

## Verification Opinion Statement

### GHG Emissions

Samsung Electronics Co.,Ltd

#### Verification Target

Korean Foundation for Quality (hereinafter 'KFQ') has conducted a verification of Scope 1, 2 Greenhouse Gas Emissions (hereinafter 'GHG emissions') of Samsung Electronics Co.,Ltd (hereinafter 'Company') for 2023.

#### Verification Scope

KFQ's verification scope covered on domestic corporations and 25 overseas subsidiaries under the operational control and organizational boundary of Samsung Electronics Co.,Ltd during 2023.

#### Verification Criteria

The verification process was based on [Rule for emission reporting and certification of greenhouse gas emission trading Scheme<sup>1)</sup>], [2006 IPCC Guidelines for National Greenhouse Gas Inventories] and [ISO14064-1] for every applicable part.

1) Notification No. 2023-221 of Ministry of Environment

#### Level of Assurance

The Verification has been planned and conducted as the 'Rules for verification of operating the greenhouse gas emission trading scheme', and the level of assurance for verification shall be satisfied as reasonable level of assurance. And it was confirmed through an internal review whether the process before the verification was conducted effectively.

#### Verification Limitation

The verification shall contain the potential inherent limitation in the process of application of the verification criteria and methodology.

#### Verification Opinions

Regarding to the data of the Greenhouse Gas Emission Consumption from the report through the verification, KFQ provides our verification opinions as below;

- 1) GHG emissions for 2023 of Company were properly calculated according to the verification standards.
- 2) The data and information used in calculating the GHG emissions were appropriate, reasonable, and no significant errors or omissions could affect verification statement were not found. The materiality assessment result on GHG emissions of domestic corporations and 25 overseas subsidiaries has met the agreed-upon criterion of less than 2%.
- 3) For the overseas subsidiaries, each national net calorific value and electricity emission factor were preferentially used and if there were no published values, net calorific value and electricity emission factor were adopted from 2006 IPCC Guidelines or Korean Energy Law Enforcement Regulation. Also, in case of buying credits(ex. RECs) in the market, the offset credit is applied to evaluate the emission and record separately in market base section.
- 4) For the domestic corporations, The calculation methodology and parameters of the 'Rule for emission reporting and certification of greenhouse gas emission trading Scheme<sup>1)</sup>' were preferentially used, but the default emission factor '(1-U)' for GHG emissions from semiconductor manufacturing was used based on the 2006 IPCC Guidelines.
- 5) Except unconsidered emission source in the 'Samsung Electronics Co.,Ltd, Greenhouse Gas Inventory Guideline', material error, omission or insignificant issues was not found in 2023 Samsung Electronics Co.,Ltd., Greenhouse Gas Emission Report.
- 6) Thus, KFQ concludes that the GHG emissions of Company in 2023 is correctly calculated and stated in accordance with 'Rule for emission reporting and certification of greenhouse gas emission trading Scheme'.

### Appendix A. Summary of GHG Emission Results

May 24<sup>th</sup>, 2024

*Ji Young Song*

CEO Ji-Young Song  
Korean Foundation for Quality



National Institute of Environmental Research



## Appendix A. Summary of GHG Emission Results

### Organization

Samsung Electronics Co.,Ltd

### Emission calculation period

The emission calculation period is from January 1 to December 31, 2023.

### GHG Emission verification results

Unit: ktCO<sub>2</sub>e

Division	Total		Domestic		Overseas	
	Location based	Market based	Location based	Market based	Location based	Market based
Scope 1	3,733	3,733	2,679	2,679	1,054	1,054
Scope 2	14,570	9,558	10,682	9,424	3,889	134
<b>Total</b>	<b>18,303</b>	<b>13,291</b>	<b>13,361</b>	<b>12,103</b>	<b>4,942</b>	<b>1,188</b>

\* The totals in this verification statement do not match the totals in emission trading scheme because the total emissions of each facility are calculated by truncating to integer units

### DX GHG Emission verification results

Unit: ktCO<sub>2</sub>e

Division	Location based	Market based
Scope 1	211	211
Scope 2	1,532	102
<b>Total</b>	<b>1,742</b>	<b>313</b>

### DS GHG Emission verification results

Unit: ktCO<sub>2</sub>e

Division	Location based	Market based
Scope 1	3,522	3,522
Scope 2	13,039	9,456
<b>Total</b>	<b>16,561</b>	<b>12,978</b>



## Verification Opinion Statement

### GHG Emissions

### Samsung Electronics

#### Verification Target

Korean Foundation for Quality (hereinafter 'KFQ') has conducted a verification of Scope 3 Greenhouse Gas Emissions (hereinafter 'GHG emissions') Samsung Electronics(hereinafter 'Company') for 2023.

#### Verification Scope

The verification Scope covered the emission categories selected by the company and the emissions between January 1st, 2023 to December 31st, 2023.

#### Verification Criteria

The following criteria and coefficients used by the company were applied.

##### • Criteria

- Corporate Value Chain (Scope 3) Accounting and Reporting Standard
- GHG Protocol Corporate Standard
- ISO 14064-3:2019

##### • Coefficient

- Environmental Product Declaration evaluation coefficient (2021)
- Ecoinvent database 3.9
- EPA
- UK Defra WTT
- IEA
- LCA S/W(Simapro)

#### Level of Assurance

The verification was performed in accordance with the procedures specified in ISO14064-3 and the assurance level of the verification was performed to satisfy the limited assurance level.

#### Verification Limitation

GHG emissions verification involves inherent limitations that may arise depending on the organization's data characteristics, calculations and estimates, sampling method, and limited assurance level. Additionally, this verification does not include responsibility for the accuracy of the original data provided by the company.

#### Verification Opinions

Through the verification process according to the 'ISO14064-3:2006' KFQ could obtain reasonable basis to express following conclusion on the Greenhouse Gas Emission Report.

- 1) GHG emissions for 2023 of Company were properly calculated according to the verification standards.
- 2) For GHG emissions, no material errors or omissions were found, except for emissions information not considered within the selected category range.
- 3) The criteria and process established or estimated/assumed by the company to calculate GHG emissions were transparently reflected in the internal calculation process.

### Appendix A. Summary of Scope3 GHG Emission Results

June 14<sup>th</sup>, 2024

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## Appendix A. Summary of Scope 3 GHG Emission Results

### Organization

Samsung Electronics

### Emission calculation period

The emission calculation period is from January 1st to December 31st, 2023.

### Company Scope 3 Emissions verification Results(Total)

Unit : ktCO<sub>2</sub>e

	Category	Scope 3 Emissions
1	Purchased goods & services	12,880
2	Capital goods	2,663
3	Fuel- and Energy-Related Activities Not Included in Scope 1 or Scope 2	3,058
4	Upstream Transportation and Distribution	4,098
5	Waste Generated in Operations	156
6	Business Travel	108
7	Employee Commuting	300
8	Upstream Leased Assets	9
9	Downstream Transportation and Distribution	40
10	Processing of Sold Products	131
11	Use of Sold Products	94,776
12	End of Life Treatment of Sold Products	1,339
13	Downstream Leased Assets	3
14	Franchises	N/A
15	Investments	169
<b>Total</b>		<b>119,730</b>

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**Appendix A. Summary of Scope 3 GHG Emission Results**

**Company Scope 3 Emissions verification Results(DX)**

Unit : ktCO<sub>2</sub>eq

Category		Scope 3 Emissions
1	Purchased goods & services	9,383
2	Capital goods	0
3	Fuel- and Energy-Related Activities Not Included in Scope 1 or Scope 2	433
4	Upstream Transportation and Distribution	3,925
5	Waste Generated in Operations	42
6	Business Travel	79
7	Employee Commuting	218
8	Upstream Leased Assets	6
9	Downstream Transportation and Distribution	34
10	Processing of Sold Products	0
11	Use of Sold Products	86,023
12	End of Life Treatment of Sold Products	1,338
13	Downstream Leased Assets	2
14	Franchises	N/A
15	Investments	156
Total		101,639

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**Appendix A. Summary of Scope 3 GHG Emission Results**

**Company Scope 3 Emissions verification Results(DS)**

Unit : ktCO<sub>2</sub>eq

Category		Scope 3 Emissions
1	Purchased goods & services	3,497
2	Capital goods	2,663
3	Fuel- and Energy-Related Activities Not Included in Scope 1 or Scope 2	2,625
4	Upstream Transportation and Distribution	173
5	Waste Generated in Operations	114
6	Business Travel	29
7	Employee Commuting	82
8	Upstream Leased Assets	3
9	Downstream Transportation and Distribution	6
10	Processing of Sold Products	131
11	Use of Sold Products	8,753
12	End of Life Treatment of Sold Products	1
13	Downstream Leased Assets	1
14	Franchises	N/A
15	Investments	13
Total		18,091