

Verification Statement on 2022 Scope1, 2 Greenhouse Gas Emission Report



Verification Target

Korean Foundation for Quality (hereinafter "KFQ") has conducted the verification of "2022 Report on Quantity of emitted Greenhouse gas Consumption (hereinafter 'Inventory Report') for Samsung Electronics Co.,Ltd (hereinafter "Company")

Verification Scope

In this verification, domestic corporations and 25 overseas subsidiaries under operational control of Samsung Electronics Co.,Ltd, and reported emission is including Scope 1 and Scope 2 emission.

Verification Criteria

The verification process was based on 'Rules for verification of operating the greenhouse gas emission trading scheme (Notification No. 2022-279 of Ministry of Environment)', GHG Protocol Scope 2 Guidance' and 'ISO 14064-1,3:2006'

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 confirmed through the internal review whether the process before the verification conducted effectively.

Verification Limitation

Accuracy and completeness of emission data reported in the 'GHG Inventory' are subject to inherent limitations due to their nature and the methodology used in determining, calculating and estimating such data.

Verification Opinions

Through the verification process according to the 'ISO 14064-3:2006' KFQ could obtain reasonable basis to express following conclusion on the Greenhouse Gas Emission Report

- 1) 2022 Samsung Electronics Co.,Ltd., Greenhouse Gas Emission Report was prepared against 'Samsung Electronics Co.,Ltd., Greenhouse Gas Inventory Guideline' developed based on the 'Guidelines for GHG emission reporting and certification of GHG emission trading scheme', GHG Protocol Scope 2 Guidance' and 'ISO 14064-1:2006'
- 2) As a result of materiality assessment on 2022 domestic Greenhouse Gas Emission, material discrepancy is less than the criteria of 2.0% for the organization which emits more than 5,000,000 tCO₂eq/year in accordance with the requirements of the 'Guidelines of verification for Greenhouse gas emission trading scheme'.
- 3) For the 25 overseas subsidiaries, document review was conducted for entire 25 subsidiaries as well as Company self assessment. The result of material discrepancy is less than 2.0%.
- 4) The efficiency of process emission reduction technology that affects the calculation of greenhouse gas emissions has to reflect the values guaranteed by the government and third parties. However, the efficiency was calculated based on the Company's own methodology, and errors are not included in the verification opinion. For the overseas subsidiaries, each national net caloric value and electricity emission factor were preferentially used but net caloric value and electricity emission factor were adopted from IPCC Guidelines or Korean Energy Law Enforcement Regulation in any change of these parameters or factors. 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.
- 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 2022 Samsung Electronics Co.,Ltd., Greenhouse Gas Emission

Organization

Samsung Electronics Co.,Ltd

Emission calculation period

The emission calculation period is from January 1 to December 31, 2022

GHG Emission verification results (Unit: ktCO₂eq)

Division	Total		Domestic		Overseas	
	Location based	Market based	Location based	Market based	Location based	Market based
Scope 1	5,972	5,972	5,100	5,100	872	872
Scope 2	13,920	9,081	9,830	8,935	4,090	146
Total	19,892	15,053	14,930	14,035	4,962	1,018

* Total emissions may differ ±1 ktCO₂eq due to rounding differences in the summation process.

DX GHG Emission verification results (Unit: ktCO₂eq)

Division	Location based	Market based
Scope 1	254	254
Scope 2	1,681	112
Total	1,935	366

DS GHG Emission verification results (Unit: ktCO₂eq)

Division	Location based	Market based
Scope 1	5,718	5,718
Scope 2	12,239	8,969
Total	17,957	14,687

April 18th 2023

Ji Young Song

CEO Ji
Young Song
Korean Foundation for Quality

Verification Statement on 2022 Scope3 Greenhouse Gas Emission Report



Verification Target

Korean Foundation for Quality (hereinafter 'KFQ') has been engaged by 『 Samsung Electronics Inc. 』 to independently verify its 2022 Scope3 Greenhouse Gas Emissions and Energy consumption Report (hereinafter 'GHG Inventory'). This verification is for the purpose of a limited guarantee that Scope3 is free from material errors and distortions in technical content.

Verification Scope

The verification of other indirect emissions (Scope 3) was carried out in the self selected category according to the following criteria.

* Verification Category: Purchased goods & services, Capital goods, Fuel and Energy Related Activities Not Included in Scope1 or Scope2, Upstream Transportation and Distribution, Waste Generated in Operations, Business Travel, Employee Commuting, Upstream Leased Assets, Downstream Transportation and Distribution, Processing of Sold Products, Use of Sold Products, End of Life Treatment of Sold Products, Downstream Leased Assets, Investments

Verification Criteria

Technical Guidance for Calculating Scope 3 Emissions, Carbon Emission Factor (Korea Environmental Industry Institute), World Resource Institute (WRI), GHG Emissions Calculating tool emission factor, National LCI database information network and overseas information network, etc.

Level of Assurance

The verification was performed according to the procedure stipulated in ISO 14064-3, and through the verification and cross validation of the Scope3 emission calculation results, there is limited assurance that the data applied to the emission calculation is accurate and that the emission is calculated appropriately according to the verification criteria above. We planned and conducted verification to obtain.

Verification Limitation

This verification is not for the purpose of verifying the validity of the calculation criteria set by the company itself. Assurance results contain inherent limits of uncertainty inherent in the company's own calculation standards. Depending on our own calculation standards, significant differences may occur in the emission calculation results, which may affect comparability.

Verification Opinions

Through the verification process according to the 'ISO 14064-3:2006' KFQ could obtain reasonable basis to express following conclusion on the Greenhouse Gas Emission Report.

- 1) Scope 3 emissions for 2022 of Samsung Electronics Co., Ltd. were properly calculated according to verification standards.
- 2) For Scope 3 emissions, no significant errors or omissions were found, except for emissions information that was not considered within the scope of the selected category. In the process of estimating the emissions, it was confirmed that the estimates were reasonably based on objective grounds so that the emissions were not underestimated or overestimated when estimating some activity data.
- 3) The standards set, estimated/assumed, and the relevant process when calculating emissions were transparently reflected in the internal calculation process.
- 4) No material errors, omissions or inappropriate matters were found in the 2022 Scope 3 emission information and data of Samsung Electronics Co., Ltd., except for emissions information not considered in the Samsung Electronics Co., Ltd. greenhouse gas calculation guidelines.

Organization

Samsung Electronics Co.,Ltd

Emission calculation period

The emission calculation period is from January 1 to December 31, 2022

Company Scope3 Emissions verification Results (Unit: ktCO₂eq)

Category	Scope3 Emissions
Purchased goods & services	14,596
Capital goods	1,508
Fuel-and Energy-Related Activities Not Included in Scope1 or Scope2	900
Upstream Transportation and Distribution	3,965
Waste Generated in Operations	246
Business Travel	87
Employee Commuting	303
Upstream Leased Assets	107
Downstream Transportation and Distribution	366
Processing of sold products	142
Use of Sold Products	101,236
End-of-Life Treatment of Sold Products	1,206
Downstream Leased Assets	1
Franchise	N/A
Investments	52
Total	124,715

※ Emissions from suppliers applied when calculating emissions are based on the year 2021 when it can be secured (Categories: Purchased goods & services, Capital goods, Processing of Sold Products)

April 21th 2023

Ji Young Song

CEO Ji Young Song
Korean Foundation for Quality