



VERIFICATION OPINION GREENHOUSE GAS EMISSIONS

This is to verify that

CHROMA ATE INC

NO. 88, WENMAO RD., GUISHAN DIST., TAOYUAN CITY, TAIWAN (R.O.C.)

Holds Statement No: TWN18561231GT/E Rev.1

Bureau Veritas Certification (Taiwan) Co., Ltd. was engaged to conduct an independent verification of the greenhouse gas (GHG) emissions reported by CHROMA ATE INC for the period stated below. This Verification Statement applies to the related information included within the scope of work described below.

The determination of the GHG emissions is the sole responsibility of CHROMA ATE INC. BVC's sole responsibility was to provide independent verification on the accuracy of the GHG emissions reported, and on the underlying systems and processes used to collect, analyze and review the information.

Boundaries of the reporting company GHG emissions covered by the verification:

- CHROMA ATE INC. at No. 86 & 88 & 90, Wenmao Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) with detailed information as below attachments.
- Period covered by GHG emissions verification: January 1, 2023 to December 31, 2023

Emissions data verified:

- Category 1 - Direct GHG emissions and removals: 465.3452 tCO₂e
- Category 2 - Indirect GHG emissions from imported energy: 8310.0056 tCO₂e
- Category 3 - Indirect GHG emissions from transportation: 58.2819 tCO₂e
- Category 4 - Indirect GHG emissions from products used by organization: 65.9025 tCO₂e

Level of Assurance and Qualifications:

- Reasonable assurance
- Limited assurance
- This verification used a materiality threshold of 5% for aggregate errors in sampled data for each of the above indicators

Assurance Opinion:

Based on the process and procedures conducted, we conclude that the GHG statement for Category 1 and 2 is materially correct and is a fair representation of the GHG data and information, and is prepared in accordance with the ISO 14064-1:2018.

There is no evidence that the GHG statement for Category 3 and 4 is not materially correct and is not a fair representation of GHG data and information and has not been prepared in accordance with the ISO 14064-1:2018.

It is our opinion that CHROMA ATE INC has established appropriate systems for the collection, aggregation and analysis of quantitative data for determination of these GHG emissions for the stated period and boundaries.

Ryan Man, Technical Reviewer
Originally Issue: 25/4/2024


Pei Hsu, CER Manager
Latest Issue: 25/4/2024


Validation and Verification
VB005



Greenhouse Gas Statement:

- CHROMA ATE INC.(Head Office): No. 86 & 88 & 90, Wenmao Rd., Guishan Dist., Taoyuan City , Taiwan (R.O.C.)
(DYNASCAN TECHNOLOGY CORP. , ADIVIC TECHNOLOGY CORP. and four Telecommunications Company Base Station are not included.)

Categories	Subcategories	Remark	tCO ₂ e	
Category 1: Direct GHG emissions and removals	1.1 Direct emissions from stationary combustion	--	88.3276	274.2141
	1.2 Direct emissions from mobile combustion	--	141.2085	
	1.3 Direct process emissions and removals arise from industrial processes	--	0.0000	
	1.4 Direct fugitive emissions arise from the release of greenhouse gases in anthropogenic systems	--	44.678	
	1.5 Direct emissions and removals from Land Use, Land Use Change and Forestry	--	0.0000	
Category 2: Indirect GHG emissions from imported energy	2.1 Indirect emissions from imported electricity	Location based approach*	5,401.0509	5,401.0509*
		Market based approach	N.A.	
Category 3: Indirect GHG emissions from transportation	2.2 Indirect emissions from imported energy	N.A.	N.A.	58.2819
	3.1 Emissions from Upstream transport and distribution for goods	N.S.	N.A.	
	3.2 Emissions from Downstream transport and distribution for goods	N.S.	N.A.	
	3.3 Emissions from Employee commuting includes emissions	Emission of employee commuting by shuttle buses.	58.2819	
	3.4 Emissions from Client and visitor transport	N.S.	N.A.	
Category 4: Indirect GHG emissions from products used by organization	3.5 Emissions from Business travels	N.S.	N.A.	35.0861
	4.1 Emissions from Purchased goods	N.S.	N.A.	
	4.2 Emissions from Capital goods	N.S.	N.A.	
	4.3 Emissions from the disposal of solid and liquid waste	Emissions from Incineration, Thermal Treatment and Physical Thermal Treatment of Solid Wastes.	35.0861	
	4.4 Emissions from the use of assets	N.S.	N.A.	
Category 5: Indirect GHG emissions associated with the use of products from the organization	4.5 Emissions from the use of services that are not described in the above subcategories	N.S.	N.A.	N.A.
	5.1 Emissions or removals from the use stage of the product	N.S.	N.A.	
	5.2 Emissions from downstream leased assets	N.S.	N.A.	
	5.3 Emissions from end of life stage of the product	N.S.	N.A.	
Category 6: Indirect GHG emissions from other sources	5.4 Emissions from investments	N.S.	N.A.	N.A.

#: N.S.: Non-significant ; N.A.: Not available



- HUAYA FACTORY: No. 68, Huaya 1ST Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)

Categories	Subcategories	Remark	tCO ₂ e	
Category 1: Direct GHG emissions and removals	1.1 Direct emissions from stationary combustion	--	44.1277	60.9012
	1.2 Direct emissions from mobile combustion	--	0.0000	
	1.3 Direct process emissions and removals arise from industrial processes	--	0.0000	
	1.4 Direct fugitive emissions arise from the release of greenhouse gases in anthropogenic systems	--	16.7735	
	1.5 Direct emissions and removals from Land Use, Land Use Change and Forestry	--	0.0000	
Category 2: Indirect GHG emissions from imported energy	2.1 Indirect emissions from imported electricity	Location based approach*	1,575.6685	1,575.6685*
		Market based approach	N.A.	
	2.2 Indirect emissions from imported energy	N.A.	N.A.	
Category 3: Indirect GHG emissions from transportation	3.1 Emissions from Upstream transport and distribution for goods	N.S.	N.A.	N.A.
	3.2 Emissions from Downstream transport and distribution for goods	N.S.	N.A.	
	3.3 Emissions from Employee commuting includes emissions	Emission is counted in HQ	N.A.	
	3.4 Emissions from Client and visitor transport	N.S.	N.A.	
	3.5 Emissions from Business travels	N.S.	N.A.	
Category 4: Indirect GHG emissions from products used by organization	4.1 Emissions from Purchased goods	N.S.	N.A.	20.9286
	4.2 Emissions from Capital goods	N.S.	N.A.	
	4.3 Emissions from the disposal of solid and liquid waste	Emissions from Incineration, Thermal Treatment and Physical Thermal Treatment of Solid Wastes.	20.9286	
	4.4 Emissions from the use of assets	N.S.	N.A.	
	4.5 Emissions from the use of services that are not described in the above subcategories	N.S.	N.A.	
Category 5: Indirect GHG emissions associated with the use of products from the organization	5.1 Emissions or removals from the use stage of the product	N.S.	N.A.	N.A.
	5.2 Emissions from downstream leased assets	N.S.	N.A.	
	5.3 Emissions from end of life stage of the product	N.S.	N.A.	
	5.4 Emissions from investments	N.S.	N.A.	
Category 6: Indirect GHG emissions from other sources		N.S.	N.A.	N.A.

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- Hsinchu Branch Office: 6F, No. 5, Technology Rd., Science Park., Hsinchu City, Taiwan (R.O.C.) (Testatr Electronics Corporation is not included.)

Categories	Subcategories	Remark	tCO ₂ e	
Category 1: Direct GHG emissions and removals	1.1 Direct emissions from stationary combustion	--	0.2307	28.5123
	1.2 Direct emissions from mobile combustion	--	20.6316	
	1.3 Direct process emissions and removals arise from industrial processes	--	0.0000	
	1.4 Direct fugitive emissions arise from the release of greenhouse gases in anthropogenic systems	--	7.6500	
	1.5 Direct emissions and removals from Land Use, Land Use Change and Forestry	--	0.0000	
Category 2: Indirect GHG emissions from imported energy	2.1 Indirect emissions from imported electricity	Location based approach*	557.8870	557.8870*
		Market based approach	N.A.	
Category 3: Indirect GHG emissions from transportation	2.2 Indirect emissions from imported energy	N.A.	N.A.	N.A.
	3.1 Emissions from Upstream transport and distribution for goods	N.S.	N.A.	
	3.2 Emissions from Downstream transport and distribution for goods	N.S.	N.A.	
	3.3 Emissions from Employee commuting includes emissions	N.S.	N.A.	
	3.4 Emissions from Client and visitor transport	N.S.	N.A.	
Category 4: Indirect GHG emissions from products used by organization	3.5 Emissions from Business travels	N.S.	N.A.	2.9320
	4.1 Emissions from Purchased goods	N.S.	N.A.	
	4.2 Emissions from Capital goods	N.S.	N.A.	
	4.3 Emissions from the disposal of solid and liquid waste	Emissions from Incineration of Solid Wastes	2.9320	
	4.4 Emissions from the use of assets	N.S.	N.A.	
Category 5: Indirect GHG emissions associated with the use of products from the organization	4.5 Emissions from the use of services that are not described in the above subcategories	N.S.	N.A.	N.A.
	5.1 Emissions or removals from the use stage of the product	N.S.	N.A.	
	5.2 Emissions from downstream leased assets	N.S.	N.A.	
	5.3 Emissions from end of life stage of the product	N.S.	N.A.	
Category 6: Indirect GHG emissions from other sources	5.4 Emissions from investments	N.S.	N.A.	N.A.

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- Kaohsiung Branch Office: No. 1, Neihuan E. Rd., Nanzi Dist., Kaohsiung City, Taiwan

Categories	Subcategories	Remark	tCO ₂ e	
Category 1: Direct GHG emissions and removals	1.1 Direct emissions from stationary combustion	--	0.0972	101.7176
	1.2 Direct emissions from mobile combustion	--	24.2752	
	1.3 Direct process emissions and removals arise from industrial processes	--	0.0000	
	1.4 Direct fugitive emissions arise from the release of greenhouse gases in anthropogenic systems	--	77.3452	
	1.5 Direct emissions and removals from Land Use, Land Use Change and Forestry	--	0.0000	
Category 2: Indirect GHG emissions from imported energy	2.1 Indirect emissions from imported electricity	Location based approach*	775.3992	775.3992*
		Market based approach	N.A.	
	2.2 Indirect emissions from imported energy	N.S.	N.A.	
Category 3: Indirect GHG emissions from transportation	3.1 Emissions from Upstream transport and distribution for goods	N.S.	N.A.	N.A.
	3.2 Emissions from Downstream transport and distribution for goods	N.S.	N.A.	
	3.3 Emissions from Employee commuting includes emissions	N.S.	N.A.	
	3.4 Emissions from Client and visitor transport	N.S.	N.A.	
	3.5 Emissions from Business travels	N.S.	N.A.	
Category 4: Indirect GHG emissions from products used by organization	4.1 Emissions from Purchased goods	N.S.	N.A.	6.9558
	4.2 Emissions from Capital goods	N.S.	N.A.	
	4.3 Emissions from the disposal of solid and liquid waste	N.S.	N.A.	
	4.4 Emissions from the use of assets	Emissions from water fertilizer treatment and solid waste incineration	6.9558	
	4.5 Emissions from the use of services that are not described in the above subcategories	N.S.	N.A.	
Category 5: Indirect GHG emissions associated with the use of products from the organization	5.1 Emissions or removals from the use stage of the product	N.S.	N.A.	N.A.
	5.2 Emissions from downstream leased assets	N.S.	N.A.	
	5.3 Emissions from end of life stage of the product	N.S.	N.A.	
	5.4 Emissions from investments	N.S.	N.A.	
Category 6: Indirect GHG emissions from other sources		N.S.	N.A.	N.A.

#: N.S.: Non-significant ; N.A.: Not available



GHG Verification Protocols used to conduct the verification:

- ISO 14064-1:2018, ISO 14064-3:2019
- Period covered by GHG emissions verification: January 1, XXXX to December 31, XXXX
- GHG covered: Carbon dioxide (CO₂), Methane (CH₄), Nitrous oxide (N₂O), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), Sulfur hexafluoride (SF₆) and Nitrogen trifluoride (NF₃)
- Global warming potential (GWP): 2023 IPCC Sixth Assessment Report (AR6)
- Electricity Emission Factor: 2023 Electricity Retailing Utility Enterprise Electricity Carbon Emission Factor (0.495 kgCO₂e/kWh) published by Bureau of Energy, Ministry of Economic Affairs, R.O.C.
- Approach for consolidating GHG emissions: Operational Control
- GHG Inventory: 240401_A7__inventory, 240401_Linkou__inventory, 240401_Hsinchu__inventory, 240411_Kaohsiung__Inventory, 240416_2023Chroma Inventory _summary
- GHG Report: 240416_2023 Chroma GHG Inventory Report

GHG Verification Methodology:

- Interviews with relevant personnel of CHROMA ATE INC.;
- Review of documentary evidence produced by CHROMA ATE INC.;
- Review of CHROMA ATE INC data and information systems and methodology for collection, aggregation, analysis and review of information used to determine GHG emissions at CHROMA ATE INC Headquarters and during site visits to Site Headquarter / Huaya Factory / Hsinchu Branch Office; and
- Audit of sample of data used by CHROMA ATE INC to determine GHG emissions.

Verification Team:

- Lead Verifier: Wendy Wang

- Verifier: Gary Hsu

, Carter Liu

Statement of independence, impartiality and competence

The Bureau Veritas Group is an independent professional services company that specializes in Quality, Health, Safety, Social and Environmental management with over 190 years history in providing independent assurance services.

No member of the verification team has a business relationship with CHROMA ATE INC., its Directors or Managers beyond that required of this assignment. We conducted this verification independently and to our knowledge there has been no conflict of interest.

The Bureau Veritas Group has implemented a Code of Ethics across the business to maintain high ethical standards among staff in their day-to-day business activities.

The verification team has extensive experience in conducting assurance over environmental, social, ethical and health and safety information, systems and processes, has over 20 years combined experience in this field and an excellent understanding of The Bureau Veritas Group standard methodology for the verification of greenhouse gas emissions data.

This verification statement, including the opinion expressed herein, is provided to CHROMA ATE INC. and is solely for the benefit of CHROMA ATE INC. in accordance with the terms of our agreement. We consent to the release of this statement by you to others interest party in order to satisfy the terms of disclosure requirements but without accepting or assuming any responsibility or liability on our part to any other party who may have access to this statement.