

声明编码 CN23/00001144

温室气体核查声明

以下组织的 2022 年 01 月 01 日至 2022 年 12 月 31 日
温室气体盘查清册

中芯国际集成电路制造(上海) 有限公司

注册地址: 中国(上海)自由贸易试验区张江路 18 号
组织边界: 中国(上海)自由贸易试验区张江路 18 号



已由 SGS 依据 ISO 14064-3:2019 进行了核查并满足以下要求

ISO 14064-1:2018

- 直接温室气体排放量 [类别 1]
226,010.37 吨二氧化碳当量
- 来自输入能源的间接温室气体排放量 [类别 2]
230,195.76 吨二氧化碳当量
- 运输产生的间接温室气体排放量 [类别 3]
558.15 吨二氧化碳当量
- 组织使用的产品产生的间接温室气体排放 [类别 4]
[属于非重大间接排放, 未量化]
- 组织产品的使用有关的间接温室气体排放 [类别 5]
[属于非重大间接排放, 未量化]
- 其他来源的间接温室气体排放 [类别 6]
[属于非重大间接排放, 未量化]
- 经量化的总排放量
456,764.28 吨二氧化碳当量

签署
David Xin
Sr. Director - Knowledge
签署日期: 2023 年 02 月 21 日

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SGS 与中芯国际集成电路制造(上海)有限公司(下文称作“委托方”)签订合同,依据

ISO 14064-3:2019

核查由中芯国际集成电路制造(上海)有限公司(下文称作“责任方”)以温室气体报告形式提供的温室气体声明,涵盖从 2022 年 01 月 01 日至 2022 年 12 月 31 日(下文称作“报告期”)的直接和间接温室气体排放。

角色和责任

责任方的管理者负责组织的温室气体信息系统,依据该系统建立和维护记录及报告程序,包括计算和决定温室气体排放信息及报告的排放量。

SGS 有责任对由责任方提供的报告期的温室气体声明作出独立的温室气体核查意见。

SGS 于 2023 年 02 月 20-21 日依据 ISO 14064-3:2019 要求对责任方提供的温室气体声明符合 ISO 14064-1:2018 的要求进行了第三方核查。核查是基于委托方与 SGS 于 2023 年 02 月 17 日商定的核查范围、目标和准则。

保证等级

商定的保证等级为合理保证。

适用范围

委托方委托 SGS 基于 ISO 14064-3:2019 进行一次独立核查,以确保责任方所报告的温室气体排放量,在下述的核查范围内符合 ISO 14064-1:2018 的要求。责任方的温室气体声明是以历史数据与信息来编制。

范围覆盖组织边界内人类活动引起的温室气体排放的核查:

- 组织边界的建立是遵循营运控制权。
- 活动地点/边界: 中国(上海)自由贸易试验区张江路 18 号
- 组织的基础设施、活动、技术和流程: 晶圆制造
- 温室气体源、汇和/或库包括: 责任方的温室气体清册和温室气体报告中所提出的温室气体源。
- 温室气体种类包括: 二氧化碳、甲烷、氧化亚氮、氢氟碳化物、全氟碳化物、六氟化硫、三氟化氮。
- 以下期间的温室气体信息已被核查: 2022 年 01 月 01 日至 2022 年 12 月 31 日。
- 采用的全球变暖潜能: IPCC 第 6 次评估报告。
- 核查声明的预期用户: 供应商/客户/利益相关方

目标

本次核查之目的是通过客观证据审查:

- 温室气体排放是否如组织的温室气体声明所述
- 所报的数据是准确的、完整的、一致的、透明的和没有实质错误或遗漏。

准则

核查依据的准则是 ISO 14064-3:2019。

重要性

基于温室气体声明的预期用户的需要,本次核查的重要性阈值定为 5%。

核查方法

SGS 的方法是基于风险，理解所报告的温室气体排放信息相关的风险并加以控制，从而减轻风险。我们的检查包括评估与排放量有关的证据和组织温室气体排放量的披露。

SGS 计划并执行工作来获取必要的信息、解释和证据，以提供保证等级，确保能公正地陈述在报告期内的责任方的温室气体排放。

SGS 核查责任方以温室气体报告的方式提供的温室气体声明，包括评估温室气体信息系统和报告计划或协议。这次评估包括收集用以支持所报数据的证据，以及检查所参考的协议的条款是否一致地和适当地应用。

核查意见结论

责任方提供了基于 ISO 14064-1:2018 要求的温室气体声明，声明在组织边界范围和报告期内共排放温室气体 456,764.28 吨二氧化碳当量。

SGS 基于商定的合理保证对责任方的温室气体声明独立核查后，出具的核查意见是：

无保留意见

责任方递交的温室气体声明是依据 ISO 14064-1:2018 对温室气体量化和准备报告，在重要性方面表述公正，声明中的温室气体数据和信息的确实体现且有充分和适宜的证据予以支持。

保留意见

责任方递交的温室气体声明无重大错误，但存在缺陷而影响出具无保留的核查意见。

否定意见

责任方递交的温室气体声明：

-存在重大错误

-收集的证据无法支持出具保留意见或无保留意见

无法表示意见

无法获取充分和适宜的证据来对责任方递交的温室气体声明是否依据 ISO 14061-1:2018 要求得到的公正表达形成意见。

本核查声明应与责任方温室气体报告的方式提供的温室气体声明作为一个整体进行解释说明。

注：通标标准技术服务有限公司（“SGS”）按 SGS 温室气体审定与核查服务通用条款发放此温室气体核查声明。此声明的内容基于核查结果编制。可向责任方查询获取此温室气体核查声明及责任方温室气体声明（温室气体报告的副本）。此核查声明不可解除委托方应遵守国家法律法规的责任。此核查声明不对 SGS 造成约束，SGS 没有责任面对除其委托方以外的任何一方。

本温室气体核查声明是以英语订立。若有任何译文差异，以英文版为准。

Greenhouse Gas Verification Statement

The inventory of Greenhouse Gas emissions in
01 Jan. 2022 to 31 Dec. 2022 of

Semiconductor Manufacturing International (Shanghai) Corporation

Business address: No. 18, Zhangjiang Road, China (Shanghai) Pilot Free Trade Zone,
Shanghai, P.R. China
Organization boundary: No. 18, Zhangjiang Road, China (Shanghai) Pilot Free Trade Zone,
Shanghai, P.R. China



has been verified in accordance with ISO 14064-3:2019 as meeting the requirements of

ISO 14064-1:2018

Direct Emissions [Category 1]

226,010.37 tonnes of CO₂e

Indirect Emissions from Imported Energy [Category 2]

230,195.76 tonnes of CO₂e

Indirect Emissions from Transportation [Category 3]

558.15 tonnes of CO₂e

Indirect Emissions from Products Used by An Organization [Category 4]

[be determined as non-significant indirect emissions and not quantified]

Indirect Emissions Associated with The Use of Products from

The Organization [Category 5]

[be determined as non-significant indirect emissions and not quantified]

Indirect Emissions from Other Sources [Category 6]

[be determined as non-significant indirect emissions and not quantified]

Total Emissions Quantified

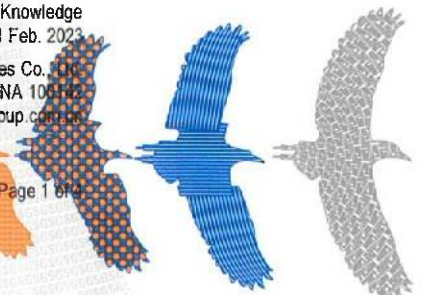
456,764.28 tonnes of CO₂e

Authorized by
David Xin

Sr. Director - Knowledge

DATE: 21 Feb. 2023

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SGS has been contracted by Semiconductor Manufacturing International (Shanghai) Corporation (hereinafter referred to as "CLIENT"), for the verification of direct and indirect Greenhouse Gas emissions in accordance with

ISO 14064-3:2019

as provided by Semiconductor Manufacturing International (Shanghai) Corporation (hereinafter referred to as "RESPONSIBLE PARTY"), in the Greenhouse Gas (GHG) Assertion in the form of GHG Report covering GHG emissions of the period 01 Jan. 2022 to 31 Dec. 2022 (hereinafter referred to as "REPORT PERIOD").

Roles and responsibilities

The management of the RESPONSIBLE PARTY 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 statement as provided by the RESPONSIBLE PARTY for the REPORT PERIOD.

According to ISO 14064-3:2019, SGS has conducted a third-party verification of the provided GHG statement by RESPONSIBLE PARTY against the requirements of ISO 14064-1:2018 in the period 20-21 Feb. 2023. The verification is based on the verification scope, objectives and criteria as agreed between the CLIENT and SGS on 17 Feb. 2023.

Level of Assurance

The level of assurance agreed is that of Reasonable assurance.

Scope

The CLIENT has commissioned an independent verification by SGS in according to ISO 14064-3:2019 to assure the reported GHG emissions of RESPONSIBLE PARTY, in conformance with ISO 14064-1:2018 requirements within the scope of the verification as outlined below. The data and information supporting the GHG statement is historical in nature.

This engagement covers verification of emission from anthropogenic sources of greenhouse gases included within the organization's boundary:

- The organizational boundary is established following Operational control approach
- Location/boundary of the activities: No. 18, Zhangjiang Road, China (Shanghai) Pilot Free Trade Zone, Shanghai, P.R. China.
- Physical infrastructure, activities, technologies and processes: The manufacture of wafer
- GHG sources, sinks and/or reservoirs included: GHG sources as presented in the GHG inventory and report of the RESPONSIBLE PARTY
- Types of GHGs included: CO₂, CH₄, N₂O, HFCs, PFCs, SF₆, NF₃
- GHG information for the following period was verified: 01 Jan. 2022 to 31 Dec. 2022
- GWP adopted: IPCC 6 Assessment Report.
- Intended user of the verification statement: Supplier / Customer / Stakeholder.

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 statement

- 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 requirements of ISO 14064-3:2019.

Materiality

The materiality required of the verification is considered by SGS to 5%, based on the needs of the intended user of the GHG statement.

Verification approach

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 of evidence relevant to the amounts and disclosures in relation to the organization's reported GHG emissions

We plan and perform 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 REPORT PERIOD are fairly stated.

We conduct our verification with regard to the GHG statement of GHG Report of the RESPONSIBLE PARTY which includes assessment of GHG information system and reporting plan/protocol. This assessment includes the collection of evidence supporting the reported data, and checking whether the provisions of the protocol reference, are consistently and appropriately applied.

Verification opinion conclusion

The RESPONSIBLE PARTY provided the GHG statement based on the requirements of ISO14064-1:2018 that total emission 456,764.28 tonnes of CO₂e in the organization boundary for the REPORT PERIOD.

The verification opinion as below is issued by SGS after an independent verification for RESPONSIBLE PARTY's GHG statement base on agreed Reasonable assurance:

Unmodified

The GHG statement submitted by RESPONSIBLE PARTY is prepared in accordance with ISO 14064-1:2018 on GHG quantification and reporting, is a fair representation materially, the GHG data and information in statement are explicit and supported by adequacy and appropriate evidence.

Modified

The GHG statement submitted by RESPONSIBLE PARTY has no material misstatement, however has some deficiencies which will prevent the issuance of unmodified verification opinion.

Adverse opinion

The GHG statement submitted by RESPONSIBLE PARTY:

- has no material misstatement or
- there is insufficient or inappropriate evidence to support an unmodified or modified opinion.

Disclaiming the issuance of an opinion

It is unable to obtain sufficient and appropriate objective evidence to form an opinion as to whether the GHG statement submitted is presented fairly in accordance with ISO 14064-1:2018

This statement shall be interpreted with the GHG statement of GHG Report of the RESPONSIBLE PARTY as a whole.

Note: This Statement is issued by SGS-CSTC Standards Technical Services Co., Ltd. ("SGS") under its General Conditions for Greenhouse Gas Validation & Verification Services. The findings recorded hereon are based upon a verification performed by SGS. A full copy of this statement, the findings and the supporting GHG Assertion may be consulted from RESPONSIBLE PARTY. This Statement does not relieve Client from compliance with any by laws, 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.

The verification statement of greenhouse gases is concluded in English. Any translation differences, the English version shall prevail.