PERFORMANCE DATA

ESG PERFORMANCE DATA

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Greenhouse gas emissions		Unit	2022	2023 ❶	2024 ❷
Scope 1+2 emissions	Global	tCO_2e	9,561,674	9,036,425	9,351,641
	Domestic	tCO_2e	8,567,697	8,072,360	8,310,445
	Overseas	tCO_2e	993,977	964,065	1,041,196
	Emission intensity ❸	tCO_2e / KRW 1M	0.3897	0.4349	0.4148
Scope 1 emissions	Global	tCO_2e	5,628,898	5,176,533	5,653,173
	Domestic	tCO_2e	5,489,586	5,031,867	5,492,228
	Overseas	tCO_2e	139,312	144,665	160,945
	Emission intensity	tCO_2e / KRW 1M	0.2294	0.2491	0.2507
Scope 2 emissions ❹	Global	tCO_2e	3,932,776	3,859,892	3,698,468
	Korea (Market-based)	tCO_2e	3,078,111	3,040,492	2,818,217
	Korea (Location-based)	tCO_2e	3,129,840	3,119,902	2,883,465
	excl. Korea (Market-based)	tCO_2e	854,664	819,400	880,251
	excl. Korea (Location-based)	tCO_2e	1,279,330	1,284,497	1,286,900
	Emission intensity	tCO_2e / KRW 1M	0.1603	0.1858	0.1640
Scope 3 emissions ❺	Domestic	tCO_2e	1,227,864	11,471,953	19,382,867
Category	1. Purchased goods and services ❻	tCO_2e	425,556	10,215,107	14,143,583
	2. Capital goods	tCO_2e	83	245,912	162,883
	3. Fuel and energy-related activities (not included in Scope 1 or 2)	tCO_2e	193,940	399,605	339,324
	4. Upstream transportation and distribution	tCO_2e	124,744	611,329	637,713
	5. Waste generated in operations	tCO_2e	61,972	-	131,531
	6. Business travel	tCO_2e	621	-	4,330
	7. Employee commuting	tCO_2e	10,474	-	10,307
	9. Downstream transportation and distribution	tCO_2e	-	-	677,368
	11. Use of sold products	tCO_2e	-	-	596,749
	12. End-of-life treatment of sold products	tCO_2e	-	-	2,435,063
	15. Investments	tCO_2e	400,000	-	244,016

❶ Figures for Scope 1 and Scope 2 emissions in Korea in 2023 have been partially revised based on the verification results of the Ministry of Environment.

❷ Figures for Scope 1 and Scope 2 emissions in Korea in 2024 are based on values reported to the Ministry of Environment. The above figures are subject to revision depending on the verification results.

LG Chem's Scope 3 Emissions Reporting

— With the increasing importance of Scope 3 carbon emissions management and growing sustainability disclosure and stakeholder demands, LG Chem reviewed global standards and the scope of calculations for Scope 3 carbon emissions. Based on this review, the company established its own calculation standards and applied them to estimate emissions for 11 categories at its domestic business sites.
— The calculation is based on the GHG Protocol's Corporate Value Chain (Scope 3) Accounting and Reporting Standard (2011), using highly reliable databases to calculate emissions by category (Figures for 2022 and 2023 emissions calculations remain unchanged from last year and were not revised).
— LG Chem plans to expand the scope of Scope 3 carbon emissions calculation to its overseas business sites in the future to enhance completeness.

— Category 1: Calculated emissions based on the purchase statements of key material inputs (raw materials, products, semi-finished products, goods, etc.) of Petrochemicals and Advanced Materials businesses.
— Category 2: Calculated emissions based on asset statements of acquired/replaced tangible goods (buildings, structures, machinery, vehicles, tools, equipment, fixtures).
— Category 3: Calculated emissions based on external fuel and energy purchases on the Statement of Greenhouse Gas Emissions.
— Category 4: Transport-related emissions based on raw materials purchased by business sites (excluding emissions from warehouses and distribution centers during transportation).
— Category 5: Emissions from the treatment and disposal of waste generated at business sites in facilities owned by third parties.
— Category 6: Emissions from transportation and accommodation during domestic and overseas business trips by employees.
— Category 7: Emissions from transportation used by employees for commuting (utilizing statistical data related to worker commuting).
— Category 9: Transport-related emissions from products exported overseas from business sites (excluding emissions from warehouses and distribution centers during transportation).
— Category 11: Emissions from sold products that are used as fuel and directly released into the atmosphere.
— Category 12: Emissions from the waste treatment process at the end-of-life stage of sold products (utilizing statistical data on disposal scenarios).
— Category 15: Emissions from business activities of investees (affiliates, joint ventures) excluding subsidiaries among companies in the consolidated financial statements of the business report.

❸ Emission Intensity = Global GHG emissions / Revenues excluding LG Energy Solution, and Common and others.

❹ Starting this year, Scope 2 GHG emissions are disclosed separately as Market-based / Location-based. However, global total emissions are aggregated based on Market-based data.

❺ Calculation of Scope 3 emissions has been limited to select categories of the Greenhouse Gas (GHG) Protocol's Corporate Value Chain (Scope 3) Accounting and Reporting Standard (2011). Categories 5, 6, 7, 9, 11, 12, and 15 have been newly established and calculated from 2024.

❻ The increase in Category 1 carbon emissions in 2024 is mainly due to increased naphtha purchases following the normal operation of Yeosu 2NCC (Yeosu 2NCC was shut down in 2023).

Energy consumption		Unit	2022 ❶	2023	2024 ❷
Total energy consumption ❸	Global	TJ	145,779	133,424	143,863
	Korea	TJ	136,765	124,335	134,028
	excl. Korea	TJ	9,015	9,089	9,834
	Energy intensity ❹	TJ / KRW 1M	0.0059	0.0064	0.0064
Direct energy consumption (fuel)	Global	TJ	107,352	96,272	109,642
	Korea	TJ	104,876	93,692	106,570
	excl. Korea	TJ	2,476	2,580	3,072
	Energy intensity	TJ / KRW 1M	0.0044	0.0046	0.0049
Indirect energy consumption ❺ (steam, electricity)	Global	TJ	38,427	37,152	34,221
	Korea	TJ	31,888	30,643	27,458
	excl. Korea	TJ	6,539	6,509	6,763
	Energy intensity	TJ / KRW 1M	0.0016	0.0018	0.0016
Renewable energy consumption ❻	Global	MWh	740,791	876,843	835,370
	Korea	MWh	112,598	172,852	142,026
	excl. Korea	MWh	628,194	703,991	693,345
Self-generated and Consumed Solar Power ❼	Global	MW	1.9	4.8	4.8

❶ Figures for energy consumption in Korea in 2022 have been revised based on the verification results of the Ministry of Environment.
❷ Figures for energy consumption in Korea in 2024 (including renewable energy) may be revised in the future based on the verification results of the Ministry of Environment.
❸ Total energy consumption figures exclude self-generated and consumed energy (solar), which is reported separately.
❹ Energy Intensity = Global energy consumption / Revenues excluding LG Energy Solution, and Common and others.
❺ Indirect energy consumption does not include (deduct) renewable energy consumption.
❻ Renewable energy consumption includes REC (solar, wind) purchases and green premium. Renewable energy consumption for 2022-2023 has been revised to reflect partial business divestiture and changes in calculation criteria (excluding self-generated and consumed solar power).
❼ As of 2024, the company owns a total of 4.8 MW of self-consumed solar power generation facilities (1.9 MW in Korea, 2.9 MW overseas), which were previously disclosed as part of renewable energy consumption based on design capacity. To provide accurate data on actual renewable energy consumption, solar self-generation and consumption are excluded from the total renewable energy consumption and separately indicated.

Water resources management		Unit	2022	2023	2024
Water withdrawal	Total	㎥	74,781,261	73,423,047	72,188,887
	Surface water	㎥	-	-	-
	Groundwater	㎥	440,512	464,569	410,739
	Seawater	㎥	-	-	-
	Municipal water	㎥	74,326,951	72,813,032	71,746,131
	Others ❶	㎥	13,798	145,446	32,017
	Water withdrawal intensity	㎥ / KRW 1M	2.9400	3.5336	3.2019
	Water Stress ❷ Water withdrawal in regions	㎥	4,457,410	4,405,035	4,296,966
Wastewater discharge	Total	㎥	21,190,129	22,543,478	21,917,739
	Emission intensity	㎥ / KRW 1M	0.8831	1.0849	0.9721
	Water discharge in regions with water stress	㎥	1,765,931	1,625,892	1,915,596
Water consumption	Total	㎥	53,591,133	50,879,569	50,271,148
	Energy intensity	㎥ / KRW 1M	2.1069	2.4486	2.2297
	Water consumption in regions with water stress	㎥	2,691,479	2,779,143	2,381,370
Water reuse rate ❸		%	2.57	2.65	3.46

❶ Other water sources include rainwater collection and storage, etc.
❷ Water Stress regions: (Korea) Iksan, Magok, (Overseas) Tianjin and Wuxi in China.
❸ Calculation of water reuse rate includes the amount of recycled water within the operation and purchased reclaimed wastewater.

Water resources management (Major business sites)		Unit	2022	2023	2024
Yeosu	Water withdrawal	㎥	48,143,272	43,611,260	41,666,050
	Municipal water ❶	㎥	48,143,272	43,611,260	41,666,050
	Water consumption	㎥	38,272,526	32,254,609	31,542,276
Daesan	Water withdrawal	㎥	13,096,040	17,462,242	18,330,156
	Municipal water ❶	㎥	13,096,040	17,462,242	18,330,156
	Water consumption	㎥	7,967,640	12,039,271	12,373,821

❶ Yeosu and Daesan plants source 100% of water from municipal water (including industrial water).

Water pollution management		Unit	2022	2023	2024
Water pollutant discharge	COD ❶	Metric tons	472	244	284
	Emission intensity	kg / KRW 1M	0.0186	0.0117	0.0126
	TOC ❶	Metric tons	457	381	460
	Emission intensity	kg / KRW 1M	0.0179	0.0183	0.0204
	SS	Metric tons	240	228	190
	Emission intensity	kg / KRW 1M	0.0094	0.0110	0.0084
	T-N	Metric tons	211	211	219
	Emission intensity	kg / KRW 1M	0.0083	0.0102	0.0097
	T-P	Metric tons	34	41	19
	Emission intensity	kg / KRW 1M	0.0013	0.0020	0.0008

❶ Reflects the gradual transition of reporting metrics from COD to TOC under the Korean Water Environment Conservation Act.

Air pollution management		Unit	2022	2023	2024
Air pollutant emissions	Dust	Metric tons	183	176	162
	Emission intensity	kg / KRW 1M	0.0072	0.0085	0.0072
	NOx	Metric tons	3,823	3,150	3,100
	Emission intensity	kg / KRW 1M	0.1503	0.1516	0.1375
	SOx	Metric tons	240	119	152
	Emission intensity	kg / KRW 1M	0.0094	0.0057	0.0067
	VOCs	Metric tons	1,206	151	134
	Emission intensity	kg / KRW 1M	0.0474	0.0073	0.0059
	HAPs	Metric tons	298	105	95
	Emission intensity	kg / KRW 1M	0.0117	0.0051	0.0042

Waste Management		Unit	2022	2023	2024
Total waste generated	Total	Metric tons	279,585	248,036	242,684
	Waste intensity	Metric tons / KRW 1M	0.0114	0.0119	0.0108
Non-hazardous waste discharged	Total	Metric tons	150,922	125,043	103,013
	Recycling	Metric tons	111,612	97,692	80,665
	Incineration (w/ heat recovery)	Metric tons	23,149	13,779	11,577
	Incineration	Metric tons	6,177	4,433	2,444
	Landfill	Metric tons	9,984	9,138	8,327
	Other	Metric tons	-	-	-
Hazardous waste discharged	Total	Metric tons	128,663	122,994	139,671
	Recycling	Metric tons	60,374	57,458	83,641
	Incineration (w/ heat recovery)	Metric tons	54,361	52,210	48,000
	Incineration	Metric tons	12,862	11,930	7,371
	Landfill	Metric tons	1,066	1,395	659
	Other	Metric tons	-	-	-
Waste recycling rate	incl. Incineration (w/ heat recovery)	%	89	89	92
	excl. Incineration (w/ heat recovery)	%	62	63	68
Zero Waste to Landfill (ZWTL)	Certifications ❶	Site	3	4	6

❶ Yeosu (Hwachi), Gimcheon, Cheongju (Separator), Guangzhou, Quzhou, Tianjin business sites.

Hazardous substances management ❶	Unit	2022 ❷	2023 ❷	2024
Proportion of sold products containing REACH ❸ Annex 17 substances	%	26.79	28.10	26.70
Proportion of sold products containing REACH SVHCs ❹ substances	%	7.96	12.35	12.90
Proportion of sold products containing CMR ❺ substances	%	11.48	9.35	8.32
Hazardous chemicals risk assessment ❻	%	26.33	26.64	25.38

❶ Calculated the proportion of products containing each substance relative to the number of products sold per year.
❷ As REACH Annex 17 restricted substances (41 types), SVHCs substances (45 types), and CMR substances (10 types) were newly added compared to 2023, data for 2022-2023 was recalculated applying the latest standards.
❸ REACH: Registration, Evaluation, Authorization and Restriction of Chemicals.
❹ SVHC: Substances of Very High Concern.
❺ CMR: Carcinogenic, Mutagenic and Reprotoxic chemicals.
❻ Proportion of substances that have completed or are exempt from substance registration among the constituent substances of the sold product.

Reused/recycled materials		Unit	2022	2023	2024
Proportion of reused/recycled materials ❶ Input	PC (Polycarbonate) ❷	%	3.1	4.5	5.3
	ABS	%	0.12	0.19	0.31
	PO	%	0.05	0.18	0.09
	PVC	%	-	0.0010	0.0144
	Plasticizers	%	-	0.0019	0.0036

❶ Reused/recycled Materials refer to Post-Consumer Recycled (PCR) or Post-Industrial Recycled(PIR) products. The proportion of reused/recycled input is the amount of PCR or PIR material input relative to the total material input.
❷ An error was found and corrected where non-PC product groups were included in the total sales when calculating the proportion of reused/recycled materials for the existing PC product group.

Employee and process EH&S		Unit	2022 ❶	2023	2024
Employees	Fatality Rate ❷	Rate	-	-	-
	TRIR ❸	Rate	0.6079	0.8344	0.4404
	LTIR ❹	Rate	0.0968	0.1597	0.0989
Subcontractors	Fatality Rate	Rate	0.0104	-	-
	TRIR	Rate	1.1025	0.7816	0.6240
	LTIR	Rate	0.3640	0.1804	0.1899
Process safety ❺	PSE ❻	Event	1	-	-
	PSER ❼	Rate	0.0035	-	-
Transport incidents	Road	Event	1	-	-
	Rail	Event	-	-	-
	Ship	Event	-	-	-

❶ From 2022 onward, the accident rate is calculated by applying actual hours worked.
❷ Fatality rate: Total number of fatality cases × 200,000 / total hours worked.
❸ TRIR(Total Recordable Incident Rate): Total number of recordable incidents × 200,000 / total hours worked.
❹ LTIR (Lost Time Incident Rate): Total number of lost time incidents × 200,000 / total hours worked.
❺ Calculations for process safety events are based on the internal accident index standard which includes injuries, fires, leakages, amount of loss, etc.
❻ PSE (Process Safety Events).
❼ PSER (Process Safety Event Rate): Number of process safety events × 200,000 / total hours worked.

Employee DE&I		Unit	2022	2023	2024
No. of employees by region ❶	Total	People	19,627	19,218	18,543
	Korea	People	14,572	14,360	13,741
	China	People	3,705	3,488	3,234
	Asia-Pacific (excl. China)	People	578	513	485
	Europe	People	471	479	466
	Americas	People	301	378	617
No. of executives ❷	Total	People	113	113	115
	Male	People	103	105	103
	Female	People	10	8	12
No. of employees by employment contract (Korea)	Non-fixed term	People	14,249	14,029	13,451
	Fixed-term	People	323	331	290
No. of employees by gender (Korea)	Male	People	12,356	12,088	11,517
	Female	People	2,216	2,272	2,224
	Ratio of female employees (non-fixed term)	%	15	16	16
	Ratio of female employees (incl. fixed term)	%	15	16	16
No. of employees by age (Korea, non-fixed term employees)	Under 30	People	2,508	2,187	1,623
	30 to 49	People	9,110	9,275	9,280
	50 or above	People	2,631	2,567	2,548
No. of leaders in revenue-related ❸ departments (Korea)	Male leaders ❹	People	486	506	526
	Female leaders	People	23	28	31
	Ratio of female leaders	%	5	5	6
No. of employees in R&D ❺ departments (Korea, non-fixed term)	Male	People	2,004	2,030	1,927
	Female	People	962	1,020	978
	Ratio of female employees	%	32	33	34
Social minorities (Korea)	Persons with disabilities	People	250	251	233
	National Veterans	People	286	290	267
Gender pay gap ❻	Non-management level (base salary)	%	80	84	84
	Management ❼ level (base salary)	%	94	95	95
	Management level (base salary + cash incentives)	%	94	95	95
	Executive level (base salary)	%	86	91	90
Parental leave (Korea)	Total number of employees due to return to work after taking parental leave	People	157	90	201
	Male	People	60	41	89
	Female	People	97	49	112
	Total number of employees that did return to work after taking parental leave	People	157	84	189
	Male	People	60	39	84
	Female	People	97	45	105

❶ Calculated based on the number of employees at the end of the fourth quarter of each year.
❷ Executives refer to executive officers and registered directors at the Vice President level and above.
❸ Revenue-related refers to departments directly related to goods and services, such as production, sales, etc.
❹ Leaders refer to employees at the positions of team leader and above, excluding executives.
❺ R&D refers to departments related to research & development, technology, etc.
❻ Gender pay gap is calculated by dividing the average remuneration of all women in a position by the average compensation of all men in the same position. There are no distinctions based on gender, while factors such as years of service contribute to the pay gap.
❼ Management refers to employees at the level of professionals/senior managers and above, excluding executives.

Employee hires		Unit	2022	2023	2024
New employee hires	Total	People	2,651	1,025	711
	Korea	People	1,431	662	178
	excl. Korea	People	1,220	363	533
No. of employees by employment contract (Korea)	Non-fixed term	People	1,261	922	111
	Fixed-term	People	170	103	67
No. of employees by gender (Korea)	Male	People	1,070	466	120
	Female	People	361	196	58
by Age (Korea)	Under 30	People	849	409	89
	30 to 49	People	469	201	63
	50 or above	People	113	52	26

Employee turnover		Unit	2022	2023	2024
No. of voluntary turnover (Korea)	Total	People	344	303	346
No. of employees by gender (Korea)	Male	People	257	225	283
	Female	People	87	78	63
by Age (Korea)	Under 30	People	161	100	87
	30 to 49	People	173	182	238
	50 or above	People	10	21	21

Training and Development		Unit	2022	2023	2024
Training hours (Korea, non-fixed term)	Total	Hour	506,803	373,011	220,588
	Male	Hour	412,266	300,215	179,221
	Female	Hour	94,537	72,796	41,367
	Average training hours per employee	Hour / Person	35.6	19.7	16.4
Mandatory training hours (Korea)	Total	Hour	95,990	62,048	49,769
	Male	Hour	86,004	56,723	43,284
	Female	Hour	9,986	5,325	6,485
Training cost (Korea)	Total	KRW 10K	2,139,966	2,219,761	1,061,434
	Average training cost per employee ❶	KRW 10K / Person	150	158	79

❶ Corrected error in average training cost per employee for 2023.

Labor and human rights		Unit	2022	2023	2024
Labor union (Korea)	No. of employees eligible to join	People	7,447	6,799	6,309
	No. of employees participating	People	5,410	5,279	5,037
	Percentage of employees participating	%	73	78	79.8
Collective Agreements (Korea)	Coverage rate	%	100	100	100

Supply chain management		Unit	2022	2023	2024
ESG self-assessment	Total number of suppliers ❶	Company	1,433	1,168	1,026
	Number of suppliers that have finished ESG self-assessment	Company	762	1,000	955
	Total number of core suppliers ❷	Company	178	118	152
	Number of core suppliers that have finished ESG self-assessment	Company	77	97	139
ESG on-site audit	Total number of high-risk suppliers ❸	Company	169	160 ❺	151
	Number of high-risk suppliers that have finished ESG on-site audit	Company	17	31 ❺	38
	Total number of high-risk core suppliers	Company	1	7 ❺	15
	Number of high-risk core suppliers that have finished ESG on-site audit	Company	-	1 ❺	3
ESG on-site audit findings and improvements	Number of findings ❹	Case	-	554 ❺	1,134
	Number of improvements	Case	-	99 ❺	604

❶ Suppliers refer to domestic and overseas suppliers with records of annual purchase amounts of KRW 100M or more, and three or more purchase orders.
❷ Core suppliers refer to suppliers in the top 90% of purchase amounts and include companies of all sizes.
❸ High-risk suppliers refer to suppliers who fall under a high-risk rating as a result of self-assessment or fall into the high-risk group due to findings of critical non-conformance items, etc.
❹ The increase in the number of findings is attributed to on-site audits focused on ESG risk monitoring and inspection after the supplier training and support period until 2022.
❺ 2023 data was found to be under-counted as cases meeting both conditions of ① high-risk group and ② High Risk rating in self-assessment results, and has been corrected.

Social contributions and community engagement		Unit	2022	2023	2024
Social Contribution Expenses	Total	KRW 1M	21,725	16,884	20,236
	Charitable donations	KRW 1M	17,760	13,101	7,284
	Community investments	KRW 1M	3,852	3,730	12,910
	Commercial initiatives	KRW 1M	113	53	42
Employee volunteer hours	Hour	Hour	3,371	2,993	3,541

Ethics, anti-corruption, and fair trade		Unit	2022	2023	2024
Corruption and bribery	No. of investigated cases	Case	14	13	5
	No. of handled cases	Case	4	3	2
Unfair trade practices	No. of legal investigations	Case	-	-	-
	No. of legal actions	Case	-	-	-
Ethics training	No. of employees participating in ethics training ❶	People	15,159	15,068	14,163
	No. of employees participating in fair trade training ❷	People	15,191	15,298	16,094

❶ Includes contents on Jeong-Do management and the Code of Ethics.
❷ Includes contents related to subcontractors and compliance.

Information security and cybersecurity		Unit	2022	2023	2024
ISO 27001	Certified business sites	Site	16	16	15
Information security training	Awareness raising activities	Campaign	12	12	12
	Average training hours per employee	Minute / Person	30	10	6

Public policy and regulation	Unit	2022	2023	2024
Contributions to trade associations ❶	KRW 1M	2,497	3,076	3,701
Contributions to political campaigns ❷	KRW 1M	-	-	-

❶ In 2024, contributions have been made to the following top 5 organizations:
— Korea Enterprises Federation (KEF): 840,000 (KRW 1K)
— World Economic Forum (WEF): 469,605 (KRW 1K)
— Korea Employers Federation: 345,846 (KRW 1K)
— Korea Vinyl Environmental Council (KOVEC): 208,000 (KRW 1K)
— Korea Chemical Industry Association (formerly Korea Petrochemical Industry Association): 178,747 (KRW 1K)
❷ The Political Funds Act prohibits companies from sponsoring political organizations.

Tax reporting		Unit	2022	2023	2024
Reported taxes ❶	Total	KRW 1M	641,482	432,501	61,035
	Korea	KRW 1M	747,539	5,387	- 166,784
	Asia (excl. Korea)	KRW 1M	389,245	424,168	332,078
	Europe	KRW 1M	186,016	66,978	- 83,025
	Americas	KRW 1M	4,141	20,589	- 39,669
	Other	KRW 1M	247	642	2,430
	Consolidated adjustments	KRW 1M	-685,706	-85,264	16,005
Cash payment of corporate tax		KRW 1M	1,707,449	1,348,461	659,998

❶ Based on the consolidated financial statements of FY 2024.

Customer satisfaction		Unit	2022	2023	2024 ❷
Customer satisfaction survey	Scope ❶	%	100	100	-
	Score	Score	79	84	-

❶ Refers to the percentage of business divisions that have conducted customer satisfaction surveys.
❷ Customer satisfaction surveys were not conducted in 2024, but are planned to resume in the second half of 2025 after review.

Economic performances		Unit	2022	2023	2024
Revenues ❶	Total	KRW 1M	50,983,251	55,249,785	48,916,104
	Petrochemicals	KRW 1M	21,151,355	17,208,803	18,619,494
	Advanced Materials	KRW 1M	2,538,394	2,441,790	2,657,248
	Life Sciences	KRW 1M	849,289	1,128,075	1,269,051
	LG Energy Solution	KRW 1M	25,586,365	33,667,228	25,609,482
	Common and others	KRW 1M	857,848	803,889	760,829
Revenue excluding LG Energy Solution, and Common and others ❷		KRW 1M	24,539,038	20,778,668	22,545,793
R&D expenses	Total	KRW 1M	869,634	1,007,779	1,059,290
	Sustainable technology and product ❸	KRW 1M	143,604	178,401	170,249

❶ Based on the consolidated financial statements of FY 2024.
❷ Represents simple deductions of revenues of LG Energy Solution and Common and others from the total. Common and others includes revenue from FarmHannong. This figure has been used to calculate the intensity of environmental performance data. For details, please refer to the notes in the consolidated financial statements.
❸ Includes expenses for projects in the areas of bio materials, recycling, and Net-Zero.

GRI INDEX

GRI INDEX

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		Description	Location	Notes
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GRI 415	415-1	Political contributions	p.108	
GRI 416	416-1	Assessment of the health and safety impacts of product and service categories	p.77	
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GRI 417	417-3	Incidents of non-compliance concerning marketing communications	-	Business Report-XI-3.

SASB INDEX

SASB INDEX

Topic	Code	Accounting metric	Disclosures
Greenhouse Gas Emissions	RT-CH-110a.1	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	5,653,173 tCO_2e, 97% (emissions in Korea subject to K-ETS relative to global Scope 1 emissions)
	RT-CH-110a.2	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	p.25, 49-51, 53-55
Air Quality	RT-CH-120a.1	Air emissions of the following pollutants: (1) NOx (excluding N_2O), (2) SOx, (3) Volatile organic compounds (VOCs), (4) Hazardous air pollutants (HAPs)	(1) 3,100 tons (2) 152 tons (3) 134 tons (4) 95 tons
Energy Management	RT-CH-130a.1	(1) Total energy consumed (2) Percentage grid electricity (3) Percentage renewable (4) Total self-generated energy	(1) 143,863 TJ (2) Korea 13%, overseas 57% (3) Korea 3%, overseas 44% (4) 4.8 MWh ❶
Water Management	RT-CH-140a.1	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	(1) 4,296,966m3, 5.95% (Percentage of water withdrawn from regions with water stress) (2) 2,381,370 m3, 4.74% (Percentage of water consumption from regions with water stress)
	RT-CH-140a.2	Number of incidents of non-compliance associated with water quality permits, standards, and regulations	4
	RT-CH-140a.3	Description of water management risks and discussion of strategies and practices to mitigate those risks	Drought caused by climate change is intensifying water shortage. Based on close cooperation with local governments related to water resources, LG Chem manages water withdrawal and usage at all business sites including Water-Stress regions, and strives to optimize water usage by expanding water reuse rates.
Hazardous Waste Management	RT-CH-150a.1	Amount of hazardous waste generated, percentage recycled	(1) 139,671 tons (2) 92% (incl. incineration w/ heat recovery), 68% (excl. incineration w/ heat recovery)
Community Relations	RT-CH-210a.1	Discussion of engagement processes to manage risks and opportunities associated with community interests	p.14-15, 95-100

❶ As of 2024, the company owns a total of 4.8 MW of self-consumption solar power generation facilities (1.9 MW in Korea, 2.9 MW overseas), calculated based on design capacity.

Topic	Code	Accounting metric	Disclosures
All employees (workforce) Health and safety employees (workforce) Workforce Health & Safety	RT-CH-320a.1	(1) Total recordable incident rate (TRIR) and (2) fatality rate for (a) direct employees and (b) contract employees	(a) (1) 0.4404 (2) 0 (b) (1) 0.6240 (2) 0
	RT-CH-320a.2	Description of efforts to assess, monitor, and reduce exposure of employees and contract workers to long-term (chronic) health risks	p.74
Product Design for Use-phase Efficiency	RT-CH-410a.1	Revenue from products designed for use-phase resource efficiency	17% (Excluding revenues from LG Energy Solution, and Common and others)
Safety & Environmental Stewardship of Chemicals	RT-CH-410b.1	(1) Percentage of products that contain Globally Harmonized System of Classification and Labeling of Chemicals (GHS) Category 1 and 2 Health and Environmental Hazardous Substances, (2) percentage of such products that have undergone a hazard assessment	(1) 32.19% (2) 74.11%
	RT-CH-410b.2	(1) Discussion of strategy to manage chemicals of concern and (2) develop alternatives with reduced human and/or environmental impact	p.77
Genetically Modified Organisms	RT-CH-410c.1	Percentage of products by revenue that contain genetically modified organisms (GMOs)	N/A
Management of the Legal & Regulatory Environment	RT-CH-530a.1	Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry	LG Chem participates in policy proposals through its local public affairs networks at home and overseas and continuously monitor new legislation and regulations that may affect its global business. LG Chem also participates in the activities of industry associations that represent its business areas and collaborates with various stakeholders by engaging in professional networking activities like external seminars, forums, and conferences. LG Chem secures incentives related to major investments and conduct policy support activities.
Operational Safety, Emergency Preparedness & Response	RT-CH-540a.1	Process Safety Incidents Count (PSIC), Process Safety Total Incident Rate (PSTIR), and Process Safety Incident Severity Rate (PSISR)	Number of Process Safety Events (PSE): 0 Process Safety Event Rate (PSER): 0
	RT-CH-540a.2	Number of transport incidents	0

TCFD INDEX

TCFD INDEX

Category	Recommendations	Location
Governance	a. Describe the board's oversight of climate-related risks and opportunities.	p.22, 30, 33
	b. Describe management's role in assessing and managing climate-related risks and opportunities.	p.22, 34
Strategy	a. Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	p.17-21
	b. Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.	p.17-21, 23, 50-51
	c. Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	p.17-21, 50-56
Risk Management	a. Describe the organization's processes for identifying and assessing climate-related risks.	p.20
	b. Describe the organization's processes for managing climate-related risks.	p.50-51
	c. Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	p.30-34, 50-52
Metrics and Targets	a. Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	p.18
	b. Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.	p.20-21, 103
	c. Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	p.25

ASSURANCE STATEMENT

LRQA INDEPENDENT ASSURANCE STATEMENT

RELATING TO LG CHEM'S 2024 SUSTAINABILITY REPORT

This assurance statement has been prepared for the readers of LG Chem's sustainability report and was prepared in accordance with a mutual contract with LG Chem.

VERIFICATION STANDARDS AND SCOPE

Lloyd's Register Quality Assurance (LRQA) has received a request from LG Chem to provide independent verification of the LG Chem Sustainability Report 2024 (hereinafter "the report"). This verification was performed based on LG Chem's data management procedures using ISAE 3000 and ISAE 3410, with limited assurance level and the materiality of professional judgment as criteria.

The verification scope included the evaluation of accuracy and reliability of ESG performance data and information contained on CHAPTER 3 PERFORMANCE DATA of the report regarding LG Chem's domestic and overseas business site operations and activities from January 1, 2024 to December 31, 2024.

Data and information regarding LG Chem's suppliers, contractors, and other third parties were excluded from the verification scope.

LRQA's responsibility is limited only to LG Chem. LRQA does not assume any obligation or responsibility to other persons or organizations as explained in the final footnote. The responsibility for collecting, aggregating, analyzing and presenting all data and information within the report and maintaining effective internal controls over the report publishing system lies with LG Chem. Ultimately, the report has been approved by LG Chem and remains LG Chem's responsibility.

LRQA'S OPINION

Based on LRQA's approach, all errors found during the verification process have been corrected, and no matters have been found that would lead us to suspect that LG Chem has not disclosed accurate and reliable performance data and information.

This opinion is based on limited assurance level verification and is derived based on the professional judgment of the verification auditors as a materiality criterion.

Note: The scope of evidence gathering in limited assurance level verification is narrower than that of reasonable assurance level verification. Limited assurance level verification focuses on aggregated data rather than directly checking raw data at business sites. Consequently, limited assurance level verification has a significantly lower level of assurance than reasonable assurance level verification.

LRQA'S APPROACH

LRQA's verification is performed in accordance with LRQA's verification procedures. The following activities were performed as part of evidence gathering for this verification:

- LRQA audited LG Chem's data management systems to confirm that there were no significant errors, omissions or misstatements in the report. For this purpose, LRQA reviewed the effectiveness of data processing procedures, guidelines and systems, including internal verification. LRQA also interviewed key personnel responsible for aggregating and editing data and drafting the report.
- LRQA confirmed that domestic direct (Scope 1) and indirect (Scope 2) greenhouse gas emissions and energy consumption data were consistent with results verified by other third parties.
- Other indirect (Scope 3) greenhouse gas emissions were verified under a separate contract with LRQA, and LRQA confirmed that the verification results were appropriately reflected.
- LRQA confirmed that financial data was consistent with the financial statements.
- LRQA visited the headquarters in Seoul and reviewed additional evidence provided by LG Chem.

LRQA'S STANDARDS, COMPETENCE AND INDEPENDENCE

LRQA implements and maintains a comprehensive management system that meets the accreditation requirements of ISO 14065 (Greenhouse gases - Requirements for greenhouse gas validation and verification bodies for use in accreditation or other forms of recognition) and ISO/IEC 17021 (Conformity assessment - Requirements for bodies providing audit and certification of management systems), and complies with the requirements of International Standard on Quality Control 1 (ISQC1) and the Code of Ethics for Professional Accountants of the International Ethics Standards Board for Accountants (IESBA).

LRQA ensures the selection of appropriately qualified verification auditors based on qualifications, training and experience. To ensure that the applied approach is strictly followed and transparent, the results of all verification and certification assessments are reviewed internally by management.

LRQA is the certification body for LG Chem's ISO 9001, ISO 14001, ISO 37001, and ISO 37301. Additionally, LRQA provides LG Chem with various training related to management systems. LRQA only provides verification and certification assessment, and training services to LG Chem, which does not compromise independence or impartiality.

Tae-Kyoung Kim
Lead Verifier
On behalf of LRQA
2nd Floor, T Tower, 30, Sowol-ro 2-gil, Jung-gu, Seoul, Republic of Korea

Date: 23 June 2025

LRQA reference: SEO00000269

❶ Energy consumption, direct and energy indirect greenhouse gas emissions of overseas business sites were excluded from the verification scope.

LRQA INDEPENDENT ASSURANCE STATEMENT

RELATING TO LG CHEM'S 2024 GREENHOUSE GAS INVENTORY

This assurance statement has been prepared in accordance with a mutual contract with LG Chem.

VERIFICATION STANDARDS AND SCOPE

LRQA has received a request from LG Chem to provide independent verification of the 2024 greenhouse gas inventory (hereinafter "the report"). This verification was performed with limited assurance level and 5% materiality criteria, utilizing the verification procedures of ISO 14064-3:2019 Specification with guidance for the verification and validation of greenhouse gas statements according to the verification standards below.

The verification scope included LG Chem's domestic operations and activities, specifically including the following requirements:

- Compliance assessment of GHG Protocol, Corporate Value Chain (Scope 3) Accounting and Reporting Standard[1]
- Assessment of accuracy and reliability of data and information on other indirect greenhouse gas emissions (Scope 3)

LG Chem's main activities are the manufacture of petrochemical products and raw materials, battery materials, pharmaceuticals, etc., and greenhouse gas emissions were consolidated using the operational control approach.

LRQA's responsibility is limited only to LG Chem. LRQA does not assume any obligation or responsibility to other persons or organizations as explained in the final footnote. The responsibility for collecting, aggregating, analyzing and presenting the reporting data and information, and maintaining effective internal controls over the reporting system lies with LG Chem. Ultimately, the report has been approved by LG Chem and remains LG Chem's responsibility.

LRQA'S OPINION

Based on LRQA's approach, no matters have been found in all material aspects that would lead us to suspect that LG Chem has not implemented the following:

- Satisfaction of the above requirements
- Accuracy and reliability of data and information summarized in Table 1

This opinion is based on limited assurance level verification and was derived with a 5% materiality criterion.

Note: The scope of evidence gathering in limited assurance level verification is smaller than that of reasonable assurance level verification. Limited assurance level verification focuses on aggregated data rather than directly checking raw data at business sites. Consequently, limited assurance level verification has a significantly lower level of assurance than reasonable assurance level verification.

LRQA'S APPROACH

LRQA's verification is performed in accordance with LRQA's verification procedures. The following activities were performed as part of evidence gathering for this verification:

- LRQA interviewed key personnel responsible for greenhouse gas emission data and record management.
- LRQA reviewed whether the parameters used in greenhouse gas emission calculations were referenced from recognized sources.
- LRQA verified the 2024 greenhouse gas emission data and records at the aggregated level.
- LRQA visited LG Chem's headquarters and reviewed additional evidence provided by LG Chem.

LRQA'S STANDARDS, COMPETENCE AND INDEPENDENCE

LRQA implements and maintains a comprehensive management system that meets the accreditation requirements of ISO 14065 (Greenhouse gases - Requirements for greenhouse gas validation and verification bodies for use in accreditation or other forms of recognition) and ISO/IEC 17021 (Conformity assessment - Requirements for bodies providing audit and certification of management systems), and complies with the requirements of International Standard on Quality Control 1 (ISQC1: International Standard on Quality Control 1) and the International Ethics Standards Board for Accountants (IESBA: International Ethics Standards Board for Accountants) Code of Ethics for Professional Accountants.

LRQA ensures the selection of appropriately qualified verification auditors based on qualifications, training and experience. To ensure that the applied approach is strictly followed and transparent, the results of all verification and certification assessments are reviewed internally by management.

LRQA is the certification body for LG Chem's ISO 9001, ISO 14001, ISO 37001, and ISO 37301. Additionally, LRQA provides LG Chem with various training related to management systems. LRQA only provides verification and certification assessment, and training services to LG Chem, which does not compromise independence or impartiality.

Tae-Kyoung Kim
Lead Verifier
On behalf of LRQA
2nd Floor, T Tower, 30, Sowol-ro 2-gil, Jung-gu, Seoul, Republic of Korea

Date: 23 June 2025

LRQA reference: SEO00001951

[1] https://www.ghgprotocol.org

Table 1. Summary of LG Chem's Scope 3 Greenhouse Gas Emissions for 2024

Greenhouse Gas Emission Reporting Scope	tCO_2e
Other Indirect Greenhouse Gas Emissions (Scope 3)	19,382,867
Purchased goods and services – Raw materials purchased at domestic business sites	14,143,583
Capital goods – Tangible assets acquired at domestic business sites	162,883
Fuel and energy related activities – Upstream of fuel, electricity and steam purchased at domestic business sites	339,324
Upstream transportation and distribution – Transportation of raw materials purchased at domestic business sites	637,713
Waste generated in operations – Treatment of waste generated from domestic business site operations	131,531
Business travel – Domestic and international business trips by domestic employees	4,330
Employee commuting – Commuting of domestic employees	10,307
Downstream transportation and distribution – Export of products produced at domestic business sites	677,368
Use of sold products – Use of fuel products	596,749
End-of-life treatment of sold products – End-of-life treatment of non-fuel products	2,435,063
Investments – Companies in which LG Chem holds equity stakes	244,016