



# 2021 ESG Performance Data

# ESG Key Indicators

## Key Indicator Development

Sustainability is one of the core values in achieving LG Chem’s vision, “We connect science to life for a better future.” LG Chem has selected key ESG indicators to strengthen company-wide ESG implementation, and is actively introducing them into corporate management. Through the analysis of indicators from ESG reporting frameworks, ESG rating agencies, and peer industry, we consolidated 20 indicators that are most material to corporate sustainability. Based on the concept of “stakeholder capitalism” proposed by the WEF, our key ESG indicators are classified into four categories: Environment, Social, Governance (ESG), and Growth. Furthermore, LG Chem seeks to align ESG performance disclosure to global sustainability disclosure standards by keeping a list of indicators that may arise as potential issues in the global sustainability arena. We will continue to practice Sustainability for the environment, society, and customers sincerely, and promote transparent communication of its progress.

## ESG Performance Disclosure

To keep pace with the rapidly evolving global regulatory landscape of ESG disclosures, LG Chem strives to disclose ESG Performance Data with consistency and integrity. In this regard, we comply with the general principles of ESG disclosure (Accuracy, Clarity, Comparability, Balance, Verifiability, and Timeliness) set out in the ESG Information Disclosure Guidance proposed by Korea Exchange. We disclose our ESG Performance Data by adopting the “Reporting on enterprise value - illustrated with a prototype climate-related financial disclosure standard” methodology developed by five leading sustainability and integrated reporting organizations—Carbon Disclosure Project (CDP), Climate Disclosure Standards Board, Global Reporting Initiative (GRI), International Integrated Reporting Council (IIRC), and Sustainability Accounting Standards Board (SASB)—based on the Task Force on Climate-related Financial Disclosures (TCFD) recommendations.

## Reporting Scope and Boundaries

This report covers LG Chem’s performance data in FY 2021 collected from headquarters and sales offices, 35 domestic and global production sites, and R&D campuses. Data of LG Energy Solution and FarmHannong have been excluded from the report since 2019.

\*Financial statements have been written in accordance with the K-IFRS Consolidated Financial Statement Standards. Statements with different reporting scopes have been expressly stated otherwise.

## Metrics and Targets

Summary and target for each metric reflects the definition of ESG indicator as described by the CDP, GRI, SASB, TCFD, and S&P Global Corporate Sustainability Assessment.

Key Indicator	Summary and Target
<b>E</b> Greenhouse Gas Emissions Reduction	Chemical company’s greenhouse gas (GHG) emissions are classified into three scopes: direct emissions that occur from sources that are controlled or owned by an organization (Scope 1); indirect emissions associated with the purchase of electricity, steam, heat, or cooling (Scope 2); and other indirect emissions from assets not owned or controlled by the reporting organization (Scope 3). We plan to manage and reduce Scope 1, 2, and 3 emissions through preemptive identification of risks and opportunities associated with GHG emissions and setting reduction target.
Energy Consumption Reduction	Total energy consumption includes both direct energy (energy consumption during operation) and indirect energy (energy purchased or acquired), and renewable energy includes self-generated renewable energy and purchased renewable energy. We will strive to actively reduce energy consumption by improving energy efficiency in all manufacturing processes and increasing the proportion of renewable energy.
Water Withdrawal, Consumption and Discharge	As water scarcity aggravates, the importance of water resource management continues to rise. In this regard, we manage the amount of withdrawal, consumption, and discharge of water used in cooling, steam generation, and raw material processing during the manufacturing process. Furthermore, we intend to identify and minimize withdrawal from water-stressed areas.
Water Pollutants Reduction	In order to return the water used during the manufacturing process to the aquatic ecosystem, we strictly comply with permissible limits of water pollutants discharge and tightly monitor effluent water quality. We intend to minimize the discharges of water pollutants into aquatic ecosystems by measuring the discharges of chemical oxygen demand (COD), total nitrogen (TN), total phosphorus (TP), and suspended solids (SS); tracing the cause and the related impacts of discharge; and conducting regular inspections on wastewater discharge facilities.
Air Pollutants Reduction	Air pollutants generated through fuel combustion during the manufacturing process can impact our health and environment, hence we strictly comply with permissible limits of air pollutants emissions and tightly monitor air quality standards. We intend to lessen the emissions of air pollutants into the air by measuring the emissions of dust, NOx, SOx, hazardous air pollutants (HAPs), and volatile organic compounds (VOCs); tracing the cause and the related impacts of emissions; and conducting regular inspections on emission facilities.
Waste Discharge and Recycling	Wastes generated from business sites include general (nonhazardous) waste and designated (hazardous) waste. In addition to disposing wastes through legitimate means, we manage wastes based on different methods of treatment to reduce waste generation and increase the recycling rate. Waste treatment is classified into four types: recycling, incineration with heat recovery, incineration, and landfill. We analyze wastes directed to incineration and landfills, and strive to maximize the amount of waste recycled.
Product Responsibility and Chemical Stewardship	Since chemical substances may pose risks during use, storage, and transportation, we evaluate risks that may arise from hazardous chemical substances, and maintain a database of products containing hazardous substances. We are continuing our efforts to reduce the use of hazardous substances or replace them with less hazardous chemicals. We actively carry out LCAs to analyze our products’ environmental impacts and identify areas for improvement.
Reused and Recycled Materials	In accordance with the obligation to reduce and recycle waste, we continuously monitor the input of reused and recycled raw materials processed by mechanical and chemical recycling, as well as the volume of products based on reused and recycled materials. We plan to actively expand the input of reused and recycled raw materials, and thereby increase the production volume of products based on them.
<b>S</b> Employee and Process EH&S	As chemical manufacturing is exposed to heavy equipment, hazardous substances, and high temperatures and high pressure, employee and process safety is of paramount importance. We have expanded the scope of EH&S management not only to employees but also to include employees of our in-house subcontractors. We operate EH&S policy and conduct regular facility inspections to prevent safety incidents. In the event of unforeseen incidents, we transparently disclose the number of EH&S incidents occurred.
Employee Diversity, Equity and Inclusion	We can promote work efficiency and improve job performance through fair treatment and inclusion of employees with diverse backgrounds and perspectives. We identify the diversity of domestic and global employees by gender, region, age, and job groups, as well as the ratio of management and executive positions in consideration of diversity. We monitor as well the equity of remuneration.
Talent Attraction, Training and Employee Engagement	To attract and develop talents of diverse backgrounds, we monitor the employee hires and turnover by age and gender, and provide leadership and job training in addition to statutory training. Going forward, we plan to expand the development and implementation of various programs in an effort to secure and nurture human resources and enhance employee engagement, and thus advance our competitive edge.
Human and Labor Rights	We conduct risk assessments for labor and human rights, such as prohibition of child labor and protection of minors, voluntary employment and labor, freedom of association and collective bargaining, non-discrimination and respect for diversity, compliance with working hours, and fair remuneration. We plan to expand training on labor rights to raise employee awareness on the topic.
Supply Chain Sustainability	Issues arising in the supply chain, including but not limited to labor rights, resource depletion and anti-corruption, are regarded as shared responsibility of all companies in the supply chain, hence identifying and improving such issues has become a competitive advantage for companies. We plan to reinforce our supply chain sustainability and partnership with suppliers through ESG assessments and on-site inspections.
Community Engagement	We engage with local communities through employment opportunities and regional development, as well as employee volunteering and partnership programs. We intend to reinforce our environmental and safety management, pursue active interaction with the local community, and continue to uphold our responsibilities as a community member.
<b>G</b> Corporate Governance	A board of directors with independence, expertise, and diversity is essential to ensure effective and active corporate governance. Since the BOD is responsible for corporate policies and overall performance, we plan to establish a global governance system and internalize a BOD-centered management system through empowerment and capacity building.
Corporate Behavior and Ethics	We conduct regular inspections on corruption and bribery, and handle identified cases through disciplinary actions and/or legal procedures. Furthermore, we provide training on corporate ethics and fair trade to raise awareness and prevent recurrence. We plan to devise policies and strategies for corporate and employee behavior and ethics, and extend them to all business sites.
Cybersecurity and Information Security	We conduct risk assessments on cybersecurity and information security, and raise employee awareness through information security training. Information leakage occurs in various forms, such as leakage of core assets of a company as well as customer data. In this regard, we plan to establish a company-wide management system to securely collect, use, and manage information relevant to corporate processes.
Public Policy and Regulation	Changes in public policy and regulation greatly influence corporate business, hence we report related issues and measures to the management on a regular basis. We continue to seek public-private partnerships by identifying policy support and promoting government proposals.
<b>A</b> Sustainable Solutions	We established Sustainable Solutions as internal standards of classifying products with distinguished social and environmental values in terms of sustainability. We not only consider product characteristics such as bio materials and recycled materials, but also the social and environmental characteristics throughout the value chain, such as water consumption during manufacturing. We will continue to expand R&D investment and achieve sustainability competitiveness.
Customer Satisfaction	We reflect a customer-centered approach as a top priority across all our business processes, and identify improvement tasks through a customer satisfaction survey. We intend to foster a customer/market-oriented culture by monitoring customer pain points, and to meet customer expectations through active communication with customers.

# ESG Performance Data

## Environment

### Greenhouse Gas Emissions

	Unit	Scope	2019	2020	2021
GHG Emissions (Scope 1 + Scope 2)	tCO2e	Global	9,510,011	9,532,948	10,339,725
		Korea	8,140,033	8,071,712	8,841,025
		excl. Korea	1,369,978	1,461,236	1,498,700
GHG Emissions Intensity (Scope 1 + Scope 2)	tCO2e/KRW 1M	Global	0.5187	0.5536	0.4296
Scope 1 Emissions	tCO2e	Global	5,405,608	5,395,112	5,856,588
		Korea	5,260,041	5,199,836	5,707,208
		excl. Korea	145,567	195,276	149,380
Scope 1 Emissions Intensity	tCO2e/KRW 1M	Global	0.2948	0.3133	0.2433
Scope 2 Emissions	tCO2e	Global	4,104,403	4,137,836	4,483,137
		Korea	2,879,992	2,871,876	3,133,817
		excl. Korea	1,224,411	1,265,960	1,349,320
Scope 2 Emissions Intensity	tCO2e/KRW 1M	Global	0.2238	0.2403	0.1863
Scope 3 Emissions <sup>1)</sup>	tCO2e	Korea	1,081,852	1,209,828	1,320,247
- Purchased Goods & Services			494,538	517,985	571,164
- Capital Goods			54	14	56
- Fuel- and Energy-related Activities			122,922	121,904	175,732
- Upstream Transportation			151,406	318,438	197,919
- Waste			19,113	19,679	28,925
- Business Travel			2,767	2,265	970
- Employee Commuting			7,987	4,737	7,488
- Investments			276,686	219,190	322,438
- Other Upstream			6,379	5,616	15,555

1) Scope 3 emissions have been calculated for operations within Korea, on relevant categories of GHG Protocol's Corporate Value Chain (Scope 3) Accounting and Reporting Standard (2011)

\* Scope 1 and Scope 2 emissions in Korea in 2020 have been revised in accordance with the verification outcomes of the Ministry of Environment

\* Scope 1 and Scope 2 emissions in Korea in 2021 have been reported in accordance with the GHG Statements submitted to the Ministry of Environment; the data is subject to change depending on the verification outcomes

\* Emissions calculations for some Scope 3 categories have been adjusted based on updated methodology

### Energy Consumption

	Unit	Scope	2019	2020	2021
Total Energy Consumption	TJ	Global	168,090	162,234	178,426
		Korea	159,327	152,411	169,105
		excl. Korea	8,763	9,823	9,321
Total Energy Consumption Intensity	TJ/KRW 1M	Global	0.0092	0.0094	0.0074
Direct Energy Consumption	TJ	Global	99,496	98,532	109,049
		Korea	96,964	95,049	106,349
		excl. Korea	2,532	3,483	2,700
Direct Energy Consumption Intensity	TJ/KRW 1M	Global	0.0054	0.0057	0.0045
Indirect Energy Consumption	TJ	Global	68,594	63,702	69,377
		Korea	62,363	57,362	62,756
		excl. Korea	6,231	6,340	6,621
Indirect Energy Use Intensity	TJ/KRW 1M	Global	0.0037	0.0037	0.0029
Total Renewable Electricity Consumption	MWh	Korea	1,426	1,760	344,528

\* Direct and indirect energy consumption in Korea in 2020 have been revised in accordance with the verification outcomes of the Ministry of Environment

\* Indirect energy consumption overseas in 2019 and 2020 have been revised to reflect updated data from production sites

### Water

	Unit	Scope	2019	2020	2021
Water Withdrawal	m <sup>3</sup>	Global	69,559,329	61,207,704	66,881,345
- Groundwater			548,051	501,077	431,327
- Surface water			609,695	-	-
- Industrial Water			61,379,578	52,917,433	59,128,641
- Municipal Water			6,947,778	7,773,729	7,307,267
- Rainwater			12,857	8,714	6,467
- Other			61,370	6,751	7,643
Water Withdrawal Intensity	m <sup>3</sup> /KRW 1M		3.7936	3.3381	3.6475
Water Consumption	m <sup>3</sup>		50,070,305	41,252,742	45,309,082
Water Consumption Intensity	m <sup>3</sup> /KRW 1M		2.7307	2.2498	2.4710
Water Discharge	m <sup>3</sup>		19,489,024	19,954,962	21,572,263
Water Discharge Intensity	m <sup>3</sup> /KRW 1M		1.0629	1.0883	1.1765
Wastewater Recycling	m <sup>3</sup>		1,770,024	1,869,328	2,135,019
Wastewater Recycling Rate	%		8.33	8.57	9.01

\* Data of 2019 and 2020 have been revised due to changes in data coverage (includes data from water and wastewater not subject to legal reporting)

### Water Pollutants

	Unit	Scope	2019	2020	2021
COD	Metric tons	Global	883	738	734
COD Intensity	kg/KRW 1M		0.0482	0.0429	0.0305
TN	Metric tons		316	276	308
TN Intensity	kg/KRW 1M		0.0172	0.0160	0.0128
TP	Metric tons		57	41	49
TP Intensity	kg/KRW 1M		0.0031	0.0024	0.0020
SS	Metric tons		344	366	301
SS Intensity	kg/KRW 1M		0.0188	0.0213	0.0125

\* Data of 2019 and 2020 have been revised due to changes in data coverage (includes data from water and wastewater not subject to legal reporting)

### Air Pollutants

	Unit	Scope	2019	2020	2021
Dust	Metric tons	Global	164	123	168
Dust Intensity	kg/KRW 1M		0.0089	0.0071	0.0070
NOx	Metric tons		998	876	4,144
NOx Intensity	kg/KRW 1M		0.0544	0.0509	0.1722
SOx	Metric tons		172	142	181
SOx Intensity	kg/KRW 1M		0.0094	0.0082	0.0075
HAPs	Metric tons		99	238	274
HAPs Intensity	kg/KRW 1M		0.0054	0.0138	0.0114
VOCs	Metric tons		278	580	956
VOCs Intensity	kg/KRW 1M		0.02	0.0337	0.0397

\* Data of 2019 and 2020 have been revised due to changes in data collection methodology (based on actual emissions)

\* Reported data of some air pollutants have increased in 2021 due to new factories and the revision of the Clean Air Conservation Act

## Waste

	Unit	Scope	2019	2020	2021
Total Waste Generated	Metric tons	Global	253,127	227,152	266,065
Total Waste Intensity	Ton/KRW 1M		0.0138	0.0132	0.0111
Nonhazardous Waste	Metric tons		129,697	109,393	144,390
- Recycling			82,446	76,118	106,420
- Incineration with Heat Recovery			9,230	7,753	14,242
- Incineration			17,321	16,505	12,797
- Landfill			20,700	9,017	10,931
Hazardous Waste			123,430	117,759	121,675
- Recycling	68,270		62,914	70,672	
- Incineration with Heat Recovery	27,362		31,160	33,529	
- Incineration	25,772		22,691	16,321	
- Landfill	2,026		995	1,153	
Waste Recycling Rate (excl. incineration with heat recovery)	%		60	61	67
Waste Recycling Rate (incl. incineration with heat recovery)	%		74	78	85

\* Data of 2019 and 2020 have been revised due to changes in data coverage (includes data from wastes not subject to legal reporting)

## Hazardous Substances

	Unit	Scope	2019	2020	2021
REACH <sup>1)</sup> Annex 17 Substances	%	Global	17.74	29.80	16.10
REACH SVHCs <sup>2)</sup>			8.40	2.39	1.57
CMR <sup>3)</sup> Substances			15.89	5.99	2.71
Hazardous Substances Risk Assessment <sup>4)</sup>			5.92	13.59	25.09

- 1) Registration, Evaluation, Authorisation and Restriction of Chemicals
- 2) Substances of very high concern
- 3) Carcinogenic, mutagenic and reprotoxic chemicals
- 4) Percentage of substances registered among chemical substances in sales products

## Reused/Recycled Materials

	Unit	Scope	2019	2020	2021
Products based on reused/recycled materials <sup>1)</sup>	Metric tons	Global	10.602	13.411	14.668
Reused/recycled materials <sup>2)</sup> input			2.746	4.175	4.841

- 1) LUPOY PCR PC products
- 2) PCR PC

# Society

## Employee and Process EH&S

	Unit	Scope	2019	2020	2021
<b>Employees</b>					
- Fatality rate <sup>1)</sup>	Rate	Global	-	0.0115	0.0056
- TRIR <sup>2)</sup>			0.4725	0.6506	0.7642
- LTIR <sup>3)</sup>			0.1501	0.2476	0.2454
<b>Subcontractors</b>					
- Fatality rate	Rate	Global	-	0.0051	-
- TRIR			0.3065	0.3345	0.5078
- LTIR			0.1591	0.1774	0.2132
<b>Process Safety Events</b>					
- PSE <sup>4)</sup>	Case	Global	1	5	-
- PSER <sup>5)</sup>	Rate		0.0029	0.0135	-
<b>Transport Incidents</b>					
- Road	Case	Global	2	2	1
- Rail			2	1	1
- Ship			-	-	-
- Ship			-	1	-

- 1) Total fatality cases \* 200,000 / Total working hours
  - 2) Total recordable incident rate: Total recordable incidents \* 200,000 / Total working hours
  - 3) Lost time incident rate: Total lost time incidents \* 200,000 / Total working hours
  - 4) Process safety events
  - 5) Process safety event rate: Total process safety events \* 200,000 / Total working hours
- \* Total working hours refer to 8 hours a day for 300 days for full-time employees; Process safety events are reported based on the internal standards set in Accident Index which includes injuries, fire, leakages, amount of loss, etc.  
\* Fatality rate, TRIR, LTIR, and PSER of 2019 and 2020 have been revised due to the correction of the number of employees

## Employees

	Unit	Scope	2019	2020	2021		
<b>Total No. of Employees</b>							
- Korea	Person	Global	19,025	18,243	18,841		
- China			13,567	12,551	13,955		
- Asia-Pacific (excl. China)			4,177	4,394	3,564		
- Europe			694	706	627		
- Americas			315	318	419		
- Americas			272	274	276		
<b>Total No. of Employees in Leadership<sup>1)</sup> Levels</b>							
- Korea			Person	Korea	4,905	4,635	5,082
- China					4,681	4,389	4,936
- Asia-Pacific (excl. China)					162	181	101
- Europe	36	38			31		
- Europe	17	15			5		
- Americas	9	12			9		
<b>No. of Employees by Age Group</b>							
- Under 30	Person	Korea			13,567	12,551	13,955
- 30 to 49					2,930	2,407	2,521
- 50 or above					8,297	7,731	8,671
<b>No. of Employees by Gender</b>							
- Male	Person	Korea	2,340	2,413	2,763		
- Female			13,567	12,551	13,955		
- Ratio of Female Employees			%	11,633	10,825	11,985	
<b>No. of Employees in Revenue Generating Positions (Sales, Production, R&amp;D) by Gender</b>							
- Management Level <sup>2)</sup> (Male)	Person	Korea	1,934	1,726	1,970		
- Management Level (Female)			14	14	14		
- Ratio of Female Management Level			%	3,486	3,224	3,521	
- Management Level <sup>2)</sup> (Male)	Person	Korea	2,883	2,670	2,923		
- Management Level (Female)			603	554	598		
- Ratio of Female Management Level			%	17	17	17	

No. of Employees in Leadership Levels by Gender			2019	2020	2021
- Management Level (Male)	Person	Korea	4,681	4,389	4,936
- Management Level (Female)			3,833	3,577	4,031
- Ratio of Female Management Level			763	717	808
- Executive Level (Male)	%		17	17	17
- Executive Level (Female)	Person		78	88	89
- Ratio of Female Executives			7	7	8
	%	8	7	8	
Ratio of Average Female Salary to Average Male Salary					
- Non-management Level (Base salary only)	%	Korea	76	76	77
- Management Level (Base salary only)			92	93	94
- Management Level (Base salary + other cash incentives)			91	94	94
- Executive Level (Base salary only)			92	90	93
Social Minorities					
- Persons with Disabilities <sup>3)</sup>	Person	Korea	311	330	323
- National Veterans			280	276	270

1) Leadership level refers to all positions from professionals/senior managers and above

2) Management level refers to all positions from professionals/senior managers and above excluding executive level positions

3) Number of persons with disabilities hired in 2019 and 2020 have been corrected to the numbers reported to Korea Employment Agency for Persons with Disabilities

## Parental Leaves

	Unit	Scope	2019	2020	2021
No. of Employees on Maternity Leave	Person	Korea	89	119	107
No. of Employees on Childcare Leave			128	148	161
No. of Employees on Childcare Leave (Female)			98	108	110
No. of Employees on Childcare Leave (Male)			30	40	51

## Employee Hires

	Unit	Scope	2019	2020	2021
Total New Hires	Person	Korea	1,497	402	1,560
- Male			1,246	320	1,255
- Female			251	82	305
- Under 30			1,126	187	759
- 30 to 49			302	144	635
- 50 or above			69	71	166
Total Local Hires		995	764	1,580	
Total No. of Senior Management Level <sup>1)</sup> from Local Hires	10	15	17		

1) Senior Management level refers to all positions from department leaders/executives and above

## Employee Turnover

	Unit	Scope	2019	2020	2021
Total No. of Employee Turnover	Person	Korea	562	575	642
- Male			483	490	556
- Female			79	85	86
Total No. of Voluntary Employee Turnover			317	284	341
- Male			248	223	276
- Female			69	61	65

## Employee Training

	Unit	Scope	2019	2020	2021
Total Training Hours	Hour	Korea	491,626	428,997	577,372
Training Hours per Employee			36	34	41
Total Costs Spent on Training	KRW 100M		183	125	156
Training Costs per Employee	KRW 10K		135	92	115

## Labor Rights

	Unit	Scope	2019	2020	2021
No. of Employees Participating in Labor Union	Person	Korea	5,177	5,075	5,436
No. of Employees Eligible to Join Labor Union			7,303	6,745	7,337
Ratio of Employees Participating in Labor Union	%		71	75	74
% of Employees Covered by Collective Bargaining Agreements			100	100	100

## Supply Chain

	Unit	Scope	2019	2020	2021
No. of Regular Suppliers <sup>1)</sup>	Company	Global	968	1,064	1,132
- No. of Suppliers Subject to Sustainability Assessment			292	291	472
- No. of Suppliers Evaluated on Sustainability			239	191	233
- High-risk Suppliers <sup>2)</sup>			33	8	-
- On-site Audits <sup>3)</sup>			13	-	-

1) Regular suppliers, based on internal management standards, exclude suppliers with less than 3 orders and purchase value of less than KRW 300 million (KRW 100 million for suppliers in life sciences)

2) High-risk suppliers refer to suppliers that scored below 65 for Supplier CSR Assessment results

3) On-site audits have been suspended from 2020 due to COVID-19, and have been replaced with an operational guide

## Community Engagement

	Unit	Scope	2019	2020	2021
Total Contributions to Local Communities <sup>1)</sup>	KRW 100M	Global	171	156	163
Employee Volunteer Hours <sup>2)</sup>	Hour		13,665	4,879	4,965

1) Total contributions to local communities in 2019 and 2020 include contributions of LG Energy Solution; Contributions made by LG Energy Solution (KRW 2.6 B) and FarmHannong (KRW 10 M) have been excluded from 2021

2) Employee volunteer hours reduced significantly since 2020 due to COVID-19

# Governance

## Corporate Behavior and Ethics

	Unit	Scope	2019	2020	2021
No. of Investigations on Corruption	Case	Global	13	5	7
No. of Corruption Cases Handled			9	2	3
No. of Employees Participating in Anti-corruption Training <sup>1)</sup>	Person	Korea	13,567	12,511	13,431
No. of Employees Participating in Fair Trade Training <sup>2)</sup>			430	14,444	14,413

1) Anti-corruption training covers trainings on “Jeong-Do Management” and the Code of Ethics  
2) Fair trade training covers trainings on subcontractors and compliance

## Cybersecurity

	Unit	Scope	2019	2020	2021
ISO 27001 Certified Business Sites	Site	Korea	4	4	4
Cybersecurity Awareness Activities	Case		12	12	12
Cybersecurity Training Hours Per Employee	Minute		20	30	30

## Public Policy and Regulation

	Unit	Scope	2019	2020	2021
Contributions to Trade Associations <sup>1)</sup>	KRW 1K	Korea	2,311,660	2,090,714	2,222,895
Contributions to Political Campains <sup>2)</sup>			-	-	-

1) Contributions have been made to the following top 5 organizations in 2021:  
- Korea Enterprises Federation: KRW 321,450,000  
- Korea PC/BPA Council: KRW 221,672,000  
- WEF: KRW 221,618,000  
- Korea Petrochemical Industry Association: KRW 213,780,000  
- Korea Vinyl Environmental Council: KRW 202,500,000

2) Companies are prohibited to sponsor political groups, in accordance with the Political Funds Act

## Tax Strategies

	Unit	Scope	2019	2020	2021
Total Reported Taxes <sup>1)</sup>	KRW 1M	Global	169,180	367,839	1,235,790
- Korea			100,760	692,538	672,683
- Asia			108,503	290,065	565,833
- Europe			4,747	6,800	61,505
- Americas			18,847	53,112	2,421
- Others			149	141	39
- Consolidated Adjustments			26,131	674,817	56,319
Cash Payment of Corporate Tax			576,713	513,128	1,281,796

1) Reported taxes are based on consolidated financial statements of FY 2021

## Customer Satisfaction

	Unit	Scope	2019	2020	2021
Customer Satisfaction Survey Scope <sup>1)</sup>	%	Global	94	100	100
Customer Satisfaction Survey Score	Score		66.1	79.9	78.7

1) % of business areas (petrochemicals, advanced materials, life sciences) that conducted customer satisfaction surveys; Surveys have been conducted for all business areas since 2020 under the supervision of the Customer Value Innovation Team

## Other Economic Performances

	Unit	Scope	2019	2020	2021
Total Revenues <sup>1)</sup>	KRW 1M	Global	27,331,968	30,058,872	42,654,722
- Revenues excluding LG Energy Solution, and Common and others <sup>2)</sup>			18,335,975	17,221,356	24,068,819
R&D Expenses			718,600	719,300	710,100

1) Based on consolidated financial statements of FY 2021

2) Represents simple deductions of revenues of LG Energy Solution and Common and others from Total; used for normalizing environmental data. Common and others includes the revenues of FarmHannong, please refer to notes on consolidated audit report of FY 2021 for details



**We value your feedback!**

**Thanks for reading the sustainability report with interest in LG Chem.  
We'd like to hear your voice to make a better report.  
We'd highly appreciate your time to take a brief survey by scanning the QR code.**