

# LRQA Independent Assurance Statement Relating to Phoenix Silicon International Corporation's GHG Report for the calendar year 2023

## 服務條件

本保證聲明書乃為昇陽國際半導體股份有限公司所準備。

英商勞盛股份有限公司台灣分公司(以下簡稱 LRQA)受昇陽國際半導體股份有限公司(以下簡稱 PHOENIX SILICON)之委託以查證其 2023 年日曆年度(2023 年 1 月 1 日~12 月 31 日)期間溫室氣體盤 查報告(發行日期:2024 年 05 月 27 日),以下簡稱為"溫室氣體盤查報告"。

此溫室氣體盤查報告包含直接、能源間接以及其其他間接(由運輸產生之間接溫室氣體排放)之溫室氣體 排放,昇陽國際半導體股份有限公司包含下列的地址範圍內的提供半導體基材及相關產品晶片加工服務 相關活動,與其他相關設施設備活動,如溫室氣體盤查報告中所描述,溫室氣體排放使用營運控制權。

溫室氣體報告:昇陽國際半導體股份有限公司溫室氣體報告書 總公司:新竹市東區力行路6號&8號3-4樓 中港廠:台中市梧棲區建七路2號

## **Terms of Engagement**

This Assurance Statement has been prepared for PHOENIX SILICON Electronics Corporation.

LRQA Taiwan Branch (hereafter referred to as "LRQA") was commissioned by Phoenix Silicon International Corporation (hereafter referred to as the "PHOENIX SILICON") to assure its GHG Report<sup>1</sup> for the calendar year 2023 (01 January 2023 ~31 December 2023) (hereafter referred to as "the Report").

The Report relates to direct GHG emissions, energy indirect GHG emissions and other indirect GHG emissions (Indirect emissions from transportation). The GHG emissions have been consolidated using 'Operational' control approach.

PHOENIX SILICON 's geographical boundary includes the operations and activities relevant with the packaging and test for semiconductor IC and the associated facilities & equipment as set out in the GHG Inventory Report.

#### <u>Headquarters:</u>

3-4 Floors No. 8 and No. 6, Lixing Rd., East Dist., Hsinchu City 300094, Taiwan.

- Chung Kang Branch:
  - No. 2, Jian 7th Rd., Wuqi Dist, Taichung City 435059, Taiwan.

#### 管理責任

昇陽國際半導體股份有限公司的管理階層對本溫室氣體盤查報告之準備及維持有效的內部控管,包含溫 室氣體盤查報告中揭露之資料負責。LRQA 的責任為依據我們與昇陽國際半導體股份有限公司間的合約 執行查證。

<sup>&</sup>lt;sup>1</sup> Final\_GHG report\_ISO14064-1-2018\_Clendar year (2023)\_PHOENIX SILICON, dated 27 May 2024.



最終的,溫室氣體盤查報告由昇陽國際半導體股份有限公司所核准並負有責任。

## Management Responsibility

PHOENIX SILICON' s management was responsible for preparing the GHG Inventory Report and for maintaining effective internal controls over the data and information disclosed. LRQA' s responsibility was to carry out an assurance engagement on the GHG Inventory Report in accordance with our contract with PHOENIX SILICON.

Ultimately, the GHG Inventory Report has been approved by, and remains the responsibility of PHOENIX SILICON.

## LRQA 的方法

LRQA 查證已依循 ISO 14064-3:2019 (溫室氣體主張之確証與查証附指引之規範),以提供對昇陽國際半 導體股份有限公司符合 ISO 14064-1:2018 (組織層級溫室氣體溫室氣體排放與移除之量化及報告附指引 之規範)規定所準備的溫室氣體盤查報告之類別一與二之合理保證查證以及類別三有限保證等級查證。

為作成結論,本保證以抽樣方式執行並涵蓋下列的活動:

- 依溫室氣體盤查報告中所界定的設施設備,進行現場查訪;同時審查與溫室氣體排放數據及資料 管理相關的過程;
- 訪談組織中對於相關溫室氣體排放數據與紀錄管理與維持之權責人員;
- 查核來自於行政院環境部之相關係數與 IPCC 2021 年第六次評估報告之 GWP 值;
- 查證類別一與類別二的歷史數據及資料來源;
- 查證類別三之上游依年度採購金額佔比前 80%以上之供應商所採購之物料、以及下游由外車運送至客戶地點之各起迄站運輸與配送產品、商務旅行之活動數據彙整;
- 查證類別四依年度採購金額佔比前 80%以上之購買的產品和服務之活動數據彙整及環保署「事業廢棄物申報及管理資訊系統」的申報資料之活動數據彙整;
- 查證類別五在承租戶用電-基地台用電分攤之活動數據彙整;以及
- 查證報告排放類別之重大性原則。

## LRQA' s Approach

Our verification has been conducted in accordance with ISO 14064 – 3:2019, 'Specification with guidance for verification and validation of greenhouse gas statements' to provide reasonable assurance for Categories 1 and 2 and limited assurance for <u>Category 3</u>, that GHG data as presented in the Report have been prepared in conformance with ISO 14064 – 1:2018, 'Specification with guidance at the organizational level for quantification and reporting of greenhouse gas emissions and removals'.

To form our conclusions the assurance engagement was undertaken as a sampling exercise and covered the following activities:

- Conducted site tour of the facilities and reviewed processes related to the control of GHG emissions data and records;
- Interviewed relevant staff of the organization responsible for managing GHG emissions data and records; and
- Verified emission factors sourced from EPA and the Global Warming Potentials (GWPs) from the Sixth Assessment Report of the Intergovernmental Panel on Climate Change 2021 (AR6).
- Verified the historical GHG emissions data and records back to source for Categories 1 and 2 emissions.
- Verified an aggregated level GHG emissions data for Category 3 from Upstream materials purchased by the top 80% suppliers accounting for more than 80% of the annual purchase amount, as well as



downstream transportation and distribution products shipped from external vehicles to customer locations at each origin and destination, and business travel activity data collection;

- Verified at an aggregated level GHG emissions for Category 4 of activity data of purchased products and services that account for more than 80% of the annual purchase amount and the collection of activity data on the reporting data of the Environmental Protection Department's "Business Waste Declaration and Management Information System";
- Verified at an aggregated level GHG emissions for Category 5 of tenant electricity consumption Activity data collection of base station electricity consumption allocation; and
- Confirmed significance criteria on reporting of emission categories.

## 查證等級及實質性

本查證聲明書的查證意見基於合理保證等級(類別一與二),有限保證等級(類別三與類別五)及 5%的實質 性等級。

## **Level of Assurance & Materiality**

In accordance with our contract agreement, the assurance was conducted at a reasonable level of assurance at a materiality of 5% for Categories 1 and 2 and at a limited level of assurance at a materiality of 5% for Category 3 ~ 5. The opinion expressed in this Assurance Statement has been accordingly formed.

## LRQA意見

基於 LRQA 的方法,依溫室氣體盤查報告中揭露日曆年西元 2023 年度之全部直接及能源間接的溫室氣 體(類別一與類別二)排放總量實質正確,其他間接溫室氣體排放(類別三與類別五)沒有任何情形引起我們 注意到計算沒有實質正確;溫室氣體盤查報告之準備也符合 ISO 14064-1:2018 (組織層級溫室氣體溫室 氣體排放與移除之量化及報告附指引之規範)相關要求。

## LRQA's Opinion

Based on LRQA' s approach,

- The GHG emissions for Categories 1 and 2 disclosed in the Report as summarized in Table 1 below are materially correct.
- Nothing has come to our attention that would cause us to believe that the GHG emissions for Category 3 ~ 5 disclosed in the Report as summarized in Table 1 below is not materially correct

and that the Report has been prepared in conformance with ISO 14064-1:2018.

Signed

Sean Chiang - I & IK

Sean Chiang Lead Verifier 主導查驗員

On behalf of LRQA Group Limted Taiwan CIT, No. 1, Yumen St., Zhongshan Dist., Taipei City, Taiwan. 台北市中山區玉門街 1 號 台北創新中心(CIT) 日期 Dated: 21 June 2024

**Chiang-shan Chen** General Manager 總經理

> Add accreditation mark if required

LRQA reference number: TWN00000325 /O\_2023/Date Issued: 12 July 2024



Table 1. Summary of PHOENIX SILICON Electronics Corporation, GHG Report for the calendar year 2023(01 January ~31 December 2023)

## 昇陽國際半導體股份有限公司竹科廠 2023 年度溫室氣體清冊 PHOENIX SILICON Electronics Corporation-Headquarters

Scope of GHG emissions(溫室氣體排放之範疇)	Tonnes CO₂e 當量噸
Direct GHG emissions (Category 1) 直接溫室氣體排放	5,038.9049
Direct GHG emissions from the combustion of biomass (生質燃燒溫室氣體排放)	0.000
Indirect GHG emissions from imported energy (purchased electricity) 輸入能源產生之間接溫室氣體排放(電力採購) (Category 2, Location-based 地區基礎)	18,655.8893
Indirect GHG emissions from transportation (Category 3) 由運輸產生之間接溫室氣體排放	75.3329
Indirect GHG emissions from products used by the organization (Category 4) 由組織使用的產品所產生之間接溫室氣體排放	7,230.2844
Indirect GHG emissions associated with the use of products from the organization (Category 5) 與組織的產品使用相關連之間接溫室氣體排放	76.2312
Indirect GHG emissions from other sources (Category 6) 由其他來源產生的間接溫室氣體排放	未有 None

昇陽國際半導體股份有限公司中港廠 2023 年度溫室氣體清冊 PHOENIX SILICON Electronics Corporation-Chung Kang Branch

Scope of GHG emissions(溫室氣體排放之範疇)	Tonnes CO₂e 當量噸
Direct GHG emissions (Category 1)	2,081.9920
直接溫室氣體排放	
Direct GHG emissions from the combustion of biomass (生質烘醬溫室氫體排放)	0.000
Indirect GHG emissions from imported energy (purchased electricity)	5,777.2732
輸入能源產生之間接溫室氣體排放(電力採購)	
(Category 2, Location-based 地區基礎)	
Indirect GHG emissions from transportation (Category 3) 由運輸產生之間接溫室氣體排放	27.5310
Indirect GHG emissions from products used by the organization (Category 4) 山組織伸田的產品所產生之間接溫玄氨體排放	3,495.2927
山鸡碱(K/I)山北山川//上之间) 安德王希腊开从	
from the organization (Category 5)	未計算
與組織的產品使用相關連之間接溫室氣體排放	Not calculated



Indirect GHG emissions from other sources (Category 6)	未有
由其他來源產生的間接溫室氣體排放	None

Note 1: The national electricity emission factor of year 2023 was quoted, the factor was taken from Taiwan Energy Administration as published on 26 April 2024.

Note 2: GHG emission figures above are being reported with four decimal places as required by Taiwan Ministry of Environment.

備註 1:國家電力溫室氣體排放係數引用能源署在 2024 年 4 月 26 日公佈之民國 112 年度電力排碳係數作為外購電 力之排碳係數。

備註 2: 溫室氣體盤放數據相關小數點規定依據行政院環境部規定執行。

This Assurance Statement is subject to the provisions of this legal section:

LRQA Group Limited, its affiliates and subsidiaries, and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'LRQA'. LRQA assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant LRQA entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.

The English version of this Assurance Statement is the only valid version. LRQA assumes no responsibility for versions translated into other languages.

This Assurance Statement is only valid when published with the Report to which it refers. It may only be reproduced in its entirety.

Copyright © LRQA, 2024.