# **ESG Aggregate Data**

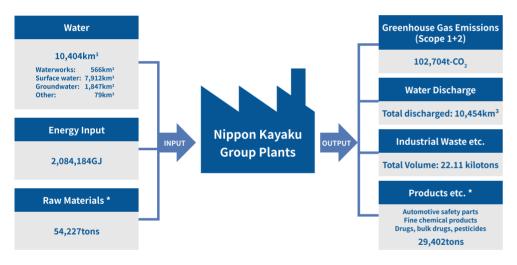
Sustainability in

the Nippon Kayaku Group

### **Environment** -

#### **Material Flow**

#### ◆ Material Flow of Business Activities (FY2023)



Items listed below without additional notes represent combined domestic and overseas values.

#### ◆ Amounts of Raw Materials Used

Indicators	Covering	Unit	2020	2021	2022	2023
Principal raw materials	non- consolidated	tons	36,614	47,583	44,211	40,707
Auxiliary materials	non- consolidated	tons	16,581	18,529	17,026	12,512
Plastic packaging materials	non- consolidated	tons	194	266	389	180
Cardboard packaging materials	non- consolidated	tons	415	529	480	395
Other packaging materials	non- consolidated	tons	461	489	470	434
Total	non- consolidated	tons	54,266	67,396	62,576	54,227

<sup>\*</sup> Products not included (goods stocked at plants)

### Energy Input Amounts

Governance

Indicators	Covering	Unit	2019	2020	2021	2022	2023
Amount of energy input (heat quantity equivalent)	consolidated	GJ	-	-	-	-	2,084,184
Renewable energy	consolidated	GJ	-	-	-	-	29,060
Non-renewable energy sources	consolidated	GJ	-	-	-	-	2,055,124

<sup>\*</sup> When converting electricity amounts into heat amounts for fuel, heat and electricity consumed in domestic and overseas business activities, electricity purchased from electricity companies is converted at 1MWh to 8.64GJ, while renewable energy such as solar power is converted at 1MWh to 3.6GJ.

### **Greenhouse Gas Emissions**

#### Scope 1 and Scope 2 (Non-consolidated)

Indicators	Covering	Unit	2019	2020 <sup>*2</sup>	2021 <sup>*2</sup>	2022 <sup>*2</sup>	2023 <sup>*2</sup>
Energy-derived CO <sub>2</sub>	non- consolidated	t-CO <sub>2</sub> e	79,476	71,632	63,168	62,267	57,760
Non-energy-derived CO <sub>2</sub>	non- consolidated	t-CO <sub>2</sub> e	2,980	2,733	3,189	2,719	2,406
N <sub>2</sub> O	non- consolidated	t-CO <sub>2</sub> e	113	123	112	169	339
CH <sub>4</sub>	non- consolidated	t-CO <sub>2</sub> e	24	26	29	30	34
HFCs	non- consolidated	t-CO <sub>2</sub> e	0	12	3	110	49
Other CFCs	non- consolidated	t-CO <sub>2</sub> e	405	34	336	622	70
PFCs	non- consolidated	t-CO <sub>2</sub> e	0	0	0	0	0
SF <sub>6</sub>	non- consolidated	t-CO <sub>2</sub> e	0	0	0	0	0
NF <sub>3</sub>	non- consolidated	t-CO <sub>2</sub> e	0	0	0	0	0
Total <sup>*1</sup>	non- consolidated	t-CO <sub>2</sub> e	82,999	74,559	66,839	65,916	60,659

<sup>\*1</sup> As figures have been rounded off, the totals in some columns do not exactly match the sum of each item above.

### ◆ Scope 1 and Scope 2 (Consolidated)

Indicators	Covering	Unit	2019	2020	2021	2022	2023
Energy-derived CO <sub>2</sub>	consolidated	t-CO <sub>2</sub> e	127,323	114,281	108,410	103,811	99,124
Non-energy-derived CO <sub>2</sub>	consolidated	t-CO <sub>2</sub> e	2,989	2,771	3,230	2,745	2,463
N <sub>2</sub> O	consolidated	t-CO <sub>2</sub> e	113	123	112	169	339
CH <sub>4</sub>	consolidated	t-CO <sub>2</sub> e	24	26	29	30	34
HFCs	consolidated	t-CO <sub>2</sub> e	26	16	7	138	113
Other CFCs	consolidated	t-CO <sub>2</sub> e	748	1,011	794	1,409	632
PFCs	consolidated	t-CO <sub>2</sub> e	0	0	0	0	0
SF <sub>6</sub>	consolidated	t-CO <sub>2</sub> e	0	0	0	0	0
NF <sub>3</sub>	consolidated	t-CO <sub>2</sub> e	0	0	0	0	0
Total <sup>*1</sup>	consolidated	t-CO <sub>2</sub> e	131,223	118,227	112,584	108,301	102,705
Scope 1	consolidated	t-CO <sub>2</sub> e	36,326	35,613	37,819	35,581	30,158
Scope 2 (Market base)	consolidated	t-CO <sub>2</sub> e	94,897	82,615	74,765	72,720	72,546
Emission volume per unit of sales*2	consolidated		0.75	0.68	0.61	0.55	0.51

<sup>\*1</sup> As figures have been rounded off, the totals in some columns do not exactly match the sum of each item above.

<sup>\*</sup> Nippon Kayaku alone

<sup>\*2</sup> Joetsu Plant emissions are included in the non-consolidated figures from FY2020 onwards

<sup>\*2 2</sup> Emissions amounts (t-CO<sub>2</sub>e) / consolidated sales figures (million yen)

### Scope3

Category	Covering	Unit	2019	2020	2021	2022	2023
Products and services purchased	consolidated	t-CO <sub>2</sub> e	243,600	237,300	294,500	275,000	241,800
Capital goods	consolidated	t-CO <sub>2</sub> e	42,700	42,900	26,800	29,600	33,400
Fuels and energy-related activities not included in Scope 1 and 2	consolidated	t-CO <sub>2</sub> e	22,400	21,200	22,300	21,000	20,500
Exports and distribution (upstream)	consolidated	t-CO <sub>2</sub> e	19,000	17,600	22,300	19,700	16,600
Business waste produced	consolidated	t-CO <sub>2</sub> e	26,500	28,800	31,800	16,200	10,800
Business trips	consolidated	t-CO <sub>2</sub> e	800	800	800	800	800
Employee commutes	consolidated	t-CO <sub>2</sub> e	2,500	2,400	2,400	2,400	2,400
Leased assets (upstream)	consolidated	t-CO <sub>2</sub> e	Included	d in Scope 1 and	d 2, and therefor	e not calculated	here
Exports and deliveries (downstream)	consolidated	t-CO <sub>2</sub> e	1,000	1,000	1,600	1,500	1,200
Processing of sold goods	consolidated	t-CO <sub>2</sub> e	-	-	-	-	-
Use of sold goods	consolidated	t-CO <sub>2</sub> e	-	-	-	-	-
Disposal of sold goods	consolidated	t-CO <sub>2</sub> e	15,400	23,200	26,400	23,000	17,600
Leased assets (downstream)	consolidated	t-CO <sub>2</sub> e	400	400	400	400	400
Franchise	consolidated	t-CO <sub>2</sub> e	n/a	n/a	n/a	n/a	n/a
Investments	consolidated	t-CO <sub>2</sub> e	n/a	n/a	n/a	n/a	n/a
Total <sup>*</sup>	consolidated	t-CO <sub>2</sub> e	374,300	375,600	429,300	389,600	345,500

<sup>\*</sup> As figures have been rounded off, the totals in some columns do not exactly match the sum of each item above.

## **Energy Consumption**

### **♦** Energy Consumed (Crude oil equivalent)

Indicators	Covering	Unit	2019	2020	2021	2022	2023
Production, R&D and office departments	non- consolidated	1,000kL	34,939	38,700	40,325	38,583	32,634

### Energy Consumed

Indicators	Covering	Unit	2019	2020	2021	2022	2023
Non-renewable fuels purchased and consumed (A) (Nuclear energy, coal, oil, natural gas etc.)	non- consolidated	MWh	138,083	155,201	165,494	153,390	137,447
Non-renewable electricity purchased (B)	non- consolidated	MWh	78,491	95,819	98,505	95,837	85,946
Non-renewable energy purchased (steam, heat, cooling, and others) (C)	non- consolidated	MWh	3,070	3,452	3,433	4,073	5,685
Renewable energy purchased and created (D) (Wind power, solar power, biomass, hydropower, geothermal energy etc.)	non- consolidated	MWh	58	59	57	162	2,028
Non-renewable energy sold (E) (electricity, thermal, cooling)	non- consolidated	MWh	0	0	0	0	0
Total non-renewable energy used (A+B+C-E)*	non- consolidated	MWh	219,644	254,472	267,432	253,300	229,078

<sup>\*</sup> As figures have been rounded off, the totals in some columns do not exactly match the sum of each item above.

#### Air

#### Air Emissions

Indicators	Covering	Unit	2019	2020	2021	2022	2023
Volatile Organic Compounds (VOC)	non- consolidated	tons	28.6	33.3	52.1	38.7	32.9
Dichloromethane	non- consolidated	tons	4.9	4.0	3.6	3.2	2.7
Formaldehyde	non- consolidated	tons	0.04	0.04	0.15	0.13	0.13
NOx	non- consolidated	tons	9.1	7.5	7.7	8.3	6.7
SOx	non- consolidated	tons	1.3	1.0	0.7	0.9	0.8
Particulate matter	non- consolidated	tons	0.9	0.5	0.5	0.4	0.2

#### **Wastewater and Waste**

#### ◆ Wastewater Management

Indicators	Covering	Unit	2019	2020	2021	2022	2023
COD	consolidated	tons	231.9	218.8	223.6	243	274
Total phosphorus	consolidated	tons	10.6	3.2	11.2	7.1	18.5
Total nitrogen	consolidated	tons	74.8	83.2	73.5	114.0	68.5
ss*	consolidated	tons	46.0	48.4	49.9	49.2	44.6

<sup>\*</sup> SS - Suspended solids: Refers to particulate matter of 2mm diameter or less either floating or suspended in water, including fine particles from minerals, plant and animal plankton or the carcasses of such, sewage, organic matter and metal sediments originating from plant wastewater. If present in large amounts, suspended solids can negatively affect water transparency and appearance, and - through impeding light-ray penetration - underwater and appearance in the contract of the contractphotosynthesis as well

Social

### Waste

	Indicators	Covering	Unit	2019	2020	2021	2022	2023
		non- consolidated	tons	17,971	19,411	22,069	21,154	16,146
Non-hazardo	ous waste	Group companies	tons	4,240	996	1,199	1,242	1,087
		Total	tons	22,211	20,407	23,268	22,396	17,233
		non- consolidated	tons	714	643	673	648	464
	General waste	Group companies	tons	647	504	449	559	513
		Total	tons	1,361	1,147	1,122	1,207	977
	Industrial waste	non- consolidated	tons	17,256	18,768	21,396	20,506	15,682
		Group companies	tons	3,593	493	750	682	574
		Total	tons	20,849	19,261	22,146	21,188	16,256
		non- consolidated	tons	5,231	5,925	6,503	6,467	4,828
Hazardous w	vaste	Group companies	tons	190	92	86	71	59
		Total	tons	5,421	6,017	6,589	6,538	4,887
	Source-specific hazardous industrial waste	non- consolidated	tons	131	221	146	182	182
		Group companies	tons	0	0	0	0	(
		Total	tons	131	221	146	182	182
Total <sup>*1</sup>			tons	27,631	26,426	29,857	28,934	22,119

	Indicators	Covering	Unit	2019	2020	2021	2022	2023
		non- consolidated	tons	2,206	1,979	2,309	2,338	2,291
	Sludge	Group companies	tons	267	131	336	258	115
		Total	tons	2,473	2,110	2,645	2,596	2,406
		non- consolidated	tons	5,296	5,766	6,386	5,848	4,809
	Waste oil	Group companies	tons	95	94	87	71	59
		Total	tons	5,391	5,860	6,473	5,919	4,868
		non- consolidated	tons	617	2,244	2,185	1,523	1,116
	Spent acid	Group companies	tons	1,916	3	2	8	13
Types of		Total	tons	2,533	2,247	2,187	1,531	1,129
waste		non- consolidated	tons	13,399	13,382	15,784	16,064	11,219
	Waste alkali	Group companies	tons	631	17	11	11	8
		Total	tons	14,030	13,399	15,795	16,075	11,227
		non- consolidated	tons	642	954	888	885	788
	Plastic waste	Group companies	tons	731	235	277	326	326
		Total	tons	1,373	1,189	1,165	1,211	1,114
		non- consolidated	tons	1,041	1,010	1,021	962	751
	Others	Group companies	tons	790	609	572	640	624
		Total	tons	1,831	1,619	1,593	1,602	1,375
Landfill am	andfill amount		tons	844	404	298	233	144
Recycling ra	ites*2	non- consolidated	%	84	81	82	87	84
Zero-emissi	ons rates	non- consolidated	%	3.7	1.6	1	0.8	0.7

<sup>\*1</sup> As figures have been rounded off, the totals in some columns do not exactly match the sum of each item above.

### PRTR substances

Indicators		Covering	Unit	2019	2020	2021	2022	2023
	Air	non- consolidated	tons	18.9	16.8	25.2	38.7	32.9
PRTR substance emission	Water regions	non- consolidated	tons	13.3	9.1	14.7	51.4	75.0
amounts	Soil	non- consolidated	tons	0	0	0	0	0
	Total*	non- consolidated	tons	32.2	25.9	39.9	90.1	107.9

<sup>\*</sup> As figures have been rounded off, the totals in some columns do not exactly match the sum of each item above.

<sup>\*2</sup> Includes recovered and reused solvent

Sustainability in

the Nippon Kayaku Group

#### Water

### ♦ Water Resource Use (non-consolidated)

Indicators		Covering	Unit	2019	2020	2021	2022	2023
	Waterworks	non- consolidated	1,000m <sup>3</sup>	356	390	381	377	320
	Surface water (industrial water)	non- consolidated	1,000m <sup>3</sup>	7,521	7,874	8,098	7,953	7,863
	Groundwater (well water)	non- consolidated	1,000m <sup>3</sup>	2,283	1,828	1,848	1,769	1,804
Amount of water taken	Others (reservoirs, rainwater storage)	non- consolidated	1,000m <sup>3</sup>	0	0	0	17	28
	Total <sup>*1</sup>	non- consolidated	1,000m <sup>3</sup>	10,160	10,092	10,327	10,116	10,015
	From water- stressed regions*2	non- consolidated	1,000m <sup>3</sup>	0	0	0	0	0
	Sea areas	non- consolidated	1,000m <sup>3</sup>	7,374	7,014	7,142	6,726	6,966
Amount of water	Rivers	non- consolidated	1,000m <sup>3</sup>	2,677	2,395	2,408	2,350	2,441
discharged <sup>*3</sup>	Sewers	non- consolidated	1,000m <sup>3</sup>	526	511	460	531	679
	Total <sup>*1</sup>	non- consolidated	1,000m <sup>3</sup>	10,577	9,919	10,011	9,607	10,086
Amount of water recycled		non- consolidated	1,000m <sup>3</sup>	0	0	0	0	0
Recycling rates		non- consolidated	%	0	0	0	0	0

<sup>\*1</sup> As figures have been rounded off, the totals in some columns do not exactly match the sum of each item above.

#### ◆ Use of Water Resources (Consolidated)

Indicators		Covering	Unit	2019	2020	2021	2022	2023
	Waterworks	consolidated	1,000m <sup>3</sup>	706	763	805	754	566
	Surface water (industrial water)	consolidated	1,000m <sup>3</sup>	7,758	7,897	8,138	8,003	7,912
	Groundwater (well water)	consolidated	1,000m <sup>3</sup>	2,388	1,918	1,947	1,819	1,847
Amount of water taken	Others (reservoirs, rainwater storage)	consolidated	1,000m <sup>3</sup>	0	0	68	81	79
	Total <sup>*1</sup>	consolidated	1,000m <sup>3</sup>	10,852	10,578	10,958	10,657	10,404
	From water- stressed regions*2	consolidated	1,000m <sup>3</sup>	36	23	33	29	28
	Sea areas	consolidated	1,000m <sup>3</sup>	7,374	7,014	7,142	6,726	6,966
Amount of water	Rivers	consolidated	1,000m <sup>3</sup>	2,682	2,400	2,410	2,351	2,443
discharged <sup>*3</sup>	Sewers	consolidated	1,000m <sup>3</sup>	928	974	987	910	1,045
	Total*1	consolidated	1,000m <sup>3</sup>	10,984	10,388	10,539	9,987	10,454
Amount of water recycled		consolidated	1,000m <sup>3</sup>	0	0	0	0	0
Recycling rates		consolidated	%	0	0	0	0	0

 $<sup>^{*}1</sup>$  As figures have been rounded off, the totals in some columns do not exactly match the sum of each item above.

### ◆ Water-stress Investigation Results for Nippon Kayaku Group Manufacturing and R&D sites (FY2023)\*1

Parisman C	ton Name	Unit		Water amount	s used at each wat	er stress level	
Region or C	ountry Name	Unit	High	Medium-high	Medium	Low-medium	Low
	Japan	1,000m <sup>3</sup> (Number of bases)	0	0	2,799 (6)	7,216 (4)	0
Asia	China	1,000m <sup>3</sup> (Number of bases)	0	15 (1)	0	0	213 (3)
	Malaysia	1,000m <sup>3</sup> (Number of bases)	0	0	0	0	45 (1)
	Czech Republic	1,000m <sup>3</sup> (Number of bases)	0	0	0	21 (1)	0
Europe	Netherlands	1,000m <sup>3</sup> (Number of bases)	0	0	0	0	3 (1)
	UK	1,000m <sup>3</sup> (Number of bases)	0	1 (1)	0	0	0
North and	America	1,000m <sup>3</sup> (Number of bases)	0	0	5 (1)	74 (1)	0
Central America			12 (1)	0	0	0	0
Total <sup>*2</sup> 1,		1,000m <sup>3</sup> (Number of bases)	12 (1)	16 (2)	2,804 (7)	7,311 (6)	261 (5)

 $<sup>^{*}</sup>$ 1 We are currently using the Aqueduct Water Risk Atlas to investigate these points.

<sup>\*2</sup> Using the Aqueduct Water Risk Atlas of water-stress levels, we have confirmed that all our business bases are located in areas of Level 3 water stress or below.

<sup>\*3</sup> Water of equal or higher quality is returned to the intake source

<sup>\*2</sup> We have used the Aqueduct Water Risk Atlas with its 5 levels of water stress. Sites at Level 4 or above are considered "water-stressed regions."

<sup>\*3</sup> Water of equal or higher quality is returned to the intake source

 $<sup>^{*}2</sup>$  As figures have been rounded off, the totals in some columns do not eaxctly match the sum of each item above.

## **Environmental Accounting**

#### **♦** Environmental Conservation Costs

					20:	19	20:	20	20:	21	20:	22	20	23
	Breakdown		Covering	Unit	Invested amount	Costs	Invested amount	Costs	Invested amount	Costs	Invested amount	Costs	Invested amount	Costs
		Air pollution prevention	non- consolidated	million yen	40.2	83.9	20.9	97.0	37.1	124.2	68.1	141.9	40.5	103.4
		Water pollution prevention	non- consolidated	million yen	70.5	148.0	109.7	174.8	266.9	178.9	206.7	186.0	0.0	186.3
	Environmental pollution	Underseepage prevention	non- consolidated	million yen	13.4	10.0	5.5	3.7	4.9	5.6	7.2	5.1	5.0	8.3
Inside business areas	noise pollut and vibratio	Prevention of noise pollution and vibrations	non- consolidated	million yen	2.4	1.8	17.2	6.2	6.0	0.0	6.0	0.0	16.1	0.1
		Others	non- consolidated	million yen	-	386.0	-	435.0	-	394.7	-	7.0	-	6.4
	Global environr conservation	nental	non- consolidated	million yen	40.3	20.1	172.6	100.4	244.6	92.3	236.6	63.5	425.6	87.7
	Resource recycl	ing	non- consolidated	million yen	30.9	576.7	106.6	709.8	111.2	772.2	5.1	805.9	2.9	578.6
Upstream and	Commissioning package recycli	of container and ng	non- consolidated	million yen	-	1.0	-	0.4	-	0.3	-	0.3	-	0.4
downstream	Sewage treatme	ge treatment expenses non-consolidated yen - 90.3 - 78.7 - 75.2	-	66.9	-	80.0								
	System prepara operation	tion and	non- consolidated	million yen	-	87.4	-	105.3	-	174.9	-	93.3	-	85.9
	Enviromental b monitoring	urden	non- consolidated	million yen	-	38.5	-	42.5	-	38.3	-	38.4	-	39.9
Management activities	Information dis	closure	non- consolidated	million yen	-	5.6	-	6.3	-	6.3	-	6.3	-	6.3
	Education, train	ning and others	non- consolidated	million yen	-	80.1	-	59.4	-	59.3	-	59.6	-	60.2
	Greening up (tree planting		non- consolidated	million yen	1.0	58.0	-	70.0	0.5	43.9	0.0	70.0	0.0	59.4
R&D	R&D		non- consolidated	million yen	-	81.7	-	57.2	-	39.2	-	158.3	-	85.5
Community act	Community activities		non- consolidated	million yen	-	9.7	-	8.9	-	9.0	-	9.8	-	9.8
Environmental	damage		non- consolidated	million yen	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0
Total <sup>*</sup>	Total <sup>*</sup>		non- consolidated	million yen	198.7	1,678.9	432.5	1,955.5	670.8	2,014.5	529.7	2,054.0	490.2	1,751.4

<sup>\*</sup> As figures have been rounded off, the totals in some columns do not exactly match the sum of each item above.

### **♦** Economic Benefits of Environmental Protection Measures

Items for which we seek to derive benefits	Main eco	onomic benefit details	Covering	Unit	2019	2020	2021	2022	2023
		Air pollution prevention	non-consolidated	million yen	0.0	0.0	0.0	0.0	0.0
	Environmental	Water pollution prevention	non-consolidated	million yen	0.0	0.0	3.5	0.0	0.0
	pollution prevention	Reduction of contamination load charges	non-consolidated	million yen	0.4	0.4	0.6	0.4	0.3
Inside	benefits	Prevention of noise pollution and vibrations	non-consolidated	million yen	0.0	0.0	0.0	0.0	0.0
business area benefits	Global environmental benefits	Prevention of global warming; energy-saving measures	non-consolidated	million yen	55.9	112.8	80.4	97.4	109.3
		Waste reduction	non-consolidated	million yen	9.5	9.5	4.1	2.6	2.2
	Waste and recycling	Outside sales of renewable resources	non-consolidated	million yen	12.9	10.5	17.3	25.9	38.2
		Others	non-consolidated	million yen	0.0	0.0	7.0	40.9	49.7
Upstream and downstream benefits	Container recyc	cling	non-consolidated	million yen	62.6	73.6	54.2	38.3	38.8
Others			non-consolidated	million yen	0.0	0.0	0.0	0.0	0.0
Total*			non-consolidated	million yen	141.3	206.8	167.1	205.5	238.5

<sup>\*</sup> As figures have been rounded off, the totals in some columns do not exactly match the sum of each item above.

### **♦** Environmentally-related capital investments

Category	Covering	Unit	2019	2020	2021	2022	2023
Air pollution prevention equipment	non- consolidated	million yen	40.2	20.9	37.1	68.1	40.5
Water pollution prevention equipment	non- consolidated	million yen	70.5	109.7	266.9	206.7	304.5
Underseepage prevention equipment	non- consolidated	million yen	13.4	5.5	4.9	7.2	5.0
Equipment to prevent noise pollution and vibrations	non- consolidated	million yen	2.4	17.2	6.0	6.0	16.1
Industrial waste processing equipment	non- consolidated	million yen	30.9	106.6	111.2	5.1	2.9
Greening up plants (through tree-planting, etc.)	non- consolidated	million yen	1.0	1.8	0.5	3.3	0.0
Energy saving; Global warming prevention	non- consolidated	million yen	40.3	172.6	244.6	236.6	425.6
Total*	non- consolidated	million yen	198.7	434.3	671.3	533.0	794.7

<sup>\*</sup> As figures have been rounded off, the totals in some columns do not exactly match the sum of each item above.

### ♦ Safety and Health-related Equipment Certification

Category	Covering	Unit	2019	2020	2021	2022	2023
Measures against equipment deterioration	non- consolidated	million yen	469.0	292.9	490.9	245.0	454.9
Safety and work environment measures	non- consolidated	million yen	165.3	171.4	171.4	86.6	281.6
Measures against fires caused by explosion and leaks	non- consolidated	million yen	39.4	9.2	14.1	60.6	54.4
Measures regarding natural disasters such as earthquakes	non- consolidated	million yen	2.6	51.4	4.4	6.5	65.2
Others	non- consolidated	million yen	4.0	4.5	6.4	32.0	0.0
Total <sup>*</sup>	non- consolidated	million yen	680.3	529.4	687.1	430.7	856.1

<sup>\*</sup> As figures have been rounded off, the totals in some columns do not exactly match the sum of each item above.

Sustainability in

#### **ISO Certification Status**

#### ♦ ISO14001 Certification

Area	Certification secured	Certifying Institution	Certification Number
Himeji Plant	March 1999	JIA-QA	JE0054H
Joetsu Plant (including the distribution center)	August 2002	SGS	JP15/071413
Fukuyama Plant	April 1999	JCQA	JCQA-E-0062
Asa Plant	September 1998	JCQA	JCQA-E-0987
Tokyo Plant	December 1998	JCQA	JCQA-E-0036
Takasaki Plant	January 2001	JCQA	JCQA-E-0101
Kashima Plant	March 1999	JCQA	JCQA-E-0046
Kayaku Safety Systems Europe	December 2002	BVCZ	250302-2017-AE-CZS-RvA
Kayaku Safety Systems (Huzhou)	June 2016	SNQA	42144
Kayaku Safety Systems de Mexico	June 2023	LRQA	00041092
Kayaku Safety Systems Malaysia	April 2017	SGS	MY17/02395
WUXI POLATECHNO OPTICS	April 2006	UCC	02420E31011518R2M
KAYAKU CHEMICAL (WUXI)	August 2006	UCC	02421E32060755R0M
WUXI ADVANCED KAYAKU CHEMICALS	July 2007	cQc	00121E33375R4M/3200
Cover rate*			70%

<sup>\*</sup> The proportion of production facilities with ISO14001 certification owned by either Nippon Kayaku or its consolidated subsidiaries.

### **Violations and accidents**

### ◆ Cases of Environmentally-related Violations and Accidents

Indicators	Covering	Unit	2019	2020	2021	2022	2023
Number of violations of environmental laws and regulations	consolidated	cases	0	0	0	0	0
Number of environmental accidents	consolidated	cases	0	0	0	0	0
Violations of laws and regulations; fines issued for enrivonmental accidents; punishment costs	consolidated	yen	0	0	0	0	0

### Social -

## **Employee Situation**

### **♦** Employee Composition

Indicators	Category	Covering	Unit	2019	2020	2021	2022	2023
	Male	consolidated	persons	-	-	-	3,883	3,991
	Female	consolidated	persons	-	-	-	1,797	1,832
	Neither/ Don't know	consolidated	persons	-	-	-	-	2
	Total	consolidated	persons	-	-	-	5,680	5,825
	Female rate	consolidated	%	-	-	-	31.6	31.5
Regular	Male	non- consolidated	persons	1,730	1,751	1,754	1,748	1,770
employees	Female	non- consolidated	persons	323	326	330	333	343
	Neither/ Don't know	non- consolidated	persons	-	-	-	-	0
	Total	non- consolidated	persons	2,053	2,077	2,084	2,081	2,113
	Female rate	non- consolidated	%	15.7	15.6	15.8	16.0	16.2
	Male	consolidated	persons	-	-	-	-	444
	Female	consolidated	persons	-	-	-	-	246
	Neither/ Don't know	consolidated	persons	-	-	-	-	0
	Total	consolidated	persons	-	-	-	726	690
Contracted/ part-time	Male	non- consolidated	persons	-	-	412	419	382
employees*	Female	non- consolidated	persons	-	-	194	194	182
	Neither/ Don't know	non- consolidated	persons	-	-	0	0	0
	Total	non- consolidated	persons	613	614	606	613	564
	Male	consolidated	persons	-	-	-	89	90
	Female	consolidated	persons	-	-	-	132	103
	Neither/ Don't know	consolidated	persons	-	-	-	-	0
	Total	consolidated	persons	-	-	-	221	193
Temp staff	Male	non- consolidated	persons	-	5	19	24	26
and others	Female	non- consolidated	persons	-	14	28	44	37
	Neither/ Don't know	non- consolidated	persons	-	-	-	-	0
	Total	non- consolidated	persons	-	19	47	68	63

<sup>\*</sup> Average number of persons per year

<sup>\*</sup> The Nippon Kayaku Co., Ltd. Cover Rate (the proportion of production facilities with ISO14001 certification) stands at 100%

Indicators	Category	Covering	Unit	2019	2020	2021	2022	2023
	Male	non- consolidated	persons	315	359	321	412	418
Below	Female	non- consolidated	persons	36	24	38	42	43
Section Chief	Total	non- consolidated	persons	351	383	359	454	461
	Female rate	non- consolidated	%	10.2	6.2	10.5	9.3	10.3
	Male	non- consolidated	persons	142	74	68	66	62
Section Chief	Female	non- consolidated	persons	6	4	4	5	3
and above	Total	non- consolidated	persons	148	78	72	71	65
	Female rate	non- consolidated	%	4.0	5.1	5.5	7.0	4.6
	Male	non- consolidated	persons	457	468	476	478	480
Overall	Female	non- consolidated	persons	42	44	47	47	46
Overail	Total	non- consolidated	persons	499	512	523	525	526
	Female rate	non- consolidated	%	8.4	8.6	9.0	9.0	8.8

Sustainability in

the Nippon Kayaku Group

### Age

Indicators	Category	Covering	Unit	2019	2020	2021	2022	2023
	29 and under	non- consolidated	persons	402	394	376	362	359
	30-39	non- consolidated	persons	580	579	575	578	610
Age groups	40-49	non- consolidated	persons	582	576	585	589	559
	50-59	non- consolidated	persons	497	523	547	498	580
	Over 60	non- consolidated	persons	8	5	1	1	5
	Male	non- consolidated	age	39.7	39.8	40.2	40.4	40.6
Average age	Female	non- consolidated	age	42.3	42.6	42.8	42.9	42.9
	Total	non- consolidated	age	41.0	40.3	40.6	40.8	41.0

#### **♦** Continuous Service

Indicators	Category	Covering	Unit	2019	2020	2021	2022	2023
Average	Male	non- consolidated	years	14.1	14.2	14.5	14.4	14.9
number of years of	Female	non- consolidated	years	16.2	16.5	16.6	16.6	16.4
continuous service	Total	non- consolidated	years	15.2	14.6	14.9	15.1	15.1

#### Freedom of Association

Indicators	Covering	Unit	2019	2020	2021	2022	2023
Number of union members *1	non- consolidated <sup>*3</sup>	persons	1,871	1,753	1,695	1,687	1,697
Union membership rate*2	non- consolidated <sup>*3</sup>	%	100	100	100	100	100

- $^{\ast}1$   $\,$  The number of persons for each financial year is accurate as of March 31st
- \*2 Number of union members/number of qualified persons (excluding managers and persons specified in agreements)
- \*3 Includes some related companies

### **Diversity**

#### Recruitment

Indicators	Category	Covering	Unit	2019	2020	2021	2022	2023
	Male	non- consolidated	persons	60	49	41	37	45
ew employees	Female	non- consolidated	persons	4	8	7	6	13
(graduates)*1	Total	non- consolidated	persons	64	57	48	43	58
	Female rate	non- consolidated	%	6.2	14.0	14.5	14.0	22.4
	Male	non- consolidated	persons	35	28	32	45	44
New employees (mid-	Female	non- consolidated	persons	3	6	7	10	15
areer)*2  Total	Total	non- consolidated	persons	38	34	39	55	59
	Female rate	non- consolidated	%	7.8	17.6	17.9	18.2	25.4

- \*1 Numbers entering the company in the April of the following financial year
- \*2 Numbers entering the company between the April of one financial year and the March of the following financial year

### Rates of disabled employees

Indicators	Covering	Unit	2019	2020	2021	2022	2023
Disabled employees	consolidated	persons	-	-	-	92	68
Disabled employment rate*1	consolidated	%	-	-	-	1.44	1.04
Disabled employment rate*2	non- consolidated	%	2.04	2.01	2.00	1.98	1.93
(Statutory employment rate)	non- consolidated	%	2.20	2.20	2.30	2.30	2.30

- \*1 Disabled employee numbers have been removed from the total of regular employees, contracted employees and part-time employees, hence calculation methods differ from those used for statutory employment rates.
- \*2 Each year's data is accurate as of Jun 1st

#### **♦** Employment of retired employees

Indicators	Covering	Unit	2019	2020	2021	2022	2023
Employment of retired employees	non- consolidated	persons	61	42	22	29	30
Employment rate of retired employees	non- consolidated	%	89.7	95.4	84.6	85.2	85.7

### **Work-life Balance**

### Working hours

Indicators	Covering	Unit	2019	2020	2021	2022	2023
Average number of annual hours worked per worker	non- consolidated	hours	1,911	1,885	1,911	1,896	1,876
Average monthly overtime hours	non- consolidated	hours	12.7	11.3	12.7	11.9	11.2

#### Paid Leave

Indicators	Covering	Unit	2019	2020	2021	2022	2023
Average number of days of annual paid leave taken	non- consolidated	days	11.1	12.2	11.1	12.0	13.3
Annual Paid Leave take-up rate	non- consolidated	%	60.1	65.8	59.8	63.7	72.8

#### Childcare

Indicators		Covering	Unit	2019	2020	2021	2022	2023
Commencement of Maternit	y Leave <sup>*1</sup>	non- consolidated	persons	13	13	11	22	21
Commencement of	Male	non- consolidated	persons	5	11	9	62	50
Childcare Leave <sup>*1</sup>	Female	non- consolidated	persons	13	13	11	22	16
Childcare Leave System	Male	non- consolidated	%	11.9	31.4	27.2	69.6	78.5
take-up rate <sup>*2</sup>	Female	non- consolidated	%	100	100	100	100	100
Post-childbirth and post- Childcare Leave return-to-	Male	non- consolidated	%	100	100	100	100	100
work rate	Female	non- consolidated	%	100	100	100	100	100
Post-childbirth and post- Childcare Leave retention	Male	non- consolidated	%	100	100	100	100	100
rate	Female	non- consolidated	%	100	100	100	100	100
Reduced Working Hours for	Male	non- consolidated	persons	2	0	1	2	3
hildcare take-up rate	Female	non- consolidated	persons	31	43	42	48	52

<sup>\*1</sup> Not including leave taken during the last financial year which crosses over into this financial year

### Nursing Care

Indicators	Covering	Unit	2019	2020	2021	2022	2023
Employees taking Nursing Care Leave	non- consolidated	persons	1	0	0	0	1
Nursing Care Leave System users	non- consolidated	persons	1	1	0	2	3

### Pay

Indicators		Covering	Unit	2019	2020	2021	2022	2023
	Male	non- consolidated	1,000 yen	7,526	7,423	7,683	8,003	7,704
Average annual pay	Female	non- consolidated	1,000 yen	6,119	6,133	6,366	6,707	6,336
	Overall	non- consolidated	1,000 yen	7,307	7,224	7,477	7,801	7,488

### Employees leaving the company

Indicators	Covering	Unit	2019	2020	2021	2022	2023
Regular employees leaving the company for personal reasons	consolidated	persons	-	-	-	535	282
Rate of regular employees leaving the company for personal reasons	consolidated	%	-	-	-	9.4	4.8
Regular employees leaving the company for personal reasons	non- consolidated	persons	37	41	48	50	51
Turnover rate	non- consolidated	%	2.2	2.2	2.3	2.3	2.9
Rate of employees leaving the company for personal reasons	non- consolidated	%	1.7	1.8	2.1	2.4	2.4
Employees leaving the company within 3 years of joining *	non- consolidated	persons	5	7	7	4	5
Rate of employees leaving the company within 3 years of joining	non- consolidated	%	3.0	4.0	4.0	2.0	3.0

<sup>\*</sup> The number of new graduate hires in each financial year quitting within the first 3 years

#### Transfers

	Indicators	Covering	Unit	2019	2020	2021	2022	2023
Tr	ransfers	non- consolidated	persons	2	1	2	3	3

## **♦** Employee Engagement Survey Results

Indicators	Covering	Unit	2019	2020	2021	2022	2023
Response rate	non- consolidated	%	-	-	-	-	85.9
Employee engagement	non- consolidated	score	-	-	-	-	47.1

#### Number of Labor Standards Law Violations

Indicators	Covering	Unit	2019	2020	2021	2022	2023
Number of labor standard	non-					,	
violations	consolidated	cases	-	-	-	1	U

<sup>\*2</sup> FY2022 calculations for the rates of Childcare Leave and Leave for the Purpose of Childcaring have been made using the methods in Article 71.4.2.

## **Human Resources Development**

Indicators	Ciu	Unit	2010	2020	2021	2022	2022
indicators	Covering	Unit	2019	2020	2021	2022	2023
Training hours per regular employee	non- consolidated	hours	-	14	13	15	17.7
Total training hours	non- consolidated	hours	-	29,156	27,092	31,045	37,465
Amount invested in education and training per employee	non- consolidated	yen	76,122	35,706	66,606	83,002	76,565

## **Occupational Safety and Health**

#### ◆ Occupational Safety and Health Management System (ISO45001) Certified Business Sites

Business Site	Certification secured	Certifying Institution	Certification Number
Kayaku Safety Systems (Huzhou)	January 2023	NQA	132021
Cover Rate*			5%

<sup>\*</sup> The proportion of production facilities with ISO14001 certification owned by either Nippon Kayaku or its consolidated subsidiaries Even business sites without ISO45001 certification have Occupational Safety and Health Management Systems of equivalent standard.

### ♦ Occupational Hazards

	Indicators	Covering	Unit	2019	2020	2021	2022	2023
Number of work-rel other serious accide	ated accidents resulting in death and ents	non- consolidated	cases	0	0	0	0	0
	Regular employees	consolidated	persons	0	0	1	0	0
Number of work- related employee deaths	Contracted employees/ part-time employees	consolidated	persons	0	0	0	0	0
ueatiis	Partner company employees*1	consolidated	persons	0	0	0	0	0
	Regular employees	non- consolidated	*2	0.4 (2 cases)	0.18 (1 cases)	0.19 (1 cases)	0 (0 cases)	(0 cases)
Rate of Lost Time	Contracted employees/ part-time employees	non- consolidated	*2	0	0	0	0	0
Injuries	Partner company employees <sup>*1</sup>	non- consolidated	*2	0	0	0	0	0
	Employees	Group companies	*2	-	-	-	-	1.5 (9 people)
Lost Time Injury Intensity Rate		non- consolidated	*3	0.031	0	0	0	0
Number of violations of Occupational Safety and Health- related regulations and standards		non- consolidated	cases	0	0	0	0	0

<sup>\*1</sup> Partner company employees: contractor (company) employees, temp (company) staff

## **♦** Employee Health

Indicators	Covering	Unit	2019	2020	2021	2022	2023
Regular health check take- up rate *	non- consolidated	%	100	100	100	100	100
Stress-check take-up rate*	non- consolidated	%	97.3	97.2	98.1	97.9	98.0
Proportion of "highly- stressed" persons	non- consolidated	%	9.6	9.5	10.6	10.0	10.1
Mental health-related investments	non- consolidated	million yen	10.8	11.0	13.0	12.6	12.6

<sup>\*</sup> Excluding employees on administrative leave

## Quality

#### ♦ Business Sites with Quality Management System Certification

Business Site Name	ISO9001	ISO13485	IATF16949	ISO22000
Safety Head Plant (Himeji)				
Safety Systems Group			•	
Research & Development Head Office				
Polatechno Group				
Joetsu Plant	•			
WUXI POLATECHNO OPTICS				
Fukuyama Plant				
Asa Plant				
Tokyo Plant				
Fine Chemicals Business Unit				
Fine Chemicals Research Lab				
Taiwan Nippon Kayaku (Fine Chemicals Business Unit)				
Takasaki Plant				
Pharmaceuticals Group	•	•		
Pharmaceuticals Research Laboratories				
Kashima Plant				
Agrochemicals Group	•			
Agrochemicals Laboratories				
Kayaku Safety Systems Europe			•	
Kayaku Safety Systems (Huzhou)			•	
Kayaku Safety Systems de Mexico			•	
Kayaku Safety Systems Malaysia			•	
MOXTEK	•			
Dejima Optical Films	•			
RaySpec	•			
KAYAKU CHEMICAL (WUXI)	•			
Kayaku Advanced Materials	•	•		
NUXI ADVANCED KAYAKU CHEMICALS	•			
NIPPONKAYAKU FOOD TECHNO	•			•

### ◆ Certification Status for GMP Approval

Business site name	Principal certifying countries
Takasaki Plant	Japan, America, Europe

<sup>\*2</sup> Occupational hazard-related deaths and injuries per every 1 million actual working hours

<sup>\*3</sup> Number of working days lost per every 1000 actual working hours

#### R&D

Indicators	Covering	Unit	2019	2020	2021	2022	2023
R&D costs	consolidated	billion yen	11.0	12.4	13.0	13.3	19.8
R&D costs as a percentage of sales	consolidated	%	6.3	7.2	7	6.7	9.8

#### **CSR**

Indicators	Covering	Unit	2019	2020	2021	2022	2023
CSR expenditure	non- consolidated	million yen	254	146	154	149	158
Total donations	non- consolidated	million yen	222	114	123	120	126
Other CSR expenditures	non- consolidated	million yen	31	32	31	29	32

### Governance

### **Corporate Governance**

### Board Member Composition\*

Indicators	Cov	ering	Unit	2019	2020	2021	2022	2023
		Male	persons	7	7	6	6	6
	Inside	Female	persons	0	0	0	0	0
		Total	persons	7	7	6	6	6
Directors	Outside (Independent)	Male	persons	2 (2)	3 (3)	3 (3)	3 (3)	3 (3)
		Female	persons	0	0	0	0	1(1)
	(macpenaent)	Total	persons	2 (2)	3 (3)	3 (3)	3 (3)	4 (4)
	Overall Total (Independent)		persons	9 (2)	10 (3)	9 (3)	9 (3)	10 (4)
Average term			years	2.0	2.7	3.0	4.0	4.6
Independent Outside Director Percentage (Results)		%	22	30	33	33	40	
Female Directo	r Percentage		%	0	0	0	0	10
Executive Direc	Executive Directors		persons	7	7	6	6	6

<sup>\*</sup> Each year's data is accurate as of the Shareholders Meeting yearly held on June

## Audit & Supervisory Board Member Composition\*

Indicators	Cov	ering	Unit	2019	2020	2021	2022	2023
		Male	persons	2	2	1	1	1
	Inside	Female	persons	0	0	1	1	1
	uditors M.	Total	persons	2	2	2	2	2
Auditors		Male	persons	3 (2)	3 (2)	3 (2)	3 (3)	3 (3)
		Female	persons	0	0	0	0	0
	(macpenaent)	Total	persons	3 (2)	3 (2)	3 (2)	3 (3)	3 (3)
	Overall Total (In	dependent)	persons	5 (2)	5 (2)	5 (2)	5 (3)	5 (3)
Average term			years	1.8	2.8	3.0	4.0	4.4
Independent Outside Auditor Percentage (Results)		%	20	40	40	60	60	
Female Audito	Female Auditor Percentage		%	0	0	20	20	20

<sup>\*</sup> Each year's data is accurate as of the Shareholders Meeting yearly held on June

## ♦ Number of Committee Meetings Held

	Meeting			Meetings Held		
	Frequency	2019	2020	2021	2022	2023
Board of Directors	Monthly	14	14	14	14	14
Nominations & Remuneration Advisory Committee	Whenever necessary	-	3	5	6	6
Sustainable Management Meeting	Weekly	50	51	48	50	48
Executive Directors Meeting	Quarterly	4	4	4	4	4
Management Strategy Meeting	Twice a year	2	2	2	2	2
Audit & Supervisory Board	Monthly	12	12	12	12	12
Ethics Committee	Twice a year	2	2	2	2	2
Risk Management Committee	Twice a year	2	2	2	2	4
Environment, Safety and Quality Management Committee	Twice a year	2	2	2	2	2
Research & Development Management Committee	Twice a year plus convened ad hoc by the chairman when required	1	1	3	2	2

<sup>\*</sup> Each financial year's data is taken from April to March

### Board Member Attendance at Committee Meetings (FY2023)\*

Executive Title	Name	Board Meeting attendance	Nominations & Remuneration Advisory Committee attendance
President and Representative Director	Atsuhiro Wakumoto	14/14	6/6
Representative Director	Tomoo Shibuya	14/14	5/5
Member of the Board	Yoshimi Inoue	11/11	-
Member of the Board	Yoshitsugu Ishida	14/14	-
Member of the Board	Masatomi Akezuma	14/14	-
Member of the Board	Shigeyuki Kawamura	11/11	-
Outside Director (Independent)	Yo Ota	13/14	5/6
Outside Director (Independent)	Yasuyuki Fujishima	14/14	6/6
Outside Director (Independent)	Seiichi Fusamura	12/14	4/6
Outside Director (Independent)	Ikuko Akamatsu	11/11	4/4
Average rate of attendance		97.9%	91.7%

<sup>\*</sup> Data taken from April 2023 to March 2024

### ◆ Audit & Supervisory Board Members Attendance at Committee Meetings (FY2023)\*

Position	Name	Board Meetings attended	Auditor attendance
Standing Auditor	Megumi Machida	14/14	12/12
Standing Auditor	Yoichiro Wada	11/11	10/10
Outside Auditor (Independent)	Katsuji Higashi	14/14	12/12
Outside Auditor (Independent)	Yasuhiro Osaki	14/14	12/12
Outside Auditor (Independent)	Ichiro Wakasa	14/14	12/12
Average rate of attendance		100%	100%

<sup>\*</sup> Data from April 2023 to March 2024

#### **◆** Executive Remuneration<sup>\*</sup>

	Category	Unit	2019	2020	2021	2022	2023
Directors	Total remuneration amount	million yen	443	449	410	382	349
(Outside Directors excepted)	Number of directors concerned	persons	9	7	8	6	8
Auditors	Total remuneration amount	million yen	44	44	45	45	45
(Outside Directors excepted)	Number of directors concerned	persons	3	2	3	2	3
	Total remuneration amount	million yen	40	47	55	57	71
Outside Directors	Number of directors concerned	persons	5	6	6	7	7
Total		million yen	527	540	510	484	465

<sup>\*</sup> The above figures and remuneration amounts for directors and auditors include those of directors retiring at the time of the Shareholders Meeting yearly held on June.

Furthermore, our outside directors have not received any remuneration from Nippon Kayaku Group companies.

### Remuneration for CPA Auditors (consolidated)

Indicators	Unit	2019	2020	2021	2022	2023
Remuneration based on audit and certification work	million yen	102	89	80	73	79
Remuneration not based on audit work	million yen	1	0	0	0	0
Total	million yen	103	89	80	73	79

## Compliance

#### ♦ Inside Whistleblowing Cases

<b>Contents of Complaints and Consultations</b>	Covering	Unit	2019	2020	2021	2022	2023
Harrassment (power harrassment, sexual harrassment, etc.)	non- consolidated	cases	8	6	2	7	16
Violations of company rules or manners	non- consolidated	cases	2	0	0	2	3
Work or labor-related	non- consolidated	cases	1	1	1	3	5
Others	non- consolidated	cases	0	0	1	4	3
Total	non- consolidated	cases	11	7	4	16	27

## Number of Whistleblowing Complaints and Consultations from Suppliers

Whistleblowing	Covering	Unit	2019	2020	2021	2022	2023
Whistleblowing complaints and consultations from suppliers	non- consolidated	cases	-	-	0	1	0

### ♦ Employees punished, fined or dimissed for causing Anti-Corruption Policy violations

Indicators	Covering	Unit	2019	2020	2021	2022	2023
Number of violations of anti-corruption- related policies	non- consolidated	cases	0	0	0	0	0
Employee punishments and dismissals	non- consolidated	cases	0	0	0	0	0
Corruption-related fines issued	non- consolidated	yen	0	0	0	0	0
Applications of corruption-related penalties	non- consolidated	cases	0	0	0	0	C

#### Political Donations

Indicators	Covering	Unit	2019	2020	2021	2022	2023
Political donations	non- consolidated	10,000 yen	118	113	104	106	89

### **Risk Management**

 Business Sites Certified by the Trusted Information Security Assessment Exchange (TISAX), (concerned with the global automotive industry supply chain)

Business Site	Certification secured	Registered for inspection with	Certification Number	
Kayaku Safety Systems Europe	January 2023	DNV	SW215F	
Kayaku Safety Systems de Mexico	January 2023	TUV NORD DE MEXICO	S6485M	

## Categories of Shares Issued (As of 2024-03-31)

Category	Number of shares	Number of voting shares	Details
Non-voting shares	-	-	-
Restricted voting shares (treasury stocks etc.)	-	-	-
Restricted voting shares (other)	-	-	-
Full voting shares (treasury stocks	(treasury stocks) Common shares 4,632,700	-	-
etc.)	(Mutually-held shares) Common shares 28,000	-	-
Full voting shares (other)	Common shares 165,649,900	1,656,499	-
Shares of less than one unit*	Common shares 192,970	-	-
Total number of shares issued	170,503,570	-	-
General shareholder voting shares	-	1,656,499	-

<sup>\*</sup> Shares of less than one unit include 85 of our own company's treasury stocks.