

Greenhouse Gas Verification Statement

The inventory of Greenhouse Gas emissions in year 2021 of

GlobalWafers Co., Ltd. Chunan Plant

No. 21, Kejung Rd., Chunan, Miaoli County,
Hsinchu Science Park, 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

59.4610 tonnes of CO₂e

Indirect emissions

31,589.1163 tonnes of CO₂e

Direct emissions and indirect emissions

31,648.577 tonnes of CO₂e

Authorized by



David Huang

Senior Director

Date: 18 April 2022

Version 1

TGP56A-15-6 2103

SGS Taiwan Ltd.

No. 136-1, Wu Kung Road, New Taipei Industrial Park, Wu Ku District,

New Taipei City 24803, Taiwan

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Statement TW22/00083GG, continued

The emission of each category is described as below:

Unit: tonnes of CO₂e

| Reporting Boundaries | | | GHG Emissions |
|---|---|---|---------------|
| Inventory categories | | Description | |
| Direct emissions | | This direct GHG emissions are the sum of owned or controlled by the organization within the organization. | 59.4610 |
| Indirect emissions | Imported energy | Imported Electricity | 26,369.5605 |
| | Transportation | Employee commuting | 224.1613 |
| | | Downstream transportation and distribution for sold products | 108.3855 |
| | Products used by an organization | Fuel- and energy- related activities (not included in category 1 or category 2) | 4,853.9438 |
| | | Transportation and treatment for waste generated in operations. | 33.0652 |
| | Associated with the use of products from the organization | NA | -- |
| | Other sources | NA | -- |
| Direct emissions and indirect emissions | | | 31,648.577 |

SGS has been contracted by GlobalWafers Co., Ltd. (hereinafter referred to as "GlobalWafers"), No. 8, Industrial E. Rd. II, Hsinchu Science Park Hsinchu 30075, Taiwan, R.O.C. for the verification of direct and indirect Greenhouse Gas emissions in accordance with

ISO 14064-3:2006

as provided by GlobalWafers Co., Ltd. Chunan Plant (hereinafter referred to as "GlobalWafers Chunan"), No. 21, Kejung Rd., Chunan, Miaoli County, Hsinchu Science Park, Taiwan, R.O.C., in the GHG Assertion in the form of GHG report covering GHG emissions of the period 01 January 2021 to 31 December 2021.

Roles and responsibilities

The management of GlobalWafers Chunan 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 2021 to 31 December 2021.

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 07 March 2022 to 22 March 2022. The verification was based on the verification scope, objectives and criteria as agreed between GlobalWafers and SGS on 15 November 2021.

Level of Assurance

The level of assurance for category 1 and category 2 agreed is that of reasonable assurance.

Scope

GlobalWafers has commissioned an independent verification by SGS Taiwan of reported GHG emissions of GlobalWafers Chunan arising from the manufacture of silicon ingots, silicon wafer, silicon diffused wafer, polished wafers 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.

Statement TW22/00083GG, continued

- Title or description activities: GHG verification for GlobalWafers Chunan in year 2021
- Location/boundary of the activities:
 - No. 21, Kejung Rd., Chunan, Miaoli County, Hsinchu Science Park, Taiwan, R.O.C.
- Physical infrastructure, activities, technologies and processes of the organization:
The manufacture of silicon ingots, silicon wafer, silicon diffused wafer, polished wafers
- GHG sources, sinks and/or reservoirs included: Sources as presented in the inventory spreadsheet provided by GlobalWafers Chunan
- Types of GHGs included: CO₂, CH₄, N₂O, HFCs, PFCs, SF₆, NF₃
- The IPCC 2013 AR5 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 0.502 kgCO₂e/kwh (Announced by Bureau of Energy, Ministry of Economic Affairs in 2021).
 - The secondary database has Carbon Footprint Calculation Platform, SimaPro 9.0.0.41 Ecoinvent 3, DoITPro(2017).
- Directed actions: NA
- GHG information for the following period was verified: 01 January 2021 to 31 December 2021
- The version of inventory sheet: V1(1110322)
- The version of GHG assertion: V1, 2022/03/22
- 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

GlobalWafers Chunan provided the GHG assertion based on the requirements of ISO 14064-1: 2018. The GHG information for the period 01 January 2021 to 31 December 2021 disclosing emissions of 31,648.577 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 Emissions |
|---|---|---|---------------|
| Inventory categories | | Description | |
| Direct emissions | | This direct GHG emissions are the sum of owned or controlled by the organization within the organization. | 59.4610 |
| Indirect emissions | Imported energy | Imported Electricity | 26,369.5605 |
| | Transportation | Employee commuting | 224.1613 |
| | | Downstream transportation and distribution for sold products | 108.3855 |
| | Products used by an organization | Fuel- and energy- related activities (not included in category 1 or category 2) | 4,853.9438 |
| | | Transportation and treatment for waste generated in operations. | 33.0652 |
| | Associated with the use of products from the organization | NA | -- |
| | Other sources | NA | -- |
| Direct emissions and indirect emissions | | | 31,648.577 |

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 for the period 01 January 2021 to 31 December 2021 are fairly stated.

We conducted our verification with regard to the GHG assertion of GlobalWafers Chunan 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 GlobalWafers Chunan as a whole.

Verifier Group

Above statements coincide with auditing process with fairness and impartiality, and aim at the emission of year 2021 of clients.

Statement TW22/00083GG, continued

Lead Verifier:

Emma Kao

Verifier:

Steve Hsieh

Henry Lin

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 GlobalWafers Co., Ltd. Chunan Plant, No. 21, Kejung Rd., Chunan, Miaoli County, Hsinchu Science Park, 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.

Greenhouse Gas Verification Statement

The inventory of Greenhouse Gas emissions in year 2020 of

GlobalWafers Co., Ltd. Chunan Plant

No. 21, Kejung Rd., Science-Based park, Chu-Nan 35053,
Miao-Li County, 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

58.9800 tonnes of CO₂e

Indirect emissions

29,635.3442 tonnes of CO₂e

Direct emissions and indirect emissions

29,694.324 tonnes of CO₂e

Authorized by



David Huang

Senior Director

Date: 06 April 2021

Version 1

TGP56A-15-6 2103

SGS Taiwan Ltd.

No. 136-1, Wu Kung Road, New Taipei Industrial Park, Wu Ku District,
New Taipei City 24803, Taiwan

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Validation and Verification

VB002

Statement TW21/00047GG, continued

The emission of each category is described as below:

Unit: tonnes of CO₂e

| Reporting Boundaries | | | GHG Emissions |
|---|---|---|---------------|
| Inventory categories | | Description | |
| Direct emissions | | This direct GHG emissions are the sum of owned or controlled by the organization within the organization. | 58.9800 |
| Indirect emissions | Imported energy | Imported Electricity | 24,124.9712 |
| | Transportation | Employee commuting | 207.7363 |
| | | Downstream transportation and distribution for sold products | 104.5619 |
| | Products used by an organization | Fuel- and energy- related activities (not included in category 1 or category 2) | 5,172.4958 |
| | | Transportation and treatment for waste generated in operations. | 25.5789 |
| | Associated with the use of products from the organization | NA | -- |
| | Other sources | NA | -- |
| Direct emissions and indirect emissions | | | 29,694.324 |

Statement TW21/00047GG, continued

SGS has been contracted by GlobalWafers Co., Ltd. (hereinafter referred to as “GlobalWafers”), No. 8. Industrial E. Rd. II, Hsinchu Science Park Hsinchu 30075, Taiwan, R.O.C. for the verification of direct and indirect Greenhouse Gas emissions in accordance with

ISO 14064-3:2006

as provided by GlobalWafers Co., Ltd. Chunan Plant (hereinafter referred to as “GlobalWafers Chunan”), No. 21, kejung Rd., Science-Based park, chu-Nan 35053, Miao-Li County, Taiwan, R.O.C., in the GHG Assertion in the form of GHG report covering GHG emissions of the period 01 January 2020 to 31 December 2020.

Roles and responsibilities

The management of GlobalWafers Chunan 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 2020 to 31 December 2020.

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 February 2021 to 23 February 2021. The verification was based on the verification scope, objectives and criteria as agreed between GlobalWafers and SGS on 14 October 2020.

Level of Assurance

The level of assurance for category 1 and category 2 agreed is that of reasonable assurance.

Scope

GlobalWafers has commissioned an independent verification by SGS Taiwan of reported GHG emissions of GlobalWafers Chunan arising from The manufacture of silicon ingots, silicon wafer, silicon diffused wafer, polished wafers 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.

Statement TW21/00047GG, continued

- Title or description activities: GHG verification for GlobalWafers Chunan in year 2020
- Location/boundary of the activities:
 - No. 21, kejung Rd., Science-Based park, chu-Nan 35053, Miao-Li County, Taiwan, R.O.C.
- Physical infrastructure, activities, technologies and processes of the organization:
The manufacture of silicon ingots, silicon wafer, silicon diffused wafer, polished wafers
- GHG sources, sinks and/or reservoirs included: Sources as presented in the inventory spreadsheet provided by GlobalWafers Chunan
- Types of GHGs included: CO₂, CH₄, N₂O, HFCs, PFCs, SF₆, NF₃
- The IPCC 2013 AR5 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 kgCO₂e/kwh (Announced by Bureau of Energy, Ministry of Economic Affairs in 2020).
 - The secondary database has Carbon Footprint Calculation Platform, SimaPro 9.0.0.4.1.
- Directed actions: NA
- GHG information for the following period was verified: 01 January 2020 to 31 December 2020
- The version of inventory sheet: V2-0305
- The version of GHG assertion: V2-0305
- 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
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Criteria

Criteria against which the verification assessment is undertaken are the principles of ISO 14064-1:2018

Statement TW21/00047GG, continued

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

GlobalWafers Chunan provided the GHG assertion based on the requirements of ISO 14064-1: 2018. The GHG information for the period 01 January 2020 to 31 December 2020 disclosing emissions of 29,694.324 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 Emissions |
|---|---|---|---------------|
| Inventory categories | | Description | |
| Direct emissions | | This direct GHG emissions are the sum of owned or controlled by the organization within the organization. | 58.9800 |
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| | | Transportation and treatment for waste generated in operations. | 25.5789 |
| | Associated with the use of products from the organization | NA | -- |
| | Other sources | NA | -- |
| Direct emissions and indirect emissions | | | 29,694.324 |

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.

Statement TW21/00047GG, continued

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 for the period 01 January 2020 to 31 December 2020 are fairly stated.

We conducted our verification with regard to the GHG assertion of GlobalWafers Chunan 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.

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This statement shall be interpreted with the GHG assertion of GlobalWafers Chunan as a whole.

Verifier Group

Above statements coincide with auditing process with fairness and impartiality, and aim at the emission of year 2020 of clients.

Statement TW21/00047GG, continued

Lead Verifier:

Chris Peng

Verifier:

Steve Hsieh

Linda Chang

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