

Environmental Impact Data

INPUT

		FY2020	FY2021	FY2022
Energy consumption	GJ	2,054,950	2,197,942	2,067,582
Energy intensity	GJ/100 million yen	1,092	808	722
Total electricity consumption	MWh	331,539	361,089	342,676
Electricity from renewable energy sources	MWh	—	66,149	96,590
Purchased power	MWh	—	66,118	96,500
In-house power generation ³	MWh	24	31	90
Electricity from non-renewable energy sources	MWh	331,515	294,940	246,086
Rate of renewable energy use	%	0.01	18	28
Heavy oil, light oil, gasoline	KL	980	1,084	1,087
Natural gas, city gas	thousand m ³	18,241	19,010	17,597
LPG · LNG	t	155	197	174
Materials	t	37,083	31,431	18,079
Raw materials	t	34,376	27,471	14,839
Chemical substances	t	2,707	3,960	3,240
Water resources				
Total water withdrawal	thousand m ³	3,994	4,902	4,336
By water source				
Municipal water	thousand m ³	1,043	1,203	993
Ground water	thousand m ³	2,951	3,700	3,343
Recycled water volume	thousand m ³	3,145	3,383	3,305
Recycling rate	%	44	41	43

Data boundary

FY2020 and FY2021: Shinko Group in Japan and overseas production sites

Overseas production sites: KOREA SHINKO MICROELECTRONICS CO., LTD. (KSM)
SHINKO ELECTRONICS (MALAYSIA) SDN. BHD. (SEM)
SHINKO ELECTRIC INDUSTRIES (WUXI) CO., LTD. (SEW)

FY2022: Shinko Group in Japan and overseas production sites

Overseas production sites: KOREA SHINKO MICROELECTRONICS CO., LTD. (KSM)
SHINKO ELECTRONICS (MALAYSIA) SDN. BHD. (SEM)

Some items have totals that do not match due to rounding

No water intake from water stress areas

¹ In the past, the annual consumption of electricity was multiplied by the calorific value conversion factor specified in Article 4, Appended Table 3 of the Enforcement Regulations of the Law Concerning the Rational Use of Energy, but the method of calculating the annual consumption of electricity was changed as of the current term. Accordingly, the figures for previous years were revised retrospectively.

² Retrospective revision of previous years' figures to improve calculation accuracy

³ No energy sales

⁴ Calculated by including energy related to automobiles, etc., traveling outside the premises of plants, etc., which has previously been calculated as within Scope 3. Accordingly, the figures for previous years were revised retrospectively.

⁵ Retrospective revision of previous years' figures because of change in method of calculation

Switched from recycled water usage rate for process to recycled water usage rate for entire plant.

⁶ To improve calculation accuracy, weight conversion factors for procured components are revised accordingly.

Due to data availability restrictions, figures for previous years have not been revised.

⁷ From FY2022 onward, calculated by adding VOC to PRTR substances.

Due to data availability restrictions, figures for previous years have not been revised.

OUTPUT

		FY2020	FY2021	FY2022
Emissions into the air				
Scope1	t-CO ₂	45,131	48,076	44,135
Energy sources	t-CO ₂	43,859	45,854	42,453
Non-energy sources	t-CO ₂	1,272	2,222	1,682
Carbon dioxide (CO ₂)	t-CO ₂	39	37	40
Methane (CH ₄)	t-CO ₂	0	0	0
Tetrafluoromethane (CF ₄)	t-CO ₂	1,041	1,722	1,428
Sulfur hexafluoride (SF ₆)	t-CO ₂	0	74	0
Nitrogen trifluoride (NF ₃)	t-CO ₂	0	0	0
Hydrofluorocarbon (HFCs)	t-CO ₂	192	388	215
Scope2				
Location-based	t-CO ₂	151,821	163,357	153,211
Market-based	t-CO ₂	—	122,797	105,620
NOx	t	29	28	26
SOx	t	1	0	0
Chemical substances				
PRTR	t	5	6	5
VOC	t	101	130	137
Water				
Total water discharge	thousand m ³	3,444	3,996	3,574
By drainage destination				
River	thousand m ³	2,339	2,853	2,534
Sewerage	thousand m ³	1,105	1,143	1,039
BOD	t	291	291	213
Waste + Valuables	t	25,130	29,382	26,321
Waste	t	6,134	7,060	6,427
Hazardous				
Effectively utilized				
Thermal	t	18	50	136
Material	t	1,328	1,343	1,540
Non-effectively utilized	t	10	50	6
Non-hazardous				
Effectively utilized				
Thermal	t	171	192	196
Material	t	4,476	5,285	4,428
Non-effectively utilized	t	132	140	122
Valuables	t	18,996	22,322	19,894
Effective utilization rate	%	99.4	99.4	99.5
(Landfill disposal)	t	19.3	10.9	25