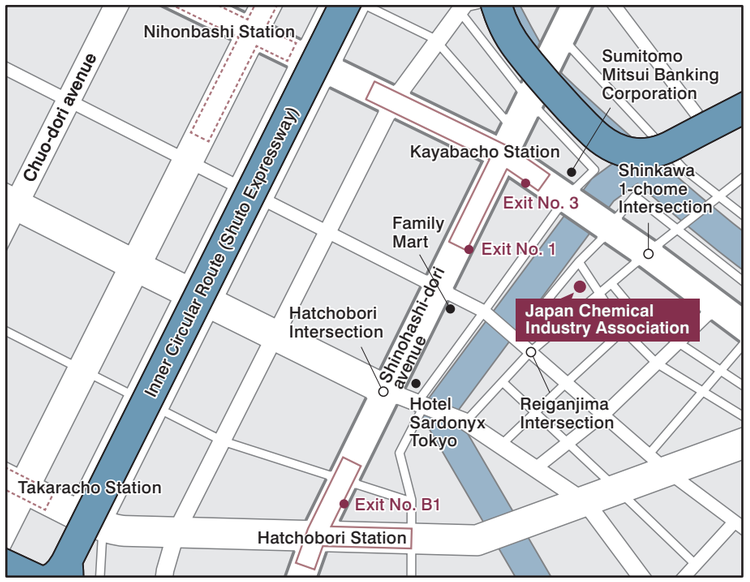

Access

Kayabacho Station (Tokyo Metro Hibiya and Tozai Lines)
Walk straight ahead from Exit No. 3 and turn right
at the Shinkawa 1-chome Intersection.
Approximately 3 minutes on foot

Kayabacho Station (Tokyo Metro Hibiya Line)
Walk straight ahead from Exit No 1,
turn left at the intersection with a Family Mart store,
and then turn left at the Reiganjima Intersection.
Approximately 3 minutes on foot

Hatchobori Station (JR Keiyo Line)
Approximately 8 minutes on foot from Exit No. B1

Nikka-chan: JCIA's official character

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JCIA Annual Report 2014 Reference Materials

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1-4-1 Shinkawa, Chuo-ku, Tokyo 104-0033

[JCIA URL]
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QR Code

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JCIA
Annual Report 2014

Reference Materials

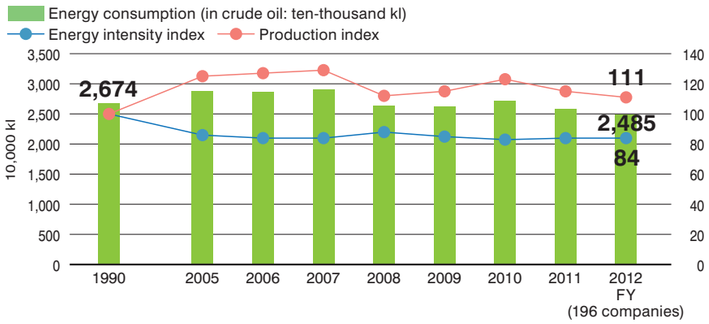
As a supplement to the contents of *JCIA Annual Report 2014*,
this pamphlet introduces various data and initiatives relating to the activities
of the Japan Chemical Industry Association.
Please read it together with *JCIA Annual Report 2014*.

Japan Chemical Industry Association

Contents

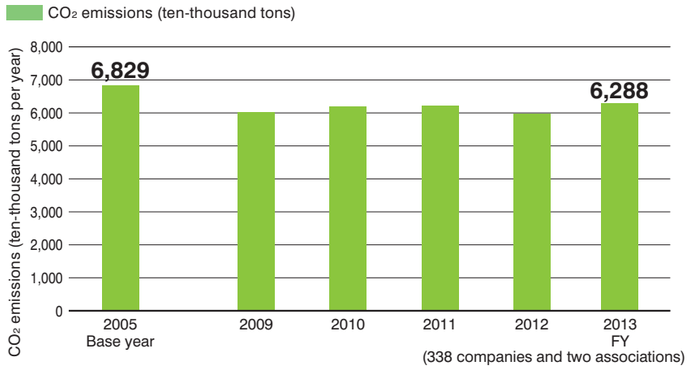
1-1 Environmental Protection (Prevention of Global Warming)

Energy Consumption, Energy Intensity Index and Production Index



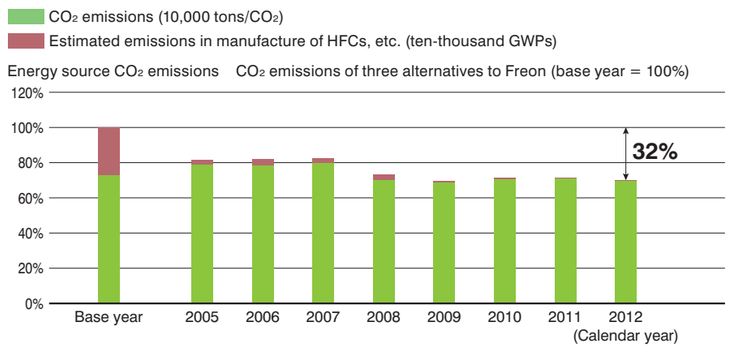
Since the specific energy intensity index under the "Environment Voluntary Action Plan" (from FY 1997 to FY 2012) related to energy saving, reached an average of 85 for 5 consecutive fiscal years from FY 2008 to FY 2012 (with the rate of the base year which was FY 1990 taken as 100) the activities were terminated.

CO_2 Emissions Index
(The JCIA's interim report figures for FY 2013)



The "Commitment to a Low-carbon Society" activities were launched in FY 2013. Compared with FY 2005 taken as the base year, CO_2 emissions have been reduced by 5,400,000 tons.

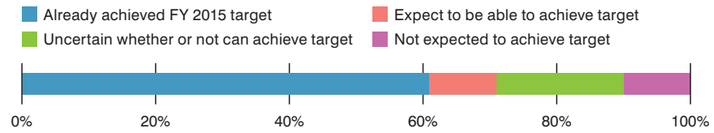
Reduction of Emissions of CO_2 and three alternatives to Freon



When the reduction of CO_2 emissions and the reduction of emissions in the manufacture of three alternatives to Freon (HFCs, PFCs, and SFb) are combined, emissions in 2012 were down 32% from the base year.

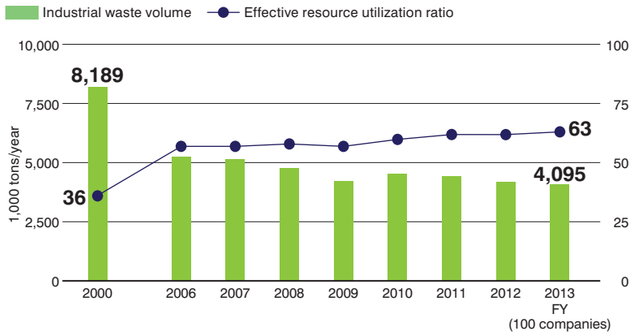
1-2 Environmental Protection (Industrial Waste Reduction)

Progress in Achievement of FY 2015 Target for Final Disposal Volume



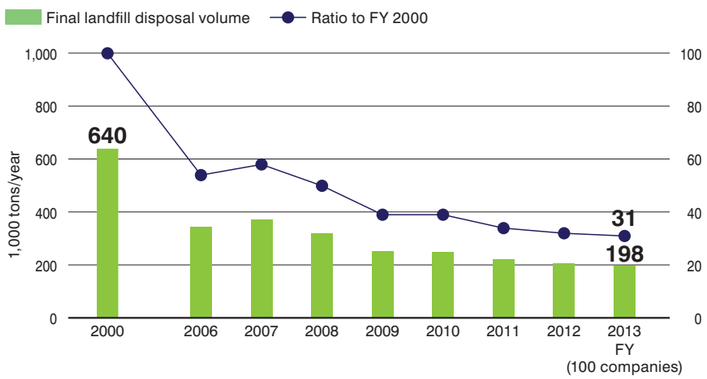
In accordance with the Environment Voluntary Action Plan of Nippon Keidanren (Japan Business Federation), JCIA has set a new target since FY 2011 (a reduction in final disposal volume by about 65% from the FY 2000 level by FY 2015) and is making efforts to achieve that goal.

Industrial Waste Volume and Effective Resource Utilization Ratio



Industrial waste volume in FY 2013 was 4,095,000 tons, down 103,000 tons from the FY 2012 level and down 50% from the level in the base year of FY 2000. We are also making positive efforts to encourage sorting and reuse. The effective resource utilization ratio (the ratio to the volume of waste discharged by effectively used resources) increased from 36% in FY 2000 to 63% in FY 2012.

Final Landfill Disposal Volume

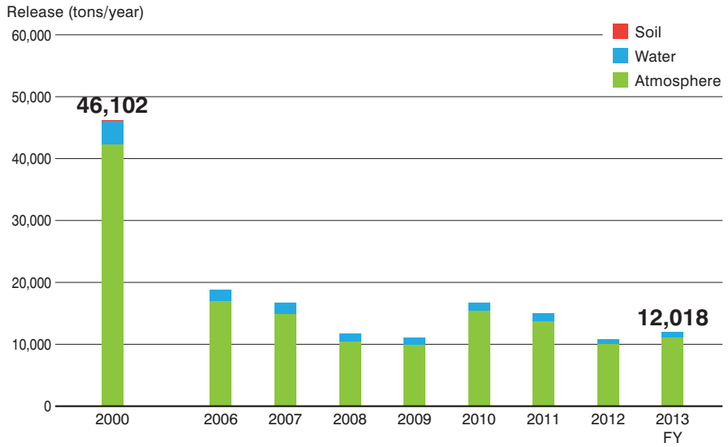


The final landfill disposal volume in FY 2013 was 198,000 tons, down 7,000 tons from FY 2012 and down 69% from the FY 2000 level. Furthermore, as well as reducing the final landfill disposal volume, in accordance with legal revisions member companies are strengthening their verification of the proper disposal of waste by, among other things, the issuance, recovery, and verification of industrial waste manifestos and the inspection of final disposal sites.

Item (FY 2013)	Relative to FY 2000	Relative to FY 2012
Industrial waste volume	Reduced by 50%	Reduced by 2%
Effective resource utilization ratio	Improved by 27 points	Hovering around the same level
Final disposal by JCIA members	Reduced by 69%	Reduced by 3.4%

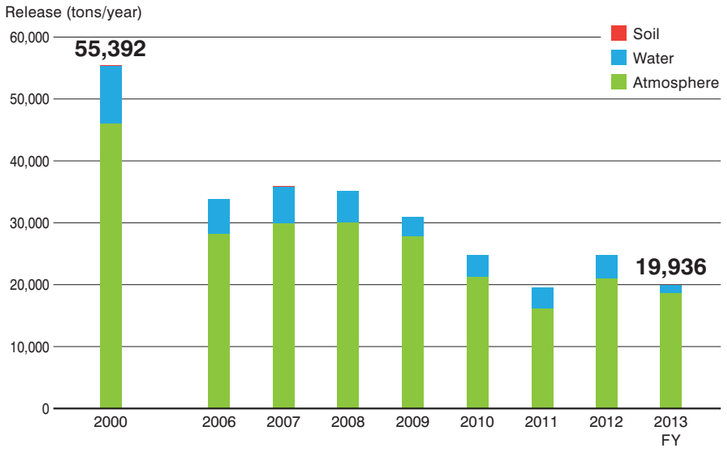
1-3 Environmental Protection (Reduction of Chemical Emissions)

Emissions of PRTR Substances



In FY 2013 Emissions of PRTR substances amounted to 12,018 tons, a reduction of about 74% from the FY 2000 level. Because the number of designated substances increased following a revision of the law, the volume of emissions temporarily increased in FY 2010, but since then the downward trend has continued. Emissions into the atmosphere accounted for 92.8% of the total, and emissions into water areas for 7.2%. Soil emissions, which accounted for less than 0.1% in FY 2012.

Emissions of Voluntary Surveyed Substances

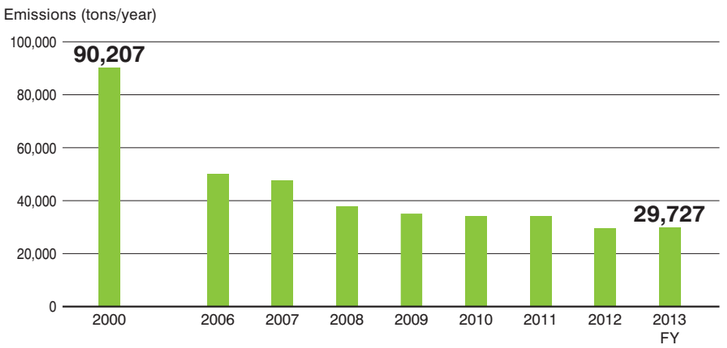


The emissions of voluntary surveyed substances was 19,936 tons, resulting in over 60% reduction compared to FY 2000. The breakdown of the emission quantities was 93% for emissions into the air and 7% for emissions into water areas. Zero emission into the soil in FY 2012 and 2013.

Note) Change in the number of substances voluntarily surveyed by JCIA:
From FY 2000 to 2009:
125 substances and 1 substance group*
From FY 2010 to 2012:
105 substances and 1 substance group*
From FY 2013 to the current:
89 substances and 1 substance group*
* Chain hydrocarbons with up to 4 to 8 numbers of carbon atoms

Reference: Emission amounts in FY 2012 were 4,277 tons for 16 substances (such as sulfuric acid, nitric acid, and ammonia) which were excluded from the survey from FY 2013.

VOC Emissions

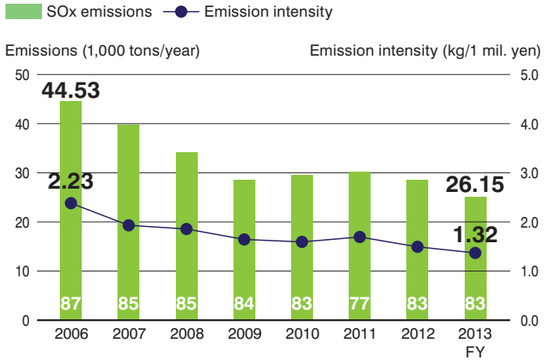


Member companies are making tremendous efforts to install equipment and improve processes for controlling emissions of volatile organic compounds (VOCs). In FY 2013 VOC emissions amounted to 29,727 tons, almost the same as the FY 2012 level and down 67% from the base year, thereby continuing a significant downward trend.

1-4 Environmental Protection
(Prevention of Atmospheric Pollution and Water Pollution)

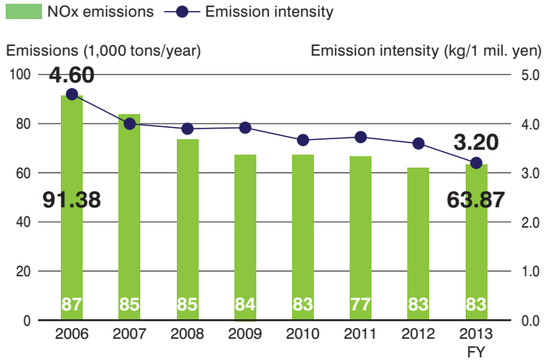
Chemical companies in Japan have significantly reduced air and water pollutant emissions. In particular, members have established voluntary management criteria that are more stringent than the regulatory standards. Also, by complying with local government agreements, members are working to further reduce emissions.

SOx emissions



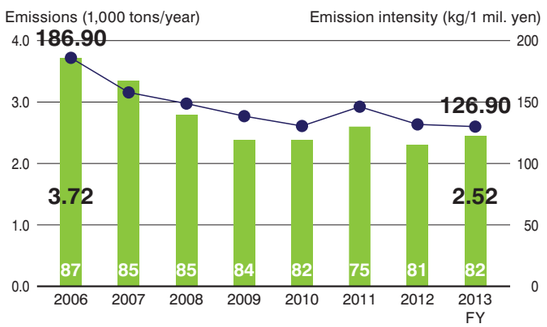
The figures in the bars indicate the numbers of companies that submitted data.

NOx Emissions



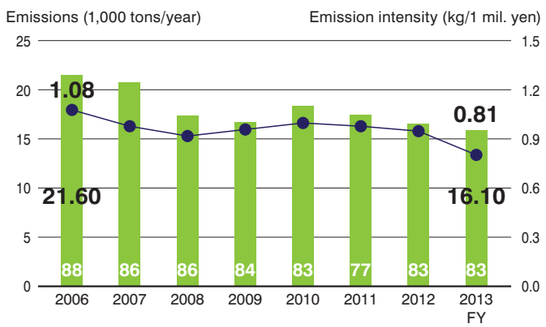
The figures in the bars indicate the numbers of companies that submitted data.

Dust Emissions



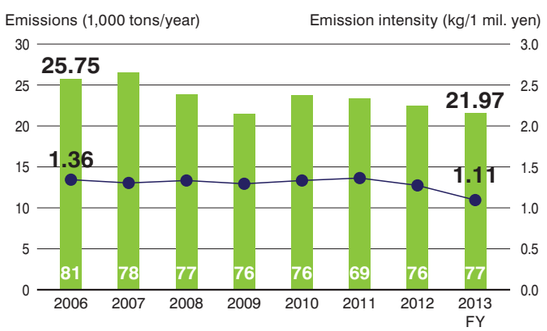
The figures in the bars indicate the numbers of companies that submitted data.

COD Emissions



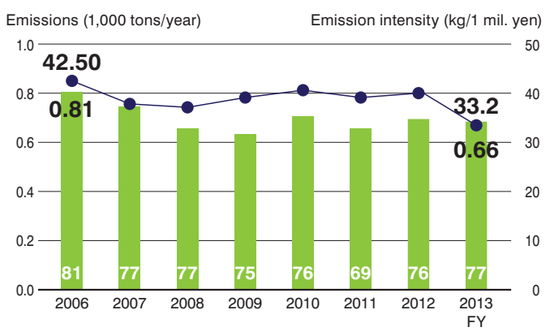
The figures in the bars indicate the numbers of companies that submitted data.

Total Nitrogen Emissions



The figures in the bars indicate the numbers of companies that submitted data.

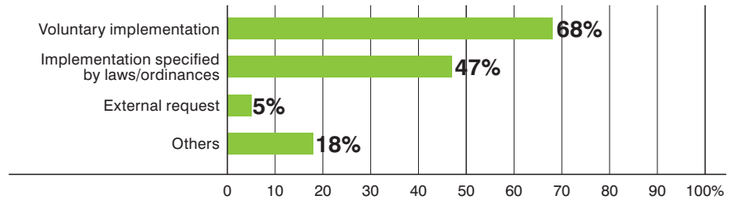
Total Phosphorous Emissions



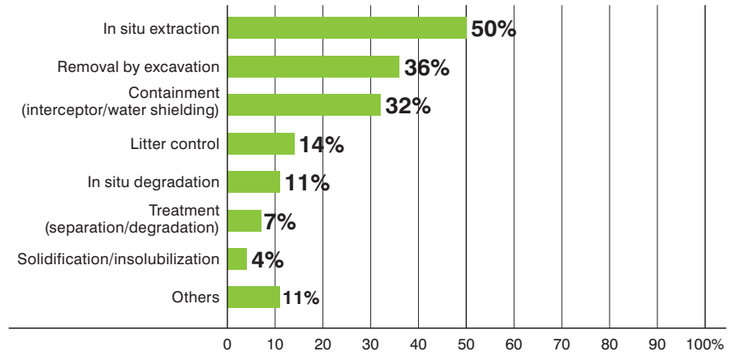
The figures in the bars indicate the numbers of companies that submitted data.

1-5 Environmental Protection
(Prevention of Soil and Ground Water Pollution [PCB])

Reasons for Implementing an Investigation (Multiple answers allowed)



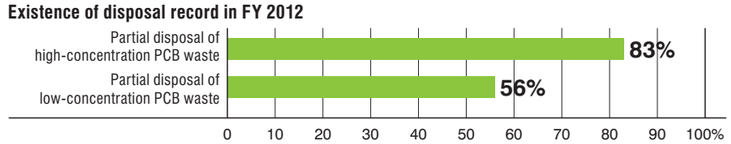
Countermeasures against Contamination (Multiple answers allowed)



State of Storage and Disposal of PCB Waste

Existence of PCB waste storage

Existence of disposal record in FY 2012



Notes: 1. High-concentration PCB waste: Electric equipment, such as transformers and capacitors, that used PCB intentionally as insulating oil before the termination of PCB manufacture (before 1972). Insulating oil contains from about 50% to 100% PCB.
2. Low-concentration PCB waste: Electric equipment made after the termination of PCB manufacture that unintentionally contained small quantities of PCB.

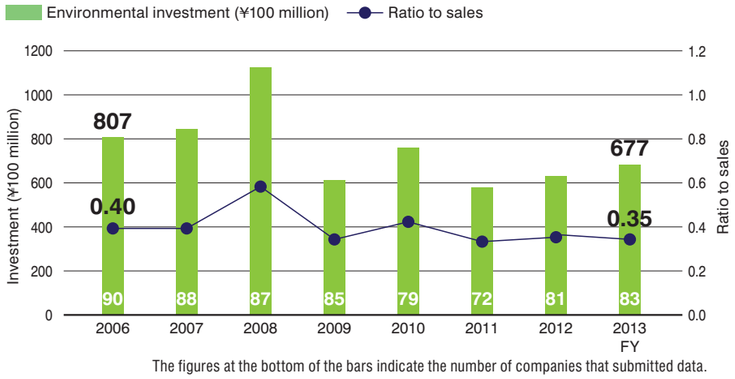
Regarding soil pollution, member companies not only conduct surveys based on the Soil Contamination Countermeasures Act but also in many cases implement their own voluntary surveys and adopt necessary countermeasures if pollution is discovered.

In FY 2013, 38 companies conducted surveys in 87 places, and 13 companies discovered pollution exceeding the standards in 17 places. When cases of pollution discovered before FY 2013 are included, 28 companies have implemented countermeasures against contamination at 44 places.

Under the Act on Special Measures Concerning Promotion of Proper Treatment of PCB Wastes, companies were obligated to report on the state of storage and disposal of polychlorinated biphenyl (PCB) to the prefectural governor and to dispose of PCB waste within 15 years of the law's enforcement on July 15, 2001. However, a partial revision of the decree enforcing the law on December 12, 2012, extended the deadline for the disposal of PCB waste to March 31, 2027.
The actual results obtained from treatment of the PCB wastes are steadily increasing every year.

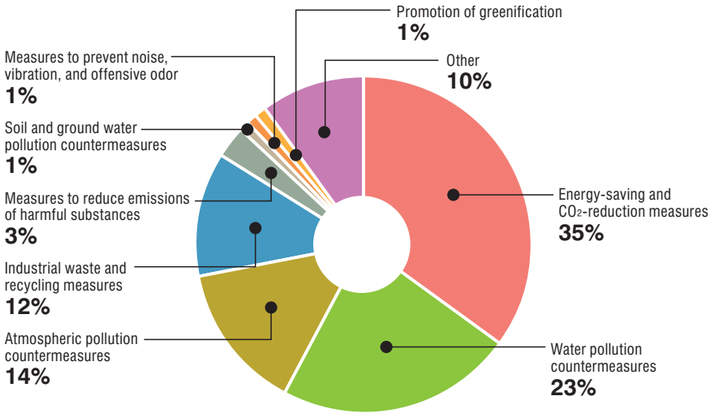
1-6 Environmental Protection (Environmental Investment)

Investment in Environmental Measures



The figures at the bottom of the bars indicate the number of companies that submitted data.

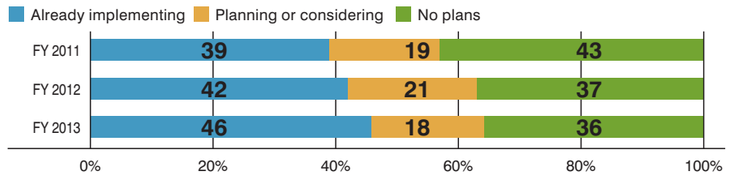
Breakdown of Environmental Investment in FY 2013



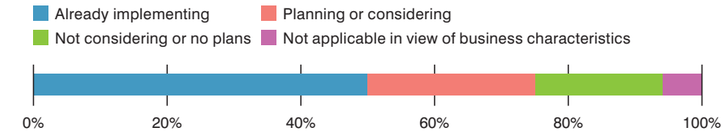
In FY 2013 investment for the installation and maintenance of environment-friendly equipment, such as energy-saving and CO_2-reduction equipment, and for the development of environment-friendly products and technologies and so on amounted to ¥67.7 billion, up 7% over the fiscal 2012 level and equivalent to 0.35% of sales (down 5% over FY 2012). Member companies are implementing planned investment in environmental measures and steadily linking that investment to sustained improvements in their environmental performance.

1-6 Environmental Protection (Biodiversity)

State of Efforts to Preserve Biodiversity



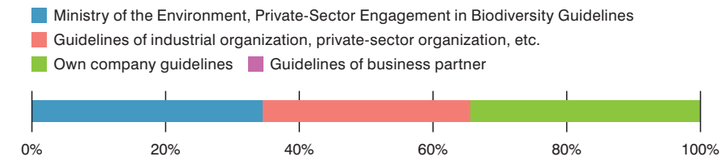
Consideration for Biodiversity in Procurement of Materials



Content of Efforts (%)

	Implemented in FY 2013	Scheduled to implement in FY 2014	Scheduled to implement in FY 2015	No implementation schedule	Not applicable in view of business characteristics
Compilation of activity targets	64	14	17	3	0
Establishment of body to oversee and promote activities	64	3	3	8	0
Tree planting and conservation of forest resources	56	8	11	19	3
Conservation of river and ocean resources	53	11	17	22	6
Restoration of lost parts in vicinity or elsewhere	11	0	14	39	14
Collaboration with external bodies, such as other companies, organizations, and NPOs	58	11	19	14	0
Other	22	0	3	0	0

Reference Guidelines



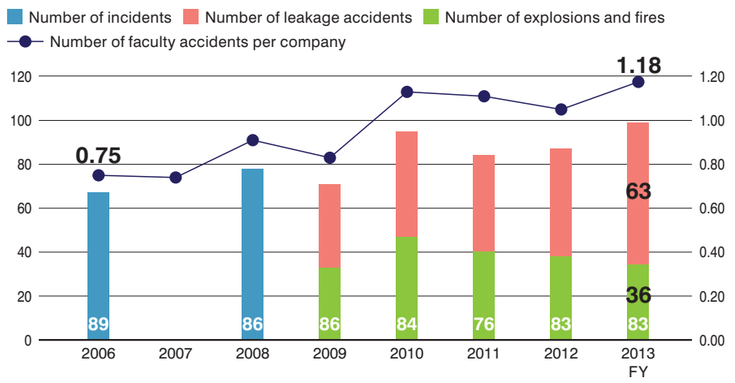
Regarding biodiversity, 46% of member companies said they were “already implementing” measures (up from 42% in FY 2012) and 18% said they were “planning or considering” measures (down from 21% in FY 2012). The number of companies taking steps in this direction can be expected to further increase in the future.
Furthermore, about 50% of the member companies already implementing measures said that they took biodiversity into consideration in the procurement of materials.

Member companies are also aggressively promoting specific activities and activities in collaboration with external organizations, including tree planting and the conservation of forest resources, the conservation of river and ocean resources, the restoration of lost ecosystem parts in the vicinity or elsewhere, the installation of biotopes using green zones at plants, the preservation of water resources, and the protection of endangered species.

In conjunction with the 10th Meeting of the Conference of the Parties to the Convention on Biological Diversity (COP 10) held in Nagoya in October 2010, Nippon Keidanren and others established the Private-Sector Engagement Initiative on Biodiversity to promote the preservation of biodiversity by companies and launched the Japan Business and Biodiversity Partnership. About half of member companies addressing the issue of biodiversity take part in this partnership.

2-1 Process Safety and Disaster Prevention
(Efforts to Prevent Facility Accidents)

Accident Occurrences (Explosions, fires, leakage, etc.)

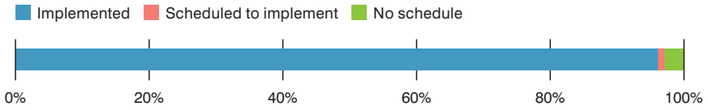


Note: From FY 2009, the number of facility accidents is devided into leakage accidents and explosion/fire accidents.
The figures in the bars indicate the number of companies that submitted data.

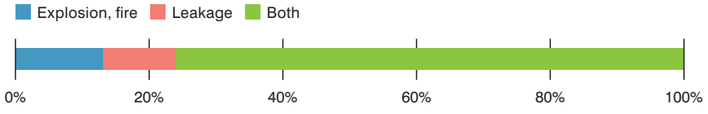
The total number of accidents at facilities in FY 2013 was 98, which was higher than in FY 2012, and the number of accidents at facilities per company (1.18) increased slightly from FY 2012.

Efforts to Prevent Facility Accidents

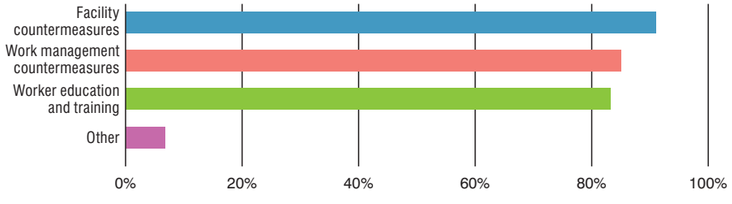
Review and strengthening of countermeasures



Reviews by type of accident



Main Targets of Review Countermeasures (Multiple answers allowed)



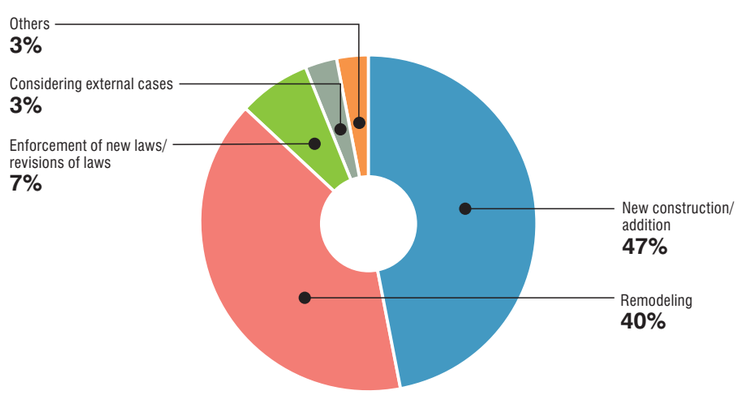
Specific Review Examples

Identification of potentially dangerous places, strengthening of inspections, and implementation of countermeasures; review of work standards and management standards; preparation of educational materials based on examples of accidents; strengthening of worker education; etc.

In response to the frequent outbreak of incidents at facilities in recent years, many member companies are reviewing and strengthening their facility countermeasures, work management countermeasures, and worker education and training.

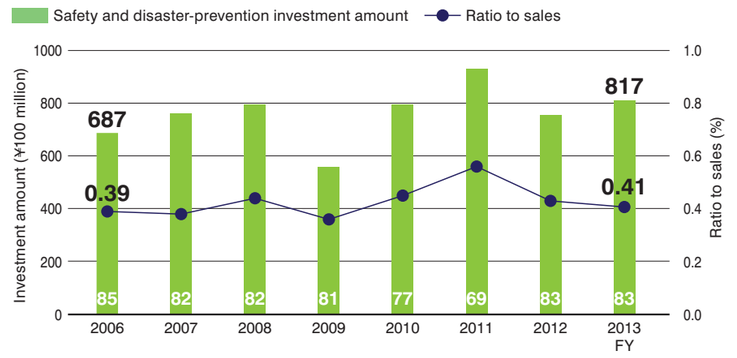
2-1 Process Safety and Disaster Prevention
(Efforts to Prevent Facility Accidents)

Reasons for Conducting Prior Facility Evaluations



All member companies have prior evaluation criteria for facilities. In FY 2013, 99% of member companies conducted prior facility evaluation. In 87% of the cases, the motivation was the new construction, addition, or remodeling of facilities.

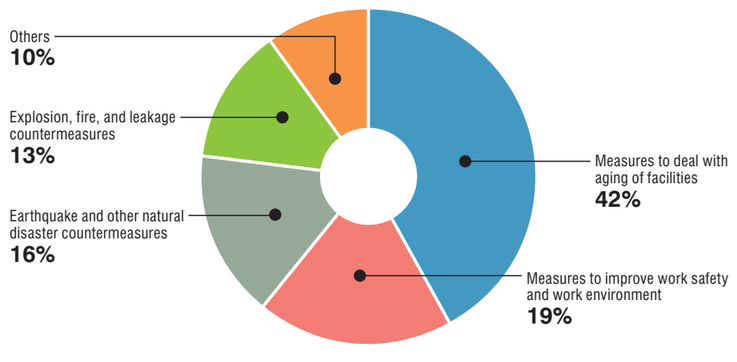
Investment in Safety, Security, and Disaster-Prevention Measures



The figures at the bottom of the bars indicate the number of companies that submitted data.

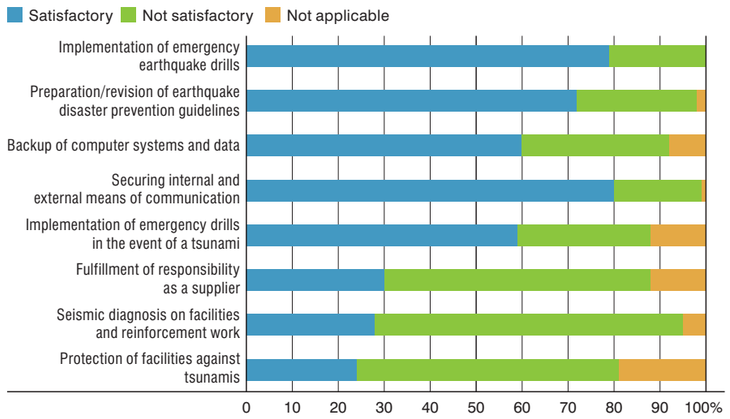
In FY 2013 spending on safety and disaster prevention measures amounted to ¥81.7 billion (up 8% from FY 2012), and the investment-to-sales ratio was 0.41% (down 5% from FY 2012). Member companies are implementing safety and disaster-prevention investment in a planned and sustained manner.

Breakdown of safety and disaster-prevention investment amount



2-2 Process Safety and Disaster Prevention
(Response to Possible Large-Scale Earthquake)

Self-Evaluation on Emergency Measures



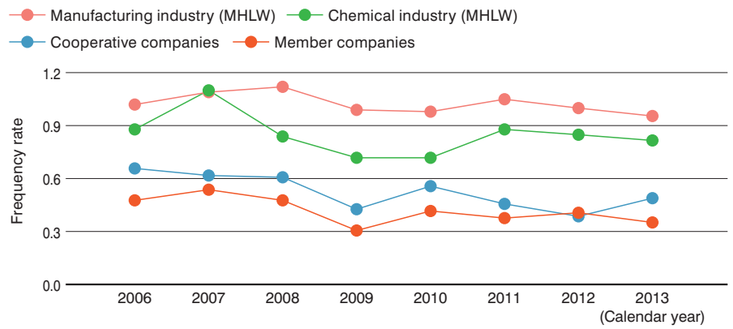
Following the Great East Japan Earthquake, many member companies have undertaken reviews of their earthquake and tsunami countermeasures.
JCIA investigated the state of progress achieved three years later on review items surveyed in a questionnaire immediately after the earthquake.

3-1 Industrial Health and Safety

Frequency Rate Trends Frequency Rate = $\frac{\text{Number of accident victims requiring absence from work}}{\text{Total working hours (per one million hours)}}$

Indicator that shows the frequency of occupational accidents

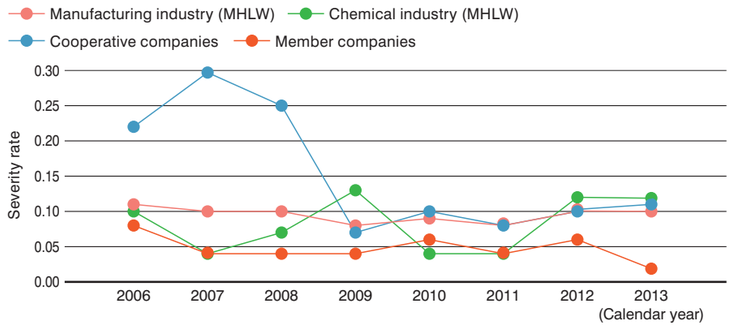
Frequency Rate Trends



In 2013 the frequency rate for member companies and their cooperative companies was lower than in the manufacturing industry as a whole and in the chemical industry as a whole, although the figure is hovering around the same level.

Severity Rate Trends Severity rate = $\frac{\text{Lost days}}{\text{Total work hours (per thousand hours)}}$

Indicator that shows the severity of occupational accidents



The severity rate of the member companies in 2013 has been improved compared to 2012, while that of the companies other than the cooperative companies remained almost unchanged.

Number of Fatalities from Occupational Accidents

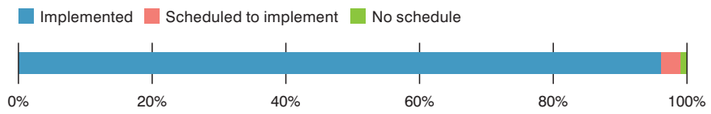
(Calendar year)

	2006	2007	2008	2009	2010	2011	2012	2013
Member companies	2	1	2	2	2	1	2	0
Cooperative companies	5	6	5	1	1	1	2	2
Chemical industry (MHLW)	25	17	28	19	11	13	17	17
Manufacturing industry (MHLW)	268	264	260	186	211	182	199	201

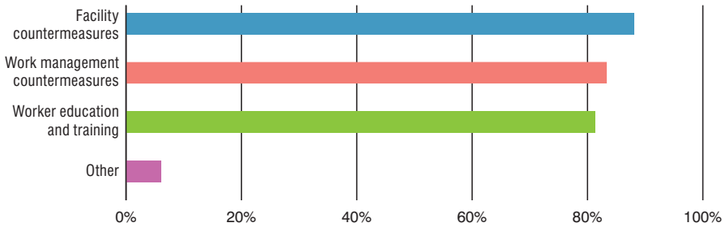
The number of fatalities at member companies in 2013 was zero, while that of the companies other than the cooperative companies remained almost unchanged.

3-1 Industrial Health and Safety

Review and Strengthening of Countermeasures



Main Targets of Review Countermeasures (Multiple answers allowed)



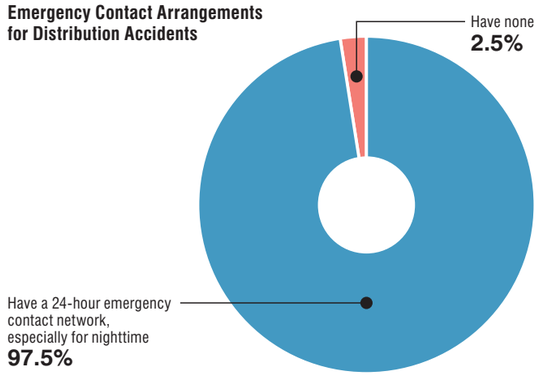
Specific Review Examples

Promotion of risk assessment; strengthening of danger prediction; strengthening of measures for dangers inherent in the workplace, such as rotating objects; review and compilation of standards; implementation of safety-awareness education; etc.

In recent years many member companies have been reviewing and strengthening their facility countermeasures, work management countermeasures, and worker education and training. Furthermore, member companies have been actively investing in safety and disaster-prevention measures. (See section 2-1 Process Safety, Investment in Safety and Disaster-Prevention Measures.)

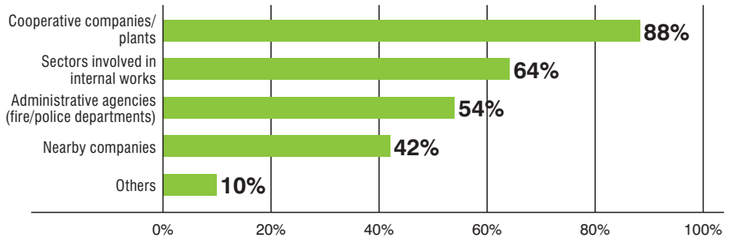
4-1 Distribution Safety

Emergency Contact Arrangements for Distribution Accidents



In preparation for unexpected accidents, member companies implement emergency-response training for distributors. Almost all member companies have emergency-response manuals and have established 24-hour emergency-response contact networks.

Mutual Support Partners for Emergencies (Multiple answers allowed)



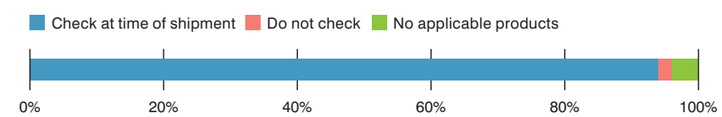
Also, about 90% of member companies have established mutual support systems for emergencies involving combustible solids, liquids, gases, high-pressure gases, corrosive substances, and acutely toxic substances.

Emergency Drills with Mutual Support Partners (Multiple answers allowed) (%)

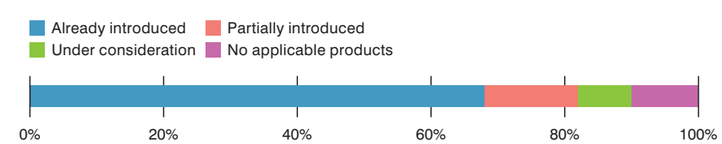
Mutual support partners \ Type of training	Communication training	Desktop training	Field training
Administrative agencies	45	21	50
Nearby companies	39	25	39
Cooperative companies/plants	77	39	70
Sectors involved in internal works	68	32	68

Furthermore, about 90% of member companies implement emergency-response drills with mutual support partners.

Verification of Yellow Card Use

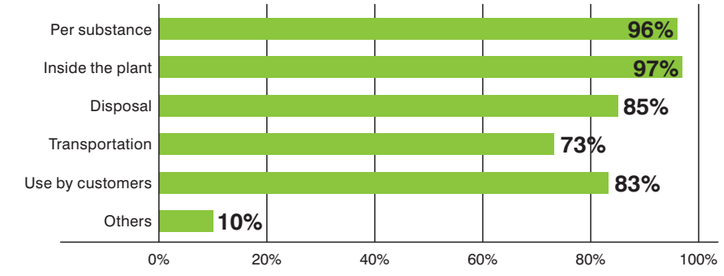


Introduction of Container Yellow Cards



As a means of providing information to parties responding to emergencies, member companies have prepared and promote the carrying of Yellow Cards.

Application of Prior Safety Assessment (Multiple answers allowed)



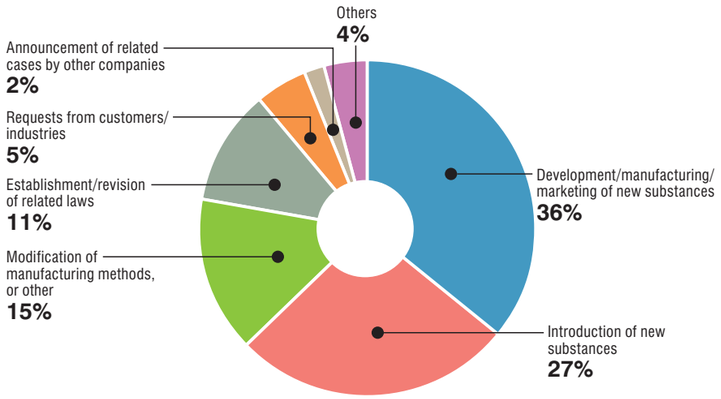
All member companies implement prior safety assessment to specify the safety of chemical substances and evaluate their impact on the health of people handling them and the environment. Prior safety assessment is conducted not only by substance and inside the plant but also more broadly for transportation, use by the customer, disposal, and so on.

Factors Covered by Prior Safety Assessment (Multiple answers allowed) (%)

	Health of handlers	Safety of handlers	Explosiveness and inflammability	Environmental impact of emissions	Others
Per substance	96	97	94	93	6
Inside the plant	96	97	94	90	4
Transportation	69	73	76	69	3
Use by customers	77	75	69	70	3
Disposal	76	75	72	76	4
Others	13	13	11	10	3

Prior safety assessment covers such factors as the health and safety of handlers, explosiveness and inflammability, and the environmental impact of emissions.

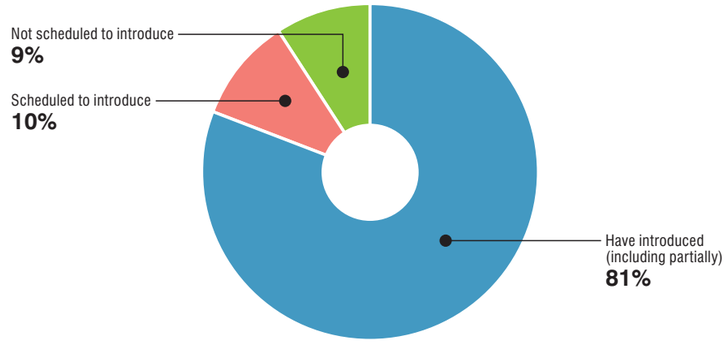
Reasons for Implementing Prior Safety Assessment



Almost all member companies implement prior safety assessment every year not only for the development, manufacture, and sale of new substances but also when existing substances are newly introduced or when methods of manufacturing, transportation, use, and disposal are changed.

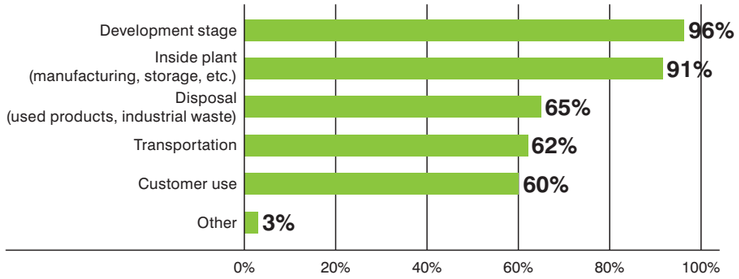
5-1 Chemicals and Product Safety (Safety Assessment)

State of Introduction of Risk Assessment for Chemical Substance Evaluation



A new initiative is the management of chemical substances on the basis of risk assessment.
Around 80% of member companies have already incorporated risk assessment in their management of chemical substances, and 10% are scheduled to do so.

Targets of Risk Assessment (Multiple answers allowed)

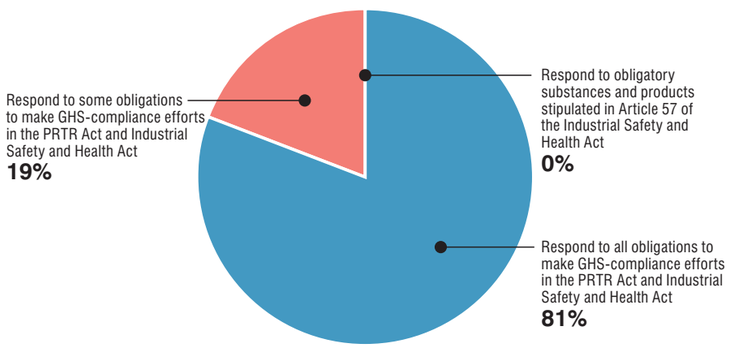


Ratio of member companies targeting the subject.

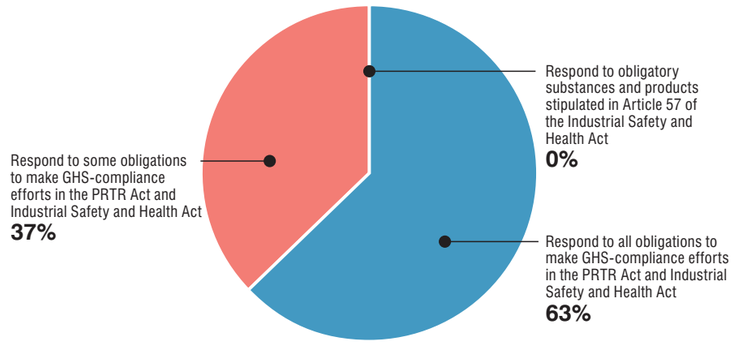
Risk assessment covers the entire lifecycle of chemical substances, from R&D and manufacturing to disposal.

5-2 Chemicals and Product Safety (Information Supply)

GHS Compliance of SDSs in Member Companies



GHS Compliance of Labeling in Member Companies



While substances for which it is obligatory to provide Safety Data Sheets (SDSs) are stipulated by the PRTR Act, Industrial Safety and Health Act, and Poisonous and Deleterious Substances Control Act, almost all member companies also voluntarily issue SDSs for substances (products) for which there are no legal requirements. In their compilation of SDSs, most member companies endeavor to fulfill the obligation to make efforts to comply with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

Regarding labeling as well, most member companies endeavor to fulfill the obligation to make efforts to comply with the GHS.

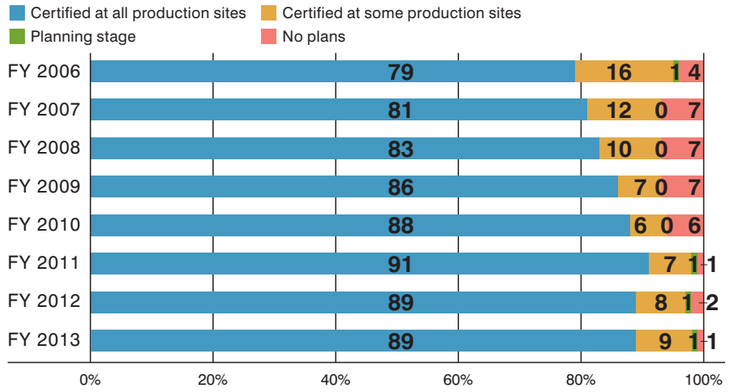
Understanding of Purpose and Use of Supplied Products (%)

	Customer/Purpose	Customer/Use	Final product/Purpose	Final product/Use
80% or over	85	51	51	34
50% or over	11	27	34	33
Under 50%	3	16	14	22
Don't understand	1	6	1	11

Furthermore, from the perspective of Responsible Care, it is important to understand how your company's chemical products are being used and processed by customers and what products are finally made from them and delivered to consumers. Most member companies therefore make efforts to find out about usage by customers and so on.

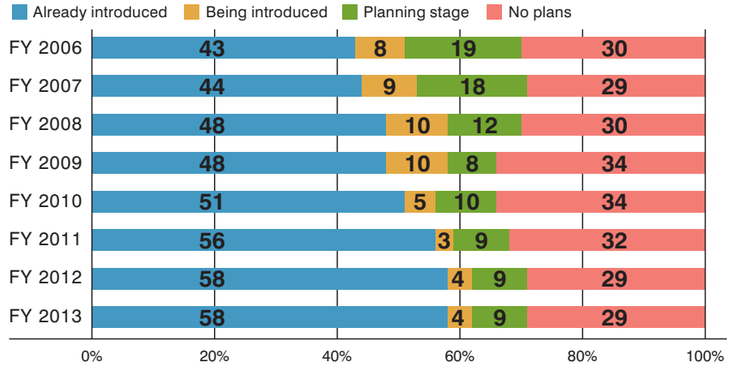
6-1 Management System

Status of Environmental Management Systems (EMSs) Certification



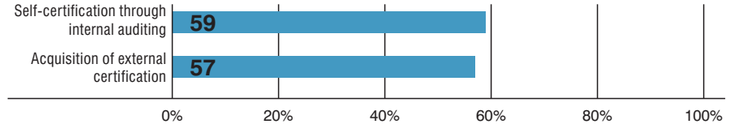
The introduction of Environmental Management Systems (EMSs) is steadily increasing; about 90% of member companies have acquired some kind of EMS certification, such as ISO14001, for their entire production sector (plants).

Trend in Adoption of Occupational Safety and Health Management Systems (OSHMSs)

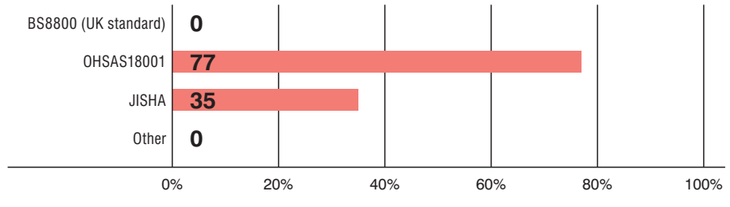


The number of member companies introducing Occupational Safety and Health Management Systems (OSHMSs) is steadily increasing as well; the ratio of members with such systems is now 62%.
Furthermore, the establishment of such systems is verified by the acquisition of external certification, such as OHSAS18001, or internal auditing with reference to the standards of such organizations as the Japan Industrial Safety and Health Association (JISHA).

Verification of System's Establishment (Multiple answers allowed)

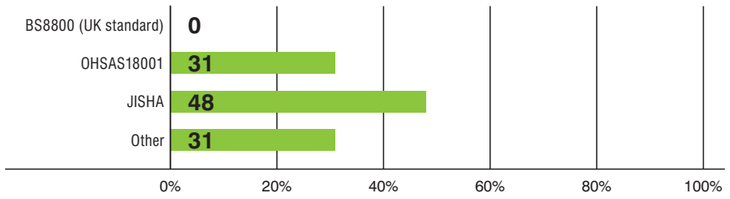


External Certification Acquired (Multiple answers allowed)

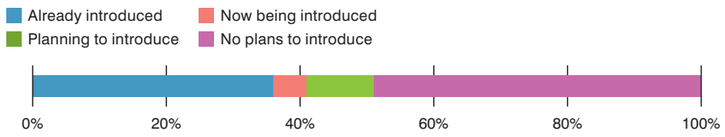


6-1 Management System

Reference Standards for Self-Certification (Multiple answers allowed)

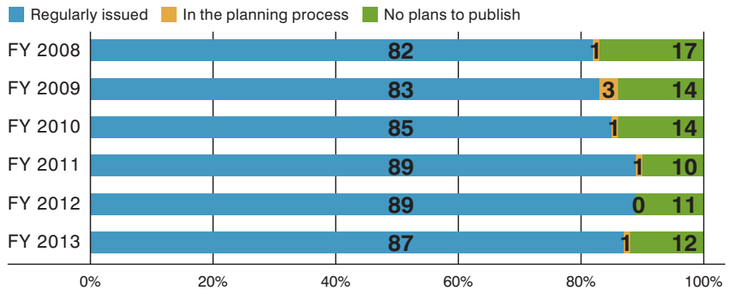


Global Reporting Initiative



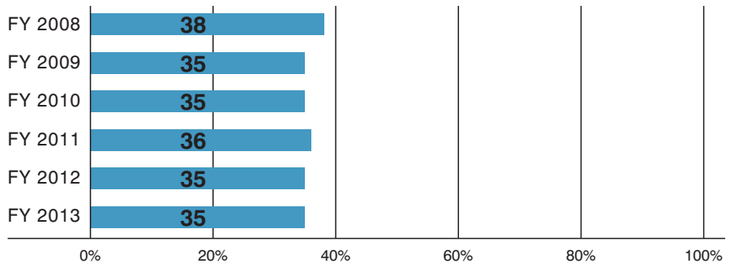
7-1 Social Dialogue

Publication of Responsible Care Reports



The ratio of member companies issuing Responsible Care Reports in FY 2013 was about 90%, almost the same as in FY 2012. If group publications are included, the ratio rises to almost 100%.

Publication of Site Reports



Around 35% of member companies issued local site reports.

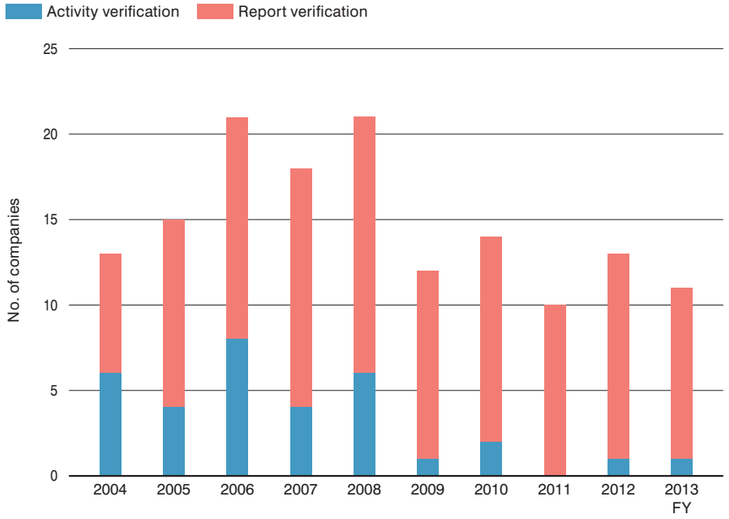
Contents of Responsible Care Reports

Contents		Coverage (%)
Basic items	RC-related management policy, declaration, philosophy, etc.	100
	RC-related management setup and organization	96
Environmental protection	Industrial waste	100
	Energy saving and carbon dioxide	100
	PRTR, harmful atmosphere-polluting substances	100
	Atmospheric pollution countermeasures, water pollution countermeasures	100
Process safety and disaster prevention	General content	96
	Emergency response inside and outside company at time of serious accident	90
	Prior safety evaluation of facilities	70
Occupational health and safety	General content	100
	Consideration of safety at affiliate companies, such as safety education	73
Chemicals and product safety	General content	97
	Supply of information through material safety data sheets, etc.	91
	Prior safety evaluation of chemical substances	81
Distribution safety	Response to distribution accidents (setup, training)	66
	Implementation of Yellow Cards and labeling	73
Social dialogue	Present state of employee education relating to RC and plans	75
	Dialogue with the local community	93

Most of the reports carried the result of activities in the six main areas of Responsible Care, namely, environmental protection, process safety and disaster prevention, occupational health and safety, chemicals and product safety, distribution safety, and social dialogue.
In particular, at a time when global environmental problems are attracting the attention of society, all of the reports carried the results of activities in the category of environmental protection relating to energy saving and the prevention of global warming, industrial waste, atmospheric pollution countermeasures, and water pollution countermeasures.

7-1 Social Dialogue

Number of Companies Receiving RC Verification



In FY 2013, 11 companies received RC verification (activity verification for 1 company, report verification for 10 companies); a total of 164 companies have received verification so far.
Activity verification (1 company): Nippon Soda Co., Ltd.
Report verification (10 companies): Daicel Corporation; Sanyo Chemical Industries, Ltd.; Shin-Etsu Chemical Co., Ltd.; Nippon Shokubai Co., Ltd.; Kaneka Corporation; Nippon Soda Co., Ltd.; Asahi Kasei Corporation; JSR Corporation; Ube Industries, Ltd.; Sumitomo Seika Co., Ltd.

7-2 Dialogue with the Community

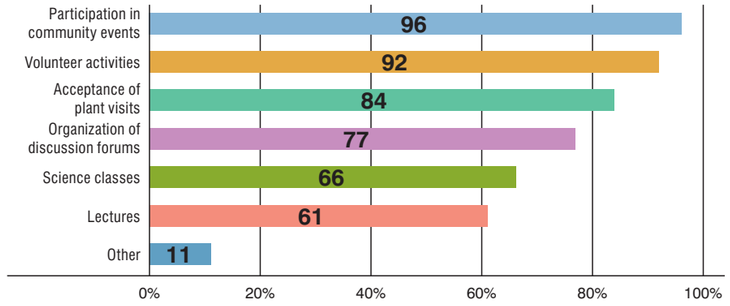
Implementation of Regional Dialogue Meetings

Areas where implemented in FY 2013	Niigata-Kita, Yamaguchi-Nishi, Kawasaki, Sakai & Senboku, Oita, Iwakuni & Ohtake, Toyama & Takaoka
Areas where implemented in FY 2012	Osaka, Yamaguchi-Higashi, Okayama, Chiba, Kashima, Aichi

RC Committee holds dialogue meetings with local communities once every two years in areas where there is a concentration of member company sites, especially chemical complexes.

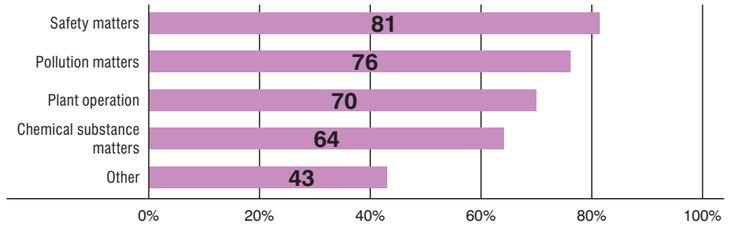
Other Community Activities

Means of Communication (Multiple answers allowed)



Besides these meetings, member companies endeavor to promote communication with the local community by participating in and supporting community events and volunteer activities, hosting plant visits for local residents and elementary and junior high school students, and giving lectures at schools and civic groups. In FY 2013, 77% of member companies created opportunities for exchange with local residents, and dialogues were conducted on a total of 543 occasions in 138 areas.

Agenda Items in Discussion Forums (Multiple answers allowed)



The discussions often involved matters closely related to the local community, such as safety (accident- and disaster-prevention measures, etc.), pollution, chemical substances, and plant management (the construction of new facilities, site changes, etc.).

8-1 Members' Self-Assessment

Details of Self-Assessment Scores (Average scores for all member companies)

Assessed item \ Code	MS	EP	PS	OHS	DS	CPS	SD
	Important items						
Policy	4.7	4.7	4.6	4.7	4.3	4.5	4.6
Identification of striking environmental aspects, identification of dangerous and harmful factors, etc.	4.4	4.5	4.6	4.6	4.0	4.4	
Legal and other requirements	4.6						
Objectives	4.6	4.5	4.3	4.3	4.0	4.0	3.7
Plans	4.6	4.2	4.4	4.5	4.0	4.0	3.9
Organization	4.4						
Education and training	4.3	4.2	4.4	4.5	4.1	4.1	3.7
Communication	4.2	4.1	3.8	4.7	4.3	4.2	4.0
Documentation and document management	4.4						
Operation management	4.3	4.2			4.1	3.9	
Response to emergency situations	4.4		4.2		3.6		
Inspection and monitoring	4.5	4.5	4.4	4.3	3.8	4.3	3.7
Corrections and preventive measures	4.5	4.5	4.5	4.6	4.2	4.5	
Collection of information and management of records	4.4						
Auditing	4.7						
Revisions by management	4.6						
(Overall assessment)	4.5	4.4	4.4	4.5	4.1	4.2	3.9

Abbreviation	Code
MS	Management system
EP	Environmental protection
PS	Process safety and disaster prevention
OHS	Occupational health and safety
DS	Distribution safety
CPS	Chemicals and product safety
SD	Social dialogue

Self-assessment score	Classification
4.5 points or over	Very satisfactory
3.5 to under 4.5 points	Just about satisfactory
2.5 to under 3.5 points	Somewhat unsatisfactory
Under 2.5 points	Unsatisfactory

On a scale of 5, scores in the 4-point range were recorded for all of the important items in the categories of management system, environmental preservation, and occupational health and safety, showing that the cycle of activities is rotating at a high level in these categories.

In the category of process safety, enhanced communication is desirable.

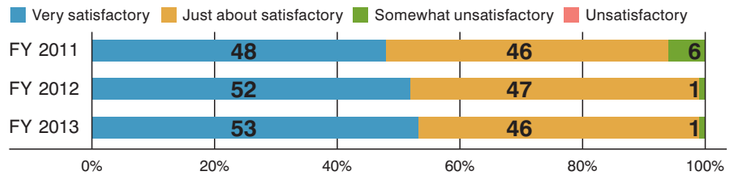
In the category of chemical product safety, the improvement of operation management is desirable.

In the category of distribution safety, there are issues especially in the response to emergency situations.

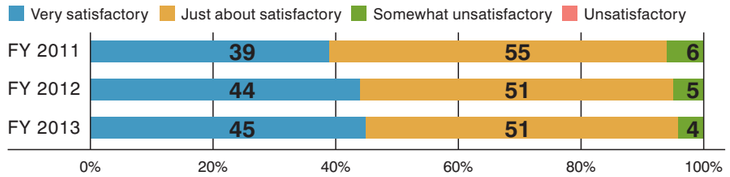
In the category of social dialogue, there are still many issues, such as objectives, education and training, and inspection and monitoring.

8-1 Members' Self-Assessment

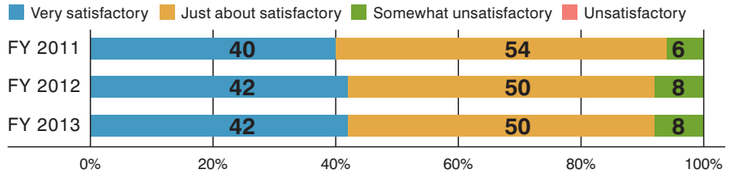
Management System



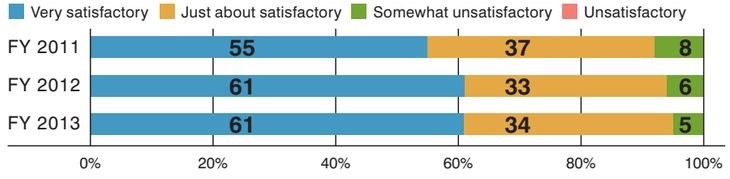
Environmental Protection



Process Safety and Disaster Prevention



Occupational Health and Safety



Regarding trends over the last three years, in the category of management system, the ratio of member companies replying "very satisfactory" or "just about satisfactory" has maintained a high level of over 90%. Furthermore, the ratio of those replying "very satisfactory" has risen to 53%.

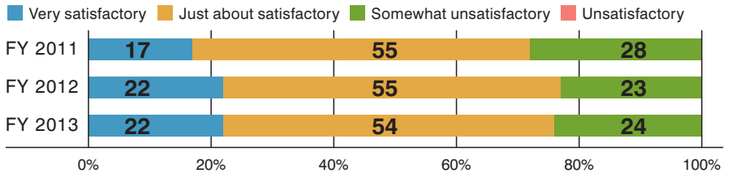
In the category of environmental protection, the ratio of member companies replying "very satisfactory" or "just about satisfactory" has remained above 90%, and the ratio of those replying "very satisfactory" is increasing too.

In the category of process safety and disaster prevention, the ratio of member companies replying "very satisfactory" or "just about satisfactory" is above 90% and on an upward trend.

In the category of occupational health and safety, the ratio of member companies replying "very satisfactory" or "just about satisfactory" has remained above 90%, and the ratio replying "very satisfactory" is now more than 60%.

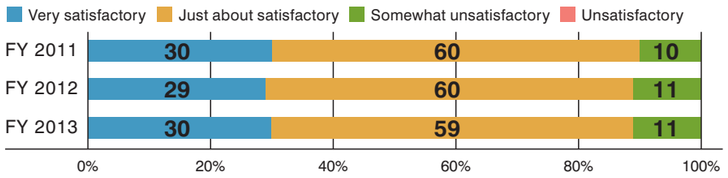
8-1 Members' Self-Assessment

Distribution Safety



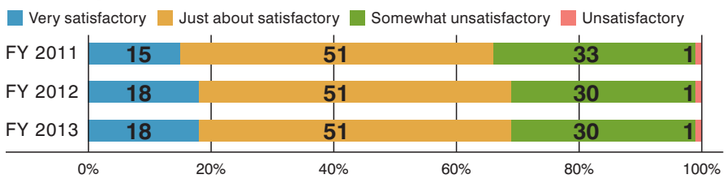
In the category of distribution safety, the ratio of member companies replying "unsatisfactory" or "somewhat unsatisfactory" continues to be nearly 30%.

Chemicals and Product Safety



In the category of chemicals and product safety, the ratio of member companies replying "very satisfactory" or "just about satisfactory" is almost 90%.

Social Dialogue



In the category of social dialogue, the ratio of member companies replying "unsatisfactory" or "somewhat unsatisfactory" continues to be about 30%.

TOPICS

FY 2013 Safety Awards, Technology Awards, and Responsible Care Awards

Prior to the regular convention held at the Palace Hotel in Tokyo on May 29, 2014, a ceremony was held to present JCIA Safety Awards Grand Prize and First Prize, JCIA Technology Awards (Grand Prize, Special Technology Prize, and Environmental Technology Prize), and the JCIA Responsible Care Awards (Responsible Care Grand Prix Award, Responsible Care Outstanding Award, Responsible Care Award for Effort).

The award winners were as follows:

38th JCIA Annual Safety Awards

Grand Prize

Kao Corporation, Tochigi Plant

First Prize

Showa Aluminum Can K.K.: Hikone Plant
Showa Denko K.K.: Chichibu Plant
Teijin DuPont Films Japan Limited: Gifu Plant
Nippon Kayaku Co., Ltd.: Pharmaceutical Research Laboratories, Research and Development Group*
*Safety Effort Award Special Prizes

Award Winners of Kao Corporation who won the Safety Award Grand Prize

46th Technology Awards

Grand Prize

Kaneka Corporation: "R&D and Commercialization of PIXEO BP (material for Flexible Copper-cladly Laminates: FCCL)"

Special Technology Prize

Shiseido Co., Ltd., Kao Corporation: "Development of h-CLAT as Alternative Method of the Skin Sensitization Test"

Environmental Technology Prize

Dupont-Mitsui Fluorochemicals Co., Ltd: "The World's First Commercialization of Low Environment Burden (Extremely Small Global Warming Potential and Zero Ozone Layer Depleting Potential) Fluorinated Fluid"

Award Winners of KANEKA Corporation who won the Technology Award Grand Prize

8th Responsible Care Awards

Responsible Care Grand Prix Award

Nissan Chemical Industries, Ltd., Toyama Plant: "Preservation of Biodiversity by Utilizing Biotope"

Responsible Care Outstanding Award

Asahi Glass Co., Ltd., CSR Room (Special Recognition Award): "Safety Reinforcement Activity Aiming at Improvement in Effectiveness of Risk Assessment and Fostering Human Resources for Safety"
Otsuka Chemical Co., Ltd., Production Hdqrs (Special Recognition Award): "Expansion of EHS Education by Establishing *Safety Dojo*"
Showa Denko Ceramics Co., Ltd., Toyama Plant: "Work to Make Industrial Waste Landfill to Zero"
Sumika Bayer Urethane Co., Ltd., Nihama Plant: "Disaster Prevention & Labor Safety"
Kao Customer Marketing Co., Ltd., Corporate Planning Division, Environment Promotion Room: "Promotion of Direct Environmental Communications Activity"

Award Winners who won the available Prizes for Responsible Care

Responsible Care Award for Effort

JNC Fibers Corporation, Moriyama Plant: "Co-existence between Community and Corporation through *Water*"
Kaneka Corporation, Takasago Plant: "Establishment of a Framework to Decrease Production Loss Utilizing Integration Power through Introduction of Material Flow Cost Accounting (MFCA)"
Mitsubishi Chemical Corporation, Kurosaki Division: "Improvement in Managing Plant Drainage"
Nippon Kayaku Co., Ltd., Asa Plant: "Activity of Disaster Prevention at Nippon Kayaku Asa Plant"
Sumitomo Chemical Co., Ltd., Oita Plant: "Enhancement in Communications with Community centering on RC Community Dialog in Oita Region"