qualification audits. The Group has also worked for thorough security control in operation design and quality assurance with safe, secure systems and processes designed to manage personal information.

Toppan has also declared that “each of us at the Toppan Group carries out Group-wide information security management” in its basic policy on information security. Under the basic policy, Toppan has continuously upgraded the Group’s systemized rules formulated based on ISO/IEC 27001 (a stringent, globally recognized standard on information security management) in compliance with Japanese Industrial Standards (JIS) Q 15001 (standard for accrediting PrivacyMark Systems for personal information protection management).

Toppan Group Basic Policy on Information Security
https://www.toppan.co.jp/en/corporateinfo/our_suggestion/security_kihonhoushin.html

Personal Information Protection Policy
<https://www.toppan.co.jp/en/privacy.html>

Toppan Group Basic Policy on Information Security

As a group of companies operating in the information communication industry, each of us at the Toppan Group carries out Group-wide information security management in the recognition that the management of information necessary for business is a significant managerial challenge for us as a means to reciprocate our customers’ trust and promote the ongoing growth of the Toppan Group.

1. We manage information necessary for our business appropriately in observance of our in-house rules, the law, and the principles of social order.
2. We collect information for appropriate purposes using appropriate methods.
3. We safely manage the information entrusted to us by customers in order to reciprocate our customers’ trust.
4. We are deeply aware of the risks to the information assets we handle, such as illegal access, loss, damage, falsification/manipulation, and leakage of information, and take necessary and reasonable safety measures against these risks. We deal with and rectify any problems that occur promptly and in an appropriate manner.
5. We establish, operate, maintain, and continuously improve information security management systems.

Established on April 1, 2001
 Revised on August 1, 2011

Shingo Kaneko
 President & Representative Director
 Toppan Printing Co., Ltd.

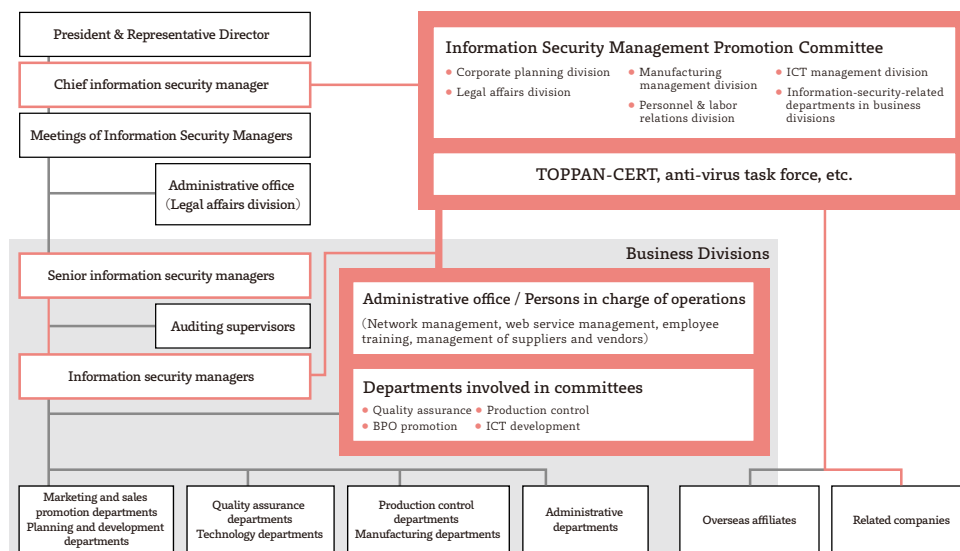
Promotion Framework

Organizational Structure for Information Security Management

Companies today face wide-ranging types of information security risk, from careless mistakes and fraudulent acts committed in-house to cyber attacks and hidden threats in new business fields.

The head office and every business division at Toppan work to

strengthen cooperation with relevant departments throughout the Group. Toppan seeks to maintain the Group’s governance structure through cooperation that goes beyond existing organizational boundaries.



■ Training on Information Security Management

Toppan works to ensure awareness of the importance of information security management through face-to-face group training for employees.

In fiscal 2017 Toppan invited outside information security experts to hold an in-house open seminar and various other lectures. The Group also organized practical risk analysis training sessions for business process designers conducted by an external instructor. These sessions aimed to enhance Toppan's ability to provide customer companies safety and security in a manner responsive to changing markets.

■ Tightly Secured Areas Designated for the Handling of Personal Information

Operations entailing the use of confidential materials at the Toppan Group are conducted exclusively in physically isolated, tightly secured workplaces to minimize the risk of potential acts of fraud inside or outside the Group. Operations under strict control include the handling of personal information, such as individual identification numbers under Japan's Social Security and Tax Number System, as well as the production and handling of security printing products with monetary value.

In response to customer requests, the Group has been increasing the number of tightly secured areas and strengthening the procedures to monitor and audit these operations. We intend to strengthen control over personal information through fiscal 2025, aiming to completely eliminate incidents of unauthorized information removal.

■ Measures against Cyber Attacks

The Toppan Group has set up a specialized team called TOPPAN-CERT to address cyber attacks. TOPPAN-CERT collects internal and external information and monitors technological trends in computer security to provide necessary information on a continuous basis and technical support for solutions when a cyber incident occurs.

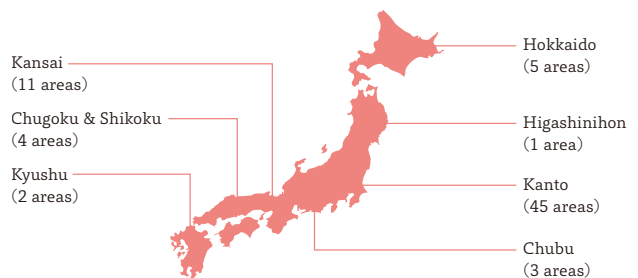
Toppan has established an emergency report form, a hotline for informing TOPPAN-CERT about suspicious incoming emails, on its internal portal site. CERT will take immediate action upon receiving a report of a virus infection or another of cyber attack via the hotline.

The Company has also engaged Toppan directors and employees in regular drills to rehearse countermeasures against targeted email attacks. We will continue to strengthen protections and training through fiscal 2025 with the goal of completely eliminating information leakage due to cyber attacks.

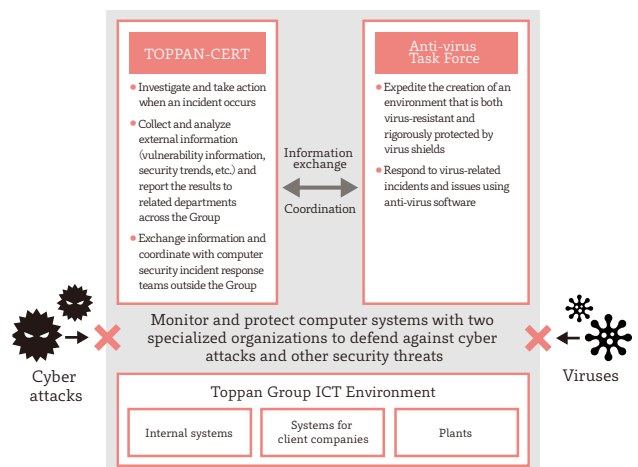
■ Complying with Laws, Regulations, and Standards on Personal Information Protection

To prepare for the enforcement of the amended Act on the Protection of Personal Information in May 2017 in Japan, the Toppan Group carefully studied a set of guidelines issued by the Personal Information Protection Commission of Japan. Toppan also revised the Group's personal information protection bylaws based on the amended act and strived to prescribe the revised bylaws throughout the Group. As a means of addressing the revised JIS Q 15001:2017, the Group has joined an inter-business project to compile a handbook on the revised standard in order to spread the relevant information throughout the printing industry in Japan. Toppan has also directed Group companies on the personal information protection system required for PrivacyMark accreditation under the revised standard.

■ Number of Domestic Sites with Tightly Secured Areas Designated for the Handling of Personal Information (as of March 31, 2018)



■ Protecting Personal Information against Cyber Attacks



■ Preparing for the Tokyo 2020 Games

The Olympic and Paralympic Games, large-scale sporting festivals, are easy targets for organized criminals.

While collecting information, as a Tokyo 2020 Official Partner Toppan Printing is taking part in anti-cyber-attack joint simulation drills organized by the Tokyo Metropolitan Police Department.

Main Activities and Relevant Information

Information Security Training

■ Group-wide and Divisional Training

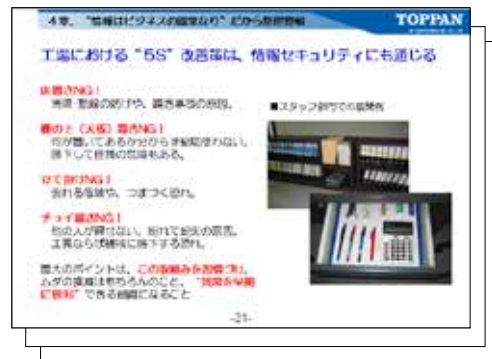
Toppan organized regular training on information security throughout the Group in fiscal 2017. By streamlining the process of collating data on all Group employees and those who have taken courses, Toppan promptly identified employees who had not received training and provided them with catch-up classes via the

e-learning system. Face-to-face training was held in 352 sessions across Japan.

For manufacturing departments, the Group has reviewed its training approaches, reexamined the methods used to collect training data, and arranged division-specific training.



Workplace precautions presented in a regular training course (in Japanese)



Tips for keeping the workplace organized (in Japanese)

■ Risk Analysis Training by Outside Instructors

The Toppan Group has been organizing practice-based risk analysis training for business process designers to provide safety and security to customers in a manner responsive to changing markets. In fiscal 2017 trainees joined an instructor invited from Ricoh Japan Co., Ltd. to study problems that can occur in the course of operations, identify the causes of accidents, and learn practical risk assessment approaches.



Open Seminar for Employees on Information Security

In October 2017 Toppan invited Mitsuhiro Maruyama, the President of Deloitte Tohmatsu Risk Services Co., Ltd., to hold an in-house seminar. Teleconference systems were used to enable about 550 employees from 23 Group sites across Japan to participate.

How to address emerging cyber security risks and resolve security challenges

- Cyber crimes today
- Security in Japan
- Targeted cyber attacks
- Leakage of email addresses and passwords
- Attack targets: all connected data and devices
- Basic information on security measures



Toppan Cyber Security Seminar

Toppan invited two guest lecturers to a cyber security seminar and panel discussion at Koishikawa Terrace in the Toppan Koishikawa Building in Tokyo in February 2018—Kei Nakamura, an expert from TIS Inc., and Kazuhisa Uryu, the Counselor of the National center of Incident readiness and Strategy for Cybersecurity (NISC) of Japan.

The seminar was also attended by personnel from 20 customer companies closely involved in cyber security issues. Toppan presented an overview of the Group's cyber security measures to the seminar participants.

Cyber security challenges and countermeasures from the viewpoint of entities handling confidential information

- Latest cyber security trends
- Initiatives promoted by the Japanese government
- Initiatives required of companies



Seminar poster (in Japanese)



Advanced Security Management

The Toppan Group imposes an advanced security management regime on the handling of personal information, including day-to-day operational checks and management assessments via internal audits. Detection of abnormal behavior and audit inspections of operational management take high priority among the information security measures enforced.

Detection of abnormal behavior

The Group disables access to external devices and prevents other behavior that can lead to information leakage. By analyzing alerts on a daily basis, the head office is always ready to check and verify any abnormal behavior on the same day it is discovered.

Audit inspections of operational management

In fiscal 2017 internal auditors checked procedures for which instructions have been provided in such operational processes as the editing of data, the sending of emails, and the printing, insertion, and sealing of documents, in order to preempt accidents that can result from mistaken handling of personal information. Their assessment report confirmed that compliance was ensured throughout the relevant processes.

■ Safety management measures for tightly secured areas



Surveillance camera



Access control

Third-party Certification

Toppan Printing Co., Ltd. and its Group companies have acquired ISO/IEC 27001 certification for information security management systems (ISMS), PrivacyMark accreditations under Japanese Industrial Standards (JIS) Q 15001:2006 for their personal information protection management systems (PMS), and other third-party certifications.

■ PrivacyMark Accreditations (JIS Q 15001:2006)

Toppan Printing Co., Ltd.	10190891
Toppan Communication Products Co., Ltd.	24000216
Toppan Graphic Communications Co., Ltd.	10190298
Toppan Joho Kako Co., Ltd.	24000061
Toppan Editorial Communications Co., Ltd.	24000308
Toppan Logistics Co., Ltd.	10450006
Toppan Prosprint Co., Ltd.	24000182
Toppan Travel Service Corp.	10450093
Toppan Forms Co., Ltd.	10190934
Toppan Forms Central Products Co., Ltd.	24000366
Toppan Forms Tokai Co., Ltd.	24000204
Toppan Forms Kansai Co., Ltd.	24000101
Toppan Forms Nishinohon Co., Ltd.	18860028
Toppan Forms Operation Co., Ltd.	10820089
Toppan Forms Logistics and Services Co., Ltd.	10450002
Toppan Forms (Hokkaido) Co., Ltd.	10190307
TOSCO Corp.	11820447
J-SCube Inc.	10860018
Tosho Printing Co., Ltd.	24000032
Tokyo Shoseki Co., Ltd.	10190966
Livretch Co., Ltd.	10190035
Tokyo Logistics Co., Ltd.	10860071
EduFront Learning Research Co., Ltd.	10861827
Froebel-Kan Co., Ltd.	24000369
BookLive Co., Ltd.	28000007
Tokyo Metropolitan Government (T.M.G.) Prepress Toppan Co., Ltd.	24000419

■ ISMS Certification (ISO/IEC 27001) for Information Security Management Systems

Information & Communication Division, Toppan Printing Co., Ltd.; ICT Infrastructure Technology Center, ICT Management Division, Toppan Printing Co., Ltd.; Toppan Communication Products Co., Ltd.; Toppan Joho Kako Co., Ltd.; Toppan Graphic Communications Co., Ltd.	IC06J0151
Toppan Group Kansai Business Center, Toppan Forms Co., Ltd.	JQA-IM0137
Toppan TDK Label Co., Ltd.	RB-IS14004
Asaka Plant and Shiga Plant, Toppan Printing Co., Ltd.; Semiconductor photomask operations, Asaka Plant and Shiga Plant, Toppan Electronics Products Co., Ltd.; Toppan Technical Design Center Co., Ltd.	IS 530416
Mapion Co., Ltd.	IS 533218
Kyushu, Chugoku & Shikoku Team and ISMS Promotion Committee, Information Security Management, Nishinohon Division, Toppan Printing Co., Ltd.	I308
Kansai Production Department, Toppan Graphic Communications Co., Ltd.	IC13J0361
Higashinohon Division, Toppan Printing Co., Ltd.	IS 606897
Takino Plant, Toppan Communication Products Co., Ltd.; Takino Manufacturing Department, Toppan Joho Kako Co., Ltd.; Technology, Kansai Information & Communication Subdivision, Toppan Printing Co., Ltd.	IC14J0376
Secure BPO Team, Chubu Division, Toppan Printing Co., Ltd.; Chubu Production Department, Toppan Graphic Communications Co., Ltd.; Nagoya Plant, Toppan Communication Products Co., Ltd.; Nagoya Plant, Toppan Joho Kako Co., Ltd.	IC17J0444
One undisclosed entity	

Complying with Laws, Regulations, Standards, and their Amendments

The Toppan Group complies with the amended Act on the Protection of Personal Information of Japan, the revised JIS standard for accrediting PrivacyMark systems, the newly enforced

EU General Data Protection Regulation, and other information-protection legislation around the world.

■ Complying with the Amended Japanese Act on the Protection of Personal Information

To prepare for the enforcement of the amended Act on the Protection of Personal Information in May 2017 in Japan, the Toppan Group carefully studied a set of guidelines issued by the Personal Information Protection Commission of Japan. Toppan also revised the Group's personal information protection bylaws based on the amended act and strived to prescribe the revised bylaws throughout the Group. The key revisions to the bylaws were additional rules on the verification of appropriateness when obtaining personal information, procedures for providing information to third parties, and the handling of "anonymously processed information*." Agreements on outsourcing operations were also reviewed.

*Personal information that has been processed to ensure that it cannot be used to identify a specific individual or otherwise restored to its original form, as defined by the Act on the Protection of Personal Information of Japan.

■ Complying with the Revised JIS Q 15001:2017

In December 2017 the Japanese Standards Association (JSA) revised JIS Q 15001:2017, a standard for accrediting a business operator or other entity with an appropriate system for the protection of personal information. The Toppan Group has joined an inter-business project to compile a handbook on the revised standard in order to spread the relevant information throughout the printing industry in Japan. Toppan has also directed Group companies on the personal information protection system required for PrivacyMark accreditation under the revised standard.

■ Complying with the EU's GDPR

The Toppan Group has been preparing for the enforcement of the General Data Protection Regulation (GDPR), a new piece of EU legislation that is likely to impose strict punitive actions. Given the unilateral adequacy decisions between Europe and Japan, Toppan's responses to the GDPR are fundamentally in line with the policies established by the Personal Information Protection Commission of Japan and the requirements the EU legislation imposes on the Group's overseas subsidiaries. Toppan has made progress in collecting necessary information, reviewing its bylaws, providing training to Group employees, and improving the data protection structure.

■ Complying with PCI DSS for Credit Card Information Management

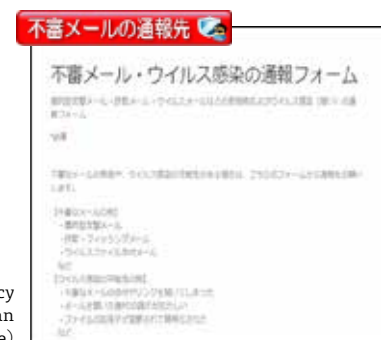
The Toppan Group follows the principle of "not storing cardholder data" for credit card issuance operations. The Group works to comply with the Payment Card Industry Card Production (PCI CP) and the Payment Card Industry Data Security Standard (PCI DSS), a standard applied to the production of credit cards and a standard applied to the datacenters that store and manage card data, respectively.

Organizing Drills against Targeted Email Attacks

Though originally conducted for Toppan directors and Company employees, drills to rehearse countermeasures against a series of targeted email attacks have steadily been extended to cover affiliated and related companies within the Group.

In fiscal 2017 Toppan redesigned this drill to accomplish more than simply raised awareness. Training was held in June and December 2017 to simulate conditions encountered during an actual attack. The drill focused on the details of seemingly innocuous messages and the reinforcement of the initial responses to take after clicking on a malicious link. For enhanced initial responses, an emergency report form has been made available on the Group portal site to ensure that employees can report an infection as soon as one occurs. Toppan has been using this form during drills to inform Group employees of the procedure used for reporting an incident.

About 26,300 employees from Toppan and 29 Group companies performed the drill in June of 2017, and some 27,700 employees from Toppan and 40 Group companies did the same in December.



Screenshot of the emergency report form on the Toppan portal site (in Japanese)

Community Involvement and Development

Basic Approach

The Toppan Group supports the communities in which it operates by addressing local issues and contributing to sustainable development. Domestic and overseas sites in the Group have engaged in contribution activities forged through dialogues with neighboring communities. Dialogue is sustained through manifold activities, including collaboration with organizations that bring together the opinions of community members. Basic Principle 9 of the Toppan Group's Conduct Guidelines emphasizes the value of

“Building trust from society through social contribution activities and appropriate disclosure of information.” Every Group site organizes an array of community initiatives in full recognition of the importance of engaging in social and community contribution activities as a corporate citizen.

Conduct Guidelines

<https://www.toppan.co.jp/en/corporateinfo/vision/shishin.html>

Promotion Framework

■ Initiatives for Community Contribution and Involvement

The Personnel & Labor Relations Division of the head office in Tokyo cooperates with general affairs departments throughout the business divisions across Japan to facilitate the involvement of Toppan sites in meetings, organizations, and various other community gatherings. Each Group site has sounded out opinions from its communities and shaped and implemented business activities and community contribution initiatives based on their opinions.

■ Cooperating with International Communities to Address Social Issues

Convinced that cooperative solutions to global issues are vital for its community contribution activities, Toppan has been organizing the *Toppan Charity Concert* series since fiscal 2007. This series aims to support global initiatives to raise literacy rates in developing countries. Literacy is the ability to read, write, and calculate with proficiency sufficient to function well in daily life.

Toppan Charity Concerts

<https://www.toppan.co.jp/en/news/2018/05/newsrelease180507.html>

Main Activities

- Cleanup around operational sites
- Traffic safety and anti-crime campaigns with surrounding communities
- Plant tours and practical training for local elementary school students
- Meetings with neighborhood communities to report environmental initiatives
- Internships
- Off-site lectures
- Provision of site facilities such as meeting rooms and sports facilities
- Blood donation drives
- Participation in community festivals and events
- Cosponsorship of projects to foster future generations and serve communities in other ways

Main Activities and Relevant Information

Community Contribution and Involvement by Toppan Group Sites

The Toppan Group supports communities by addressing local issues and contributing to sustainable development. Domestic and overseas sites in the Group have engaged in contribution activities forged through dialogues with neighboring communities. Dialogue is sustained through manifold activities, including collaboration with organizations that bring together the viewpoints of community members. Each Group site takes part in meetings and activities with various local organizations in the community in which it operates and devises local contribution activities by sounding out opinions from surrounding communities. The sites also hold briefings and forums to inform neighborhoods about production operations and environmental initiatives, to answer questions from

participants, and to elicit opinions. Site facilities such as meeting rooms and sports facilities are also opened to community residents.



Cosponsoring the Central Contest for Book Report Drawings

Toppan Printing Co., Ltd. continues to work with the Japan School Library Association and The Mainichi Newspapers Co., Ltd. as a cosponsor of the Central Contest for Book Report Drawings, an annual contest that cultivates the reading and creative skills of children by encouraging them to express their impressions of books by drawing. The judges of the 29th competition in fiscal 2017 received 688,672 picture entries from 6,434 schools. Toppan produced and distributed a calendar decorated with the prize-winning works to schools and other educational facilities across Japan. The schools of the prize-winning students also received

replicas of famous Japanese-style paintings produced with Toppan's technology.



Off-site Lecture "Printing School"

Toppan Group sites in Bunkyo and Itabashi in Tokyo cooperate with local elementary schools by organizing the "Printing School," a workshop class where students create guidebooks to promote the shopping districts in their towns. Younger employees from Toppan lecture on efficient methods to gather and edit information. The students learn more about work-oriented mindsets by interviewing shopkeepers and refine their skills by taking on the challenges

of writing prose for the production of a fun-to-read booklet. The guidebooks are published and distributed in and around shopping streets in Bunkyo and Itabashi. A cumulative total of about 150 Toppan employees and some 500 elementary school students have taken part in the Printing School workshops since the launch in fiscal 2013.

Toppan Charity Concerts

Upon completing the 10th* *Toppan Charity Concert* series in fiscal 2016, Toppan had donated an accumulated total of 21,332,183 yen to the Office of the United Nations High Commissioner for Refugees and the Asia-Pacific Cultural Centre for UNESCO (ACCU). The funds provided to the ACCU have been used for literacy education and classes on maternal and child health for mothers raising young children in Cambodia. Toppan also continues to invite personnel from a Cambodian NGO working on the literacy initiative to greet the concert audiences and engage in discussion on the operation of the classes in the years to come. We will continue to sponsor Charity Concerts, aiming to raise a cumulative total of 27 million yen by fiscal 2020 (13th concert).

*The 11th *Toppan Charity Concert* was held on June 1, 2018.



10th *Toppan Charity Concert*



Discussion with Cambodian NGO members

Basic Approach

Basic Approach

With the growing awareness of environmental conservation throughout the world in the 1990s, the scope of environmental issues to be tackled by businesses grew significantly. Toppan reorganized its previous structure for environmental conservation by establishing the Ecology Center in 1991 and formulating its Declaration on the Global Environment, a basic philosophy for environmental conservation activities, in 1992. Toppan has promoted environmental initiatives based on the declaration ever since.

The Toppan Group targets the creation of a sustainable society where all forms of life in the global ecosystem can coexist into the future. In April 2009, the Group revised the Declaration on the Global Environment into The Toppan Group Declaration on the Global Environment, a new basic philosophy for environmental activities applied to the entire Group. The revised declaration reflects Toppan's more assertive approach to the conservation of the global environment.

The Toppan Group Declaration on the Global Environment (in Japanese)
https://www.toppan.co.jp/library/japanese/csr/files/pdf/The_Toppa_Group_Declaration_on_the_Global_Environment.pdf

The Toppan Group Declaration on the Global Environment

As responsible members of international society, we who work within the Toppan Group strive to realize a sustainable society through forward looking corporate activities with consideration for the conservation of the global environment.

Basic Principles

1. We observe all laws, regulations and in-company rules relating to the environment.
2. For the future of the Earth, we strive for the effective utilization of limited resources and the reduction of all types of environmental burden.
3. With foresight, we promote the development and widespread use of products that show consideration for the environment, and contribute to the environmental activities of customers.
4. We engage in communication related to the environment with a wide range of peoples both inside and outside the company, and strive for mutual understanding.
5. We also take a proactive approach to environmental conservation in corporate activities in international society.

Established in April 1992
Revised in April 2009

Promotion Framework

■ Promotion Structure

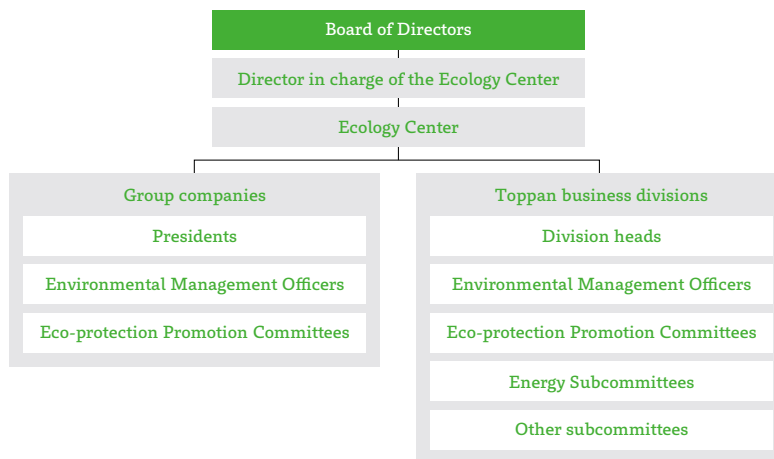
The Board of Directors is the highest-level body responsible for the Toppan Group's environmental management. The board appoints a director to head the Ecology Center, an organization that oversees Toppan's environmental conservation initiatives by supervising, evaluating, and verifying environmental activities undertaken throughout the Group and reporting results to the Board of Directors.

The Toppan Group has established an environmental conservation framework in which the heads of every division, Group company, and operational site are positioned as the personnel chiefly responsible for environmental efforts. These heads appoint Environmental Management Officers to steer the

actual implementation of conservation activities carried out at their sites and collaborate to propel environmental initiatives throughout the divisions.

To accelerate the initiatives, these officers have set up Eco-protection Promotion Committees, bodies composed of persons relevant to the environment across the departments. The committees promote environmental conservation activities at Group sites and manage progress. For advanced environmental measures, the committees have convened multiple subcommittees to formulate necessary responses to specific environmental issues. Energy Subcommittees, for example, pursue energy-saving efforts to help mitigate global warming.

■ Environmental Management Organization



■ Mechanism

The Toppan Group has established environmental management systems (EMSs) based on ISO 14001.

A PDCA cycle of planning, support and operation, performance evaluation, and improvement serves as a core part of the ISO 14001-based EMSs to ensure ongoing improvement.

Group sites maintain their EMSs through management system audits by ISO 14001 registrars, internal audits (of legal compliance) by the Ecology Center, and other internal environmental audits at individual sites.

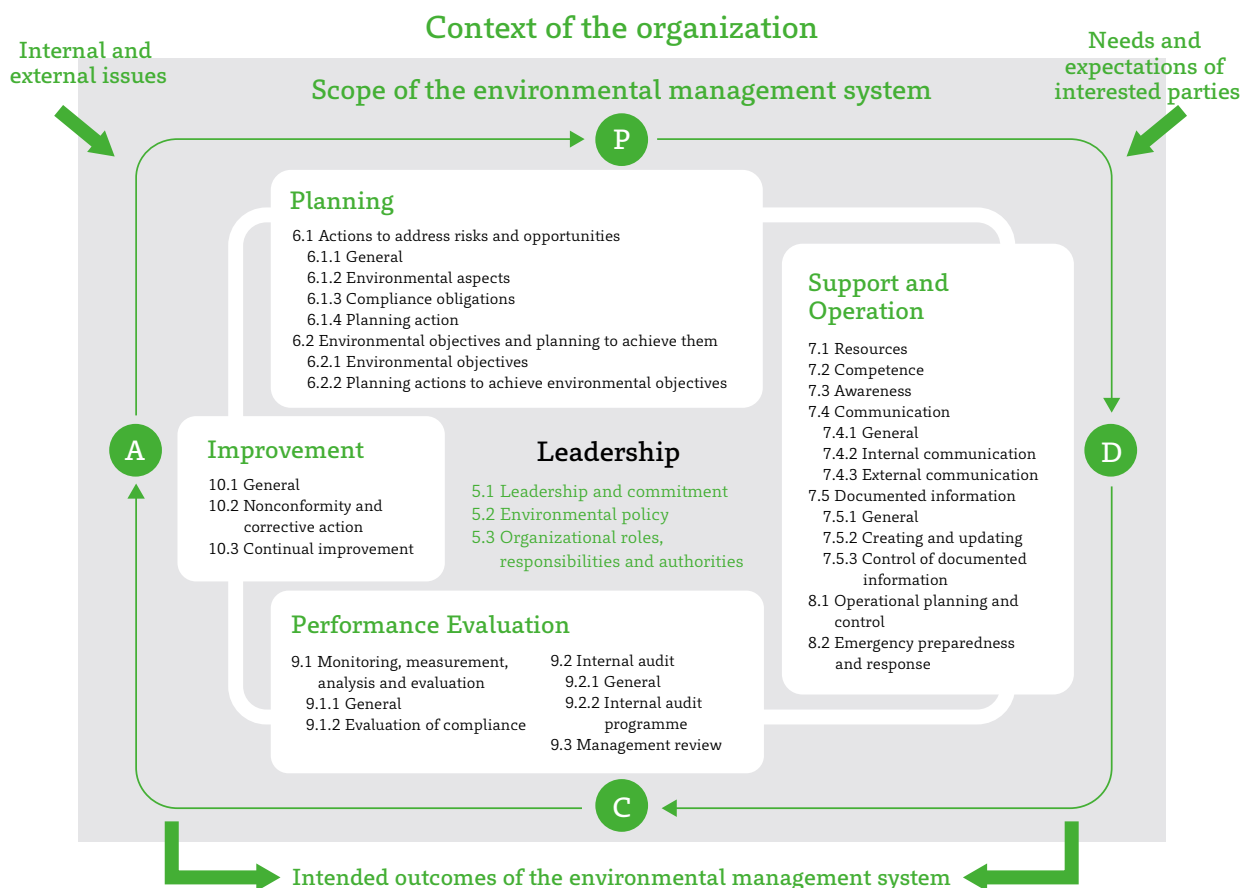
The Ecology Center aggregates evaluations of environmental performance as the organization responsible for overseeing

the Toppan Group's environmental conservation activities. The evaluation results are assured by an audit firm (independent assurance provider) and reported to the Board of Directors. The center discloses the verified performance data via the Toppan corporate website and other communication channels.

ISO 14001 environmental management system certification (in Japanese)
https://www.toppan.co.jp/corporateinfo/our_suggestion/iso/iso14001.html

Independent Assurance Report
https://www.toppan.co.jp/library/english/csr/files/pdf/2018/csr2018_detail-en.pdf#page=85

■ Management Cycle under ISO 14001:2015



■ Environmental Education

The Toppan Group implements various measures to improve the environmental literacy of employees based on social trends related to the environment, priority topics for year-by-year environmental activities, and other environment-related issues.

Toppan has been holding sessions for rank-based training, optional training, and internal auditor training, along with Company-wide e-learning-based training. Group sessions in rank-based training are arranged in conjunction with e-learning programs. Regular training on Eco-creativity Activities is also organized for employees in sales departments.

■ Medium-and-long-term Environmental Targets

As the highest-level body responsible for the Toppan Group's environmental management, the Board of Directors appoints the Director in charge of the Ecology Center, an organization responsible for overseeing the Group's environmental conservation initiatives. The director leads the center in its work to establish a set of environmental targets. Management indicators to be targeted are set based on guiding forces on the environment such as global conventions, Japanese laws and regulations, social conditions, and the voluntary action plans of the KEIDANREN (Japan Business Federation) and Japan Federation of Printing Industries (JPPI). For the objective assessment of environmental impact by indicator, the Toppan Group applies the Life-cycle Impact assessment Method based on Endpoint modeling (LIME) to consolidate INPUT and OUTPUT data on the environmental burden associated with business activities into a single index of environmental impact. This quantitative assessment provides a holistic view of the environmental impact of the overall business activities of the Group as a benchmark for checking which management indicators exert comparatively significant influences on the Group's environmental impact.

■ Environmental Communication

The Toppan Group develops Environmental Communication Activities to share environmental conservation awareness with stakeholders through integration into the communities, along with environmental education for Group employees and non-Toppan individuals. Toppan has been organizing a host of environmental communication activities such as industry-government-academia-civil society projects, the disclosure of environmental performance data on the Toppan website, the publication of *Site Eco Reports* for surrounding communities and local governments, neighborhood meetings to report on the Group's environmental efforts, and participation in eco-exhibitions and environmental consortiums.

The Toppan Group has established current targets for fiscal 2020 with regard to three management indicators: CO₂ emissions for the mitigation of global warming, final landfill waste disposal for building a recycling-oriented society, and VOC emissions into the atmosphere for the conservation of the atmospheric environment. The Ecology Center collects results on these indicators every year, reports them to the Board of Directors, decides a set of single-year targets, and finally develops environmental measures for the current year with authorization from the Board of Directors. These Group-wide targets are reshaped into site-specific targets to be treated as key indicators for managing the progress of the environmental conservation activities carried out at individual sites.

Single-year and Medium-and-long-term Environmental Targets
https://www.toppan.co.jp/library/english/csr/files/pdf/2018/csr2018_detail-en.pdf#page=53

Evaluating Domestic Environmental Impact based on LIME
https://www.toppan.co.jp/library/english/csr/files/pdf/2018/csr2018_detail-en.pdf#page=54

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

① Mitigation of global warming	② Action for building a recycling-oriented society	③ Conservation of the atmospheric environment
<ul style="list-style-type: none"> Reduce CO₂ emissions by 30% compared to the fiscal 2008 level (751 kilotons → 530 kilotons: - 221 kilotons) 	<ul style="list-style-type: none"> Reduce final landfill waste disposal by 95% compared to the fiscal 2008 level (1,584 tons → 80 tons: - 1,504 tons) 	<ul style="list-style-type: none"> Reduce VOC emissions into the atmosphere by 70% compared to the fiscal 2008 level (7,326 tons → 2,198 tons: - 5,128 tons)

Main Activities and Relevant Information

ISO 14001 Certification (56 systems at 109 sites, as of March 31, 2018)

■ 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	BV	July 1998
Environmental Design Subdivision [Kashiwa Plant and Satte Plant of Toppan Decor Products Inc.] (Living & Industry Division)	ICL	March 2000
Tokyo-based sites (Information & Communication Manufacturing Subdivision)	SAI GLOBAL	February 2002
Fukusaki Plant [including Wakayama Plant and Fukusaki Plant of Toppan Plastic Co., Ltd.] (Toppan Packaging Products Co., Ltd.)	JQA	July 2002
Takino Site	JQA	October 2002
Azusawa Site, Atago Site, Niiza Site, Kawaguchi Site, Sagamihara Site, Numazu Site (Toppan Logistics Co., Ltd.)	ICL	October 2002
Gunma Central Plant (Toppan Packaging Products Co., Ltd.)	JQA	July 2003
Mito Plant (Toppan Proprint Co., Ltd.)	ICL	January 2004
Saitama Plant, Miyagi Plant, Sano Plant (Toppan Containers Co., Ltd.)	ICL	April 2004
Fukuyama Plant (Toppan Joho Kako Co., Ltd.)	ICL	October 2004
Higashinohon Subdivision	ICL	March 2005
Toppan Technical Research Institute	JQA	May 2005
Sapporo Plant, Chitose Plant (Hokkaido Subdivision)	ICL	June 2005
Satte Plant (Toppan Plastic Co., Ltd.)	SAI GLOBAL	December 2006
Ranzan Plant, Kyushu Plant (Toppan Packaging Service Co., Ltd.)	JQA	February 2007
Sagamihara Plant (Toppan Packaging Products Co., Ltd.)	SAI GLOBAL	March 2007
Saga Plant (Toppan Plastic Co., Ltd.)	ICL	November 2007
Kyushu Subdivision (Nishinohon Division of Toppan Printing Co., Ltd.)	ICL	October 2008
Head office, Kansai branch (Toppan Techno Co., Ltd.)	SAI GLOBAL	March 2009
Sodegaura Beverage Plant (Toppan Packaging Service Co., Ltd.)	SAI GLOBAL	April 2009
Fukaya Plant [including Satte Site] (Toppan Packaging Products Co., Ltd.)	ICL	March 2010
Chubu Division	JQA	December 2010

■ 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	March 2001
Head office, Saitama Plant (Livrettech Co., Ltd.)	JCQA	July 2001
Fukushima Plant [including Takino Plant, Sagamihara Plant] (Toppan TDK Label Co., Ltd.)	RB-ISO	November 2001
Central Research Center (Toppan Forms Co., Ltd.)	JQA	March 2004
Toppan Forms Tokai Co., Ltd.	JQA	August 2004
Toppan Forms Kansai Co., Ltd.	JQA	April 2007
Toppan Forms Nishinohon Co., Ltd.	JQA	January 2005
Hino Plant (Toppan Media Printec Tokyo Co., Ltd.)	JSA	November 2005
Zama Plant (Toppan Media Printec Tokyo Co., Ltd.)	JACO	September 2009
Kansai Tosho Printing Co., Ltd.	JQA	June 2005
Tosho Printing Co., Ltd.	Intertek	May 2003
Head office, Kochi Plant (Ortus Technology Co., Ltd.)	BV	February 2008
Gunma Plant (Tamapoly Co., Ltd.)	JQA	February 2011
Toppan Forms Central Products Co., Ltd.	JQA	September 2011
Sanda Plant (Tamapoly Co., Ltd.)	JQA	January 2012
Tokyo Logistics Co., Ltd.	JIA-QA	August 2001
Tochigi Plant (Tamapoly Co., Ltd.)	JQA	August 2017

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

Group Company	Registrar	Registration Date
Toppan Photomasks France SAS	LRQA	October 2000
Toppan Photomasks, Inc. [Round Rock]	LRQA	November 2001
Siam Toppan Packaging Co., Ltd.	MASCI	April 2002
Toppan Printing Co., (H.K.) Ltd.	DNV	May 2002
Toppan Chungwa Electronics Co., Ltd.	SGS	October 2003
PT. Indonesia Toppan Printing	LRQA	November 2004
Toppan Photomasks Korea Limited	LRQA	February 2005
Toppan Photomasks Co., Ltd. Shanghai	SGS	February 2007
Toppan SMIC Electronics (Shanghai) Co., Ltd.	SGS	February 2007
Toppan Leefung Printing (Shanghai) Co., Ltd.	CCCI	April 2007
Shanghai Toppan Printing Co., Ltd.	NQA	July 2008
Toppan Leefung Changcheng Printing (Beijing) Co., Ltd.	ZDHY	November 2009
Toppan Leefung Printing Limited (H.K.)	CNAS	March 2009
Toppan Leefung Packaging & Printing (Dongguan) Co., Ltd.	CNAS	May 2009
Toppan Excel Printing (Guangzhou) Company Limited	CQC	September 2013
Toppan Excel Printing (Meizhou) Co., Ltd.	TUV	August 2010
Toppan Security Printing Pte. Ltd.	CQC	November 2012
Toppan Win Label Company Limited	CQC	November 2012
Toppan Yau Yue Paper Products (Dongguan) Co., Ltd.	Intertek	May 2016
Toppan Yau Yue Packaging (Dongguan) Co., Ltd.	Intertek	May 2016

*Every indicator assured by an independent assurance provider is marked with an assurance stamp .

Single-year Environmental Targets

■ Values, Results, and Evaluation of Environmental Targets for Fiscal 2017 and Environmental Target Values for Fiscal 2018

Environmental Targets	Management Indicators	Fiscal 2017				Environmental Target Values for Fiscal 2018
		Target Values	Results	Achievement Rates	Evaluation	
1. Mitigation of global warming Reduce CO ₂ emissions	CO ₂ emissions	550 kilotons	537 kilotons	102.4%	A	535 kilotons
2. Action for building a recycling-oriented society Reduce final landfill waste disposal	Final landfill waste disposal	100 tons	82 tons	118%	S	80 tons
3. Conservation of the atmospheric environment Reduce VOC emissions into the atmosphere	VOC emissions into the atmosphere	3,200 tons	2,924 tons	108.6%	S	3,100 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)

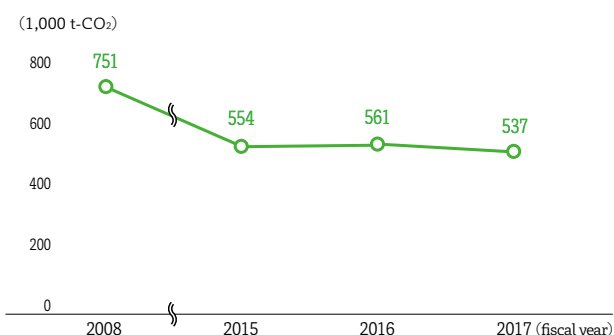
200 - (values actually achieved / target values) x 100 [%]

Medium-and-long-term Environmental Targets

The Toppan Group has been undertaking environmental conservation activities to ensure that Toppan Printing Co., Ltd. and its main domestic Group manufacturing subsidiaries attain

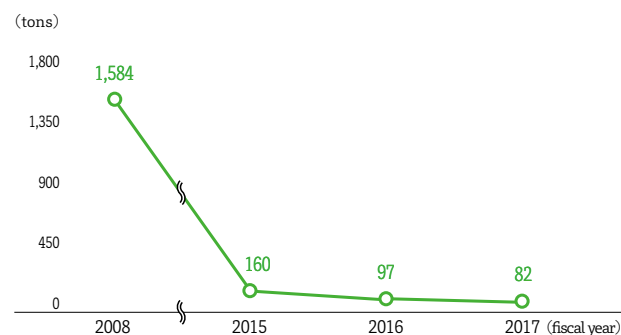
the target values for fiscal 2020. Values from fiscal 2008 are set as baseline values.

■ CO₂ Emissions

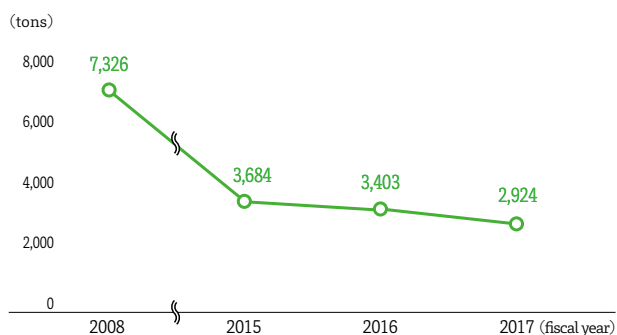


*CO₂ emissions associated with electricity consumption are calculated uniformly as 0.378 t-CO₂/MWh to confirm the degree of improvement achieved. CO₂ emissions in fiscal 2017 totaled 652,314 t-CO₂ when calculated using the effective emission factor from the method specified in the Ministerial Ordinance Concerning the Calculation of Greenhouse Gas Emissions from Business Activities of Specified Dischargers (the latest amendment on April 30, 2015) issued by the Ministry of the Environment of Japan.

■ Final Landfill Waste Disposal



■ VOC Emissions into the Atmosphere

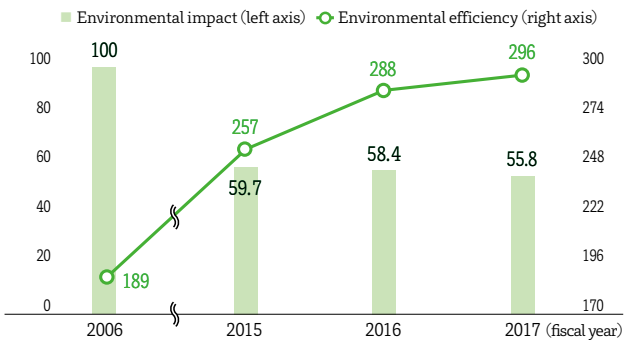


Evaluating Domestic Environmental Impact based on LIME

The Toppan Group applies the Life-cycle Impact assessment Method based on Endpoint modeling (LIME) to quantify domestic environmental impact. The value from fiscal 2006 is set as a

baseline of 100. In fiscal 2017 the Group attained a 44% reduction compared to the baseline value from fiscal 2006.

■ Environmental Impact and Environmental Efficiency in Japan

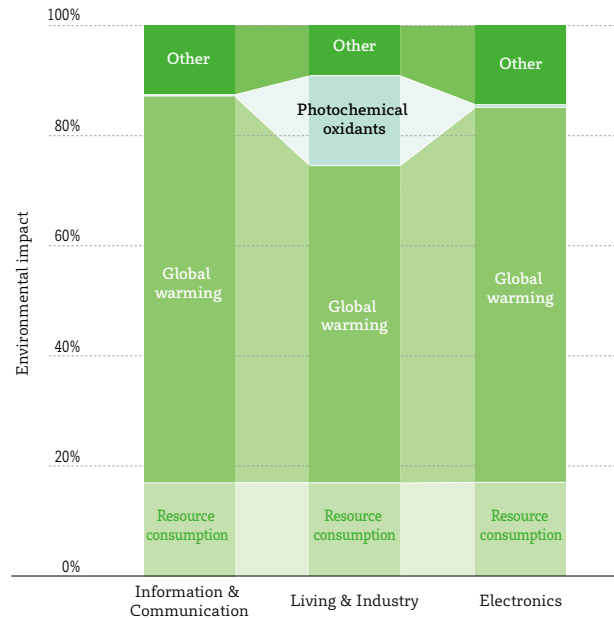


*1 The value in fiscal 2006 = 100 (baseline); recalculated with non-production sites excluded


*2 Environmental efficiency = net sales / environmental impact
The Toppan Group has implemented the following measures in Japan since fiscal 2006 (base year).

- Installed solvent treatment equipment and other systems and processes that have together helped reduce VOC emissions into the atmosphere by approximately 70%
- Practiced high-efficiency production, material recycling, and other processes that have together contributed to the reduction of total resource consumption by approximately 70%
- Replaced existing equipment with energy-saving, high-efficiency alternatives and conducted other energy-saving initiatives that have contributed to the reduction of total energy consumption by approximately 30%

■ Types of Environmental Impact by Business Field



*Toppan's environmental impact cannot be expressed in a uniform manner because materials and product types in each business field differ. Therefore, key items are assessed for each business field and reflected in medium-term targets.

*Every indicator assured by an independent assurance provider is marked with an assurance stamp .

Environmental Performance Data

■ Major Types of Environmental Burden (Total burden; covering Group companies around the world)

Category		Chief Component	Environmental Burden (Total)
INPUT	Material (tons)	Total input	1,995,400
		Paper	1,582,498
		Ink, solvent	89,440
		Plastic	270,536
		Glass	9,621
		Other	43,305
	Energy (1,000 GJ) ¹	Total consumption	20,961
		Fuel	4,310
		Electricity, steam	16,652
	Water (1,000 m ³)	Total consumption	14,069
		Industrial water	815
		Municipal water	5,762
		Groundwater	7,468
		Rainwater used	24
		Use of water circulated on premises	4,358
OUTPUT	Atmosphere (t-CO ₂) ²	CO ₂ emission	1,006,082
		Fuel-derived	239,796
		Electricity-, steam-derived	766,287
	Water and soil environments	Total effluent discharge (1,000 m ³)	10,612
		Into public water system (1,000 m ³)	7,527
		Into sewage system (1,000 m ³)	3,085
		BOD (kg)	54,240
		COD (kg)	82,724
		Nitrogen discharge (kg)	32,186
		Phosphorous discharge (kg)	85,499
	Waste (tons)	Total discharge ³	362,027
		Recycled	353,221
		Final landfill disposal	7,407

*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.

*2 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 Group sites, however, are calculated based on the latest conversion factors published by the International Energy Agency.

Fuel-derived CO₂ emissions include emissions derived from combustibles burned in incinerators.

*3 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).

*Every indicator assured by an independent assurance provider is marked with an assurance stamp .

■ Major Types of Environmental Burden (subject to the environmental targets in Japan)

Category		Chief Component	Environmental Burden (subject to the environmental targets in Japan)
INPUT	Material (tons)	Total input	1,140,345
		Paper	868,842
		Ink, solvent	60,930
		Plastic	173,139
		Glass	7,535
		Other	29,899
	Energy (1,000 GJ) ¹	Total consumption	12,380
		Fuel	3,400
		Electricity, steam	8,980
	Water (1,000 m ³)	Total consumption	6,427
		Industrial water	787
		Municipal water	1,290
		Groundwater	4,339
		Rainwater used	11
		Use of water circulated on premises	3,611
	Chemical substances (tons)	Handling of chemical substances designated under the PRTR law	5,045
	OUTPUT	Atmosphere	CO ₂ emission (t-CO ₂) ²
Fuel-derived (t-CO ₂)			191,602
Electricity-, steam-derived (t-CO ₂)			345,554
Release of chemical substances designated under the PRTR law (tons)			130
VOC emission into the atmosphere (tons) ³			2,924
Water and soil environments		Total effluent discharge (1,000 m ³)	4,938
		Into public water system (1,000 m ³)	3,602
		Into sewage system (1,000 m ³) ⁴	1,336
		BOD (kg)	11,788
		COD (kg)	7,674
		Nitrogen discharge (kg)	10,801
		Phosphorous discharge (kg)	612
		Release of chemical substances designated under the PRTR law (tons)	1
Waste (tons)		Total discharge ⁵	222,409
		Recycled	221,988
		Final landfill disposal	82

*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.

*2 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.

Fuel-derived CO₂ emissions include emissions derived from combustibles burned in incinerators.

*3 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).

*4 Includes 10,926 m³ of spring water from the premises of the Akihabara Sales Building.

*5 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).

Environmentally Friendly Products (87 products as of March 2018)

Business Field	Product	Standard Categories	Business Field	Product	Standard Categories
Information & Communication	Ecothrough card	Suitability for disposal	Living & Industry	Cylindrical paper-composite container for refill	Use of sustainable resources
	Bulky Waste Processing Sticker	Resource saving (reduced use of materials)		High-resistance Flexible Pouch	Resource-saving efforts, improvement in transport efficiency
	Eco Pack (life-size POP display)	Resource saving (reduced use of materials)		BIOAXX (label)	Use of sustainable resources
	Paper Desk Calendar	Use of recycled materials		Aluminum-free Lid Material	Use of sustainable resources
	Ecology Calendar	Use of recycled materials		Multi-layer Blow Tube	Resource-saving efforts
	Non-vinyl Chloride Lenticular Lens	Suitability for disposal		Steam-release Packaging	Reduced environmental burden during use
	Eco Pack Multipanel	Reusability		Air Hold Pouch	Resource-saving efforts
	Eco Floor Sticker	Suitability for disposal		BIOAXX (flexible packaging material)	Use of sustainable resources, resource saving, environmentally friendly disposal, visualization of environmental burden
	Eco Pack End Panel	Resource saving		Square-bottomed Gazette Pouch	Improvement in transport efficiency, resource saving, environmentally friendly disposal
	Eco Pack Stand (round type)	Resource saving		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
	Disk Tottokun Series	Resource saving, prolonged product life, recyclability, suitability for disposal		Printed Decorative Paper (Coated Paper)	Reduced use of chemical substances, reduced use of hazardous substances
	Ultra-thin DM (brochures, etc.)	Resource saving, reduced energy consumption in production, recyclability		Printed Decorative Paper (Coated Paper FSC-certified)	Use of sustainable resources, reduced use of chemical substances, reduced use of hazardous substances
	Eco Pack Multipanel Mini	Reusability, prolonged product life, recyclability, easy separation and disassembly		Printed Decor Paper for HPL/LPL (Saturated Grade Paper)	Reduced use of chemical substances, reduced use of hazardous substances, reduced release of chemical substances
	Multicube POP	Reusability, prolonged product life, recyclability, easy separation and disassembly		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
Green Bankbook	Recyclability, suitability for disposal	Transfer paper for padded floors	Reduced use of chemical substances, reduced release of chemical substances		
KAMICARD®	Biodegradability, use of safe materials, resource saving, recyclability	Lower-VOC wallpaper (Exceptional*)	Reduced use of chemical substances, reduced use of hazardous substances, reduced release of chemical substances		
KAMI-RFID CARD	Recyclability, use of safe materials, resource saving, easy separation and disassembly	SnapFit	Reduced use of chemical substances, reduced use of hazardous substances, use of sustainable resources, extension of product life		
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	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		
Electronics	Flip chip ball grid array [FC-BGA] substrate (halogen free)	Suitability for disposal	Sosogi Jozu	Resource saving, improvement in transport efficiency, environmentally friendly disposal	
	Color filter (resin black matrix [BM])	Use of safe materials, energy saving, reduced release of chemical substances, suitability for disposal	Preform for PET bottles	Improvement in transport efficiency, visualization of environmental burden	
	Palladium pre-plated leadframe	Use of safe materials, reduced release of chemical substances, suitability for disposal	FORMANO	Reduced use of chemical substances, reduced use of hazardous substances, environmentally friendly disposal, reduced release of chemical substances, extension of product life	
Flip chip ball grid array [FC-BGA] substrate (lead free)	Use of safe materials, reduced release of chemical substances, suitability for disposal	FORTINA	Reduced use of chemical substances, reduced use of hazardous substances, environmentally friendly disposal, reduced release of chemical substances, extension of product life		
Living & Industry	Toppan Ecowall	Reduced release of chemical substances, use of safe materials, suitability for disposal	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	
	TOPPAN ECO SHEET	Reduced release of chemical substances, extension of product life	Smart Deli Bag	Reduced environmental burden during use	
	GL BARRIER (Exceptional*)	Use of sustainable resources, resource-saving efforts	Plastic UV ink container	Use of recycled materials, use of sustainable resources, improvement in transport efficiency, recycling	
	Stand-up pouch	Resource-saving efforts	Forest-certified-paper packaging	Use of sustainable resources, labeling with environmental logos	
	Bottled Pouch	Resource-saving efforts	Biodegradable plastic products	Use of biodegradable materials	
	Plastic container made from recycled materials	Use of recycled materials	Cardboard with shrink wrap packaging	Resource saving, reduced energy consumption in production, improvement in transport efficiency, recycling	
	IT Paper Can	Use of sustainable resources	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	
	Ecotainer	Recycling, improvement in transport efficiency	FINE FEEL (101 Materium)	Reduced use of chemical substances, reduced use of hazardous substances, resource saving, extension of product life, environmentally friendly disposal	
	TL-PAK	Recycling, improvement in transport efficiency	EP-PAK Fold & Tear/Easy Removal Cap (Exceptional*)	Reduced use of chemical substances, reduced use of hazardous substances, use of sustainable resources, improvement in transport efficiency, recycling, environmentally friendly disposal, labeling with environmental logos	
	EP-PAK (EP-GL)	Improvement in transport efficiency, recycling	BIOAXX flexible packaging material (Eco Mark certified) (Exceptional*)	Reduced use of chemical substances, reduced use of hazardous substances, resource saving, use of sustainable resources, environmentally friendly disposal, visualization of environmental burden, labeling with environmental logos	
	EP-PAK (Al)	Improvement in transport efficiency	Flexible packaging material using recycled materials (Eco Mark certified) (Exceptional*)	Reduced use of chemical substances, reduced use of hazardous substances, use of recycled materials, resource saving, reduced energy consumption in production, environmentally friendly disposal, visualization of environmental burden, labeling with environmental logos	
	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			
	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			
	Easy Peel-off Thermo-label	Recycling			
	Eco Band	Reusability			
	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			

*Exceptional environmentally friendly product

Results of Environmental Education

Training	Number of Trainees
New employee training: General environmental education	345
E-learning-based programs	20,576
Toppan Challenge School (11 courses)	61
Internal environmental auditor training program	368

Numbers of Internal Environmental Audits and Issues in Need of Improvement

Domestic sites audited	62 sites
Issues in need of improvement identified at domestic sites	75 issues
Domestic sites reviewed	2 sites

Environmental Accounting: Capital Investment for Environmental Conservation

(million yen)

Item	Major Content	Fiscal 2017	Increase/Decrease from Fiscal 2016	Average for the Last Five Years
1	Investment in equipment to prevent pollution Investment in equipment to prevent atmospheric and other forms of pollution (Including equipment to prevent water pollution)	1,003 (273)	-568 (98)	1,181 (198)
2	Investment in equipment to conserve the global environment Investment in equipment to conserve the global environment by mitigating global warming, etc.	607	-587	971
3	Investment in equipment to circulate resources Investment in equipment to realize the appropriate treatment and recycling, etc. of waste (Including equipment to use rainwater and reduce water consumption)	69 (9)	-68 (-35)	163 (24)
4	Investment in equipment to carry out environmental management activities Investment in equipment to monitor and measure environmental burden, plant trees at operational sites, and implement other environmental measures	49	34	36
Total		1,728	-1,189	2,350

Environmental Accounting: Environmental Conservation Benefit

Item	Major Content	Increase/Decrease from Fiscal 2016	Fiscal 2017
Energy	Total energy consumption (1,000 GJ)	-941	20,961
Water	Water consumption (1,000 m ³)	95	14,069
Atmosphere	CO ₂ emission (1,000 t-CO ₂)	-26	1,006
	Emission of dioxins (mg-TEQ)	-1	0
Water and soil environments	Total effluent discharge (1,000 m ³)	355	10,612
	BOD (tons)	17	54
	COD (tons)	24	83
Waste	Total discharge (1,000 tons)	-8	362

Green Procurement and Green Purchasing

■ Green Procurement Standards for Paper and Level of Fulfillment

Green Principle	Level 1	Level 2	Fiscal 2017 Result*
1. Using recycled paper or paper made with fewer forest resources (excluding covers for brochures)	Paper composed of at least 60% recycled pulp plus forest-certified pulp for the remaining portion, or with an overall rating of more than 80 points	Paper composed of at least 20% recycled pulp or forest-certified paper, tree-free paper, paper made with pulp from forest-thinning operations, or tissue paper	4.3%
2. 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	
3. Procuring from manufacturers proactively engaged in paper recycling	Procurement from manufacturers who proactively use waste paper as a raw material for recycled paper		

Note: Result under the Green Standards for Offset Printing Services (April 1, 2017 amendment) of the Japan Federation of Printing Industries (JPFI)

*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 2017 Result*
1. Avoiding the use of substances harmful to the human body	Conformance with the NL regulations of the Japan Printing Ink Makers Association		98.3%
2. Considering chemical substances designated under the PRTR law of Japan	Non-usage of substances designated under the PRTR law	Identification of substances designated under the PRTR law (via SDSs)	
3. Controlling VOC emissions (for offset ink, excluding heat-set ink for web press)	Non-VOC ink or UV ink	Vegetable oil ink, soybean oil ink, or "ig" ink (labeling with Ink Green Mark)	
4. Using sustainable resources (for heat-set ink for web press)	Vegetable oil ink, soybean oil ink, or "ig" ink (labeling with Ink Green Mark)		
5. 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 JPFI Green Standards for Offset Printing Services (April 1, 2017 amendment)

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

■ In-house Green Purchasing Standards and Levels of Fulfillment

Product	Standard	Fiscal 2017 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 and to maintain low energy consumption when in low-power mode	100.0%
Stationery and office goods	Products listed in eco-friendly product catalogues of manufacturers	73.5%

Environment-related Businesses

The total sales of environment-related businesses—including, most notably, sales of environmentally friendly products satisfying the in-house criteria of the Toppan Group—were 606.5 billion yen in fiscal 2017.

Mitigation of Global Warming

Basic Approach

The Toppan Group has formulated the following basic policies for mitigating global warming.

Toppan positions global warming mitigation as an important element of management. The Group focuses on energy management and the rational use of energy in implementing activities towards

climate security.

The Group will continue to adopt renewable energy sources on a preferential basis and assertively encourage the broad use of renewables into the future.

Promotion Framework

■ Promotion Structure

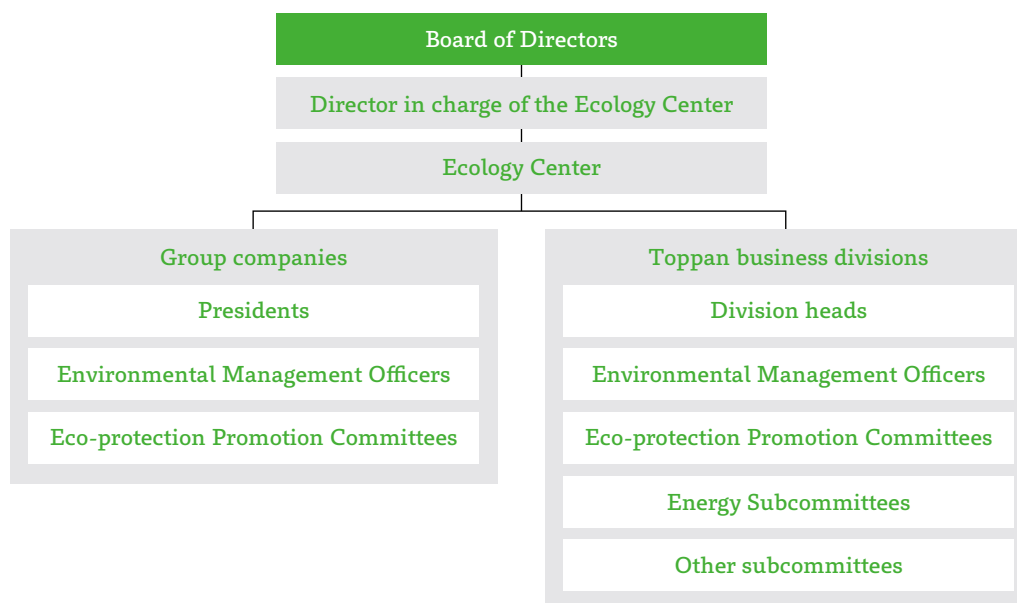
The Board of Directors is the highest-level body responsible for the Toppan Group's environmental management. The board appoints a director to head the Ecology Center, an organization that oversees Toppan's environmental conservation initiatives by supervising, evaluating, and verifying environmental activities undertaken throughout the Group and reporting results to the Board of Directors.

The Toppan Group has established an environmental conservation framework in which the heads of every division, Group company, and operational site are positioned as the personnel chiefly responsible for environmental efforts. These heads appoint Environmental Management Officers to steer the

actual implementation of conservation activities carried out at their sites and collaborate to propel environmental initiatives throughout the divisions.

To accelerate the initiatives, these officers have set up Eco-protection Promotion Committees, bodies composed of persons relevant to the environment across the departments. The committees promote environmental conservation activities at Group sites and manage progress. For advanced environmental measures, the committees have convened multiple subcommittees to formulate necessary responses to specific environmental issues. Energy Subcommittees, for example, pursue energy-saving efforts to help mitigate global warming.

■ Environmental Management Organization



■ Mechanism

The Toppan Group has established environmental management systems (EMSs) based on ISO 14001.

A PDCA cycle of planning, support and operation, performance evaluation, and improvement serves as a core part of the ISO 14001-based EMSs to ensure ongoing improvement.

Group sites maintain their EMSs through management system audits by ISO 14001 registrars, internal audits (of legal compliance) by the Ecology Center, and other internal environmental audits at individual sites.

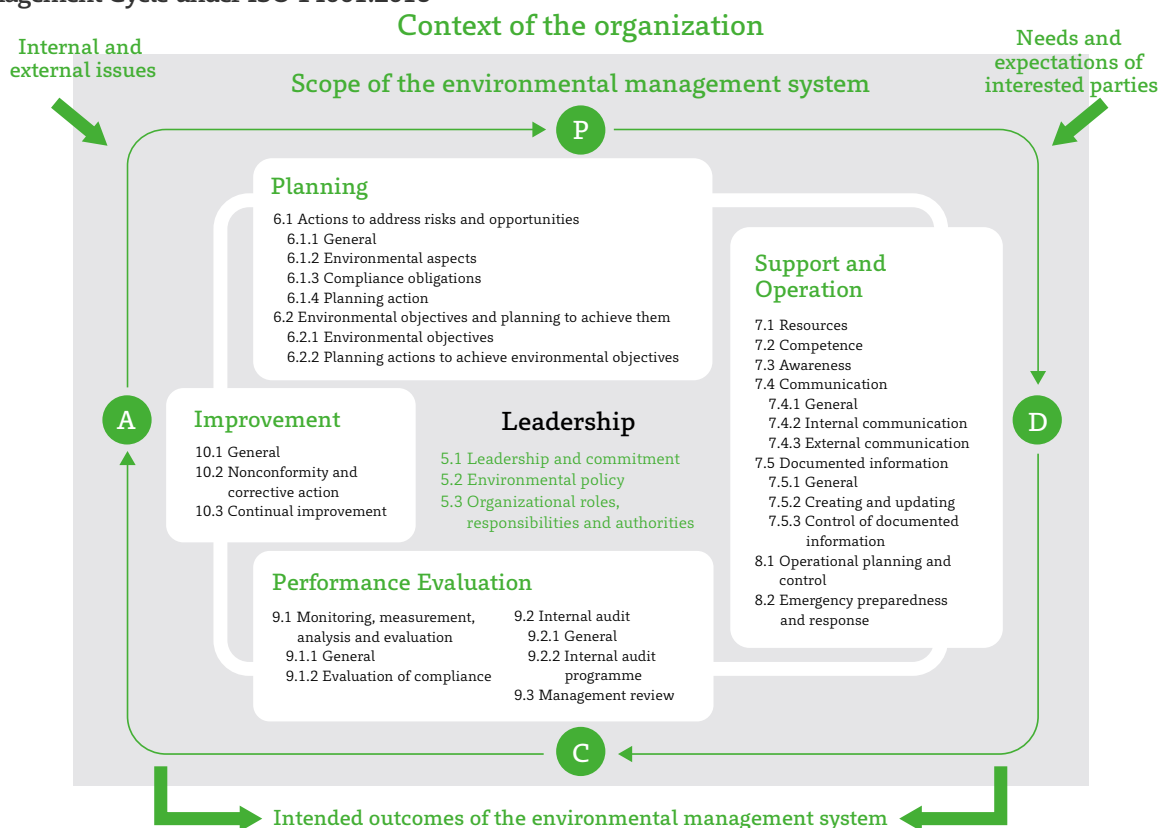
The Ecology Center aggregates evaluations of environmental performance as the organization responsible for overseeing

the Toppan Group's environmental conservation activities. The evaluation results are assured by an audit firm (independent assurance provider) and reported to the Board of Directors. The center discloses the verified performance data via the Toppan corporate website and other communication channels.

ISO 14001 environmental management system certification (in Japanese)
https://www.toppan.co.jp/corporateinfo/our_suggestion/iso/iso14001.html

Independent Assurance Report
https://www.toppan.co.jp/library/english/csr/files/pdf/2018/csr2018_detail-en.pdf#page=85

■ Management Cycle under ISO 14001:2015



■ Mitigating Global Warming

The Toppan Group has been reducing total emissions of carbon dioxide (CO₂) to help mitigate global warming.

For reduced electricity consumption, the Group operates a nationwide demand-monitoring system to control peak power demand in summer and winter in Japan. The electricity consumption data compiled for each site via this system enables Toppan to review power contracts and encourage energy-saving efforts on a site-by-site basis.

The Group is also replacing long-used utility facilities with high-efficiency alternatives systematically. To reduce the unnecessary or nonessential use of electricity, Toppan redresses demand-and-supply imbalances and suspends the use of any equipment that has been kept running during vacations.

Toppan Logistics Co., Ltd., the logistics specialist for the Group, is working with shippers from Toppan Group companies to optimize transportation conditions and further improve

transportation efficiency. Together they endeavor to reduce the energy consumption per unit of transport volume by company vehicles and the total volume of CO₂ emissions from transport.

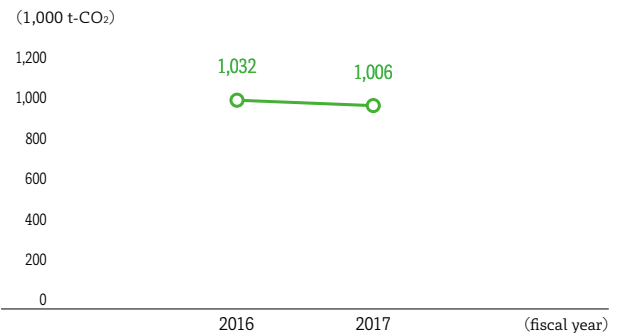
As a member of the Japan Federation of Printing Industries (JFPI; Chairman Shingo Kaneko, President & Representative Director of Toppan Printing Co., Ltd.), Toppan has driven industry-wide efforts to spawn global warming mitigation measures, primarily through its involvement in JFPI activities to address climate change and promote low carbonization. Under the leadership of Toshiro Kinoshita from Toppan Printing's Ecology Center, the JFPI's Working Group for Voluntary Action Plans on the Environment (under the Environmental Management Task Force of the Global Environment Committee) pursues industry-wide global warming mitigation initiatives by devising voluntary action plans for reducing VOC emissions and implementing various other measures towards the realization of a low-carbon, circular economy.

Main Activities and Relevant Information

CO₂ Emissions

■ CO₂ Emissions (Group-wide)

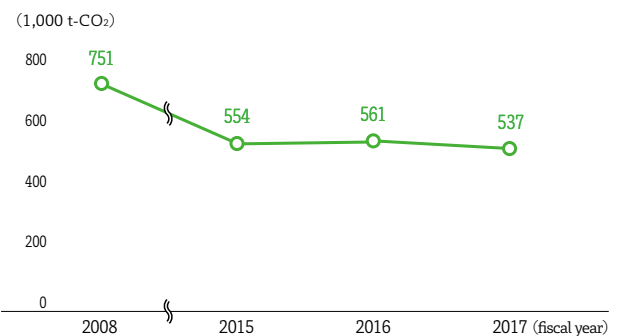
In fiscal 2017 the Toppan Group began evaluating and disclosing Group-wide CO₂ emissions, including emissions associated with overseas Group subsidiaries. The disclosed values for Group-wide CO₂ emissions begin from fiscal 2016 (data disclosed for earlier years is limited to sites in Japan).



*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 Group sites, however, are calculated using the latest conversion factors published by the International Energy Agency. CO₂ emissions include emissions derived from combustibles burned in incinerators.

■ CO₂ Emissions (subject to the environmental targets in Japan)

Among CO₂ emissions from various sources (subject to the environmental targets in Japan), emissions associated with electricity consumption are calculated using a fixed factor to assess the Group's CO₂ reduction measures.

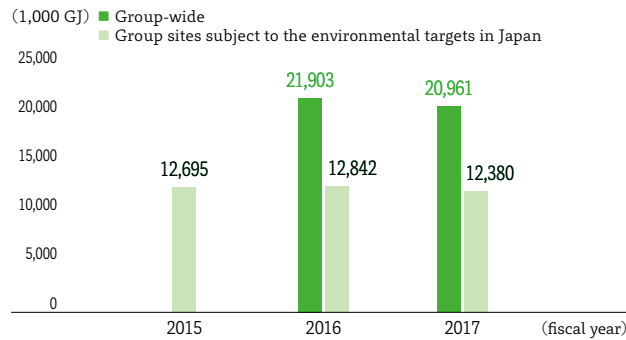


*CO₂ emissions are calculated by the method specified in the Guidelines for Calculating Greenhouse Gas Emissions from Businesses (2003) issued by the Ministry of the Environment of Japan. CO₂ emissions associated with electricity consumption are calculated uniformly as 0.378 t-CO₂/MWh to confirm the degree of improvement achieved. CO₂ emissions in fiscal 2017 totaled 652,314 t-CO₂ when calculated using the effective emission factor from another MOE method specified in the Ministerial Ordinance Concerning the Calculation of Greenhouse Gas Emissions from Business Activities of Specified Dischargers (the latest amendment on April 30, 2015). CO₂ emissions include emissions derived from combustibles burned in incinerators.

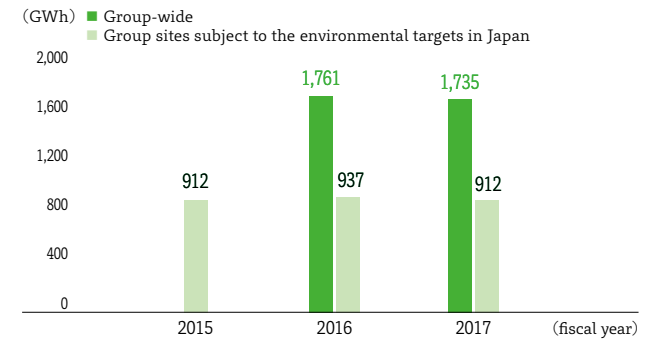
Energy Consumption

In fiscal 2017 Toppan began evaluating and disclosing energy consumption across the entire Group, including consumption by overseas subsidiaries. The disclosed values for Group-wide energy consumption begin from fiscal 2016 (data disclosed for earlier years is limited to sites in Japan).

■ Energy Consumption



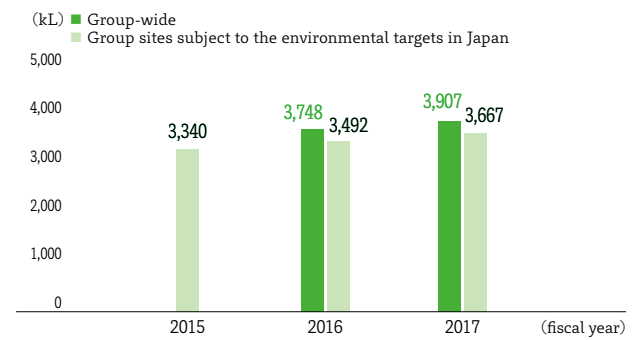
■ Electricity Consumption



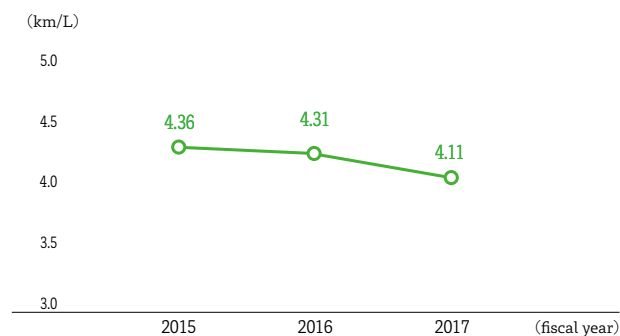
■ Natural Gas Consumption



■ Kerosene Consumption



■ Fuel Efficiency of Vehicles Owned by Toppan Logistics



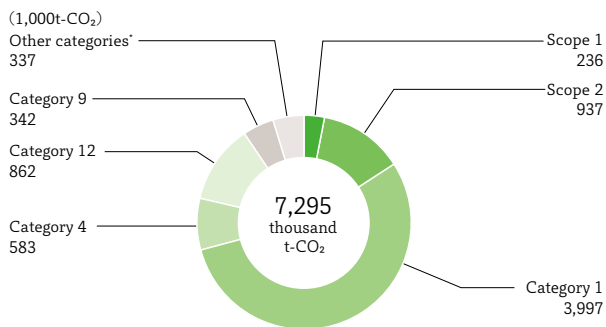
Scope 1-3 Greenhouse Gas Emissions

In fiscal 2017 the Toppan Group began evaluating and disclosing Group-wide scope 1-3 greenhouse gas (GHG) emissions, including emissions associated with overseas Group subsidiaries.

Toppan calculated the Group's scope 3 emissions (total value chain GHG emissions) in fiscal 2017 to identify the categories of corporate activity that represented larger sources of GHG emissions and to establish priority targets in the Group's emission reduction

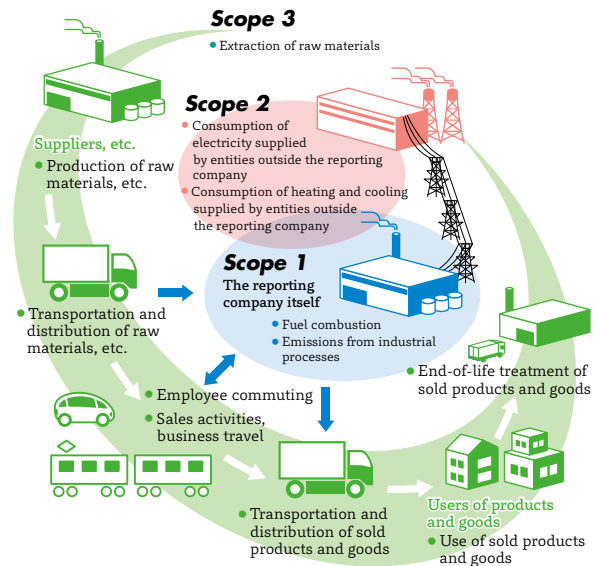
strategy. This calculation showed that four categories related to raw material consumption collectively accounted for the largest share of the Group's GHG emissions: category 1 (manufacturing of products purchased by Toppan), categories 4 and 9 (transportation and distribution of products purchased and sold by Toppan), category 12 (end-of-life treatment of products sold by Toppan).

■ Scope 1-3 Greenhouse Gas Emissions



*Categories 2, 3, 5, 6, 7, 8

■ Calculating Scope 3 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

For scope 1 and 2 GHG emissions, CO₂ emissions associated with electricity consumption at domestic sites are calculated using the effective emission factor from the method specified in the Ministerial Ordinance Concerning the Calculation of Greenhouse Gas Emissions from Business Activities of Specified Dischargers (the latest amendment on April 30, 2015) issued by the Ministry of the Environment (MOE) of Japan. Meanwhile, CO₂ emissions associated with electricity consumption at overseas sites are calculated using country-specific conversion factors published by the International Energy Agency. CO₂ emissions associated with fuel consumption, excluding electricity consumption, are calculated globally by the MOE method specified in the Ministerial Ordinance Concerning the Calculation of Greenhouse Gas Emissions from Business Activities of Specified Dischargers (the latest amendment on April 30, 2015).

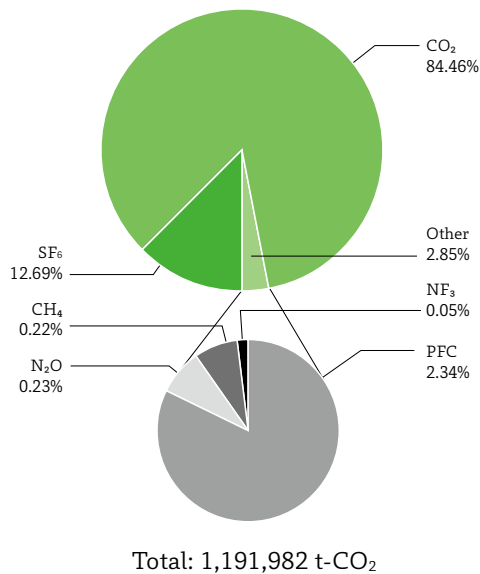
Indirect Emissions Not Included in Scope 2 (Scope 3)			Calculation Methods	
			Activity Quantity	Basic Unit from
Category 1	Purchased goods and services	Emissions associated with activities up to the point of the production of raw materials, components, goods, sales-related materials, or the like purchased or acquired by the reporting company	Materials purchased or acquired (by weight)	CFP-DB 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

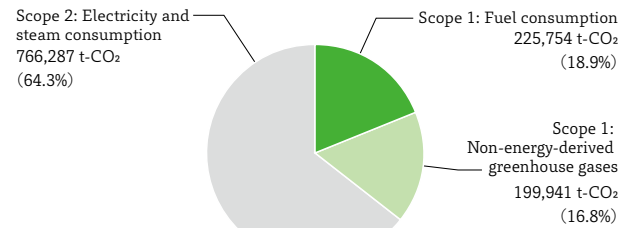
- Toppan calculates the Group's scope 3 emissions for categories 1-9 and 12.
- The calculation boundary covers all GHG emissions associated with Toppan Printing Co., Ltd. and its consolidated entities.
- For "freight ton-kilometers as a designated shipper classified under the Energy Saving Act of Japan" 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. 2.5)
- *2 CFP-DB: Standard database (ver. 1.01) of the Japan Environmental Management Association for Industry (JEMAI) Carbon Footprint of Products (CFP) Communication Program

Greenhouse Gas Emissions

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



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



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.
- Fiscal 2017 greenhouse gas (GHG) emissions from domestic sites (subject to and not subject to the environmental targets) and overseas sites (including Group company sites) 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	Domestic Sites (subject to the environmental targets)	Domestic Sites (not subject to the environmental targets)	Overseas Sites
2017	3,600 t-CO ₂	694 t-CO ₂	2,877 t-CO ₂

Notes:

The values shown for domestic sites (subject to and not subject to the environmental targets) are calculated in conformance with the Act on Rational Use and Proper Management of Fluorocarbons enforced in April 2015 in Japan.

The value shown for overseas sites (including Group company sites) is calculated by a method corresponding to the Japanese Act on Rational Use and Proper Management of Fluorocarbons.

Building of a Recycling-oriented Society

Basic Approach

The Toppan Group has formulated the following basic policies to contribute to the building of a recycling-oriented society, an endeavor it positions as an important element of management. The Group processes industrial waste and waste materials in line with the following priorities.

1) First priority is given to reductions of the discharge of industrial waste and waste materials generated in association with business activities.

- 2) Second priority is given to the reuse or recycling of industrial waste and waste materials discharged in spite of the reduction efforts.
- 3) Third priority is given to the application of appropriate treatment methods to industrial waste and waste materials not reused or recycled.

This order of priority may not apply when another order of priority is deemed to be more effective for reducing environmental burden.

Promotion Framework

■ Promotion Structure

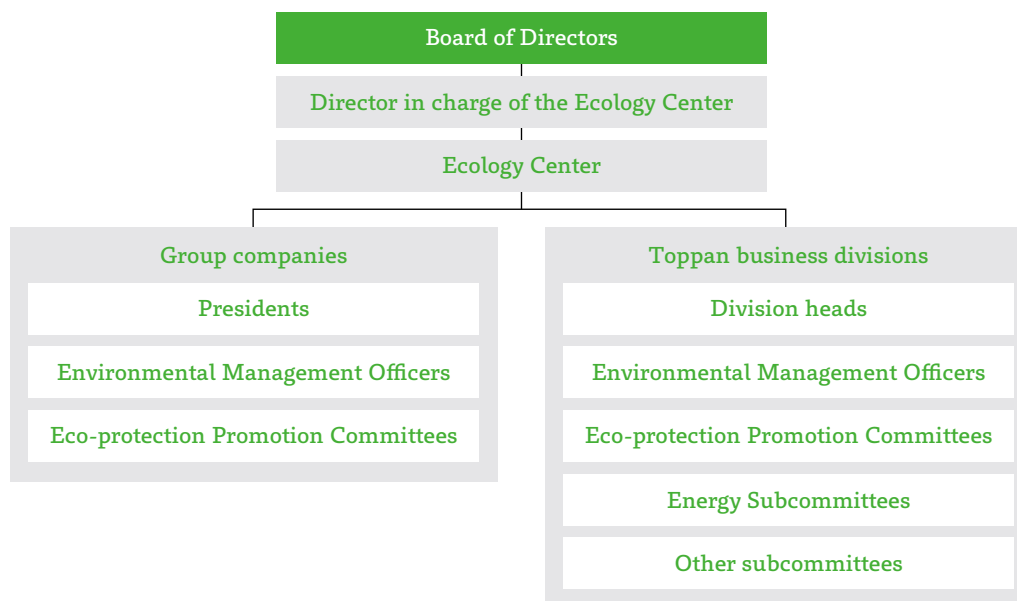
The Board of Directors is the highest-level body responsible for the Toppan Group's environmental management. The board appoints a director to head the Ecology Center, an organization that oversees Toppan's environmental conservation initiatives by supervising, evaluating, and verifying environmental activities undertaken throughout the Group and reporting results to the Board of Directors.

The Toppan Group has established an environmental conservation framework in which the heads of every division, Group company, and operational site are positioned as the

personnel chiefly responsible for environmental efforts. These heads appoint Environmental Management Officers to steer the actual implementation of conservation activities carried out at their sites and collaborate to propel environmental initiatives throughout the divisions.

To accelerate the initiatives, these officers have set up Eco-protection Promotion Committees, bodies composed of persons relevant to the environment across the departments. The committees promote environmental conservation activities at Group sites and manage progress.

■ Environmental Management Organization



■ Mechanism

The Toppan Group has established environmental management systems (EMSs) based on ISO 14001.

A PDCA cycle of planning, support and operation, performance evaluation, and improvement serves as a core part of the ISO 14001-based EMSs to ensure ongoing improvement.

Group sites maintain their EMSs through management system audits by ISO 14001 registrars, internal audits (of legal compliance) by the Ecology Center, and other internal environmental audits at individual sites.

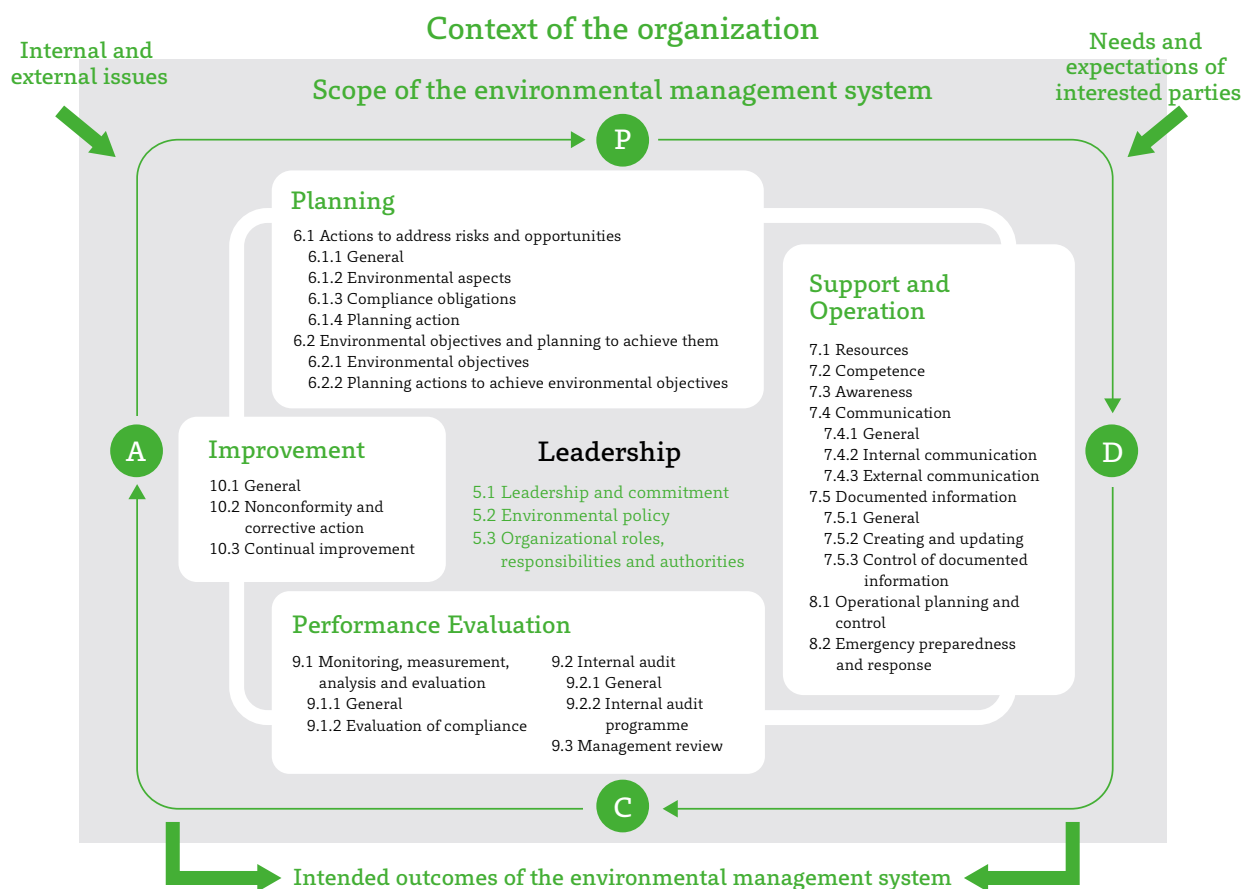
The Ecology Center aggregates evaluations of environmental performance as the organization responsible for overseeing

the Toppan Group's environmental conservation activities. The evaluation results are assured by an audit firm (independent assurance provider) and reported to the Board of Directors. The center discloses the verified performance data via the Toppan corporate website and other communication channels.

ISO 14001 environmental management system certification (in Japanese)
https://www.toppan.co.jp/corporateinfo/our_suggestion/iso/iso14001.html

Independent Assurance Report
https://www.toppan.co.jp/library/english/csr/files/pdf/2018/csr2018_detail-en.pdf#page=85

■ Management Cycle under ISO 14001:2015



■ Building a Recycling-oriented Society

In a drive to use limited resources more effectively, the Toppan Group works to reduce the discharge of waste, increase the recycling rate, and apply appropriate waste treatment methods based on The Toppan Group Declaration on the Global Environment.

Waste paper derived from operational sites primarily in the Information & Communication and Living & Industry fields makes up the largest portion (about 70%) of the total waste discharged at Group sites. This is followed by waste plastics from plants in the Living & Industry field and waste acid from the Electronics

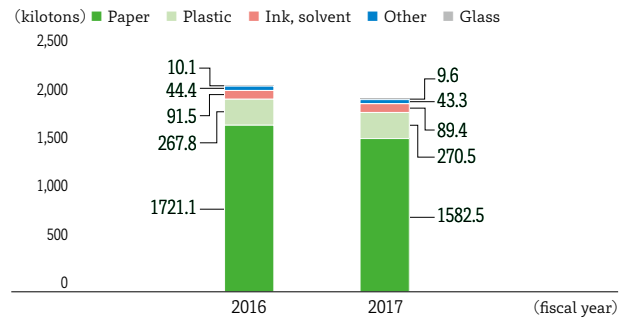
field. The Group has striven to increase the material recycling rate by processing waste paper into recycled paper, separating waste plastics and processing composite plastics into pellets, and recycling by other methods. Waste acid, meanwhile, has been treated in-house to lower volumes for disposal.

In its approaches to water, a limited resource, Toppan is committed to limiting the levels consumed and controlling the quality of effluents discharged into water resources. The Group will continue reducing waste discharge and promoting material recycling.

Main Activities and Relevant Information

Material Input

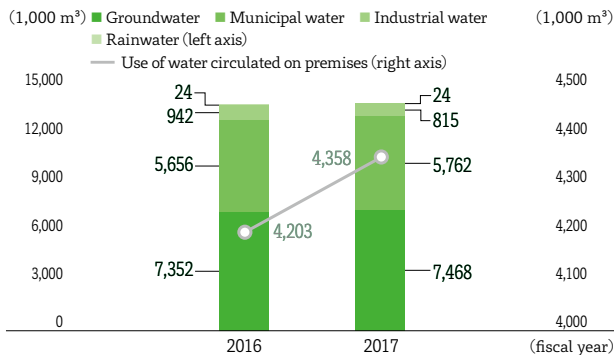
In fiscal 2017 the Toppan Group began evaluating and disclosing Group-wide material input, including input at overseas Group subsidiaries. The disclosed values for Group-wide material input begin from fiscal 2016 (data disclosed for earlier years is limited to sites in Japan).



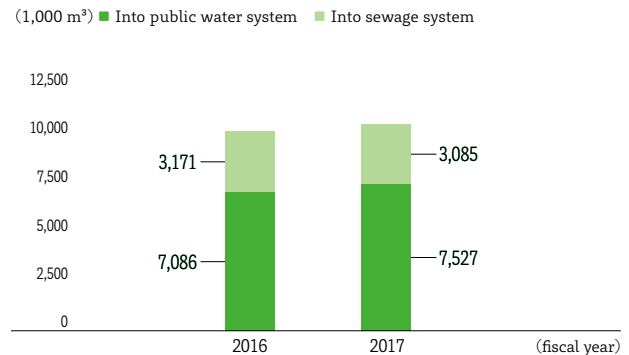
Water Consumption

In fiscal 2017 the Toppan Group began evaluating and disclosing Group-wide water consumption, including consumption at overseas Group subsidiaries. The disclosed values for Group-wide water consumption begin from fiscal 2016 (data disclosed for earlier years is limited to sites in Japan).

Water Consumption



Effluent Discharge



Waste Discharge and Recycling

In fiscal 2017 the Toppan Group began evaluating and disclosing Group-wide waste discharge and recycling, including discharge and recycling at overseas Group subsidiaries. The disclosed values for Group-wide waste discharge and recycling begin from fiscal 2016 (data disclosed for earlier years is limited to sites in Japan).



Zero-emission Efforts

- 59 sites approved in June 2017
- The Toppan Group approves operational sites as zero-emission sites based on a three-level grading system according to their recycling rates.
- Group sites satisfying any of the following criteria were approved as zero-emission sites in June 2017: S-rank site, recycling rate of 99.5% or over; A+-rank site, recycling rate of 99% or over and less than 99.5%; and A-rank site, recycling rate of 98% or over and less than 99%.

■ Zero-emission Sites (TZERO-17) (59 sites approved in June 2017)

Operational Site (Division or Group Company)	Total Waste Generation in Fiscal 2016 (tons)	Waste Recycled in Fiscal 2016 (tons)	Recycling Rate in Fiscal 2016 (%)	Rank
Sapporo Plant (Hokkaido Subdivision)	2,054	2,054	100.00	S
Sendai Plant (Higashinihon Division)	4,558	4,553	99.90	S
Itabashi Site	6,618	6,587	99.53	S
Asaka Site [Commercial Printing, Publications Printing] (Toppan Communication Products Co., Ltd.)	3,624	3,620	99.88	S
Asaka Site (Toppan Joho Kako Co., Ltd.)				
Asaka Securities Printing Plant (Toppan Communication Products Co., Ltd.)	3,202	3,202	100.00	S
Kawaguchi Site	35,259	35,259	100.00	S
Sakado Site	24,398	24,398	100.00	S
Ranzan Plant (Toppan Communication Products Co., Ltd.)	763	763	100.00	S
Nagoya Plant (Chubu Division)	6,765	6,760	99.93	S
Takino Plant (Toppan Communication Products Co., Ltd.)	9,547	9,469	99.18	A+
Takino Securities Printing Plant (Toppan Communication Products Co., Ltd.)	959	951	99.14	A+
Fukuoka Plant (Toppan Communication Products Co., Ltd.)	6,137	6,137	100.00	S
Fukuyama Plant (Toppan Joho Kako Co., Ltd.)	1,862	1,838	98.71	A
Oyodo Plant (Toppan Communication Products Co., Ltd.)	276	274	99.30	A+
Chitose Plant (Toppan Packaging Products Co., Ltd.)	3,268	3,213	98.33	A
Gunma Central Plant (Toppan Packaging Products Co., Ltd.)	11,434	11,415	99.84	S
Sagamihara Plant (Toppan Packaging Products Co., Ltd.)	17,423	17,423	100.00	S
Matsusaka Plant (Toppan Packaging Products Co., Ltd.)	3,014	2,977	98.76	A
Fukusaki Plant (Toppan Packaging Products Co., Ltd.)	6,630	6,530	98.50	A
Fukusaki Plant (Toppan Plastic Co., Ltd.)	372	372	100.00	S
Fukuoka Plant (Toppan Packaging Products Co., Ltd.)	6,101	6,099	99.98	S
Miyata Plant (Toppan Packaging Service Co., Ltd.)	134	134	100.00	S
Mikkabi Plant (Toppan Packaging Products Co., Ltd.)	3,141	3,141	100.00	S
Tamana Plant (Toppan Packaging Products Co., Ltd.)	4,884	4,884	100.00	S
Miyagi Plant (Toppan Containers Co., Ltd.)	3,380	3,319	98.20	A
Sano Plant (Toppan Containers Co., Ltd.)	3,390	3,363	99.21	A+
Saitama Plant (Toppan Containers Co., Ltd.)	9,080	9,010	99.23	A+
Satte Plant (Toppan Plastic Co., Ltd.)	526	523	99.42	A+
Wakayama Manufacturing Section (Fukusaki Plant of Toppan Plastic Co., Ltd.)	119	119	100.00	S
Saga Plant (Toppan Plastic Co., Ltd.)	218	218	100.00	S
Ranzan Plant (Toppan Packaging Service Co., Ltd.)	500	500	100.00	S
Sodegaura Beverage Plant (Toppan Packaging Service Co., Ltd.)	1,711	1,711	100.00	S
Kyushu Plant (Toppan Packaging Service Co., Ltd.)	178	178	100.00	S
Mito Plant (Toppan Prosprint Co., Ltd.)	5,237	5,234	99.94	S
Satte Plant (Toppan Packaging Products Co., Ltd.)	423	423	100.00	S
Kashiwa Plant (Toppan Decor Products Inc.)	503	503	100.00	S
Satte Plant (Toppan Decor Products Inc.)	5,415	5,415	100.00	S
Harima Plant (Toppan Plastic Co., Ltd.)	547	547	100.00	S
Kansai Bottling Co., Ltd.	77	77	99.95	S
Fukaya Plant (Toppan Packaging Products Co., Ltd.)	1,763	1,758	99.73	S
Asaka Plant (Toppan Electronics Products Co., Ltd.)	61	61	100.00	S
Shiga Plant (Toppan Electronics Products Co., Ltd.)	277	277		
Shiga Plant (Toppan TOMOEGAWA Optical Films Co., Ltd.)	502	499	99.63	S
Mie Plant [Kameyama] (Toppan Electronics Products Co., Ltd.)	2,581	2,581	100.00	S
Mie Plant [Hisai] (Toppan Electronics Products Co., Ltd.)	2,462	2,462	100.00	S
Niigata Plant (Toppan Electronics Products Co., Ltd.)	5,343	5,342	99.97	S
Kumamoto Plant (Toppan Electronics Products Co., Ltd.)	5,404	5,404	100.00	S
Toyama Plant (Toppan Electronics Products Co., Ltd.)	100	100	100.00	S
Toppan Technical Research Institute (Toppan Printing Co., Ltd.)	439	438	99.77	S
Sakado Distribution Processing Center (Toppan Logistics Co., Ltd.)	1,198	1,198	100.00	S
Sagamihara Plant (Toppan TDK Label Co., Ltd.)	450	450	99.92	S
Takino Plant (Toppan TDK Label Co., Ltd.)	412	412	99.99	S
Fukushima Plant (Toppan TDK Label Co., Ltd.)	2,166	2,165	99.94	S
Gunma Plant (Tamapoly Co., Ltd.)	3,032	2,984	98.42	A
Sanda Plant (Tamapoly Co., Ltd.)	2,990	2,990	100.00	S
Tochigi Plant (Tamapoly Co., Ltd.)	2,265	2,265	100.00	S
Saitama Plant (Livrettech Co., Ltd.)	6,721	6,702	99.73	S
Hino Plant (Toppan Media Printec Tokyo Co., Ltd.)	657	657	99.95	S
Zama Plant (Toppan Media Printec Tokyo Co., Ltd.)	246	246	99.85	S
Kochi Factory (Ortus Technology Co., Ltd.)	1,241	1,227	98.88	A

Note:

The Toppan Group 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%.

Group sites satisfying any of the above criteria were approved as zero-emission sites in June 2017.

Control of Chemical Substances

Basic Approach

The Toppan Group has formulated the following basic policies on chemical substance control.

Toppan refrains from the use of hazardous chemical substances as a basic rule. The Group may, however, resort to the use of hazardous substances when their use is legally permitted and no alternate technologies are available. Even when these latter conditions apply, the Group appropriately controls the substances

and endeavors to reduce their usage and replace them with substitutes.

Toppan monitors every chemical substance used within the Group's business operations. The Toppan Group seeks to eliminate obstacles to environmental conservation in advance by being proactive in constantly improving substance control methods as a business operator.

Promotion Framework

■ Promotion Structure

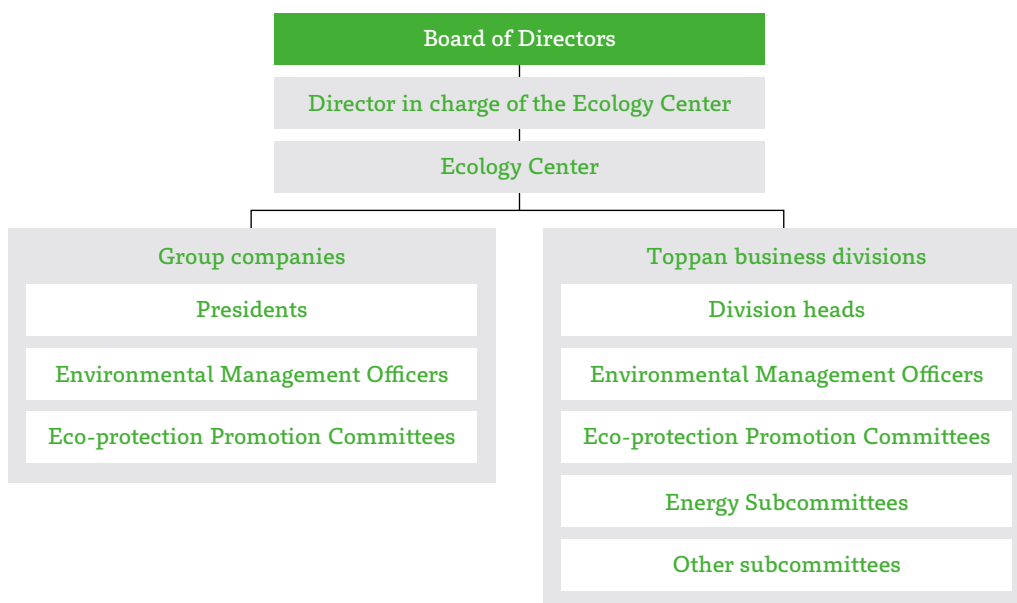
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The Toppan Group has established an environmental conservation framework in which the heads of every division, Group company, and operational site are positioned as the personnel chiefly responsible for environmental efforts. These heads appoint Environmental Management Officers to steer the

actual implementation of conservation activities carried out at their sites and collaborate to propel environmental initiatives throughout the divisions.

To accelerate the initiatives, these officers have set up Eco-protection Promotion Committees, bodies composed of persons relevant to the environment across the departments. The committees promote environmental conservation activities at Group sites and manage progress. For advanced environmental measures, the committees have convened multiple subcommittees to formulate necessary responses to specific environmental issues. Energy Subcommittees, for example, pursue energy-saving efforts to help mitigate global warming.

■ Environmental Management Organization



■ Mechanism

The Toppan Group has established environmental management systems (EMSs) based on ISO 14001.

A PDCA cycle of planning, support and operation, performance evaluation, and improvement serves as a core part of the ISO 14001-based EMSs to ensure ongoing improvement.

Group sites maintain their EMSs through management system audits by ISO 14001 registrars, internal audits (of legal compliance) by the Ecology Center, and other internal environmental audits at individual sites.

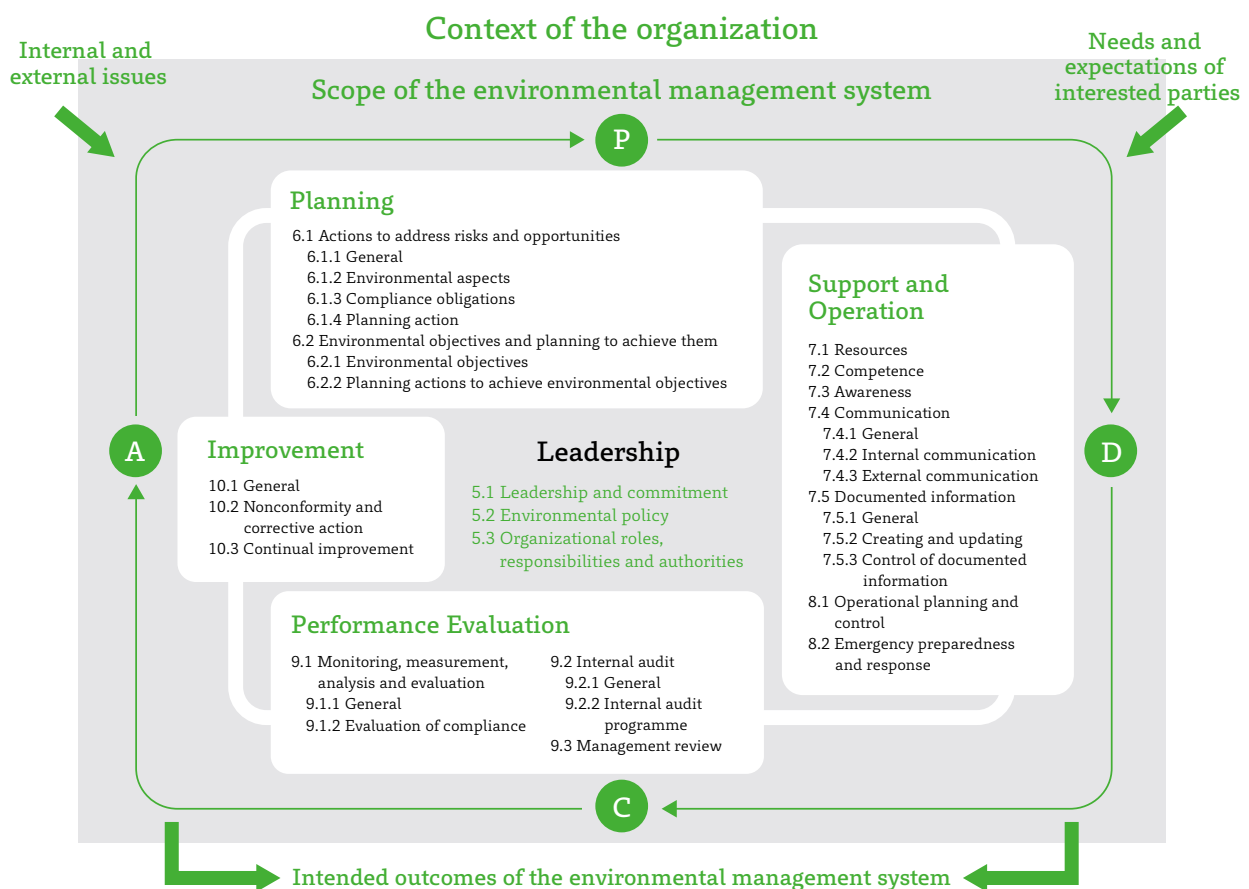
The Ecology Center aggregates evaluations of environmental performance as the organization responsible for overseeing

the Toppan Group's environmental conservation activities. The evaluation results are assured by an audit firm (independent assurance provider) and reported to the Board of Directors. The center discloses the verified performance data via the Toppan corporate website and other communication channels.

ISO 14001 environmental management system certification (in Japanese)
https://www.toppan.co.jp/corporateinfo/our_suggestion/iso/iso14001.html

Independent Assurance Report
https://www.toppan.co.jp/library/english/csr/files/pdf/2018/csr2018_detail-en.pdf#page=85

■ Management Cycle under ISO 14001:2015



■ Controlling Chemical Substances

The Toppan Group strives to reduce the consumption of chemical substances in order to mitigate the impact of these substances on the environment. The Group continues reducing the consumption of chemical substances designated under the Pollutant Release and Transfer Register (PRTR) law of Japan and introducing safer substitutes by setting priorities in terms of both the type and range of application. Group production sites have also been appropriately controlling chemical substances based on established management procedures.

The Toppan Group has formulated a set of Standards for the Management of Chemical Components of Raw Materials governing the substances and materials the Group purchases. Based on Japanese and international laws and regulations on chemical

substances, these standards list substances that are banned or restricted with regard to use as raw materials. Toppan regularly reviews the list to assure chemical control and asks every supplier to control the chemical substances listed.

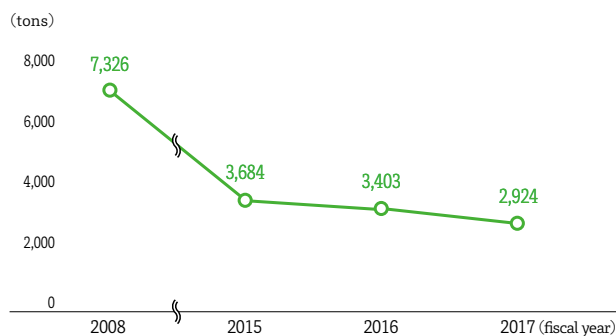
For reduced VOC emissions into the atmosphere, the Group applies adequate treatment before discharge to ensure that the emission volumes and concentrations are controlled at appropriate levels. Increasing efforts are also made to reduce the consumption of VOCs.

Toppan Group Standards for the Management of Chemical Components of Raw Materials (ver. 4.4)
https://www.toppan.co.jp/library/english/corporateinfo/files/csr/2018/proc2018_en04.pdf

Main Activities and Relevant Information

VOC Emissions into the Atmosphere

■ VOC Emissions into the Atmosphere
(subject to the environmental targets in Japan) 



PRTR Data

■ Chemical Substances Designated under the PRTR law of Japan
(subject to the environmental targets in Japan) 

(Unit: kg/year)

PRTR No.	Chemical Substance	Handled	Released			Total Transferred
			1. Atmosphere	2. Water	3. Soil	
20	2-aminoethanol	23,821	0	0	0	13,686
44	Indium and its compounds	2,367	0	0	0	1
53	Ethylbenzene	21,448	1,170	1,170	0	569
59	Ethylenediamine	3,014	0	0	0	3,014
71	Ferric chloride	1,960,608	0	0	0	1,895,409
76	Epsilon-caprolactam	2,825	0	0	0	428
80	Xylene	58,763	1,645	1,645	0	576
87	Chromium and chromium (III) compounds	23,611	14	0	14	16,910
88	Chromium (VI) compounds	13,047	0	0	0	1,000
151	1,3-dioxolane	8,589	341	341	0	1,762
213	N,N-dimethylacetamide	1,769	106	106	0	255
243	Dioxins (mg-TEQ)	725	0	0	0	724
245	Thiourea	2,559	2	0	2	2,557
272	Copper salts (water-soluble, except complex salts)	311,962	438	0	438	129,790
296	1,2,4-trimethylbenzene	88,592	5,558	5,558	0	3,738
297	1,3,5-trimethylbenzene	9,868	579	579	0	1,121
300	Toluene	2,373,947	120,426	120,426	0	146,560
308	Nickel	54,570	0	0	0	0
309	Nickel compounds	19,476	4	0	4	18,406
401	1,2,4-benzenetricarboxylic 1,2-anhydride	1,256	0	0	0	101
411	Formaldehyde	6,280	44	44	0	427
412	Manganese and its compounds	7,612	84	0	84	1,842
438	Methylnaphthalene	8,916	46	46	0	0
448	Methylenebis(4,1-phenylene) diisocyanate	39,734	0	0	0	0
	Total	5,044,636	130,459	129,916	542	2,238,149

Notes:

- Period covered: April 1, 2017–March 31, 2018
- 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.

Pollution Control

Basic Approach

The Toppan Group has formulated the following basic policies on pollution control.

Toppan positions pollution control as an important element of management. The Group places utmost priority on environmental conservation activities in its efforts to prevent pollution. In the event that Toppan causes environmental pollution of any form, the Group will immediately publish the incident, disclose information,

and work relentlessly to address the case while taking necessary actions to reliably prevent recurrences. Toppan will also implement recurrence-prevention measures for similar operations throughout the Group. Proactive conservation activities will enable Toppan to detect any signs of pollution and swiftly correct the problem at its source.

Promotion Framework

■ Promotion Structure

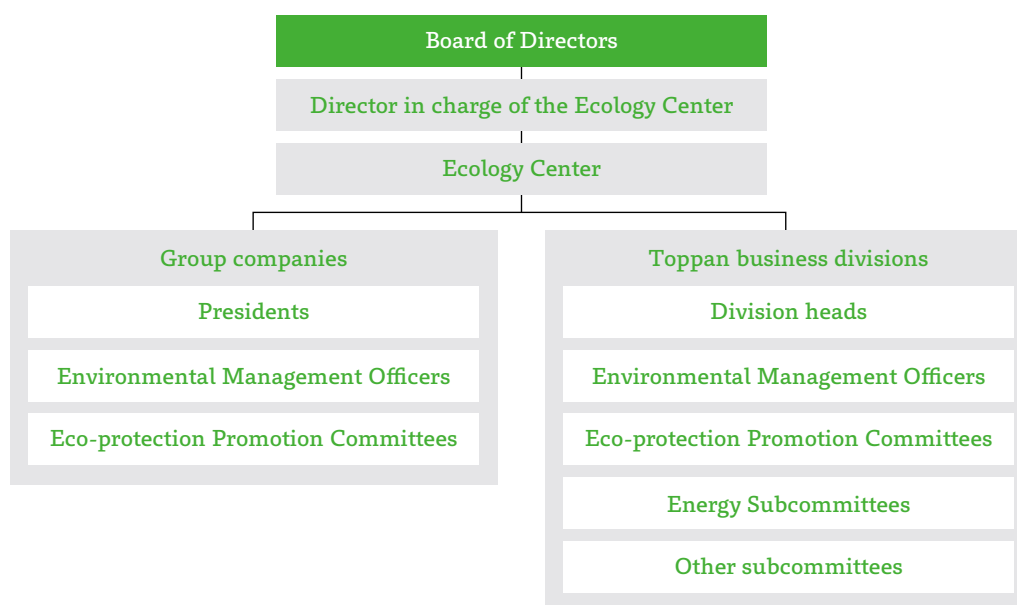
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actual implementation of conservation activities carried out at their sites and collaborate to propel environmental initiatives throughout the divisions.

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■ Environmental Management Organization



■ Mechanism

The Toppan Group has established environmental management systems (EMSs) based on ISO 14001.

A PDCA cycle of planning, support and operation, performance evaluation, and improvement serves as a core part of the ISO 14001-based EMSs to ensure ongoing improvement.

Group sites maintain their EMSs through management system audits by ISO 14001 registrars, internal audits (of legal compliance) by the Ecology Center, and other internal environmental audits at individual sites.

The Ecology Center aggregates evaluations of environmental performance as the organization responsible for overseeing the Toppan Group's environmental conservation activities. The evaluation results are assured by an audit firm (independent assurance provider) and reported to the Board of Directors. The

center discloses the verified performance data via the Toppan corporate website and other communication channels.

The Ecology Center also manages the monitoring of soil and groundwater pollution, ascertains the results, and discloses the details.

ISO 14001 environmental management system certification (in Japanese)
https://www.toppan.co.jp/corporateinfo/our_suggestion/iso/iso14001.html

Independent Assurance Report
https://www.toppan.co.jp/library/english/csr/files/pdf/2018/csr2018_detail-en.pdf#page=85

Monitoring Soil and Groundwater Pollution
https://www.toppan.co.jp/library/english/csr/files/pdf/2018/csr2018_detail-en.pdf#page=78

■ Management Cycle under ISO 14001:2015



■ Preventing Pollution

The Eco-protection Promotion Committee at each Group site in Japan sets in-house control standards that are more stringent than the applicable regulatory standards. The Toppan Group works to reduce environmental burden and prevent pollution by complying with these in-house standards.

To prevent atmospheric pollution, the Group controls boilers and other plant facilities responsible for air pollutants by managing operations under appropriate combustion conditions. The Group enhances the efficiency of effluent-gas treatment in plant facilities subject to requirements under the Air Pollution Control Act by reusing recovered solvents and controlling combustion facilities appropriately.

To prevent water pollution, the Group has installed wastewater

treatment facilities designed to correspond to specific water consumption and pollutant conditions at individual sites. Wastewater recycling systems have also been installed at Electronics plants that discharge effluents in significant amounts. By recovering and reusing wastewater via these systems, the plants have been working to reduce the levels of water consumption and effluent discharge.

The Toppan Group also checks plant facilities subject to the Water Pollution Control Law in compliance with the regulatory standards for structures. The Group will monitor every facility, including those not subject to the law, to prevent groundwater pollution caused by the leakage of chemicals and other liquids. Any equipment or components with undue wear will be replaced.

■ Education

Toppan arranges three types of training programs on pollution control: general education for every employee at individual Group sites; specific operational training for every employee engaged in operations that cause or could potentially cause significant impact on the environment; and emergency drills to prevent the spread of damage in the event of a potential emergency.

■ Handling Inquiries and Complaints

The Toppan Group receives environmental inquiries and complaints via “Inquiries,” a contact window for persons seeking information on corporate activities, on the Toppan corporate website. The Ecology Center receives reports on these inquiries and complaints from the Public Relations Division and responds to them as the organization overseeing environmental conservation activities across the Group.

Inquiries on Toppan's activities

https://www.toppan.co.jp/en/inquiry/privacy_corporate.html

Main Activities and Relevant Information

Monitoring Soil and Groundwater Pollution

■ Purification of Soil and Groundwater Pollution

Operational Site	Detail	Current Progress
Itabashi Plant (Itabashi City, Tokyo)	Groundwater pollution by hexavalent chromium and toluene	Continuously monitored
Niigata Plant (Shibata City, Niigata)	Soil pollution by fluorine and fluorine compounds	Continuously monitored

■ Soil Pollution Remediation for Redevelopment in Conformance with Applicable Laws, Regulations, and Ordinances

- The Soil Contamination Countermeasures Act of Japan requires remediation work or other countermeasures in the event that a soil investigation detects soil contamination at a site during construction or demolition work of a certain scale (including soil contamination by natural sources in the environment).
- Site reconstruction projects are occasionally subject to these legal demands. The Toppan Group has therefore conducted soil investigations in accordance with the act and taken necessary countermeasures when soil contamination has been detected at a Group site.

Operational Site	Chemical Substances Subject to Remediation	Remediation Measures	Current Progress
Former Itami Plant (Itami City, Hyogo)	Lead, fluorine, and their compounds	Excavation and removal	Remediation completed
Former Gunma Plant (Oizumi, Ora District, Gunma)	Hexavalent chromium, lead, selenium, and their compounds	Excavation and removal; purification of groundwater	Remediation work completed (Groundwater will be monitored continuously up to November 2019.)

Preventing Pollution / Approach to Environmental Compliance

■ Preventing Pollution

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■ Approach to Environmental Compliance

Toppan has used the Group's in-house environmental database for operational sites across Japan to identify any risk of exceeding the limits stipulated under laws, ordinances, agreements, and other applicable regulations. Preventive measures against unduly high risks have been taken to ensure that none of the regulatory limits are breached.

Despite these steps, two sites reported cases of excessive levels of water contaminant (BOD) relative to the standards set under laws, ordinances, agreements, or other applicable regulations in fiscal 2017 (one case at each site). The Toppan Group has taken immediate corrective measures for both cases, including steps to inspect plant facilities and revise the methods for facility control. Since implementing these corrective measures, the Group has standardized newly adopted control procedures and taken other actions to reliably prevent recurrences. For water, Toppan has identified no problems with withdrawal volumes.

As a preventive action against environmental pollution, the Group also reviews drills for coping with potential emergencies and accidents during production operations whenever necessary.

Communities around Toppan plants filed two complaints at two sites in fiscal 2017. One involved noise and another involved inconvenience to community members related to odor. The Group has identified the plant facilities responsible for the noise and odor and taken measures to mitigate them. Toppan will continue enhancing the quality of environmental management through earnest dialogue with residents in surrounding communities.

Fiscal 2017	Excessive Levels Relative to Applicable Legal Standards	Complaints
Cases	2 (2 cases involving water contaminant [BOD])	2 (1 case involving noise; 1 involving odor)

Biodiversity

Basic Approach

The Toppan Group has formulated the following basic policies on biodiversity conservation and the sustainable use of biodiverse resources.

Toppan positions the conservation of biodiversity as an important element of management. The Group takes an assertive approach to the sustainable use of resources by avoiding or minimizing the impact on biodiversity during raw material procurement operations. The Group also proactively undertakes social contribution activities

to conserve biodiversity with preventative and adaptive methods formulated from long-term perspectives. These biodiversity initiatives focus on cooperation with communities and various other stakeholders with links to biodiversity. The Group recognizes that biodiversity conservation and the sustainable use of biodiverse resources help mitigate global warming and alleviate other environmental problems.

Promotion Framework

■ Promotion Structure

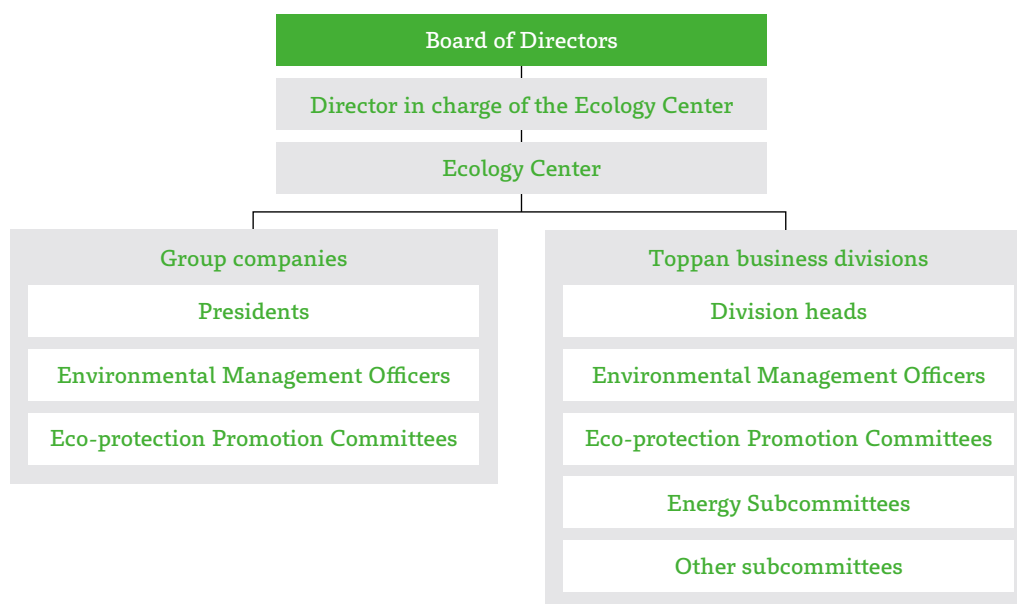
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■ Management Cycle under ISO 14001:2015



■ Promoting the Conservation of Biodiversity

The Toppan Group established a Basic Policy on Biodiversity in April 2010 to pursue biodiversity conservation. A set of Paper Procurement Guidelines for the Sustainable Use of Forest Resources was also formulated in September 2011 to step up specific conservation measures.

Concrete initiatives have been carried out through two approaches: biodiversity conservation at Group sites and conservation outside the sites. In the former initiatives, Toppan employees and their families promote biodiversity conservation within site premises in cooperation with external environmental experts. In the latter, employees and family members take part

in conservation activities organized in site neighborhoods by environmental NPOs and local governments.

The Toppan Group works with a number of stakeholders, including employees, to conserve biodiversity throughout Japan and the rest of the world.

Basic Policy on Biodiversity (in Japanese)
<https://www.toppan.co.jp/library/japanese/csr/files/pdf/2013/biodiversity.pdf>

Toppan Group Paper Procurement Guidelines for the Sustainable Use of Forest Resources (second edition) (in Japanese)
https://www.toppan.co.jp/library/japanese/corporateinfo/files/csr/2014/proc2014_06.pdf

Main Activities and Relevant Information

Approaches to Forest Management Certification

■ FSC® and PEFC Certification (as of July 5, 2018)

FSC®: Forest Stewardship Council

PEFC: Programme for the Endorsement of Forest Certification Schemes

Organization	Country	FSC	PEFC
Information & Communication Division, Toppan Printing Co., Ltd.	Japan	✓	
Environmental Design Subdivision, Living & Industry Division, Toppan Printing Co., Ltd.	Japan	✓	
Toppan Cosmo, Inc.	Japan	✓	
Satte Plant, Toppan Decor Products Inc.	Japan	✓	
Chubu Site, Environmental Design Subdivision, Living & Industry Division, Toppan Printing Co., Ltd.	Japan	✓	
Nishinohon Site, Environmental Design Subdivision, Living & Industry Division, Toppan Printing Co., Ltd.	Japan	✓	
Hiroshima Office, Environmental Design Subdivision, Living & Industry Division, Toppan Printing Co., Ltd.	Japan	✓	
Takamatsu Office, Environmental Design Subdivision, Living & Industry Division, Toppan Printing Co., Ltd.	Japan	✓	
Toppan Forms Co., Ltd.	Japan	✓	✓
Takiyama Plant, Toppan Forms Central Products Co., Ltd.	Japan	✓	
Fussa Plant, Toppan Forms Central Products Co., Ltd.	Japan	✓	
Kawamoto Plant, Toppan Forms Central Products Co., Ltd.	Japan	✓	
Hamamatsu Plant, Toppan Forms Tokai Co., Ltd.	Japan	✓	
Shizuoka Plant, Toppan Forms Tokai Co., Ltd.	Japan	✓	
Nagoya Plant, Toppan Forms Tokai Co., Ltd.	Japan	✓	
Osaka Sakurai Plant, Toppan Forms Kansai Co., Ltd.	Japan	✓	
Kyushu Plant, Toppan Forms Nishinohon Co., Ltd.	Japan	✓	
Toppan TDK Label Co., Ltd.	Japan	✓	
Living & Industry Division, Toppan Printing Co., Ltd.	Japan	✓	✓
Kansai Living & Industry Subdivision, Nishinohon Division, Toppan Printing Co., Ltd.	Japan	✓	
Chubu Division, Toppan Printing Co., Ltd.	Japan	✓	
Mito Plant, Toppan Prosprint Co., Ltd.	Japan	✓	
Higashinohon Subdivision, Higashinohon Division, Toppan Printing Co., Ltd.	Japan	✓	
Hokkaido Subdivision, Higashinohon Division, Toppan Printing Co., Ltd.	Japan	✓	
Kyushu Subdivision, Nishinohon Division, Toppan Printing Co., Ltd.	Japan	✓	
Chugoku & Shikoku Subdivision, Nishinohon Division, Toppan Printing Co., Ltd.	Japan	✓	
Tosho Printing Co., Ltd.	Japan		✓

Organization	Country or Region	FSC	PEFC
Toppan Interamerica Inc.(PA)	USA	✓	
Toppan Interamerica Inc.(GA)	USA	✓	
Toppan Europe GmbH (London)	UK	✓	
Toppan Security Printing Pte.Ltd.	Singapore	✓	
Toppan Europe GmbH (Barcelona)	Spain	✓	
Siam Toppan Packaging Co., Ltd.	Thailand	✓	
Toppan Europe GmbH	Germany	✓	
Toppan Excel (Hong Kong) Company Limited	Hong Kong	✓	
Toppan Forms	Hong Kong	✓	
Toppan Vintage Limited	Hong Kong	✓	
Toppan Win Label Company Limited	Hong Kong	✓	
Toppan Yau Yue Paper Products Limited	Hong Kong	✓	
Toppan Leefung Printing Limited	PRC	✓	
Shanghai Toppan Advertising Co., Ltd.	PRC	✓	
Toppan Forms (HK) Ltd.	PRC	✓	
Toppan Leefung Changcheng Printing (Beijing) Co., Ltd.	PRC	✓	
Toppan Leefung Packaging & Printing (Dongguan) Company Limited	PRC	✓	
Toppan Leefung Printing (Shanghai) Co., Ltd.	PRC	✓	
Toppan Leefung Printing Limited	PRC	✓	
Toppan Win Label Printing (Dongguan) Company Limited	PRC	✓	

ECO-GREEN Purchasing

Fiscal Year	2013	2014	2015	2016	2017
Number of Cases	2,484	2,867	2,811	2,949	3,046

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

Group Business Outline

Corporate Profile

Corporate name

Toppan Printing Co., Ltd.

Head office

1, Kanda Izumi-cho, Chiyoda-ku,
Tokyo 101-0024, Japan
Phone: +81-3-3835-5111

Established

1900

President & Representative Director

Shingo Kaneko

Number of employees (nonconsolidated)

9,699 (as of the end of March 2018)

Number of employees (consolidated)

51,210 (as of the end of March 2018)

Capital (nonconsolidated)

104.9 billion yen

Group Profile

The Toppan Group (“the Group”) comprises Toppan Printing Co., Ltd. (“the Company”) and 182 related companies (155 subsidiaries and 27 affiliates) engaged in manifold businesses in three fields: Information & Communication, Living & Industry, and Electronics.

Detailed information on related companies can be found in the financial statements posted on the Toppan website.

<http://www.toppan.co.jp/ir/material/report.html>
(in Japanese)

Business Fields



Information & Communication

Providing solutions to enhance the value of information and deliver it effectively to customers who require smooth communication.



Living & Industry

Providing a wide range of products and services to create living environments that offer comfort and peace of mind.



Electronics

Using advanced technology and manufacturing capabilities to develop products related to displays and semiconductors.

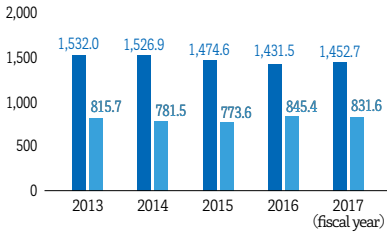
DATA

■ Net Sales

1,452.7 billion yen

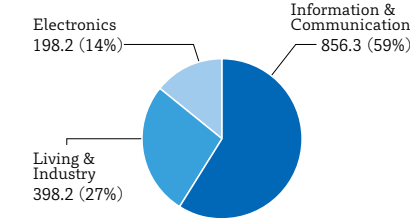
■ Consolidated ■ Nonconsolidated

(billion yen)



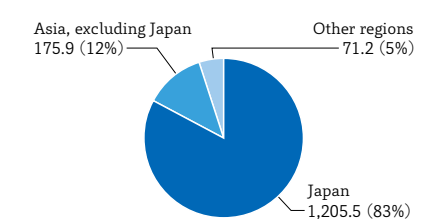
■ Net Sales by Business Field

(billion yen)



■ Net Sales by Region

(billion yen)

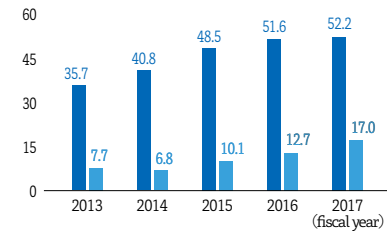


■ Operating Income

52.2 billion yen

■ Consolidated ■ Nonconsolidated

(billion yen)

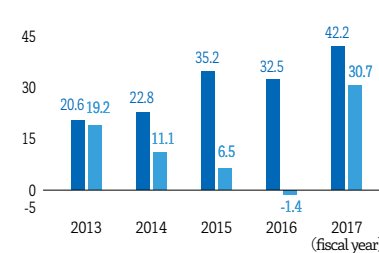


■ Net Income

42.2 billion yen

■ Consolidated ■ Nonconsolidated

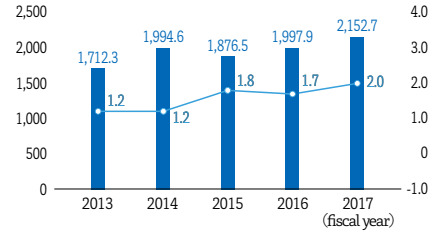
(billion yen)



■ Total Assets & Return on Assets (ROA)

2,152.7 billion yen/2.0%

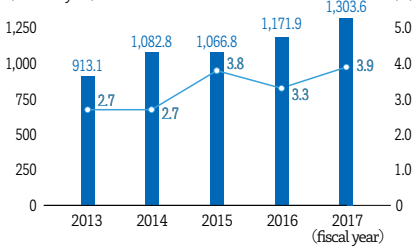
(billion yen)



■ Net Assets & Return on Equity (ROE)

1,303.6 billion yen/3.9%

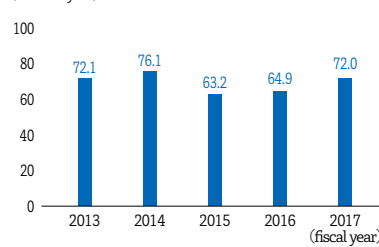
(billion yen)



■ Capital Expenditure

72.0 billion yen

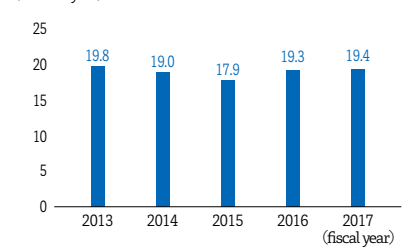
(billion yen)



■ R&D Expenses

19.4 billion yen

(billion yen)

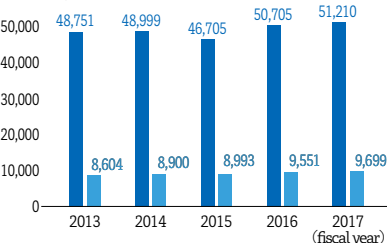


■ Number of Employees

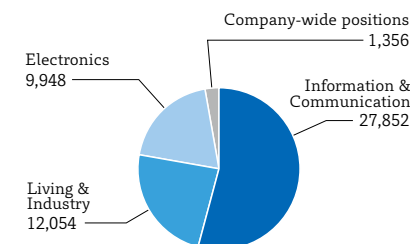
51,210

■ Consolidated ■ Nonconsolidated

(billion yen)



■ Number of Employees by Business Field (consolidated)



Independent Assurance Report



Independent Assurance Report

To the President and Representative Director of Toppan Printing Co., Ltd.

We were engaged by Toppan Printing Co., Ltd. (the "Company") to undertake a limited assurance engagement of the environmental and social performance indicators marked with (the "Indicators") for the period from April 1, 2017 to March 31, 2018 included in its Sustainability Data 2018 (the "Report") for the fiscal year ended March 31, 2018, and the completeness of the material sustainability information in the Report.

The Company's Responsibility

The Company is responsible for the preparation of the Indicators in accordance with its own reporting criteria (the "Company's reporting criteria"), as described in the Report, and for including the material sustainability information as defined in the 'Sustainability Reporting Assurance and Registration Criteria' of the Japanese Association of Assurance Organizations for Sustainability Information ("J-SUS") in the Report.

Our Responsibility

Our responsibility is to express a limited assurance conclusion on the Indicators based on the procedures we have performed. We conducted our engagement in accordance with the 'International Standard on Assurance Engagements (ISAE) 3000, Assurance Engagements other than Audits or Reviews of Historical Financial Information' and the 'ISAE 3410, Assurance Engagements on Greenhouse Gas Statements' issued by the International Auditing and Assurance Standards Board, as well as the 'Practical Guidelines for the Assurance of Sustainability Information' published by J-SUS. The limited assurance engagement consisted of making inquiries, primarily of persons responsible for the preparation of information presented in the Report, and applying analytical and other procedures, and the procedures performed vary in nature from, and are less in extent than for, a reasonable assurance engagement. The level of assurance provided is thus not as high as that provided by a reasonable assurance engagement. Our assurance procedures included:

- Interviewing the Company's responsible personnel to obtain an understanding of its policy for preparing the Report and reviewing the Company's reporting criteria.
- Inquiring about the design of the systems and methods used to collect and process the Indicators.
- Performing analytical procedures on the Indicators.
- Examining, on a test basis, evidence supporting the generation, aggregation and reporting of the Indicators in conformity with the Company's reporting criteria, and recalculating the Indicators.
- Visiting the Kawaguchi Plant of Toppan Communication Products Co., Ltd. selected on the basis of a risk analysis.
- Assessing whether or not all the material sustainability information as defined by J-SUS is included in the Report.
- Evaluating the overall presentation of the Indicators.

Conclusion

Based on the procedures performed, as described above, nothing has come to our attention that causes us to believe that the Indicators in the Report are not prepared, in all material respects, in accordance with the Company's reporting criteria as described in the Report, and all the material sustainability information as defined by J-SUS is not included in the Report.

Our Independence and Quality Control

We have complied with the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which includes independence and other requirements founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior. In accordance with International Standard on Quality Control 1, we maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

KPMG AZSA Sustainability Co., Ltd.

KPMG AZSA Sustainability Co., Ltd.

Tokyo, Japan

November 22, 2018



Toppan is authorized to attach the mark on the left as a testament to the reliability of the sustainability information presented in this Sustainability Data 2018 report. Any report bearing this mark meets the Sustainability Reporting Assurance and Registration Criteria established by The Japanese Association of Assurance Organizations for Sustainability Information.