bsi. Opinion Statement



Greenhouse Gas Emissions

Verification Opinion Statement

This is to verify that:

ChipMOS Technologies Inc. No. 1, Yanfa 1st Rd. Hsinchu Science Park Hsinchu City 300092 Taiwan

南茂科技股份有限公司 臺灣 新竹市 新竹科學園區 研發一路一號 300092

Holds Statement No: GHGEV 790778

Verification opinion statement

As a result of carrying out verification procedures in accordance with ISO 14064-3:2006, it is the opinion of BSI with reasonable assurance that:

- The Greenhouse Gas Emissions with ChipMOS Technologies Inc. for the period from 2022-01-01 to 2022-12-31 was verified, including direct greenhouse gas emissions 4,302.6471 tonnes of CO₂ equivalent and indirect greenhouse gas emissions from imported energy 238,014.9896 tonnes of CO₂ equivalent.
- No material misstatements for the period from 2022-01-01 to 2022-12-31 Greenhouse Gas Emissions calculation were revealed.
- Data quality was considered acceptable in meeting the principles as set out in ISO 14064-1:2018.
- The emission factor for electricity of year 2022 is 0.495 kgCO₂ per kWh.

The other selected indirect GHG emissions listed in the attached table on the next page were also reported and thus verified with limited assurance, and data quality was not considered unacceptable in meeting the principles as set out in ISO 14064-1:2018.

For and on behalf of BSI:

Managing Director BSI Taiwan, Peter Pu

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...making excellence a habit."

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The greenhouse gas emissions information reported by the organization for the period from 2022-01-01 to 2022-12-31 is as follows:

	EMISSIONS	Notes	tonnes CO2e
Cate	4,302.6471		
1.1	Stationary combustion		505.8235
1.2	Mobile combustion		30.5863
1.3	Industrial processes (anthropogenic systems)		4.3311
1.4	Fugitive (anthropogenic systems)		3,761.9062
1.5	Land use, land use change and forestry	N/A	0
	t emissions in tonnes of CO2e from biomass		0
Cate	gory 2: Indirect GHG emissions from imported energy		238,014.9896
2.1	Indirect emissions from imported electricity	location-based approach	238,014.9896
Renewable Electricity purchased in kWh with contractual instruments compliant with ISO 14064-1:2018 Annex E		all PPA	10,003 kWh
	Indirect emissions from imported electricity	market-based approach	238,010.0381
2.2	Indirect emissions from imported energy (steam, heating, cooling and compressed air)	N/A	0
Cate	3,049.4028		
3.1	Emissions from upstream transport and distribution for goods		108.7470
3.2	Emissions from Downstream transport and distribution for goods		84.8690
3.3	Emissions from Employee commuting	Estimate based on employee personnel information	2,782.7349
3.4	Emissions from Client and visitor transport	NS	
3.5	Emissions from Business travels	Estimated based on business travel expenses	73.0519
Cate	47,178.4260		
4.1	Emissions from Purchased goods	Direct raw materials, natural gas, motor gasoline, diesel, electricity	45,759.6545
4.2	Emissions from Capital goods		10.1774
4.3	Emissions from the disposal of solid and liquid waste	Solid and liquid waste	1,320.8642
4.4	Emissions from the use of assets	Emissions from Asset Use (Electricity Consumption)	87.7299
4.5	Emissions from the use of services that are not described in the above subcategories	NS	
* NC.	Non significant: N/A: Non available.	I	

* NS: Non significant; N/A: Non available.

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The total emissions were verified in selected branches and representative offices, including but not limited to the following:

Location	Verification Information
ChipMOS Technologies Inc. Hsinchu fab. No. 1, R&D Rd. 1, Hsinchu Science Park Hsinchu City, Taiwan, R.O.C. 南茂科技股份有限公司竹科一廠 台灣新竹科學園區研發一路一號	The Greenhouse Gas Emissions with the ChipMOS Technologies Inc. Hsinchu fab. for the period from 2022-01-01 to 2022-12-31 was verified, including the direct greenhouse gas emissions 670.1706 tonnes of CO_2 equivalent and indirect greenhouse gas emissions from imported energy 48,707.2080 tonnes of CO_2 equivalent.
ChipMOS Technologies Inc. Zhubei fab. No. 37, Xintai Rd., Zhubei City Hsinchu County, Taiwan, R.O.C. 南茂科技股份有限公司 竹北一廠 台灣新竹縣竹北市新泰路 37 號	The Greenhouse Gas Emissions with the ChipMOS Technologies Inc. Zhubei fab. for the period from 2022-01-01 to 2022-12-31 was verified, including the direct greenhouse gas emissions 878.7423 tonnes of CO_2 equivalent and indirect greenhouse gas emissions from imported energy 39,592.0800 tonnes of CO_2 equivalent.
ChipMOS Technologies Inc. Zhubei fab. 2 No. 112, Zhonghe St., Zhubei City Hsinchu County, Taiwan, R.O.C. 南茂科技股份有限公司 竹北二廠 台灣新竹縣竹北市中和街 112 號	The Greenhouse Gas Emissions with the ChipMOS Technologies Inc. Zhubei fab. 2 for the period from 2022-01-01 to 2022-12-31 was verified, including the direct greenhouse gas emissions 152.2527 tonnes of CO_2 equivalent and indirect greenhouse gas emissions from imported energy 10,248.0840 tonnes of CO_2 equivalent.
ChipMOS Technologies Inc. Hukou fab. No. 4, Rende Rd., Feng Shan Vil. Hukou Township, Hsinchu County Taiwan, R.O.C. 南茂科技股份有限公司 湖口廠 台灣新竹縣湖口鄉鳳山村仁德路 4 號	The Greenhouse Gas Emissions with the ChipMOS Technologies Inc. Hukou fab. for the period from 2022-01-01 to 2022-12-31 was verified, including the direct greenhouse gas emissions 1,549.7301 tonnes of CO ₂ equivalent and indirect greenhouse gas emissions from imported energy 29,355.4800 tonnes of CO ₂ equivalent.
ChipMOS Technologies Inc. Tainan fab. No. 5, Nanke 7th Rd., Southern Taiwan Science Park Tainan City, Taiwan, R.O.C. 南茂科技股份有限公司 台南廠 台灣台南科學園區南科七路 5 號	The Greenhouse Gas Emissions with the ChipMOS Technologies Inc. Tainan fab. for the period from 2022-01-01 to 2022-12-31 was verified, including the direct greenhouse gas emissions 641.2045 tonnes of CO ₂ equivalent and indirect greenhouse gas emissions from imported energy 79,369.8944 tonnes of CO ₂ equivalent.

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Verification Information Location ChipMOS Technologies Inc. Tainan fab. 2 The Greenhouse Gas Emissions with the ChipMOS Technologies Inc. Tainan fab. 2 for the period from No. 3, Nanke 7th Rd., Southern Taiwan Science Park Tainan City, Taiwan, R.O.C. 2022-01-01 to 2022-12-31 was verified, including the 南茂科技股份有限公司 台南二廠 direct greenhouse gas emissions 389.2481 tonnes of CO₂ equivalent and indirect greenhouse gas emissions 台灣台南科學園區南科七路3號 from imported energy 30,728.8080 tonnes of CO2 equivalent. ChipMOS SEMICONDUCTORS (Shanghai) LTD. The Greenhouse Gas Emissions with ChipMOS Room 309-C, 6 Building, 990 Shenchang Road SEMICONDUCTORS (Shanghai) LTD. for the period from 2022-01-01 to 2022-12-31 was verified, including the Minhang District, Shanghai direct greenhouse gas emissions 0.1479 tonnes of CO₂ 南茂半導體(上海)有限公司 equivalent and indirect greenhouse gas emissions from 上海市閔行區申長路 990 弄 6 號樓 309-C 室 imported energy 1.0424 tonnes of CO₂ equivalent. ChipMOS U.S.A. Inc. The Greenhouse Gas Emissions with ChipMOS U.S.A. Inc. for the period from 2022-01-01 to 2022-12-31 was 2890, North First Street, San Jose, CA 95134, U.S.A. verified, including the direct greenhouse gas emissions 21.1509 tonnes of CO₂ equivalent and indirect greenhouse gas emissions from imported energy 7.4413

tonnes of CO₂ equivalent.

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