

# VERIFICATION STATEMENT OF GREENHOUSE GAS ASSERTIONS

Statement No.:  
00016-2022-GHG-RGC

Date of issue:  
18 April 2022

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This is to verify initiate reporting of Greenhouse Gas Emissions Inventory Report (2021) of

## TSMC Nanjing Company Limited

### Scope of Verification

DNV Business Assurance China Co. Ltd (DNV) has been commissioned by TSMC Nanjing Company Limited to perform a verification of the greenhouse gas assertion of TSMC Nanjing Company Limited Greenhouse Gas Inventory Management Report (hereafter the "Inventory Report") with respect to the following organization scope area: 16 Zifeng Road, Pukou Economic Development Zone, Nanjing, Jiangsu, China.


### 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.

### Verification Statement

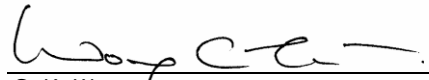
It is DNV's opinion that with reasonable assurance the greenhouse gas assertion of the direct GHG emissions and indirect GHG emissions from imported energy in The Inventory Report of 2021, which was published on 31st March 2022 is free from material discrepancies in accordance with ISO 14064-1:2018.

DNV Business Assurance  
China



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FONG, Guo Wai  
GHG Verifier



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C. K. Wong  
Management Representative

Place and date: Shanghai, 18 April 2022

## 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. The Inventory Report correctly complies with the requirement of ISO 14064-1:2018.

### Quantification of Greenhouse Gas Emission

The Inventory Report covering the period 1st January 2021 to 31st December 2021, it is DNV's opinion that the Inventory Report results in quantification of GHG emissions that are real, transparent and measurable.

### 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>

### Organizational Boundary of Verification

Financial Management Control  Operational Management Control  Equity Share

### Reporting Boundary and Emission Amount of Verification

Categories	Amount (Tones CO <sub>2</sub> -e)
Direct GHG emissions	29777.79
Indirect GHG emissions from imported energy <sup>Note 2</sup>	353746.28
Indirect GHG emissions from products used by TSMC Nanjing Company Limited <sup>Note 3</sup>	259668.01

Note 1 : The Global Warming Potential (GWP) defined in IPCC AR6 has been chosen and referred by the Organization.

Note 2: The electricity consumption related indirect emissions from imported energy were calculated by the factor of 0.7921 kg CO<sub>2</sub>-e/kwh (2019) which was announced by Ministry of Ecology and Environment.

Note 3: The indirect GHG emissions from products used by the company are counted by the upstream (cradle-to-gate) emissions of 80% (by CO<sub>2e</sub>) purchased goods and the upstream (cradle-to-gate) emissions of purchased fuels (diesel, and Nature gas) and electricity

In March 2022, the company has applied for 446593 MWH I-RECs under International REC Standard. 139 tons CO<sub>2</sub>-e caused by natural gas consumption in non-production areas was offset by purchasing CCER on 25th March 2022 from the national voluntary emission reduction and emission trading registration system.

### Verification Opinion

Verified without Qualification  
 Unable to Verify