

# Independent Verification Opinion

**Verification Opinion No.:**  
C679381-2023-AG-TWN-DNV

**Issued Place:**  
Taipei

**Issued Date:**  
12 June, 2024

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

## Materials Analysis Technology Inc.

### Scope of Verification

DNV Business Assurance (DNV) has been commissioned by MATERIALS ANALYSIS TECHNOLOGY INC. ('the Organization') to perform a verification of the greenhouse gas statements of Greenhouse Gas Inventory Management Report (2023) (hereafter the "Inventory Report") with respect to the boundary listed in APPENDIX A.

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.

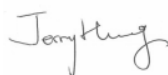
The verification was conducted in accordance with ISO 14066:2011, ISO 14065:2020, ISO 14064-3:2019

### Verification Opinion

It is DNV's opinion that the Inventory Report (2023), which was published on May 28, 2024 (V.3), 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.
- For the other indirect GHG emissions, the involved information was verified and tested using agreed-upon procedures, AUP, defined in Inventory Report.

Chien Yi Jerry Huang  
GHG Verifier



Place and date:  
Taipei, 12 June, 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 Management Control ☒ Operational Management Control ☐ Equity Share

### GHGs Verified

☒ CO<sub>2</sub> ☒ CH<sub>4</sub> ☒ N<sub>2</sub>O ☒ HFCs ☒ PFCs ☒ SF<sub>6</sub> ☒ NF<sub>3</sub>

### Quantification of Direct emissions and sink and Indirect GHG emissions from imported energy (in tonnes CO<sub>2</sub>e):

Company	Category 1	Category 2	Total
MATERIALS ANALYSIS TECHNOLOGY INC.	6,877.7858	16,418.8202	23,296.606

(\* The Imported Energy Indirect Emissions was calculated based on 2023 electricity emission factor of 0.494 kg CO<sub>2</sub>e/kwh, which was announced by Energy Administration, Ministry of Economic Affairs. The Global Warming Potential (GWP) defined in IPCC AR6 (2021) has been chosen and correctly referred by the Organization.)

### Quantification of other indirect emissions (in tonnes CO<sub>2</sub>e):

Category	Subcategory	Emissions (tonnes CO <sub>2</sub> e)
Category 3	Indirect GHG emissions from transportation	557.9644
3.1	Upstream transport and distribution for purchasing goods	0.7256
3.3	Employee Commuting	383.2674
3.5	Business travel	173.9714
Category 4	Indirect GHG emissions from products used by an organization	1,676.8861
4.1	Purchased goods and services	1,674.8396
4.3	Wastes treatment and transportation	2.0465
Category 5	Indirect GHG emissions associated with the use of products from the organization	Not Significant
Category 6	Indirect GHG emissions from other sources	Not Significant

\*The scope of indirect emissions, other than Imported Energy with specified/limited list of sources, was defined by MATERIALS ANALYSIS TECHNOLOGY INC. 's pre-determined criteria for significance of indirect emissions, considering the intended use of the GHG inventory.

### Verification Opinion

☒ unmodified ☐ modified ☐ adverse

## Appendix to Verification Opinion No. C679381-2023-AG-TWN-DNV

### APENDIX A

The Reporting Boundary of MATERIALS ANALYSIS TECHNOLOGY INC. Greenhouse Gas Inventory Management Report (2023)

#### Organization boundary: MATERIALS ANALYSIS TECHNOLOGY INC.

Boundary	Address
Materials Analysis Technology Inc.	Jubei Lab I Jubei Lab II Hsinchu Jinshan Lab
Materials Analysis Technology Inc., Hsinchu Science Park Branch	Hsinchu Prosperity Lab SoC Lab
Materials Analysis Technology Inc., Tainan Science Park Branch	Tainan Lab I Tainan Lab II
MA-tek (Shanghai) Ltd.	Zhangjiang Lab I Zhangjiang Lab II Jinqiao Lab I Jinqiao Lab II
MA-tek (Xiamen) Ltd.	Xiamen Lab Shenzhen Lab
Ma-tek Japan Inc.	Japan Nagoya Lab
Workflow Enhancement Technology Inc.	
Ma-tek International Inc.	
MA-tek Educational Consulting (Xiamen) Co., Ltd.	

#### Indirect emissions reporting boundary:

Category	Subcategory	Verification Procedure
Category 2	Indirect GHG emissions from imported energy	-Emission from imported electricity. -Bill and invoice from suppliers.
Category 3	3.1 Upstream transportation and distribution 3.5 Business Travel 3.3 Employee commuting	-Weight of purchasing goods and raw material -Distance of transportation from suppliers -Transportation of employees for business-related activities. -Taiwan, China and Japan emission factors -Ecoevent V3.10 factor -Transportation of employees from their residence to worksites, includes vehicles, motorcycles and bus transportation. - Taiwan, China and Japan emission factors -Ecoevent V3.10 factor
Category 4	4.1 Purchased goods 4.3 Wastes treatment and transportation	-Weight of purchasing goods and raw material -Distance of transportation from suppliers - Weight of wastes - Distance of wastes Transportation
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

\*The scope of indirect emissions, other than Imported Energy with specified/limited list of sources, was defined by MATERIALS ANALYSIS TECHNOLOGY INC. 's pre-determined criteria for significance of indirect emissions, considering the intended use of the GHG inventory.