

# CSR Report 2016

Corporate Social Responsibility Report

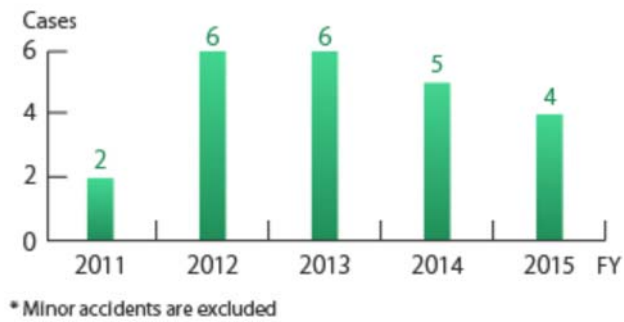
PDF Ver.



# Data Safety Data

- ▶ Number of facility-related accidents (Mitsubishi Chemical Corporation Group (MCC Group))
- ▶ Lost-time injury frequency/severity rate
- ▶ Categories of lost-time injury accidents (MCC Group)
- ▶ Percentage of specific health guidance (MCC)
- ▶ Number of illness-related workday absences (MCC in fiscal 2015)
- ▶ Investments and expenses for accident prevention and safety (MCC)

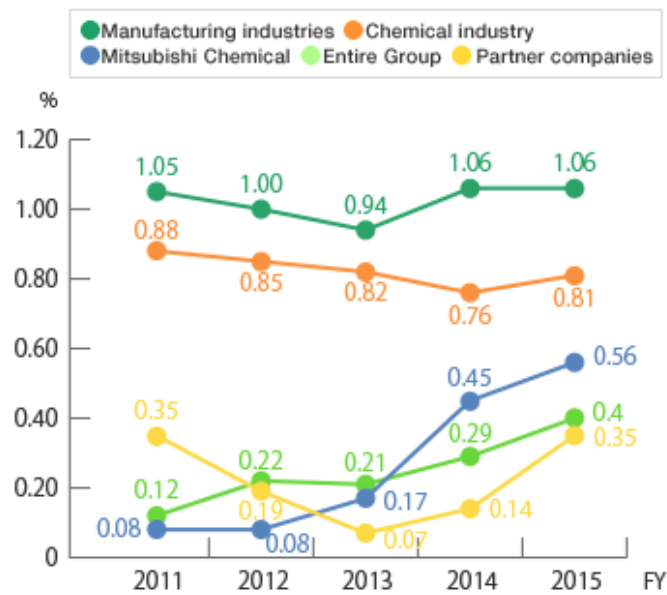
● **Number of facility-related accidents (Mitsubishi Chemical Corporation Group (MCC Group))**



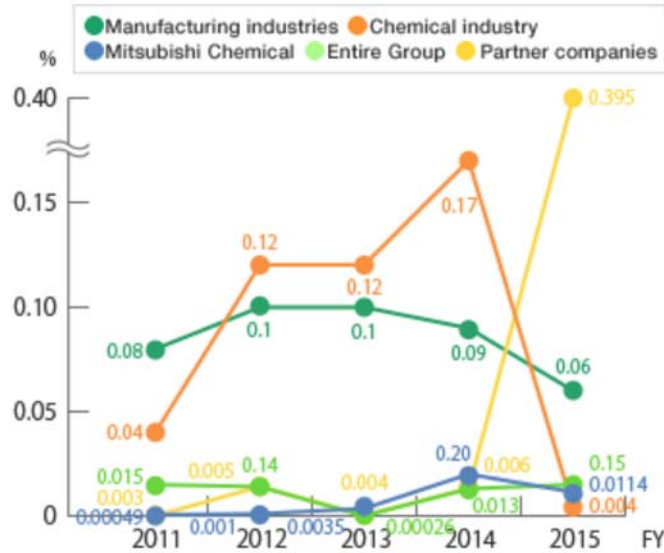
▶ See the Process Safety and Disaster Prevention page for details

● **Lost-time injury frequency/severity rate**

1) Lost-time injury frequency

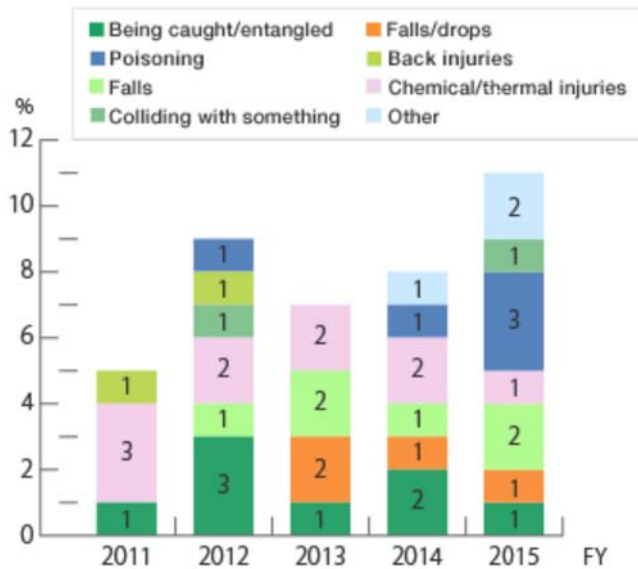


2) Lost-time injury severity rate

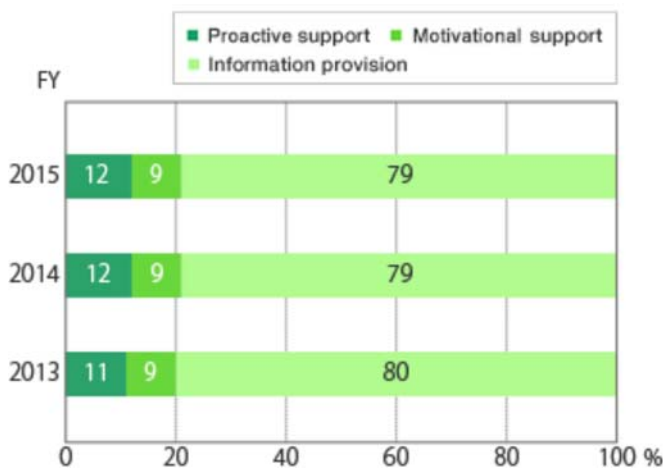


▶ See Occupational safety and health page for details

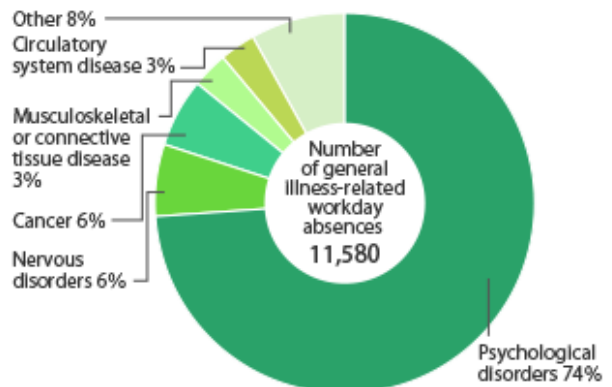
• Categories of lost-time injury accidents (MCC Group)



• Percentage of specific health guidance (MCC)



• Number of illness-related workday absences (MCC in fiscal 2015)



\* Statistical scope changed from fiscal 2015

▶ See Occupational safety and health page for details

● Investments and expenses for accident prevention and safety (MCC)

(million yen)

Accident prevention and safety costs		2014	2015
Category	Main implementation items	Investment amount	
Cost of legal responses relating to accident prevention and safety	Earthquake countermeasures, installation and maintenance of new fire prevention and fire extinguishing facilities, legal inspections, etc.	1,202	1,119
Cost of voluntary risk management responses relating to accident prevention and safety	Tighter security for manufacturing facilities, repair expenses associated with accident prevention and safety, purchase of nitrogen for accident prevention, etc.	6,570	9,446
Accident prevention and safety costs in management activities	Operation of the organization for accident prevention and safety countermeasures	524	623
<b>Total</b>		<b>8,296</b>	<b>11,190</b>

# Data Environmental Data

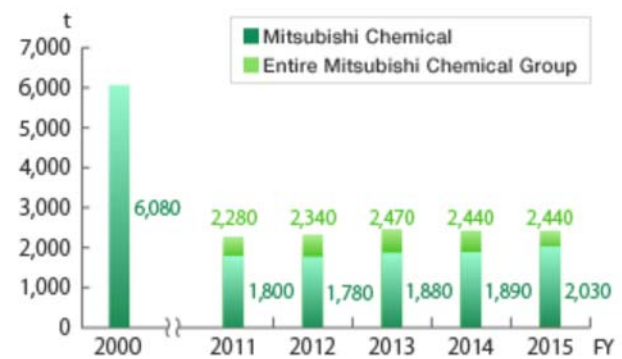
- ▶ Preventing air and water pollution
- ▶ Total phosphorus and nitrogen emissions
- ▶ Breakdown of water consumption (excluding seawater)
- ▶ Energy consumption (Mitsubishi Chemical Corporation (MCC))
- ▶ Greenhouse gas emissions
- ▶ 5 Greenhouse gases emissions (MCC Group)
- ▶ Actual reduction in unit energy consumption (MCC)
- ▶ Breakdown of transport volumes by transport mode in fiscal 2015 (MCC)
- ▶ PRTR-regulated substances discharge volume
- ▶ VOC discharge
- ▶ Industrial waste emissions and the recycling ratio
- ▶ Volume of industrial waste ultimately disposed of as landfill and ratio of industrial waste ultimately disposed of as landfill (MCC Group)
- ▶ Waste processing flow (including transient construction wastes)
- ▶ Material flow (MCC)
- ▶ Investments and expenses for the environment (MCC)
- ▶ Prevention of air and water pollution by overseas MCC Group companies
- ▶ Water consumption (excluding seawater) by overseas MCC Group companies
- ▶ Volume of industrial waste generated by overseas MCC Group companies

● Preventing air and water pollution

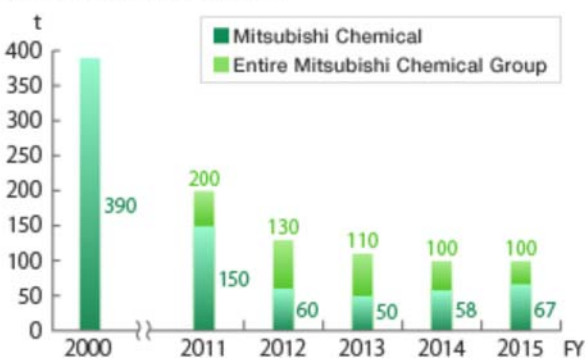
**NOx emissions**



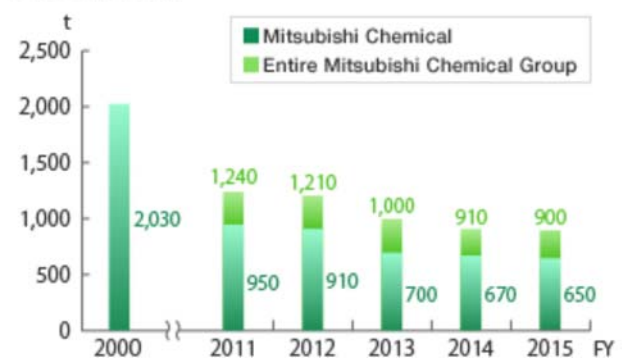
**SOx emissions**



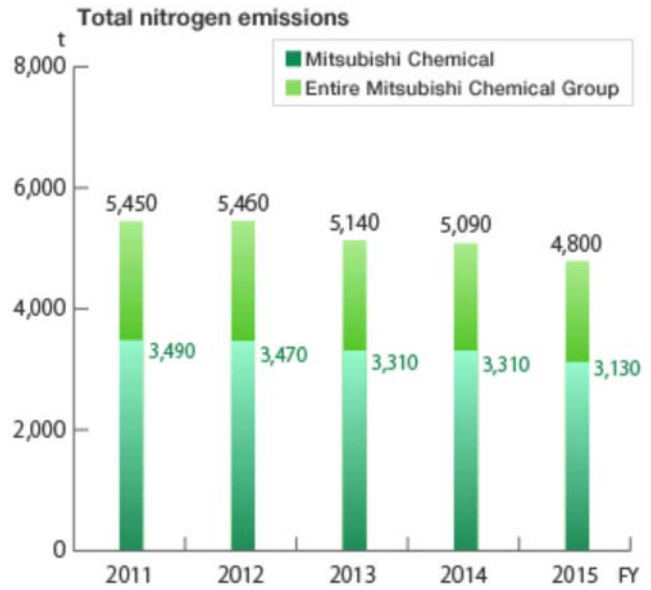
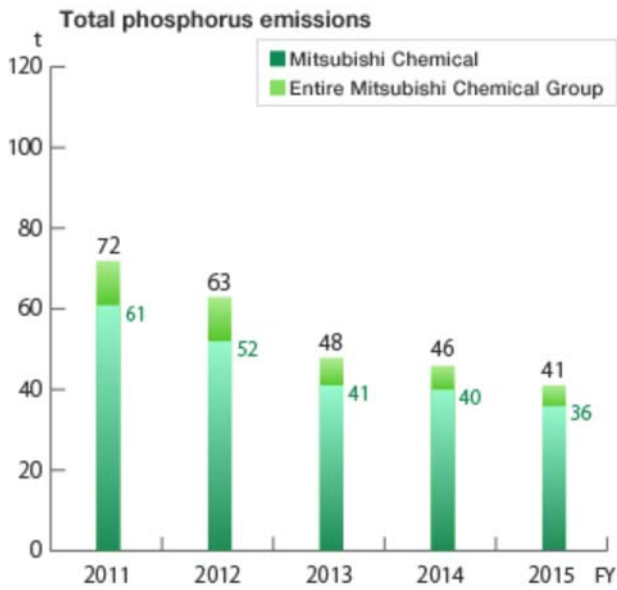
**Particulate matter emissions**



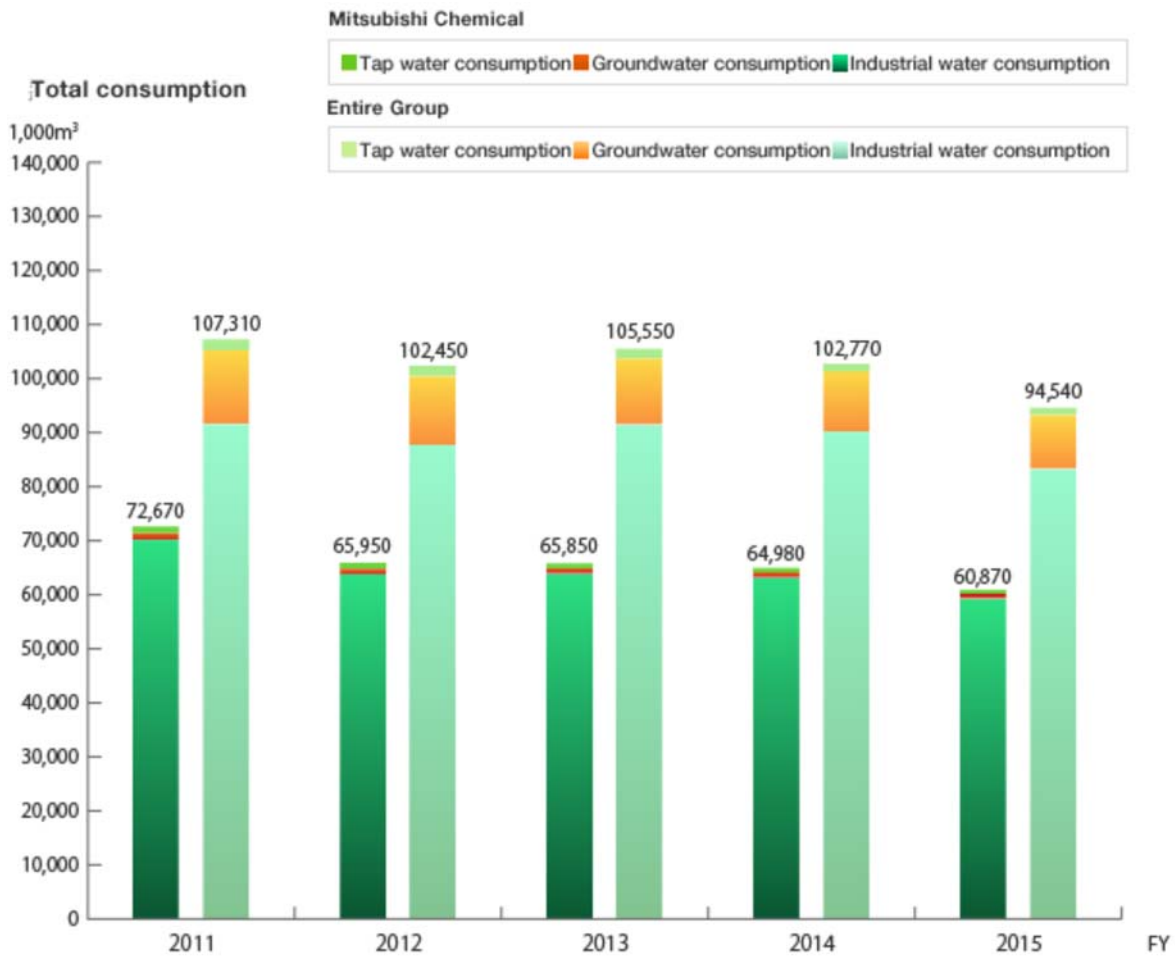
**COD emissions**



● Total phosphorus and nitrogen emissions



● Breakdown of water consumption (excluding seawater)



● Breakdown of water consumption (MCC)

1,000m<sup>3</sup>

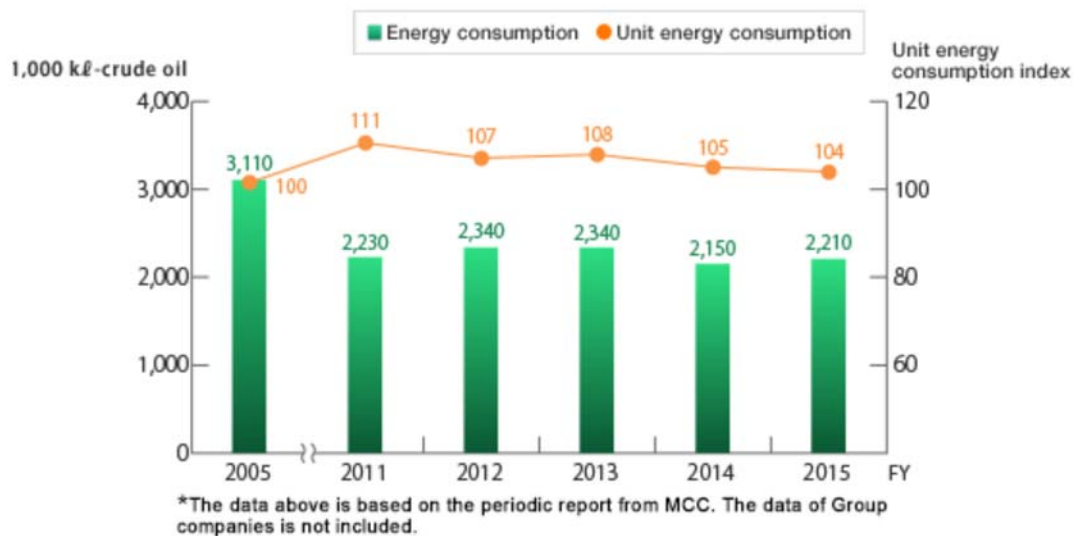
	2011	2012	2013	2014	2015
<b>Total consumption</b>	<b>72,670</b>	<b>65,950</b>	<b>65,850</b>	<b>64,980</b>	<b>60,870</b>
Tap water consumption	1,220	1,110	930	820	660
Groundwater consumption	1,220	1,000	1,000	970	950
Industrial water consumption	70,230	63,840	63,920	63,200	59,260

● Breakdown of water consumption (MCC Group)

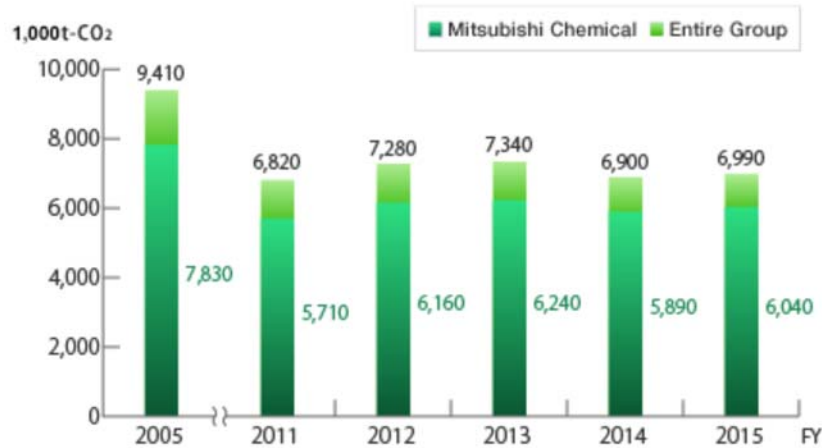
1,000m<sup>3</sup>

	2011	2012	2013	2014	2015
<b>Total consumption</b>	<b>107,310</b>	<b>102,450</b>	<b>105,550</b>	<b>102,770</b>	<b>94,540</b>
Tap water consumption	1,980	1,900	1,750	1,370	1,210
Groundwater consumption	13,720	12,770	12,260	11,150	10,030
Industrial water consumption	91,610	87,780	91,540	90,250	83,300

● Energy consumption (MCC)

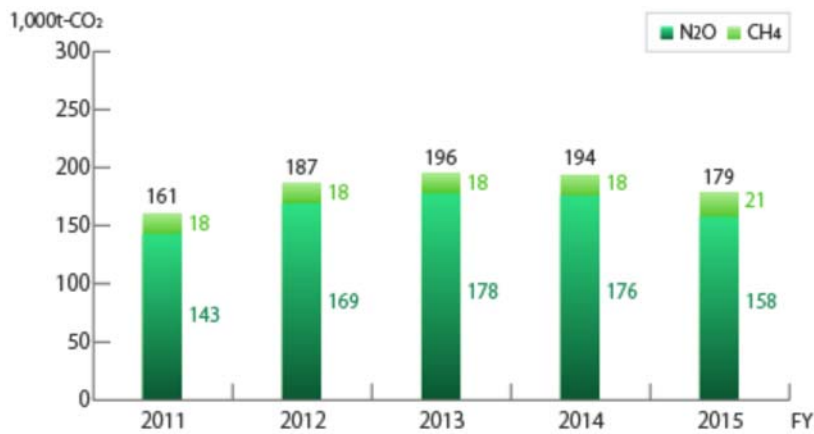


● Greenhouse gas emissions



\*For greenhouse gas emissions, as the result of a detailed examination on the inclusion of heat-trapped gases not subject to reporting under the law in addition to reporting values stipulated in the Act on promotion of Global Warming Countermeasures, figures not included at Group companies were found, and in the FY2012 version of the graph, retroactive corrections have been made to add these figures to past data.

● 5 Greenhouse gases\* emissions (MCC Group)



\*Gases: methane, dinitrogen monoxide, hydrofluorocarbon (yearly volume filled), perfluorocarbon (yearly volume filled), sulfur hexafluoride

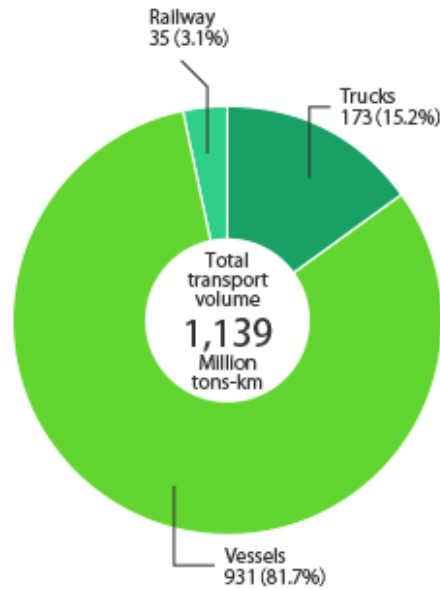
● Actual reduction in unit energy consumption (MCC)

FY		2011	2012	2013	2014	2015
Energy consumption	GJ	716,823	725,407	756,777	780,237	770,630
Fuel consumption (converted to crude oil)	Kℓ	18,494	18,716	19,525	20,130	19,880
Transport volume	Million tons-km	1,023	1,076	1,132	1,134	1,139
CO <sub>2</sub> emissions	t-CO <sub>2</sub>	49,500	50,100 <span style="color: orange;">→ 1% increase</span>	52,300 <span style="color: orange;">→ 4% increase</span>	53,900 <span style="color: orange;">→ 3% increase</span>	53,300 <span style="color: green;">→ 1% reduction</span>
Unit energy consumption	Kℓ/million tons-km	18.1	17.4 <span style="color: green;">→ 3.9% reduction</span>	17.3 <span style="color: green;">→ 0.8% reduction</span>	17.7 <span style="color: orange;">→ 2.9% increase</span>	17.5 <span style="color: green;">→ 1.7% reduction</span>

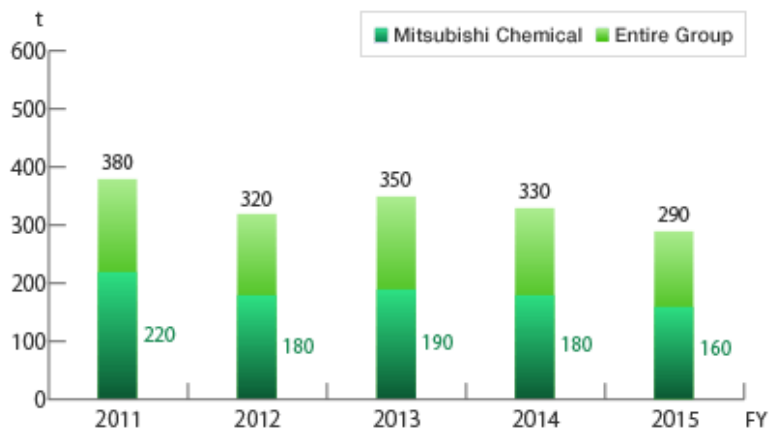
\* Figures are consumption units excluding return voyages by empty vessels.



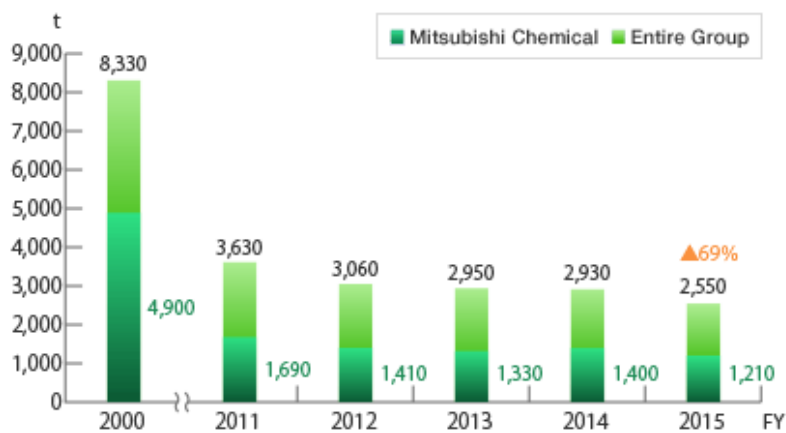
● Breakdown of transport volumes by transport mode in fiscal 2015 (MCC)



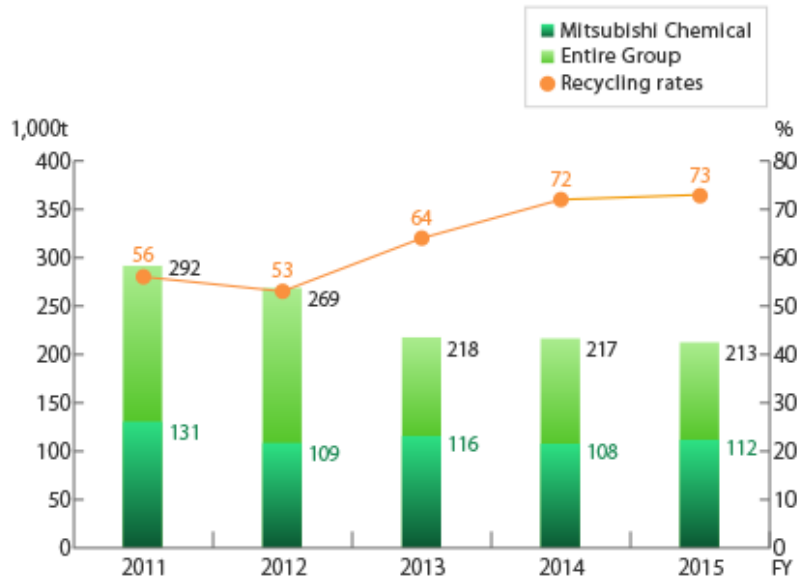
● PRTR-regulated substances discharge volume



● VOC discharge

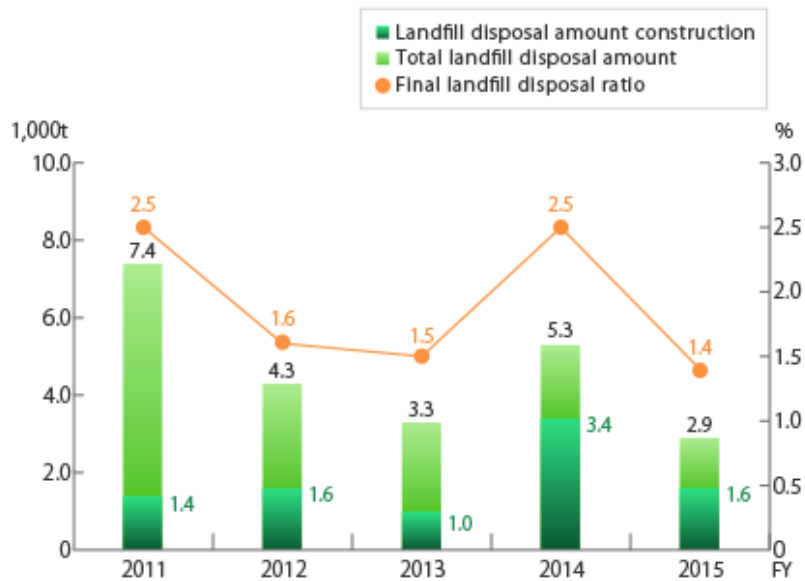


● Industrial waste emissions and the recycling ratio



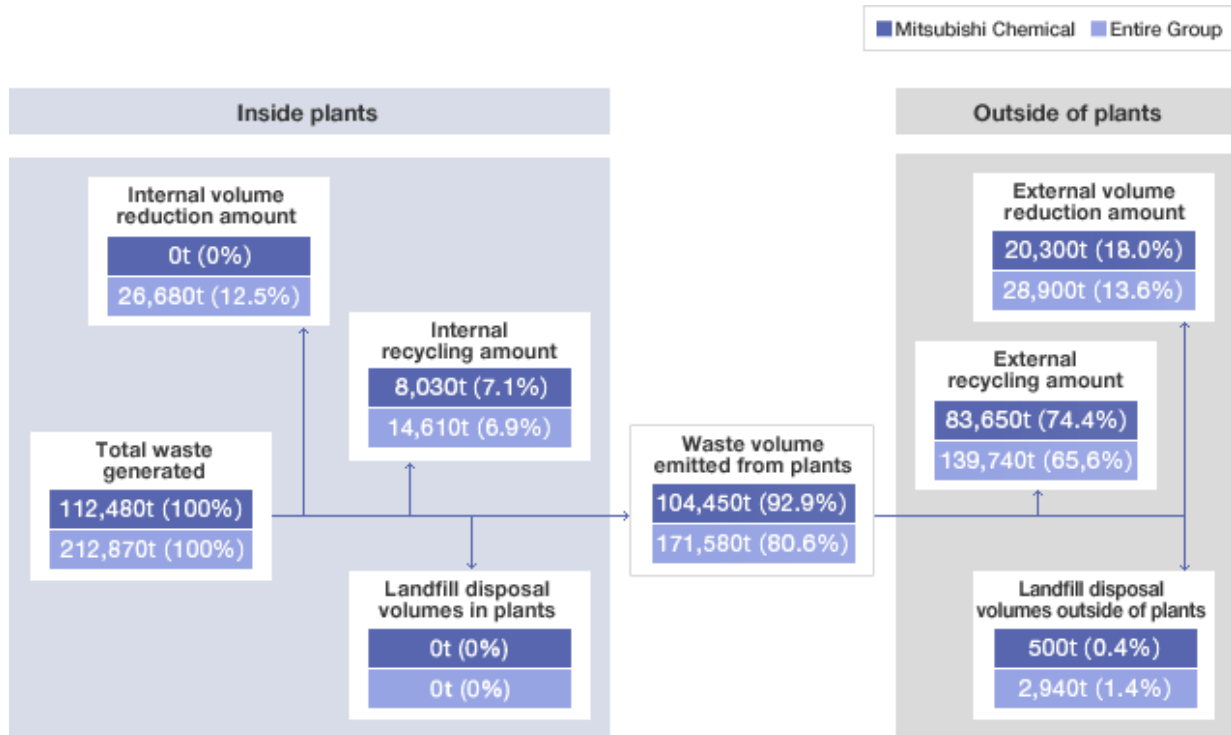
\* In fiscal 2013 and fiscal 2014, the treatment volume related to the industrial waste treatment business is outside the scope of aggregation

● Volume of industrial waste ultimately disposed of as landfill and ratio of industrial waste ultimately disposed of as landfill (MCC Group)

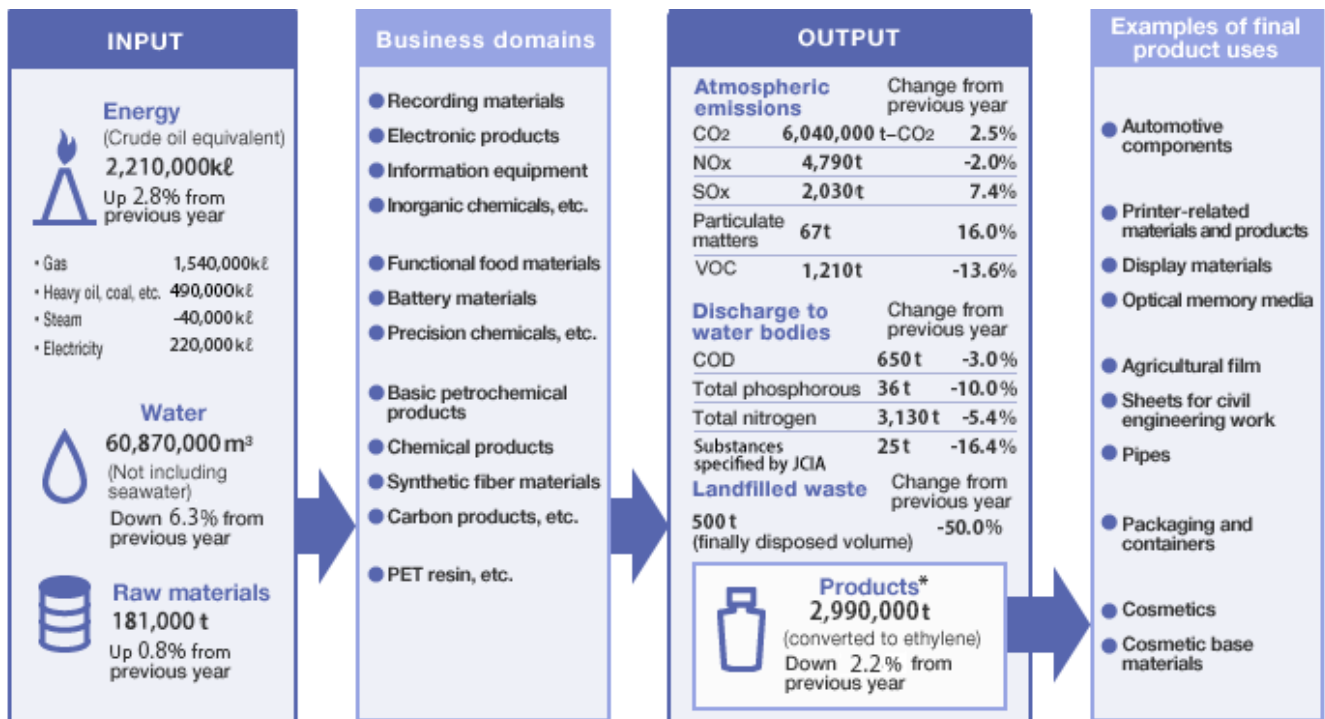


\* In fiscal 2013 and fiscal 2014, the treatment volume related to the industrial waste treatment business is outside the scope of aggregation

● Waste processing flow (including transient construction wastes)



● Material flow (MCC)



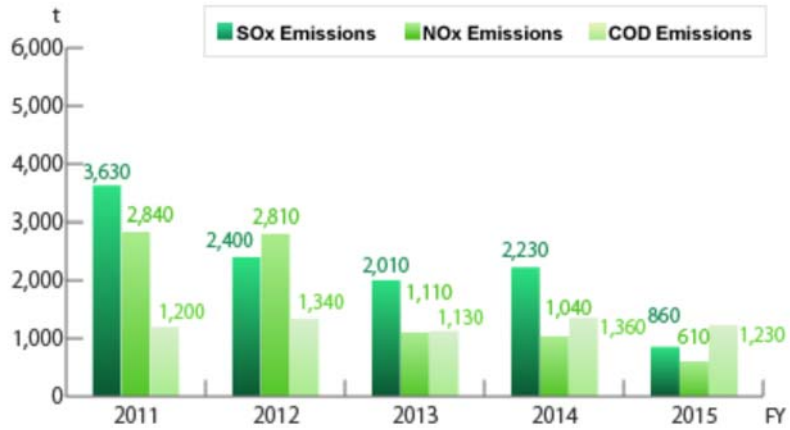
\* The base year for the calculation of production volume (ethylene equivalent) has been changed from the former 1990 to 2005.

● Investments and expenses for the environment (MCC)

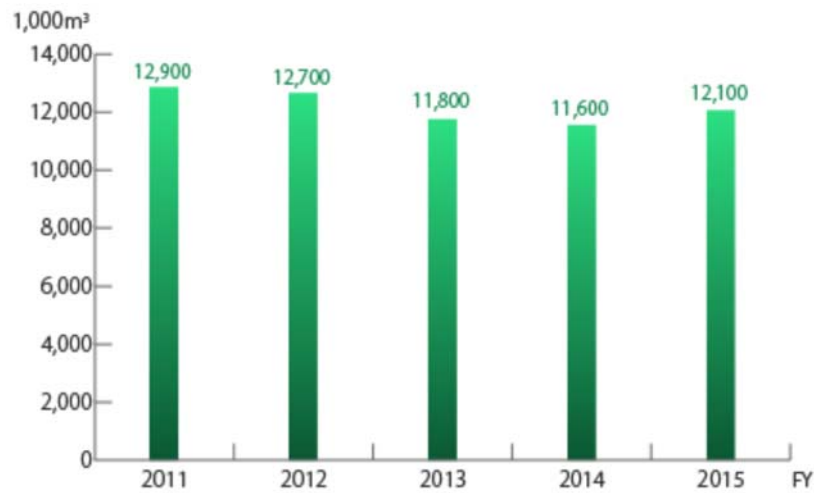
(million yen)

Environmental conservation costs		2014		2015	
Category	Main initiatives	Investment amount	Expenses	Investment amount	Expenses
Environmental conservation costs for suppressing environmental load generated in business areas due to production and service activities	1. Pollution prevention costs Prevention of Air pollution Dust collection system augmentation and particulate matter reduction Prevention of water pollution Wastewater management improvement, etc.	4,012	15,067	933	13,527
	2. Global environmental conservation costs CO <sub>2</sub> emissions reduction, operational improvement, etc	23	699	0	650
	3. Resource recycling costs Industrial waste reduction, proper waste disposal, resource conservation, energy conservation, etc.	527	4,151	132	4,005
Environmental conservation costs in management activities	Operation of unit addressing environmental conservation ISO 14001 compliance and renewal national exams, environmental education, etc.	0	810	0	798
Environmental conservation costs in R&D activities	R&D for increased productivity, etc.	0	1,635	0	253
Environmental conservation costs in social contribution activities	Installation and upkeep of factory green spaces	8	355	10	304
Costs for dealing with environmental damage	Cleanup of contaminated soil, etc.	0	12	0	12
Other environmental conservation costs	SO <sub>x</sub> surcharges	0	462	0	428
<b>Total</b>		<b>4,570</b>	<b>23,192</b>	<b>1,075</b>	<b>19,977</b>

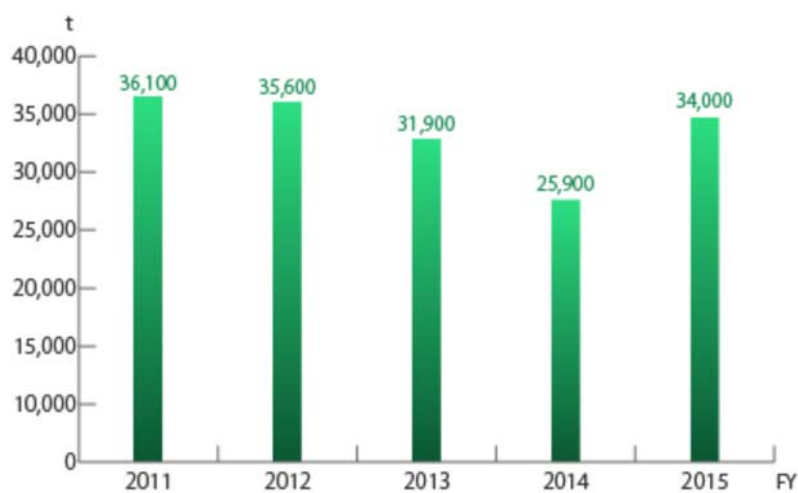
● Prevention of air and water pollution by overseas MCC Group companies



● Water consumption (excluding seawater) by overseas MCC Group companies



● Volume of industrial waste generated by overseas MCC Group companies



▶ Find out more about overseas MCC Group companies

\* However, only overseas MCC Group companies that are promoting RC activities and that are subsidiaries of MCC as stipulated by the Japanese Companies Act (ones with ○) are included in the scope of the Group performance data collection.

## Data Social Data

- ▶ Employee composition (fiscal 2015) \*Only MCC-registered employees
- ▶ Actual use of open recruitment, in-house free agencies, and in-house internships
- ▶ Number of people who consulted career counselors
- ▶ Target values and results of Women's Initiative & Work Innovation (WIN-WIN) Plan (%)
- ▶ Status of use of systems for work-life balance
- ▶ Change in employment ratio of people with disabilities
- ▶ Change in overtime and holiday work hours (regular daytime workers)
- ▶ Change in number of paid vacation days taken (general workers)
- ▶ Change in the ratio of life support holiday system taken (general workers)
- ▶ Human rights enlightenment activities given
- ▶ Results of questionnaire after Group Human Rights Training (2015)

### ● Employee composition (fiscal 2015)

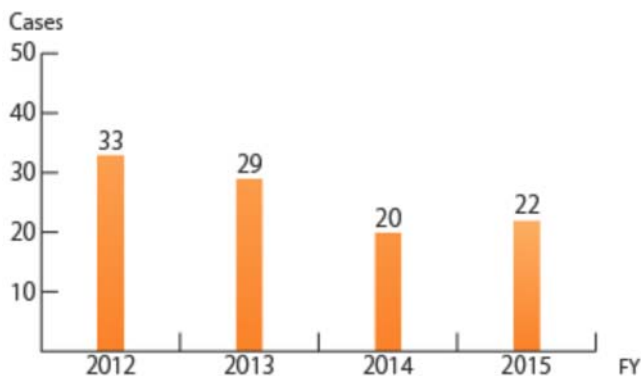
\*Only MCC-registered employees

Number of employees	8,552
Male	7,387
Female	1,165

Number hired (clerical)	16
Number hired (technical)	38
Number hired (total)	54
Number retired	122

\* Number of new graduates hired

### ● Number of people who consulted career counselors



### ● Actual use of open recruitment, in-house free agencies, and in-house internships

FY

Title		2012	2013	2014	2015
Open recruitment	Programs offered (people)	4	13	4	20
	Applicants (people)	18	32	24	23
	Accepted (people)	4	12	4	12
In-house free agent (people)		2	1	0	1
In-house internship (people)		1	1	1	0

### ● Target values and results of Women's Initiative & Work Innovation (WIN-WIN) Plan (%)

FY

Item		2012	2013	2014	2015	Target values ※
Ratio of women among management		5.3	5.8	6.3	6.5	over 20
Ratio of women among new hires	Clerical	36	44	31	50	over 40
	Engineering	8	18	15	29	over 20

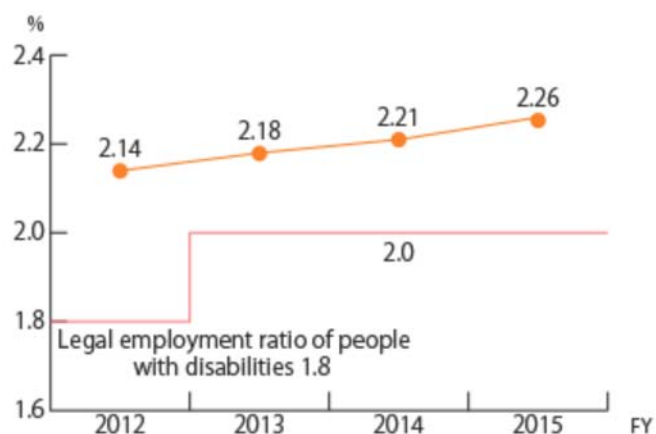
\* The target for ratio of women among management is for fiscal 2025 and for women among new hires is for fiscal 2015. The result for ratio of women among management is as of April 1 each year.

● Status of use of systems for work-life balance

FY

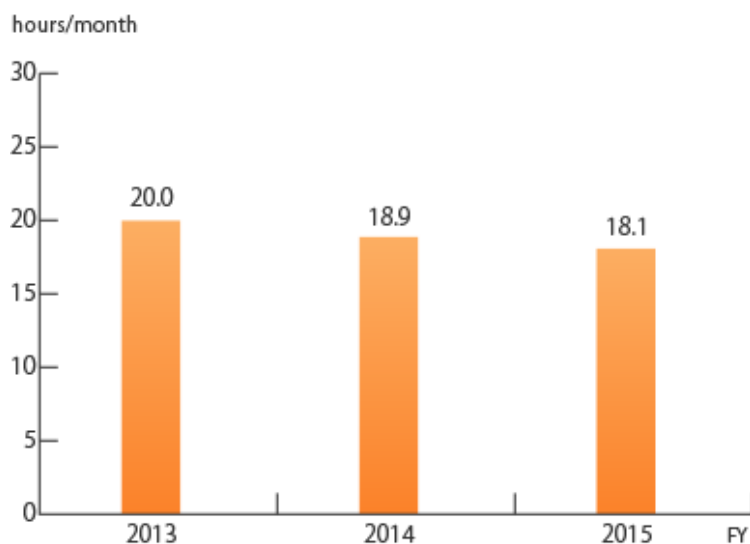
System	2012	2013	2014	2015
Child-raising leave (people)	110	99	100	97
Shorter work hours while raising a child (people)	218	210	195	195
Nursing care leave (people)	6	6	4	1
Shorter work hours while providing nursing care to family members (people)	4	5	4	3
Fertility treatment leave (people)	0	0	1	0
Subsidy for fertility treatment (cases)	56	56	71	56
Leave to accompany spouse's overseas assignment (people)	1	3	1	2
Temporary suspension of transfer (people)	0	0	0	0
Declaration of desired place of work (people)	0	1	1	0

● Change in employment ratio of people with disabilities

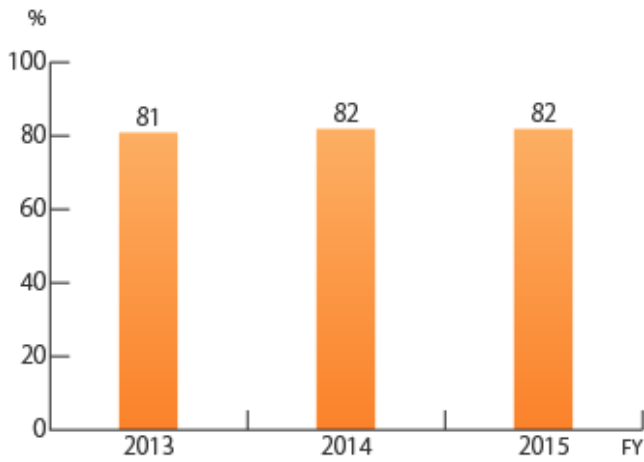


\* Includes companies to which Mitsubishi Chemical's system of disabled person employment ratio applies.

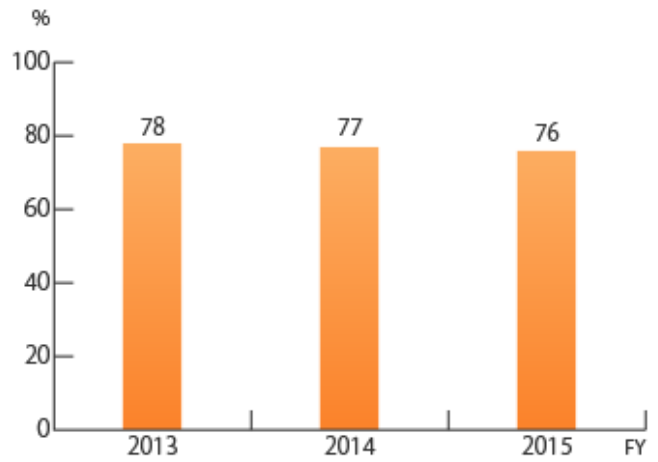
● Change in overtime and holiday work hours (regular daytime workers)



● Change in number of paid vacation days taken (general workers)



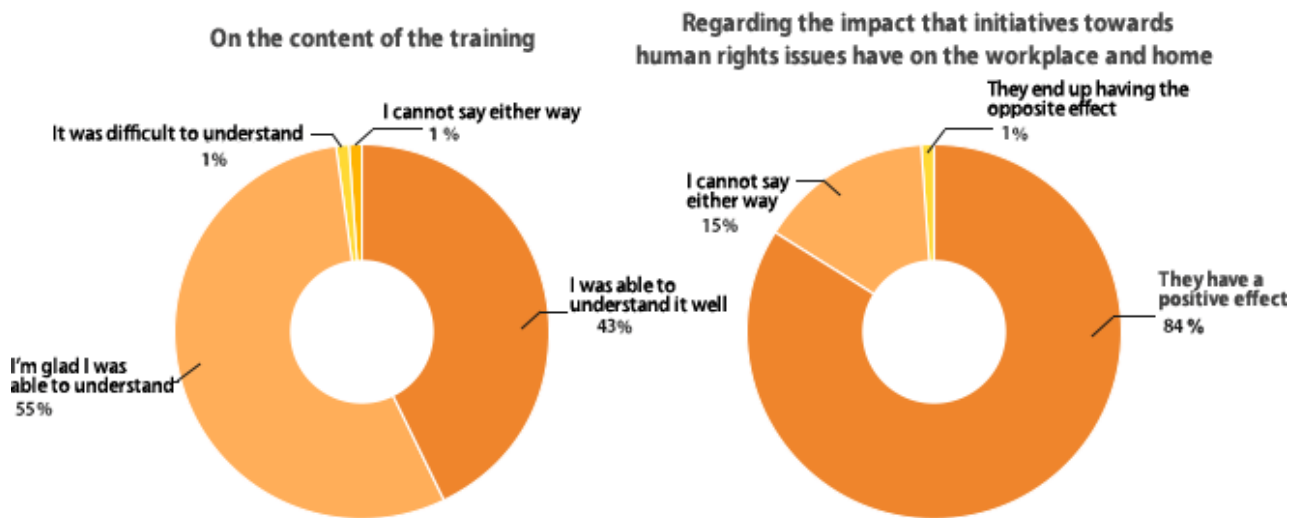
● Change in the ratio of life support holiday system taken (general workers)



● Human rights enlightenment activities given

Training description		2012	2013	2014	2015
Group seminars	Number of times	556	450	446	418
	Number of people	11,611	8,710	8,925	8,028
Human rights slogans	Number of cases	18,245	17,351	13,907	13,501

● Results of questionnaire after Group Human Rights Training (2015)



▶ See the Together with Employees page for details