

# Greenhouse Gas Verification Statement

The inventory of Greenhouse Gas emissions in year 2019 of

## San Fu Chemical Co., Ltd. Shan-Hua Plant

No. 340, Xiaoxinying, Xiaoxin VII. Shanhua Dist., Tainan City 74170, Taiwan

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

### ISO 14064-1:2006



Direct emissions

**9,090.0080** tonnes of CO<sub>2</sub>e

Energy indirect emissions

**16,840.2416** tonnes of CO<sub>2</sub>e

Direct emissions and energy indirect emissions

**25,930.250** tonnes of CO<sub>2</sub>e

Authorized by

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Senior Director

Date: 04 March 2020

Version 1



Validation and Verification

VB002

TGP56A-15-1 2001

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SGS has been contracted by San Fu Chemical Co., Ltd. Shan-Hua Plant (hereinafter referred to as "San Fu Chemical Shan-Hua Plant"), No. 340, Xiaoxinying, Xiaoxin Vil. Shanhua Dist., Tainan City 74170, Taiwan for the verification of direct and indirect Greenhouse Gas emissions in accordance with

**ISO 14064-3: 2006**

as provided by San Fu Chemical Co., Ltd. Shan-Hua Plant (hereinafter referred to as "San Fu Chemical Shan-Hua Plant"), No. 340, Xiaoxinying, Xiaoxin Vil. Shanhua Dist., Tainan City 74170, Taiwan, in the GHG Assertion in the form of GHG report covering GHG emissions of the period 01 January 2019 to 31 December 2019.

**Roles and responsibilities**

The management of San Fu Chemical Shan-Hua Plant 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 2019 to 31 December 2019.

SGS conducted a third party verification of the provided GHG assertion against the principles of ISO 14064-1:2006, ISO 14064-3:2006 in the period 07 February 2020 to 17 February 2020. The verification was based on the verification scope, objectives and criteria as agreed between San Fu Chemical Shan-Hua Plant and SGS on 20 November 2019.

**Level of Assurance**

The level of assurance agreed is that of reasonable assurance.

**Scope**

San Fu Chemical Shan-Hua Plant has commissioned an independent verification by SGS Taiwan of reported GHG emissions of San Fu Chemical Shan-Hua Plant arising from Basic chemical materials manufacturing activities, to establish conformance with ISO 14064:2006 principles within the scope of the verification as outlined below.

This engagement covers verification of emission from anthropogenic sources of greenhouse gases

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included within the organization's boundary and is based on ISO 14064-3:2006.

- Title or description activities: GHG verification for San Fu Chemical Shan-Hua Plant in year 2019.
- Location/boundary of the activities:
  - No. 340, Xiaoxinying, Xiaoxin VII. Shanhua Dist., Tainan City 74170, Taiwan
- Physical infrastructure, activities, technologies and processes of the organization: Basic chemical materials manufacturing.
- GHG sources, sinks and/or reservoirs included: Sources as presented in the inventory spreadsheet provided by San Fu Chemical Shan-Hua Plant.
- 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 2007 AR4 GWP values are applied in this inventory.
- Electricity emission factor: 0.533 kgCO<sub>2</sub>e/kwh  
(Announced by Bureau of Energy, Ministry of Economic Affairs in 2019)
- Directed actions: NA
- GHG information for the following period was verified: 01 January 2019 to 31 December 2019.
- The version of inventory sheet: 20200217
- The version of GHG assertion: 20200217
- 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 14064-1:2006.

**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**

San Fu Chemical Shan-Hua Plant provided the GHG assertion based on the requirements of ISO14064-1: 2006. The GHG information for the period 01 January 2019 to 31 December 2019 disclosing emissions of 25,930.250 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.

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 for the period 01 January 2019 to 31 December 2019 are fairly stated.

We conducted our verification with regard to the GHG assertion of San Fu Chemical Shan-Hua Plant 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 ISO14064-1:2006 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

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duties, but also to receive legal charge and punishment.

This statement shall be interpreted with the GHG assertion of San Fu Chemical Shan-Hua Plant as a whole.

**Verifier Group**

Above statements coincide with auditing process with fairness and impartiality, and aim at the emission of year 2019 of clients.

Lead Verifier:



Verifier:



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 San Fu Chemical Co., Ltd. Shan-Hua Plant, No. 340, Xiaoxinying, Xiaoxin VII, Shanhua Dist., Tainan City 74170, 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.