

溫室氣體查證意見書 Greenhouse Gas Verification Opinion

四維航業股份有限公司 SHIH WEI NAVIGATION CO., LTD.

臺北市松山區復興北路 167 號 16 樓
16F., No. 167, Fuxing N. Rd., Songshan Dist., Taipei City 105403, Taiwan (R.O.C.)

四維航業股份有限公司 2023 年溫室氣體盤查報告書 Inventory Management Report of SHIH WEI NAVIGATION CO., LTD. for 2023

財團法人驗船中心(CR)根據 ISO14064-3:2019 確認上述組織之溫室氣體聲明，查證結果發現未違反實質性限制，符合雙方協議之查證準則並提出報告。

According to ISO14064-3:2019, CR Classification Society (CR) confirmed greenhouse gas statement of the above-mentioned is reported in accordance with the verification standards agreed by both parties. The results fulfill the requirements for materiality limits.

查 證 準 則 : ISO 14064-1: 2018, ISO 14064-3:2019, ISO 14065:2020,
Verification Standard : ISO 14066:2023

溫室氣體排放資訊(公噸二氧化碳當量) GHG Emissions (tons CO₂e)

盤 查 期 間 Covering Period	:	自民國 112 年 1 月 1 日至民國 112 年 12 月 31 日止
直接溫室氣體排放量 Direct GHG Emissions	:	14453.081 合理保證等級 Reasonable Assurance level
能源間接溫室氣體排放 Energy Indirect GHG Emissions	:	118.669 合理保證等級 Reasonable Assurance level
間接溫室氣體排放量 Indirect GHG Emissions	:	361015.852 有限保證等級 Limited Assurance level



Chitray

財團法人驗船中心 總驗船師

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查證範圍
Scope of Verification

報告書或計劃書名稱 (版次或發行日期)	四維航業股份有限公司 2023 溫盤報告書_(母公司辦公室+綠舞 1 號及子孫公司船隊)_1211
盤查清冊 (版次或發行日期)	四維航業 2023 溫盤氣體排放清冊 S2(辦公室+客輪+子孫公司船舶)_20251211
公司(廠)地址 (若為多場址案件請自行增列欄位)	臺北市松山區復興北路 167 號 16 樓
管制編號/登記編號	12551801

盤查資訊
Verification Information

排放溫室氣體種類	<input checked="" type="checkbox"/> 二氧化碳(CO ₂)、 <input checked="" type="checkbox"/> 甲烷(CH ₄)、 <input checked="" type="checkbox"/> 亞化亞氮(N ₂ O)、 <input checked="" type="checkbox"/> 氫氟碳化物(HFCs)、 <input checked="" type="checkbox"/> 全氟碳化物(PFCs)、 <input checked="" type="checkbox"/> 六氟化硫(SF ₆)、 <input checked="" type="checkbox"/> 三氟化氮(NF ₃)
採用 GWP 值之版次	IPCC AR6
電力排放係數及版本 (版次或日期)	能源署公告 112 年電力排放係數
自廠電力或蒸汽排放係數及版本 (版次或日期)	無

查證作業實施日期
Verification Date

各階段現場查驗日期	
7 月 22 日	第一階段現場查驗
10 月 3 日	第二階段現場查驗
12 月 11 日	書面審查完成

溫室氣體排放量
GHG Emission

類別 Category	排放源 GHG item	溫室氣體排放 GHG Emission	
		tons CO ₂ e	%
類別 1-直接溫室氣體排放 排放量	柴油引擎、車用汽油	3756.834	1.000
	逸散排放-冷媒逸散、化糞池 逸散	9568.121	2.548
	固定排放-廢油、廢棄物燃燒	1128.126	0.300
類別 2-能源間接溫室氣體 排放排放量	外購電力	118.669	0.032
類別 3-商務旅行	商務旅行	21.578	0.006
	員工通勤	4.574	0.001
類別 4-購買的商品	船舶用油、水	980.323	0.261
類別 5-下游租賃資產	船舶外租之用油	360009.378	95.852

查證意見
Verification
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過程與方法

Process and Methodology

CR 對該報告執行必要之審查程序與各階段訪談，基於所獲得之必要佐證，該報告有足夠的證據來確定符合標準的規定。

The reviews of the Inventory Report and relevant documents, and the subsequent follow up interviews have provided CR with sufficient evidence to determine the fulfilment of stated criteria.

保密性聲明

Confidentiality statement

此報告及附件可能包含屬於四維航業股份有限公司之機密資訊，除依法報送主管機關外，未經四維航業股份有限公司書面同意，其他個人、團體或公司禁止自行複製或發行。

This report and attachments may contain confidential information belonging to SHIH WEI NAVIGATION CO., LTD. Except as required by law, other individuals, groups or companies are prohibited from copying or distributing it without the written consent of SHIH WEI NAVIGATION CO., LTD.

利益衝突迴避聲明

Conflict of Interest Avoidance Statement

茲保證此報告及附件內容完全依照主管機關之相關規範與程序，秉持公正、誠實之原則進行查證作業。絕無虛偽不實，如有違反，就政府機關所受損失願負連帶賠償責任之外，並接受主管機關依法令所為之行政處分及刑事處罰。

查證人員瞭解如自身受政府機關委任從事公務，亦屬於刑法上之公務員，並瞭解刑法上圖利罪、公務員登載不實偽造公文書及貪污治罪條例之相關規定，如有違反，亦為刑法及貪污治罪條例之適用對象，願受最嚴厲之法律制裁。

保證本公司與受查證單位並無財務投資之關係，且符合主管機關對利益衝突迴避之要求。如有違反前述事實情事，經主管機關查證屬實時，此報告及附件內容願接受主管機關判定為無效之處分。

This is to ensure that the contents of this report and attachments are completely based on the standards and procedures that related-authorities established. and that verification operations are conducted in accordance with the principles of fairness and honesty. There is absolutely no hypocrisy. If there is any violation, I will be jointly and severally liable for the losses suffered by the government agencies, and I will accept the administrative sanctions and criminal penalties imposed by the competent authorities in accordance with the law.

Verifiers understand that if we are appointed by a government agency to engage in official duties, we are also civil servants under the criminal law. We also understand the relevant provisions of the crime of profiteering under the criminal law, the publication of false and forged official documents by public servants, and the Corruption Crime Ordinance. If there is any violation, we will also be deemed as civil servants under the criminal law. Those who are subject to criminal laws and corruption offenses are willing to be subject to the most severe legal sanctions.

Ensure that the company has no financial investment relationship with the unit subject to verification, and meets the requirements of the competent authority for avoiding conflicts of interest. If there is any violation of the above-mentioned facts, and if verified to be true by the competent authority, this report and the contents of the attachments are willing to be deemed invalid by the competent authority.

查證小組

Verifier Group

主導查證員
Lead Verifier

陳紀川

查證員
Verifiers

黃煜堂

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溫室氣體查證意見書
Greenhouse Gas Verification Opinion

四維航業股份有限公司
SHIH WEI NAVIGATION CO., LTD.

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Inventory Management Report of SHIH WEI NAVIGATION CO., LTD. for 2024

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查證準則 : ISO 14064-1: 2018, ISO 14064-3:2019, ISO 14065:2020, ISO 14066:2023
Verification Standard

溫室氣體排放資訊(公噸二氧化碳當量)
GHG Emissions (tons CO₂e)

盤查期間 Covering Period	:	自民國 113 年 1 月 1 日至民國 113 年 12 月 31 日止
直接溫室氣體排放量 Direct GHG Emissions	:	16,638.1668 合理保證等級 Reasonable Assurance level
能源間接溫室氣體排放 Energy Indirect GHG Emissions	:	193.8221 合理保證等級 Reasonable Assurance level
間接溫室氣體排放量 Indirect GHG Emissions	:	320,662.1862 有限保證等級 Limited Assurance level



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財團法人驗船中心 總驗船師

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查證範圍

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盤查清冊 (版次或發行日期)	四維航業 2024 溫盤氣體排放清冊 S2(辦公室+客輪+子孫公司船舶)_20251231
公司(廠)地址 (若為多場址案件請自行增列欄位)	臺北市松山區復興北路 167 號 16 樓
管制編號/登記編號	12551801

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電力排放係數及版本 (版次或日期)	能源署公告 113 年電力排放係數
自廠電力或蒸汽排放係數及版本 (版次或日期)	無

查證作業實施日期

Verification Date

各階段現場查驗日期	
2025 年 12 月 12 日	第一階段現場查驗
2025 年 12 月 24 日	第二階段現場查驗
2026 年 01 月 13 日	現場查驗審查完成

溫室氣體排放量

GHG Emission

類別 Category	排放源 GHG item	溫室氣體排放 GHG Emission	
		tons CO ₂ e	%
類別 1-直接溫室氣體排放 排放量	船舶引擎、車用汽油	12,173.9528	3.6072
	逸散排放-冷媒逸散、化糞池 逸散	3,341.1322	0.9900
	固定排放-廢油、廢棄物燃燒	1,123.0818	0.3328
類別 2-能源間接溫室氣體 排放排放量	外購電力	193.8221	0.0574
類別 3-商務旅行	商務旅行	30.4318	0.0090
	員工通勤	7.5111	0.0022
類別 4-購買的商品	船舶用油、水	1304.6862	0.3866
類別 5-下游租賃資產	船舶外租之燃油	319,319.5571	94.6148

查證意見

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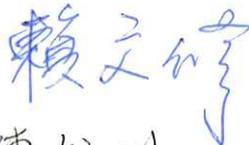
Verifiers understand that if we are appointed by a government agency to engage in official duties, we are also civil servants under the criminal law. We also understand the relevant provisions of the crime of profiteering under the criminal law, the publication of false and forged official documents by public servants, and the Corruption Crime Ordinance. If there is any violation, we will also be deemed as civil servants under the criminal law. Those who are subject to criminal laws and corruption offenses are willing to be subject to the most severe legal sanctions.

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Verifier Group

主導查證員
Lead Verifier



查證員
Verifiers



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