

## Data

## Governance

	Item	FY2015	FY2016	FY2017
Board of Directors	Number of meetings	14	14	15
	Number of members	19	19	From April 1: 25 From June 28: 22
	Number of independent outside directors	4	4	From April 1: 5 From June 28: 4
	Average attendance rate	98.1	98.9	98.6
Board of Corporate Auditors	Number of meetings	15	15	16
	Number of members	5	5	From April 1: 7 From June 28: 6
	Number of independent outside corporate auditors	3	3	From April 1: 4 From June 28: 3
	Average attendance rate	98.7	96	100
Nomination Advisory Committee	Number of meetings	1	2	3
	Number of members	4	4	6
	Number of independent outside directors	2	2	3
	Average attendance rate	100	100	100
Compensation Advisory Committee	Number of meetings	–	3	3
	Number of members	–	4	6
	Number of independent outside directors	–	2	3
	Average attendance rate	–	100	100

Notes: The number of members of the Board of Directors was changed to the following at the General Meeting of Shareholders on June 28, 2017: directors: 16, corporate auditors: 6.  
The number of members of the Board of Corporate Auditors was changed from seven to six at the General Meeting of Shareholders on June 28, 2017.  
The number of independent outside corporate auditors on the Board of Corporate Auditors was changed from four to three at the General Meeting of Shareholders on June 28, 2017.  
As the Compensation Advisory Committee was established in April 2016, there are no figures for fiscal 2015.

## Environmental

- The environmental information covers a total of 76 business sites at 41 companies in the JXTG Nippon Oil & Energy Group, the JX Nippon Oil & Gas Exploration Group, the JX Nippon Mining & Metals Group and other operating companies (JXTG Nippon Oil & Energy Group: 46 business sites at 25 companies; JX Nippon Oil & Gas Exploration Group: 3 business sites at 1 company; JX Nippon Mining & Metals Group: 27 business sites at 14 companies; other operating companies: 1 company), however, the companies covered vary depending on the information. The companies covered are indicated in the "Scope of data" column.
- The environmental information indicated with  for fiscal 2017 has been assured by an independent practitioner.
- Some figures from past fiscal years have been revised due to revisions in the scope of data, etc.

Energy Consumption (crude oil equivalent) 

	Unit	FY2015	FY2016	FY2017	Scope of data
Energy consumption (crude oil equivalent)	Million kL	11.75	11.74	11.75	JXTG Nippon Oil & Energy, JX Nippon Oil & Gas Exploration, JX Nippon Mining & Metals, NIPPO CORPORATION
Fuel consumption (crude oil equivalent)	Million kL	10.68	10.53	10.49	
Electricity consumption	Million kWh	4,335	4,630	4,569	

Note: Figures for JXTG Nippon Oil & Energy Group data include energy consumption from distribution activities.

Energy Consumption Intensity 

	Unit	FY2015	FY2016	FY2017	Scope of data
Energy consumption intensity for oil refining	Oil equivalent (kL)/Crude distillation unit equivalent throughput (thousand kL)	8.22	8.28	8.18	Petroleum refining business of the JXTG Nippon Oil & Energy Group
Energy consumption intensity for smelting and refining	GJ of heat/ton of refined copper produced	13.8	13.6	13.6	Smelting and refining business sites of the JX Nippon Mining & Metals Group
CO <sub>2</sub> emissions intensity for smelting and refining	t-CO <sub>2</sub> /ton of refined copper produced	0.93	0.86	0.86	Smelting and refining business sites of the JX Nippon Mining & Metals Group

**GHG Emissions** ✓

	Unit	FY2015	FY2016	FY2017	Scope of data
CO <sub>2</sub> emissions	Million tons	28.69	29.47	29.47	JXTG Nippon Oil & Energy, JX Nippon Oil & Gas Exploration, JX Nippon Mining & Metals
(1) Scope 1	Million tons	25.56	26.29	26.25	
(2) Scope 2	Million tons	3.07	3.12	3.12	
(3) Non-energy-derived CO <sub>2</sub>	Million tons	0.05	0.07	0.11	
GHG emissions other than CO <sub>2</sub>	tons	17,987	146,795	153,727	
(1) CH <sub>4</sub>	tons	17,628	38,592	41,480	
(2) N <sub>2</sub> O	tons	359	108,203	111,725	
(3) HFCs	tons	0	0	308	
(4) PFCs	tons	0	0	0	
(5) SF <sub>6</sub>	tons	0	0	214	
(6) NF <sub>3</sub>	tons	0	0	0	
Total GHG emissions	Million tons	28.71	29.62	29.63	

Notes: CO<sub>2</sub> emissions include CO<sub>2</sub> equivalent emissions from energy consumption (electricity, fuel, etc.) as well as greenhouse gases emitted mainly in oil and gas production.  
Figures for JXTG Nippon Oil & Energy Group data include emissions from distribution activities.

**Air Pollution Load** ✓

	Unit	FY2015	FY2016	FY2017	Scope of data
(1) SO <sub>x</sub>	tons	13,010	16,049	13,398	JXTG Nippon Oil & Energy, JX Nippon Oil & Gas Exploration, JX Nippon Mining & Metals, NIPPO CORPORATION
(2) NO <sub>x</sub>	tons	15,606	15,568	15,449	
(3) Soot	tons	1,001	936	1,062	JXTG Nippon Oil & Energy, JX Nippon Oil & Gas Exploration
(4) VOC	tons	17,841	17,819	15,872	

Notes: SO<sub>x</sub> and NO<sub>x</sub> figures for NIPPO CORPORATION have been estimated based on its 50 main plants. The scope of data for the JX Nippon Mining & Metals Group includes only business sites that are subject to legal requirements.  
VOC figures from past fiscal years have been revised due to expansion of the scope of data from fiscal 2017.

**Use of Water Resources** ✓

	Unit	FY2015	FY2016	FY2017	Scope of data
Water used (1) + (2) + (3) + (4) + (5)	Million tons	1,198.68	1,419.63	1,847.41	JXTG Nippon Oil & Energy, JX Nippon Oil & Gas Exploration, JX Nippon Mining & Metals
(1) Service water (tap water)	Million tons	3.88	4.61	4.94	
(2) Service water (industrial water)	Million tons	167.34	171.70	175.78	
(3) Rainwater	Million tons	0.07	0.11	0.07	
(4) Groundwater	Million tons	18.08	21.09	18.57	
(5) Seawater	Million tons	1,009.30	1,222.11	1,648.04	
Water discharged	Million tons	1,259.74	1,340.70	1,813.94	
(1) River discharge	Million tons	-	-	15.48	
(2) Sea discharge	Million tons	-	-	1,798.46	

Notes: Overseas sites (Malaysia and Vietnam) are not included in figures for the JX Nippon Oil & Gas Exploration Group.  
The volume of water used and water discharged by the JX Nippon Mining & Metals Group is the product of volume multiplied by density (seawater: 1,024 t/m<sup>3</sup>; fresh water: 1,000 t/m<sup>3</sup>).  
Data for water discharged from past fiscal years has been revised due to expansion of the scope of data in fiscal 2017.

**Water Pollution Load** ✓

	Unit	FY2015	FY2016	FY2017	Scope of data
COD	tons	1,472	1,477	1,598	JXTG Nippon Oil & Energy, JX Nippon Oil & Gas Exploration, JX Nippon Mining & Metals

**Release and Transfer of Chemical Substances (PRTR)** ✓

	Unit	FY2015	FY2016	FY2017	Scope of data
(1) Released	tons	1,657	1,750	1,916	JXTG Nippon Oil & Energy, JX Nippon Oil & Gas Exploration, JX Nippon Mining & Metals, NIPPO CORPORATION
(2) Transferred	tons	217	195	408	

Notes: Overseas sites (Malaysia and Vietnam) are not included in figures for the JX Nippon Oil & Gas Exploration Group.  
The scope for the JX Nippon Mining & Metals Group includes only companies with business sites required to give notification under the PRTR Law. Overseas offices and plants are not included.

**Waste** ✓

	Unit	FY2015	FY2016	FY2017	Scope of data
Total waste	tons	1,748,859	1,742,239	1,535,182	JXTG Nippon Oil & Energy, JX Nippon Oil & Gas Exploration, JX Nippon Mining & Metals, NIPPO CORPORATION
Landfill disposal volume	tons	9,896	11,765	9,304	
Waste-to-landfill ratio	%	0.6	0.7	0.6	

**Environmental Accidents**

	FY2017	Monetary penalties	FY2017
Number of environmental accidents	1		Nil

**Social**

- Social information covers the JXTG Nippon Oil & Energy Group, the JX Nippon Oil & Gas Exploration Group, the JX Nippon Mining & Metals Group and other operating companies, however, the companies covered vary depending on the information. The companies covered are indicated in the "Scope of data" column.
- The social information indicated with ✓ for fiscal 2017 has been assured by an independent practitioner.
- Some figures from past fiscal years have been revised.

**Employees**

		Item	Total	JXTG Holdings	Energy	Oil & Gas Exploration	Metals
Number of Employees (by employment status)	Male	Full Time	9,935	114	7,968	327	1,526
		Fixed term	346	1	232	13	100
		Non-fixed term	9,589	113	7,736	314	1,426
		Other than full time	52	0	26	0	26
		Fixed term	48	0	26	0	22
		Non-fixed term	4	0	0	0	4
		Subtotal	9,987	114	7,994	327	1,552
	Female	Full Time	1,198	46	948	47	157
		Fixed term	66	1	55	2	8
		Non-fixed term	1,132	45	893	45	149
		Other than full time	28	0	7	2	19
		Fixed term	15	0	7	2	6
		Non-fixed term	13	0	0	0	13
		Subtotal	1,226	46	955	49	176
	Ratio of female employees	10.9%	28.8%	10.7%	13.0%	10.2%	
	Temporary staff	505	2	417	6	80	
	Male	244	0	203	1	40	
	Female	261	2	214	5	40	
	Ratio of temporary staff	4.3%	1.2%	4.5%	1.6%	4.4%	
	Total	11,718	162	9,366	382	1,808	
	Foreign nationals	59	0	37	9	13	
	Male	37	0	22	6	9	
	Female	22	0	15	3	4	
Number of locally employed staff at overseas sites			3,758	0	1,279	450	2,029
Number of Employees (by category), Average Age and Average Years of Service		Managerial staff	3,052	93	2,487	157	315
		Male	2,976	85	2,424	155	312
		Female	76	8	63	2	3
		Ratio of female managerial staff	2.5%	8.6%	2.5%	1.3%	1.0%
		Age	Up to 29 years old	0	0	0	0
			30-49 years old	1,416	56	1,176	59
			50 years old and over	1,636	37	1,311	98
		Average age	50.5	53.7	50.3	52.0	50.1
		Average years of service	25.3	23.6	25.9	25.6	21.3
		Non-managerial staff	7,669	65	6,142	202	1,260
		Male	6,613	28	5,312	159	1,114
		Female	1,056	37	830	43	146
		Age	Up to 29 years old	2,449	9	2,064	49
			30-49 years old	3,645	49	2,741	140
			50 years old and over	1,575	7	1,337	13
		Average age	38.9	38.2	39.1	34.9	38.8
		Average years of service	16.9	12.8	17.8	10.1	13.9
		Total	10,721	158	8,629	359	1,575
		Average age	42.2	44.2	42.3	42.4	41.1
	Average age - male	42.2	45.5	42.3	42.7	41.5	
	Average age - female	41.5	41.1	42.3	40.5	36.8	
	Average years of service	19.2	19.1	20.1	15.6	15.4	
	Average years of service - male	19.4	20.2	20.2	15.1	15.9	
	Average years of service - female	17.3	16.4	19.5	13.2	10.3	

Item		Total	JXTG Holdings	Energy	Oil & Gas Exploration	Metals	
Number of New Hires (incl. mid-career hires)	Male	Up to 29 years old	311	0	248	7	56
		Percentage of regular employees as of March 2018	2.9%	0.0%	2.9%	1.9%	3.6%
		30-49 years old	78	0	20	3	55
		Percentage of regular employees as of March 2018	0.7%	0.0%	0.2%	0.8%	3.5%
		50 years old and over	7	0	1	0	6
		Percentage of regular employees as of March 2018	0.1%	0.0%	0.0%	0.0%	0.4%
	Female	Subtotal	396	0	269	10	117
		Percentage of regular employees as of March 2018	3.7%	0.0%	3.1%	2.8%	7.4%
		Up to 29 years old	57	0	43	0	14
		Percentage of regular employees as of March 2018	0.5%	0.0%	0.5%	0.0%	0.9%
		30-49 years old	7	0	1	0	6
		Percentage of regular employees as of March 2018	0.1%	0.0%	0.0%	0.0%	0.4%
Total	50 years old and over	1	0	0	0	1	
	Percentage of regular employees as of March 2018	0.0%	0.0%	0.0%	0.0%	0.1%	
	Subtotal	65	0	44	0	21	
	Percentage of regular employees as of March 2018	0.6%	0.0%	0.5%	0.0%	1.3%	
	Total	461	0	313	10	138	
	Percentage of regular employees as of March 2018	4.3%	0.0%	3.6%	2.8%	8.8%	
Employee Turnover	Male	Up to 29 years old	34	0	30	1	3
		Percentage of regular employees as of March 2018	0.3%	0.0%	0.3%	0.3%	0.2%
		30-49 years old	38	0	23	2	13
		Percentage of regular employees as of March 2018	0.4%	0.0%	0.3%	0.6%	0.8%
		50 years old and over	102	0	87	0	15
		Percentage of regular employees as of March 2018	1.0%	0.0%	1.0%	0.0%	1.0%
	Female	Subtotal	174	0	140	3	31
		Percentage of regular employees as of March 2018	1.6%	0.0%	1.6%	0.8%	2.0%
		Up to 29 years old	9	0	8	0	1
		Percentage of regular employees as of March 2018	0.1%	0.0%	0.1%	0.0%	0.1%
		30-49 years old	5	0	2	0	3
		Percentage of regular employees as of March 2018	0.0%	0.0%	0.0%	0.0%	0.2%
	Total	50 years old and over	6	0	6	0	0
		Percentage of regular employees as of March 2018	0.1%	0.0%	0.1%	0.0%	0.0%
		Subtotal	20	0	16	0	4
		Percentage of regular employees as of March 2018	0.2%	0.0%	0.2%	0.0%	0.3%
		Total	194	0	156	3	35
		Percentage of regular employees as of March 2018	1.8%	0.0%	1.8%	0.8%	2.2%
Employment rate of persons with disabilities	2.3%	-	2.2%	2.8%	2.3%		
Number of employees re-employed after retirement	710	3	688	10	9		
Paid annual leave	Number of days of paid annual leave granted	22.3	23.2	22.8	22.0	19.8	
	Number of days of paid annual leave taken	18.8	18.8	19.7	14.2	14.8	
	Usage rate of paid annual leave	84.0%	81.0%	86.4%	64.4%	74.4%	
Number of employees taking family care leave	3	0	2	1	0		
Childbirth/child care	Number of employees taking childcare leave	164	3	142	7	12	
	Male employees	107	1	94	6	6	
	Number of employees returning to work after giving birth or taking childcare leave	100%	100%	100%	100%	100%	
	Percentage still employed 12 months after returning to work	96.6%	100%	97.1%	100%	66.7%	
Labor unions	Labor unions	8,141	No labor unions	6,890	No labor unions	1,251	
	Number of members	99.7%	No labor unions	99.6%	No labor unions	100.0%	
Participation rate for regular health screenings	99.9%	100.0%	99.9%	100.0%	100.0%		

Note: Employees of JXTG Holdings are seconded from operating companies. The number of new hires and employee turnover are accounted for at their companies of origin.

### Training Programs Implemented in Fiscal 2017

	Total training hours	Training hours per employee
JXTG Holdings	1,957	12.23
Energy	69,046	7.72
Oil & Gas Exploration	7,985	21.24
Metals	29,379	17.00
Total	108,367	9.66

Note: Number of hours of internal group training and external training organized by the human resources departments of JXTG Holdings and the Group's core operating companies, aggregated for each employer.

### Occupational injury

		FY2015	FY2016	FY2017	Scope of data	
Number of occupational injuries	JXTG Group	Subtotal	17	16	9	
		Fatalities	0	0	0	
		Lost work time	17	16	9	
	Contractors (partner companies, etc.)	Subtotal	23	19	27	
		Fatalities	0	1	1	
		Lost work time	23	18	26	
	Total		40	35	36	JXTG Nippon Oil & Energy, JX Nippon Oil & Gas Exploration, JX Nippon Mining & Metals
	Occupational injury frequency rate		0.23	0.40	0.29	15 JXTG Nippon Oil & Energy Group refineries and plants, 5 JX Nippon Oil & Gas Exploration business sites, and 6 JX Nippon Mining & Metals business sites
	Occupational injury severity rate		0.01	0.01	0.01	
Lost work days due to occupational injury		263	197	251		

Notes: Number of contractors in "Number of occupational injuries" is for reference.

Targets for inclusion in the occupational injury frequency rate, occupational injury severity rate, and lost work days due to occupational injuries cover 15 JXTG Nippon Oil & Energy Group refineries and plants, 5 JX Nippon Oil & Gas Exploration business sites (Miri, Vietnam, Kuala Lumpur, Doha, and Nakajo) and 6 JX Nippon Mining & Metals business sites (head office, Hitachi, Isohara, Kurami, Turuga, and Saganoseki).

### JXTG Group Safety Education Center Training Participation

	FY2015	FY2016	FY2017	Scope of data
Number of participants	1,793	1,698	1,503	JXTG Holdings, JXTG Nippon Oil & Energy, JX Nippon Oil & Gas Exploration, JX Nippon Mining & Metals, affiliated Group companies, partner companies, etc.