

Greenhouse Gas Verification Opinion

The inventory of Greenhouse Gas emissions in year 2025 of

TAIWAN HIGH SPEED RAIL CORPORATION

13F~15F., No. 66, Jingmao 2nd Rd., Nangang Dist., Taipei City 115, Taiwan (R.O.C.)

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

ISO 14064-1:2018

Opinion Type: Modified

Direct emissions

7,861.7638 tonnes of CO₂e

Indirect emissions

425,467.9690 tonnes of CO₂e

Direct emissions and indirect emissions

433,329.733 tonnes of CO₂e

Authorized by



Stephen Pao

Business Assurance Director

Date: 28 May 2026

Version 1

TGP56B-15-1 2601

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	36.4030
		Direct emissions from mobile combustion	1,315.8786
		Direct process emissions and removals from industrial processes	0.0000
		Direct fugitive emissions arise from the release of GHGs in anthropogenic systems	6,509.4822
		Direct emissions and removals from land use, land use change and forestry	0.0000
Indirect emissions	Imported energy	Indirect emissions from purchased electricity	317,975.9063
	Transportation	Indirect emissions from upstream transportation and distribution include greenhouse gas emissions from the transportation of raw materials and consumables purchased for production.	154.6279
		Indirect emissions from downstream transportation and distribution are calculated based on the annual greenhouse gas emissions from T-Shopping shipments to the logistics center.	0.0235
		Indirect emissions from employee commuting include: driving private cars, taking public transportation, and taxis.	3,620.7422
		Indirect emissions from business travel include: air travel, domestic public transport, and taxis.	130.5039
	Products used by an organization	Indirect Emissions from Purchased Goods : - Administrative Category: Calculate four items: cleaning supplies (hand towels, toilet paper, etc.), alcohol, water dispenser filters, and photocopy paper. The Taoyuan OMC Building and the Taipei Headquarters have added stationery items. The total annual purchase volume is estimated by back-calculating the proportion of physical purchases in general operating costs. - Chemicals Category: Chemicals items for 2025. - Documents Category: Purchase volume of High Speed Rail paper magnetic tickets, ticket forms, receipt rolls, and contactless chip cards (CSC). - Production-related emissions from purchased energy (electricity and oil), but not included in categories 1 and 2.	93,574.1223
		Indirect emissions from capital goods are calculated by taking inventory of all fixed assets in 2025, then calculating computer information equipment such as computers, tablets, servers, screens, and mobile devices, and extrapolating the results back to 100%.	180.3967
		Indirect emissions from outsourced solid and liquid waste treatment include: waste treatment and transportation.	1,448.6152
		Indirect discharge of electricity and tax, inclusive: electricity and water consumption.	9.3956

Reporting Boundaries			GHG Emissions
Inventory categories		Description	
Indirect emissions	Associated with the use of products from the organization	Indirect discharge of wastewater rental capital, inclusive: electricity and water consumption.	8,373.6354
	Other sources	Undisclosed	NA
Direct emissions and indirect emissions			433,329.733

The emission of each site is described as below:

Unit: tonnes of CO₂e

Site	Direct emissions	Indirect emissions		Total GHG emissions
	Category 1	Category 2	Category 3~6	
Nangang Station	23.8531	8,055.5817	2,722.6245	10,802.059
Taipei Station	1.8452	5,997.8473	2,746.5549	8,746.247
Banqiao Station	3.1126	5,016.1144	2,546.5038	7,565.731
Taoyuan Station	3.1927	3,200.5647	4,803.2801	8,007.038
Hsinchu Station	6.1523	2,724.7017	1,498.3050	4,229.159
Miaoli Station	3.7106	1,046.5034	1,067.0155	2,117.230
Taichung Station	31.1615	4,972.3412	4,633.7906	9,637.293
Changhua Station	1.5405	1,185.0583	700.7688	1,887.368
Yunlin Station	294.7377	1,203.3305	755.3936	2,253.462
Chiayi Station	569.9163	2,508.5218	2,110.4657	5,188.904
Tainan Station	1.8455	1,896.7883	1,813.2126	3,711.846
Zuoying Station	1,862.8930	3,896.5573	3,587.6445	9,347.095
Liujia Depot	399.7401	593.7013	722.1843	1,715.626
Wuri Depot	586.5282	1,696.8517	1,428.5604	3,711.940
Taibao Depot	223.4539	91.8422	481.8471	797.143
Yanchao Main WorkShop	1,238.9508	3,953.5392	1,745.4982	6,937.988

Site	Direct emissions	Indirect emissions		Total GHG emissions
	Category 1	Category 2	Category 3~6	
Zuoying Depot	1,056.7206	2,629.0639	1,994.8158	5,680.600
Taoyuan OMC Building	1.4963	2,700.1218	6,426.0600	9,127.678
Taipei Headquarters	14.1070	672.9437	1,148.8483	1,835.899
Main Line (Train and Trackage Equipment)	1,536.8059	263,933.9319	64,558.6890	330,029.427

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

ISO 14064-3:2019

as provided by TAIWAN HIGH SPEED RAIL CORPORATION (hereinafter referred to as “TAIWAN HIGH SPEED RAIL”) · 13F.~15F., No. 66, Jingmao 2nd Rd., Nangang Dist., Taipei City 115, Taiwan (R.O.C.), in the GHG Statement in the form of GHG report.

Roles and responsibilities

- The management of TAIWAN HIGH SPEED RAIL 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 07 January 2026.
- Verification Criteria: ISO 14064-1:2018
- Verification Period: 25 March 2026 to 21 April 2026.

Scope

- GHG information for the following period was verified: 01 January 2025 to 31 December 2025
- Location/boundary of the activities:

Location	Address
Nangang Station	No.313, Sec. 1, Nangang Rd., Nangang Dist., Taipei City 115018 Taiwan (R.O.C.)
Taipei Station	No. 3, Beiping W. Rd., Zhongzheng District, Taipei City 100230, Taiwan (R.O.C.)
Banqiao Station	No.7, Sec. 2, Xianmin Blvd., Banqiao Dist., New Taipei City 220408, Taiwan (R.O.C.)
Taoyuan Station	No. 6, Sec. 1, Gaotie N. Rd., Cingpu Village, Zhongli Dist., Taoyuan City 320016, Taiwan (R.O.C.)
Hsinchu Station	No. 6, Gaotie 7th Rd., Zhubei City, Hsinchu County 302058, Taiwan (R.O.C.)
Miaoli Station	No. 268, Gaotie 3rd Rd., Houlong Township, Miaoli County 356002, Taiwan (R.O.C.)
Taichung Station	No.8, Jhancyuer 2nd Road, Neighbor 3, Sanhe Village, Wurih Township, Taichung County 414010, Taiwan (R.O.C.)
Changhua Station	No.99, Sec. 2, Jhancyuer Rd., Tianzhong Township, Changhua County 520013, Taiwan (R.O.C.)

Location	Address
Yunlin Station	No.301, Zhanqian E. Rd., Huwei Township, Yunlin County 632007, Taiwan (R.O.C.)
Chiayi Station	No. 168, Gaotie W. Road., Taibau Li, Taibau City , Chiayi 612001, Taiwan (R.O.C.)
Tainan Station	No.100, Guiren Blvd., Guiren Dist., Tainan City 711010, Taiwan (R.O.C.)
Zuoying Station	No. 105 Gaotie Rd., Tsoying District Kaoshiung City 813782, Taiwan (R.O.C.)
Liujia Depot	No. 55, Lane 358, Sec. 5, Xinglong Rd., Zhubei City, Hsinchu County 302053, Taiwan (R.O.C.)
Wuri Depot	No.828, Qingguang Rd., Wuri Dist., Taichung City 414018, Taiwan (R.O.C.)
Taibao Depot	No.360, Kaotie Si Rd., Taibao City, Chiayi County 612001, Taiwan (R.O.C.)
Yanchao Main WorkShop	No. 500, Gaotie-zongchang Rd., Yanchao Dist., Kaohsiung City 824005, Taiwan (R.O.C.)
Zuoying Depot	No.1999, Gaotie Rd., Renwu Dist., Kaohsiung City 814032, Taiwan (R.O.C.)
Taoyuan OMC Building	No. 2, Sec. 1, Gaotie N. Rd., Cingpu Village, Zhongli Dist., Taoyuan City 320016, Taiwan (R.O.C.)
Taipei Headquarters	13~15F., No. 66, Jingmao 2nd Rd., Nangang District, Taipei City 115605, Taiwan (R.O.C.)
Main Line (Train and Trackside Equipment)	The total length of the THSR operating route from Nangang to Zuoying is 350 kilometers.

- Types of GHGs included: CO₂, CH₄, N₂O, HFCs, PFCs, SF₆, NF₃
- The IPCC 2021 AR6 GWP values are applied in this inventory.
- Emission factor:
 - o Direct emissions: Greenhouse Gas Emission Factor, MOENV (2024.02.05).
 - o Indirect emissions:
 - Electricity emission factor is 0.474 kgCO₂e/kwh (Announced by Energy Administration, Ministry of Economic Affairs in 2025).
 - The secondary database has Carbon Footprint Information Platform,
- The level of assurance for category 1 and category 2 agreed is that of reasonable assurance. Category 3 to category 6 agreed is that of limited assurance.
- Materiality : 5%
- The version of inventory sheet: 21 April 2026
- The version of GHG statement: 21 April 2026
- 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 of category 1 and category 2 are free from material misstatement and nothing has come to our attention to cause us to believe that the GHG statement for category 3 to category 6 is materially misstated.

- The greenhouse gas emissions is 433,329.733 metric tonnes of CO₂ equivalent
- The emissions from the combustion of biomass is 0.0000 metric tonnes of CO₂ equivalent

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- The opinion of SGS is modified in accordance with the following described circumstances.
 - o The verifier has sufficient and appropriate evidence to support the material emissions, removals, or storage.
 - o The verifier applies appropriate criteria for the material emissions, removals, or storage.
 - o When the verifier intends to rely on relevant controls, the effectiveness of those controls has been assessed.

- o The verifier, applying the ISO 14064-1:2018 standard, presents the following findings. After adjustments and corrections, no material errors were identified.
 - Power purchased outside Taoyuan Station and OMC, abstract statistical quantification standards inconsistent, accuracy after balance adjustment, conformity requirements.
 - Partial emission source activity count is accurate, accurate after adjustment, and conforms to the requirements of reality.
 - A number of partial emission source activities have been completed and supplementary information has been provided.
- Retention Limitation: NA
- Additional Notes: 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 TAIWAN HIGH SPEED RAIL as a whole.

Verifier Group

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

Lead Verifier:

Kyle Lu.

Verifier:

Kai ping Teh

Carol Chen

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 TAIWAN HIGH SPEED RAIL CORPORATION, 13F.~15F., No. 66, Jingmao 2nd Rd., Nangang Dist., Taipei City 115, 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.