

Pioneer Group Environmental Data 2023

■ Targets, Plans and Performance

Category	Issue	Targets	Base value	FY2019	FY2020	FY2021	FY2022	FY2023	Self assessment ※3	Unit
Control items	Prevention of Global Warming	<New target> Greenhouse gas emission Worldwide: 42% reduction from FY2021 to FY2030 (Target value: 20.8t) (4.2%/year, 1.5 Degrees Scenario estimation)	Result of FY2021 35.7	-	-	Base value 35.7	Reduction of 2.1% 34.9	Reduction of 15.8% 30.0	○ Achieved the reduction (4.2%/year)	% 1,000 tonnes CO ₂
		<Old target> Greenhouse gas emission Worldwide: 30% reduction from FY2018 to FY2030 (Total amount of Scope1 and Scope2)	FY2018	Reduction of 2.7%	Reduction of 8.9%	Reduction of 21.4%	Reduction of 22.2%	Reduction of 27.5%	○ *3	%
	Conservation of Resources, and Recycling	Amount of valuable resources /waste material Worldwide: 3% reduction/year from FY2011 (per unit of sales amount)	3.871	2.260 (Target 3.033 or lower)	2.485 (Target 2.942 or lower)	2.058 (Target 2.854 or lower)	1.596 (Target 2.768 or lower)	0.852 (Target 2.685 or lower)	○ Target value or lower	tonnes
Monitoring items	Prevention of Global Warming	Management of the five Greenhouse gas emission (Five gases except CO ₂)	Only result is described	2.4	1.8	0.05	0.1	0.2	○ *3	1,000 tonnes CO ₂
		Management of the energy accompanying transportation of products Japan: Confirm it is less than 30 million tonne-kilometers	3,000	1,745	1,186	1,202	752	823	○ Base value or lower	10,000 tonne-kilometers
	Conservation of Resources, and Recycling	Recycling rate for valuable resources /waste material Japan: Maintaining 99.5% or higher Overseas: Maintaining 99% or higher	Japan: 99.5 Overseas: 99.0	Japan: 99.7 Overseas: 99.0	Japan: 99.8 Overseas: 99.3	Japan: 99.9 Overseas: 99.4	Japan: 99.9 Overseas: 99.1	Japan: 99.9 Overseas: 99.2	○ Base value or higher	%
		Management of the amount of water resources used Worldwide: Maintaining FY2013 level	1,836	1,100	970	643	482	406	○ Base value or lower	1,000 m ³
	Management of chemical substances	Management of the amount of office paper purchase Worldwide: Maintaining FY2013 level	2.9	13.8	15.9	13.9	14.0	12.6	○ Base value or lower	Million sheets
Management of emissions of PRTR chemical substances and VOCs ^{※2} Worldwide: Maintaining FY2013 level		136	19 ^{※4}	15 ^{※4}	13 ^{※4}	17 ^{※3}	11 ^{※3}	○ *3	tonnes	
		Management of emissions of SOx, NOx, and dust Worldwide: Maintaining FY2013 level	Sox 11 Nox15 Dust 0.3	Sox 1.0 ^{※4} Nox 2.8 ^{※4} Dust 0.08 ^{※4}	Sox 1.0 ^{※4} Nox 2.8 ^{※4} Dust 0.08 ^{※4}	Sox 1.1 ^{※4} Nox 2.1 ^{※4} Dust 0.06 ^{※4}	Sox 1.0 ^{※4} Nox3.4 ^{※4} Dust 0.06 ^{※4}	Sox 1.4 ^{※4} Nox23.2 ^{※4} Dust 0.06 ^{※4}	✕ Nox was over the Base value	tonnes

※1 By regulation of Zero emission of waste (Pioneer's definition), it judges for every plant.

※2 The target material is 20 kinds for JEITA's independence reduction activity.

※3 Self-evaluation standards: ○ Achieved the target / △ Slightly did not reach the target achievement / ✕ Target was not achieved / /.....N/A

※4 Japan Data Only

■ Input and output

Input Amount of resources required for business activities

		FY2019	FY2020	FY2021	FY2022	FY2023	Unit
		Procurement	Resources	40.0	39.0	31.8	
Planning, design, production	Total energy	1,363	1,160	844	683	619	tera joule
	Water consumption	1,100	970	640	480	468	1,000 m ³
	Chemical substances handled	48 ^{※1}	36 ^{※1}	21 ^{※1}	27 ^{※1}	36 ^{※1}	tonnes
	Office paper	13.8	15.9	13.9	14.0	12.6	million sheets
Transportation	Goods Transported	32	31	26	20	15	1,000 tonnes
Service	Total energy	9.5	6	4.5	5.8	4.3	tera joule
	Water consumption	0.9	0.6	0.3	1.8	1.2	1,000 m ³

※1 Japan Data Only

Output Environmental impact emitted as a result of business activities

		FY2019	FY2020	FY2021	FY2022	FY2023	Unit
		Planning, design, production	Greenhouse gas emission	76	61	41	
Waste and valuables generated	8.0		6.6	5.8	4.3	2.3	1,000 tonnes
Amount recycled	7.0		6.5	5.7	4.2	2.2	1,000 tonnes
Waste water	920		850	520	360	349	1,000 m ³
Waste chemical substances	19 ^{※1}		15 ^{※1}	13 ^{※1}	17 ^{※1}	11 ^{※3}	tonnes
SOx	1.0		1.0 ^{※1}	1.1 ^{※1}	1.0 ^{※1}	1.4 ^{※1}	tonnes
Transportation	NOx	2.8	3.2 ^{※1}	2.1 ^{※1}	3.4 ^{※1}	23.2 ^{※1}	tonnes
	Greenhouse gas emission ^{※1}	3.4	2.3	2.2	1.5	1.2	1,000 tonnes CO ₂
Used by customer	Recycled packaging materials ^{※1}	131	121	116	114	99	tonnes
Service	Greenhouse gas emission	0.5	0.3	0.2	0.3	0.2	1,000 tonnes CO ₂
	Waste and valuables generated	0.1	0.2	0.1	0.2	0.1	1,000 tonnes
	Amount recycled	0.1	0.2	0.1	0.2	0.1	1,000 tonnes
	Waste water	1.0	0.6	0.3	1.8	1.2	1,000 m ³

※1 Japan Data Only

■ Global Warming Prevention Activities

Greenhouse gases emissions

(Unit : 1,000 tonnes CO₂)

	Category	FY2019	FY2020	FY2021	FY2022	FY2023
Japan	Scope 1	4	3	2.3	1.7	3.3
	Scope 2	31	24	17.5	11.6	9.3
	Scope 3	0	0	0	0	0
	PFU, HFC, etc.	2	2	0	0	0
	Total	37	29	19.9	13.3	12.6
Overseas	Scope 1	5	1	0	0	0
	Scope 2	36	31	20.5	18.8	17.2
	Scope 3	1	0	0.4	0.4	0.3
	PFU, HFC, etc.	0	0	0	0	0
	Total	37	32	21.1	19.2	17.5

Energy consumption

(Unit : terajoule)

	Category	FY2019	FY2020	FY2021	FY2022	FY2023
Japan	Electricity	604	485	359	250	228
	Fuel	28	18	17	18	44
	Gas	41	32	17	4	4
	Cold water	7	4	6	4	2
	Total	680	544	400	276	278
Overseas	Electricity	655	607	438	400	334
	Fuel	15	9	7	6	4
	Gas	10	11	4	7	3
		0	0	0	0	0
	Total	680	627	448	413	341

Reduction of Non-Energy-Derived Greenhouse Gases

(Unit : 1,000 tonnes CO₂e)

	Category	FY2019	FY2020	FY2021	FY2022	FY2023
Japan	Reduction of Non-Energy-Derived Greenhouse Gases	2.4	1.8	0.1	0.1	0.2

※ This data includes CO₂, CH₄, HFC, PFC, N₂O, SF₆, HFE, NF₃

Changes in CO₂ emissions by domestic products transportation

	Category	FY2019	FY2020	FY2021	FY2022	FY2023	Unit
Japan	Basic unit ^{※1}	9.7	7.3	7.7	5.7	4.6	tonnes-CO ₂ /billion JPY
	Total amount	3,369	2,332	2,161	1,531	1,238	tonnes CO ₂

※1 Basic unit = CO₂ emissions (total amount) / sales

CO₂ reduction by modal shift

(Unit : tonnes CO₂)

	Category	FY2019	FY2020	FY2021	FY2022	FY2023
Japan	CO ₂ reduction by modal shift	113.0	90.6	71.6	76.3	78.9

Transition of office paper purchases

(Unit : million sheets)

	Category	FY2019	FY2020	FY2021	FY2022	FY2023
Japan	Office paper purchases	7.5	6.2	4.3	4.1	3.1
Overseas		6.3	9.7	9.4	9.8	9.5

■ Reduction in Waste and Valuables

Transition of generation amounts of waste and valuables

(Unit : tonnes)

Category	FY2019	FY2020	FY2021	FY2022	FY2023
Japan	2,013	1,528	1,157	1,318	998
Overseas	5,836	6,362	4,622	2,990	1,290

Transition of recycling rate

(Unit : %)

Category	FY2019	FY2020	FY2021	FY2022	FY2023
Japan	100.0	99.8	99.9	99.9	99.9
Overseas	89.1	99.3	99.4	99.1	99.2

Breakdown of waste and valuables

(Unit : %)

Category	FY2019	FY2020	FY2021	FY2022	FY2023
Sludge	5.0	9.8	2.5	2.0	3.0
Waste oil	2.2	2.0	1.8	1.4	1.6
Waste acids	0.0	0.0	0.0	0.0	0.0
Waste alkali	0.3	0.2	0.5	0.3	1.0
Waste Plastics and rubber	23.0	17.4	24.0	26.0	28.4
Waste paper	42.3	40.5	50.7	49.3	41.0
Wood waste	2.2	1.0	0.4	1.3	2.1
Waste textile	0.0	0.0	0.1	0.0	0.1
Garbage	1.7	1.3	0.8	0.5	0.7
Waste metals	18.9	27.3	18.8	18.2	21.6
Glass and pottery waste	0.0	0.4	0.5	0.6	0.4

(Unit : %)

Category	FY2019	FY2020	FY2021	FY2022	FY2023
Sludge	0.7	0.5	0.6	1.1	2.3
Waste oil	0.2	0.1	0.0	0.0	0.0
Waste acids and alkali	0.3	0.5	0.1	0.2	0.2
Waste Plastics and rubber	6.9	7.8	8.6	9.9	12.1
Waste paper	37.0	43.4	48.5	63.0	48.8
Wood waste	1.5	2.3	2.5	4.4	8.0
Garbage	9.3	6.2	5.1	3.5	6.2
Waste metals	26.1	19.9	18.6	2.2	3.2
Glass and pottery waste	0.3	0.2	0.3	0.3	0.8
General waste from dormitories	5.8	3.7	7.5	11.8	11.2
Other	11.8	15.4	8.2	3.6	7.2

■ Management of Chemical Substances

Trends in VOC emissions

(Unit : tonnes)

Category	FY2019	FY2020	FY2021	FY2022	FY2023
Japan	18.0	15.0	12.8	10.7	11.0
Overseas	— ^{※1}	— ^{※1}	— ^{※1}	— ^{※1}	— ^{※1}

※1 No data

Trends in PRTR chemical substances handling and emissions

(Unit : tonnes)

Category	FY2019	FY2020	FY2021	FY2022	FY2023
Japan	15.0	13.0	8.5	8.7	15.0
	Volume handled				
	Volume emitted	0.8	0.6	0.6	0.3

※ Japan Data Only

Handling, transfer and emissions of PRTR chemical substances

(Unit : tonnes)

Substance	Volume handled	Emissions			Transferred		Transferred in the products	Volume removed or disposed	Volume recycled		
		Volume emitted into atmosphere	Volume emitted into public water	Volume emitted to soil	Volume transferred as waste	Volume transferred to sewers					
Japan	FY2023	Methylnaphthalen ^{※1}	14.2	0.1	0.0	0.0	0.0	0.0	14.2	0.0	0.0
		Hydrogen Fluoride and its salt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Toluene	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0
		1,2,4-trimethyl benzene	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
		Xylene	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
	FY2022	2-ethoxyethyl acetate ^{※2}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Total	14.6	0.2	0.0	0.0	0.0	0.0	14.4	0.0	0.0
		Methylnaphthalen ^{※1}	6.0	0.0	0.0	0.0	0.0	0.0	5.9	0.0	0.0
		Hydrogen Fluoride and its salt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Toluene	2.3	0.5	0.0	0.0	1.7	0.0	0.1	0.0	0.0
	FY2021	1,2,4-trimethyl benzene	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
		Xylene	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
		2-ethoxyethyl acetate ^{※2}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Total	8.6	0.5	0.0	0.0	1.7	0.0	6.4	0.0	0.0
		Methylnaphthalen ^{※1}	5.4	0.0	0.0	0.0	0.0	0.0	5.4	0.0	0.0
	FY2020	Hydrogen Fluoride and its salt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Toluene	2.5	0.5	0.0	0.0	2.0	0.0	0.1	0.0	0.0
		1,2,4-trimethyl benzene	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
		Xylene	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
		2-ethoxyethyl acetate ^{※2}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FY2019	Total	8.3	0.6	0.0	0.0	2.0	0.0	5.8	0.0	0.0	
	Methylnaphthalen ^{※1}	4.8	0.0	0.0	0.0	0.0	0.0	4.8	0.0	0.0	
	Hydrogen Fluoride and its salt	3.7	0.0	0.0	0.0	0.0	0.0	0.0	3.7	0.0	
	Toluene	2.6	0.5	0.0	0.0	2.0	0.0	0.1	0.0	0.0	
	1,2,4-trimethyl benzene	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	
FY2019	Xylene	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	
	2-ethoxyethyl acetate ^{※2}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Total	11.4	0.5	0.0	0.0	2.0	0.0	5.2	0.0	0.0	
	Methylnaphthalen ^{※1}	5.6	0.0	0.0	0.0	0.0	0.0	5.6	0.0	0.0	
	Hydrogen Fluoride and its salt	4.5	0.0	0.0	0.0	0.0	0.0	0.0	4.5	0.0	
FY2019	Toluene	2.9	0.6	0.0	0.0	2.1	0.0	0.2	0.0	0.0	
	1,2,4-trimethyl benzene	0.5	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	
	Xylene	0.5	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	
	2-ethoxyethyl acetate ^{※2}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Total	13.8	0.7	0.0	0.0	2.1	0.0	6.6	4.5	0.0	

※1 Methylnaphthalen is included in the distilled fuel for power generation. This table is the result of the aggregate quantity that one substance handled by one plant exceeds one tonne in Japan.

※2 2-ethoxyethyl acetate as like Ethylene glycol monoethyl ether acetate.

Trends in SOx, NOx and Smoke Dust emissions

(Unit : tonnes)

Category	FY2019	FY2020	FY2021	FY2022	FY2023	
Japan	0.1	0.1	0.1	0.1	0.1	
	Dust					
	NOx	2.8	3.2	2.1	3.4	23.2
	SOx	1.0	1.0	1.1	1.0	1.4
Overseas	0.0	— ^{※1}	— ^{※1}	— ^{※1}	— ^{※1}	
	Dust					
	NOx	0.0	— ^{※1}	— ^{※1}	— ^{※1}	— ^{※1}
	SOx	0.0	— ^{※1}	— ^{※1}	— ^{※1}	— ^{※1}

※1 No data

■ Reduction of Water Usage and Discharged Water Amounts

Water usage

(Unit : 1,000m³)

	Category	FY2019	FY2020	FY2021	FY2022	FY2023
Japan	Industrial water	59	49	51	15	54
	Underground water	347	316	167	54	12
	Public water supply	76	55	37	37	26
Overseas	Industrial water	0	0	0	0	0
	Underground water	1	1	1	0	0
	Public water supply	616	605	389	376	396

Discharged water

(Unit : 1,000m³)

	Category	FY2018	FY2019	FY2020	FY2021	FY2023
Japan	Public water	257	209	191	110	3
	Sewer	273	262	222	137	87
	Other	12	4	0	0	0
Overseas	Public water	139	72	88	48	40
	Sewer	417	374	349	222	221
	Other	0	0	0	0	0

■ Number of Environment-related Qualification (Japan Data Only)

The Pioneer Group has secured staff numbers exceeding the legally required number of qualified persons in Japan.

(Unit : Number of people)

Qualification	Legally required number	FY2019	FY2020	FY2021	FY2022	FY2023	
National qualification	Pollution-related	Pollution Control Manager	23	14	5	5	3
		Qualified Person for Energy Management	1	6	8	4	4
	Energy	Energy Manager and Energy Management	2	8	7	6	5
		Managers of the Specially Controlled Industrial Waste	6	34	27	19	18
	Waste	Hazardous Materials Officers	9	155	165	69	70
		Specified High Pressure Gas Handling Supervisor	0	50	37	1	1
		High Pressure Gas Handling Supervisor	0	2	2	0	0
		Work Supervisor (Organic Solvents Lead-Specified Chemical Substance)	17	320	252	108	132
		Toxic Substance Handling Officer	0	9	3	2	1
		Internal Environmental Auditor (Japan)	— ^{※1}	51	34	29	31
		Internal Environmental Auditor (Overseas)	— ^{※1}	160	157	112	69
	Company qualification	Environmental management					

※1 Not applicable

■ Environmental data of major offices

Site name	District	Energy consumption (Unit : Gigajour)	Waste and Valuables (Unit : tonnes)	Chemical substances emissions (Unit : tonnes)	Water use (Unit : 1,000m)
FY2023					
Pioneer Corporation Headquarters	Tokyo	9,039	6	0.0	—※1
Pioneer Corporation Kawagoe plant	Saitama pref.	88,594	665	4.5	15.9
Pioneer Finetech Corporation	Saitama pref.	12,621	46	6.5	1.4
Tohoku Pioneer Corporation	Yamagata pref.	32,615	84	0.0	9.6
Mogami Denki Corporation	Yamagata pref.	1,069	3	0.2	1.4
Soar Corporation	Yamagata pref.	119,280	108	0.1	62.6
Pioneer Automotive Technologies, Inc. (PAT)	USA	14,377	—※2	—※2	—※1
Pioneer do Brasil Ltda.(PBL)	Brazil	36,173	108	—※2	0.0
Pioneer Manufacturing (Thailand) Co., Ltd. (PTM)	Thailand	163,645	500	—※2	88.6
Tohoku Pioneer (Vietnam) Co., Ltd.(TPV)	Vietnam	76,127	86	—※2	122.0
Pioneer Technology (Dongguan) Co., Ltd. (PTD)	China	34,077	143	—※2	52.3
Mogami Dongguan Electronics Co.,Ltd. (MDE)	China	5,449	100	—※2	113.7
FY2022					
Pioneer Corporation Headquarters	Tokyo	12,409	49	0.0	—※1
Pioneer Corporation Kawagoe plant	Saitama pref.	84,706	950	3.4	25.2
Pioneer Finetech Corporation	Saitama pref.	16,190	77	7.7	1.7
Tohoku Pioneer Corporation	Yamagata pref.	140,927	78	0.0	73.5
Mogami Denki Corporation	Yamagata pref.	1,357	1	0.1	1.8
Pioneer Automotive Technologies, Inc. (PAT)	USA	26,255	1,416	—※2	4.3
Pioneer do Brasil Ltda.(PBL)	Brazil	36,271	135	—※2	0.0
Pioneer Manufacturing (Thailand) Co., Ltd. (PTM)	Thailand	186,897	602	—※2	104.6
Tohoku Pioneer (Vietnam) Co., Ltd.(TPV)	Vietnam	93,782	62	—※2	38.5
Pioneer Technology (Dongguan) Co., Ltd. (PTD)	China	49,813	347	—※2	88.5
Mogami Dongguan Electronics Co.,Ltd. (MDE)	China	5,404	78	—※2	139.7
FY2021					
Pioneer Corporation Headquarters	Tokyo	17,217	3	0.0	—※1
Pioneer Corporation Kawagoe plant	Saitama pref.	87,195	892	2.0	25.6
Pioneer Finetech Corporation	Saitama pref.	15,917	65	10.6	2.0
Tohoku Pioneer Corporation	Yamagata pref.	146,182	93	0.0	70.0
Mogami Denki Corporation	Yamagata pref.	1,419	2	0.1	2.3
Pioneer Automotive Technologies, Inc. (PAT)	USA	27,176	1,498	—※2	4.9
Pioneer do Brasil Ltda.(PBL)	Brazil	48,160	227	—※2	0.0
Pioneer Manufacturing (Thailand) Co., Ltd. (PTM)	Thailand	182,216	613	—※2	88.9
Tohoku Pioneer (Thailand) Co., Ltd. (TPT)	Thailand	36,685	813	—※2	24.7
Tohoku Pioneer (Vietnam) Co., Ltd.(TPV)	Vietnam	82,295	566	—※2	36.3
Pioneer Technology (Dongguan) Co., Ltd. (PTD)	China	55,690	501	—※2	95.6
Mogami Dongguan Electronics Co.,Ltd. (MDE)	China	4,517	107	—※2	136.8
FY2020					
Pioneer Corporation Headquarters	Tokyo	23,271	13	0.0	—※1
Pioneer Corporation Kawagoe plant	Saitama pref.	99,980	978	4.5	41.2
Pioneer Finetech Corporation	Saitama pref.	15,340	74	9.4	2.8
Tohoku Pioneer Corporation	Yamagata pref.	152,847	320	0.0	66.8
Mogami Denki Corporation	Yamagata pref.	1,836	10	0.0	3.2
Pioneer Micro Technology Corporation	Yamanashi pref.	218,614	175	0.8	304.4
Pioneer Automotive Technologies, Inc. (PAT)	USA	31,684	1,605	—※2	3.9
Pioneer Automotive de Mexico S.A.de C.V. (PMX)	Mexico	15,653	58	—※2	—※1
Pioneer do Brasil Ltda.(PBL)	Brazil	55,422	378	—※2	1.0
Pioneer Manufacturing (Thailand) Co., Ltd. (PTM)	Thailand	201,472	827	—※2	130.6
Tohoku Pioneer (Thailand) Co., Ltd. (TPT)	Thailand	48,829	1,290	—※2	39.8
Tohoku Pioneer (Vietnam) Co., Ltd.(TPV)	Vietnam	91,933	930	—※2	40.8
Pioneer Technology (Shanghai) Co., Ltd. (PSG)	China	94,575	196	—※2	33.7
Pioneer Technology (Dongguan) Co., Ltd. (PTD)	China	60,818	550	—※2	128.4
Mogami Dongguan Electronics Co.,Ltd. (MDE)	China	5,910	80	—※2	171.4
FY2019					
Pioneer Corporation Headquarters	Tokyo	28,807	87	0.1	—※1
Pioneer Corporation Kawagoe plant	Saitama pref.	112,355	974	6.0	48.6
Pioneer Finetech Corporation	Saitama pref.	16,430	75	9.4	2.3
Tohoku Pioneer Corporation	Yamagata pref.	196,342	179	0.0	81.6
Mogami Denki Corporation	Yamagata pref.	1,994	10	0.1	3.0
Tohoku Pioneer EG Corporation	Yamagata pref.	11,227	87	0.0	3.6
Towada Pioneer Corporation	Aomori pref.	26,754	406	1.7	6.0
Pioneer Micro Technology Corporation	Yamanashi pref.	257,959	97	1.2	332.4
Pioneer Automotive Technologies, Inc. (PAT)	USA	34,433	1,085	0.0	3.7
Pioneer Automotive de Mexico S.A.de C.V. (PMX)	Mexico	22,990	99	0.0	—※1
Pioneer do Brasil Ltda.(PBL)	Brazil	41,302	300	0.0	1.0
Pioneer Manufacturing (Thailand) Co., Ltd. (PTM)	Thailand	204,991	617	0.0	141.1
Tohoku Pioneer (Thailand) Co., Ltd. (TPT)	Thailand	50,118	1,694	0.0	48.3
Tohoku Pioneer (Vietnam) Co., Ltd.(TPV)	Vietnam	77,215	615	0.0	38.3
Shanghai Pioneer Speakers Co., Ltd. (SPS)	China	16,960	137	0.0	18.6
Pioneer Technology (Shanghai) Co., Ltd. (PSG)	China	144,727	201	0.0	38.4
Pioneer Technology (Dongguan) Co., Ltd. (PTD)	China	63,900	596	0.0	131.8
Dongguan Monotech Electronic Co., Ltd. (MND)	China	8,451	29	0.0	13.3
Mogami Dongguan Electronics Co.,Ltd. (MDE)	China	6,876	122	0.0	179.8

※1 There is no use of water at the exclusive possession part.

※2 No data

Period covered

The period covered by the data is FY2023 (April 2022 - March 2023).
There may be some discrepancies between subtotals and totals due to rounding off.

Organization covered

The scope of this data is as follows. (Site name is as of March 2023.)
For the scope of data aggregation reports on or before FY2022, please refer to "Pioneer Group Environmental Data" for that year.

Japan

Pioneer Corporation
Headquarters
Kawagoe Plant
Tohoku Pioneer Corporation
Headquarters
Soar Corporation
Mogami Denki Corporation

Pioneer Service Network Corporation
World Parts Center / Repair Technical Group
Pioneer System Technologies Corporation
Pioneer Finetech Corporation

THE AMERICAS

Pioneer Automotive Technologies, Inc. (PAT)

Pioneer do Brasil Ltda. (PBL)

Europe

Pioneer Europe NV (PEE)

ASIA & OCEANIA

Pioneer Electronics Asiacentre Pte. Ltd. (PAC)
Pioneer Manufacturing (Thailand) Co., Ltd. (PTM)
Tohoku Pioneer (Vietnam) Co., Ltd. (TPV)

Pioneer China Holding Co., Ltd. (PCH)
Pioneer Technology (Dongguan) Co., Ltd. (PTD)
Pioneer (HK) Ltd. (PHK)
Mogami Dongguan Electronics Co.,Ltd. (MDE)