Statement TW23/00540GG



Greenhouse Gas Verification Statement

The inventory of Greenhouse Gas emissions in year 2022 of

WINSTAR Display Co., Ltd.

2F., No. 43, Keya Rd., Daya Dist., Taichung City 428, Taiwan



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

ISO 14064-1:2018

Direct emissions
347.2990 tonnes of CO₂e
Indirect emissions
8,309.0230 tonnes of CO₂e
Direct emissions and indirect emissions
8,656.322 tonnes of CO₂e

Authorized by

age

Stephen Pao Knowledge Deputy General Manager Date: 25 October 2023

Version 1

TGP56A-15-6 2207 SGS Taiwan Ltd. No. 136-1, Wu Kung Road, New Taipei Industrial Park, Wu Ku District, New Taipei City 24803, Taiwan t (02) 22993279 f (02)22999453 www.sgs.com







The emission of each category is described as below:

Unit: tonnes of CO2e

		Reporting Boundaries	GHG
Inventory categories		Description	Emissions
Direct emissions		This direct GHG emissions are the sum of owned or controlled by the organization within the organization.	347.2990
	Imported energy	Imported electricity	2,719.5499
Indirect emissions	Transportation	1. Emissions from transportation and goods: (1) Greenhouse gas emissions generated by the transportation process of the top 10 items purchased by WS and VS (direct raw materials), excluding group purchases that between factories. (2) The CS factory uses the raw material composition of products that implement product carbon footprints as representative raw materials. (including: direct raw materials, indirect raw materials, equipment consumables, packaging materials, factory investment, pollution prevention investment) 2. Emissions from employee commuting 3. Emissions from business travel	166.3557
	Products used by an organization	1. Emissions from purchased goods (direct raw materials/indirect raw materials/equipment consumables/packaging materials/factory input consumables/pollution prevention input consumables): (1) Calculate the top 10 items with purchase amount of WS (direct raw materials) and VS purchased goods (direct/indirect raw materials/equipment consumables/packaging materials/factory input consumables/pollution prevention input consumables), excluding group purchases that between factories. (2) The CS factory uses the raw material composition of products that implement product carbon footprints as representative raw materials. (direct/indirect raw materials/equipment consumables/packaging materials/factory input consumables/pollution prevention input consumables). 2. Emissions from upstream of energy fuel (electricity//gasoline// diesel) 3. Emissions from waste disposal. 4. Emissions from asset use (electricity/LPG)	5,423.1177
	Associated with the use of products from the organization	N/A	-
	Other sources	N/A	
Direct emis	sions and indirect	emissions	8,656.322



SGS has been contracted by WINSTAR Display Co., Ltd. (hereinafter referred to as "WINSTAR"), 2F., No. 43, Keya Rd., Daya Dist., Taichung City 428, Taiwan for the verification of direct and indirect Greenhouse Gas emissions in accordance with

ISO 14064-3:2006

as provided by WINSTAR Display Co., Ltd. (hereinafter referred to as "WINSTAR"), 2F., No. 43, Keya Rd., Daya Dist., Taichung City 428, 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 WINSTAR 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 04 August 2023 to 29 August 2023. The verification was based on the verification scope, objectives and criteria as agreed between WINSTAR and SGS on 26 December 2022.

Level of Assurance

For WINSTAR Display Co., Ltd.: 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.

For WINSTAR Display (Changshu) Co., Ltd. & Dongguan Vanstar Technology Co., Ltd.: The level of assurance agreed is limited assurance.

Scope

WINSTAR has commissioned an independent verification by SGS Taiwan of reported GHG emissions of WINSTAR arising from Office + QC (WINSTAR Display Co., Ltd.) // Design and manufacture of liquid crystal display module (WINSTAR Display (Changshu) Co., Ltd.) // Manufacture of liquid crystal display modules (Dongguan Vanstar Technology Co., Ltd.) 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 WINSTAR in year 2022
- Location/boundary of the activities:
 - 2F., No. 43, Keya Rd., Daya Dist., Taichung City 428, Taiwan
 - 4F., No. 33, Keya Rd., Daya Dist., Taichung City 428, Taiwan
 - 2F., No. 25, Keya Rd., Daya Dist., Taichung City 428, Taiwan
 - 4F., No. 25, Keya Rd., Daya Dist., Taichung City 428, Taiwan
 - No. 401, 400, Xinzhuang Road, Changshu City, Jiangsu Province, P.R. China
 - Xiangdong Industrial Zone, Guanchang Road, Ailing Kan, Dalingshan Town,
 Dongguan City, Guangdong Province, P.R. China
- Physical infrastructure, activities, technologies and processes of the organization:
 Office + QC (WINSTAR Display Co., Ltd.)
 Design and manufacture of liquid crystal display module
 (WINSTAR Display (Changshu) Co., Ltd.)
 Manufacture of liquid crystal display modules
 (Dongguan Vanstar Technology Co., Ltd.)
- GHG sources, sinks and/or reservoirs included: Sources as presented in the inventory spreadsheet provided by WINSTAR
- 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. IEA (2022)
 Emission Factors-People's Republic of China General Office of the Ministry of Ecology
 and Environment-Climate Letter [2023] No. 43 of the Environmental Protection Office
 - o Indirect emissions:
 - Taiwan electricity emission factor is 0.495 kgCO₂e/kwh (Announced by Bureau of Energy, Ministry of Economic Affairs in 2023). China electricity emission factor is 0.5703 kgCO₂e/kwh from the General Office of the Ministry of Ecology and Environment
 - The secondary database has Carbon Footprint Information Platform, Yadi Technology Group Co., Ltd.-Electric Bicycle TDR2481Z, SimaPro 9.3.0.2, ICAO Carbon Emissions Calculator, Taiwan High-Speed Railway Transportation Service Carbon Footprint, Chinese Product Full Life Cycle Greenhouse Gas Emission Coefficient Library-China High-Speed Railway, SimaPro 9.5.0.0 Ecoinvent v3, China Environmental Science-Provincial Road Traffic Carbon Dioxide Emission Factors in China



- Directed actions: NA
- GHG information for the following period was verified: 01 January 2022 to 31 December 2022
- The version of inventory sheet: 2023/08/29, v.3
- The version of GHG assertion: 2023/08, v.2.0
- 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

WINSTAR 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 8,656.322 metric tonnes of CO₂ equivalent and 0.0000 metric tonnes of direct CO₂ emissions from the combustion of biomass are verified by SGS to a reasonable level of assurance, consistent with the agreed verification scope, objectives and criteria.



The emission of each category is described as below:

Unit: tonnes of CO2e

Reporting Boundaries			GHG	
Invento	ry categories	Description	Emissions	
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Indirect emissions	Imported energy	Imported electricity	2,719.5499	
	Transportation	1. Emissions from transportation and goods: (1) Greenhouse gas emissions generated by the transportation process of the top 10 items purchased by WS and VS (direct raw materials), excluding group purchases that between factories. (2) The CS factory uses the raw material composition of products that implement product carbon footprints as representative	166.3557	
	Transportation	raw materials. (including: direct raw materials, indirect raw materials, equipment consumables, packaging materials, factory investment, pollution prevention investment) 2. Emissions from employee commuting 3. Emissions from business travel		
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	Associated with the use of products from the organization	N/A	-	
	Other sources	N/A		
Direct emis	sions and indirect	emissions	8,656.322	



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 WINSTAR Display Co., Ltd., limited level of assurance for WINSTAR Display (Changshu) Co., Ltd. & Dongguan Vanstar Technology Co., Ltd. for the period 01 January 2022 to 31 December 2022 are fairly stated.

We conducted our verification with regard to the GHG assertion of WINSTAR 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 WINSTAR 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:

Verifier:

Roya Go

Artila.

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 WINSTAR Display Co., Ltd., 2F., No. 43, Keya Rd., Daya Dist., Taichung City 428, 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.