

# APPENDIX

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# Materiality Assessment

Samsung SDI conducted double materiality assessment in accordance with the GRI (Global Reporting Initiative standards 2021), EU’s CSRD (Corporate Sustainability Reporting Directive), and IFRS (International Financial Reporting Standards)’s Exposure Draft for sustainability disclosures. We identified ESG topics material to Samsung SDI based on understanding on our business context, and looked into each ESG topic for their inside-out impact – how our business operations impact economy, environment, and people (employees, customers, end-users, and value chain workers) - and for their outside-in impact – how respective ESG topics impact the financial aspect of Samsung SDI. This was followed by impact assessments conducted on internal/external experts who have in-depth understanding of Samsung SDI and ESG. Assessment results received Board’s final review and approval, and this led us to arrive at eight key ESG topics.

## Double Materiality Assessment Process

Process	Objective and Activity	Detailed Process and Consideration	Output				
Understand the business context	Understand Samsung SDI’s business operations and relationships and sustainability contexts to completely identify significant actual and potential sustainability impact	<ul style="list-style-type: none"> <li>Business operations in general: Mission, business model/strategy, products and services, location, type of workers, etc.</li> <li>Business relationship: Main business, customer/supply chain characteristics, etc.</li> <li>Sustainability context: Economic, environmental, and social issues associated with industry, activity, and location as well as laws and regulations</li> </ul>	Identify stakeholders				
Create a pool of topics	Choose topics fit for our corporate and industry characteristics and whose disclosure is required by stakeholders	<ul style="list-style-type: none"> <li>Analyze major disclosure guidelines (GRI, SASB, etc.)</li> <li>Analyze major ESG rating standards (MSCI, DJSI, etc.)</li> <li>Analyze material ESG topics reported by industry peers</li> <li>Analyze internal ESG management data including sustainability strategy and focus areas</li> </ul>	List 22 topics				
Characterize topics	Identify topics for their impact characteristics (positive/negative, actual/potential), and determine how to assess these topics depending on their type identified	<ul style="list-style-type: none"> <li>Understand policies/regulatory requirements, media articles, global disclosure and assessment standards, internal news, and shareholder/investor requirements for each topic</li> <li>Identify inside-out impact: Characterize topics: Identify the subject of impact (economy, environment, people) and categorize impact into positive/negative and actual/potential impact</li> </ul>	Develop impact assessment tools				
Assess topics for their impact	Survey internal/external experts who deeply understand Samsung SDI and ESG to prioritize topics	<table border="1"> <tr> <td>Inside-out(Social and environmental impacts)</td> <td> <ul style="list-style-type: none"> <li>Topic assessment criteria: Scale, scope, remediability, and likelihood</li> </ul> </td> </tr> <tr> <td>Outside-in(financial impacts)</td> <td> <ul style="list-style-type: none"> <li>Topic assessment criteria: Probability of resource input, stakeholder dependence, probability of change in business model and strategy, impact on financial expenses</li> </ul> </td> </tr> </table>	Inside-out(Social and environmental impacts)	<ul style="list-style-type: none"> <li>Topic assessment criteria: Scale, scope, remediability, and likelihood</li> </ul>	Outside-in(financial impacts)	<ul style="list-style-type: none"> <li>Topic assessment criteria: Probability of resource input, stakeholder dependence, probability of change in business model and strategy, impact on financial expenses</li> </ul>	Produce impact assessment results and priorities
Inside-out(Social and environmental impacts)	<ul style="list-style-type: none"> <li>Topic assessment criteria: Scale, scope, remediability, and likelihood</li> </ul>						
Outside-in(financial impacts)	<ul style="list-style-type: none"> <li>Topic assessment criteria: Probability of resource input, stakeholder dependence, probability of change in business model and strategy, impact on financial expenses</li> </ul>						
Select material topics	Set priorities for reporting topics to the Sustainability Management Committee under the Board	<ul style="list-style-type: none"> <li>Quantitatively analyze impact assessment results</li> <li>Group material topics for disclosure based on assessment results</li> <li>Review and approval at the Board level</li> </ul>	Choose material topics and group disclosure topics				

# Materiality Assessment

## Materiality Assessment Results

ESG	Material Topic	Identified Impact	Key Impact	Impact on	Impact level <sup>1)</sup>		GRI Index	Related Focus Area	Page
					Social/Environmental impact	Financial impact			
E	Building a battery circular economy	Positive-actual	Establishing a closed-loop resource circulation system to ensure effective battery disassembly/recycling designs and to recycle reclaimed materials helps mitigate environmental impact and expand the circular economy ecosystem.	Environment, economy	●●●●●	●●●●●	301-2	Move to Net-Zero	48-49p, 94p
	GHG emissions	Negative-actual	GHG emissions generated from the overall value chain cause the negative impact of climate change, and may incur management costs to respond to emissions trading schemes and other regulations.	Environment, economy	●●●●●	●●●●●	305-1-5	Move to Net-Zero	40-42p, 45p, 93p
	Renewable energy transition	Positive-actual	Expanding renewable energy not only helps proactively address climate change but also contributes to landing orders and improving business relationships with global leading customers demanding transition to 100% renewables.	Environment, economy	●●●●●	●●●●●	302-1, 3	Move to Net-Zero	42p, 47p
	Product environmental LCA and and environmental impact mitigation	Positive-actual	Assessing and mitigating environmental impact, including carbon emissions generated from a product's lifecycle, helps respond to the (draft) EU Batteries Regulation and meet relevant requirements from global car OEMs and other key customers.	Environment, economy	●●●●○	●●●●●	Non-GRI	Move to Net-Zero	46p
	Energy efficiency management	Positive-actual	Improving the efficiency of energy used in the entire manufacturing process brings positive impact to operational efficiency and profitability.	Environment, economy	●●●●○	●●●●○	302-1, 3, 4	Move to Net-Zero	42-44p, 93p
S	Supply chain sustainability/risk management	Positive-actual	Managing potential environmental/social risk factors that may affect partners helps manage value chain risk and prevent/mitigate negative impact.	People, environment	●●●●○	●●●●●	308-1-2, 414-1-2	Accountability in Value-Chain	60-64p, 96p
	Health/safety accidents affecting employees (high-consequence injuries and others)	Negative-actual	Health and safety accidents involving employees bring negative impact on employee retention and may lead to business disruptions and suspension, making it impossible to continue with reliable manufacturing operations.	People, economy	●●●●●	●●●●○	403-1-9	Infinite Safety	30-33p, 92p
	Product safety and quality accidents (recalls and others)	Negative-potential	Exposure to product safety issues and lack of quality management efforts may result in direct/indirect damage to public health and safety.	People, economy	●●●○○	●●●●○	416-1-2	Infinite Safety	34-38p, 93p

1) ●●●●● Very High ●●●●○ High ●●●○○ Moderate ●●○○○ Low ●○○○○ Very Low

# Financial Performance

53<sup>rd</sup> as of Dec. 31, 202252<sup>nd</sup> as of Dec. 31, 202151<sup>st</sup> as of Dec. 31, 2020

(unit: KRW)

## Consolidated Statement of Financial Position

Category	End of 53 <sup>rd</sup>	End of 52 <sup>nd</sup>	End of 51 <sup>st</sup>
<b>Assets</b>			
Total current assets	9,651,702,375,329	7,444,907,068,203	5,657,405,165,394
Cash and cash equivalents	2,614,271,849,898	2,325,692,348,376	1,545,974,321,801
Trade and other receivables, net	2,933,814,798,893	2,195,425,598,789	1,870,381,153,317
Inventories, net	3,204,515,834,716	2,487,316,318,701	1,810,785,260,639
Other investments	534,662,104,634	164,541,358,730	167,037,269,633
Other assets	335,800,401,510	258,708,109,360	256,395,938,005
Current derivative assets	28,637,385,678	13,223,334,247	6,831,221,999
Total non-current assets	20,605,822,795,798	18,388,285,928,733	15,876,827,101,435
Trade and other receivables, net	6,879,322,583	13,538,047,881	25,279,489,150
Investments in equity-accounted investees	8,940,282,254,638	7,885,424,300,376	7,143,396,948,925
Tangible assets, net	8,965,469,798,907	7,635,995,590,121	6,128,099,170,818
Intangible assets, net	814,931,162,728	798,911,068,282	793,573,297,061
Investment property	147,558,866,183	150,410,177,327	150,502,139,591
Deferred tax assets	168,913,513,518	140,864,868,927	96,846,429,192
Other non-current investments, including derivatives	1,245,883,336,770	1,572,410,115,693	1,358,684,147,489
Other non-current assets	137,715,011,245	105,884,740,957	106,629,882,558
Derivative assets	6,070,437,854	84,847,019,169	73,815,596,651
Employee benefits assets	172,119,091,372	-	-
Total assets	30,257,525,171,127	25,833,192,996,936	21,534,232,266,829
<b>Liabilities</b>			
Total current liabilities	8,006,938,827,488	6,461,285,795,016	4,983,633,140,961
Trade and other payables	4,285,754,045,541	3,269,446,524,533	1,809,091,871,927
Income taxes payable	229,613,880,891	126,201,165,219	44,391,708,778

Category	End of 53 <sup>rd</sup>	End of 52 <sup>nd</sup>	End of 51 <sup>st</sup>
Advance received	230,132,847,224	211,277,273,149	353,726,970,697
Unearned revenue	78,688,354,316	39,131,549,681	17,761,781,525
Short-term borrowings	2,851,183,213,651	2,510,216,802,997	2,427,504,179,850
Derivative liabilities	57,510,091	2,330,249,501	28,783,093,680
Provisions	331,508,975,774	302,682,229,936	302,373,534,504
Total non-current liabilities	5,033,084,187,511	4,175,207,887,065	3,191,672,237,752
Trade and other payables	697,531,224,825	265,947,483,830	210,040,906,245
Long-term advance received	50,623,504,840	35,429,209,729	1,344,199,495
Long-term borrowings	2,297,040,000,000	2,107,760,803,273	1,484,319,604,943
Employee benefit liabilities, net	2,005,409,849	9,358,262,362	38,705,231,267
Derivative liabilities	82,319,778	10,016,686,557	-
Provisions	91,878,306,036	93,311,709,876	79,823,289,635
Deferred tax liabilities	1,893,923,422,183	1,653,383,731,438	1,377,439,006,167
Total liabilities	13,040,023,014,999	10,636,493,682,081	8,175,305,378,713
<b>Total shareholders' equity</b>			
Equity attributable to owners of the Parent Company	16,485,723,513,578	14,704,264,131,372	12,977,616,019,092
Capital stock	356,712,130,000	356,712,130,000	356,712,130,000
Capital surplus	5,001,974,693,202	5,001,974,693,202	5,001,974,693,202
Other capital	(345,131,583,767)	(345,131,583,767)	(345,131,583,767)
Accumulated other comprehensive income	1,003,816,893,169	1,174,235,557,799	545,959,019,790
Retained earnings	10,468,351,380,974	8,516,473,334,138	7,418,101,759,867
Non-controlling interests	731,778,642,550	492,435,183,483	381,310,869,024
Total shareholders' equity	17,217,502,156,128	15,196,699,314,855	13,358,926,888,116
<b>Total liabilities and equity</b>	30,257,525,171,127	25,833,192,996,936	21,534,232,266,829

## Financial Performance

### Consolidated Statements of Comprehensive Income

53<sup>rd</sup> from Jan. 1, 2022 to Dec. 31, 202252<sup>nd</sup> from Jan. 1, 2021 to Dec. 31, 202151<sup>st</sup> from Jan. 1, 2020 to Dec. 31, 2020

(unit: KRW)

Category	53 <sup>rd</sup>	52 <sup>nd</sup>	51 <sup>st</sup>
Revenue	20,124,069,515,854	13,553,220,248,796	11,294,770,446,035
Cost of sales	15,903,322,834,044	10,475,602,069,114	8,914,217,432,960
Gross profit	4,220,746,681,810	3,077,618,179,682	2,380,553,013,075
Selling, general and administrative expenses	2,412,733,668,608	2,010,042,579,185	1,709,217,654,651
Operating income	1,808,013,013,202	1,067,575,600,497	671,335,358,424
Other income	62,998,019,043	51,960,888,011	50,205,002,985
Other expenses	206,316,945,755	93,328,475,158	147,740,368,241
Financial income	1,390,645,972,964	547,619,989,802	528,826,123,713
Financial expenses	1,442,761,340,601	440,534,600,273	591,925,690,538
Share of profit of equity accounted investees	1,039,696,669,877	530,041,919,350	292,710,207,317
Profit before income taxes	2,652,275,388,730	1,663,335,322,229	803,410,633,660
Income tax expenses	612,913,940,744	412,933,761,988	172,444,336,134
Profit for the year	2,039,361,447,986	1,250,401,560,241	630,966,297,526
Other comprehensive income	(139,877,439,687)	629,464,562,852	136,609,851,168
Items that will never be reclassified to profit or loss	(82,073,743,779)	232,418,639,469	59,405,681,279
Remeasurements of defined benefit liability	87,645,868,605	(5,968,133,542)	4,557,253,690
Unrealized net changes in fair value of FVOCI financial assets	(166,678,916,451)	312,538,060,698	73,814,357,496
Related tax	(3,040,695,933)	(74,151,287,687)	(18,965,929,907)
Items that are or may be reclassified to profit or loss	(57,803,695,908)	397,045,923,383	77,204,169,889
Change in equity of equity-method accounted investees	(9,615,209,282)	191,618,539,908	60,009,573,086
Change in gain on translation of foreign operations	17,859,070,952	238,564,516,062	(26,482,304,334)
Effective portion of unrealized changes in fair values of cash flow hedges	(67,984,703,341)	17,423,534,765	77,530,704,627
Related tax	1,937,145,763	(50,560,667,352)	(33,853,803,490)

Category	53 <sup>rd</sup>	52 <sup>nd</sup>	51 <sup>st</sup>
Total comprehensive income	1,899,484,008,299	1,879,866,123,093	767,576,148,694
Profit attributable to:			
Owners of the Parent Company		1,169,801,394,611	574,723,493,870
Non-controlling interests		80,600,165,630	56,242,803,656
Total comprehensive income attributable to:			
Owners of the Parent Company		1,793,592,722,080	719,623,908,425
Non-controlling interests		86,273,401,013	47,952,240,269
Earnings per share			
Ordinary share – Basic earnings per share	29,191	17,492	8,593
Preferred share – Basic earnings per share	29,241	17,542	8,643

### Sales by Business Division

(unit: KRW 100 million)

Category	53 <sup>rd</sup>	52 <sup>nd</sup>	51 <sup>st</sup>
Energy solution	175,663	109,469	87,288
Electronic materials	25,578	26,063	25,660
Total	201,241	135,532	112,948

# Sustainability Performance

## Economic Performance

### Production

Business Division	Unit	2020	2021	2022	
Energy solution	Small-sized battery <sup>1)</sup>	Million cells	1,576	1,950	2,172
	Automotive battery	Million cells	77.1	105.2	127.2
	ESS	Million cells	14.8	20.3	20.8
Electronic Materials	Polarizing film	1,000 m <sup>2</sup>	96,356	98,802	77,872

1) Data for 2020 and 2021 was restated based on the annual report

### Taxes Paid by Country and Continent

Category	Unit	2020	2021	2022
Korea	KRW	10,770,144,804	117,804,568,306	210,672,837,530
Japan	KRW	270,427,271	310,057,934	421,309,896
Americas and Europe	KRW	37,120,086,061	66,167,763,563	63,953,685,429
China and Southeast Asia	KRW	39,396,460,066	65,644,370,222	70,336,936,363

Samsung SDI honestly and faithfully files and pays taxes in the countries where we operate. We do not use any tax system devoid of commercial substance for the purpose of tax avoidance nor engage in cross-border income transfer or tax avoidance using tax havens. We sincerely follow country-specific tax policies, and make sure we keep up-to-date with changing tax policies. To this end, all our employees responsible for tax affairs comply with our legally-appropriate tax policy in their business conduct.

### Corporate Taxes paid (consolidated)

Category	Unit	2020	2021	2022	Note
Pre-tax profit	KRW million	803,411	1,663,335	2,652,275	On a consolidated basis
Corporate tax expenses	KRW million	172,444	412,934	612,914	On a consolidated basis
Effective tax rate	%	21.46	24.83	23.11	On a consolidated basis
Corporate taxes paid	KRW million	124,576	217,775	278,533	On a consolidated basis (corporate taxes paid as specified in the cash flow statement)
Cash tax rate	%	15.51	13.09	10.50	On a consolidated basis

### Contributions Other Spendings<sup>1)</sup>

Category	Unit	2022
Lobbying, interest representation or similar	KRW million	0
Local, regional or national political campaigns/organizations/candidates	KRW million	0
Trade associations or tax-exempt groups (e.g., think tanks) <sup>2)</sup>	KRW million	1,209

1) Samsung SDI does not make political donations accordance with Article 31 of the Political Fund Act.

2) 3 largest contributions in 2022

- Korea Chamber of Commerce and Industry(KRW 211 million)
- Korea Battery Industry Association(KRW 600 million)
- Korea Display Research Association(KRW 45 million)

### Green Sales<sup>1)</sup>

Category	Unit	2020	2021	2022
Green sales	KRW 100 million	87,288	109,469	175,663

1) Green sales were calculated as revenues from our battery business which falls into the 'green' economy category under the EU Taxonomy. In 2022, our battery business (energy solutions) accounted for 87.3% of total sales, 98.7% of CAPEX, and 89.1% of OPEX.

# Sustainability Performance

## Infinite Safety – Occupational Health & Safety

### Occupational Injury

Category	Unit	2020	2021	2022	
Employees	Injuries	cases	4	6	2 <sup>1)</sup>
	Accident rate <sup>2)</sup>	%	0.014	0.021	0.007
	- Domestic	%	0.028	0.037	0.018
	- Overseas	%	0.006	0.011	0
	Illness rate		0	0	0
	Fatalities	No. of persons	0	1	0
In-house partners	Injuries	cases	1	1	0
	Accident rate <sup>2)</sup>	%	0.019	0.035	0
	Fatalities	No. of persons	0	0	0

1) Accidents in grade D or higher that involved Samsung SDI employees (2 cases in Korea)

2) (No. of injured employees/No. of employees) X 100

### Detailed Occupational Injury Data in 2022

Category	Calculation	Domestic	Overseas	Total
Employees	Injury frequency rate (No. of injuries/No. of annual work hours <sup>1)</sup> ) X1,000,000	0.073	0	0.027
	Loss rate (No. of lost work days/No. of annual work hours) X1,000,000	6.061	0	2.252
	Injury rate (accidents + illnesses) (No. of injured employees/No. of employees) X 100	0.018%	0%	0.007%
In-house partners	Injury frequency rate (No. of injuries/No. of annual work hours <sup>1)</sup> ) X1,000,000	0	0	0
	Loss rate (No. of lost work days/No. of annual work hours) X1,000,000	0	0	0
	Injury rate (accidents + illnesses) (No. of injured employees/No. of employees) X 100	0%	0%	0%
Employees + in-house partners	Injury frequency rate (No. of injuries/No. of annual work hours <sup>1)</sup> ) X1,000,000	0.065	0	0.024
	Loss rate (No. of lost work days/No. of annual work hours) X1,000,000	5.388	0	1.980
	Injury rate (accidents + illnesses) (No. of injured employees/No. of employees) X 100	0.016%	0%	0.006%

1) Annual work hours = 8 hours X 300 days X No. of employees

### EHS (Environment, Health & Safety) Reviews and Audit

Category	Unit	2020	2021	2022
EHS meetings supervised by the CEO	No. of meetings	6	5	4
Improvement tasks identified through EHS audits	Domestic cases	475	242 <sup>1)</sup>	326
	Overseas cases	160	72 <sup>1)</sup>	47 <sup>1)</sup>

1) Due to COVID-19, the audit was scaled down

### Safety Job Qualification Training

Category	Unit	2020	2021	2022
Completion of safety job qualification training	%	99.9	100	100
Employees to be trained <sup>1)</sup>	No. of persons	1,942	2,002	2,073
Employees who completed training	No. of persons	1,940 <sup>2)</sup>	2,002	2,073

1) Full-time and contract employees are included

2) Two employees did not take the performance test

### Acquisition of National Health & Safety Engineer Qualifications

Category	Unit	2020	2021	2022
Employees with industrial engineer and above qualifications <sup>1)</sup>	%	51	60	55
Employees with master engineer and above qualifications <sup>2)</sup>	%	23	24	25

1) Qualifications recognized within the Safety and Environment Group (industrial safety engineers, industrial hygiene management engineers, firefighting equipment engineers + masters and technicians)

2) Qualifications recognized within the Safety and Environment Group (masters and technicians)

# Sustainability Performance

## Infinite Safety – Product Safety

### Development of Qualify Workforce

Category	Unit	2020	2021	2022
Quality management training hour <sup>1)</sup>	hours	42	117	181

1) In 2020, no training other than legally-mandatory training was provided due to COVID-19

### Customer Satisfaction Score

Business Division	Category	Unit	2020	2021	2022
Small-sized Li-ion Battery	Customer satisfaction score	Point	85.1	91.9	87.7
	Companies surveyed	No. of companies	15	22	24
	Customers surveyed	No. of persons	15	22	24
Automotive & ESS Battery	Customer satisfaction score	Point	81.2	81.0	81.6
	Companies surveyed	No. of companies	5	4	4
	Customers surveyed	No. of persons	5	4	4

## Move to Net-Zero – Action for Climate Crisis

### Energy Consumption

Category	Unit	2020	2021	2022
Company-wide consumption	TJ	23,661	27,464	32,799
- Domestic consumption	TJ	11,601	12,186	12,093
- Overseas consumption	TJ	12,060	15,278	20,706
Company-wide consumption intensity	TJ/KRW 100 million	0.21	0.20	0.16

### GHG Emissions

Category	Unit	2020	2021	2022 <sup>1)</sup>	
Total emissions (the sum of direct/indirect emissions)	tCO <sub>2</sub> e	1,399,528	1,573,530	1,660,732	
Direct/indirect emissions	Direct emissions	tCO <sub>2</sub> e	183,925	225,594	242,116
	Indirect emissions	tCO <sub>2</sub> e	1,215,603	1,347,936	1,418,616
	Direct/indirect emissions intensity	tCO <sub>2</sub> e/KRW 100 million	12.4	11.6	8.3
By region	Domestic	tCO <sub>2</sub> e	561,197	587,846	582,503
	Overseas	tCO <sub>2</sub> e	838,331	985,684	1,078,229
By product	Small-sized battery	tCO <sub>2</sub> e	763,831	868,223	892,538
	Automotive & ESS battery	tCO <sub>2</sub> e	393,962	454,820	516,853
	Electronic materials	tCO <sub>2</sub> e	195,817	184,720	186,114
	R&D and others	tCO <sub>2</sub> e	45,918	65,767	65,227
Other indirect emissions	Purchased goods and services	tCO <sub>2</sub> e	-	-	789,059
	Capital goods	tCO <sub>2</sub> e	-	-	12,097
	Fuel- and energy-related activities <sup>2)</sup>	tCO <sub>2</sub> e	-	223,150	103,527
	Upstream transportation and distribution	tCO <sub>2</sub> e	568	621	118,927
	Waste generated in operations	tCO <sub>2</sub> e	-	9,977	33,810
	Business travel	tCO <sub>2</sub> e	1,673	2,193	6,726
	Employee commuting	tCO <sub>2</sub> e	-	-	7,446
	Upstream leased assets	tCO <sub>2</sub> e	-	-	104
	Downstream transportation and distribution	tCO <sub>2</sub> e	-	-	35,234
	End-of-life treatment of sold products	tCO <sub>2</sub> e	-	-	95,269
	Downstream leased assets	tCO <sub>2</sub> e	-	-	24
Investments	tCO <sub>2</sub> e	-	-	1,713	

1) 2022 emissions were reported as market-based GHG emissions that reflect the consumption of renewable energy. Our location-based GHG emissions that do not reflect the consumption of renewable energy amounted to 2,953,550tCO<sub>2</sub>e

2) Applied emission factor was changed(When the same emission factor is applied, the emission in 2021 is 102,563tCO<sub>2</sub>e)



## Sustainability Performance

### Move to Net-Zero – Circular Economy and Environmental Impact Management

#### Waste Generation and Disposal

Category	Unit	2020 <sup>1)</sup>	2021	2022
Total generation	ton	159,168	175,143	175,060
- Domestic	ton	71,046	74,151	69,262
- Overseas	ton	88,121	100,992	105,799
Company-wide generation intensity	ton/KRW 100 million	1.41	1.29	0.87
Hazardous waste generated	ton	73,999	86,627	84,514
Domestic	Recycling rate	%	95.5	96.0
	Landfill rate	%	0.4	0.2
Overseas	Recycling rate	%	71.8	88.5
	Landfill rate	%	1.5	4.4
General waste disposal	Incineration	ton	9,310	3,114
	Landfill	ton	1,239	725
	Recycling	ton	73,290	80,627
	Others (neutralization, etc.)	ton	1,330	4,050
Hazardous waste disposal	Incineration	ton	15,699	2,750
	Landfill	ton	327	3,910
	Recycling	ton	57,837	79,828
	Others (neutralization, etc.)	ton	137	140

1) Restatements were made by recalculating the waste generated and treated in 2020

#### Green Purchases<sup>1)</sup> Made

Category	Unit	2021	2022
Use of recycled metals	%	2	2

1) Green purchases are defined from the perspective of recycling directly associated with Samsung SDI's business, and refer to raw materials collected after their use and disposal and recycled

#### Environmental Management Investments Made<sup>1)</sup>

Category	Unit	2021	2022
Environmental Management Investments	Plan	KRW million	29,281
	Achievement	KRW million	30,916
	Rate of Investment Execution	%	106
			103

1) 6 domestic worksites in Giheung, Suwon, Cheonan, Cheongju, Gumi, and Ulsan and 6 overseas corporations in Tianjin, Xi'an, Wuxi, Vietnam, Malaysia, and Hungary

#### Water Withdrawal

Category	Unit	2020	2021	2022
Company-wide withdrawal	ton	8,060,766 <sup>1)</sup>	8,714,979	9,551,318
- Domestic	ton	3,895,356	4,018,931	3,643,041
- Overseas	ton	4,165,410	4,696,048	5,908,277
Company-wide generation intensity	kiloton/KRW 100 million	0.07	0.06	0.05
Withdrawal by source	Industrial water	ton	4,380,986	4,667,804
	Utility water	ton	1,751,228	1,716,392
	Surface water	ton	1,735,050	2,127,482
	Underground water	ton	193,502	203,301

1) Restatements were made by recalculating the water withdrawal in 2020

#### Water Reuse<sup>1)</sup>

Category	Unit	2021	2022
Company-wide water reuse	Water reused	ton	2,559,268
	Water consumed	ton	11,274,247
	Water reuse rate	%	22.7

1) Calculated since 2021

#### Effluent Discharge

Category	Unit	2020	2021	2022
Company-wide discharge	ton	3,453,609	3,350,084	3,754,770
- Domestic	ton	2,299,058	2,038,574	1,976,173
- Overseas	ton	1,154,551	1,311,510	1,778,597
Company-wide discharge intensity	kiloton/KRW 100 million	0.03	0.02	0.02

#### Pollutant Generation

Category	Unit	2020	2021	2022
Water pollutant discharge intensity	BOD	kg/KRW 100 million	0.11	0.20
	COD	kg/KRW 100 million	0.88	0.85
	SS	kg/KRW 100 million	0.41	0.32
Air pollutant emissions intensity	NOx	kg/KRW 100 million	0.62	0.43
	SOx	kg/KRW 100 million	0.03	0.01
	Dust	kg/KRW 100 million	0.56	0.34

## Sustainability Performance

### Partnership with Value-Chain Partners and Community – Value-Chain Partnership

#### Purchases Made along the Supply Chain

Category	Unit	2020	2021	2022
Total purchases made	KRW 100 million	73,455	90,568	134,189
- Raw/subsidiary material purchases made	KRW 100 million	60,793	75,157	118,744
- Equipment purchases made	KRW 100 million	9,971	13,065	12,796
- MRO purchases made <sup>1)</sup>	KRW 100 million	2,691	2,346	2,649
Ratio of local purchases made by partners (based on battery business)	%	35.3	52.0 <sup>2)</sup>	38.0

1) MRO (Maintenance, Repair & Operation) purchases include the purchase of packaging materials

2) Restatements were made as the proportion of local purchases was re-calculated

#### Shared Growth Support and Performance

Category	Unit	2020	2021	2022	
Financial support	Direct support (credit assistance for molding fees, etc.)	KRW 100 million	135	158	213
	Contributions to the win-win fund <sup>1)</sup>	KRW 100 million	450	650	650
	Special support (training, etc.) <sup>1)</sup>	KRW 100 million	2	2	5
Direct/indirect management support	On-the-job training (partners)	No. of persons	851	1151	1249
		No. of companies	89	96	103
	Online training (partners)	No. of persons	35	48	60
		No. of companies	5	29	36
	Recruitment support <sup>2)</sup>	No. of persons	52	73	49
		No. of companies	3	3	2
Performance in technology support and protection	Innovation guidance	No. of companies	6	6	7
	Original trade secret certification system	cases	52	75	0
Performance in new market penetration	Technology escrow system	cases	8	3	2
	Buyer meetings hosted	cases	7	6	6
	Product exhibitions operated for partners	cases	0	0	1

1) For first-, second-, and third-tier partners 2) Support for creating jobs for youth (aged 15 and older and 30 and under)

#### Fair Trade Agreement

Category	Unit	2020	2021	2022
Samsung SDI – first-tier partners	No. of companies	110	111	112
First-tier partners – second-tier partners	cases	129	136	157
Second-tier partners – third-tier partners	cases	40	45	54

### Partnership with Value-Chain Partners and Community – Togetherness with Community

#### Employees' Participation in CSR Programs

Category	Unit	2020	2021	2022
Participation in CSR programs	%	99.1	93.6	96.8
Volunteer hours per employee in Korea <sup>1)</sup>	hours/no. of persons	8.7	8.5	8.2

1) For one day each year, 8 hours are set as the target volunteer hour to encourage volunteering

#### Major CSR Achievements

Category	Unit	2020	2021	2022	
Samsung SW Academy for Youth <sup>1)</sup>	Beneficiaries	no. of persons	0	1,700	2,300
Samsung Junior SW Academy <sup>1)</sup>	Beneficiaries	no. of persons	0	0	43,720
Stepping Stone of Hope <sup>1)</sup>	Beneficiaries	no. of persons	0	0	6,284
Blue Elephant	Beneficiaries	no. of persons	93,862	259,339	308,941

1) This is jointly-conducted program, and the data reflect program results generated after Samsung SDI joined the program

#### CSR Expenditures

Category	Unit	2020	2021	2022
Management expense <sup>1)</sup>	KRW 100 million	16.5	13.2	18.1
Cash expenses <sup>2)</sup>	KRW 100 million	51.2	74.2	71.1

1) Directly-operated programs

2) Donations made (Samsung year-end love your neighbor funds, etc.)

## Sustainability Performance

### Accountability in Value-Chain – SCM Risk Management

#### S-Partner Certification

Category	Unit	2020	2021	2022
Domestic	No. of companies	29	33	23
Overseas	No. of companies	26	42	49 <sup>1)</sup>
Total	No. of companies	55	75	72
Partners who failed to meet the certification criteria	No. of companies	0	0	0

1) 37 partners were certified with document evaluations

#### Third-party Audit for Cobalt Smelters & Refiners

Category	Unit	2020	2021	2022
Smelters & refiners reported	No. of companies	24	23	23
Smelters & refiners certified <sup>1)</sup>	No. of companies	21	22	22
Conformant	No. of companies	8	18	21
Active	No. of companies	13	4	0
Other third-party audit <sup>2)</sup>	No. of companies	0	0	1

1) Smelters and refiners participating in active RMI audit programs are included

2) Companies that have conducted independent third-party audits that are equivalent to RMI RMAP

### Accountability in Value-Chain – Labor · Human Rights

#### Employee Data

Category	Unit	2020	2021	2022	
Total	No. of persons	27,984	28,913	30,716	
By gender	Male	No. of persons	21,194	21,923	23,077
	Female	No. of persons	6,790	6,990	7,639
By region	Korea	No. of persons	10,705	10,859	11,412
	Asia (excluding Korea)	No. of persons	12,058	12,108	11,988
	Europe	No. of persons	4,959	5,572	6,691
	Americas	No. of persons	262	374	625
By age	Under 30	No. of persons	12,284	12,134	12,353
	30~49	No. of persons	14,065	14,943	16,313
	50 and older	No. of persons	1,635	1,836	2,050
By employment type	Full-time	No. of persons	24,392	25,051	25,964
	Contract	No. of persons	1,454	1,316	1,453
	Dispatched <sup>1)</sup>	No. of persons	2,138	2,546	3,299
By nationality	Korea	No. of persons	10,948	11,142	11,771
	China	No. of persons	6,704	7,121	6,875
	Malaysia	No. of persons	2,345	2,142	2,558
	Vietnam	No. of persons	2,545	2,483	1,972
	USA	No. of persons	236	348	572
	Others	No. of persons	5,206	5,677	6,968

1) Domestic dispatched employees mainly assume positions of executive secretaries and interpreters, and overseas dispatched employees are responsible for manufacturing and packaging inspection among others.

## Sustainability Performance

### Recruitment

Category	Unit	2020	2021	2022	
Total	No. of persons	5,512	6,271	7,218	
By gender	Male	No. of persons	4,144	4,864	4,988
	Female	No. of persons	1,368	1,407	2,230
By region	Domestic	No. of persons	367	494	914
	Overseas	No. of persons	5,145	5,777	6,304

### Turnover<sup>1)</sup>

Category	Unit	2020	2021 <sup>2)</sup>	2022	
Total turnover	%	11.3	15.3	12.9	
- Domestic	%	1.8	2.9	2.9	
- Overseas	%	17.7	23.4	19.4	
Voluntary turnover	%	10.8	14.8	12.0	
- Domestic	%	1.6	2.6	2.6	
- Overseas	%	16.9	22.7	18.2	
By gender	Male	%	10.8	15.3	12.1
	Female	%	12.9	15.6	15.1
By region	Asia	%	16.9	13.3	11.4
	Europe	%	21.4	28.7	20.6
	Americas	%	15.0	24.6	21.8
By age	Under 30	%	16.9	25.6	19.8
	30~49	%	7.9	8.8	8.8
	50 and older	%	5.3	11.1	10.5

1) Turnover data is calculated by dividing the annual number of resignees by the annual average number of employees.

2) Restatements were made for 2021 turnover data due to change in calculation formula

### Organizational Culture

Category	Unit	2020	2021	2022
Samsung Culture Index (SCI) assessment scores <sup>1)</sup>	Point	70.9	70.0	73.5
Employees who participated in SCI	%	93.8	89.5	92.5
Change Agents selected	No. of persons	283	292 <sup>2)</sup>	298

1) Restatements were made for 2020 and 2021 data as the data were re-calculated in line with the SCI calculation method updated in 2022

2) Restatements were made due to the re-calculation of employees selected

### Diversity and Social Equality

Category	Unit	2020	2021	2022		
Employees with disabilities <sup>1)</sup>	No. of persons	172	178	181		
Local recruitment	Leaders at overseas worksites <sup>2)</sup>	No. of persons	241	271	280	
	Locally-hired leaders	No. of persons	117	158	154	
	Locally-hired leaders	%	48.5	58.3	55.0	
By job category	Development	%	20.1	20.7	23.0	
	Manufacturing	%	25.7	37.1	33.5	
	Quality & EHS	%	36.5	38.9	33.0	
	Sales & marketing	%	25.5	25.4	30.8	
	Others	%	18.0	14.9	19.3	
Female employees	By region	Korea	%	13.6	14.1	15.9
		Asia (excluding Korea)	%	34.7	34.8	32.0
		Europe	%	20.7	19.4	25.8
By position	Americas	%	24.8	27.8	32.0	
	Rank-and-file employees	%	26.9	26.7	27.3	
	Managers (senior professionals and higher positions)	%	11.2	12.0	13.0	
Executives (unregistered executive and higher positions)	%	6.7	8.6	8.5		

1) Based on the number of employees reported to Korea Employment Agency for Persons with Disabilities (KEAD)

2) Leader positions include group/team leaders and other leaders assuming such official positions.

### Training

Category	Unit	2020	2021	2022
Total training expenditures	KRW 100 million	75	87	122
Accumulated No. of trainees	No. of persons	50,628	55,621	70,339
Training hours per employee <sup>1)</sup>	Hours/No. of persons	90	91	93
Training expenses per employee <sup>1)</sup>	KRW/No. of persons	765,132	876,066	1,005,018
Sales and marketing training expenses	KRW million	9	11	22

1) Based in Korea

### Remuneration<sup>1)</sup>

Category	Unit	2020	2021	2022
Wage	KRW million	1,184,894	1,463,694	1,669,172
Retirement benefits	KRW million	84,213	102,604	96,900

1) There is no gender-based disparity in wage

## Sustainability Performance

### Welfare and Benefits

Category	Unit	2020	2021	2022
Welfare and benefits expenditures	KRW million	366,873	421,096	499,220
Return-to-work ratio <sup>1)</sup>	%	100.0	95.5	99.5
Parental leave				
Return-to-work and retention ratio <sup>2)</sup>	%	100.0	99.5	99.0

1) Ratio of employees who returned to work in the concerned year after taking parental leave the previous year

2) Ratio of employees who worked 12 months and longer among those who returned to work after taking parental leave the previous year

### Employee Grievance Handling (domestic)

Category	Unit	2020	2021	2022
Grievances submitted	cases	1,193	1,245	1,402
Grievance handling rate	%	100	100	100

### Grievances Submitted in 2022

Category	Unit	2022
By channel	Online	cases
		1,402
		%
		100
Offline		cases
		-
		%
		-

Category	Unit	2022
Working conditions		cases
		668
		%
		47.6
Benefits		cases
		337
		%
		24
By type of grievance	HR system	cases
		216
		%
		15.4
Health and safety		cases
		131
		%
		9.3
Others		cases
		50
		%
		3.6

## Credibility in Corporate Governance – Advanced BOD

### Composition of the BOD

Category	Unit	2020	2021	2022
Members of the BOD	Executive Director	No. of persons	3	3
			3	3
	Independent Director	No. of persons	4	4
			4	4
Number of female registered executives	No. of persons	1	1	1

### Operation of the BOD

Category	Unit	2020	2021	2022
Average BOD Attendance	Total	%	93.5	93.7
	Executive Director	%	87.9	85.2
	Independent Director	%	92.7	100
Average BOD tenure	Total	years	1.6	2.3
				2.9 <sup>1)</sup>

1) As of Jun. 30, 2023

# Sustainability Performance

## Credibility in Corporate Governance – Ethics & Compliance

### Compliance and Ethics Training Provided to Employees in 2022

Category		Unit	Headquarters	Subsidiary (Overseas Corporation)	Partner
Compliance	Employees subject to training	No. of persons	12,787	194	102
	Employees who completed the training <sup>1)</sup>	No. of persons	12,547	194	102
	Completion rate	%	98%	100%	100%
Anti-corruption/ethics <sup>1)</sup>	Employees subject to training	No. of persons	10,825	17,359	-
	Employees who completed the training <sup>2)</sup>	No. of persons	11,546	16,813	-
	Completion rate	%	107%	97%	-

1) Partners are not subject to anti-corruption/ethics training

2) Based on cumulative numbers

### Worksite Corruption Risk Assessment

Category		Unit	2020	2021	2022
Total worksites		No. of worksites	27	27	31
Worksites identified as at risk (number)	Total	No. of worksites	2 <sup>1)</sup>	-	3
	Domestic	No. of worksites	1	-	1
	Overseas	No. of worksites	1	-	2
Worksites identified as at risk (rate)		%	7	-	10

1) Restatements were made for 2020 data as overseas operations were included in the scope of calculation

### Compliance Audit

Category	Unit	2020	2021	2022
Compliance audits performed	cases	22	26	22

### Corruption Audits and Resulting Disciplinary Measures Taken

Category		Unit	2020	2021	2022
Disciplinary measure taken as a result of corruption audits <sup>1)</sup>	Total	No. of persons	13	1	4
	Domestic	No. of persons	12	-	4
	Overseas	No. of persons	1	1	-
Business partners whose contract was terminated in relation to corruption		No. of companies	-	-	4

1) Restatements were made for 2020 and 2021 data as overseas operations were included in the scope of calculation

### Information Security Training

Category	Unit	2020	2021	2022
Information security training	No. of persons	7,639	8,786	10,502
Data privacy training provided to employees handling personal data	No. of persons	388	388	370

# GRI Standards 2021 Index

## General Disclosures(GRI 2)

Topic	No.	Disclosure	Pages	Note
GRI 2: The organization and its reporting practices	2-1	Organizational details	6p	
	2-2	Entities included in the organization's sustainability reporting	-	7p of the Annual Report(in PDF format)
	2-3	Reporting period, frequency and contact point	2p	
	2-4	Restatements of information	-	Annotations were made when deemed necessary
	2-5	External assurance	109p	
GRI 2: Activities and workers	2-6	Activities, value chain and other business relationships	6p, 8-11p, 17p, 91p	
	2-7	Employees	96p	
	2-8	Workers who are not employees	96p	
GRI 2: Governance	2-9	Governance structure and composition	72p, 74p	
	2-10	Nomination and selection of the highest governance body	73p	
	2-11	Chair of the highest governance body	72p	
	2-12	Role of the highest governance body in overseeing the management of impacts	19-20p, 24p, 40p, 74p	
	2-13	Delegation of responsibility for managing impacts	19-21p	
	2-14	Role of the highest governance body in sustainability reporting	19-20p, 40p	
	2-15	Conflicts of interest	73p	
	2-16	Communication of critical concerns	20p	
	2-17	Collective knowledge of the highest governance body	72-73p	
	2-18	Evaluation of the performance of the highest governance body	74p	
	2-19	Remuneration policies	74p	
	2-20	Process to determine remuneration	74p	
	2-21	Annual total compensation ratio	74p	215p, 218p of the Annual Report (in PDF format)

Topic	No.	Disclosure	Pages	Note
GRI 2: Strategy, policies and practices	2-22	Statement on sustainable development strategy	5p	
	2-23	Policy commitments	18p, 65p, 76p, 78p	
	2-24	Embedding policy commitments	54p, 65-66p, 76-78p	
	2-25	Processes to remediate negative impacts	60-61p, 65-66p, 77-78p	
	2-26	Mechanisms for seeking advice and raising concerns	77-78p	
	2-27	Compliance with laws and regulations	84-85p	178p of the Annual Report (in PDF format) <sup>1)</sup>
	2-28	Membership associations	26p	
	GRI 2: Stakeholder engagement	2-29	Approach to stakeholder engagement	82p
2-30		Collective bargaining agreements	65-66p	

1) Orders to pay fines were given by the Fair Trade Commission in relation to the two cases of alleged violation of the Fair Trade Act and the Subcontract Act, and administrative proceedings are pending currently

## Material Topics(GRI 3)

Topic	No.	Disclosure	Pages	Note
GRI 3: Material topics	3-1	Process to determine material topics	87p	
	3-2	List of material topics	88p	
	3-3	Management of material topics	28p, 30-38p, 40-49p, 60-64p	

## GRI Standards 2021 Index

### Economic Performance(GRI 200)

Topic	Disclosure	Pages	Note
GRI 201: Economic Performance	201-2	Financial implications and other risks an opportunities due to climate change	40-41p
	201-3	Defined benefit plan obligations and other retirement plans	97p
GRI 202: Market Presence	202-2	Proportion of senior management hired from the local community	97p
GRI 203: Indirect Economic Impacts	203-1	Infrastructure investments and service supported	95p
	203-2	Significant indirect economic impacts	54-55p
GRI 204: Procurement Practices	204-1	Proportion of spending on local suppliers	95p
GRI 205: Anti-Corruption	205-1	Operations assessed for risks related to corruption	99p
	205-2	Communication and training about anti-corruption policies and procedures	76-78p
	205-3	Confirmed incidents of corruption and actions taken	99p
GRI 206: Anti-Competitive Behavior	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	- No such case
GRI 207: Tax	207-1	Approach to tax	91p
	207-4	Country-by-country reporting	91p

### Environmental Performance(GRI 300)

Topic	Disclosure	Pages	Note
GRI 301: Materials	301-1	Materials used by weight or volume	- Not applicable
	301-2	Recycled input materials used	49p, 94p
	301-3	Reclaimed products and their packaging materials	- Not applicable
GRI 302: Energy	302-1	Energy consumption within the organization	42-44p, 93p
	302-2	Energy consumption outside of the organization	- Not applicable
	302-3	Energy intensity	93p
	302-4	Reduction of energy consumption	42-44p, 93p
	302-5	Reductions in energy requirements of products and services	- Not applicable
GRI 303: Water and Effluents	303-1	Interactions with water as a shared resource	50p
	303-2	Management of water discharge-related impacts	50p
	303-4	Water withdrawal	50p, 94p
GRI 305: Emissions	303-5	Water discharge	50p, 94p
	305-1	Direct (Scope 1) GHG emissions	93p
	305-2	Energy indirect (Scope 2) GHG emissions	93p
	305-3	Other indirect (Scope 3) GHG emissions	93p
	305-4	GHG emissions intensity	93p
	305-5	Reduction of GHG emissions	44p
	305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	51p, 94p
GRI 306: Waste	306-1	Waste generation and significant waste-related impacts	50p
	306-2	Management of significant waste-related impacts	50p
	306-3	Waste generated	50p, 94p
	306-4	Waste diverted from disposal	50p, 94p
	306-5	Waste directed to disposal	50p, 94p
GRI 308: Supplier Environmental	308-1	New suppliers that were screened using environmental criteria	61p
	308-2	Negative environmental impacts in the supply chain and actions taken	61p



## GRI Standards 2021 Index

### Social Performance(GRI 400)

Topic	Disclosure	Pages	Note
GRI 401: Employment	401-1	New employee hires and employee turnover	97p
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	66p
	401-3	Parental leave	66p, 98p
GRI 403: Occupational Health and Safety	403-1	Occupational health and safety management system	30-33p
	403-2	Hazard identification, risk assessment, and incident investigation	30-33p
	403-3	Occupational health services	33p
	403-4	Worker participation, consultation, and communication on occupational health and safety	31-32p
	403-5	Worker training on occupational health and safety	31p
	403-6	Promotion of worker health	33p
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	32-33p, 35-37p
	403-8	Workers covered by an occupational health and safety management system	31p
	403-9	Work-related injuries	92p
	403-10	Work-related ill health	33p, 92p
GRI 404: Training and Education	404-1	Average hours of training per year per employee	97p
	404-2	Programs for upgrading employee skills and transition assistance programs	67-68p
GRI 405: Diversity and Equal Opportunity	405-1	Diversity of governance bodies and employees	72-73p, 98p
	405-2	Ratio of basic salary and remuneration of women to men	- There is no gender-based disparity in wage
GRI 406: Non-discrimination	406-1	Incidents of discrimination and corrective actions taken	- No such case
GRI 408: Child Labor	408-1	Operations and suppliers at significant risk for incidents of child labor	- No such case
GRI 409: Forced or Compulsory Labor	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	- No such case

Topic	Disclosure	Pages	Note
GRI 413: Local Communities	413-1	Operations with local community engagement, impact assessments, and development programs	56-58p
	414-1	New suppliers that were screened using social criteria	61p
GRI 414: Supplier Social Assessment	414-2	Negative social impacts in the supply chain and actions taken	61p
	GRI 415: Public Policy	415-1	Political contributions
GRI 416: Customer Health and Safety		416-1	Assessment of the health and safety impacts of product and service categories
	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	- No such case
GRI 417: Marketing and Labeling	417-2	Incidents of non-compliance concerning product and service information and labeling	- No such case
	417-3	Incidents of non-compliance concerning marketing communications	- No such case
GRI 418: Customer Privacy	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	- No such case

## SASB Index

### SASB Sustainability Disclosure - Hardware Industry & Fuel cells and Industrial Batteries

#### Accounting Metrics

Topic	Code	Accounting Metric	Pages (Reference)
Product Security	TC-HW-230a.1	Description of approach to identifying and addressing data security risks in products	79p
Employee Diversity & Inclusion	TC-HW-330a.1	Percentage of gender and racial/ethnic group representation for (1) management, (2) technical staff, and (3) all other employees	96-98p
Product Lifecycle Management	TC-HW-410a.1	Percentage of products by revenue that contain IEC 62474 declarable substances	Samsung SDI complies with global regulations such as EU RoHS and REACH as well as national laws. In addition, all raw materials and components that go into our products are subject to rigorous pre-inspections and follow-up management.
	TC-HW-410a.4	Weight of end-of-life products and e-waste recovered, percentage recycled	N/A * Please refer to 48-49p for Samsung SDI's efforts regarding recycling and reuse
Supply Chain Management	TC-HW-430a.1	Percentage of Tier 1 supplier facilities audited in the RBA Validated Audit Process (VAP) or equivalent, by (a) all facilities and (b) high-risk facilities	61p
	TC-HW-430a.2	Tier 1 suppliers' (1) non-conformance rate with the RBA Validated Audit Process (VAP) or equivalent, and (2) associated corrective action rate for (a) priority non-conformances and (b) other non-conformances	61p
Energy Management	RR-FC130a.1	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	42p, 93p
Workforce Health & Safety	RR-FC-320a.1	(1) Total recordable incident rate (TRIR) and (2) fatality rate	92p
	RR-FC-320a.2	Description of efforts to assess, monitor, and reduce exposure of workforce to human health hazards	30p, 33p
Product End-of-life Management	RR-FC-410b.3	Description of approach to manage use, reclamation, and disposal of hazardous materials	33p
Materials Sourcing	TC-HW-440a.1 RR-FC-440a.1	Description of the management of risks associated with the use of critical materials	62-63p

#### Activity Metric

Code	Activity Metric	Pages (Reference)
TC-HW-000.A	Number of units produced by product category	91p
TC-HW-000.C	Percentage of production from owned facilities	15-16p of the Annual Report(in PDF format)
RR-FC-000.A	Number of units sold <sup>1)</sup> (Unit: 1,000 cells)	2,346,817
RR-FC-000.B	Total storage capacity of batteries sold (Unit: MWh)	60,589

1) The sum of small-sized batteries, automotive batteries, and ESS batteries based on the number of cells








## TCFD Index

### TCFD Index







Category	TCFD Recommendation	Pages (Reference)
Governance	a) Describe the board's oversight of climate-related risks and opportunities	40p
	b) Describe management's role in assessing and managing climate-related risks and opportunities	40p
Strategy	a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term	40-41p
	b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning	40-41p
	c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario	N/A
Risk Management	a) Describe the organization's processes for identifying and assessing climate-related risks	47p
	b) Describe the organization's processes for managing climate-related risks	47p
	c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management	47p
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	28p, 42p, 44p, 47p
	b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks	42p, 45p, 93p
	c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets	22p, 42p, 47p

# UN SDGs


Samsung SDI engages in a wide spectrum of activities centered around its sustainability management strategies and material issues to contribute to the attainment of the UN Sustainable Development goals.

UN SDGs	Samsung SDI's Contribution	Pages (Reference)
 <p><b>3</b> GOOD HEALTH AND WELL-BEING</p>	<p><b>Good Health and Well-being</b></p> <ul style="list-style-type: none"> <li>Strengthen the accountability of top management and the Board of Directors for health and safety operations, bolster the dedicated EHS organization, and operate an integrated company-wide EHS system</li> <li>Advance the verification of product safety and establish a hazardous substances management system</li> <li>Conduct workplace risk assessment and partner safety assessment</li> <li>Support employees' regular health check-ups, work environment surveys, health training, and illness prevention</li> </ul>	30-33p, 35p
 <p><b>4</b> QUALITY EDUCATION</p>	<p><b>Quality Education</b></p> <ul style="list-style-type: none"> <li>Operate bachelor/master/doctoral degree courses to nurture talent for battery business and engage in industry-academia partnerships</li> <li>Implement education programs with Samsung including Samsung SW Academy for Youth, Samsung Junior SW Academy, Dream Class, and Blue Elephant</li> </ul>	56-57p, 67-68p
 <p><b>5</b> GENDER EQUALITY</p>	<p><b>Gender Equality</b></p> <ul style="list-style-type: none"> <li>Focus on the management of diversity metrics including the proportion of female managers</li> <li>Provide maternal/paternal and parental leave irrespective gender and expand support beyond statutory obligations</li> <li>Encourage organizational-level discussions on diversity to minimize conflicts among different genders, nationalities and generations</li> </ul>	65-66p, 97p
 <p><b>6</b> CLEAN WATER AND SANITATION</p>	<p><b>Clean Water and Sanitation</b></p> <ul style="list-style-type: none"> <li>Manage our mid/long-term water reuse goal and implement water withdrawal reduction projects by 2050</li> <li>Manage the discharge of water pollutants on an on-going basis by applying discharge thresholds more stringent than legal standards</li> <li>Install monitoring sensors at chemical storage facilities and stormwater outlets to prevent the discharge of water pollutants as well as devices to block and recover pollutants along the stormwater passages</li> </ul>	50p
 <p><b>7</b> AFFORDABLE AND CLEAN ENERGY</p>	<p><b>Affordable and Clean Energy</b></p> <ul style="list-style-type: none"> <li>Join the RE100 and purchase RECs in line with the goal of transitioning to 100% renewable energy by 2050</li> <li>Support global operations with energy technology and roll out best practices to implement energy conservation projects</li> <li>Strengthen the energy management system at worksites and implement taskforce activities to pursue innovation for our power use structure</li> </ul>	42-44p
 <p><b>8</b> DECENT WORK AND ECONOMIC GROWTH</p>	<p><b>Decent Work and Economic Growth</b></p> <ul style="list-style-type: none"> <li>Contribute to expanding the eco-friendly industry through our small-sized Li-ion battery, automotive/ESS battery, and electronics material supply</li> <li>Assist partners in bolstering their management capabilities and competitiveness through win-win cooperation consulting and win-win smart factory initiative</li> <li>Contribute to job creation by recruiting 7,218 persons at domestic and overseas operations and by helping 49 persons land a job through partner recruitment and talent development support programs in 2022</li> </ul>	8-11p, 54-55p
 <p><b>9</b> INDUSTRY INNOVATION AND INFRASTRUCTURE</p>	<p><b>Industry, Innovation and Infrastructure</b></p> <ul style="list-style-type: none"> <li>Contribute to nurturing outstanding industrial workforce through industry-academia cooperation with third-party institutions and domestic/overseas prestigious universities</li> <li>Provide financing support through shared growth funds and others to help partners improve their operational stability</li> <li>Reach 5.4% in R&amp;D investments against 2022 sales</li> <li>Ensure security in the domestic technology area including automotive battery-related national core technology through information security management system development and patent management</li> </ul>	13-14p, 55p, 79p

# UN SDGs

UN SDGs	Samsung SDI's Contribution	Pages (Reference)
 <p><b>10</b> REDUCED INEQUALITIES</p>	<p><b>Reduced Inequalities</b></p> <ul style="list-style-type: none"> <li>• Implement blind recruitment by eliminating all personal information – academic level, gender, nationality, religion, etc. – from applications in the hiring process</li> <li>• Ensure zero gender-based disparities in wage</li> <li>• Give precedence to socially-underprivileged groups, including men of national merit and people with disabilities</li> </ul>	65p, 97p
 <p><b>11</b> SUSTAINABLE CITIES AND COMMUNITIES</p>	<p><b>Sustainable Cities and Communities</b></p> <ul style="list-style-type: none"> <li>• Contribute to reducing waste discharge by developing a system to recycle end-of-life batteries and scraps generated from the manufacturing process</li> <li>• Operate appropriate pollution prevention devices for each of the emitting facilities installed at worksites to manage air pollutants and mitigate impact on the nearby community</li> <li>• Create School Forests to reduce particulate matter levels at elementary schools located in the vicinity of worksites</li> </ul>	48-51p, 58p
 <p><b>12</b> RESPONSIBLE CONSUMPTION AND PRODUCTION</p>	<p><b>Responsible Consumption and Production</b></p> <ul style="list-style-type: none"> <li>• Establish a closed-loop process to reclaim and recycle process scraps and end-of-life batteries</li> <li>• Minimize waste to landfill and reduce water consumption by increasing water reuse</li> <li>• Perform extended Life Cycle Assessments (LCA) from manufacturing to disposal to analyze environmental impact and reduce loads throughout the entire process</li> <li>• Ensure supply chain traceability for all major minerals and use minerals verified through third-party audits or certified by competent bodies</li> </ul>	46p, 48-50p, 60-63p
 <p><b>13</b> CLIMATE ACTION</p>	<p><b>Climate Action</b></p> <ul style="list-style-type: none"> <li>• Systematically implement tasks to achieve net zero emissions and transition to 100% renewables by 2050</li> <li>• Expand products certified under carbon footprint programs and reduce products' environmental impact</li> <li>• Switch to 100% zero-emission vehicles for corporate fleet vehicles by 2030</li> <li>• Calculate Scope 3 GHG emissions, and identify partners' GHG emissions through our CDP Supply Chain membership and collaborate for reduction projects</li> </ul>	40-47p
 <p><b>16</b> PEACE, JUSTICE AND STRONG INSTITUTIONS</p>	<p><b>Peace, Justice and Strong Institutions</b></p> <ul style="list-style-type: none"> <li>• Disseminate a culture of compliance at all levels through compliance control standards, compliance system operation, and various compliance activities</li> <li>• Make ethics/anti-corruption assessments across the board and facilitate ethics/compliance whistleblowing</li> <li>• Preemptively manage human rights and compliance risk through compliance reviews and blind surveys at domestic/overseas operations</li> <li>• Identify and improve partners' labor and ethics risks through S-Partner Certification assessments</li> </ul>	60-61p, 65p, 76-78p
 <p><b>17</b> PARTNERSHIPS FOR THE GOALS</p>	<p><b>Partnerships for the Goals</b></p> <ul style="list-style-type: none"> <li>• Join the UNGC to endorse its 10 principles in the areas of human rights, labor, environment, and anti-corruption</li> <li>• Join global initiatives across diverse areas, including renewable energy, sustainable battery value chain, conflict minerals, and ecosystem protection</li> <li>• Establish and operate a range of communication channels with major stakeholder groups, including customers, shareholder/investors, employees, partners, communities/civic organizations, industry associations/universities/research institutes, governments, and media.</li> </ul>	26p, 82p

# GHG Verification Opinion



## GHG Verification Opinion

Samsung SDI Co., Ltd.

**Verification Scope**  
 Korean Standards Association conducted verification of Samsung SDI Co., Ltd.'s 2022 domestic greenhouse gas statement for direct emission (Scope1) and indirect emission (Scope2).

**Verification Standards and Guidelines**  
 · Guidance for reporting and verification of GHG emissions trading scheme (No. 2022-279 provided by Ministry of Environment, Republic of Korea)  
 · ISO 14064-1, 3 : 2006  
 · 2006 IPCC Guidelines for National Greenhouse Gas Inventories

**Level of Assurance**  
 Samsung SDI Co., Ltd.'s GHG emissions satisfies a reasonable level of assurance (less than ±2.5% of total emissions).

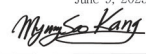
**Verification Conclusion**  
 As a result of verification by the verification team, no serious errors, omissions, or false facts were found in the statement. Therefore, Korean Standards Association confirms that GHG emission data has been properly calculated.

**2022 Domestic GHG Emissions**


No	Business Site	GHG Emissions (Unit : tCO2eq)		
		Scope1	Scope2	Total
1	Cheonan Plant	31,898	199,386	231,283
2	Ulsan Plant	19,227	159,292	178,519
3	Giheung HQ and R&D	5,963	19,779	25,742
4	Suwon Future Technology Campus	256	39,153	39,409
5	Gumi Plant	4,383	55,996	60,379
6	Cheongju Plant	23,229	22,910	46,138
7	Uiwang Plant	20	937	957
8	Rental Building (Samsung Electronics Secho Office)	14	63	76
<b>Total</b>		<b>84,991</b>	<b>497,516</b>	<b>582,503</b>

\* Note : Total emissions differ from the sum of direct/indirect emissions because each business site cuts and adds up to less than a decimal point.

June 9, 2023



KOREAN STANDARDS ASSOCIATION



## GHG Verification Opinion

Samsung SDI Co., Ltd.

**Verification Scope**  
 Korean Standards Association conducted verification of Samsung SDI Co., Ltd.'s greenhouse gas from overseas business sites for direct emission (Scope1) and indirect emission (Scope2).

· Boundary : Direct Emission (Scope1), Indirect Emission (Scope2)  
 · Year : 2022

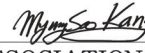
**Verification Criteria and Guidelines**  
 · Guidance for reporting and verification of GHG emissions trading scheme (No. 2022-279 provided by Ministry of Environment, Republic of Korea)  
 · ISO 14064-1, 3 : 2006  
 · 2006 IPCC Guidelines for National Greenhouse Gas Inventories  
 · WRI(World Resources Institute) Greenhouse Gas Protocol

**Level of Assurance and Responsibility**  
 Korean Standard Association provides a limited guarantee level of assurance for the company's GHG emissions, Samsung SDI Co., Ltd. is responsible for fairly disclosing its GHG verification opinions, and the responsibility of the Korean Standards Association is limited to guaranteeing GHG emissions.


**Verification Limit**  
 GHG emissions can be affected by factors such as data limit and uncertainties in the scope of verification, and inherent limitations may exist accordingly.

**Verification Conclusion**  
 No errors or false facts were found in Samsung SDI Co., Ltd.'s GHG emissions verified through the ISO 14064-3 verification procedure within the scope of verification.

June 9, 2023



KOREAN STANDARDS ASSOCIATION



## GHG Verification Opinion

Samsung SDI Co., Ltd.

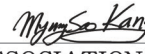
**2022 Overseas GHG Emissions**

(Unit : tCO2eq)

No	Business site	Location-based			Market-based		
		Scope1	Scope2	Total	Scope1	Scope2	Total
1	Tianjin, China(TSDI)	59,576	445,816	505,392	59,576	411,749	471,325
2	Xi'an, China(SAPB)	14,742	149,497	164,238	14,742	149,497	164,238
3	Wuxi, China(SDIW)	2,745	75,897	78,640	2,745	75,897	78,640
4	Vietnam(SDIV)	143	7,358	7,500	143	7,358	7,500
5	Malaysia(SDIEM)	17,230	165,200	182,430	17,230	165,200	182,430
6	Austria(SDIBS)	7	251	257	7	251	257
7	USA(SDIABS)	453	2,522	2,975	453	2,522	2,975
8	Hungary(SDihu)	62,232	163,448	225,680	62,232	108,632	170,864
<b>Total</b>		<b>157,128</b>	<b>1,009,989</b>	<b>1,167,112</b>	<b>157,128</b>	<b>921,106</b>	<b>1,078,229</b>

\* Note : Total emissions differ from the sum of direct/indirect emissions because each business site cuts and adds up to less than a decimal point.

June 9, 2023



KOREAN STANDARDS ASSOCIATION

# GHG Verification Opinion

## GHG Verification Opinion

Samsung SDI Co., Ltd.

**Verification Scope**

Korean Standards Association conducted verification of Samsung SDI Co., Ltd's Scope3 GHG emissions establishment in 2022.

- Boundary : Scope3
  - Category 1. Purchased goods and services
  - Category 2. Capital goods
  - Category 3. Fuel and energy-related activities(not included in Scope1 or 2)
  - Category 4. Upstream transportation and distribution
  - Category 5. Waste generated in operations
  - Category 6. Business travel
  - Category 7. Employee commuting
  - Category 8. Upstream leased assets
  - Category 9. Downstream transportation and distribution
  - Category 12. End-of-life treatment of sold product
  - Category 13. Downstream leased assets
  - Category 15. Investments
- Year : 2022

**Verification Criteria and Guidelines**

- Guidance for reporting and verification of GHG emissions trading scheme (No. 2022-279 provided by Ministry of Environment, Republic of Korea)
- ISO 14064-1, 3 : 2006
- 2006 IPCC Guidelines for National Greenhouse Gas Inventories
- WRI(World Resources Institute) Greenhouse Gas Protocol
- The Corporate Value Chain (Scope3) Accounting and Reporting Standard

**Level of Assurance and Responsibility**

Korean Standard Association provides a limited guarantee level of assurance for the company's GHG emissions.

**Verification Limit**

GHG emissions can be affected by factors such as data limit and uncertainties in the scope of verification, and inherent limitations may exist accordingly.

**Verification Conclusion**

No errors or false facts were found in Samsung SDI Co., Ltd's GHG emissions verified through the ISO 14064-3 verification procedure within the scope of verification.

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**2022 Scope3 GHG Emissions** (Unit : tCO2eq)

Category	GHG Emissions
Category 1. Purchased goods and services	789,059
Category 2. Capital goods	12,097
Category 3. Fuel and energy-related activities (not included in Scope1 or 2)	103,527
Category 4. Upstream transportation and distribution	118,927
Category 5. Waste generated in operations	33,810
Category 6. Business travel	6,726
Category 7. Employee commuting	7,446
Category 8. Upstream leased assets	104
Category 9. Downstream transportation and distribution	35,234
Category 12. End-of-life treatment of sold product	95,269
Category 13. Downstream leased assets	24
Category 15. Investments	1,713
<b>Total</b>	<b>1,203,935</b>

June 9, 2023

**KOREAN STANDARDS ASSOCIATION**

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# Independent Assurance Statement

## To readers of SAMSUNG SDI Sustainability Report 2023

### Introduction

Korea Management Registrar (KMR) was commissioned by SAMSUNG SDI to conduct an independent assurance of its Sustainability Report 2023 (the "Report"). The data and its presentation in the Report is the sole responsibility of the management of SAMSUNG SDI. KMR's responsibility is to perform an assurance engagement as agreed upon in our agreement with SAMSUNG SDI and issue an assurance statement.

### Scope and Standards

SAMSUNG SDI described its sustainability performance and activities in the Report. Our Assurance Team carried out an assurance engagement in accordance with the AA1000AS v3 and KMR's assurance standard SRV1000. We are providing a Type 2, moderate level assurance. We evaluated the adherence to the AA1000AP (2018) principles of inclusivity, materiality, responsiveness and impact, and the reliability of the information and data provided using the Global Reporting Initiative (GRI) Index provided below. The opinion expressed in the Assurance Statement has been formed at the materiality of the professional judgment of our Assurance Team.

Confirmation that the Report was prepared in accordance with GRI standards 2021 was included in the scope of the assurance. We have reviewed the topic-specific disclosures of standards which were identified in the materiality assessment process.

- GRI Sustainability Reporting Standards 2021
- Universal standards
- Topic specific standards
  - GRI 301 : Materials
  - GRI 302 : Energy
  - GRI 305 : Emissions
  - GRI 308 : Supplier Environmental Assessment
  - GRI 403 : Occupational Health and Safety
  - GRI 414 : Supplier Social Assessment
  - GRI 416 : Customer Health and Safety

As for the reporting boundary, the engagement excludes the data and information of SAMSUNG SDI's partners, suppliers and any third parties.

### KMR's Approach

To perform an assurance engagement within an agreed scope of assessment using the standards outlined above, our Assurance Team undertook the following activities as part of the engagement:

- reviewed the overall Report;
- reviewed materiality assessment methodology and the assessment report;
- evaluated sustainability strategies, performance data management system, and processes;
- interviewed people in charge of preparing the Report;
- reviewed the reliability of the Report's performance data and conducted data sampling;
- assessed the reliability of information using independent external sources such as Financial Supervisory Service's DART and public databases.

### Limitations and Recommendations

KMR's assurance engagement is based on the assumption that the data and information provided by SAMSUNG SDI to us as part of our review are provided in good faith. Limited depth of evidence gathering including inquiry and analytical procedures and limited sampling at lower levels in the organization were applied. To address this, we referred to independent external sources such as DART and National Greenhouse Gas Management System (NGMS) and public databases to challenge the quality and reliability of the information provided.

### Conclusion and Opinion

Based on the document reviews and interviews, we had several discussions with SAMSUNG SDI on the revision of the Report. We reviewed the Report's final version in order to make sure that our recommendations for improvement and revision have been reflected. Based on the work performed, it is our opinion that the Report was not prepared in accordance with the AA1000AP (2018) principles.

### Inclusivity

SAMSUNG SDI has developed and maintained different stakeholder communication channels at all levels to announce and fulfill its responsibilities to the stakeholders. Nothing comes to our attention to suggest that there is a key stakeholder group left out in the process. The organization makes efforts to properly reflect opinions and expectations into its strategies.

### Materiality

SAMSUNG SDI has a unique materiality assessment process to decide the impact of issues identified on its sustainability performance. We have not found any material topics left out in the process.

### Responsiveness

SAMSUNG SDI prioritized material issues to provide a comprehensive, balanced report of performance, responses, and future plans regarding them. We did not find anything to suggest that data and information disclosed in the Report do not give a fair representation of SAMSUNG SDI's actions.

### Impact

SAMSUNG SDI identifies and monitors the direct and indirect impacts of material topics found through the materiality assessment, and quantifies such impacts as much as possible.

### Reliability of Specific Sustainability Performance Information

In addition to the adherence to AA1000AP (2018) principles, we have assessed the reliability of economic, environmental, and social performance data related to sustainability performance. We interviewed the in-charge persons and reviewed information on a sampling basis and supporting documents as well as external sources and public databases to confirm that the disclosed data is reliable. Any intentional error or misstatement is not noted from the data and information disclosed in the Report.

### Competence and Independence

KMR maintains a comprehensive system of quality control including documented policies and procedures in accordance with ISO/IEC 17021 : 2015 - Requirements for bodies providing audit and certification of management systems. This engagement was carried out by an independent team of sustainability assurance professionals. KMR has no other contract with SAMSUNG SDI and did not provide any services to SAMSUNG SDI that could compromise the independence of our work.

June 2023 Seoul, Korea



CEO E. J. Hwang