



# Opinion Statement

## Greenhouse Gas Emissions Verification Opinion Statement

This is to verify that:

FORMOSAN UNION CHEMICAL CORP.  
No. 9, Shihua 3rd Rd.  
Linyuan Dist.  
Kaohsiung City  
83245  
Taiwan

和益化學工業股份有限公司  
臺灣  
高雄市  
林園區  
北汕里石化三路9號  
83245

Holds Statement No: GHGEV 808423

### 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 FORMOSAN UNION CHEMICAL CORP. 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 448,830.529 tonnes of CO<sub>2</sub> equivalent and indirect greenhouse gas emissions from imported energy 19,146.764 tonnes of CO<sub>2</sub> equivalent.
- FORMOSAN UNION CHEMICAL CORP. 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

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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>e per kWh.
- The emission factor for steam of year 2023 from Linyuan Advanced Materials Technology Co., Ltd. is 0.2028009420 kgCO<sub>2</sub>e per kg steam.

| EMISSIONS  |   | Notes                           | tonnes CO <sub>2</sub> e |
|--|---|---------------------------------|--------------------------|
| Category 1: Direct GHG emissions and removals  |   |                                 | <b>48,830.529</b>        |
| 1.1  | Stationary combustion                           |                                 | 48,636.7838              |
| 1.2  | Mobile combustion                               |                                 | 18.0096                  |
| 1.3  | Industrial processes (anthropogenic systems)    |                                 | 0.0592                   |
| 1.4  | Fugitive (anthropogenic systems)                |                                 | 175.6765                 |
| 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  |   |                                 | <b>19,146.764</b>        |
| 2.1  | Indirect emissions from imported electricity    | location-based approach         | 15,701.9876              |
| Renewable Electricity purchased in kWh with contractual instruments compliant with ISO 14064-1 Annex E |   | T-REC: 22SP0098-B023002898~3554 | 657,000 kWh              |
|  | Indirect emissions from imported electricity    | market-based approach           | 15,377.4064              |
| 2.2  | Indirect emissions from imported energy (steam) |                                 | 3,444.7768               |

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## 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 4: indirect GHG emissions from products used by organization |   |   |   | <b>15,820.477</b>        |
| 4.1   | Emissions from Purchased goods                        | Use the Average-data method<br>Electricity, fuels and treated water                     | Electricity:<br>31,785 MWh<br>Nature gas:<br>19,618 km <sup>3</sup><br>Fossil oil fuels:<br>3,256 KL<br>Treated water:<br>91,651 M <sup>3</sup> | 15,782.0241              |
| 4.3   | Emissions from the disposal of solid and liquid waste | Use the waste-type-specific method<br>Solid waste (incl. transportation) and wastewater | Solid waste:<br>59 ton<br>15,180 tkm<br>Wastewater:<br>50,463 M <sup>3</sup>  | 38.4527                  |

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

| Location   | Verification Information   |
|--|--|
| FORMOSAN UNION CHEMICAL CORP.<br>No. 9, Shihua 3rd Rd.<br>Linyuan Dist.<br>Kaohsiung City<br>83245<br>Taiwan<br>和益化學工業股份有限公司<br>台灣<br>高雄市<br>林園區<br>北汕里石化三路 9 號<br>83245 | The Greenhouse Gas Emissions with FORMOSAN UNION CHEMICAL CORP. for the year 2023 was verified, including direct GHG emissions 48,830.529 tCO <sub>2</sub> e and indirect GHG emissions from imported energy 19,146.764 tCO <sub>2</sub> e . |



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