

30 January 2023

Responsible Party	Ardentec Korea	
Verification Criteria	ISO 14064-1:2018	
Reporting Period	1 January 2022 ~ 31 December 2022	
GHG Emission Results from Responsible Party's GHG Statement	Direct GHG Emissions	23.279 tonnes of CO ₂ e
	Indirect GHG Emissions from Imported Energy	1,862.464 tonnes of CO ₂ e
	Indirect GHG Emissions from Transportation	NS
	Indirect GHG Emissions from Products used by the Responsible Party	NS
	Indirect GHG Emissions Associated with the used of Products from the Responsible Party	NS
	Indirect GHG Emissions from Other Sources	NS
	Total Direct and Indirect GHG Emissions	1,885.743 tonnes of CO ₂ e
	CO ₂ Emissions from Combustion of Biomass	0 tonnes of CO ₂ e
	GHG Removals	0 tonnes of CO ₂ e
Verification Date(s):	ST1) 2023.1.17	
	ST2) 2023.1.26~27	
SGS Delivering Office:	SGS Korea Co., Ltd.	
Address:	11FL, Chongryong Bldg., 257, Hangang-daero, Yongsan-gu, Seoul, 04322, Korea	
Verification Team Leader:	Jim (JungHong) SEO	
Other Accompanying Person (Names & Roles)	N/A	



SGS has been contracted by **Ardentec Korea** (hereinafter referred to as "CLIENT"), **61,Cheongbuksandan-ro,Cheongbuk-eup,Pyeongtaek-si, Gyeonggi-do, 17792 ,Korea**, for the Greenhouse Gas (GHG) verification in accordance with ISO 14064-3:2019 as provided by **Ardentec Korea** (hereinafter referred to as "RESPONSIBLE PARTY"), **61,Cheongbuksandan-ro,Cheongbukeup,Pyeongtaek-si, Gyeonggi-do, 17792 ,Korea**, in the GHG Statement in the form of GHG Report (11 January 2023) covering GHG emissions and removals of the period [1 January 2022] to [31 December 2022].

1. VERIFICATION OBJECTIVES

The purposes of this verification exercise were, by review of objective evidence, to independently review:

- Conformance with agreed verification criteria, including the principles and requirements of relevant standards or GHG programmes, if applicable, within the scope of the verification;
- Whether the GHG emissions and removals were as declared by the organization's GHG Statement.

2. VERIFICATION CRITERIA AND REFERENCE

Criteria against which the verification assessment undertaken were the requirement of:

- ISO 14064-1:2018

Other references which the verification assessment considered were:

- Reference 1: Korean GHG ETS Scheme (Ministry of Environment Directive No. 2022-279)

3. VERIFICATION SCOPE

This engagement covered verification of emissions and removals from anthropogenic sources and sinks of GHGs included within the scope outlined below.

- The organization boundary was established following [Operation control] approach
- Location/boundary of the activities:
 - Verification address; 61,Cheongbuksandan-ro,Cheongbuk-eup,Pyeongtaek-si, Gyeonggi-do, 17792, Korea
- Physical infrastructure, activities, technologies and processes of the organization:
 - Wafer testing in the facility of Pyeongtaek site
- GHG sources, sinks and/or reservoirs included: GHG sources and sinks as presented in the [year 2022] GHG Report (11 January 2023) of the RESPONSIBLE PARTY, which comprises the following emission categories:
 - Direct GHG emissions
 - Indirect GHG emissions from imported energy
- Types of GHGs included: CO₂, CH₄, N₂O
- GWP adopted: IPCC Fifth Assessment Report
- GHG information for the following period was verified: [1 January 2022] to [31 December 2022]
- Level of assurance: Reasonable assurance
- Materiality thresholds: without major non-conformance to the agreed criteria in GHG quantification and reporting, and less than 5% error in misclassified GHG emissions of misapplication of calculations

4. ROLES AND RESPONSIBILITY



The management of the RESPONSIBLE PARTY was 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 information and the reported GHG emissions and removals. This responsibility includes designing, implementing and maintaining a data management system relevant to the preparation and fair presentation of a GHG Statement in accordance with ISO 14064-1:2018.

It was SGS's responsibility to express a third party GHG verification opinion on the GHG Statement as provided by the RESPONSIBLE PARTY for the period [1 January 2022] to [31 December 2022] against the principles and requirements of ISO 14064-3:2019.

5. SUMMARY OF THE GHG STATEMENT

The GHG emission results presented in [year 2022] GHG Statement in the form of GHG Report (26 January 2023) of the RESPONSIBLE PARTY were listed below.

- Direct GHG emissions and removals: 23.279 tonnes of CO2e
- Indirect GHG emissions from imported energy: 1,862.464 tonnes of CO₂e

6. EVIDENCE GATHERING ACTIVITIES

SGS planned and performed works to obtain the information, explanations and evidence which SGS considered necessary to provide a reasonable level of assurance that the GHG emissions and removals for the period [1 January 2022] to [31 December 2022] were fairly stated. The verification was mainly conducted through document review, interview, observation and site visit in sampling. The evidence gathering procedures included but not limited to:

- Review and assessment of the RESPONSIBLE PARTY's GHG information management system and its control;
- Inspect the completeness of the RESPONSIBLE PARTY's inventory;
- Sampling of GHG emissions related activity data record to confirm accuracy of source data into calculations;
- Recalculation of emissions;
- Assessment against verification criteria, as well as evaluation of the GHG statement of the RESPONSIBLE PARTY

The data and information examined during the verification were hypothetical, projected and/or historical in nature.

7. VERIFICATION OPINION

In SGS's opinion the presented GHG Statement by the RESPONSIBLE PARTY

- is materially correct and is a fair representation of the GHG data and information, and
- is prepared in accordance with the agreed criteria on GHG quantification and reporting.