



# Opinion Statement

## Greenhouse Gas Emissions Verification Opinion Statement

This is to verify that: EPISTAR Corporation  
No. 21, Li-Hsin Rd.  
Hsinchu Science Park  
Hsinchu City  
300094  
Taiwan

晶元光電股份有限公司  
臺灣  
新竹市  
科學園區  
力行路 21 號  
300094

Holds Statement No: GHGEV 806325

### Verification opinion statement

As a result of carrying out verification and validation procedures in accordance with ISO 14064-3:2019, it is the statement for mixed engagement including reasonable assurance for verification activity as well as validation and agreed-upon procedures (AUP) contains the following:

- The Greenhouse Gas Emissions with EPISTAR Corporation for the period from 2023-01-01 to 2023-12-31 was verified and validated.
- The verified organization-level greenhouse gas emissions include direct greenhouse gas emissions 31,348.7085 tonnes of CO<sub>2</sub> equivalent and indirect greenhouse gas emissions from imported energy 137,643.1024 tonnes of CO<sub>2</sub> equivalent.
- EPISTAR Corporation has defined and explained its own process and pre-determined criteria for significance of indirect Greenhouse Gas Emissions and quantify and report these identified significant emissions accordingly.

For and on behalf of BSI:

Managing Director BSI Taiwan, Peter Pu

Originally Issue: 2024-05-31

Latest Issue: 2024-05-31

Page: 1 of 5

...making excellence a habit.™

The British Standards Institution is independent to the above named client and has no financial interest in the above named client. This Opinion Statement has been prepared for the above named client only for the purposes of verifying its statements relating to its carbon emissions more particularly described in the scope. It was not prepared for any other purpose. The British Standards institution will not, in providing this Opinion Statement, accept or assume responsibility (legal or otherwise) or accept liability for or in connection with any other purpose for which it may be used or to any person by whom the Opinion Statement may be read. This Opinion Statement is prepared on the basis of review by The British Standards Institution of information presented to it by the above named client. The review does not extend beyond such information and is solely based on it. In performing such review, The British Standards Institution has assumed that all such information is complete and accurate. Any queries that may arise by virtue of this Opinion Statement or matters relating to it should be addressed to the above name client only.

Taiwan Headquarters: 2nd Floor, No. 37, Ji-Hu Rd., Nei-Hu Dist., Taipei 114, Taiwan, R.O.C.  
BSI Taiwan is a subsidiary of British Standards Institution.

The Greenhouse Gas Emissions Verification activities are based on reasonable level of assurance:

- The data and information of greenhouse gas emissions are based on historical in nature, and no material misstatements for the period from 2023-01-01 to 2023-12-31 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 2023 is 0.494 kgCO<sub>2</sub> per kWh.

EMISSIONS		Notes	tonnes CO <sub>2</sub> e
Category 1: Direct GHG emissions and removals			31,348.7085
1.1	Stationary combustion		2,417.3445
1.2	Mobile combustion		20.4325
1.3	Industrial processes (anthropogenic systems)		28,266.1232
1.4	Fugitive (anthropogenic systems)		644.8084
1.5	Land use, land use change and forestry	NA	
Direct emissions in tonnes of CO <sub>2</sub> e from biomass			0.0000
Category 2: Indirect GHG emissions from imported energy			137,643.1024
2.1	Indirect emissions from imported electricity	location-based approach	137,643.1024

Agreed upon procedures (AUP)

- AUP are specific types of verification activities, BSI have performed the evidence-gathering procedures for the period from 2023-01-01 to 2023-12-31
- BSI do not express any assurance on the GHG emissions, removals and storage in listed below.

EMISSIONS		Notes	AUP Item(s)	tonnes CO <sub>2</sub> e
Category 3: Indirect GHG emissions from transportation				3,129.9715
3.1	Emissions from upstream transport and distribution for goods	Use the Distance-based method	Goods Weight: 80,787 tonne Road transport: 75,768 tkm Air transport: 78,656 tkm	13.1872
3.2	Emissions from Downstream transport and distribution for goods	Use the Distance-based method	Goods Weight: 64,113 kg Road transport: 6,645 km Air transport: 119,820 km	115.7238
3.3	Emissions from Employee commuting	Use the Man-day-based method	Motorcycle: 7,013,657.70 pkm Automobile: 13,993,476.30 pkm	2,434.7921
3.5	Emissions from Business travels	Use the Distance-based method	Air transport: 1,884,885 km Road transport: 6,645 km Air transport: 119,820 km	566.2684
Category 4: indirect GHG emissions from products used by organization				137,362.2480
4.1	Emissions from Purchased goods	Goods: Use the supplier-specific method Energy & Fuel: Use the Average-data method	Electricity: 278,629,762 kWh Natural gas: 1,221,545 m <sup>3</sup> Diesel: 22,373.34 L Purchase goods: 80,787.1654 ton	30,481.9043
4.3	Emissions from the disposal of solid and liquid waste	Use the waste-type-specific method	Landfill treatment: 9,570 kg , Incineration:493,506.561 kg , Physical and chemical treatment:856,713,922.483 kg , Curing treatment:834,405 kg, Waste transport :579,102.6144938 tkm, Sewage: 1145577.0222151 m <sup>3</sup>	106,880.3437

The direct GHG emissions and removals(cat.1) and indirect GHG emissions from imported energy emissions(cat.2) were verified in selected branches and representative offices, including but not limited to the following:

Location	Verification Information
Epistar Corporation A1 Factory No. 21, Li-Hsin Rd., Hsinchu Science Park Hsinchu, Taiwan, 300 晶元光電股份有限公司 A1 廠(A1) 300 臺灣新竹市科學園區力行路 21 號	The Greenhouse Gas Emissions with the A1 Factory of Epistar Corporation for the period from 2023-01-01 to 2023-12-31 was verified, including direct greenhouse gas emissions 25.1899 tonnes of CO <sub>2</sub> equivalent and indirect greenhouse gas emissions from imported energy 943.2813 tonnes of CO <sub>2</sub> equivalent.
Epistar Corporation N1 Factory 1st Fl., No. 48, 1st Fl., No. 50, 1st Fl., No 52.,1st Fl.,No. 541st Fl., Park AveII., Hsinchu Science Park Hsinchu County, Taiwan, 308 晶元光電股份有限公司一廠(N1) 308 新竹縣新竹科學園區寶山鄉園區二路 48 號 1F、50 號 1F、52 號 1F、54 號 1F	The Greenhouse Gas Emissions with the N1 Factory of Epistar Corporation for the period from 2023-01-01 to 2023-12-31 was verified, including direct greenhouse gas emissions 62.8074 tonnes of CO <sub>2</sub> equivalent and indirect greenhouse gas emissions from imported energy 932.4757 tonnes of CO <sub>2</sub> equivalent.
Epistar Corporation N2 Factory No. 10, Li-Hsin Rd. Hsinchu Science Park Hsinchu City, Taiwan, 300 晶元光電股份有限公司二廠(N2) 300 新竹市新竹科學園區東區力行路 10 號	The Greenhouse Gas Emissions with the N2 Factory of Epistar Corporation for the period from 2023-01-01 to 2023-12-31 was verified, including direct greenhouse gas emissions 7,284.1163 tonnes of CO <sub>2</sub> equivalent and indirect greenhouse gas emissions from imported energy 19,351.3632 tonnes of CO <sub>2</sub> equivalent.
Epistar Corporation N3 Factory No. 5, Li-Hsin Rd. Hsinchu Science Park Hsinchu City, Taiwan, 300 晶元光電股份有限公司三廠(N3) 300 新竹市新竹科學園區力行五路 5 號	The Greenhouse Gas Emissions with the N3 Factory of Epistar Corporation for the period from 2023-01-01 to 2023-12-31 was verified, including direct greenhouse gas emissions 1,354.8364 tonnes of CO <sub>2</sub> equivalent and indirect greenhouse gas emissions from imported energy 4,651.3964 tonnes of CO <sub>2</sub> equivalent.
Epistar Corporation N5 Factory No.3, Gongye E. 3rd Rd., East Dist., Hsinchu City , Taiwan, 300 晶元光電股份有限公司五廠(N5) 300 新竹市科學園區工業東三路 3 號	The Greenhouse Gas Emissions with the N5 Factory of Epistar Corporation for the period from 2023-01-01 to 2023-12-31 was verified, including direct greenhouse gas emissions 3,401.4064 tonnes of CO <sub>2</sub> equivalent and indirect greenhouse gas emissions from imported energy 16,784.0709 tonnes of CO <sub>2</sub> equivalent.
Epistar Corporation N6 Factory No. 13, Kejung Rd. Chunan Science Park, Chunan, MiaoLi County, Taiwan, 350 晶元光電股份有限公司六廠(N6) 350 苗栗縣新竹科學園區竹南鎮科中路 13 號	The Greenhouse Gas Emissions with the N6 Factory of Epistar Corporation for the period from 2023-01-01 to 2023-12-31 was verified, including direct greenhouse gas emissions 153.0632 tonnes of CO <sub>2</sub> equivalent and indirect greenhouse gas emissions from imported energy 8,827.3023 tonnes of CO <sub>2</sub> equivalent.
Epistar Corporation N8 Factory No. 26, Li-hsin Rd. Hsinchu Science Park Hsinchu City, Taiwan, 300 晶元光電股份有限公司八廠(N8) 300 新竹市新竹科學園區東區力行路 26 號	The Greenhouse Gas Emissions with the N8 Factory of Epistar Corporation for the period from 2023-01-01 to 2023-12-31 was verified, including direct greenhouse gas emissions 5,307.0672 tonnes of CO <sub>2</sub> equivalent and indirect greenhouse gas emissions from imported energy 12,451.5664 tonnes of CO <sub>2</sub> equivalent.

Originally Issue: 2024-05-31

Latest Issue: 2024-05-31

Location	Verification Information
Epistar Corporation N9 Factory No 12, Kexi 1St Rd., Hsinchu Science Park, Chunan, Miaoli County, Taiwan, 350 晶元光電股份有限公司九廠(N9) 350 苗栗縣新竹科學園區竹南鎮科西一路 12 號	The Greenhouse Gas Emissions with the N9 Factory of Epistar Corporation for the period from 2023-01-01 to 2023-12-31 was verified, including direct greenhouse gas emissions 7.9435 tonnes of CO <sub>2</sub> equivalent and indirect greenhouse gas emissions from imported energy 8,750.5905 tonnes of CO <sub>2</sub> equivalent.
Epistar Corporation H1 Factory No.22, Keya Rd., Daya Dist., Taichung City, Taiwan, 428 晶元光電股份有限公司中科廠(H1) 428 台中市大雅區科雅路 22 號全建物涵蓋範圍	The Greenhouse Gas Emissions with the H1 Factory of Epistar Corporation for the period from 2023-01-01 to 2023-12-31 was verified, including direct greenhouse gas emissions 3,278.1668 tonnes of CO <sub>2</sub> equivalent and indirect greenhouse gas emissions from imported energy 21,190.2278 tonnes of CO <sub>2</sub> equivalent.
Epistar Corporation S1 Factory No. 10, 16, Dashun 9th Rd. Tainan Science Park, Xinshi Dist., Tainan City, Taiwan, 744 晶元光電股份有限公司南科一廠(S1) 744 台南市台南科學工業園區新市區大順九路 10、16 號全建物涵蓋範圍	The Greenhouse Gas Emissions with the S1 Factory of Epistar Corporation for the period from 2023-01-01 to 2023-12-31 was verified, including direct greenhouse gas emissions 8,458.4029 tonnes of CO <sub>2</sub> equivalent and indirect greenhouse gas emissions from imported energy 25,646.3084 tonnes of CO <sub>2</sub> equivalent.
Epistar Corporation S3 Factory No.11, Nanke 8th Rd. Tainan Science Park,Shanhua Dist., Tainan, Taiwan, 741 晶元光電股份有限公司南科三廠(S3) 741 台南市台南科學工業園區善化區南科八路 11 號全建物涵蓋範圍	The Greenhouse Gas Emissions with the S3 Factory of Epistar Corporation for the period from 2023-01-01 to 2023-12-31 was verified, including direct greenhouse gas emissions 2,015.7085 tonnes of CO <sub>2</sub> equivalent and indirect greenhouse gas emissions from imported energy 18,114.5196 tonnes of CO <sub>2</sub> equivalent.