

Greenhouse Gas Verification Statement

The inventory of Greenhouse Gas emissions in year 2022 of

**GIGA-BYTE TECHNOLOGY
CO., LTD.**

No.6, Baoqiang Rd., Xindian Dist.,
New Taipei City 231, Taiwan



has been verified in accordance with ISO 14064-3:2006 as
meeting the requirements of

ISO 14064-1:2018

Direct emissions

627.8059 tonnes of CO₂e

Indirect emissions

6,620,466.7871 tonnes of CO₂e

Direct emissions and indirect emissions

6,621,094.593 tonnes of CO₂e

Authorized by



Stephen Pao

Knowledge Deputy General Manager

Date: 08 March 2023

Version 1

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Statement TW23/00030GG, continued

The emission of each category is described as below:

Unit: tonnes of CO₂e

Reporting Boundaries			GHG Emissions
Inventory categories		Description	
Direct emissions		This direct GHG emissions are the sum of owned or controlled by the organization within the organization.	627.8059
Indirect emissions	Imported energy	Indirect emissions from incoming electricity and steam	27,283.6386
	Transportation	Emissions from employee commuting and business travel	1,995.8799
	Products used by an organization	Emissions from purchased goods and solid waste treatment	893,495.2627
	Associated with the use of products from the organization	Emissions from the use stage of the product and end of life stage of the product	5,697,692.0058
	Other sources	No quantification	--
Direct emissions and indirect emissions			6,621,094.593

The emission of each site is described as below:

Unit: tonnes of CO₂e

Site	Direct emissions	Indirect emissions	Total GHG emissions
Main Office	293.2686	6,574,596.1624	6,574,889.431
Taipei Silicon Valley Park Office	41.1652	476.4588	517.624
Ping-Jen Plant	70.4837	6,922.2566	6,992.740
Dong Guan Plant	24.6195	28,205.5906	28,230.210
Ningbo Plant	198.2689	10,266.3187	10,464.588

Note: Main Office total GHG emissions include category 4 "Indirect GHG emissions from goods purchased by organization" that purchased order by main office and category 5 " Indirect GHG emissions from the use stage of the product" that the total number of products sold by the head office to Taiwan, North America, Europe, China and other regions. Due to the data availability, this is the best way to include above Indirect GHG emissions to main office.

SGS has been contracted by GIGA-BYTE TECHNOLOGY CO., LTD (hereinafter referred to as "GIGA-BYTE"), No.6, Baoqiang Rd., Xindian Dist., New Taipei City 231, Taiwan for the verification of direct and indirect Greenhouse Gas emissions in accordance with

ISO 14064-3:2006

as provided by GIGA-BYTE TECHNOLOGY CO., LTD. (hereinafter referred to as GIGA-BYTE), No.6, Baoqiang Rd., Xindian Dist., New Taipei City 231, Taiwan, in the GHG Assertion in the form of GHG report covering GHG emissions of the period 01 January 2022 to 31 December 2022

Roles and responsibilities

The management of GIGA-BYTE is responsible for the organization's GHG information system, the development and maintenance of records and reporting procedures in accordance with that system, including the calculation and determination of GHG emissions information and the reported GHG emissions.

It is SGS's responsibility to express an independent GHG verification opinion on the GHG emissions as provided in the GHG Assertion for the period 01 January 2022 to 31 December 2022.

SGS conducted a third-party verification of the provided GHG assertion against the principles of ISO 14064-1:2018, ISO 14064-3:2006 in the period 06 February 2023 to 22 February 2023. The verification was based on the verification scope, objectives and criteria as agreed between GIGA-BYTE and SGS on 01 December 2022.

Level of Assurance

The level of agreed assurance for category 1 and category 2 of HQ/ Taipei Silicon Valley Park Office/ Ping-Jen Plant is reasonable assurance.

The level of agreed assurance for category 1 and category 2 of other sites that are verified remotely is limited assurance.

Category 3 till category 6 agreed is that of limited assurance.

Scope

GIGA-BYTE has commissioned an independent verification by SGS Taiwan of reported GHG emissions of GIGA-BYTE arising from the design and manufacture of computer system, bare bone, motherboard, add-on card, server platform, router, notebook and mobile phone activities, to establish conformance with ISO 14064:2018 principles within the scope of the verification as outlined below.

This engagement covers verification of emission from anthropogenic sources of greenhouse gases included within the organization's boundary and is based on ISO 14064-3:2006.

- Title or description activities: GHG verification for GIGA-BYTE in year 2022
- Location/boundary of the activities:
 - No.6, Baoqiang Rd., Xindian Dist., New Taipei City 231, Taiwan
 - B2F, No. 207, Sec. 3, Beixin Rd., Xindian Dist., New Taipei City 231, Taiwan
 - No. 215, Nan Ping Road Ping-Jen Dist. Taoyuan City 324. Taiwan
 - No.5, Yue Yuen 1 Road, Yue Yuen Industrial Park, Huang Jiang Town, Dong Guan City, Guang Dong Province, P.R.C.
 - No.9, Chuangye 2 Road, Western Area, Ningbo Free Trade Zone, Beiu, Ningbo City, Zhejiang Province, P.R.C.
- Physical infrastructure, activities, technologies and processes of the organization: the design and manufacture of computer system, bare bone, motherboard, add-on card, server platform, router, notebook and mobile phone
- GHG sources, sinks and/or reservoirs included: Sources as presented in the inventory spreadsheet provided by GIGA-BYTE
- Types of GHGs included: CO₂, CH₄, N₂O, HFCs, PFCs, SF₆, NF₃
- The IPCC 2021 AR6 GWP values are applied in this inventory.
- Emission factor:
 - Direct emissions: Greenhouse Gas Emission Factor Table (6.0.4), EPA.
 - Indirect emissions:
 - Taiwan Electricity emission factor is 0.509 kgCO₂e/kwh (Announced by Bureau of Energy, Ministry of Economic Affairs in 2022).
 - Ningbo GIGA-BYTE TECHNOLOGY CO., LTD.: 0.7921 kgCO₂e/kWh (Announced by Department of Climate change, National Development and Reform Commission, China, in 2019)
 - Dong Guan GIGA-BYTE TECHNOLOGY CO., LTD.: 0.8042 kgCO₂e/kWh (Announced by Department of Climate change, National Development and Reform Commission, China, in 2019)
 - The secondary database have SimaPro LCA Software ver. 9.1, Ecoinvent 3 and Carbon Footprint Information Platform.
- Directed actions: NA
- GHG information for the following period was verified: 01 January 2022 to 31 December 2022

- The version of inventory sheet: 2023.02.22
- The version of GHG assertion: 2023.02.22
- Intended user of the verification statement: Private

Objective

The purposes of this verification exercise are, by review of objective evidence, to independently review:

- Whether the GHG emissions are as declared by the organization's GHG assertion
- The data reported are accurate, complete, consistent, transparent and free of material error or omission.

Criteria

Criteria against which the verification assessment is undertaken are the principles of ISO 14064-1:2018

Materiality

The materiality required of the verification was considered by SGS to 5%, based on the needs of the intended user of the GHG Assertion.

Conclusion

GIGA-BYTE provided the GHG assertion based on the requirements of ISO 14064-1: 2018. The GHG information for the period 01 January 2022 to 31 December 2022 disclosing emissions of 6,621,094.593 metric tonnes of CO₂ equivalent and 0.0000 metric tonnes of direct CO₂ emissions from the combustion of biomass are verified by SGS to the level of agreed assurance for category 1 and category 2 of HQ/ Taipei Silicon Valley Park Office/ Ping-Jen Plant is reasonable assurance.

The level of agreed assurance for category 1 and category 2 of other sites that are verified remotely is limited assurance.

Category 3 till category 6 agreed is that of limited assurance, consistent with the agreed verification scope, objectives and criteria.

The emission of each site is described as below:

Unit: tonnes of CO₂e

Site	Direct emissions	Indirect emissions	Total GHG emissions
Main Office	293.2686	6,574,596.1624	6,574,889.431

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SGS's approach is risk-based, drawing on an understanding of the risks associated with reporting GHG emissions information and the controls in place to mitigate these. Our examination includes assessment, on a test basis, of evidence relevant to the amounts and disclosures in relation to the organization's reported GHG emissions.

We planned and performed our work to obtain the information, explanations, and evidence that we considered necessary to provide a reasonable level of assurance that the GHG emissions of category 1 and category 2, and limited level of assurance of category 3 till category 6 for the period 01 January 2022 to 31 December 2022 are fairly stated.

We conducted our verification with regard to the GHG assertion of GIGA-BYTE which included assessment of GHG information system, monitoring and reporting plan/protocol. This assessment included the collection of evidence supporting the reported data, and checking whether the provisions of the protocol reference, were consistently and appropriately applied.

In SGS's opinion the presented GHG assertion

- is materially correct and is a fair representation of the GHG data and information, and
- is prepared in accordance with ISO14064-1:2018 on GHG quantification, monitoring and reporting.

Confidentiality

The reports and attachments may contain relevantly confidential information of the clients. In addition to being submitted as governmental application or certification documents, the reports and attachments are not allowed to be edited, duplicated, or published without the clients' agreement in written form.

Avoidance of Conflict of Interest

The reports and attachments are completely complied with the standards and procedures that related authorities established. The reports and attachments of auditing process are conduct with fairness and honesty. If not, the auditing institution not only has to bear the relevant compensation duties, but also to receive legal charge and punishment.

This statement shall be interpreted with the GHG assertion of GIGA-BYTE as a whole.

Verifier Group

Above statements coincide with auditing process with fairness and impartiality and aim at the emission of year 2022 of clients.

Lead Verifier:

Andy Hsu

Verifier:

Hans Lin

Ocean Wu

Dr. Lin

Sunny Chang

Aiden Tseng

Note: This Statement is issued, on behalf of Client, by SGS Taiwan Ltd. ("SGS") under its General Conditions for Greenhouse Gas Verification Services available at http://www.sgs.com/terms_and_conditions.htm. The findings recorded hereon are based upon an audit performed by SGS. A full copy of this statement, the findings and the supporting GHG Assertion may be consulted at GIGA-BYTE, No.6, Baoqiang Rd., Xindian Dist., New Taipei City 231, Taiwan, This Statement does not relieve Client from compliance with any bylaws, federal, national or regional acts and regulations or with any guidelines issued pursuant to such regulations. Stipulations to the contrary are not binding on SGS and SGS shall have no responsibility vis-à-vis parties other than its Client.