

Greenhouse Gas Verification Opinion

The inventory of Greenhouse Gas emissions in year 2024 of

Kwantex Research Inc.

No.7, Lane 376, Zong-Zeng Rd., Kwanmiao District,
Tainan City 718012, Taiwan

has been verified in accordance with ISO 14064-3:2019 as meeting the requirements of

ISO 14064-1:2018

Opinion Type: Modified

Direct emissions

111.2348 tonnes of CO₂e

Indirect emissions

19,831.3300 tonnes of CO₂e

Direct emissions and indirect emissions

19,942.565 tonnes of CO₂e

Authorized by

Stephen Pao

Business Assurance Director

Date: 27 November 2025

Version 1

TGP56B-15-1 2501

SGS Taiwan Ltd.

No. 136-1, Wu Kung Road, New Taipei Industrial Park,

Wu Ku District, New Taipei City 248016, Taiwan

t (02) 22993279 f (02)22999453 www.sgs.com



Validation and Verification

VB002

The emission of each category is described as below:

Unit: tonnes of CO₂e

Reporting Boundaries		GHG Emissions	
Inventory categories	Description		
Direct emissions		Direct emissions from stationary combustion	1.8300
		Direct emissions from mobile combustion	74.4575
		Direct process emissions and removals from industrial processes	0.0000
		Direct fugitive emissions arise from the release of GHGs in anthropogenic systems	34.9473
		Direct emissions and removals from land use, land use change and forestry	0.0000
Indirect emissions	Imported energy	Indirect GHG emissions from imported electricity	375.6586
	Transportation	Emissions from raw material transportation (including land transportation of wire rods, screws, laboratory chemicals, and packaging consumables, where only the top three categories with an annual inbound volume share of ≥3% are subject to inventory)	86.1314
		Emissions from product transportation	2,451.3424
		Emissions from employee commuting	38.5519
		Emissions from business travel	32.7336
	Products used by an organization	Emissions from purchased commodities (wire rod/electricity/LPG/diesel/gasoline/tap water)	16,844.5211
		Emissions from waste transport and disposal	2.3910
	Associated with the use of products from the organization	N/A	--
	Other sources	N/A	--
	Direct emissions and indirect emissions		19,942.565

SGS has been contracted for the verification of direct and indirect Greenhouse Gas emissions in accordance with

ISO 14064-3:2019

as provided by Kwantex Research Inc. (hereinafter referred to as “Kwantex”), No.7, Lane 376, Zong-Zeng Rd., Kwanmiao District, Tainan City 718012, Taiwan, in the GHG Statement in the form of GHG report.

Roles and responsibilities

- The management of Kwantex 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.
- The verification was based on the verification scope, objectives and criteria as agreed on 12 April 2023.
- Verification Criteria: ISO 14064-1:2018
- Verification Period: 28 August 2025 to 23 September 2025.

Scope

- GHG information for the following period was verified: 01 January 2024 to 31 December 2024
- Location/boundary of the activities:
 - No.7, Lane 376, Zong-Zeng Rd., Kwanmiao District, Tainan City 718012, Taiwan
- 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: MOENV(2024.02.05)
 - Indirect emissions:
 - Electricity emission factor is 0.474 kgCO₂e/kwh (Announced by Energy Administration, Ministry of Economic Affairs in 2025).
 - The secondary database has aiwan High-Speed Railway Transportation Service Carbon Footprint, CSC wire rod carbon footprint (2022/11/21~2024/11/20), Bureau of Energy, Ministry of Economic Affairs (109 Year electric scooter), Simapro 9.5.0.0.
- The level of assurance for category 1 and category 2 agreed is that of reasonable assurance. Category 3 till category 6 agreed is that of limited assurance.

- Materiality : 5%
- The version of inventory sheet: 2025/09/24, V4
- The version of GHG statement: 2025/09/24, Rev.4.0
- Intended user of the verification opinion: 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 statement
- The data reported are accurate, complete, consistent, transparent and free of material error or omission.

Conclusion

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 the GHG emissions are free from material misstatement.

- The greenhouse gas emissions is 19,942.565 metric tonnes of CO₂ equivalent
- The emissions from the combustion of biomass is 0.0000 metric tonnes of CO₂ equivalent

The emission of each category is described as below:

Unit: tonnes of CO₂e

Reporting Boundaries			GHG Emissions
Inventory categories	Description		
Direct emissions	Direct emissions from stationary combustion		1.8300
	Direct emissions from mobile combustion		74.4575
	Direct process emissions and removals from industrial processes		0.0000
	Direct fugitive emissions arise from the release of GHGs in anthropogenic systems		34.9473
	Direct emissions and removals from land use, land use change and forestry		0.0000
Indirect emissions	Imported energy	Indirect GHG emissions from imported electricity	375.6586
	Transportation	Emissions from raw material transportation (including land transportation of wire rods, screws, laboratory chemicals, and packaging consumables, where only the top three categories with an annual inbound volume share of ≥3% are subject to inventory)	86.1314
		Emissions from product transportation	2,451.3424

Reporting Boundaries		GHG Emissions
Inventory categories	Description	
	Emissions from employee commuting	38.5519
	Emissions from business travel	32.7336
Products used by an organization	Emissions from purchased commodities (wire rod/electricity/LPG/diesel/gasoline/tap water)	16,844.5211
	Emissions from waste transport and disposal.	2.3910
Associated with the use of products from the organization	N/A	--
Other sources	N/A	--
Direct emissions and indirect emissions		19,942.565

- The opinion of SGS is modified in accordance with the following described circumstances.
 - The verifier has sufficient and appropriate evidence to support the material emissions, removals, or storage.
 - The verifier applies appropriate criteria for the material emissions, removals, or storage.
 - When the verifier intends to rely on relevant controls, the effectiveness of those controls has been assessed.
 - The verifier, applying the ISO 14064-1:2018 standard, presents the following findings. After adjustments and corrections, no material errors were identified.
 - The procedure manual and report have been updated in wording in accordance with the latest laws and standards (e.g., legal references, competent authorities, and emission factor versions), and inconsistencies in the organizational name, organizational chart of the GHG Inventory Promotion Committee, and the category numbering in the materiality assessment tables have been corrected for consistency.
 - In terms of emission sources, non-Kyoto GHGs have been removed, and the quantification boundaries of electricity, water, and business travel emission sources have been supplemented in the report.
 - Activity data have been revised in accordance with supporting evidence.
- Retention Limitation: NA

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 opinion shall be interpreted with the GHG statement of Kwantex as a whole.

Verifier Group

Above opinions coincide with auditing process with fairness and impartiality and aim at the emission of year 2024 of clients.


Lead Verifier:



Team Leader
under Witness:



Verifier:



Note: This opinion 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 opinion, the findings and the supporting GHG Statement may be consulted at Kwantex Research Inc., No.7, Lane 376, Zong-Zeng Rd., Kwanmiao District, Tainan City 718012, Taiwan , This opinion 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.