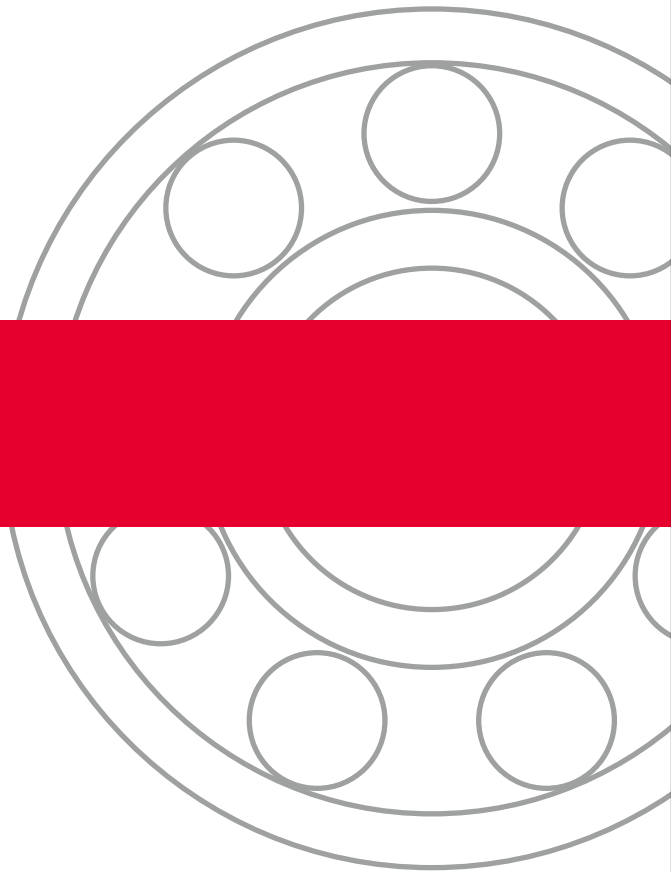


NSK ESG Data Book

2021 





Environment

Environmental Management



NSK Report 2021 [P. 37 Progress on Strategies for 2026](#) [Contribute to the Environment and Society](#) [Environmental Management](#)

Websites [Sustainability Information ▶ NSK ESG Initiatives ▶ Environment ▶ Executive Summary on the Environment](#)
[Sustainability Information ▶ NSK ESG Initiatives ▶ Environment ▶ Environmental Management](#)
[Sustainability Information ▶ Information Disclosure Based on TCFD Recommendations](#)

Category		Scope of coverage	Unit	FY2016	FY2017	FY2018	FY2019	FY2020
Environmental management system	Number of ISO14001 certified sites	NSK Group	Sites	67	67	66	68	68
	Coverage*1		%	95% or more	95% or more	95% or more	95% or more	95% or more
Compliance with environmental laws	Number of serious violations of environmental regulations	NSK Group	Incidents	0	0	0	0	0
Environmental accidents	Number of serious incidents of environmental pollution	NSK Group	Incidents	0	0	0	0	0
Environmental education and training	Number of environmental education and training sessions and number of participants (total)	Group in Japan	Sessions	461	583	463	393	388
			Persons	7,563	10,236	17,776	17,444	57,173*2
	Compliance with environmental laws and regulations, reduction of environmental risks		Sessions	85	175	125	108	97
			Persons	1,342	2,402	2,398	1,653	1,270
	Efforts to raise environmental awareness		Sessions	297	315	274	226	230
			Persons	5,556	6,242	14,326	14,807	53,913*2
	Acquisition of environmental qualifications		Sessions	58	51	34	36	29
			Persons	352	259	131	147	191
Environmentally friendly design, green procurement	Sessions	21	42	30	23	32		
	Persons	313	1,333	921	837	1,799		
Environmental accounting*3	Environmental conservation cost: investment	Group in Japan	Millions of yen	3,552	3,730	3,899	3,522	2,961
	Business area costs		Millions of yen	1,488	2,185	2,191	2,328	1,794
	Pollution prevention costs		Millions of yen	345	476	292	164	187
	Global environment conservation costs		Millions of yen	892	1,283	1,320	1,450	1,020
	Resource circulation costs		Millions of yen	250	426	578	714	588
	Upstream and downstream costs		Millions of yen	0	0	0	7	0
	Administration costs		Millions of yen	41	17	6	2	4
	Research and development costs		Millions of yen	2,018	1,528	1,696	1,180	1,157
	Social activity costs		Millions of yen	0	0	0	0	0
	Environmental remediation costs		Millions of yen	6	0	5	5	5
	Environmental conservation cost: cost		Millions of yen	13,158	15,092	15,087	13,515	12,214
	Business area costs		Millions of yen	2,279	2,767	2,820	2,924	3,309
	Pollution prevention costs		Millions of yen	529	574	573	533	594
	Global environment conservation costs		Millions of yen	956	1,180	1,330	1,432	1,301
	Resource circulation costs		Millions of yen	794	1,012	917	960	1,414
	Upstream and downstream costs		Millions of yen	259	524	398	255	248
	Administration costs		Millions of yen	502	544	564	603	553
	Research and development costs		Millions of yen	10,058	11,179	11,167	9,669	8,037
Social activity costs	Millions of yen	41	49	120	45	49		
Environmental remediation costs	Millions of yen	19	29	18	17	17		
Economic benefits associated with environmental conservation activities	Millions of yen	1,335	1,998	2,288	1,579	1,847		
Reductions in energy costs through energy conservation activities	Millions of yen	491	536	549	607	899		
Reductions in waste disposal costs through waste reduction activities	Millions of yen	51	40	25	25	21		
Sales of recyclable waste material	Millions of yen	793	1,421	1,714	948	927		

*1 Percentage of environmental impact for ISO 14001 certified sites compared to the total environmental impact of the entire NSK Group, including greenhouse gas and waste emissions.

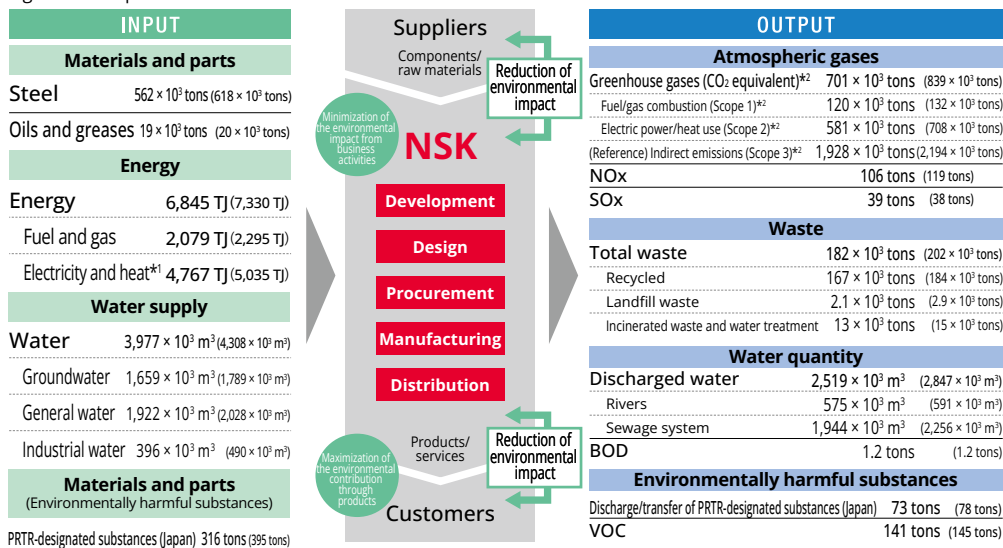
*2 The number of participants increased thanks to the provision of e-learning modules for raising employee awareness.

*3 Environmental costs and expenses are determined in accord with the Environmental Accounting Guidelines 2005 issued by the Ministry of the Environment in Japan.

Depreciation is entered as a cost using the 5-year straight-line depreciation method. Compound costs are divided in proportion to the relevant environmental objective. Costs incurred through green procurement are entered as full amounts and not as differential amounts.

Material and Energy Balance

Figures within parentheses indicate fiscal 2019 data



*1 Energy usage accounted for by purchased electricity is the total amount of the NSK Group's electricity usage.
 *2 Total greenhouse gas emissions are obtained by multiplying each type of gas by its global warming coefficient. Emission factors for electricity are variable market standards. These emission factors, which change every year, are published by power companies with which we have contracts, or are given in the International Energy Agency's CO₂ Emissions from Fuel Combustion. The amount of greenhouse gas emissions for Scopes 1 to 3 are calculated based on GHG Protocol calculation standards.

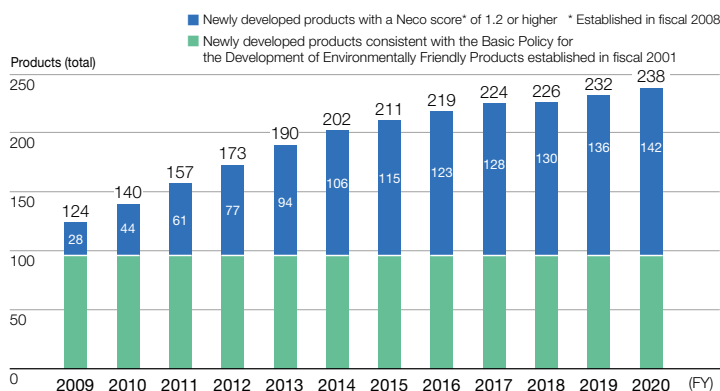
Creating Environmentally Friendly Products

NSK Report 2021 [Pp. 21-23 Collaborative Value Creation and Beyond](#) [Special Feature 1. NSK's Environmental Contributions](#)
 Websites [Sustainability Information](#) ▶ [Environmentally Friendly Products](#)

Category	Scope of coverage	Unit	FY2016	FY2017	FY2018	FY2019	FY2020	
Environmentally friendly products*1	Number of products developed (cumulative)	NSK Group	Products	219	224	226	232	238
Products that help reduce CO ₂ emissions	CO ₂ emissions avoided (total)	NSK Group	× 10 ³ t-CO ₂	1,309	1,324	1,446	1,572	2,514
	Direct contributions*2		× 10 ³ t-CO ₂	505	649	879	804	1,380
	Indirect contributions*3		× 10 ³ t-CO ₂	804	675	567	767	1,134

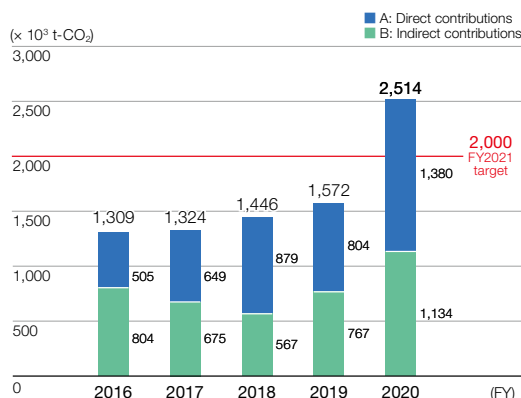
*1 Total of environmentally friendly products with a Neco score of 1.2 or higher. Includes 96 products developed in or before fiscal 2007 that were consistent with the Basic Policy for the Development of Environmentally Friendly Products.
 *2 NSK product performance directly contributes to the reduction of CO₂ emissions during customer use.
 *3 NSK product applications for customers indirectly contribute to the reduction of CO₂ emissions.

Number of Environmentally Friendly Products Developed



In fiscal 2020, we developed six environmentally friendly products with a Neco score of 1.2 or higher, bringing the total up to 238 products.

CO₂ Emissions Avoided through Products



Due to the growth in sales of low friction hub unit bearings for automobiles and wind turbine bearings, we greatly surpassed our fiscal 2021 CO₂ emissions reduction target of 2 million tons, achieving a reduction of 2.51 million tons in fiscal 2020.

Fighting Global Warming and Climate Change



NSK Report 2021 [P. 52 Climate Change-related Risks and Opportunities: Addressing the TCFD Recommendations](#)

Websites

[Sustainability Information](#) ▶ [Sustainability Highlights](#) ▶ [Environment](#)

[Sustainability Information](#) ▶ [NSK ESG Initiatives](#) ▶ [Environment](#) ▶ [Fighting Global Warming and Climate Change](#)

[Sustainability Information](#) ▶ [Information Disclosure Based on TCFD Recommendations](#)

Category		Scope of coverage	Unit	FY2016	FY2017	FY2018	FY2019	FY2020
Energy	Total energy usage	NSK Group	TJ	7,503	7,864	7,965	7,330	6,845 ^{*1}
	Fuel and gas		TJ	2,330	2,425	2,456	2,295	2,079 ^{*1}
	Electricity and heat ^{*2}		TJ	5,173	5,439	5,509	5,035	4,767 ^{*1}
	(Reference) Electricity and heat primary energy conversion		TJ	13,986	14,747	14,815	13,577	12,860
	Rate of renewable energy use ^{*3}		%	0.02	0.3	1.0	2.8	9.6
	Rate of change in energy usage per unit of sales ^{*4}		%	+2.6	0 (base year)	+4.2	+14.4	+18.8
Greenhouse gas	GHG emissions (Total for Scope 1 and Scope 2)	NSK Group	× 10 ³ t-CO ₂ e	991	1,019	998	839	701 ^{*1}
	Scope 1		× 10 ³ t-CO ₂ e	137	143	142	132	120 ^{*1}
	Scope 2		× 10 ³ t-CO ₂ e	854	876	856	708	581 ^{*1}
	Rate of change in emissions (base year: FY2017)	%	—	0 (base year)	-2.0	-17.6	-31.2	
	Rate of change in emissions per unit of sales ^{*5}	%	+2.7	0 (base year)	+3.5	+13.2	-6.1	
	CO ₂ emissions from distribution	*7	× 10 ³ t-CO ₂	23.5	23.4	22.5	19.9	18.5
	Rate of change in CO ₂ emissions from distribution by transport volume ^{*6}	%	-1.3	0 (base year)	+1.4	+0.6	+6.1	
	(Reference) Scope 3 ^{*8}	NSK Group	× 10 ³ t-CO ₂ e	2,056	2,039	2,705	2,194	1,928 ^{*1}
	1. Purchased goods and services		× 10 ³ t-CO ₂ e	1,444	1,397	1,985	1,629	1,452 ^{*1}
	2. Capital goods		× 10 ³ t-CO ₂ e	187	220	259	177	119 ^{*1}
	3. Fuel- and energy-related activities (Not included in Scope 1 and 2)		× 10 ³ t-CO ₂ e	51	216	215	198	179 ^{*1}
	4. Upstream transportation and distribution		× 10 ³ t-CO ₂ e	13	101	143	118	113 ^{*1}
	5. Waste generated in operations		× 10 ³ t-CO ₂ e	26	54	44	19	15 ^{*1}
	6. Business travel		× 10 ³ t-CO ₂ e	7	5	5	4	4 ^{*1}
	7. Employee commuting		× 10 ³ t-CO ₂ e	94	17	17	16	15 ^{*1}
	8. Upstream leased assets		× 10 ³ t-CO ₂ e	0	0	0	0	0 ^{*1}
	9. Downstream transportation and distribution		× 10 ³ t-CO ₂ e	68	—	—	—	—
10. Processing of sold products	× 10 ³ t-CO ₂ e		—	—	—	—	—	
11. Use of sold products	× 10 ³ t-CO ₂ e		—	—	—	—	—	
12. End-of-life treatment of sold products	× 10 ³ t-CO ₂ e		70	14	12	9	9 ^{*1}	
13. Downstream leased assets	× 10 ³ t-CO ₂ e		0	0	1	1	1 ^{*1}	
14. Franchises	× 10 ³ t-CO ₂ e		0	0	0	0	0 ^{*1}	
15. Investments	× 10 ³ t-CO ₂ e		96	15	24	23	21 ^{*1}	
16. Upstream other	× 10 ³ t-CO ₂ e		—	—	—	—	—	
17. Downstream other	× 10 ³ t-CO ₂ e	—	—	—	—	—		

*1 Verified by a third-party. See the Independent Verification Report on p. 13 for details.

*2 The previously used "amount of primary energy from electric power companies" has been changed to the "amount of energy used by NSK Group sites."

*3 Rate of renewable energy use = Electricity use from renewable sources / electricity use

*4 Energy usage per unit of sales = Energy usage / net sales

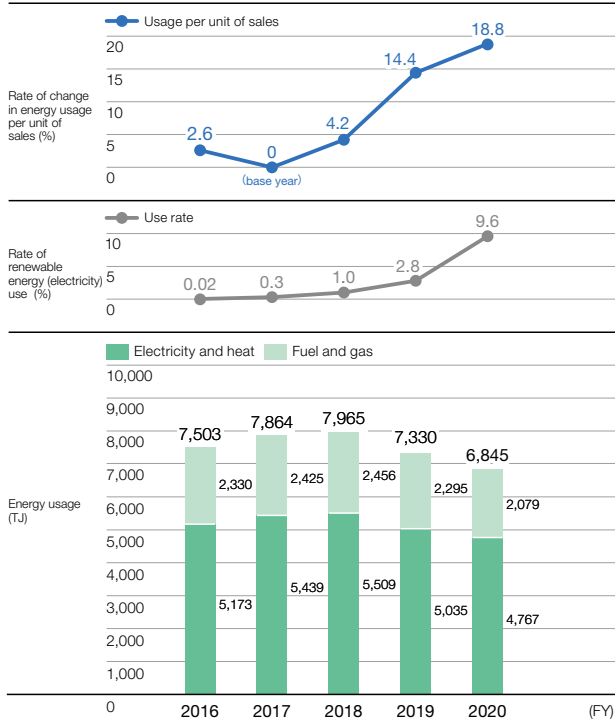
*5 Emissions per unit of sales = Greenhouse gas emissions / net sales

*6 CO₂ emissions from distribution by transport volume = CO₂ emissions from distribution / transport volume (tons)

*7 NSK Logistics Co., Ltd., and main distribution contractors (within Scope 3, Category 4, only for transport in Japan)

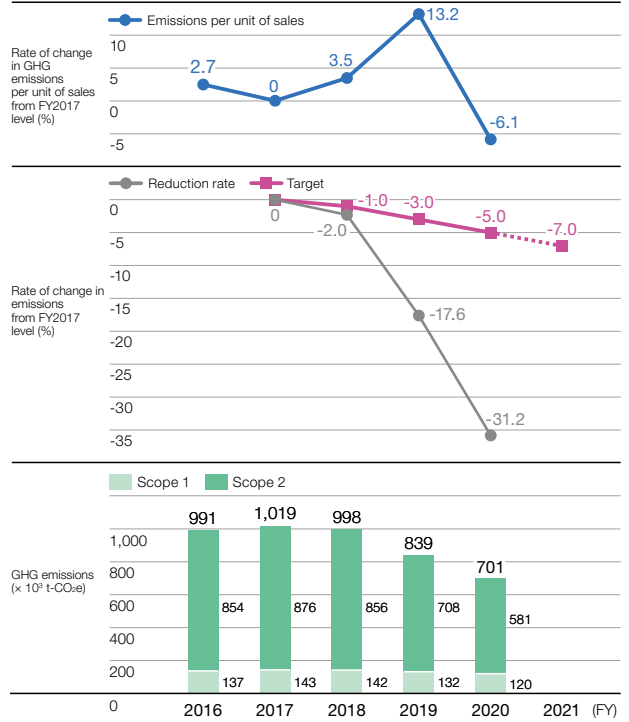
*8 The calculation criteria were revised in fiscal 2017.

Energy Usage



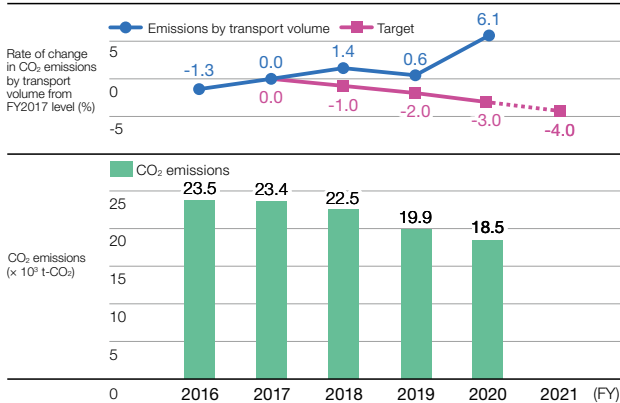
We are promoting the development of technologies such as high-frequency induction heat treatment of bearing components, working to switch to electricity from fuel and gas, and striving to expand our use of green electricity.

GHG Emissions and Emissions per Unit of Sales



The impact of the COVID-19 pandemic has led to a decline in production, but efforts such as expanding our use of renewable energy have helped us to achieve a 31.2% reduction in greenhouse gas emissions. This has resulted in a 6.1% reduction in emissions per unit of sales.

CO₂ Emissions and Emissions by Transport Volume from Distribution in Japan



We took steps to improve logistics efficiency such as revising transport routes. However, the pandemic led to a reduction in production volume and disruptions to distribution. Consequently, CO₂ emissions by transport volume in fiscal 2020 increased by 6.1% compared to fiscal 2017, falling short of our reduction target.

Resource Conservation and Recycling Measures



NSK Report 2021 P. 37 Progress on Strategies for 2026 Contribute to the Environment and Society Environmental Management

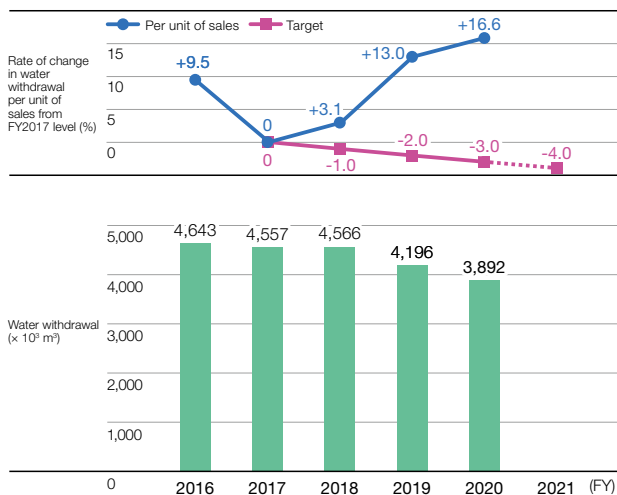
Websites Sustainability Information ▶ NSK ESG Initiatives ▶ Environment ▶ Resource Conservation and Recycling Measures

Category		Scope of coverage	Unit	FY2016	FY2017	FY2018	FY2019	FY2020		
Materials and parts	Steel consumption	NSK Group	× 10 ³ t	705	756	758	618	562		
	Oils and greases	(procurement volume from main suppliers)	× 10 ³ t	21	21	21	20	19		
	Recycled plastic raw material use for distribution (plastic containers, i.e. returnable containers)	*8	t	248	210	283	148	144		
Water consumption	Total water withdrawal	NSK Group	× 10 ³ m ³	4,716	4,713	4,700	4,308	3,977*1		
	Groundwater		× 10 ³ m ³	1,840	1,869	2,011	1,789	1,659*1		
	General water		× 10 ³ m ³	2,274	2,325	2,194	2,028	1,922*1		
	Industrial water		× 10 ³ m ³	601	519	495	490	396*1		
	Water withdrawal in water-stressed regions (breakdown)	× 10 ³ m ³	157	159	83	19	13*2			
	Total water withdrawal	NSK Group (production sites)	× 10 ³ m ³	4,643	4,557	4,566	4,196	3,892		
Rate of change in water withdrawal per unit of sales*3			%	+9.5	0 (base year)	+3.1	+13.0	+16.6		
Waste and valuables	Total waste and valuables	NSK Group*3	× 10 ³ t	—	—	230.2	201.8	181.9*1		
	Valuables		× 10 ³ t	—	—	159.5	137.4	126.1*1		
	Waste		× 10 ³ t	—	—	70.6	64.4	55.8*1		
	Hazardous waste (breakdown of waste)		× 10 ³ t	—	—	18.9	17.0	16.3		
	Recycling volume		× 10 ³ t	—	—	208.2	183.6	166.5		
	Incineration/water treatment volume		× 10 ³ t	—	—	18.4	15.3	13.3		
	Landfill disposal volume		× 10 ³ t	—	—	3.54	2.9	2.08		
	Total waste and valuables		NSK Group (production sites)	× 10 ³ t	212.3	223.5	227.8	200.2	180.6*1	
	Valuables			× 10 ³ t	149.0	156.8	159.4	137.3	125.9*1	
	Waste			× 10 ³ t	63.2	66.8	68.5	62.9	54.7*1	
	Hazardous waste (breakdown of waste)			× 10 ³ t	14.9	18.6	18.9	17.0	16.3	
	Rate of change in industrial waste per unit of sales*5			%	+1.8	0 (base year)	+5.6	+15.8	+11.8	
	Landfill disposal volume			× 10 ³ t	3.66	3.01	3.35	2.62	1.90	
	Recycling rate*6 for waste			%	98.2	98.6	98.4	98.6	98.9*1	
	Amount of packaging waste (distribution)		*8	t	191	174*9	193*9	211*9	169	
Rate of change in packaging waste per production unit (distribution)*7			%	+6.4	0 (base year)	+10.8*9	+39.8*9	+28.1		

*1 Verified by a third-party. See the Independent Verification Report on p. 13 for details.
 *2 Refers to water withdrawal at three plants in India that are determined to be located in high water-risk areas based on assessments by WWF Water Risk Filter and WRI Aqueduct. Based on local assessments, NSK has determined that current risk is low.
 *3 Water withdrawal per unit of sales (production sites) = Water withdrawal / net sales
 *4 Figures for fiscal 2016 and fiscal 2017 are for production sites only.

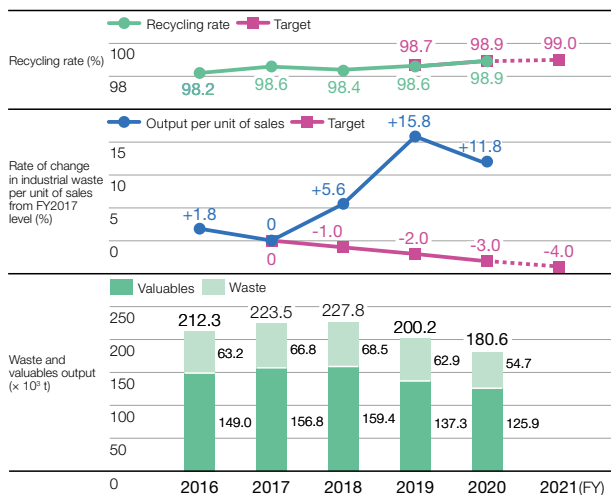
*5 Industrial waste per unit of sales (production sites) = Waste amount / net sales
 *6 Recycling rate (production sites) = Recycled amount / (Total waste amount - reduction amount) × 100
 *7 Packaging waste per production unit (distribution) = Amount of packaging material waste / production volume
 *8 NSK Logistics Co., Ltd., and main distribution contractors (only for transport in Japan)
 *9 Revised to improve accuracy.

Water Withdrawal per Unit of Sales (Production Sites)



We are working to effectively use water by improving management, promoting recycling, and taking other measures. Water withdrawal in fiscal 2020 decreased by 304,000 m³ compared to the previous fiscal year. Water withdrawal per unit, however, increased by 16.6% compared to fiscal 2017 due to the sales decrease caused by the COVID-19 pandemic.

Industrial Waste and Valuables Output, Output per Unit of Sales, and Recycling Rate (Production Sites)



We achieved our target recycling rate of 98.9% in fiscal 2020 due to advancement of the 3Rs. However, waste per unit of sales increased by 11.8% compared to fiscal 2017 due to the sales decrease brought about by the economic downturn.

Reducing Use of Environmentally Harmful Substances



Websites

Sustainability Information ▶ NSK ESG Initiatives ▶ Environment ▶ [Reducing Use of Environmentally Harmful Substances](#)

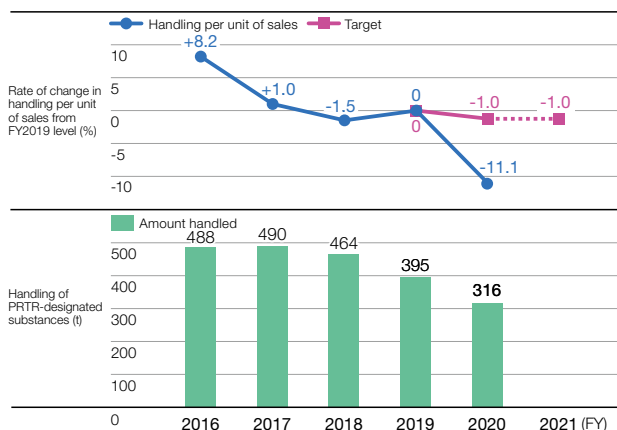
Category		Scope of coverage	Unit	FY2016	FY2017	FY2018	FY2019	FY2020
Green procurement	Rate of supplier consent to NSK Group Green Procurement Standards obtained	NSK Group	%	96.5	97.4	98.6	99.1	99.1
	Number of suppliers audited by NSK Group companies		Companies	129	183	192	124	158
Reducing use of environmentally harmful substances	Number of suppliers at which the NSK Survey of Environmentally Harmful Substance Inclusion was conducted	Group in Japan	Companies	509	468	473	478	467
	Handling of PRTR-designated substances		t	488	490	464	395	316
	Discharge/transfer of PRTR-designated substances	t	96	105	72	78	73	
	Rate of change in handling of PRTR-designated substances per unit of sales*2	%	+8.2	+1.0	-1.5	0 (base year)	-11.1	
	Emissions of VOCs	NSK Group	t	162	154	151	145	141*1
	Rate of change in emissions of VOCs per unit of sales*3		%	-2.2	-13.5	-12.7	0 (base year)	+8.1
Protecting air quality	Emissions of NOx	NSK Group	t	128	132	128	119	106
	Emissions of SOx		t	48	50	42	38	39
Protecting water quality	Discharged (total)	NSK Group	$\times 10^3 \text{ m}^3$	2,863	3,040	3,159	2,847	2,519
	Rivers		$\times 10^3 \text{ m}^3$	704	453	729	591	575
	Sewage system	$\times 10^3 \text{ m}^3$	2,159	2,587	2,430	2,256	1,944	
	BOD (biochemical oxygen demand)	t	2.3	1.3	1.4	1.2	1.2	
	Discharged (total)	NSK Group (production sites)	$\times 10^3 \text{ m}^3$	2,835	2,925	2,982	2,692	2,441

*1 Verified by a third-party. See the Independent Verification Report on p. 13 for details.

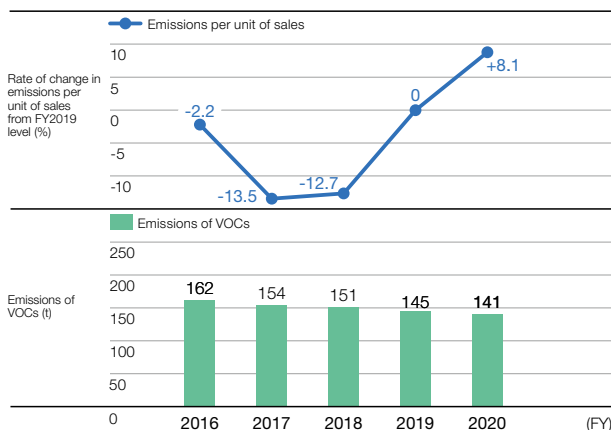
*2 Handling of PRTR-designated substances per unit of sales = Handling of PRTR-designated substances / net sales

*3 Emissions of VOCs per unit of sales = Emissions of VOCs / net sales

Handling of PRTR-Designated Substances and Handling per Unit of Sales



Emissions of VOCs and Emissions per Unit of Sales



Thanks to efforts to achieve our target of reducing handling of PRTR-designated substances per unit of sales by 1% compared to the previous fiscal year, we greatly surpassed our fiscal 2020 target and achieved an 11.1% reduction. In fiscal 2021, we will introduce new efforts to achieve further reductions.

NSK Group's Main Initiatives to Reduce Environmentally Harmful Substances

FY	Action
1994	Completely eliminated CFCs for cleaning
	Completely eliminated trichloroethylene
1999	Phased out in-house incinerators (a measure against dioxins)
2003	Completely eliminated chlorinated organic solvents

FY	Action
2006	Came into full compliance with the EU RoHS Directive*1 and ELV Directive*2 Reinforced chemical management system for compliance with the EU REACH regulation
2015	Phased out machining oil with chlorine-based extreme pressure additives (a measure against dioxins)
2020	Fully responded to the 10 EU RoHS2*3 substances

*1 RoHS Directive: An EU directive that restricts the use of six harmful substances in electric and electronic devices

*2 EU ELV Directive: An EU directive that prohibits lead, mercury, cadmium, and hexavalent chromium in automotive parts and materials, in order to promote the recycling of end of life vehicles

*3 RoHS2 Directive: The revised RoHS Directive issued in 2014, now including phthalates and other substances added in 2019, restricts the use of 10 substances.

Biodiversity Conservation



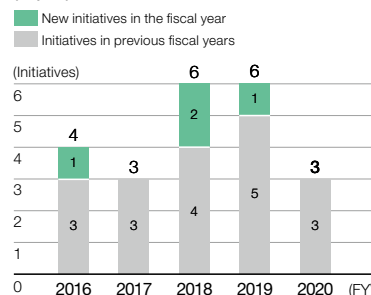
Websites Sustainability Information ▶ NSK ESG Initiatives ▶ Environment ▶ [Biodiversity Conservation](#)
 Sustainability Information ▶ NSK ESG Initiatives ▶ Environment ▶ Biodiversity Conservation
 ▶ [Expanding Social Contribution Activities Related to Biodiversity Conservation](#)

Number of Initiatives (Japan)

Category		Scope of coverage	Unit	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Biodiversity conservation initiatives	Initiatives implemented (total)	Group in Japan	Initiatives	4	3	6	6	3
	Initiatives in previous fiscal years*		Initiatives	3	3	4	5	3
	New initiatives in the fiscal year		Initiatives	1	0	2	1	0
Target: 1 new initiative/year	Donation		Millions of yen	—	0.4	0.7	0.7	0.9

* Varies depending on the fiscal year, as some could not be implemented in the applicable fiscal year due to bad weather, etc.

Number of Biodiversity Conservation Initiatives (Japan)



Activities in Fiscal 2020 (Japan)

First year	Site (Pref.)	Category	Overview	FY2020	
				Month(s) held	Participants*
2015	Gunma	Preservation of <i>satoyama</i> forest areas	NSK Gunma Future Forest activities	October	20
2018	Fukushima	Preservation of <i>satoyama</i> forest areas	Forest preservation activities in Tanagura Town	November	19
2019	Shizuoka	Marine conservation activities	Shoreline cleanup (reducing marine plastics) and release of sea turtles (baby turtles)	September	57
—	Across Japan	Cleanup activities	Neighborhood cleanup and beautification activities near NSK plants and other sites	As needed	892 (125 activities in 12 regions)

* Including participants from outside the company (personnel of NPOs, forest cooperatives, local governments, and local residents)

Biodiversity Impact Analysis and Initiatives

Action agenda classification	Research and development	Procurement and purchasing	Manufacturing and logistics	Plant and office grounds	Social contribution activities	Communication	
Promotion of positive impacts	<ul style="list-style-type: none"> Making products lighter (manufactured with minimal materials) Developing more fuel-efficient products Developing longer-lasting products Developing products that are easy to recycle after use Revising manufacturing processes 	<ul style="list-style-type: none"> Using environmentally friendly materials and products Reducing environmental impact in parts and raw material production through supplier selection 	<ul style="list-style-type: none"> Utilizing renewable energy Promoting energy- and resource-saving activities Saving energy by using milk runs and empty trucks on outbound and return journeys 	<ul style="list-style-type: none"> Conducting environmental risk assessments Protecting important species 	<ul style="list-style-type: none"> Creating and managing habitats through employee volunteer activities Reducing marine plastic (cleanups) Donating to various organizations 	<ul style="list-style-type: none"> Promoting employee education Promoting activities in the NSK Group Promoting activities based on local characteristics Favorable reputation in the community 	
Control of negative impacts	<ul style="list-style-type: none"> Reducing resource waste 	<ul style="list-style-type: none"> Reducing environmental impact in parts and raw material production by suppliers through supplier selection Reducing overexploitation and habitat loss by reducing surplus purchasing 	<ul style="list-style-type: none"> Reducing use of raw materials, water, and energy Reducing GHG emissions from production and transport Reducing the creation of landfills by reducing landfill disposal of waste Reducing modification of plant premises 	<ul style="list-style-type: none"> Reducing deterioration of energy efficiency dependent on buildings Reducing habitat modification 	<ul style="list-style-type: none"> Reducing the lack of employee education Reducing biodiversity loss 	<ul style="list-style-type: none"> Reducing the lack of recognition of local characteristics 	
NSK's initiatives on impacts	<ul style="list-style-type: none"> Developing environmentally friendly products Revising manufacturing processes Improving yield 	<ul style="list-style-type: none"> Green purchasing and green procurement Reducing waste plastic 	<p>Reducing emissions of harmful substances</p> <ul style="list-style-type: none"> Energy- and resource-saving activities Energy conversion Reducing overproduction Proper inventory control Milk runs and modal shift Using low-emission vehicles 	<p>Reducing pollution of air, water, soil, etc.</p>	<p>Reducing emissions of harmful substances</p> <ul style="list-style-type: none"> Conducting environmental impact assessments before construction of new plants, before plant site modification, and before construction Improving insulation performance of buildings Protecting important species Conducting environmental risk assessments (IBAT analysis) 	<ul style="list-style-type: none"> Preservation of <i>satoyama</i> forest areas Tree planting Reducing marine plastic (cleanups) Removing specified invasive species Donating to various organizations 	<ul style="list-style-type: none"> Cooperation with NPOs, local governments, and local residents and organizations Internal and external public relations
Employee education							



Social

Research and Development

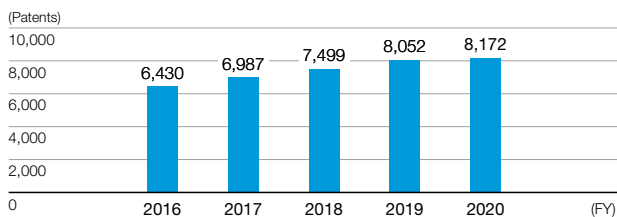


NSK Report 2021 [Pp. 48-49 Core Technologies and Taking Up the Challenge of Creating New Collaborative Value](#)

Websites [Research & Development](#)

Category		Scope of coverage	Unit	FY2016	FY2017	FY2018	FY2019	FY2020
R&D expenses	R&D expenses (on a statutory basis)	NSK Group	Billions of yen	13.9	17.1	19.0	18.3	16.8
	R&D expenses (on a managerial basis)		Billions of yen	25.7	28.2	32.4	31.4	28.6
Sales share of new/improved products	Total sales share of new/improved products		%	23	21	18	18	16
Number of patents held	Number of patents held		Patents	6,430	6,987	7,499	8,052	8,172

Number of Patents Held



We are focusing on research and development to achieve sustainable growth. The number of patents held by NSK in fiscal 2020 increased by 120 compared to fiscal 2019 for a total of 8,172.

Occupational Health and Safety

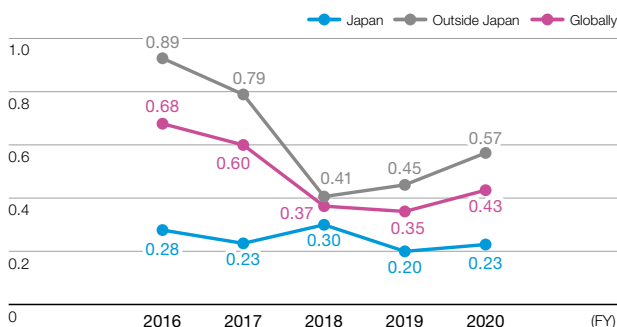


NSK Report 2021 [P. 38 Progress on Strategies for 2026](#) [Contribute to the Environment and Society](#) [Safety Management](#)

Websites [Sustainability Information](#) ▶ [NSK ESG Initiatives](#) ▶ [Safety Management](#)

Category		Scope of coverage	Unit	FY2016	FY2017	FY2018	FY2019	FY2020
Lost time injury frequency rate ^{*1}	Japan	Group in Japan	—	0.28	0.23	0.30	0.20	0.23 ^{*1}
	Outside Japan	NSK Group (outside Japan)	—	0.89	0.79	0.41	0.45	0.57 ^{*1}
	Globally	NSK Group	—	0.68	0.60	0.37	0.35	0.43 ^{*1}

Lost Time Injury Frequency Rate



We are strengthening our occupational safety initiatives throughout the entire NSK Group, but the lost time injury frequency rate rose slightly over the previous fiscal year to 0.43 for fiscal 2020.

^{*1} Lost time injury frequency rate = Number of work accidents resulting in one or more days of work absence / total actual working hours × 1,000,000

^{*2} Verified by a third-party. See p. 14 for details.

Health and Wellness



NSK Report 2021 [P. 36 Progress on Strategies for 2026](#) [Enhance Managerial Resources](#) [Evolve Personnel Development](#)

Websites

Sustainability Information ▶ NSK ESG Initiatives ▶ Human Resource Management
▶ [Safe and Healthy Workplaces and Work-Style Reforms: Building More Engaging Workplaces](#)

	Category	Scope of coverage	Unit	FY2016	FY2017	FY2018	FY2019	FY2020
Health and wellness initiatives indicators	Percentage of employees participating in the Specific Health Guidance program	Group in Japan	%	—	25.7	25.3	25.1	27.3
	Percentage of employees receiving stress checks		%	—	93.8	95.9	94.9	95.9
	Percentage of employees who smoke		%	—	39.1	37.6	36.6	33.8

Human Resources



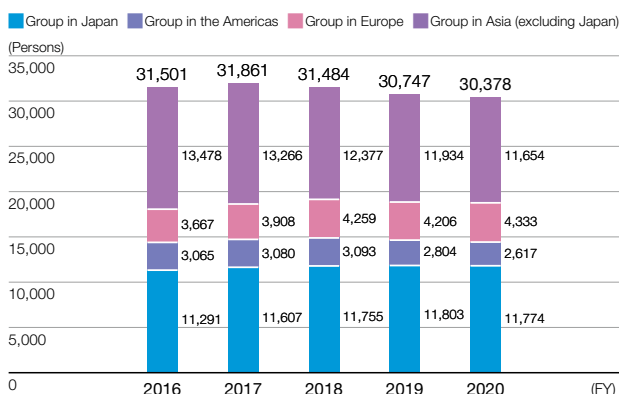
NSK Report 2021 [P. 36 Progress on Strategies for 2026](#) [Enhance Managerial Resources](#) [Evolve Personnel Development](#)

Websites

Sustainability Information ▶ NSK ESG Initiatives ▶ [Human Resource Management](#)

	Category	Scope of coverage	Unit	FY2016	FY2017	FY2018	FY2019	FY2020
Number of employees	Total	NSK Group	Persons	31,501	31,861	31,484	30,747	30,378
	Japan	Group in Japan	Persons (%)	11,291 (35.8)	11,607 (36.4)	11,755 (37.3)	11,803 (38.4)	11,774 (38.8)
	The Americas	Group in the Americas	Persons (%)	3,065 (9.7)	3,080 (9.7)	3,093 (9.8)	2,804 (9.1)	2,617 (8.6)
	Europe	Group in Europe	Persons (%)	3,667 (11.6)	3,908 (12.3)	4,259 (13.5)	4,206 (13.7)	4,333 (14.3)
	Asia	Group in Asia (excluding Japan)	Persons (%)	13,478 (42.8)	13,266 (41.6)	12,377 (39.3)	11,934 (38.8)	11,654 (38.4)
Employee composition by gender	Total	Group in Japan*1	Persons	9,192	9,391	9,501	9,559	9,576
	Men		Persons (%)	8,395 (91.3)	8,570 (91.3)	8,667 (91.2)	8,698 (91.0)	8,684 (90.7)
	Women		Persons (%)	797 (8.7)	821 (8.7)	834 (8.8)	861 (9.0)	892 (9.3)
Average years of employment (average age)	Total	Group in Japan*1	Years (Age)	15 (41)	16 (41)	16 (41)	17 (42)	17 (42)
	Men		Years (Age)	17 (42)	17 (42)	17 (42)	17 (42)	18 (43)
	Women		Years (Age)	10 (36)	10 (37)	11 (37)	12 (37)	12 (38)
Number of new graduates hired	Total	Group in Japan*2	Persons	118	102	115	93	107
	Men		Persons (%)	100 (84.7)	89 (87.3)	99 (86.1)	67 (72.0)	87 (81.3)
	Women		Persons (%)	18 (15.3)	13 (12.7)	16 (13.9)	26 (28.0)	20 (18.7)

Number of Employees



The global number of employees as of the end of March 2021 decreased by 369 people compared to the previous fiscal year, bringing the total to 30,378.

*1 NSK Ltd. and major NSK Group companies in Japan

*2 NSK Ltd. and major NSK Group companies in Japan (career-track positions only)

Category		Scope of coverage	Unit	FY2016	FY2017	FY2018	FY2019	FY2020
Managers Percentages of men and women	Men	Group in Japan*1	%	98.8	98.4	98.4	98.3	98.3
	Women		%	1.2	1.6	1.6	1.7	1.7
Turnover rate	Turnover rate*2	Group in Japan*1	%	1.36	1.88	1.64	1.40	1.11
Number of rehired senior employees*3	Total		Persons	655	624	660	625	613
	Senior employee rehiring system		Persons	620	570	592	555	569
	Other (fixed-term contract, etc.)		Persons	35	54	68	70	44
Employment rate of people with disabilities	Employment rate of people with disabilities	Group in Japan	%	2.20	2.09	2.25	2.24	2.45
	(Reference) Legally mandated employment rate in Japan	—	%	2.00	2.00	2.20	2.20	2.30
Number of employees who took childcare leave	Total	Group in Japan*1	Persons	75	69	109	160	227
	Men		Persons	34	40	73	123	185
	Women		Persons	41	29	36	37	42
Number of employees who took nursing care leave	Total		Persons	4	3	3	11	15
	Men		Persons	3	1	2	6	10
	Women		Persons	1	2	1	5	5
Human resource development	Number of participants in Global Management College	NSK Group	Persons	13	14	13	12	0*4
	Number of participants in Japan Management College	Group in Japan*1	Persons	17	15	10	10	10
	Number of participants in NSK Institute of Technology	NSK Group	Persons	403	466	451	527	518
Rate of labor union participation	Non-management employees	Group in Japan*1	%	100	100	100	100	100
	All employees including management		%	82	82	83	83	83
Labor-management consultations	Number of labor-management consultations*5	Group in Japan*1	Times	6	7	7	7	5

*1 NSK Ltd. and major NSK Group companies in Japan

*2 Percentage of persons employed at the end of the previous fiscal year who left the Company in the given year

*3 Number of employees aged 60 and over

*4 Suspended due to the COVID-19 pandemic.

*5 Number of times Central Labor-Management Conference meetings held



Governance

Corporate Governance



NSK Report 2021 [Pp. 60-63 Corporate Governance](#)

Websites [Company](#) ► [Corporate Governance](#)

Composition of the Board of Directors and Nomination/Audit/Compensation Committees

As of June 30 of each fiscal year

Category		Unit	June 2017	June 2018* ¹	June 2019	June 2020	June 2021
Board of Directors	Chair of the Board of Directors	—	President and CEO	President and CEO	President and CEO	President and CEO	Chairman and Director
	Number of directors	Persons	12	12	12	9	9
	Men (percentage)	Persons (%)	12 (100)	11 (91.7)	11 (91.7)	8 (88.9)	8 (88.9)
	Women (percentage)	Persons (%)	0 (0)	1 (8.3)	1 (8.3)	1 (11.1)	1 (11.1)
	Number of internal directors (who also serve as executive officers)	Persons	7	6	6	3	2
	Men	Persons	7	6	6	3	2
	Women	Persons	0	0	0	0	0
	Number of internal directors (who do not serve as executive officers)	Persons	1	1	1	1	2
	Number of independent outside directors (total)	Persons	4	5	5	5	5
	Men	Persons	4	4	4	4	4
	Women	Persons	0	1	1	1	1
	Percentage of internal directors (who also serve as executive officers)	%	58.3	50.0	50.0	33.3	22.2
	Percentage of independent outside directors	%	33.3	41.7	41.7	55.6	55.6
	Number of independent outside directors with four or more important concurrent posts	Persons	0	0	0	0	0
Term of directors	Years	1	1	1	1	1	
Average tenure of directors* ²	Years	2.5	3.3	3.3	3.5	4.3	
Nomination Committee	Committee chair	—	Independent outside director	Independent outside director	Independent outside director	Independent outside director	Independent outside director
	Number of members	Persons	3	3	3	3	3
	Internal directors	Persons	1	1	1	1	1
	Independent outside directors	Persons	2	2	2	2	2
Audit Committee	Committee chair	—	Independent outside director	Independent outside director	Independent outside director	Independent outside director	Independent outside director
	Number of members	Persons	3	4	3	4	4
	Internal directors	Persons	1	1	1	1	1
	Independent outside directors	Persons	2	3	2	3	3
Compensation Committee	Committee chair	—	Independent outside director	Independent outside director	Independent outside director	Independent outside director	Independent outside director
	Number of members	Persons	3	3	3	3	3
	Internal directors	Persons	1	1	1	1	1
	Independent outside directors	Persons	2	2	2	2	2

*1 One independent outside director was appointed in July 2018.

*2 The average tenure of directors who were reelected following the previous year, at the time directors are elected.

Number of Times the Board of Directors and Nomination/Audit/Compensation Committees Convened and Their Attendance Rates

Category		Unit	FY2016	FY2017	FY2018	FY2019	FY2020
Board of Directors	Number of times convened	Meetings	10	10	10	10	10
	Attendance rate	%	98	100	99	99	98
	Attendance rate of independent outside directors	%	95	100	98	98	98
Nomination Committee	Number of times convened	Meetings	6	6	7	8	5
	Attendance rate	%	100	100	95	100	100
	Attendance rate of independent outside directors	%	100	100	86	100	100
Audit Committee	Number of times convened	Meetings	15	14	14	15	16
	Attendance rate	%	100	100	100	100	100
	Attendance rate of independent outside directors	%	100	100	100	100	100
Compensation Committee	Number of times convened	Meetings	5	4	8	5	4
	Attendance rate	%	100	100	100	100	100
	Attendance rate of independent outside directors	%	100	100	100	100	100

Executive Officers, Group Officers

As of April 1 of each fiscal year

Category		Unit	April 2017	April 2018	April 2019	April 2020	April 2021
Executive officers	Total	Persons	35	34	35	34	32
	Men (percentage)	Persons (%)	35 (100)	33 (97.1)	34 (97.1)	33 (97.1)	30 (93.7)
	Women (percentage)	Persons (%)	0 (0)	1 (2.9)	1 (2.9)	1 (2.9)	2 (6.3)
Group officers	Total	Persons	3	3	3	3	4
	Men (percentage)	Persons (%)	3 (100)	3 (100)	3 (100)	3 (100)	4 (100)
	Women (percentage)	Persons (%)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

Compensation of the President and CEO

Category	Unit	FY2016	FY2017	FY2018	FY2019	FY2020
Total consolidated compensation, etc., of the President and CEO ^{*1}	Millions of yen	136	203	153	Less than 100	157
Average annual salary of employees (NSK Ltd.) ^{*2}	Millions of yen	7.67	7.62	7.76	7.47	6.85
Ratio of total consolidated compensation, etc., of the President and CEO to average annual salary of employees	—	17.7	26.6	19.7	Less than 13.4	22.9

*1 Disclosed in the Status of Corporate Governance section in the Annual Securities Report.

*2 Disclosed in the Overview of Company section in the Annual Securities Report.

Political Donations

Category	Unit	FY2016	FY2017	FY2018	FY2019	FY2020
Political donations	Millions of yen	4.00	4.10	4.05	4.05	2.05

Compliance

NSK Report 2021 [P. 55 Compliance](#)Websites [Sustainability Information](#) ▶ [NSK ESG Initiatives](#) ▶ [Compliance](#)

Category		Scope of coverage	Unit	FY2016	FY2017	FY2018	FY2019	FY2020
Employee engagement survey ^{*1}	Participants (officers/employees)	NSK Group	Persons	22,365 (Worldwide)	28,893 (Worldwide)	15,538 (Japan)	15,518 (Outside Japan)	14,963 (Japan)
Compliance hotline: Number of consultations and reports			Incidents	52	88	127	175	178
Number of serious legal violations, incidents/accidents			Incidents	0	0	0	0	0
Number of penalties for corruption/bribery incidents			Incidents	0	0	0	0	0
Number of violations of competition law			Incidents	0	0	0	0	0
Competition law training (including compliance-related topics)	Sessions conducted		Sessions	100 ^{*2}	106 ^{*2}	207	154	172
	Number of participants		Persons	1,848 ^{*2}	1,463 ^{*2}	2,960	2,867	5,481 ^{*3}
	Average training time	Hours/person	—	1.5	1.0	1.0	1.0	

*1 Conducted as a compliance awareness survey until fiscal 2017.

*2 Includes the results of training conducted outside Japan.

*3 Includes e-learning participants.



No.1811004139

Independent Verification Report

To: NSK Ltd.

1. Objective and Scope

Japan Quality Assurance Organization (hereafter "JQA") was engaged by NSK Ltd. (hereafter "the Company") to provide an independent verification on "FY2020 NSK Group GHG emission calculation report", "FY2020 NSK Group Water withdrawal calculation report", "FY2020 NSK Group Waste, valuable resources, and Hazardous waste calculation report" and "FY2020 NSK Group VOC emission calculation report" (hereafter "the Reports"). The content of our verification was to express our conclusion, based on our verification procedures, on whether the statement of information regarding GHG emissions, Energy Use, Water withdrawal, Industrial waste and valuable resources, Hazardous waste only in Japan facilities, and VOC emissions in the Reports was correctly measured and calculated, in accordance with the "NSK Group GHG emission calculation standard (Scope 1 and 2) (Ver. 02-07)", "NSK Group GHG emission calculation standard (Scope 3) (Ver. 01-08)", "NSK Group Water withdrawal calculation standard (Ver. 01-04)" and "NSK Group Total waste of industrial waste and valuables, Recycling rate and Hazardous waste, calculation standard (Ver. 02-02)" and "NSK Group VOC emission calculation standard (Ver.01-03)" (hereafter "the Rules"). The purpose of the verification is to evaluate the Reports objectively and to enhance the credibility of the Reports.

* The fiscal year 2020 of the Company ended on March 31, 2021.

2. Procedures Performed

JQA conducted verification in accordance with "ISO 14064-3" for GHG emissions and Energy use, and with "ISAE3000" for Water withdrawal, Industrial waste and valuable resources, Hazardous waste, and VOC emissions, respectively. The scope of this verification assignment covers Scope 1, 2 and Scope 3 as GHG emissions, Energy Use, Water withdrawal^{*1}, Industrial waste and valuable resources^{*2}, Hazardous waste only in Japan facilities^{*3}, and VOC emissions^{*4}. The verification was conducted to a limited level of assurance and quantitative materiality was set at 5 percent each of the total emissions and total amount in the Reports. The organizational boundaries of this verification cover all NSK Group sites in Japan and outside Japan, including production sites, technology centers and non-production sites of NSK Ltd., NSK equity affiliates^{*5} and NSK brand producing companies.

^{*1} Water withdrawal is comprised of tap water, industrial water, groundwater, recycled water and rainwater, used by business activities.

^{*2} Industrial waste and valuable resources are solid or liquid waste discharged by business activities.

^{*3} Hazardous waste is "specially controlled industrial waste" stipulated by the "Waste Management and Public Cleaning Act" among the amount of Industrial waste and valuable resources only in Japan facilities.

^{*4} VOC emissions are substances specified by the Rules, among the VOC emitted from business activities.

^{*5} NSK equity affiliates which 50 percent or more of the voting stock is owned by NSK.

Our verification procedures included:

- Performing validation of integrated functions to check the Rules.
- On-site assessment at 4 domestic sampling sites (NSK Ltd. Haruna Plant, NSK Ltd. Saitama Plant, CHITOSE SANGYO Co., Ltd., NSK Logistics Co., Ltd. East Japan Business Center Nagareyama warehouse) to check the report boundaries; GHG sources; monitoring points of activity data; monitoring and calculation system; and the activity data. The number and location of sampling sites were selected by the Company.
- Performing validation of the Rule and verification of Scope 3. Checking calculation scenario and allocation method for Scope 3; monitoring and calculation system; and emission data.

3. Conclusion

Based on the procedures described above, nothing has come to our attention that has caused us to believe that the statement of the information regarding the Company's FY2020 GHG emissions, Energy Use, Water withdrawal, Industrial waste and valuable resources, Hazardous waste only in Japan facilities, and VOC emissions in the Report is not materially correct, or has not been prepared in accordance with the Rules.

4. Consideration

The Company was responsible for preparing the Reports, and JQA's responsibility was to conduct verification of GHG emissions, Energy Use, Water withdrawal, Industrial waste and valuable resources, Hazardous waste only in Japan facilities, and VOC emissions in the Reports only. There is no conflict of interest between the Company and JQA.

Sumio Asada, Board Director

For and on behalf of Japan Quality Assurance Organization

1-25, Kandasudacho, Chiyoda-ku, Tokyo, Japan

July 26, 2021



Independent Assurance Statement

September 8, 2021

Mr. Akitoshi Ichii
President & CEO
NSK Ltd.

1. Purpose

We, Sustainability Accounting Co., Ltd., have been engaged by NSK Ltd. ("the Company") to provide limited assurance on the Company's Lost-Worktime Injury Rates for the fiscal year ended March 2021 which were 0.23 in Japan, 0.57 outside Japan, and 0.43 globally ("the performance data"). The purpose of this process is to express our conclusion on whether the performance data were calculated in accordance with the Company's standards. The Company's management is responsible for calculating the performance data. Our responsibility is to independently carry out a limited assurance engagement and to express our assurance conclusion.

2. Procedures Performed

Our assurance engagement has been planned and performed in accordance with International Standard on Assurance Engagement 3000 (ISAE3000).

The key procedures we carried out included:

- Interviewing the Company's responsible personnel to understand the Company's standards
- Reviewing the Company's standards
- Performing cross-checks on a sample basis and performing a recalculation to determine whether the performance data were calculated in accordance with the Company's standards.

3. Conclusion

Based on the procedures performed, nothing has come to our attention that causes us to believe that the performance data have not been calculated, in all material respects, in accordance with the Company's standards.

We have no conflict of interest relationships with the Company.

A handwritten signature in black ink, appearing to read "Takashi Fukushima", is written over a horizontal line.

Takashi Fukushima
Representative Director
Sustainability Accounting Co., Ltd.

MOTION & CONTROL™
NSK