

# Greenhouse Gas Verification Statement

The inventory of Greenhouse Gas emissions in year 2022 of

## Coretronic Corporation

No. 11, Lixing Rd., East Dist., Hsinchu Science Park,  
Hsinchu City 300, Taiwan (R.O.C.)

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

### ISO 14064-1:2018

Direct emissions

**246.0933** tonnes of CO<sub>2</sub>e

Indirect emissions

**50,545.4501** tonnes of CO<sub>2</sub>e

Direct emissions and indirect emissions

**50,791.543** tonnes of CO<sub>2</sub>e

Authorized by

Stephen Pao

Knowledge Deputy General Manager

Date: 15 March 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



Statement TW23/00043GG, continued

The emission of each category is described as below:

Unit: tonnes of CO<sub>2</sub>e

Reporting Boundaries			GHG Emissions	
Inventory categories	Description		Location-based	Market-based
Direct emissions	This direct GHG emissions are the sum of owned or controlled by the organization within the organization.		246.0933	
Indirect emissions	Imported energy	Input power	7,726.6251	7,688.4501
	Transportation	Upstream transportation and distribution Downstream transportation and distribution Employee commuting	1,307.6771	
	Products used by an organization	purchased commodity energy and resources of upstream Disposal of solid and liquid waste	41,511.1479	
	Associated with the use of products from the organization	Unquantified	—	
	Other sources	Unquantified	—	
Direct emissions and indirect emissions			50,791.543	50,753.368
Purchased Renewable Energy Certificate(s) Information				
Site/Location	Type	Renewable Energy Source/Location	Imported energy emissions	
			Location-based	Market-based
Coretronic Corporation Headquarters	T-REC	Solar energy/ Taiwan	2,300.8836	2,276.9606
The 2nd plant of Coretronic Corporation Southern Taiwan Science Park Branch	T-REC	Solar energy/ Taiwan	1,193.4523	1,179.2003

The emission of each site is described as below:

Unit: tonnes of CO<sub>2</sub>e

Site	Direct emissions	Indirect emissions	Total GHG emissions
Coretronic Corporation Headquarters	94.6096	3,455.9679	3,550.578
Coretronic Corporation Chunan Plant	74.7101	2,733.0600	2,807.770
The 1st plant of Coretronic Corporation Southern Taiwan Science Park Branch	37.1689	5,905.7395	5,942.908
The 2nd plant of Coretronic Corporation Southern Taiwan Science Park Branch	39.6047	38,450.6827	38,490.287



SGS has been contracted by Coretronic Corporation (hereinafter referred to as “Coretronic”), No. 11, Lixing Rd., East Dist., Hsinchu Science Park, Hsinchu City 300, Taiwan (R.O.C.) for the verification of direct and indirect Greenhouse Gas emissions in accordance with

**ISO 14064-3:2006**

as provided by Coretronic Corporation (hereinafter referred to as “Coretronic”), No. 11, Lixing Rd., East Dist., Hsinchu Science Park, Hsinchu City 300, Taiwan (R.O.C.), 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 Coretronic 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 02 February 2023 to 24 February 2023. The verification was based on the verification scope, objectives and criteria as agreed between Coretronic and SGS on 07 September 2022.

**Level of Assurance**

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.

**Scope**

Coretronic has commissioned an independent verification by SGS Taiwan of reported GHG emissions of Coretronic arising from Design od Digial Projector and Design and manufacture of LCD backlight module 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 Coretronic in year 2022.
- Location/boundary of the activities:
  - Coretronic Corporation Headquarters : No. 11, Lixing Rd., East Dist., Hsinchu Science Park, Hsinchu City 300, Taiwan (R.O.C.)
  - Coretronic Corporation Chunan Plant : No. 2, Kebei 5th Rd., Zhunan Township, Chunan Science Park, Miaoli County, Taiwan (R.O.C.)
  - The 1st plant of Coretronic Corporation Southern Taiwan Science Park Branch : No. 2-1, Nanke 6th Rd., Xinshi Dist., Southern Taiwan Science Park, Tainan City, Taiwan (R.O.C.)
  - The 2nd plant of Coretronic Corporation Southern Taiwan Science Park Branch : No. 6, Sec. 1, Huanxi Rd., Xinshi Dist., Tainan City, Taiwan (R.O.C.)
- Physical infrastructure, activities, technologies and processes of the organization: Design of Digital Projector and Design and manufacture of LCD backlight module.
- GHG sources, sinks and/or reservoirs included: Sources as presented in the inventory spreadsheet provided by Coretronic.
- Types of GHGs included: CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, SF<sub>6</sub>, NF<sub>3</sub>
- The IPCC 2021 AR6 GWP values are applied in this inventory.
- Emission factor:
  - Direct emissions: Greenhouse Gas Emission Factor Table (6.0.4), EPA.
  - Indirect emissions:
    - Electricity emission factor is 0.509 kgCO<sub>2</sub>e/kwh (Announced by Bureau of Energy, Ministry of Economic Affairs in 2022).
    - The secondary database has Carbon Footprint Information Platform, Ecoinvent V3.
- Directed actions: NA
- GHG information for the following period was verified: 01 January 2022 to 31 December 2022.
- The version of inventory sheet:

Coretronic Corporation Headquarters	2023/03/01 2023/03/02
Coretronic Corporation Chunan Plant	2023/03/05V1
The 1st plant of Coretronic Corporation Southern Taiwan Science Park Branch	2023/03/01
The 2nd plant of Coretronic Corporation Southern Taiwan Science Park Branch	2023/03/01 2023/03/02



- The version of GHG assertion:

Coretronic Corporation Headquarters	2023/03/01
Coretronic Corporation Chunan Plant	2023/03/06
The 1st plant of Coretronic Corporation Southern Taiwan Science Park Branch	2023/03/01
The 2nd plant of Coretronic Corporation Southern Taiwan Science Park Branch	2023/03/01

- 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

Coretronic 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 50,791.543 metric tonnes of CO<sub>2</sub> equivalent and 0.0000 metric tonnes of direct CO<sub>2</sub> 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 site is described as below:

Unit: tonnes of CO<sub>2e</sub>

Site	Direct emissions	Indirect emissions	Total GHG emissions
Coretronic Corporation Headquarters	94.6096	3,455.9679	3,550.578
Coretronic Corporation Chunan Plant	74.7101	2,733.0600	2,807.770
The 1st plant of Coretronic Corporation Southern Taiwan Science Park Branch	37.1689	5,905.7395	5,942.908
The 2nd plant of Coretronic Corporation Southern Taiwan Science Park Branch	39.6047	38,450.6827	38,490.287

Coretronic purchased 75 Renewable Energy Certificate(s) in 2022. The imported energy emissions by location-based and market-based approach shown as the following table :

Unit: tonnes of CO<sub>2e</sub>

Purchased Renewable Energy Certificate(s) Information				
Site/Location	Type	Renewable Energy Source/Location	Imported energy emissions	
			Location-based	Market-based
Coretronic Corporation Headquarters	T-REC	Solar energy/ Taiwan	2,300.8836	2,276.9606
The 2nd plant of Coretronic Corporation Southern Taiwan Science Park Branch	T-REC	Solar energy/ Taiwan	1,193.4523	1,179.2003

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 the period 01 January 2022 to 31 December 2022 are fairly stated.

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

*Kevin Hsieh*

Verifier:

*Kyle Lu.*

*Finn Han*

*John Chiang*

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](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 Coretronic Corporation, No. 11, Lixing Rd., East Dist., Hsinchu Science Park, Hsinchu City 300, Taiwan (R.O.C.), 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.