2024 Environment Data

GHG

Total GHG Emissions

Category		Unit	2022	2023	2024
Scope1 (Direct Emissions)		tCO2eq	13,269	12,958	5,966
Scope2 (Indirect Emissions)		tCO2eq	88,237	91,809	100,054
Total GHG Emissions [1]		tCO2eq	101,502	104,764	106,015
GHG Emissions Intensity [2]		tCO2eq/ 100million KRW	6.95	12.88	11.65
Scope3 [3] (Indirect Emissions-other)	Purchased Goods and Services	tCO2eq	-	-	158,216
	Capital Goods	tCO2eq	-	-	9,929
	Activities related to Fuel and Energy	tCO2eq	-	-	15,472
	Total	tCO2eq	-	-	183,616
Reduction Target		tCO2eq	14,152	14,823	12,689
Reduction Performance		tCO2eq	30,750	13,026	15,515

1) Total GHG Emissions : Sum of Scope1 and 2 and calculated in accordance with the guidelines for the verification of the GHG emissions trading system

2) GHG Emissions Intensity : Sum of GHG emissions from workplaces (Scope1 & 2) / Separate total sales amount (million KRW)

3) Scope3 (Indirect Emissions-other) : Indirect GHG emissions from the value chain of the company

Water

Category		Unit	2022	2023	2024
Total Water Consumption		ton	2,224,856	2,466,447	2,412,527
Cheong-ju Factory:	Supply ater	ton	80,278	117,596	129,415
	Industrial Water	ton	1,795,726	1,975,814	1,880,718
Ochang 1 Factory:	Supply ater	ton	16,285	20,400	27,155
	Industrial Water	ton	82,705	79,296	94,903
Ochang 2 Factory:	Supply ater	ton	7,539	8,921	8,662
	Industrial Water	ton	242,323	264,420	271,674
Total Water Consumption Target		ton	2,210,372	2,345,652	2,439,487
Total Wastewater Discharge		㎥/day	5,429	5,729	5,758
Recycled Wastewater (Water Reuse)		㎥/day	-	-	3,925

Energy

Category	Unit	2022	2023	2024
Total Energy Consumption	TJ	2,040	2,150	2,306
Non-Renewable Energy	TJ	2,040	1,459	2,235
Renewable Energy	TJ	0	691	71
Total Energy Consumption Target [1]	TJ	2,055	2,095	2,260
Energy Consumption Intensity [2]	TJ/100million KRW	0.14	0.26	0.25

1) Total Energy Consumption Target : Calculated as sum of target consumption of Non-Renewable energy and Renewable energy

2) Energy Consumption Intensity : Total Energy Consumption of workplaces / Seperated Sales amount (100million KRW)

Wastes

Category	Unit	2022	2023	2024
Total Waste Generated	ton	14,556	13,787	15,373
General	ton	10,294	9,033	8,387
Designated	ton	4,263	4,754	6,986
Waste Generated Target	ton	15,411	14,172	14,580
Total Waste Recycling	ton	13,644	13,098	13,766
General Waste Recycling	ton	10,294	9,000	8,420
Designated Waste Recycling	ton	3,291	4,164	6,252

Use of Major Raw Materials

Category	Unit	2022	2023	2024
Copper Clad Laminate	million PNL	11.482	6.922	10.080
Prepreg	million PNL	17.123	11.955	14.835
Copper Foil	million Sheet	11.124	7.419	8.996
PGC	ton	3.171	1.864	2.452

Hazardous Substances and Chemicals

Category	Unit	2022	2023	2024
Use of Hazardous Chemicals [1]	K ton	33.3	26.7	13.9
Chimicals Generated	ton	12.0	9.0	9.3

1) Data Collection Range of Hazardous Substances : 210 Materials including hardeners, fillers, addition agents, epoxy resins, and more

Green Purchase

Category	Unit	2022	2023	2024
Total Purchase Amount (Major Raw Materials)	Ten million won	53,188	37,651	54,032
Renewable Energy [1]	Ten million won	0	9	7
	TJ	0	33	27
Renewable Copper Oxide [2]	Ten million won	666	561	633
	ton	421	382	459

1) Renewable Energy : Energy derived from sources such as solar, wind, water, biomass etc (including Green Premium)

2) Renewable Copper Oxide : Regenerated raw materials produced by recycling ndustria lwaste (refer to the Act on the promotion of resource conservation and recycling)

Air/Water Pollutants

Category	Unit	2022	2023	2024
Nitrogen Oxide (NOx)	ton	2.324	4.031	3.412
Particular Matter (PM)	ton	10.767	5.750	0.680
Sulfur Oxides (SOx)	ton	0.003	0.354	0.00
BOD	ton	287.235	188.947	108.598
SS	ton	21.03	34.13	25.49
COD	ton	350.11	0.00	0.00
TOC	ton	209.73	101.93	77.98