

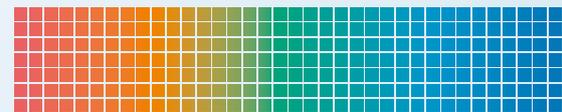


DENKA GROUP

CSR REPORT

2014

References



Pursuing Lasting Trust
as an Outstanding Manufacturer

Based on its corporate philosophy, "to become a company that creates new value from resources by fully employing our technological capabilities," the DENKA Group established CSR action guidelines.

CONTENTS

The DENKA Group Guidelines	3
Compliance	4
Information Security and System Management/ Online Information Management	5
Responsible Care (RC) Activities	6
ISO 14001 and 9001 Management Systems	7
Environmental Conservation	8
Product Safety Management System	11
Environment- and Energy-Related Subsidies	15
Environmental Accounting	16
The DENKA Group's Environment-Friendly Products and Technologies	17
Initiatives with Our Stakeholders	21
Corporate Officers	23
Consolidated Financial Statements	24
Global Reporting Initiative (GRI) Content Index	26

- 1. We will promote sustainable social and business development out of a conviction that corporate social responsibility is the essence of business.**
- 2. While constantly ensuring quality to maintain customer trust, we will contribute to sound social progress by developing and supplying products and services that are safe and environment friendly.**
- 3. We will operate fairly.**
- 4. We will maintain a good level of communication with society and disclose appropriate information.**
- 5. We will comply with laws and regulations and operate fairly according to social norms.**
- 6. We will maintain safe, clean and comfortable workplaces and respect all basic human rights.**
- 7. We will use, reuse and recycle resources to help protect the environment.**
- 8. We will maintain security and disaster prevention measures, participate in environmental protection activities and communicate with society.**
- 9. We will contribute to society as a good corporate citizen.**
- 10. We will contribute to social development as a good member of the global community.**

Established April 1, 2007

To Maintain the Trust of Society, We Will Develop a Corporate Structure with Greater Transparency While Ensuring Fair Transactions.

Compliance

Our Stance against Corruption and Antisocial Forces

On the back of the recent trend toward the tightening of anti-corruption regulations, laws pertaining to the prevention of bribery of foreign public officials have been enhanced in the United States and the United Kingdom. As these regulations are also applicable to Japanese companies, we hold study sessions and have external specialists give lectures to ensure that content of these regulations is thoroughly followed by every employee concerned.

Meanwhile, to prevent antisocial activities, prefectures throughout Japan have enacted ordinances for eliminating organized crime groups. Reflecting this, business transactions with such forces are now clearly deemed illegal. DENKA is striving to ensure that the Company and its business partners have no relationships with antisocial forces. To that end, we are taking such steps as revising business contracts to incorporate rules prohibiting such relationships and asking business partners to submit written oaths abjuring all such relationships. We also cooperate with the police, lawyers and other specialized external institutions to gather the latest information.

Security Trade Control

Current international regulations on trade control aim to prevent the proliferation of weapons for mass destruction by prohibiting exports of products and technologies that could help the development and manufacture of such weapons. In line with this, the DENKA Group Ethics Policy requires adherence to Japan's Foreign Exchange and Foreign Trade Act, the Export Trade Control Order and other related regulations as well as the Company's in-house rules on security trade control. Reflecting this, our fiscal 2013 initiatives aimed at ensuring security trade control included internal audits undertaken at each sales section and participation in external seminars in addition to product classification as well as end-use and end-user verification in the course of our daily operations.

Protection of Intellectual Property Rights

In line with the DENKA100 new growth strategies, we are stepping up initiatives to accelerate global expansion and facilitate open innovation. Therefore, the protection of intellectual property rights is becoming ever more important in terms of compliance.

In step with global expansion, appropriate measures must be taken to protect businesses' intellectual property rights against piracy in both consuming and production areas. In addition to exercising their own intellectual property rights, businesses must respect other companies' rights while giving due consideration to local law systems and cultures.

In order to facilitate open innovation, it is essential to maintain relationships of mutual respect between research partners as they often share their intellectual property rights based on joint research contracts.

DENKA's business divisions, R&D sections, Legal and IP Departments are working together to tackle these issues while

formulating educational programs aimed at facilitating a corporate culture that is conscious of intellectual property rights.

Prevention of Insider Trading

In recent years, the incidence of insider trading by corporate officers and employees illegally using or leaking information has increased. In response, Japan's Securities and Exchange Surveillance Commission is stepping up efforts aimed at cracking down on such trading. In line with its in-house rules regarding the control of insider information and prevention of insider trading, DENKA prohibits information leakage as well as the sale or purchase of stocks without prior notice while uniformly banning such sale and purchase during the two weeks before the date of financial results announcement. These rules are thoroughly disseminated via the Company's intranet and other media, thereby helping to ensure the appropriate control of information and the prevention of insider trading.

DENKA Will Secure Information Security through Appropriate Control.

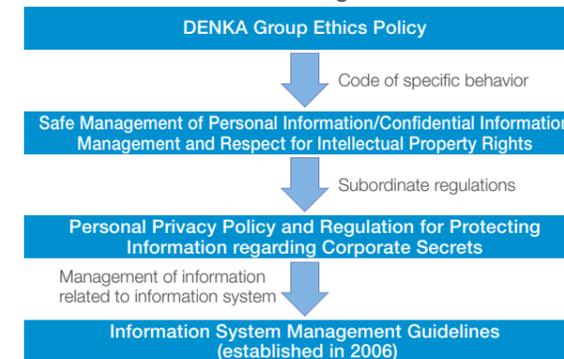
Information Security

Information Security Management

The DENKA Group Ethics Policy established in 2002 includes a code of specific behavior that encompasses guidelines under the headings the Safe Management of Personal Information/Confidential Information Management and Respect for Intellectual Property Rights, both of which are strictly complied with. As subordinate regulations of these guidelines, DENKA established and developed the Personal Privacy Policy and the Regulation for Protecting Information regarding Corporate Secrets, which are thoroughly disseminated through lectures and in-house newsletters.

Furthermore, DENKA strictly manages and respectfully handles confidential information provided by third parties in accordance with the DENKA Group Ethics Policy.

Structure of Information Management Rules



Lectures on Information Security

To disseminate in-house rules pertaining to information security, our information technology specialist course, covering the *Information System Management Guidelines* and basic rules, is provided annually at Headquarters as well as each branch and plant. With classes of about 10 employees, the course aims to ensure the adoption of proper information management methods through practical training as well as active discussion.



Younger employees participating in a lecture on information management

Information System Management

In recent years, the volume of information digitally processed by the Group's information system has been rapidly expanding on the back of drastic advances in IT technologies. Accordingly, it is increasingly important to secure our information management system. DENKA created the *Information System Management Guidelines* in 2006 and the *Information System Work Manual* in 2008 based on the Regulation for Protecting Information regarding Corporate Secrets. In cooperation with managers and persons in charge at each relevant department, we are appropriately handling digitized information.

Information System Management Structure



Protection of Electronic Data

To secure the reliability and efficiency of information systems, we are utilizing external specialized data centers to manage and operate our information system equipment. As a part of emergency preparations, in fiscal 2012 we established an information system operational structure that links two data centers (located in the east and west of Japan) capable of supplementing each other's operational capacity at the time of wide-area disaster, including earthquake and tsunami, thereby securing the continuity of our business operations.

Online Information Management

DENKA utilizes the Tokyo Stock Exchange's timely disclosure network (TDnet) service to disclose corporate information subject to the timely disclosure rules. Although the Company presents the same information on its website, DENKA makes sure that such information is protected from unauthorized access or theft prior to the completion of timely disclosure. For example, the number of personnel handling the management of the website is strictly limited and they are appropriately educated. They initiate procedures for the uploading of said information only after confirming that the information has been successfully disclosed through the aforementioned service. Moreover, their workspaces are monitored and equipped with protection systems. We have also set up a procedure to handle emergencies, such as unintentional information disclosure and leakage.

Fiscal 2013 RC Objectives and Achievements

Assessment code: A = Reached target B = Partially missed target C = Missed target

Key Area	Fiscal 2013 (the first year of the Fifth Medium-Term Environmental Plan)			Major Initiatives and Goals for Fiscal 2014
	Goals	Achievements	Evaluation	
Environmental Conservation	Prevent global warming and save energy	CO ₂ emissions intensity (from energy sources): 1.24t/t Energy consumption intensity (fiscal 1990 base): 90% Energy consumption intensity (fiscal 1990 base): 93% or lower	CO ₂ emissions intensity (from energy sources): 1.22t/t Energy consumption intensity (fiscal 1990 base): 91% or lower • Achieved the target for CO ₂ emissions intensity thanks to the success of individual energy-saving activities implemented on the back of rebounds in production volume.	CO ₂ emissions intensity (from energy sources): 1.22t/t Energy consumption intensity (fiscal 1990 base): 91% or lower • Promote total CO ₂ reduction through such steps as improving production processes and increasing yield ratios
	Prevent air and water pollution	SO _x : 64t NO _x : 4,266t Soot and dust: 123t COD (BOD): 1,293t	SO _x : 84t NO _x : 4,460t Soot and dust: 73t COD (BOD): 860t • SO _x emissions decreased approximately 28% year on year due to the switchover of fuels at the Omi Plant from heavy oil to natural gas. • NO _x emissions increased 10% year on year reflecting rising cement production volume and an increase in the nitrogen content of coal used for cement production. • Soot and dust emissions fell approximately 21% due to such steps as the replacement of bag filters of dust collectors at the Omuta Plant's calcium carbide production facilities. • COD (BOD) emissions remained virtually unchanged from the previous fiscal year despite rising production volume. This was thanks mainly to the reinforcement of wastewater treatment facilities used in the Omi Plant's chloroprene rubber production process.	SO _x : 116t NO _x : 4,250t Soot and dust: 125t COD (BOD): 1,150t • Reduce BOD emissions at the Omi Plant through such steps as the improvement of facility management methods
	Reduce waste (zero emissions)	Total waste generated: 140,000t	123,590t • Waste reduction efforts at each plant have made progress.	139,000t Analyze the causes of waste generation while reducing waste sent to landfill
		In-house and external landfill: 177t	210t • Failed to achieve the target due to the replacement of filters used at the Omuta Plant's electric furnaces and the disposal of flexible containers at the Chiba Plant. However, overall performance encompassing plants throughout the Group resulted in zero emissions.	Final landfill waste: 178t Maintain zero emissions
Use resources efficiently	Raise the amount of waste and byproducts used in one ton of cement (recycled resource usage intensity) (560kg/t in fiscal 2012)	Recycled resource usage intensity: 554kg/t • Promoted recycling of industrial waste into raw materials and fuels.	Raise the recycled resource usage intensity, thereby contributing to the development of a recycling-oriented society Enhance the reuse of automobile shredder residue (ASR)	
Product Safety	Compliance with chemical substance management policies	Continuously provide sufficient information on product safety, such as through SDSs,* while complying with international regulations on chemical substances, including REACH**	• Revised the SDSs and labeling for products for the EU and China while posting warning signs on reaction and storage tanks that contain substances designated as hazardous by the Ministry of Health, Labour and Welfare. • Made notifications under the Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc., with regard to chemical substances subject to monitoring while registering such substances in accordance with REACH regulations. • Took necessary measures to comply with the TSCA† regulations of the United States, K-REACH†† and other regulations worldwide that conform with GHS.***	Continue to supply SDSs and other product safety information while remaining compliant with such overseas regulations on chemicals as REACH
	Chemical substance management and emission reduction	Companywide emissions of PRTR substances: 95t	90t • Emissions of PRTR substances decreased 13% year on year, reflecting a fall in toluene emissions resulting from the use of solvent-free adhesives for the Chiba Plant's tape products.	Companywide emissions of PRTR substances: 92t Step up ongoing efforts at the Chiba Plant to reduce the emissions of toluene
	Ensure safe transportation	*Fulfill responsibilities as a bulk shipper *	• Conducted plant inspection tours by the Logistics Safety Working Team and identified points where ongoing countermeasures are necessary (e.g., work involving heights, stacking of containers). • The Logistics Training Working Team hosted educational sessions, inviting external lecturers (the Omuta Plant) to speak. • Each business site held Logistics Subcommittee meetings to address issues related to operating procedures, checklist management, staff education and training, and the maintenance of safety with the aim of ensuring ongoing improvements.	• Eliminate occupational and facility accidents in the course of distribution • Promote safety activities with the Logistics Subcommittee spearheading • Promote risk assessment, prepare manuals, train transporters, thoroughly manage compliance checklists and ensure the safety of loading and unloading work
Occupational Safety and Health	Eliminate occupational accidents	Achieve zero occupational accidents, implement safety activities involving all workers, create a lively and vibrant workplace, provide safety education, raise safety awareness and carry out safety activities tailored to local needs	Promoted such safety activities as creating a lively and vibrant workplace since fiscal 2010 by enhancing communication. However, in addition to the occurrence of major accidents, including a fatal incident, the Company's fiscal 2013 safety record exposed challenges in such areas as accidents in which workers at subcontractors suffered and accidents resulting from insufficient on-site experience. Number of fatal accidents and incidents that required lost work time during fiscal 2013 (fiscal 2012 for comparisons) DENKA Group: 1 (5); accident frequency of 0.18 (0.92) Among subcontractors: 7* (3) accident frequency of 1.25 (0.54) * Including one fatal accident	Achieve zero accident rate for incidents resulting in lost work time by implementing the following policies: • Facilitate worksite communication to create a lively and vibrant workplace • Safety activities involving everyone and thorough implementation of safety education • Implement safety activities tailored to local needs
	Manage employee health	Maintain and improve employee health	Launched the Mental Health Promotion Plan to implement comprehensive countermeasures, including providing training and assisting employees who suffer mental health problems with their reinstatement	Achieve zero disease attributable to work
Disaster Prevention	Eliminate major accidents	Eliminate major accidents, especially explosions, fires and large-scale leaks of chemical substances while improving production control	• There were two major accidents (explosion and fire), including a heat blast from the Omi Plant's electric furnace and a fire during the demolition of the Chiba Plant's SM distillation tower. • The number of facility-related incidents totaled six (three explosion and fire incidents, two environmental accidents involving leakage and one facility failure), decreasing nearly by half from 11 of fiscal 2012. • Applied a security evaluation system at styrene monomer production facilities and addressed weakness identified through evaluations performed with the aim of implementing ongoing improvement measures.	• Eliminate major facility accidents such as explosions and fires • Ensure the security of each production site, including overseas plants, by implementing steps tailored to the characteristics of individual facilities • Apply a security evaluation system Groupwide and step up facility improvement based on evaluations while creating a safety-oriented corporate culture
Community Relations	Maintain community trust	Continue to engage communities and build trust	• Addressed complaints from community residents about noise and odors through response desks at each business site, deploying countermeasures and responding in good faith to complaints. • Engaged in community dialogue, hosted site tours and held children's chemistry classes. • Included a third-party opinion in the DENKA Group CSR Report.	Facilitate communication with community residents and local societies to maintain their trust

* Safety Data Sheet ** Registration, Evaluation, Authorisation and Restriction of Chemical Substances *** Globally Harmonized System of Classification and Labeling of Chemicals
† Toxic Substances Control Act †† REACH-related law adopted in the Republic of Korea

The DENKA Group Is Pursuing Ongoing Improvement Using Quality and Environmental Management Systems.

Status of ISO Certification Acquisition

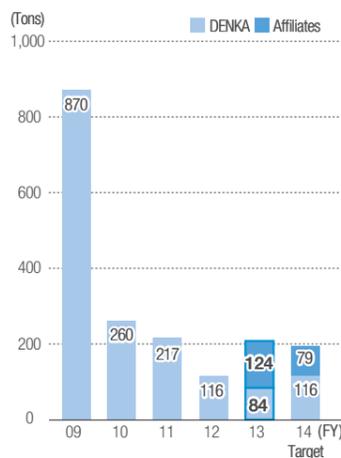
The status of our ISO certification acquisition as of July 10, 2014 is as follows:

	ISO 14001 (Environment)		ISO 9001 (Quality)		
	Date Certified	Registration Number	Date Certified	Registration Number	Products Covered
Omi Plant	October 16, 1999	2661116-2A (BV)	August 19, 1994	2936857 (BV)	Chloroprene, acetaldehyde, POVAL, ASR, SAKNOHOL, special cement additives, cement, alumina fiber, monochloro acetic acid, sodium monochloroacetate, caustic soda, monosilane, dichlorosilane, hexachlorodisilane
Omuta Plant	October 28, 2000	2832519 (BV)	November 7, 1998	3066427 (BV)	Fused silica, special cement additives, nitride powder, ceramic substrates, steel additives, acetylene black, calcium aluminate cement, FIRELEN, boron, boron carbide powder, thermally conductive materials, heat sinks, phosphor
Chiba Plant	May 31, 1999	2229709 (BV)	March 22, 1995	2985010 (BV)	Polystyrene, acrylonitrile styrene resins, methyl methacrylate styrene resins, methacrylatebutadiene-styrene resins, methacrylate acrylonitrile butadiene styrene resins, acrylonitrile butadiene styrene resins, styrene-maleimide copolymers, styrene-butadiene copolymers, ethylene vinyl acetate copolymers, acrylic rubber, polystyrene sheet, styrene monomer, ethyl benzene, rain gutters, vinyl tape, corrugated pipes, duct hosing, polyvinyl chloride
Shibukawa Plant	May 21, 2001	2944628 (BV)	October 23, 1996	3119550 (BV)	Metal substrates, adhesives, emitters, thermally conductive spacers, thermally conductive adhesive sheets, electromagnetic shields, ELEGRIP tape, electric power
Ofuna Plant	November 9, 2001	JQA-EM1895 (JQA)	October 25, 1996	JQA-1429 (JQA)	Packaging tape, plastic films, polyvinyl chloride fibers
Isesaki Plant	September 30, 2003	2770789 (BV)	February 28, 2008	3038095 (BV)	Stretch films, food packaging sheets, electronic packaging sheets, cover tapes, DX FILMS
Denka Innovation Center	July 5, 2004	2988036 (BV)	—	—	—
DSPL Merbau Plant	June 8, 2001	SNG0190016 (Lloyd's)	November 29, 2000	SNG0160194 (Lloyd's)	Acetylene black
DSPL Seraya Plant	May 28, 2003	SNG0190023 (Lloyd's)	September 27, 2001	SNG0160242 (Lloyd's)	Polystyrene, methyl methacrylate styrene resins, styrene-butadiene copolymers, styrene-maleimide copolymers
DAPL Tuas Plant	March 2003	2003-0194 (PSB)	April 2000	99-2-0984 (PSB)	Fused silica filler
Denka Advanced Materials (Suzhou) Co., Ltd.	May 20, 2008	310092-UK (BV)	September 19, 2007	271680-1 (BV)	Electronic packaging sheets, cover tapes
DENKA Polymer Co., Ltd.	—	—	June 25, 2014	JUSE-RA-1970 (JUSE)	Plastic food packaging and plastic sheets
DENKA SEIKEN Co., Ltd.	June 23, 2000	2737475 (BV)	July 13, 2005	12 100 25631 TMS (TUV SUD)	Clinical chemistry diagnostic reagents, immunological diagnostic reagents, bacteriological and virological diagnostic reagents, sterile cotton swabs
CRK Corporation	—	—	November 19, 2009	2862476 (BV)	Rubber compounds, rubber tape, rubber molding

We Are Striving to Monitor Environmental Data at Each Business Site and Affiliate.

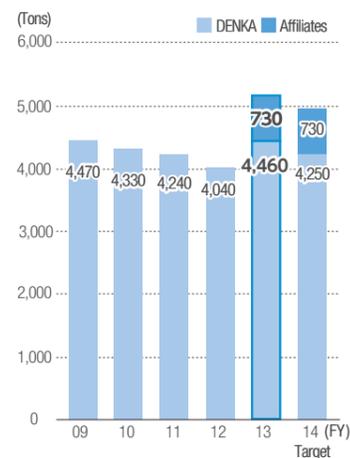
* Figures for fiscal 2013 include the environmental data of affiliates.

SOx



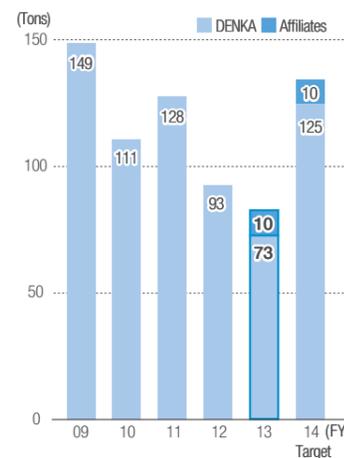
SOx emissions decreased by approximately 28% year on year thanks mainly to the ongoing utilization of low-sulfur byproduct gas that the Chiba Plant recovered from a nearby factory complex for use as a boiler fuel as well as a switchover of fuels used in the Omi Plant's production process to natural gas. Emissions at affiliates included approximately 120 tons from Hinode Kagaku Kogyo. We will continue to systematically reduce SOx emissions in fiscal 2014.

NOx



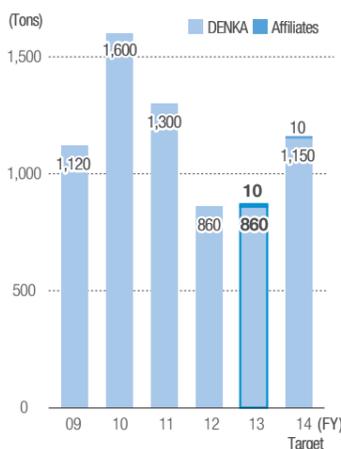
NOx emissions increased by approximately 10% year on year (non-consolidated basis) due to a rise in the volume of the Omi Plant's cement production and an increase in the nitrogen content of coal used for cement production. Emissions at affiliates included approximately 500 tons from the Tuas Plant and approximately 190 tons from Hinode Kagaku Kogyo. Although production volume is expected to rise in fiscal 2014, we will step up efforts to reduce NOx emissions.

Soot and Dust



Soot and dust emissions decreased by approximately 21% year on year due mainly to repairs made to the Omi Plant's cement kiln and the replacement of filters at the plant's calcium carbide production facilities. For fiscal 2014, we expect soot emissions to increase as cement production volume increases. We will strive for emissions reduction through such means as facility improvement.

COD (BOD)



Despite rising production volume, COD (BOD) emissions in fiscal 2013 remained virtually unchanged from the previous fiscal year, thanks to efforts to reinforce the capacity of the Omi Plant's treatment facilities for wastewater from the POVAL and chloroprene rubber production process. We will strive to maintain efficient facility operations in fiscal 2014, thereby reducing emissions systematically.

Fiscal 2013 PRTR Substances Emissions and Transfers

The following table shows PRTR registered substances emitted and transferred in amounts exceeding one ton.

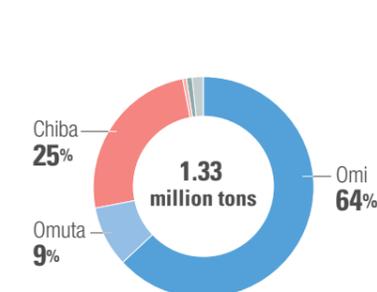
Unit: tons (excluding dioxin)

PRTR Substances	Emissions					Total	Amount Transferred
	Air	Water	Soil	Landfill			
n-Butyl acrylate	0	0	0	0	0	0	2
Acrylonitrile	2	0	0	0	2	2	12
Acetaldehyde	0	6	0	0	6	6	0
Aniline	0	0	0	0	0	0	17
Ethyl benzene	3	0	0	0	3	3	43
Ferric chloride	0	0	0	0	0	0	27
Calcium cyanamide	0	0	0	0	0	0	1
Vinyl acetate	16	0	0	0	16	16	0
Cyanamide	0	0	0	0	0	0	1
N,N-Dimethylformamide	0	0	0	0	0	0	18
Styrene	17	0	0	0	17	17	120
Water soluble copper salt	0	5	0	0	5	5	0
Toluene	20	1	0	0	21	21	32
Carbon disulfide	2	0	0	0	2	2	0
Fluorine compounds	1	0	0	0	1	1	21
n-Hexane	0	0	0	0	0	0	4
Boron and boron compounds	1	10	0	0	11	11	17
2-Ethylhexyl methacrylate	0	0	0	0	0	0	1
Methyl methacrylate	2	0	0	0	2	2	12
Total (tons)	64	22	0	0	86	86	328
Dioxin (mg-TEQ)	25	63	0	0	88	88	1

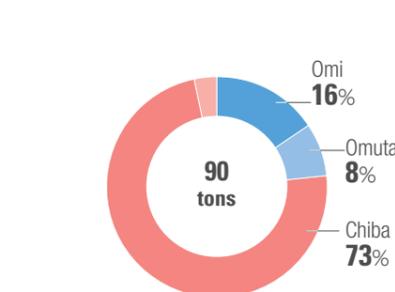
Fiscal 2013 Environmental Performance by DENKA Business Sites (Japan)

Items	Units	Omi	Omuta	Chiba	Shibukawa	Ofuna	Isesaki	Innovation Center
Unit energy consumption	Compared with FY1990	0.90	0.94	0.91	0.83	0.78	1.02	—
CO ₂ emissions (from energy sources)	10,000t	84	12	33	1	1	2	0
PRTR substance emissions	t	14	7	66	3	0	0	0
NOx emissions	t	3,390	790	263	11	2	0	0
SOx emissions	t	61	1	20	2	0	0	0
Soot and dust emissions	t	67	5	1	0	0	0	0
Water used	1,000m ³	63,000	1,190	9,600	2,400	46	427	8
COD (BOD) discharges	t	850	1	10	4	0	0	0
Waste	t	101,260	8,680	12,860	382	167	145	100
Final landfill waste	t	69	72	52	1	16	0	0

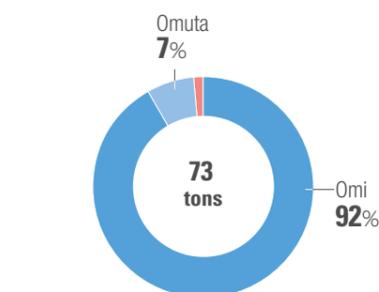
CO₂ emissions (from energy sources)



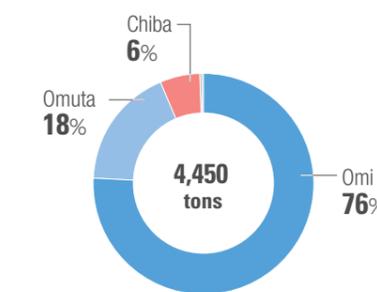
PRTR substance emissions



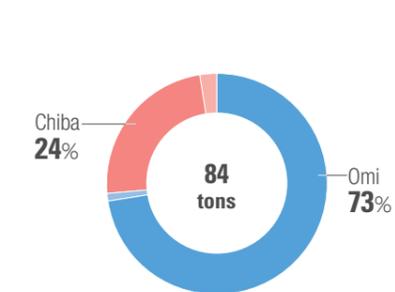
Soot and dust emissions



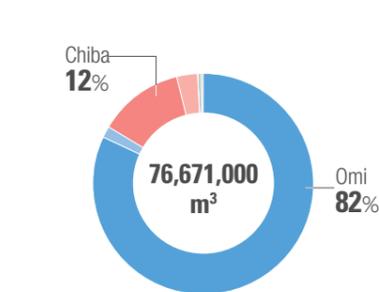
NOx emissions



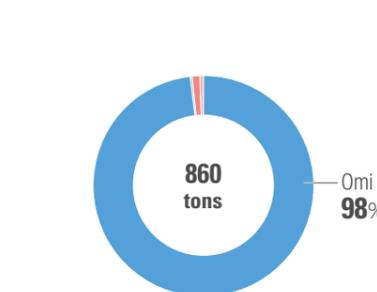
SOx emissions



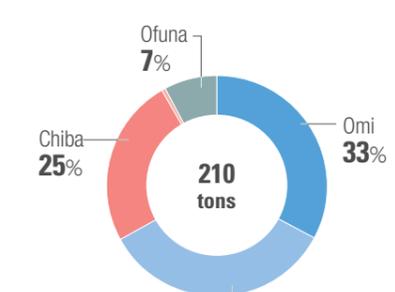
Water used



COD (BOD) discharges



Final landfill waste

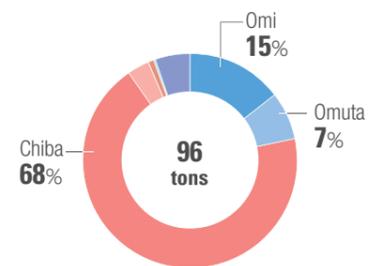


Legend for donut charts:
■ Omi Plant
■ Omuta Plant
■ Chiba Plant
■ Shibukawa Plant
■ Ofuna Plant
■ Isesaki Plant
■ Denka Innovation Center

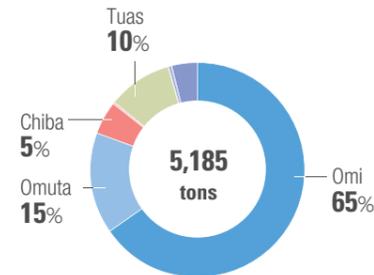
Fiscal 2013 Environmental Performance by DENKA Business Sites, Overseas Subsidiaries and Affiliates

Items	Units	Omi	Omuta	Chiba	Shibukawa	Ofuna	Isesaki	Innovation Center	Merbau	Seraya	Tuas	South	DAS	DCD	DPK	Seiken	CRK	Hinode	Azumin
CO ₂ emissions (from energy sources)	10,000t	84	12	33	1	1	2	0	0.4	3.0	2.5	0.2	0.0	—	1.2	1.5	0.1	2.4	0.5
PRTR substance emissions	Tons	14	7	66	3	0	0	0	—	—	—	—	1	—	0	0	0.1	5	0
NOx emissions	Tons	3,390	790	263	11	2	0	0	1	5	501	1	0	0	0	3	0	190	29
SOx emissions	Tons	61	1	20	2	0	0	0	—	1	0	0	0	0	0	3	0	118	2
Soot and dust emissions	Tons	67	5	1	0	0	0	0	—	—	—	0	0	0	0	0	0	10	—
Wastewater	1,000m ³	63,000	1,190	9,600	2,400	46	427	8	44	98	97	3	2	1	0	440	75	1,880	596
COD (BOD) discharges	Tons	850	1	10	4	0	0	0	0	3	0	—	0	0	0	0	0	2	4
Waste	Tons	101,260	8,680	12,860	382	167	145	100	254	785	411	140	112	19	113	275	84	244	78
Final landfill waste	Tons	69	72	52	1	16	0	0	—	—	381	0	112	18	0	42	37	184	63

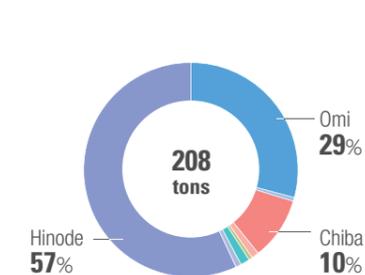
PRTR substance emissions



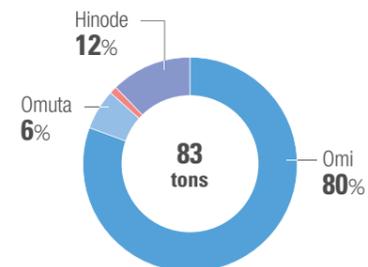
NOx emissions



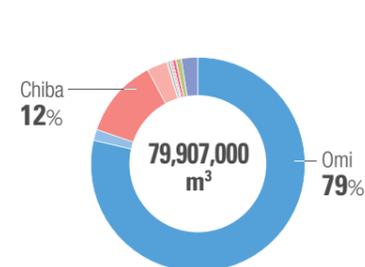
SOx emissions



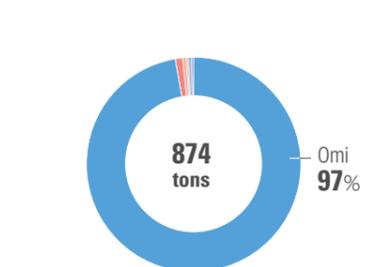
Soot and dust emissions



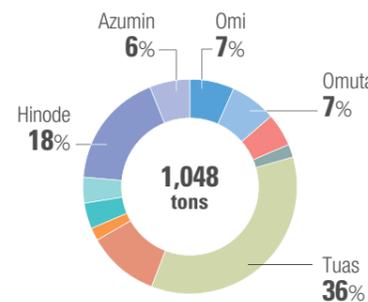
Wastewater



COD (BOD) discharges



Final landfill waste

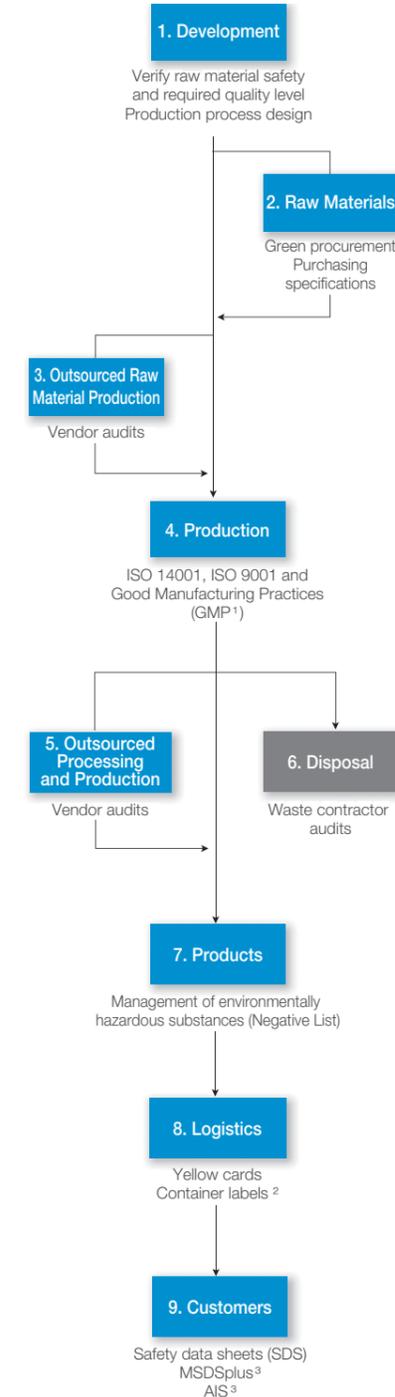


- Omi Plant
- Omuta Plant
- Chiba Plant
- Shibukawa Plant
- Ofuna Plant
- Isesaki Plant
- Denka Innovation Center
- Denka Singapore Pte., Ltd. Merbau Plant
- Denka Singapore Pte., Ltd. Seraya Plant
- Denka Advantech Pte., Ltd. Tuas Plant
- Denka Advantech Pte., Ltd. Tuas South Plant
- Denka Advanced Materials (Suzhou) Co., Ltd. (DAS) [China]
- Denka Chemicals Development Suzhou Co., Ltd. (DCD) [China]
- DENKA Polymer Co., Ltd. (DPK)
- DENKA SEIKEN Co., Ltd. (Seiken)
- CRK Corporation (CRK)
- Hinode Kagaku Kogyo Kaisha Ltd. (Hinode)
- DENKA Azumin Co., Ltd. (Azumin)

We Consider Safety, Environmental Protection and Quality in All Our Processes, from Raw Materials Procurement to Research, Production, Logistics, Consumption and Disposal.

Product Safety Management

Flowchart



We ensure product safety at each phase—from development and production to use by customers—while focusing on maintaining and improving quality.

1. Verify the Safety of Raw Materials and Required Quality Level and Engage in Production Process Design

We select and use raw materials for which safety can be verified while developing products that conform with customer and legal demands. We establish production processes that ensure consistent quality and thus trust in the products we develop.

2. Green Procurement and Purchasing Specifications

We purchase and use raw materials based on the Negative List, which takes into consideration Japanese and international environmental management regulations, as well as purchasing specifications that outline the required characteristics of purchased raw materials. Consequently, we are striving to manufacture superior products from quality raw materials and production processes.

3 & 5. Manufacturing Vendor Audits

We outsource some raw material production processes and the manufacture of semi-processed goods. We regularly audit manufacturing vendors based on our in-house standards for quality, logistics, environmental management and product safety.

4. Maintain/Improve Environmental Protection and Quality

We are undertaking environmental and quality management operations; gradually expanding the scope of our efforts to include new products; and working to maintain and improve quality, environmental protection and safety.

6. Waste Contractor Audits

We commission waste contractors in line with the Waste Management and Public Cleansing Law, requiring them to issue manifests and confirm collection. We regularly evaluate the operations and financial positions of these vendors and visit their waste processing sites.

7. Management of Environmentally Hazardous Substances in Products

We established the Negative List, which lists substances that are considered to be harmful to people and the environment. We are taking steps to ensure product quality and safety while reducing environmental load by placing restrictions on usage during the raw material phase and by decreasing the residual volume of harmful substances in our products. The Advanced Technologies Research Institute analyzes the amount of residual substances harmful to the environment contained within raw materials and products. Analytical data verifying that the amount of such substances is below regulatory limits is shared with the production, sales, and analysis and product management departments.

8. Displaying Yellow Cards and Yellow Card Container Labels

We require drivers to carry yellow cards that explain post-accident procedures. We also label containers to ensure swift and proper remediation. We regularly inform drivers of our requirements and conduct emergency drills.

9. Safety Data Sheets (SDS)

We produce these sheets for all products to ensure proper handling according to physical and chemical hazards and health and environmental risks. The sheets inform customers and help educate employees. We have begun disseminating information on environmentally hazardous substances contained in our products to customers through the Material Safety Data Sheet plus (MSDSplus)—which supplements information conveyed on SDS sheets—and Article Information Sheet (AIS) systems.

Quality Symposia, SQC and Quality Engineering Education

The DENKA Group holds periodic quality symposia aimed at enhancing quality management techniques while implementing education programs on the statistical quality control (SQC) method and quality engineering across the board.

On February 21, 2014, the fourth quality symposium was held and attended by representatives of the Company's plants, research laboratories and affiliates. During the two sessions, "Applying the SQC Method: Case Studies" and "Resolving Quality-Related Problems: Case Studies," seven presentations were given that shared best practices in the area of quality improvement.

SQC and Quality Engineering Education

DENKA has been implementing employee education programs centered on SQC to enhance quality control techniques on a Companywide basis. We are continuously striving to improve such programs in line with the following policies.

- Tailor these programs to best serve diverse levels of expertise, offering introductory to advanced levels with particular emphasis on ensuring that the basics of the SQC method are firmly adopted

- Appoint persons to take charge of SQC promotion at each production site and nurture them as SQC trainers
- Establish Companywide education policies and determine the required level of comprehension by job rank and category
- Enrich the software used for statistical analysis

In addition, in fiscal 2013 we began to introduce quality engineering (Taguchi methods) to advance our quality management techniques. The aim of quality engineering is to effectively ensure high product performance regardless of variability in production and end-use conditions.

After holding a study session themed on this engineering approach in fiscal 2012, we went on to implement a pilot project during fiscal 2013 under selected R&D themes, with external specialists serving as advisors. Although some research has yet to yield results, we will continuously practice this approach to enhance the quality of our products.

Collaborating in Chemical Industry Initiatives

HPV (High Production Volume) Program

DENKA has been participating in the HPV program, in which chemical companies collaboratively evaluate the safety of around 1,000 substances that are used heavily worldwide and are designated as priority substances by the Organisation for Economic Co-operation and Development (OECD). The Company also takes part in the Japan Challenge Program, a similar initiative undertaken by the domestic chemical industry. Since fiscal 2011, DENKA has participated in JIPS,⁴ an initiative sponsored by the Japan Chemical Industry Association (JCIA) in support of GPS.⁵ Under JIPS, we collect and disclose information on hazardous substances while carrying out risk assessments. This initiative also resulted in preparing and posting GPS/JIPS Safety Summaries for three substances on the GPS portal site run by JCIA.

LRI (Long-range Research Initiative)

The Japan Chemical Industry Association, the American Chemistry Council and the European Chemical Industry Council oversee this program. The program entails conducting long-term basic research to correctly determine if and/or in what manner chemical substances affect human health and the environment. Currently, these bodies are engaged in long-term basic studies of such issues as ecological (environmental) toxicity due to exposure to chemical substances, neural toxicity and cancer caused by exposure to toxic chemicals, and endocrine hypersensitivity due to exposure to chemical substances.

1. Good Manufacturing Practices (GMP) refers to standards that Japan's Ministry of Health, Labour and Welfare established in its Ministerial Ordinance on Standards for Manufacturing Control and Quality Control for Drugs and Quasi-drugs.
2. The Japan Chemical Industry Association created a labeling format to augment the Yellow Card system. The labels present emergency guideline numbers and United Nations identification numbers for different chemicals transported simultaneously in relatively small amounts on the same vehicle. The labels aid in the proper handling of these chemicals in emergencies.
3. The Joint Article Management Promotion-consortium (JAMP)*'s Material Safety Data Sheet plus (MSDSplus) and Article Information Sheet systems provide standardized formats for presenting information on substances subject to management. MSDSplus is mainly for substances and agents that are upstream in the supply chain. Article manufacturers produce Article Information Sheets based on that information. JAMP aims to spread its systems throughout Japan and Southeast Asia.
- * JAMP is a cross-industry association established in Japan in 2006 to encourage companies to properly manage information on substances and compounds as well as on chemical substances in parts, plastics and other articles. JAMP also establishes mechanisms to disclose and present information on supply-chain products.
4. Japan Initiative of Product Stewardship (JIPS): Domestic chemical manufacturers' voluntary initiative to control the risk of chemical substances encompassing their supply chains.
5. Global Product Strategy (GPS): A voluntary initiative promoted by the International Council of Chemical Associations (ICCA) to control the risk of chemical substances.

Streamlining Logistics for Further Energy Savings

Response to the Revised Law Concerning the Rational Use of Energy

As a designated shipper,* we are dedicated to enhancing the efficiency and environment friendliness of our logistics operations, namely the transportation and storage of products, with the aim of improving customer satisfaction.

In recent years, an upturn in the domestic economy has caused cargo transportation volumes to grow and the supply of trucks and cargo vessels to tighten. Securing a stable means of product distribution has therefore become crucial to customer service. Under the banner of "scrutinize every cost element" set forth in the DENKA100 new growth strategies, we are striving to overhaul our distribution structure with the aim of optimizing logistics. Accordingly, we are promoting modal shifts while consolidating storage facilities, including those located overseas. In these ways, we will develop a more robust logistics platform.

In fiscal 2013, although the Company's total transportation volume was 567 million t-km, up 6.5% compared with fiscal 2012, we were able to cut energy consumption intensity 0.9% year on year. This almost matched our year-on-year reduction target of 1% and was attributable to the success of efforts to enhance transportation efficiency. The CO₂ emission volume increased 5.5% year on year in step with rising transportation volume. Looking ahead, we will further pursue optimal logistics operations in line with ongoing efforts to promote energy savings and reduce energy consumption intensity.

* Designated under the Revised Law Concerning the Rational Use of Energy: Business operators whose annual transportation volume exceeds 30 million t-km are obligated to fulfill specific requirements under said law, including submitting reports on their energy-saving targets and achievements.

Energy Saving Status

(FY)	2009	2010	2011	2012	2013
Transportation volume (1,000t-km)	618,865	605,609	521,131	0.95	567,484
Energy consumption intensity*	0.0240	0.0239	0.0250	0.0246	0.0244
Change from fiscal 2012		99.6%	104.8%	98.3%	99.1%
CO ₂ emissions (t-CO ₂)	39,500	38,500	34,700	34,800	36,707

* Crude oil equivalent divided by cargo volume

Initiatives Undertaken by the Logistics Subcommittee

In addition to reviewing our distribution structure, we are striving to reinforce our logistics platform.

1. Logistics Safety Working Team

From fiscal 2013 onward, each plant is undertaking periodic worksite patrols to raise safety awareness, with selected staff inspecting logistics-related facilities.

2. Logistics Training Working Team

The Omuta Plant hosted hands-on training for efficient warehousing within the factory premises, with external consultants giving lectures.



Safety inspection undertaken at the Iseaki Plant



Hands-on training on storage management implemented at the Omuta Plant

Initiatives Aimed at Streamlining Exports of Special Cement Additives

The Special Cement Additives Dept., which markets a number of concrete improvers and other related products to domestic and overseas customers, has taken on the challenges of improving the efficiency and energy use of its export operations. Previously, the department had been transporting most of its output from the Omi Plant (Itoigawa, Niigata Prefecture) to the Tokyo metropolitan area, where it was reloaded on cargo vessels heading overseas. Revising this distribution structure, the department began exporting through Naoetsu and other ports nearer the plant using containers pre-loaded on plant premises.

This initiative was initiated in fiscal 2013 on a trial basis, and the volume of products exported through the new transportation route totaled approximately 700 tons. We will further promote this shift to reduce CO₂ emissions and transportation costs.



Loading yard of the Omi Plant



Loading products for export into shipping containers

We Proactively Utilize Subsidy Programs to Develop Technologies That Reduce the Environmental Burden and Energy Consumption.

Occupational Safety and Health Management System

DENKA conducts risk assessments to monitor the degree of risk at each plant. Based on assessment results, we comprehensively manage risks and implement improvements. The status of certification acquisition from external institutions is as in the following table.

Although the Shibukawa Plant has yet to acquire certification for its occupational safety and health management system, the plant is implementing safety management and

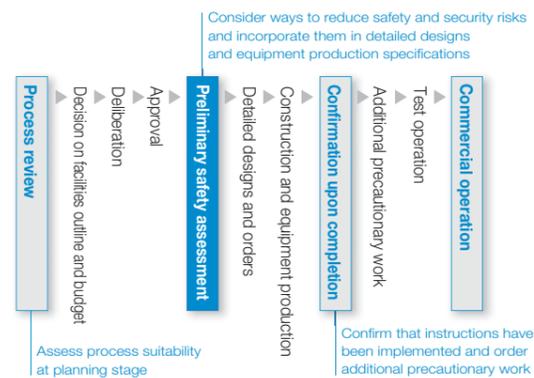
promotion activities equivalent to those prescribed by a certified system.

Plant Name	Certification System	Certification Number	Acquisition Date
Chiba Plant	OHSAS 18001	279788	February 6, 2007
Omi Plant	OSHMS	10-15-6	March 8, 2010
DSPL Seraya Plant	OHSAS 18001	SNG6011133	January 23, 2011

Change Management

This encompasses establishing rules to assess risks and implement measures where needed for changes in the 4Ms* during production. Preliminary safety assessments are important when building plants that use new processes. Change management comes into play when we upgrade or modify facilities. Facilities and operations departments conduct preliminary safety assessments and gather with in-house third parties to discuss risks relating to fires, explosions and worker safety. In particular, we emphasize preventing key lapses in areas concerning disaster prevention and occupational health.

* 4Ms: Man, Machines (facilities, equipment, tools), Materials (raw materials and components) and Methods (including work methods/operations, processing conditions and formulas)



Initiatives under the Government Subsidy Programs

As part of its activities to reduce the environmental burden as well as energy consumption, DENKA actively utilizes subsidy programs provided by the Japanese Ministry of the Environment (MOE) and the Ministry of Economy, Trade and Industry (METI). It also utilizes subsidies aimed at facilitating public-private cooperation in advanced technology pilot projects as well as at encouraging Japan-based production and R&D facility construction.

During the fiscal 2010 to 2013 period, DENKA received subsidies and approvals for subsidies for ten projects.

- As for energy-saving initiatives, the Omi Plant's cement and POVAL sections and the Chiba Plant's styrene monomer section, etc., have succeeded in reducing annual energy consumption well in excess of their targets. Both plants are applying for continued energy-saving-related subsidies in fiscal 2014.
- Among initiatives aimed at reducing environmental burden, the Shibukawa Plant was able to considerably surpass

its target for CO₂ emissions reduction, entitling it to CO₂ emission credits. The Omuta Plant succeeded in developing a method to recycle slaked lime, a byproduct of acetylene manufacture, into cement products.

- The Omuta Plant won two governmental pilot projects for testing advanced silicon nitride and boron nitride production facilities under the Innovation Center Establishment Assistance Program. Construction is now under way at the Chiba Plant to establish an ultra-pure acetylene black production facility that utilizes the Domestic Business Location Promotion Project Subsidy. In addition, the development of a breakthrough technology for next-generation LiBs that is under way at the DENKA Innovation Center's Advanced Technologies Research Institute was selected as a project under the support of METI's Program for Accelerating Breakthrough Innovation for Practical Applications.

	Category	Project	Business site	Subsidy title, Relevant authority	Fiscal year
1	Energy saving	Introduction of energy-saving burners for cement calcining, etc.	Omi Plant	Subsidy program for the rationalization of business operators' energy use (METI)	FY2011
2	Energy saving	Introduction of the latest technologies at petrochemical plants (styrene monomer-related facilities)	Chiba Plant	Subsidy program for the rationalization of business operators' energy use (METI)	FY2011 and 2012
3	Energy saving	The improvement of heat recovery at the Omi Plant's POVAL production facilities	Omi Plant	Subsidy program for the rationalization of business operators' energy use (METI)	FY2012 and 2013
4	Energy saving	The introduction of high-performance burners for cement production	Omi Plant	Subsidy program for the rationalization of business operators' energy use (METI)	FY2013
5	The environment	CO ₂ emissions reduction initiative through a fuel changeover from A-class heavy oil to town gas and LPG	Shibukawa Plant	Voluntary Emissions Trading Scheme (MOE)	FY2010
6	The environment	Development of a method to recycle slaked lime generated from acetylene manufacture into cement products	Omuta Plant	Environment Research and Technology Development Fund (MOE)	FY2011 and 2012
7	Advanced technology	Demonstration of a high-frequency induction furnace for silicon nitride	Omuta Plant	Innovation Center Establishment Assistance Program (METI)	FY2012 and 2013
8	Advanced technology	Demonstration of a boron nitride production facility (for use in next-generation high-heat conductive fillers)	Omuta Plant	Innovation Center Establishment Assistance Program (METI)	FY2013 and 2014
9	Domestic business location	Establishment of a production facility for a high-performance conducting agent (acetylene black) for LiBs	Omuta Plant	Domestic Business Location Promotion Project Subsidy (METI)	FY2013 and 2014
10	Advanced technology	Establishment of an R&D facility for next-generation LiBs	Advanced Technologies Research Institute	Program for Accelerating Breakthrough Innovation for Practical Applications	FY2014



The Omi Plant's cement production facility



The Chiba Plant's styrene monomer production facility



The Omi Plant's POVAL production facility

We Apply Environmental Accounting Covering Investments and Spending and Their Environmental and Economic Effects.

Conservation Costs

The Company's environmental investments in fiscal 2013 were mainly accounted for by the following items: environmental conservation costs associated with the introduction of energy-saving facilities (41%); implementation of environmental burden reduction measures (31%); investments for the effective utilization of resources (15%); and R&D spending focused on developing energy-saving products (14%).

Conservation Cost Category	Details	Conservation Costs (millions of yen)	
		Investments	Expenses
1) Business site costs	(Subtotal)	1,153	2,302
a) Pollution prevention	Environmental burden reduction measures	416	1,795
b) Conservation	Energy saving	541	112
c) Recycling resources	Using resources effectively	197	395
2) Upstream and downstream costs	Changing raw materials, etc.	0	0
3) Administrative costs	Educational activities	0	24
4) R&D costs	Development of energy saving products, etc.	181	870
5) Social activity costs	Educational activities	0	11
6) Environmental damage costs	Community relations	0	99
7) Others		0	0
Total		1,334	3,306

Conservation Effects

We calculated the environmental load data. For more details, please also refer to the CSR Report 2014 (print or online version) and site reports.

Environmental Load	Units	FY2012 Results	FY2013 Results	Effects
CO ₂ emissions (from energy and non-energy sources)	10,000t	228	234	-6
SO _x emissions	t	116	124	-8
NO _x emissions	t	4,044	4,460	-416
Soot and dust emissions	t	93	73	20
COD (BOD) discharges	t	864	860	4
Water used	1,000m ³	77,860	76,750	1,110
PRTR substance emissions	t	103	90	13
Waste	1,000t	132	123	8
Final landfill waste	t	180	210	-30
CO ₂ emissions from transportation	1,000t	35	37	-2

Economic Effects

To present the actual economic effects of our environmental conservation measures, we calculated proceeds from selling and recycling waste as well as cost reductions in the form of energy savings and reductions in waste treatment costs.

Category	Item	Details	Effects (millions of yen)
Profits	Proceeds from selling waste from core operations and income from recycling waste	Sales profits	393
Cost reductions	Lowering energy costs by conserving energy	Conserving energy	350
	Reducing waste treatment costs by conserving or recycling resources	Using resources effectively	10
Total			753

Employing Proprietary Technologies, We Offer Products and Solutions That Contribute to Environmental Protection and Social Development.

Category: Protect the environment Improve the operational environment Reduce weight of finished goods Save resources and energy Contribute to society

Electronics & Innovative Products Division				
Category	Department	Product Name	Application	Benefits
	Electronic Products Dept.	DENKA AN PLATE, DENKA SN PLATE and ALSINK	Rolling stock, industrial instruments, electric and hybrid vehicles	Ceramic-based electronic circuit substrates with superior heat dispersion capabilities that, when used in such components as inverters and drive transistors, facilitate the downsizing and secure the greater reliability of units
	Advanced Specialty Materials Dept.	ALONBRIGHT	Phosphor for LEDs	A phosphor for white LEDs used in backlights for LCD TVs and various types of LED lights that helps to significantly reduce energy consumption
	Electronic Products Dept.	HITPLATE	Air conditioners, electronic circuit substrates for automotive parts	An electronic circuit substrate used in invertors that effectively disperses the heat emitted by drive transistors to protect electronic circuits and to facilitate the downsizing of such components
	Electronic Products Dept.		Electronic circuit substrates for LEDs	Electronic circuit substrates that help improve LED luminous efficiency by effectively dissipating the heat generated by LEDs
	Electronic Products Dept.	Thermally Conductive Sheets	Automotive parts, smartphones and tablets	Silicon insulating materials packed with ceramic filler that boast high thermal conductivity for use in hybrid and electric vehicles as heat dissipaters for power semiconductors, facilitating the downsizing of automotive parts
	Advanced Specialty Materials Dept.	Silicon nitride	Bearings for wind power turbines, mold-release agents for manufacturing silicon ingots for solar cells	High-strength ceramic material used in the bearings of wind power turbines to enhance durability while significantly reducing facility maintenance workload. It is also used as a mold-release agent for manufacturing silicon ingots being processed into solar cells.
	Advanced Specialty Materials Dept.	BN powder	LEDs	A highly heat-conducting material used as a filler for LED chips' encapsulant to disperse heat and thereby enhance LED's luminous efficiency
	Advanced Specialty Materials Dept.	Molded BN products	LED manufacturing equipment	Used in LED chip manufacturing equipment as an excellent, easy to cast insulation material
	Advanced Specialty Materials Dept.	Spherical fused silica filler	Semiconductor encapsulant fillers	An incombustible filler with a modified particle form and size mixed in the encapsulant used for semiconductors. Capable of protecting circuits from temperature fluctuations, it can be used to reduce the need for hazardous flame retardants.
	Advanced Specialty Materials Dept.	Spherical alumina	LEDs	Inserted into a resin matrix as a heat-conducting filler for the purpose of dissipating the heat generated by LED chips and thereby enhancing LED's luminous efficiency
	Adhesives & Solutions Dept.	HARDLOC (SGA)	Metal adhesion (substitute for welding)	An adhesive that hardens at room temperature and can be substituted for welding metal, reducing energy consumption significantly while eliminating the need to fix the deformation of metal materials
	Adhesives & Solutions Dept.	TEMPLOC	Temporary adhesives for the processing of glass in smartphones	A temporary UV-curing fixing adhesive that can be removed with hot water rather than solvents, thereby reducing environmental burdens attributable to wastewater treatment and heat processing while facilitating cost reduction by enabling "laminated-glass cutting"
	Adhesives & Solutions Dept.	SOLARLOC	Temporary adhesives used for slicing silicon ingots being processed into solar cells	A 2-component type adhesive removable with hot water rather than organic solvents, thereby reducing environmental burdens attributable to wastewater treatment and heat processing

Category: Protect the environment Improve the operational environment Reduce weight of finished goods Save resource and energy Contribute to society

Infrastructure & Inorganic Materials Division				
Category	Department	Product Name	Application	Benefits
	Special Cement Additives Dept.	EIEN/SUICOM	EIEN: Embedded concrete molds, radioactive waste containers SUICOM: Vegetation blocks, foundation blocks	Incorporating special cement additives, EIEN can densify the internal structure of concrete by reacting with carbonate ions. In addition to absorbing CO ₂ in its production process, it helps prolong the lives of buildings, thereby reducing CO ₂ emitted from demolition and construction processes. During production, SUICOM absorbs CO ₂ and thereby hardens concrete thanks to carbonization caused by a special cement additive made using slaked lime, which generates no CO ₂ even at the raw material stage.
	Special Cement Additives Dept.	DENKA Σ1000, 2000, 6000	Concrete piles, propulsive pipes, box culverts, high-strength piles, pillars for buildings, concrete secondary products, cast-in-place concrete	<ul style="list-style-type: none"> • These products effectively utilize industrial byproducts emitted from steelworks and thermal power generation plants as raw materials. • When supplemented with Σ1000 and 2000, high-strength concrete can be made through steam curing. These products also perform well with blast furnace cement made of recycled steel slag. Concrete made of blast furnace cement supplemented with Σ1000 boasts approximately 40% or lower CO₂ emissions intensity than autoclave cured cement. • Σ6000 reduces high-strength concrete's CO₂ emissions intensity by more than 30%. Moreover, the concrete produced boasts superior abrasion resistance and durability and can be recycled multiple times.
	Special Cement Additives Dept.	F-DAC	Additive used for vibrating compaction	<ul style="list-style-type: none"> • This product effectively utilizes the industrial byproducts of steelworks and thermal power generation plants as raw materials. • F-DAC helps shorten time required for the pre-curing and steam curing processes, thereby contributing to the reduction of CO₂ emissions. It also performs well with blast furnace cement made from recycled steel slag. Concrete produced using blast furnace cement and F-DAC boasts approximately 40% lower CO₂ emissions intensity than steam-cured concrete.
	Special Cement Additives Dept.	NATMIC (T-10)	Shotcrete (high strength and low dust generation)	<ul style="list-style-type: none"> • This product effectively utilizes industrial byproducts emitted from steelworks and thermal power generation plants as raw materials. • NATMIC hardens quickly and thus is used as a shotcrete for tunnel construction. It also performs well with blast furnace cement made with recycled steel slag. When this product is added into blast furnace cement, the resulting concrete's CO₂ emissions intensity is approximately 50% lower than that of other type of concrete supplemented with the product.
	Special Cement Additives Dept.	DENKA slurry shot method (NATMIC US-32, US-50)	Shotcrete for tunnels	This method applies quick-hardening cement as a shotcrete for tunnel construction. It reduces dust and concrete splash during the spraying process, thereby helping to improve the workplace environment while decreasing material loss.
	Special Cement Additives Dept.	Clear shot method (NATMIC LSA, USS)	Shotcrete for tunnels	Employing quick-hardening cement with a low alkaline content, this method improves the workplace environment in tunnel construction. By reducing dust and concrete splash, it also helps to decrease material loss during the spraying process.
	Special Cement Additives Dept.	Electrochemical repair	Countermeasure against concrete deterioration due to neutralization and salt damage, etc., DENKA TECHNOCRETE SYSTEM	Desalination (electrochemical repair) is an environment-friendly repair method capable of reducing CO ₂ emissions by approximately 30% compared with conventional surface repair methods. Moreover, a surface coating applied after the repair reduces the need for future repairs as well as CO ₂ emissions over a structure's useful life.
	Cement Dept.	DENKA Cement	Utilization of industrial waste	With the aim of contributing to a recycling-oriented society, this product utilizes waste produced by nearby municipal bodies and industrial byproducts as raw materials and fuels for cement production. It also utilizes ash derived from the combustion of scrap wood in a biomass boiler that powers the Omi Plant's production system.
	Special Cement Additives Dept.	Super Cement	Emergency repair of roads, railways and airports	This ultraquick-hardening concrete gains practical strength over a short time period, helping to restore the transportation infrastructure quickly at the time of emergency.
	Special Cement Additives Dept.	F-DAC B-FORM	Concrete secondary products	Facilitating the hardening and solidification of concrete, this cement additive shortens curing time while reducing fuel use, thereby enhancing production efficiency and cost effectiveness.
	Special Cement Additives Dept.	SUNTIGHT T-K, T-F	Repair and maintenance of sewage systems	This acid-resistant mortar for repair and maintenance use can enhance sewage systems' durability, preventing the deterioration of concrete due to sulfuric acid exposure.

Category: Protect the environment Improve the operational environment Reduce weight of finished goods Save resource and energy Contribute to society

Infrastructure & Inorganic Materials Division				
Category	Department	Product Name	Application	Benefits
	Special Cement Additives Dept.	SUQCEM	Concrete precast products	An ultra-high strength fiber-reinforced concrete that significantly reduces construction expenses and life cycle costs by facilitating the construction of lighter, stronger structures
	Special Cement Additives Dept.	DENKA SOIL PACK SP20, SP2000	Soil liquefaction countermeasures	Soil stabilization materials that strengthen soft ground by causing dehydration when mixed directly into the soil.
	Special Cement Additives Dept.	ES, ES-L		Boasting high durability, these cement-based quick-hardening materials accelerate the solidification and hardening of cement in terrestrial grouting work performed during construction.
	Special Cement Additives Dept.	DENKA Colloidal Super		Boasting high strength and durability as well as excellent permeability, this super-fine powder cement additive is used in terrestrial grouting work.
	Special Cement Additives Dept.	DENKA S pack	Hardening materials with plasticity, used as cavity sealants for soil improvement work	A grout additive used as the primary injection material in the dual-tube double packer grouting method aimed at stabilizing ground, preventing water intrusion and countering soil liquefaction
	Special Cement Additives Dept.	CG1000, CG2000		
	Agri-Products Dept.	AZUMIN (Magnesium Humate soil fertilizer)	Fertilizer, agrochemicals	When mixed into desalinized soil, AZUMIN humic acid fertilizer improves agricultural yields, thereby helping restore farmland damaged by tsunami.
	Agri-Products Dept.	Calcium cyanamide	Fertilizer, agrochemicals	In addition to being used as a fertilizer, calcium cyanamide was certified under the Japanese government's J-Credit Scheme for its ability to lower emissions of N ₂ O attributable to the use of nitrogen fertilizers by more than 39% when it is employed as a supplement (24% or greater ratio) to such fertilizers.* *A study conducted by the National Agriculture and Food Research Organization has estimated that the use of supplemented fertilizer in tea plantations countrywide would have a GHG reduction effect equivalent to the planting of 200 million cedar trees. (The global warming potential of N ₂ O is approximately 300 times greater than that of CO ₂)
	Inorganic Products Dept.	Synthetic FLUX COMPOUND	Desulfurizing agent, deoxidizing agent	Product lineup includes Eco FLUX, which contains no fluorine, an environmentally harmful chemical.
	Inorganic Products Dept.	DENKA ALCEN	Automobile parts (catalyst holder), materials for heating furnaces and industrial furnaces	This alumina fiber, which is used to hold catalysts that purify automobile exhausts, helps reduce the weight of automotive parts by facilitating the switch from cast iron to aluminum, thereby enhancing fuel efficiency. It is also used as a thermal insulator for furnaces and is helping reduce heat loss. When used in fire-resistant linings, the product reduces the need for repair work as it boasts greater heat resistance than that of ceramic fibers.
	Inorganic Products Dept.	Alumina cement	Steelmaking and refining of non-ferrous metals	Boasting superior heat resistance, this product is used in fire-resistant materials for such equipment as steel ladles, helping enhance their heat insulating properties.

Category: Protect the environment Improve the operational environment Reduce weight of finished goods Save resource and energy Contribute to society

Elastomers & Performance Plastics Division				
Category	Department	Product Name	Application	Benefits
	Elastomers & Acetylene Black Dept.	DENKA BLACK	Lithium-ion secondary cells (conductive aid, activating agents for electrodes)	Ultra-pure electro-conductive carbon black used as a conductive aid for electrodes to enhance battery performance
	Elastomers & Acetylene Black Dept.	DENKA BLACK	Tire bladders	Incorporated in bladders* used in the manufacture (vulcanization) of tires to improve heat conductivity and thus shorten vulcanization time and contribute to energy savings * A balloon-like device that inflates and applies pressure to hold the rubber against the tire mold
	Elastomers & Acetylene Black Dept.	DENKA CHLOROPRENE	Gaskets for solar cells, vibration insulation rubber for wind power generation, charging cables for electric vehicles	Due to its flame resistance and ability to control vibrations, this product is used in gaskets for solar cells installed on housing rooftops and charging cables for electric vehicles in addition to as vibration insulation rubber for wind turbine nacelles (covers that house power generation components).
	Elastomers & Acetylene Black Dept.	Chloroprene latex	Aqueous adhesives	This product facilitates a changeover in chloroprene-based adhesive solvents from volatile organic compound (VOC) to aqueous solutions, thereby helping reduce environmental burdens and improve the workplace environment.
	Performance Plastics Dept.	CLEAREN	Food packaging materials	CLEAREN can be processed at a temperature 50C° lower than that of its competitor PET-G, while also being 20% lighter than PET-G, thereby reducing energy use in processing and transportation.
	Performance Plastics Dept.	MS Polymer	Transparent molded resin products	Incorporating PS as an ingredient, MS Polymer is 6% lighter than resins used for the same applications that consist only of PMMA, and therefore requires less energy in transportation.

Life Science & Environment Products Division				
Category	Department	Product Name	Application	Benefits
	Household Packaging Materials Dept.	SOFRIA	Food containers	Lighter than its competitor A-PET, SOFRIA helps reduce container weight and transportation costs.
	DENKA Polymer Co., Ltd.	Easy Disposal Pack	Food packaging	The Easy Disposal Pack helps reduce the weight of food packaging while curbing the bulk of household waste as it can be easily compressed after use.
	Environmental Film Dept.	DENKA DX FILM	Back sheets for solar panels	A fluorine-based film that boasts superior weather-resistance and thus helps enhance the durability of back sheets for solar panels
	Housing & Environmental Materials Dept.	Rain Oasis	Rainwater storage system	Used to collect rainwater through rain gutters. Collected rainwater may be used for watering the garden, cooling pavements and washing cars, contributing to the effective utilization of water resources.
	Housing & Environmental Materials Dept.	TOYODRAIN	Corrugated pipes for construction and agricultural use	Used in construction and farmland development, TOYODRAIN contributes to the effective utilization of water resources.
	Housing & Environmental Materials Dept.	TOYO GUTTERS	Rain gutters for housing and buildings	Protecting structures while contributing to the effective utilization of rainwater
	Medical Science Dept.	Macromolecular sodium hyaluronate preparation	Joint function improvement agent	Helping maintain quality of life by improving joint function

Supply Chain

The CSR Procurement Policies

1. We will maintain respect for human rights while striving to improve the workplace environment and occupational safety and health.
2. We will pursue environment-conscious procurement, striving to secure safety and to reduce our impact on the earth's environment.
3. We will undertake procurement activities based on compliance with relevant laws, regulations and corporate ethics.
4. We will purchase raw materials and equipment and consign construction work by comprehensively taking into account such factors as quality, prices and delivery time as well as suppliers' technological capabilities, supply reliability and their environmental conservation initiatives.

5. We will sincerely engage with our suppliers and treat them as important business partners, fostering mutual understanding and trustworthy relationships with them through fair business transactions.
6. We will not accept from our suppliers nor provide them with any gifts or entertainment of value that are deemed in excess of social norms or of an inappropriate nature.
7. We will not divulge any non-public information acquired in confidence from our suppliers in the course of procurement activities while properly managing and protecting their intellectual property rights.
8. We will maintain an equal partnership with all suppliers and provide them with equal opportunities for competition in a fair manner.

The CSR Procurement Guidelines

1. **Respect for Human Rights and Occupational Safety and Health:** A supplier is required to include respect for fundamental human rights and the pursuit of occupational safety and health in its corporate policy.
2. **Compliance with Laws and Regulations:** A supplier is required to include compliance with law and regulations, as well as fair corporate activities in accordance with social ethics, in its corporate policy.
3. **CSR Promotion:** A supplier is required to recognize CSR as being integral to its business activities. This entails including sustainable social and business development in its corporate policy and establishing an in-house CSR promotion structure.
4. **Environmental Conservation:** A supplier is required to include environmental conservation activities in its corporate policy and disclose the status of said activities to the general public. The said activities include the appropriate management of chemical substances contained in its products and green procurement.

5. **Product Quality and Safety:** A supplier is required to include quality and safety assurance in its corporate policy. Such activities are expected to take place under an established product quality management system.
6. **Fair and Just Business Transactions:** A supplier is required to include fair and just business transactions in its corporate policy.
7. **Risk Management:** A supplier is required to make sure that any risk or contingencies it may confront are managed and controlled through such means as the appropriate and timely information disclosure.
8. **Contribution to Society:** A supplier is required to include proactive contribution to local communities and global society in its corporate policy.
9. **Severing Ties with Antisocial Forces:** A supplier is required to not have any relationship with antisocial forces, whether they are individuals or entities.

Life Cycle Assessment (LCA) Initiative

We are promoting LCA for our mainstay products with an eye to ensuring the sustainability of our corporate activities. In doing so, we are striving to utilize LCA as a means of promoting energy saving and CO₂ reduction.

Main Achievements and Ongoing Initiatives:

- Completed LCA for 47 mainstay products (resin-based and inorganic products as well as electronic materials)
- Promoting the assessment of the direct and indirect effects of environment-friendly products designed to help reduce environmental burdens through their life cycles
- Participating in the carbon-Life Cycle Analysis (c-LCA) Committee hosted by the Japan Chemical Industry Association
- Providing LCA-related information in response to customers' requests
- Held LCA presentation meetings at the following business sites to report the results of relevant LCA initiatives
 - ▶ The Shibukawa Plant (March 13, 2013)
 - ▶ The Isesaki Plant (May 28, 2013)
 - ▶ The Ofuna Plant (August 21, 2013)



LCA presentation meetings (the Shibukawa Plant)



LCA presentation meetings (the Ofuna Plant)

Local Communities

Main Educational Support Initiatives Undertaken by the DENKA Group (Fiscal 2013)

Experimental Science Classes	The Innovation Center and Head Office	The Summer Holiday Chemical Experiment Show for Children sponsored by the "Dream Chemistry 21" committee
	The Omi Plant	<i>Geomaru & Nuna to Omoshiro Science</i>
	The Omuta Plant	On-demand lectures at Tenryo Elementary School and Meiji Elementary School as well as the Omuta Ecotown Fair
	The Shibukawa Plant	Kanashima Elementary School and Shibukawa Technical High School
	The Ofuna Plant	Yamasaki Elementary School
Plant Tours	The Innovation Center	Tadao Elementary School and Machida Dai-Yon Elementary School
	The Omuta Plant	Miike Community Study Group, "child reporters" from Nishi Nihon Shimbun Newspaper, Miike Technical High School and Miyakonojo National College of Technology
	The Chiba Plant	Wakamiya Elementary School, Takushoku University Koryo High School, Tateyama Sogo High School and plant tours for local elementary school students held in cooperation with other locally based companies
	The Shibukawa Plant	Shibukawa Technical High School
Internship	The Ofuna Plant	Kamakura Jogakuin Junior High School
	The Chiba Plant	Chiba Technical High School
Other Initiatives	Head Office	Sponsoring the Fureai Trio's classical music concerts at elementary schools nationwide
		Holding basketball clinics for children in tandem with the NIIGATA ALBIREX BB

Experimental Science Classes



• Summer Holiday Chemical Experiment Show for Children (the Innovation Center and Head Office)



• *Geomaru & Nuna to Omoshiro Science* (the Omi Plant)



• The Omuta Ecotown Fair (the Omuta Plant)



• Experimental science class at Kanashima Elementary School (the Shibukawa Plant)



• Lecture on the science of adhesives at Shibukawa Technical High School (the Shibukawa Plant)



• Experimental science class in spring vacation season (the Shibukawa Plant)



• Yamasaki Elementary School (the Ofuna Plant)



• Tadao Elementary School (the Innovation Center)

Plant Tours



• Members of Miike Community Study Group touring the Omuta Plant



• Local elementary school students touring the Chiba Plant facilities as a part of a tour jointly hosted by DENKA and other locally based companies



• Plant tour during the summer vacation season to which employees' families are invited (the Chiba Plant)



• Kamakura Jogakuin Junior High School students touring the Ofuna Plant

Board of Directors / Audit & Supervisory Board / Executive Officers

Board of Directors

Representative Director, President	Shinsuke Yoshitaka
Representative Director	Hitoshi Watanabe
Director	Tetsuro Maeda
Director	Mitsukuni Ayabe
Director	Shinji Sugiyama
Director	Hideyuki Udagawa
Director	Manabu Yamamoto
Director	Kozo Tanaka (Outside Director)
Director	Tadashi Hashimoto (Outside Director)

Audit & Supervisory Board

Audit & Supervisory Board Member	Hideo Oishi
Audit & Supervisory Board Member	Jiro Hiroe
Audit & Supervisory Board Member	Toshiaki Tada (Outside)
Audit & Supervisory Board Member	Tsunehiro Sasanami (Outside)

Executive Officers

President and Chief Executive Officer	Shinsuke Yoshitaka
Senior Managing Executive Officer	Hitoshi Watanabe
Senior Managing Executive Officer	Mitsukuni Ayabe
Managing Executive Officer	Shinji Sugiyama
Managing Executive Officer	Hideyuki Udagawa
Managing Executive Officer	Manabu Yamamoto
Managing Executive Officer	Shohei Tamaki
Managing Executive Officer	Norihiro Shimizu
Managing Executive Officer	Toshiharu Kano
Managing Executive Officer	Sanshiro Matsushita
Managing Executive Officer	Kenji Nakano
Executive Officer	Akihiko Okuda
Executive Officer	Masaharu Suzuki
Executive Officer	Ken Koizumi
Executive Officer	Tetsuya Shinmura
Executive Officer	Junichi Kimura
Executive Officer	Toshio Imai

Consolidated Balance Sheets (Summary)

Millions of yen

Account item	As of Mar. 31, 2014	As of Mar. 31, 2013
Assets		
Current assets	164,747	158,595
Cash and deposits	8,427	10,800
Notes and accounts receivable, trade	83,701	77,111
Inventories	62,816	60,712
Other	10,107	10,474
Allowance for doubtful accounts	(305)	(503)
Non-current assets	266,599	256,761
Property, plant and equipment	211,783	206,214
Intangible fixed assets	1,299	1,243
Investment securities	46,562	42,665
Other	7,016	6,786
Allowance for doubtful accounts	(61)	(148)
Total assets	431,347	415,356
Liabilities		
Current liabilities	163,645	170,752
Notes and accounts payable, trade	54,238	55,226
Short-term loans	50,006	47,085
Commercial paper	10,000	14,000
Current portion of bonds	5,000	10,000
Other current liabilities	44,401	44,440
Long-term liabilities	78,185	63,894
Bonds payable	25,000	15,000
Long-term loans payable	30,663	28,156
Other	22,522	20,738
Total liabilities	241,831	234,647
Net Assets		
Shareholders' equity	170,894	165,043
Capital stock	36,998	36,998
Capital surplus	49,284	49,284
Retained earnings	89,562	80,693
Treasury stock	(4,951)	(1,933)
Accumulated other comprehensive income	16,762	13,957
Minority interests	1,858	1,707
Total net assets	189,516	180,709
Total liabilities and net assets	431,347	415,356

Consolidated Statements of Income (Summary)

Millions of yen

Account item	Apr. 1, 2013 to Mar. 31, 2014	Apr. 1, 2012 to Mar. 31, 2013
Net sales	376,809	341,645
Cost of sales	299,671	269,326
Selling, general and administrative expenses	55,908	53,501
Operating income	21,230	18,817
Non-operating income	3,595	3,414
Non-operating expense	4,221	4,407
Ordinary income	20,604	17,824
Extraordinary losses	281	590
Income before income taxes and minority interests	20,322	17,233
Income taxes—current	5,776	5,959
Income taxes—deferred	858	(132)
Minority interests in income	114	151
Net income	13,573	11,255

Consolidated Statements of Comprehensive Income

Millions of yen

Account item	Apr. 1, 2013 to Mar. 31, 2014	Apr. 1, 2012 to Mar. 31, 2013
Income before minority interests	13,688	11,406
Other comprehensive income		
Valuation difference on available-for-sale securities	1,133	2,380
Deferred gains or losses on hedges	—	1
Revaluation reserve for land	—	—
Foreign currency translation adjustments	3,128	1,357
Share of other comprehensive income of associates accounted for using equity method	36	80
Total other comprehensive income	4,297	3,820
Comprehensive Income	17,986	15,227
(Breakdown)		
Comprehensive income attributable to owners of the parent	17,800	15,033
Comprehensive income attributable to owners of the minority interests	186	194

Consolidated Statement of Shareholders' Equity (April 1, 2013 to March 31, 2014)

Millions of yen

	Shareholders' Equity				
	Capital Stock	Capital Surplus	Retained Earnings	Treasury Stock	Total Shareholders' Equity
Balance at April 1, 2013	36,998	49,284	80,693	(1,933)	165,043
Changes of items during the period					
Dividends from surplus			(4,704)		(4,704)
Net income			13,573		13,573
Purchase of treasury stock				(3,018)	(3,018)
Disposal of treasury stock		0		0	1
Reversal of revaluation reserve for land			(1)		(1)
Net changes of items other than shareholders' equity					—
Total changes of items during the period	—	0	8,868	(3,018)	5,850
Balance at March 31, 2014	36,998	49,284	89,562	(4,951)	170,894

	Other Accumulated Comprehensive Income					Minority Interests	Total Net Assets
	Valuation Difference on Available-for-Sale Securities	Revaluation Reserve for Land	Foreign Currency Translation Adjustments	Remeasurements of Defined Benefit Plans	Total Valuation and Translation Adjustments		
Balance at April 1, 2013	7,516	9,064	(2,623)	—	13,957	1,707	180,709
Changes of items during the period							
Dividends from surplus					—		(4,704)
Net income					—		13,573
Purchase of treasury stock					—		(3,018)
Disposal of treasury stock					—		1
Reversal of revaluation reserve for land					—		(1)
Net changes of items other than shareholders' equity	1,123	1	3,103	(1,422)	2,805	150	2,956
Total changes of items during the period	1,123	1	3,103	(1,422)	2,805	150	8,806
Balance at March 31, 2014	8,640	9,065	479	(1,422)	16,762	1,858	189,516

Consolidated Statements of Cash Flows (Summary)

Millions of yen

Account item	Apr. 1, 2013 to Mar. 31, 2014	Apr. 1, 2012 to Mar. 31, 2013
Net cash provided by operating activities	27,245	40,215
Net cash used in investing activities	(26,693)	(25,864)
Net cash used in financing activities	(3,327)	(12,784)
Effect of exchange rate changes on cash and cash equivalents	339	153
Net increase (decrease) in cash and cash equivalents	(2,436)	1,720
Cash and cash equivalents at the beginning of the year	10,680	8,207
Increase in cash and cash equivalents due to the new consolidation of subsidiaries	—	481
Increase in cash and cash equivalents due to the merger of non-consolidated subsidiaries	—	270
Cash and cash equivalents at the end of the year	8,244	10,680

Please see below to find disclosure information listed in the Sustainability Reporting Guidelines Version 3.1 (G3.1).

Note 1: Ref. = References (PDF), Site = Site Reports (PDF) Note 2: Core indicators are in boldface type.

Disclosure		Location of disclosure
PART I: Profile Disclosures		
1. Strategy and Analysis		
1.1	Statement from the most senior decision-maker of the organization	• To Our Stakeholders (p.4-5)
1.2	Description of key impacts, risks, and opportunities	• To Our Stakeholders (p.4-5) • DENKA's Group Operations and CSR (p.8-9) • DENKA Group's CSR (p.10-11) • Our Business Operations (p.12-13) • Responsible Care (RC) Activities (Ref. p.6)
2. Organizational Profile		
2.1	Name of the organization	• Corporate Profile (p.2)
2.2	Primary brands, products, and/or services	• Our Business Operations (p.14-17) • The DENKA Group's Environment-Friendly Products and Technologies (Ref. p.17-20)
2.3	Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures	• Corporate Profile (p.2) • Major Affiliates (Site p.16-26)
2.4	Location of organization's headquarters	• Corporate Profile (p.2)
2.5	Number of countries where the organization operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report	• Corporate Profile (p.2) • Overseas Subsidiaries (Site p.16-21)
2.6	Nature of ownership and legal form	• Corporate Profile (p.2)
2.7	Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries)	—
2.8	Scale of the reporting organization	• Corporate Profile (p.2-3) • Consolidated Financial Statements (Ref. p.24-25)
2.9	Significant changes during the reporting period regarding size, structure, or ownership	• Our Business Operations (p.12-13)
2.10	Awards received in the reporting period	• Site Reports (p.7, 11)
3. Report Parameters		
Report Profile		
3.1	Reporting period (e.g., fiscal/calendar year) for information provided	• Editorial Policy (p.2) • Our Initiatives to Maintain Safe Operations (p.27)
3.2	Date of most recent previous report	• Previous CSR Reports (PDF)
3.3	Reporting cycle (annual, biennial, etc.)	• Previous CSR Reports (PDF)
3.4	Contact point for questions regarding the report or its contents	• Inquiries (p.2)
Report Scope and Boundary		
3.5	Process for defining report content	• DENKA's Group Operations and CSR (p.8-9) • DENKA Group's CSR (p.10-11) • With Our Stakeholders (p.34-38)
3.6	Boundary of the report (e.g., countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers)	• Editorial Policy (p.2) • Environmental Conservation (p.28-29)
3.7	State any specific limitations on the scope or boundary of the report	• Editorial Policy (p.2) • Environmental Conservation (p.28-29)
3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organizations	• Corporate Profile (p.2) • Our Initiatives to Maintain Safe Operations (p.26-27) • Environmental Conservation (p.28-29) • Initiatives to Secure Our Electricity Supply (p.30-31) • Site Reports
3.9	Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the indicators and other information in the report	• Environmental Conservation (p.28-29)
3.10	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement (e.g., mergers/acquisitions, change of base years/periods, nature of business, measurement methods)	—
3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report	• Environmental Conservation (p.29)
GRI Content Index		
3.12	Table identifying the location of the Standard Disclosures in the report	• GRI Content Index (Ref. p.26-30)
Assurance		
3.13	Policy and current practice with regard to seeking external assurance for the report	• Third-Party Opinion (p.39)
4. Governance, Commitments, and Engagement		
Governance		
4.1	Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight	• DENKA Group's CSR (p.10) • Corporate Governance (p.24-25)
4.2	Indicate whether the Chair of the highest governance body is also an executive officer	• Corporate Governance (p.24-25) • Corporate Officers (Ref. p.23)
4.3	For organizations that have a unitary board structure, state the number and gender of members of the highest governance body that are independent and/or non-executive members	• Corporate Governance (p.24-25) • Consolidated Financial Statements (Japanese only) • Disclosure on the Internet accompanying the Notice of Convocation of the 155th Ordinary General Meeting of Shareholders
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body	• Corporate Governance (p.24-25) • Shareholders and Investors (p.35) • Disclosure on the Internet accompanying the Notice of Convocation of the 155th Ordinary General Meeting of Shareholders
4.5	Linkage between compensation for members of the highest governance body, senior managers, and executives (including departure arrangements), and the organization's performance (including social and environmental performance)	• Consolidated Financial Statements (Japanese only) • Disclosure on the Internet accompanying the Notice of Convocation of the 155th Ordinary General Meeting of Shareholders
4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided	• Corporate Governance (p.24-25) • Disclosure on the Internet accompanying the Notice of Convocation of the 155th Ordinary General Meeting of Shareholders
4.7	Process for determining the composition, qualifications, and expertise of the members of the highest governance body and its committees, including any consideration of gender and other indicators of diversity	• Disclosure on the Internet accompanying the Notice of Convocation of the 155th Ordinary General Meeting of Shareholders

Disclosure		Location of disclosure
4.8	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation	• To Our Stakeholders (p.4-5) • DENKA's Group Operations and CSR (p.8-9) • Fiscal 2013 Overview / DENKA100 New Growth Strategies (p.12-13) • Environmental Conservation (p.28) • Employees (p.36) • The DENKA Group Guidelines (Ref. p.3)
4.9	Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental, and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles	• Corporate Governance (p.24-25) • Responsible Care (RC) Activities (Ref. p.6)
4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance	• Corporate Governance (p.24-25) • Our Initiatives to Maintain Safe Operations (p.26)
Commitments to External Initiatives		
4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organization	• Corporate Governance (p.24) • Risk Management (p.25) • Our Initiatives to Maintain Safe Operations (p.26-27) • Supply Chain (p.34) • Compliance (Ref. p.4) • Responsible Care (RC) Activities (Ref. p.6)
4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses	• ISO 14001 and 9001 Management Systems (Ref. p.7) • Product Safety Management System (Ref. p.11-12) • Occupational Safety and Health Management System (Ref. p.14)
4.13	Memberships in associations (such as industry associations) and/or national/international advocacy organizations in which the organization: * Has positions in governance bodies; * Participates in projects or committees; * Provides substantive funding beyond routine membership dues; or * Views membership as strategic	• Product Safety Management System (Ref. p.12) • Life Cycle Assessment (LCA) Initiative (Ref. p.21)
Stakeholder Engagement		
4.14	List of stakeholder groups engaged by the organization	• With Our Stakeholders (p.34-38)
4.15	Basis for identification and selection of stakeholders with whom to engage	—
4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group	• With Our Stakeholders (p.34-38) • With Our Stakeholders (Ref. p.21-22)
4.17	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting	• DENKA's Group Operations and CSR (p.8-9) • With Our Stakeholders (p.34-38)
PART II: Disclosures on Management Approach (DMAs) and Performance Indicators		
Economic		
DMA	Disclosure on Management Approach	• To Our Stakeholders (p.4-5) • DENKA's Group Operations and CSR (p.8-9) • Our Business Operations (p.12-17) • Promoting Our R&D Activities (p.18)
Economic Performance Indicators		
Economic Performance		
EC1	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments	• Consolidated Financial Statements (Ref. p.24-25) • Consolidated Financial Statements (Japanese only)
EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change	• To Our Stakeholders (p.4-5) • Environmental Conservation (p.28-29)
EC3	Coverage of the organization's defined benefit plan obligations	• Consolidated Financial Statements (Japanese only)
EC4	Significant financial assistance received from government	• Environment- and Energy-Related Subsidies (Ref. p.15)
Market Presence		
EC5	Range of ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation	—
EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation	• Supply Chain (p.34) • Supply Chain (Ref. p.21)
EC7	Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation	—
Indirect Economic Impacts		
EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement	• Local Communities (p.38) • The DENKA Group's Environment-Friendly Products and Technologies (Ref. p.17-20) • Local Communities (Ref. p.22)
EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts	• Fiscal 2013 Overview (p.12)
Environmental		
DMA	Disclosure on Management Approach	• To Our Stakeholders (p.4-5) • Environmental Conservation (p.28-29) • Responsible Care (RC) Activities (Ref. p.6) • Site Reports
Environmental Performance Indicators		
Materials		
EN1	Materials used by weight or volume	—
EN2	Percentage of materials used that are recycled input materials	• Overview of Environmental Impacts (p.28) • Resource Recycling through Cement Production (p.32-33)
Energy		
EN3	Direct energy consumption by primary energy source	• Overview of Environmental Impacts (p.28)
EN4	Indirect energy consumption by primary source	• Overview of Environmental Impacts (p.28) • Initiatives to Secure Our Electricity Supply (p.30-31)
EN5	Energy saved due to conservation and efficiency improvements	• Environmental Conservation (p.28-29) • Streamlining Logistics for Further Energy Savings (Ref. p.13)
EN6	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives	• To Our Stakeholders (p.4-5) • Environmental Conservation (p.28-29) • The DENKA Group's Environment-Friendly Products and Technologies (Ref. p.17-20)
EN7	Initiatives to reduce indirect energy consumption and reductions achieved	• Environmental Conservation (p.28-29)

Disclosure		Location of disclosure
Water		
EN8	Total water withdrawal by source	• Overview of Environmental Impacts (p.28) • Site Reports
EN9	Water sources significantly affected by withdrawal of water	• Initiatives to Secure Our Electricity Supply (p.30-31)
EN10	Percentage and total volume of water recycled and reused	—
Biodiversity		
EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	• Site Reports (p.2)
EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas	—
EN13	Habitats protected or restored	—
EN14	Strategies, current actions, and future plans for managing impacts on biodiversity	—
EN15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk	—
Emissions, Effluents and Waste		
EN16	Total direct and indirect greenhouse gas emissions by weight	• Environmental Conservation (p.28-29) • Responsible Care (RC) Activities (Ref. p.6, 9-10) • Site Reports
EN17	Other relevant indirect greenhouse gas emissions by weight	• Streamlining Logistics for Further Energy Savings (Ref. p.13)
EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved	• To Our Stakeholders (p.4-5) • Environmental Conservation (p.28-29) • Streamlining Logistics for Further Energy Savings (Ref. p.13) • Life Cycle Assessment (LCA) Initiative (Ref. p.21)
EN19	Emissions of ozone-depleting substances by weight	• Overview of Environmental Impacts (p.28) • PRTR Substances (p.29) • Environmental Conservation (Ref. p.8-10)
EN20	NOx, SOx, and other significant air emissions by type and weight	• Overview of Environmental Impacts (p.28) • Environmental Conservation (Ref. p.8-10) • Site Reports
EN21	Total water discharge by quality and destination	• Overview of Environmental Impacts (p.28) • Environmental Conservation (Ref. p.8-10) • Site Reports
EN22	Total weight of waste by type and disposal method	• Environmental Conservation (p.28-29) • Environmental Conservation (Ref. p.9-10) • Site Reports
EN23	Total number and volume of significant spills	• Our Initiatives to Maintain Safe Operations (p.26-27)
EN24	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally	—
EN25	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff	—
Products and Services		
EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation	• Our Business Operations (p.14-17) • Initiatives to Secure Our Electricity Supply (p.30-31) • The DENKA Group's Environment-Friendly Products and Technologies (Ref. p.17-20)
EN27	Percentage of products sold and their packaging materials that are reclaimed by category	—
Compliance		
EN28	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	—
Transport		
EN29	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce	• Streamlining Logistics for Further Energy Savings (Ref. p.13)
Overall		
EN30	Total environmental protection expenditures and investments by type	• Environmental Accounting (Ref. p.16)
Social		
Social: Labor Practices and Decent Work		
DMA	Disclosure on Management Approach	• To Our Stakeholders (p.4-5) • Human Resource Development (p.22) / Employees (p.36) • Site Reports
Labor Practices and Decent Work Performance Indicators		
Employment		
LA1	Total workforce by employment type, employment contract, and region, broken down by gender	• Corporate Profile (p.2) • Employees (p.37) • Site Reports
LA2	Total number and rate of new employee hires and employee turnover by age group, gender, and region	• Employees (p.37)
LA3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations	• Employees (p.36-37)
LA15	Return to work and retention rates after parental leave, by gender	• Employees (p.36)
Labor/management Relations		
LA4	Percentage of employees covered by collective bargaining agreements	• Consolidated Financial Statements (Japanese only)
LA5	Minimum notice period(s) regarding significant operational changes, including whether it is specified in collective agreements	—
Occupational Health and Safety		
LA6	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs	—
LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region and by gender	• Our Initiatives to Maintain Safe Operations (p.26-27)
LA8	Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases	• Employees (p.36-37)

Disclosure		Location of disclosure
LA9	Health and safety topics covered in formal agreements with trade unions	• Employees (p.37)
Training and Education		
LA10	Average hours of training per year per employee by gender, and by employee category	—
LA11	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	• Human Resource Development (p.22-23) • Employees (p.37)
LA12	Percentage of employees receiving regular performance and career development reviews, by gender	—
Diversity and Equal Opportunity		
LA13	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity	• Employees (p.37)
Equal Remuneration for Women and Men		
LA14	Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation	—
Social: Human Rights		
DMA	Disclosure on Management Approach	• To Our Stakeholders (p.4-5) • Supply Chain (p.34) • The DENKA Group Guidelines (Ref. p.3) • Supply Chain (Ref. p.21)
Human Rights Performance Indicators		
Investment and Procurement Practices		
HR1	Percentage and total number of significant investment agreements and contracts that include clauses incorporating human rights concerns, or that have undergone human rights screening	—
HR2	Percentage of significant suppliers, contractors and other business partners that have undergone human rights screening, and actions taken	• Supply Chain (p.34)
HR3	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained	—
Non-discrimination		
HR4	Total number of incidents of discrimination and actions taken	—
Freedom of Association and Collective Bargaining		
HR5	Operations and significant suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and actions taken to support these rights	—
Child Labor		
HR6	Operations and significant suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor	• Supply Chain (Ref. p.21)
Forced and Compulsory Labor		
HR7	Operations and significant suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of all forms of forced or compulsory labor	• Supply Chain (p.34) • Supply Chain (Ref. p.21)
Security Practices		
HR8	Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations	• The DENKA Group Guidelines (Ref. p.3)
Indigenous Rights		
HR9	Total number of incidents of violations involving rights of indigenous people and actions taken	—
Assessment		
HR10	Percentage and total number of operations that have been subject to human rights reviews and/or impact assessments	—
Remediation		
HR11	Number of grievances related to human rights filed, addressed and resolved through formal grievance mechanisms	—
Social: Society		
DMA	Disclosure on Management Approach	• To Our Stakeholders (p.4-5) • Compliance (p.25) • Local Communities (p.38) • The DENKA Group Guidelines (Ref. p.3) • Compliance (Ref. p.4) • Site Reports
Society Performance Indicators		
Local Communities		
S01	Percentage of operations with implemented local community engagement, impact assessments, and development programs	—
S09	Operations with significant potential or actual negative impacts on local communities	• To Our Stakeholders (p.4) • Report on Accidents at Our Plants (p.6-7) • Our Initiatives to Maintain Safe Operations (p.26-27)
S010	Prevention and mitigation measures implemented in operations with significant potential or actual negative impacts on local communities	• To Our Stakeholders (p.4) • Report on Accidents at Our Plants (p.6-7) • Our Initiatives to Maintain Safe Operations (p.26-27)
Corruption		
S02	Percentage and total number of business units analyzed for risks related to corruption	—
S03	Percentage of employees trained in organization's anti-corruption policies and procedures	• Corporate Governance (p.24-25) • Compliance (Ref. p.4)
S04	Actions taken in response to incidents of corruption	—
Public Policy		
S05	Public policy positions and participation in public policy development and lobbying	• Environment- and Energy-Related Subsidies (Ref. p.15)
S06	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country	—
Anti-competitive Behavior		
S07	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes	—
Compliance		
S08	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	—

Disclosure		Location of disclosure
Social: Product Responsibility		
DMA	Disclosure on Management Approach	<ul style="list-style-type: none"> • Promoting Further Innovation (p.20) • Supply Chain (p.34) • Responsible Care (RC) Activities (Ref. p.6) • ISO9001 Management System (Ref. p.7) • Product Safety Management System (Ref. p.11-12)
Product Responsibility Performance Indicators		
Customer Health and Safety		
PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures	<ul style="list-style-type: none"> • Product Safety Management System (Ref. p.11-12) • ISO9001 Management System (Ref. p.7)
PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes	<ul style="list-style-type: none"> • Supply Chain (p.34) • Product Safety Management System (Ref. p.4-5)
Product and Service Labelling		
PR3	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements	<ul style="list-style-type: none"> • Our Business Operations (p.14-17)
PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes	<ul style="list-style-type: none"> • Supply Chain (p.34) • Product Safety Management System (Ref. p.4-5)
PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction	—
Marketing Communications		
PR6	Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship	<ul style="list-style-type: none"> • Shareholders and Investors (p.35) • Information Security/System Administration/Online Information Management (Ref. p.5)
PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes	<ul style="list-style-type: none"> • Shareholders and Investors (p.35) • Information Security/System Administration/Online Information Management (Ref. p.5)
Customer Privacy		
PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	—
Compliance		
PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services	—