

# Independent Verification Opinion

Verification Opinion No.:  
C776058-2024-AG-TWN-DNV

Issued Place and Date:  
Taipei, 28 July, 2025

Page 1 of 2

This is to verify initiate reporting of Greenhouse Gas Inventory Management Report (2024) of

## Materials Analysis Technology Inc

### Scope of Verification

DNV Business Assurance (DNV) has been commissioned by Materials Analysis Technology Inc. (hereafter "the Organization") to perform a verification of the greenhouse gas statements of Greenhouse Gas Inventory Management Report (2024) (hereafter the "Inventory Report") in Taiwan, R.O.C. with respect to the sites listed in Appendix A.

Organization	Address
Materials Analysis Technology Inc.	1A3, No.1, Li-Hsin 1st Rd., Hsinchu Science Park, Hsinchu 300, 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 and indirect GHG emissions from products used by the Organization. The further descriptions for the Reporting Boundary listed in Appendix B.

### Verification Criteria and GHG Programme

The verification was performed on the basis of ISO 14064-1:2018, CNS 14064-1:2021 as well as criteria given to provide for consistent GHG emission identification, calculation, monitoring and reporting. The verification was conducted in accordance with ISO 14066:2023, ISO 14065:2020, ISO14064-3:2019.

### Verification Opinion

It is DNV's opinion that the Inventory Report (2024), which was published on June 23, 2024 (Version 2), 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) GHG emissions and Indirect GHG emissions from imported energy (Category 2), the reliability of the information within the Inventory Report (2024) was verified with reasonable level of assurance.
- For the other indirect GHG emissions, the involved information was verified with limited level of assurance.

GHG Verifier :  
Alvin Chen



For the issuing office:  
DNV Business Assurance Co., Ltd.



Management Representative



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Page 2 of 2

## 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 1st January, 2024 to 31st December, 2024, 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  HFC<sub>s</sub>  PFC<sub>s</sub>  SF<sub>6</sub>  NF<sub>3</sub>

### Quantification of Emissions (in tonnes CO<sub>2</sub>e)

The Global Warming Potential (GWP) defined in IPCC AR6(2021) has been chosen and correctly referred by the Organization.

Category	Total
1: Direct emissions	14,768.4925
2: Imported energy indirect emissions*	17,965.8332
3: Indirect GHG emissions from transportation	619.7919
4: Indirect GHG emissions from products used by organization	2,072.4080
5: Indirect GHG emissions associated with the use of products from the organization	-
6: Other Emission Sources	-

(\*The Imported Energy Indirect Emissions was calculated based on 2024 electricity emission factor including 0.474 kg CO<sub>2</sub>e/kWh announced by the Energy Administration, Ministry of Economic Affairs (Taiwan); 0.5849 kg CO<sub>2</sub>e/kWh for Shanghai and 0.4403 kg CO<sub>2</sub>e/kWh for Guangdong, both published in the December 26, 2024 announcement by the Ministry of Ecology and Environment of the People's Republic of China; and 0.423 kg CO<sub>2</sub>/kWh issued by the Ministry of the Environment, Japan for the Reiwa 7 fiscal year (2025).)

### Type of Opinion

unmodified  modified  adverse

The Appendix forms an integral part of this Certificate, which shall be invalid when used without the Appendix.

Lack of fulfilment of conditions as set out in the Verification Agreement may render this Verification invalid. This Verification Opinion is based on the information made available to us and the engagement conditions detailed above. Hence, DNV cannot guarantee the accuracy or correctness of the information. DNV cannot be held liable by any party relying or acting upon this Verification Opinion.

The issuing office : 29Fl., No. 293, Sec. 2, Wenhua Rd., Banqiao District, New Taipei City 220, Taiwan Tel.: +886-2-82537800. <https://www.dnv.com/tw/>

DNV ZNATW-OP-F50, Rev.14, 2025-03

## APENDIX A

### The Reporting Boundary of MATERIALS ANALYSIS TECHNOLOGY INC. Greenhouse Gas Inventory Management Report (2024)

Boundary		Address
Materials Analysis Technology Inc.	Jubei Lab I	1F, No.26-2, Tai-Yuan St., Jubei City, Hsinchu 302, Taiwan, R.O.C.
	Jubei Lab II	1F, No.8, Taiyuan 2nd St., Jubei City, Hsinchu 302, Taiwan, R.O.C.
	Hsinchu Jinshan Lab	2F, No.1, Jinshan 7th St., Hsinchu 300, Taiwan, R.O.C.
Materials Analysis Technology Inc., Hsinchu Science Park Branch	Hsinchu Prosperity Lab	1F, No.14, Prosperity Rd. II, Hsinchu Science Park, Hsinchu 300, Taiwan, R.O.C.
	SoC Lab	1A3, No. 1, Li-Hsin 1st Rd., Hsinchu Science Park, Hsinchu 300, Taiwan, R.O.C.
Materials Analysis Technology Inc., Tainan Science Park Branch	Tainan Lab I	1F, No.9, Nanke 3rd Rd., Xinshi Dist., Tainan 74147, Taiwan, R.O.C.
	Tainan Lab II	1F, No.23, Nanke 3rd Rd., Xinshi Dist., Tainan 74147, Taiwan, R.O.C.
MA-tek (Shanghai) Ltd.	Zhangjiang Lab I	No.138, Lane 1505, Zuchongzhi Road, Zhangjiang Hi-Tech Park, Pudong New Area, Shanghai, China
	Zhangjiang Lab II (A)	Building 16, 1500 Zuchongzhi Road, Zhangjiang Hi-tech Park, Pudong New Area, Shanghai, China
	Zhangjiang Lab II (B)	Building 15, 1500 Zuchongzhi Road, Zhangjiang Hi-tech Park, Pudong New Area, Shanghai, China
	Zhangjiang Lab II (A)	Building 3, 1500 Zuchongzhi Road, Zhangjiang Hi-tech Park, Pudong New Area, Shanghai, China
	Jinqiao Lab I	No.4, Aly. 33, Jinji Road Jinqiao Export Processing Zone Pudong, Shanghai, China
	Jinqiao Lab II	Building A, No.100, Guiqiao Road Jinqiao Export Processing Zone Pudong, Shanghai, China
MA-tek (Xiamen) Ltd.	Xiamen Lab	Zone B, 1F, Building D, No. 518, Lushan North Road, Huli Dist., Xiamen, China
	Shenzhen Lab	101/102/103, Building 3, Jia'an Science & Technology Park, No. 2 Longchang Rd., Xingdong Community, Xin'an Street, Bao'an District, Shenzhen, China
Ma-tek Japan Inc.	Japan Nagoya Lab	4-130 Kamiyashiro, Meito-Ku, Nagoya-City, 465-0025, Japan
	Japan Kumamoto Lab	6-25-17 Oe, Chuo-ku, Kumamoto City, 862-0971, Japan
Workflow Enhancement Technology Inc.		1A2, No.1, Li-Hsin 1st Rd., Hsinchu Science Park, Hsinchu 300, Taiwan, R.O.C.
Ma-tek International Inc.		Holding company managing the reinvestment.
MA-tek Educational Consulting (Xiamen) Co., Ltd.		Provide mainland region educational consultation service, but no funding has been invested yet.

The Appendix forms an integral part of this Certificate, which shall be invalid when used without the Appendix.

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## APENDIX B

### 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	- Weight of purchasing goods and raw material - Distance of transportation from suppliers
	3.5 Business Travel	- Transportation of employees for business-related activities. - Taiwan, China and Japan emission factors - Ecoevent V3.10 factor
	3.3 Employee Commuting	- 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	- Weight of incoming goods and raw material report. - Upstream emissions of purchased fuels and electricity. (i.e. upstream emissions associated with fuels and electricity production). - Bill and invoice from suppliers. - Taiwan, China and Japan emission factors
	4.3 Wastes treatment and transportation	- Weight of wastes - Distance of wastes Transportation
	4.4 Upstream leased assets	- Electricity use attributable to common area facilities in leased office buildings.
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.