

Independent Verification Opinion

Verification Opinion No.:
C706048-2023-AG-TWN-DNV

Issued Place:
Taipei

Issued Date:
18 October, 2024

This is to verify initiate reporting of Greenhouse Gas Inventory Management Report (2023) of

JMC Electronics Co., Ltd.

Scope of Verification

DNV Business Assurance (DNV) has been commissioned by JMC ELECTRONICS CO., LTD. ('the Organization') to perform a verification of the greenhouse gas statements of Greenhouse Gas Inventory Management Report (2023) (hereafter the "Inventory Report") in Taiwan, R.O.C. with respect to the area: NO.8, SHINKAIFA ROAD, NANZIH DISTRICT, KAOHSIUNG CITY, TAIWAN(R.O.C.)

The Reporting Boundary for the verification including direct GHG emissions and removals, indirect GHG emissions from imported energy, indirect GHG emissions from transportation, indirect GHG emissions from products used by the Organization and indirect GHG emissions associated with the use of products from the Organization. The further descriptions for the Reporting Boundary listed in Appendix A.

Verification Criteria and GHG Programme

The verification was performed on the basis of ISO 14064-1:2018 as well as criteria given to provide for consistent GHG emission identification, calculation, monitoring and reporting. The verification was conducted in accordance with ISO 14066:2011, ISO 14065:2020, ISO14064-3:2019

Verification Opinion

It is DNV's opinion that the Inventory Report (2023), which was published on March 2024 is free from material discrepancies in accordance with the verification criteria identified as stated above. The opinion is decided based on the following approaches,

- For the Direct (Category 1) and Indirect GHG emissions from imported energy (Category 2), the reliability of the information within the Inventory Report (2023) were verified with reasonable level of assurance.

Also, the GHG information as stated in Appendix B has been verified during the process.

Wendy Yang
GHG Verifier



Place and date:

Taipei, 18 October, 2024

For the issuing office:

DNV Business Assurance Co., Ltd.
29Fl., No. 293, Sec. 2, Wenhua Rd.,
Banqiao District, New Taipei City
220, Taiwan



Management Representative



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Supplement to Verification Opinion

Process and Methodology

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

Quantification of Greenhouse Gas Emission

The Inventory Report covering the period 1 January, 2023 to 31 December, 2023, it is DNV's opinion that GHG emissions and removals identified within the Reporting Boundary has been included in the Inventory Report as claimed in accordance with the verification criteria identified as stated above, and results in quantification of GHG emissions that are real, transparent and measurable.

Organizational Boundary of Verification

☐ Financial Control ☒ Operational Control ☐ Equity Share

GHGs Verified

☒ CO₂ ☒ CH₄ ☒ N₂O ☒ HFCs ☒ PFCs ☒ SF₆ ☒ NF₃

The Quantification of GHG emissions:

Category		Emission (ton CO ₂ e)
Category 1	Direct GHG emissions and removals	215.4553
1.1	Stationary combustion emissions	0.6697
1.2	Mobile emissions	2.2229
1.3	Industry process	0.8530
1.4	Fugitive emissions	211.7097
Category 2	Indirect GHG emissions from imported energy	17,247.9977
2.1	Indirect emissions from imported electricity	17,247.9977
Total		17,463.4530

(The Imported Energy Indirect Emissions was calculated based on 2023 electricity emission factor of 0.494 kg CO₂-e/kwh, which was announced by Bureau of Energy, Ministry of Economic Affairs. The Global Warming Potential (GWP) defined in IPCC AR6 has been chosen and correctly referred by the Organization.)

Verification Opinion

☒ unmodified ☐ modified ☐ adverse

APPENDIX A

The Reporting Boundary of JMC Electronics Co., Ltd. Greenhouse Gas Inventory Management Report (2023)

Indirect emissions verification procedures:

Category	Subcategory	Verification Procedures
Category 2	2.1 Imported electricity	Bill and invoice from suppliers (TPC)
Category 3*	Indirect GHG emissions from transportation	Not Significant Emissions
Category 4*	Indirect GHG emissions from products used by an organization	Not Significant Emissions
Category 5*	Indirect GHG emissions associated with the use of products from the organization	Not Significant Emissions
Category 6*	Indirect GHG emissions from other sources	Not Significant Emissions

NOTE: Category 3, Category 4, Category 5 & Category 6 were evaluated as Not Significant Emissions base on JMC Electronics Co., Ltd.'s significant emission identification process reported in GHG inventory report.

APPENDIX B

For direct emissions and removals, quantified separately for each GHG as below:

GHG Type	CO ₂	CH ₄	N ₂ O	HFCs	PFCs	SF ₆	NF ₃	Total
Emissions (ton CO ₂ e)	3.6975	71.3286	0.0403	140.3889	0.0000	0.0000	0.0000	215.4553
Proportion (%)	1.7161%	33.1060%	0.0187%	65.1592%	0.0000%	0.0000%	0.0000%	100.0000%