



LRQA Independent Assurance Statement

Relating to Winstek Semiconductor Co., Ltd.'s GHG Inventory Report for the calendar year 2023

服務條件

本保證聲明書乃為台星科技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)受台星科技股份有限公司(以下簡稱 Winstek)之委託以查證其 2023 日曆年度 1/1/2023~31/12/2023 期間溫室氣體盤查報告(發行日期:2024 年 8 月 30 日,第三版),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、能源間接以及其他間接溫室氣體排放。台星科技股份有限公司包含下列的地址範圍內的積體電路封裝測試為主要業務相關活動,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: 台星科技股份有限公司溫室氣體盤查報告書
新竹縣芎林鄉華龍村 6 鄰鹿寮坑 176 之 5 號

Terms of Engagement

This Assurance Statement has been prepared for Winstek Semiconductor Co., Ltd.

LRQA was commissioned by Winstek Semiconductor Co., Ltd. (hereafter referred to as the “Winstek”) to assure its GHG Inventory Report¹ of Winstek Semiconductor Co., Ltd. for the calendar year 2023 (hereafter referred to as the “GHG Inventory Report”).

The GHG Inventory Report relates to direct GHG emissions, energy indirect GHG emissions and other indirect GHG emissions. The GHG emissions have been consolidated using ‘Operational’ control approach.

Winstek’s geographical boundary includes IC assembly and testing, and the associated facilities and equipment as set out in the following GHG Inventory Report as follows.

GHG Inventory Report: Winstek Semiconductor Co., Ltd., dated 30 August 2024, 3rd Edition.
No. 176-5, Luliaokeng, Qionglin Township, Hsinchu County 307410, Taiwan

管理責任

台星科技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台星科技股份有限公司間的合約執行查證。

最終的,溫室氣體盤查報告由台星科技股份有限公司所核准並負有責任。

¹ Final_GHG report_ISO14064-1-2018_calendar_year (2023)_Winstek, dated 30 Aug., 3rd Edition.



Management Responsibility

Winstek'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 Winstek.

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

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)，以提供對台星科技股份有限公司符合 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四有限保證等級查證。

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記錄及資料來源；
- 查證類別四在購買的產品和服務之活動數據彙整（能源等使用）；以及處置廢棄物之活動數據彙整；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 Category 4, 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;
- Verified emission factors sourced from MOENV and the Global Warming Potentials (GWPs) from the Fourth 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 4 from purchased products and services (Use of energy) and disposal of waste; and
- Confirmed significance criteria on reporting of emission categories.

查證等級及實質性

依據合約的協議，查證是在合理保證等級及5%的實質性等級(類別一與類別二)，有限保證等級及5%的實質性等級(類別四)下執行的，本查證意見基於此形成。



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 4. 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(類別四)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 total direct and energy indirect GHG emissions for the calendar year 2023 disclosed in the GHG Inventory Report as summarised in the Table 1 below are materially correct.
- Nothing has come to our attention that would cause us to believe that the GHG emissions for Category 4 disclosed in the Report as summarized in Table 1 below is not materially correct and that the GHG Inventory Report has been prepared in conformance with ISO 14064-1:2018.

LRQA's 建議

台星科技股份有限公司需考量:

- 強化人員對於活動數據蒐集之知識與技巧.
- 改進活動數據輸入與換算之一致性.

LRQA's Recommendations

Winstek Semiconductor Co., Ltd. should:

- Strengthen staff's knowledge and skills in activity data collection.
- Improve the consistency of data input and use of conversion factors.

Signed

日期 Dated: 30 August 2024

Gary Chen

Lead Verifier 主導查驗員

On behalf of LRQA Limited

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Chiang-shan Chen

General Manager 總經理



Table 1. Summary of Winstek's GHG Inventory Report for the calendar year 2023(01 January ~31 December 2023)

台星科技股份有限公司 2023 年度溫室氣體清冊

Scope of GHG emissions(溫室氣體排放之範疇)	Tonnes CO₂e CO₂ 當量噸
Direct GHG emissions (Category 1) 直接溫室氣體排放	3,646.7989
Direct GHG emissions from the combustion of biomass (生質燃燒溫室氣體排放)	None
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)	28,685.9872
Indirect GHG emissions from transportation (Category 3) 由運輸產生之間接溫室氣體排放	Not significant
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	7,614.3572
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	Not significant
Indirect GHG emissions from other sources (Category 6) 由其他來源產生的間接溫室氣體排放	Not identified
Location based and Market based are terminologies from Annex E of ISO 14064-1:2018	

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 MOENV.

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放係數。

備註 2：溫室氣體盤放數據相關小數點規定依據環境部規定執行。



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

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