

# VERIFICATION OPINION OF GREENHOUSE GAS STATEMENT

Opinion No.: 00047-2025-GHG-RGC Rev.1

Date of issue: 17 July 2025

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

# SHANGHAI MEADVILLE ELECTRONICS CO., LTD.

### Scope of Verification

DNV Business Assurance (DNV) has been commissioned by SHANGHAI MEADVILLE ELECTRONICS CO., LTD., (hereafter the "Company") to perform a verification of the GHG Emissions Inventory Report (2024) (hereafter the "Inventory Report") in China, the scope of the verification is set to the reporting boundary covered by this Inventory Report, as detailed in Appendix A & B of this opinion.

### **Verification Criteria and GHG Programme**

The verification was performed on the basis of ISO 14064-1:2018, as well as those given to provide for consistent GHG emission identification, calculation, monitoring and reporting.

The implementation process of the verification, is in accordance with the requirements of standards of ISO 14066:2023, ISO 14065:2020 and ISO 14064-3:2019 etc.

## **Verification Opinion**

It is DNV's opinion that the Inventory Report, which was published on 14 July 2025, 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 GHG emissions (Category 1) and Indirect GHG emissions from imported energy (Category 2), the reliability of the information within the Inventory Report were verified with reasonable level of assurance.
- For the other Indirect GHG emissions (Category 3&4), the involved information was verified and tested using agreed-upon procedures (AUP).

In addition, the information listed in attached Appendix A&B&C were also verified during the process.

DNV Business Assurance China

LYU, Xiuyuan GHG Verifier

Tony Xu

Management Representative

Place and date: Shanghai, 17 July 2025

CW, Xinguan



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# **Supplement to Statement**

# **Process and Methodology**

The reviews of the Inventory Report 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 from 01 January 2024 to 31 December 2024, it is DNV's opinion that the Inventory Report 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**

 $\square CO_2 \square CH_4 \square N_2O \square HFCs \square PFCs \square SF_6 \square NF_3$ 

| GHG Inventory Categories  | Amount (tCO <sub>2</sub> e) location-based | Amount (tCO <sub>2</sub> e)<br>market-based |
|---|--|---|
| Category 1 - Direct GHG emissions <sup>1</sup>                        | 3,991.03                                   | 3,991.03                                    |
| Category 2 - Indirect GHG emissions from imported energy <sup>2</sup> | 34,289.91                                  | 26,301.08                                   |
| Category 3 - Indirect GHG emissions from transportation               | 1,459.57                                   | 1,459.57                                    |
| Category 4 - Indirect GHG emissions from products used by the Company | 22,199.91                                  | 19,509.25                                   |
| Total Emissions <sup>34</sup>   | 61,940.42                                  | 51,260.93                                   |

- 1. For details of the Direct GHG emissions please refer to Annex C;
- 2. As announced in Announcement on 2022 Emission Factors for Power Grid in China by Ministry of Ecology and Environment and Bureau of Statistics on 26 Dec. 2024; For Market-based approach: Purchased green electricity has an emission factor of 0 kgCO<sub>2</sub>e/kWh. The remaining electricity uses the Residual Mix grid emission factor of 0.5856 kgCO<sub>2</sub>e/kWh; For location-based approach: The grid emission factor of 0.5366 kgCO<sub>2</sub>e/kWh is applied;
- 3. The scope of indirect emissions was defined by Company's own pre-determined criteria for significance of indirect emissions, considering the intended use of the GHG inventory;
- 4. The Global Warming Potential (GWP) 100 year defined in IPCC AR6 has been chosen and referred by the company.

|             | Verification Opinion           |  |  |  |  |  |  |
|-------------|--------------------------------|--|--|--|--|--|--|
| $\boxtimes$ | Verified without Qualification |  |  |  |  |  |  |
|             | Verified with Qualification    |  |  |  |  |  |  |
|             | Unable to Verify               |  |  |  |  |  |  |

<sup>\*</sup> This Verification Opinion replaces DNV's opinion letter 00047-2025-GHG-RGC issued on 7 July 2025, which is no longer valid.



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## **APPENDIX A**

The GHG statement proposed by the reporting entity for this Inventory Report includes the following addresses:

| No. | Facility                                 | Address   | Total emissions<br>tCO₂e          |
|-----|--|---|-----------------------------------|
| 1   | SHANGHAI MEADVILLE ELECTRONICS CO., LTD. | No.200 Jiang Tian Dong Road, Song<br>Jiang Industrial Zone, Shanghai, China                           | <b>51,260.93</b> (market-based)   |
|     | CAF                                      | 6th Floor, No.685 Lian Yang Road,<br>Song Jiang Industrial Zone, Shanghai,<br>China                   | <b>61,940.42</b> (location-based) |
|     | ////                                     | Southeast Area of 1st Floor, No.228 Jiang Tian Dong Road, Song Jiang Industrial Zone, Shanghai, China |                                   |





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### **APPENDIX B**

The reporting boundary of the Inventory Report (2024) is identified by organization as:

| Category  | Reporting Boundary*  |
|---|--|
| 1.Category1 - Direct GHG emissions                                      | Fuel usage from mobile & stationery combustion, fugitive from refrigerant, fire extinguisher and septic tank, and process emissions. These facilities and process were owned or controlled by the reporting entity within its organizational boundary. |
| 2.Category2 - Indirect GHG emissions from imported energy               | Indirect emissions from imported electricity.  |
| 3.Category3 - Indirect GHG emissions from transportation                | Indirect emissions from activities incl., upstream transportation, employee commuting, business travel and downstream transportation.  |
| 4.Category 4 - Indirect GHG emissions from products used by the Company | Indirect emissions from activities incl., purchased goods and services.  |

<sup>\*</sup>The scope of other indirect emissions (excl. imported energy with designated/limited source) is determined by the reporting entity based on predetermined criteria for assessing significant indirect emissions and considering the intended use of its GHG inventory.





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### **APPENDIX C**

For direct GHG emissions and removals, the quantified results for each GHGs are as follows, in Tones  $CO_{2}$ -e units.

| CO <sub>2</sub> | CH <sub>4</sub> | N <sub>2</sub> O | HFCs  | PFCs     | SF <sub>6</sub> | NF <sub>3</sub> | HCFC  | Sum      |
|-----------------|-----------------|------------------|-------|----------|-----------------|-----------------|-------|----------|
| 1,999.38        | 100.61          | 2.55             | 94.69 | 1,771.20 | 0.00            | 0.00            | 22.60 | 3,991.03 |
| 50.10%          | 2.52%           | 0.06%            | 2.37% | 44.38%   | 0.00%           | 0.00%           | 0.57% | 100.00%  |





# 温室气体声明 核查意见书

意见书编号:

签发日期:

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00047-2025-GHG-RGC Rev.1

2025年7月17日

兹对下列报告主体所递交之温室气体盘查报告书(2024年)进行核查

# 上海美维电子有限公司

### 核查范围

DNV - 管理服务集团(下称 DNV) 受上海美维电子有限公司,对该公司(下称"报告主体")所递交的温室气体盘查报告书(2024年)(下称"该报告")而提出的温室气体主张进行核查,核查范围设定为该报告所涵盖之报告边界,详见本意见书的附录 A & B。

### 核查规范

本次核查,以 ISO 14064-1:2018 以及其他涉及使得温室气体排放的识别、计算、监测及报告等过程能趋于一致的各项准则进行。

本次核查的实施过程. 是按照 ISO 14066:2023/ISO 14065:2020/ISO 14064-3:2019 等标准的要求执行的。

#### 核杏音贝

依据上述确定的各项验证准则进行核查, DNV 认为, 2025 年 7 月 14 日发布的该报告不存在不符合上述验证标准的重大差异。该意见是基于以下方法决定的:

- 对于直接温室气体排放 (类别 1) 和输入能源的间接温室气体排放 (类别 2) ,该报告中信息的可靠性得到了合理保证水平的验证。
- 对于其他间接排放 (类别 3&4) ,所涉及的信息已使用议定的程序 (AUP) 进行验证和测试。同时、对附录 A、B及 C中所列的各项信息也在过程中进行了核查。

是熔流

吕修远 核查组长 DNV - 管理服务集团

徐立志 管理代表

意见书签发地点及日期: 中国上海 2025 年 7 月 17 日



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### 意见书补充信息

### 过程与方法

DNV 于核查期间,对盘查报告进行了完整的审阅,并在接续的追踪访谈中,获取了足够的证据以决定对如前述规范的符合程度。

### 温室气体排放量的量化

盘查报告所涵盖的时间范围自 2024 年 1 月 1 日起至 2024 年 12 月 31 日为止。DNV 认为盘查报告所载明之温室气体排放量化过程的结果具有真实性、透明度高,并具有可量测性。

# 核查的组织边界

| □ 财务管理控制 🖂 运行管理控制 □ 股权 | 权持: | 限 | 里控制「 | 法行管: | $\boxtimes$ | 财务管理控制 |  |
|------------------------|-----|---|------|------|-------------|--------|--|
|------------------------|-----|---|------|------|-------------|--------|--|

### 核查的温室气体

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

| 核算指标                              | 核算结果(tCO₂e) | 核算结果(tCO₂e) |  |
|-----------------------------------|-------------|-------------|--|
|                                   | 基于位置        | 基于市场        |  |
| 类别 1 - 直接温室气体排放 <sup>1</sup>      | 3,991.03    | 3,991.03    |  |
| 类别 2 - 输入能源的间接温室气体排放 <sup>2</sup> | 34,289.91   | 26,301.08   |  |
| 类别 3 – 运输的间接温室气体排放                | 1,459.57    | 1,459.57    |  |
| 类别 4 - 购买货物的间接温室气体排放              | 22,199.91   | 19,509.25   |  |
| 类别 1-4 之温室气体排放总量 <sup>34</sup>    | 61,940.42   | 51,260.93   |  |

- 1. 直接温室气体排放的详细信息见附录 C;
- 2. 依据生态环境部及国家统计局《关于发布 2022 年电力二氧化碳排放因子的公告》(2024 年 12 月 26 日)。基于市场的电力因子,其中采购的 绿色电力的因子为 0 kgCO<sub>2</sub>/kWh,核销后剩余的电力采用公告中全国电力平均二氧化碳排放因子(不包括市场化交易的非化石能源电量,即电 网剩余组合排放因子)0.5856 kgCO<sub>2</sub>/kWh;基于位置的电力因子,采用公告中全国电力平均二氧化碳排放因子 0.5366 kgCO<sub>2</sub>/kWh;
- 3. 间接排放的报告范围,由报告主体根据温室气体盘查清单的预期用途而确定的间接排放重要性判定标准确定;
- 4. GWP 值来源于 IPCC 2021 第六次评估报告。

## 核查意见

| $\boxtimes$ | 不附带保留意见的核查结果 |
|-------------|--------------|
|             | 附带保留意见的核查结果  |
|             | 无法核查         |

\* 本意见书替代 DNV 于 2025 年 7 月 7 日签发的 00047-2025-GHG-RGC 意见书, 原意见书不再有效。



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# 附录A

报告主体所提出该报告之温室气体主张, 其涵盖地址包括:

| 编号 | 厂区         | 地址                     | 排放量       |
|----|------------|------------------------|-----------|
| 細写 | / 🗠        | ил                     | tCO₂e     |
|    |            | 中国上海松江工业区江田东路 200 号    | 51,260.93 |
| 1  | 上海美维电子有限公司 | 中国上海松江工业区联阳路 685 号 6 楼 | (基于市场)    |
|    |            | 中国上海松江工业区江田东路 228 号一楼  | 61,940.42 |
|    |            | 东南区                    | (基于位置)    |





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# 附录B

报告主体所提出该报告 (2024) 之报告边界:

| , ,                   |                           |  |  |  |
|-----------------------|---------------------------|--|--|--|
| 类别                    | 报告边界*                     |  |  |  |
| 1. 直接温室气体排放与移除        | 组织边界內由组织拥有或控制的:燃料使用(柴油,   |  |  |  |
|                       | 油,天然气,乙炔等)、制程排放、化粪池、CO2灭火 |  |  |  |
|                       | 器、制冷剂逸散等。                 |  |  |  |
| 2. 输入能源的间接温室气体排放      | 输入电力所产生的间接温室气体排放量。        |  |  |  |
| 3. 运输产生的间接温室气体排放      | 上游的运输,员工通勤,商务差旅,下游的运输等活动  |  |  |  |
| / 5/                  | 所产生的温室气体间接排放量。            |  |  |  |
| 4. 组织使用产品产生的间接温室气体排放量 | 采购商品和服务等活动产生的温室气体间接排放量。   |  |  |  |

其他间接排放的范围(具有指定/有限來源清单的输入能源除外)是由报告主体根据预先确定的重大间接排放评估准 则进行判定,并考虑温室气体清册的预期用途而确定的。





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# 附录C

对于直接排放和移除量,每种温室气体的量化结果如下,以 tCO<sub>2</sub>e 为单位。

| CO <sub>2</sub> | CH <sub>4</sub> | N <sub>2</sub> O | HFCs  | PFCs     | SF <sub>6</sub> | NF <sub>3</sub> | HCFC  | 合计       |
|-----------------|-----------------|------------------|-------|----------|-----------------|-----------------|-------|----------|
| 1,999.38        | 100.61          | 2.55             | 94.69 | 1,771.20 | 0.00            | 0.00            | 22.60 | 3,991.03 |
| 50.10%          | 2.52%           | 0.06%            | 2.37% | 44.38%   | 0.00%           | 0.00%           | 0.57% | 100.00%  |

