

Greenhouse Gas Verification Opinion

The inventory of Greenhouse Gas emissions in year 2024 of

King Yuan Electronics Co., Ltd.

No. 118, Chung-Hua Rd., Chu-Nan,
Miao-Li Hsien 350, Taiwan, R.O.C.

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

WBCSD/WRI Greenhouse Gas (GHG) Protocol

Opinion Type: Modified

Direct emissions

7,894.6663 tonnes of CO₂e

Energy Indirect emissions

307,208.9544 tonnes of CO₂e

Other Indirect emissions

478,412.2164 tonnes of CO₂e

Direct emissions and indirect emissions

793,515.837 tonnes of CO₂e

Authorized by



Stephen Pao

Business Assurance Director

Date: 16 May 2025

Version 1

TGP56B-15-2 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



The data of the verification result of GHG emissions is described as below:

Operational boundaries		GHG Emissions (tonnes of CO ₂ e)
Inventory categories	Description	
Scope 1: Direct emissions from owned/controlled operations	The direct GHG emissions cover stationary, mobile, process and fugitive emission sources.	7,894.6663
Scope 2: Indirect emissions from the use of purchased electricity, steam, heating, and cooling	The indirect energy GHG emissions cover energy such as electricity and steam.	307,208.9544
Upstream scope 3 emissions		
Category 1: Purchased goods and services	Includes raw materials, general supplies, bulk gases (e.g., nitrogen), and tap water.	80,099.1530
Category 2: Capital goods	Includes machinery, communication devices, construction equipment, and office furniture.	310,895.4018
Category 3: Fuel- and energy-related activities (not included in scope 1 or scope 2)	Includes upstream activities of purchased fuels and electricity, such as oil, diesel, solar power, and grid mix.	63,349.1302
Category 4: Upstream transportation and distribution	Includes road freight, air freight, and marine shipping of purchased goods, bulk gases, and capital goods by third parties.	12,349.5223
Category 5: Waste generated in operations	Includes the transportation and treatment of operational waste by external providers.	334.5265
Category 6: Business travel	Includes business trips via train, high-speed rail, metro, bus, taxis, motorcycles, and airplanes.	291.3481
Category 7: Employee commuting	Includes commuting by motorcycle, e-scooter, bus, company shuttle, car (gasoline, diesel, electric, hybrid), taxi, and railway.	4,167.0408
Category 8: Upstream leased assets	NA	--
Downstream scope 3 emissions		
Category 9: Downstream transportation and distribution	Includes customer returns or inter-facility shipments by air or land.	4,475.6295
Category 10: Processing of sold products	NA	--
Category 11: Use of sold products	NA	--
Category 12: End-of-life treatment of sold products	NA	--
Category 13: Downstream leased assets	NA	--
Category 14: Franchises	NA	--
Category 15: Investments	Emissions from equity investments based on ownership share in investee companies.	2,450.4642

Operational boundaries		GHG Emissions (tonnes of CO ₂ e)
Inventory categories	Description	
Direct emissions and indirect emissions		793,515.837

The emission of each site is described as below:

Unit: tonnes of CO₂e

Site	Direct emissions	Energy Indirect emissions	Other Indirect emissions	Total GHG emissions
Hsin-Chu plant	434.0192	5,583.0028	1,713.2459	7,730.268
Chu-Nan plant (CH1~CH5)	5,359.7566	224,923.4280	381,163.3027	611,446.487
Tong-Luo plant	2,100.4162	76,698.3192	95,534.7988	174,333.534
KYEC USA Corp.	0.1953	-	-	0.195
KYEC Japan. K.K.	0.1953	3.6699	0.7517	4.617
KYEC SINGAPORE PTE. LTD.	0.0837	0.5345	0.1173	0.736
KYEC Investment International Co., Ltd.	0.0000	0.0000	0.0000	0.0000
KYEC Technology Management Co., Ltd.	0.0000	0.0000	0.0000	0.0000
KYEC Microelectronics Co., Ltd.	0.0000	0.0000	0.0000	0.0000

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

ISO 14064-3:2019

as provided by King Yuan Electronics Co., Ltd. (hereinafter referred to as “KYEC”), No. 118, Chung-Hua Rd., Chu-Nan, Miao-Li Hsien 350, Taiwan, R.O.C., in the GHG Statement in the form of GHG report.

Roles and responsibilities

- The management of KYEC 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 15 August 2024.
- Verification Criteria: WBCSD/WRI Greenhouse Gas (GHG) Protocol
- Verification Period: 21 January 2025 to 19 February 2025.

Scope

- GHG information for the following period was verified: 01 January 2024 to 31 December 2024
- Location/boundary of the activities:
 - Hsin-Chu plant:
No. 81, Sec. 2, Gongdaowu Rd. Hsinchu City 300, Taiwan, R.O.C.
 - Chu-Nan plant (CH1~CH5):
No. 118, Chung-Hua Rd., Chu-Nan, Miao-Li Hsien 350, Taiwan, R.O.C.
No. 8, Lane 228, Chung-Hua Rd., Chu-Nan, Miao-Li Hsien 350, Taiwan, R.O.C.
 - Tong-Luo plant:
No. 8, Tongke N. Rd., Tong-Luo, Miao-Li Hsien 366, Taiwan, R.O.C.
 - KYEC USA Corp.
101 Meto Drive., #540 San Jose, CA 95110 USA.
 - KYEC Japan K.K.
2-3-8 Momochihama, Sawara-ku, Fukuoka 814-0001 Japan.
 - KYEC SINGAPORE PTE. LTD.
750A CHAI CHEE ROAD, #07-22, ESR BIZPARK @ CHAI CHEE, Singapore 469001
 - KYEC Investment International Co., Ltd.
Wickhams Cay II, Road Town Tortola, VG1110, British Virgin Islands.
 - KYEC Technology Management Co., Ltd.
Portcullis TrustNet Chambers, P.O. Box 1225, Apia, Samoa.
 - KYEC Microelectronics Co., Ltd.
P.O. Box 2804, George Town, Grand Cayman, Cayman Islands.
- 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)
 - Indirect emissions:
 - Electricity emission factor is 0.474 kgCO₂e/kwh (Announced by Energy Administration, Ministry of Economic Affairs in 2024).
 - The secondary database has Carbon Footprint Information Platform, Ecoinvent 3.10, Vehicle Life Cycle Assessment in Taiwan..
- The level of assurance for scope 1 and scope 2 agreed is that of reasonable assurance.
scope 3 agreed is that of limited assurance.
- Materiality : 5%

- The version of inventory sheet: 20250418
- The version of GHG statement: 20250418
- 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 793,515.837 metric tonnes of CO₂ equivalent
- The emissions from the combustion of biomass is 0.000 metric tonnes of CO₂ equivalent

The emission of each category is described as below:

Operational boundaries		GHG Emissions (tonnes of CO ₂ e)
Inventory categories	Description	
Scope 1: Direct emissions from owned/controlled operations	The direct GHG emissions cover stationary, mobile, process and fugitive emission sources.	7,894.6663
Scope 2: Indirect emissions from the use of purchased electricity, steam, heating, and cooling	The indirect energy GHG emissions cover energy such as electricity and steam.	307,208.9544
Upstream scope 3 emissions		
Category 1: Purchased goods and services	Includes raw materials, general supplies, bulk gases (e.g., nitrogen), and tap water.	80,099.1530
Category 2: Capital goods	Includes machinery, communication devices, construction equipment, and office furniture.	310,895.4018
Category 3: Fuel- and energy-related activities (not included in scope 1 or scope 2)	Includes upstream activities of purchased fuels and electricity, such as oil, diesel, solar power, and grid mix.	63,349.1302

Operational boundaries		GHG Emissions (tonnes of CO ₂ e)
Inventory categories	Description	
Category 4: Upstream transportation and distribution	Includes road freight, air freight, and marine shipping of purchased goods, bulk gases, and capital goods by third parties.	12,349.5223
Category 5: Waste generated in operations	Includes the transportation and treatment of operational waste by external providers.	334.5265
Category 6: Business travel	Includes business trips via train, high-speed rail, metro, bus, taxis, motorcycles, and airplanes.	291.3481
Category 7: Employee commuting	Includes commuting by motorcycle, e-scooter, bus, company shuttle, car (gasoline, diesel, electric, hybrid), taxi, and railway.	4,167.0408
Category 8: Upstream leased assets	NA	--
Downstream scope 3 emissions		
Category 9: Downstream transportation and distribution	Includes customer returns or inter-facility shipments by air or land.	4,475.6295
Category 10: Processing of sold products	NA	--
Category 11: Use of sold products	NA	--
Category 12: End-of-life treatment of sold products	NA	--
Category 13: Downstream leased assets	NA	--
Category 14: Franchises	NA	--
Category 15: Investments	Emissions from equity investments based on ownership share in investee companies.	2,450.4642
Direct emissions and indirect emissions		793,515.837

The emission of each site is described as below:

Unit: tonnes of CO₂e

Site	Direct emissions	Energy Indirect emissions	Other Indirect emissions	Total GHG emissions
Hsin-Chu plant	434.0192	5,583.0028	1,713.2459	7,730.268
Chu-Nan plant (CH1~CH5)	5,359.7566	224,923.4280	381,163.3027	611,446.487
Tong-Luo plant	2,100.4162	76,698.3192	95,534.7988	174,333.534
KYEC USA Corp.	0.1953	-	-	0.195
KYEC Japan. K.K.	0.1953	3.6699	0.7517	4.617

KYEC SINGAPORE PTE. LTD.	0.0837	0.5345	0.1173	0.736
KYEC Investment International Co., Ltd.	0.0000	0.0000	0.0000	0.0000
KYEC Technology Management Co., Ltd.	0.0000	0.0000	0.0000	0.0000
KYEC Microelectronics Co., Ltd.	0.0000	0.0000	0.0000	0.0000

- 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 WBCSD/WRI Greenhouse Gas (GHG) Protocol standard, presents the following findings. After adjustments and corrections, no material errors were identified.
 - The revised opinion has been supported with appropriate evidence.
 - The Greenhouse Gas Report and Inventory has been supplemented and revised based on 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 KYEC 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:

Lens Lin

Verifier:

Bob Lu

Mike Huang

Carol Chen

Sunny Chung

Roya Lo

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 King Yuan Electronics Co., Ltd., No. 118, Chung-Hua Rd., Chu-Nan, Miao-Li Hsien 350, Taiwan, R.O.C., 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.