



Independent Assurance Opinion

Verification Opinion No.:
C616296-2022-AG-TWN-DNV

Issued date:
04 September, 2023

Page 1 of 2

This is to verify initiate reporting of Greenhouse Gas Inventory Management Report (2022) of

EVERLIGHT CHEMICAL INDUSTRIAL CORPORATION

Scope of Verification

DNV Business Assurance (DNV) has been commissioned by EVERLIGHT CHEMICAL INDUSTRIAL CORPORATION (hereafter "the Company") to perform a verification of the greenhouse gas assertion of Greenhouse Gas Inventory Management Report (2022) (hereafter the "Inventory Report") in Taiwan, ROC with respect to the sites listed in Appendix A.

The scope of indirect emissions, other than Imported Energy with specified/limited list of sources, was defined by the company's own pre-determined criteria for significance of indirect emissions, considering the intended use of the GHG inventory:

Category	Subcategory	Boundary
Indirect GHG emissions from transportation	Upstream transportation and distribution	Emissions from the transportation of the purchased raw materials, consumables and packaging materials, including domestic land transportation, overseas air freight, and shipping.
	Employee commuting (car & scooter)	Emissions from the transportation of employees travelling between company and residential area by cars or scooters.
	Business travel (air)	Emissions from the air transportation by employees for business-related activities.
Indirect GHG emissions from products used by organization	Purchased materials	Upstream (cradle-to-gate) emissions of purchased raw materials used for production and manufacturing.
	Fuel-and-energy-related activities (not included in Scope 1 or 2)	Upstream emissions of purchased fuels and electricity, excluding steam energy.
	Waste generated in operations	Emissions from the disposal treatment and transportation of waste.

Verification Criteria and GHG Programme

The verification was performed on the basis of ISO 14064-1:2018, given to provide for consistent GHG emission identification, calculation, monitoring and reporting. The verification was conducted in accordance with ISO 14066:2011, ISO 14065:2020 and ISO 14064-3:2019.

Verification Opinion

It is DNV's opinion that the Inventory Report (2022), which was published on Aug 16, 2023 (ver. 1), is free from material discrepancies in accordance with ISO 14064-1:2018. The reliability of the information within the Inventory Report (2022) for direct GHG emissions and indirect GHG emissions from imported energy were verified with a reasonable assurance. 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 (Category 1) and Indirect GHG emissions from imported energy (Category 2), the reliability of the information within the Inventory Report (2022) were verified with reasonable level of assurance.
- For the other indirect GHG emissions, the involved information was tested using agreed-upon procedures, AUP, defined in Inventory Report.

Celine Wang
GHG Verifier

Place and date:
Taipei, 04 September, 2023

For the issuing office:
DNV Business Assurance Co., Ltd.
29Fl., No. 293, Sec. 2, Wenhua Rd.,
Banqiao District, New Taipei City 220,
Taiwan

Management Representative

Lack of fulfilment of conditions as set out in the Certification Agreement may render this Certificate invalid. This Verification Opinion is based on the information made available to us and the engagement conditions detailed above. Hence, DNV cannot guarantee the accuracy or correctness of the information. DNV cannot be held liable by any party relying or acting upon this Verification Opinion.



Supplement to Verification Opinion

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, 2022 to 31st December, 2022, 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

CO₂ CH₄ N₂O HFCs PFCs SF₆ NF₃

Direct Emissions: 18684.8901 tons CO₂e

Imported Energy Indirect Emissions: 39370.3494 tons CO₂e

Total emissions of Cat.1 and Cat.2: 58055.2395 tons CO₂e

Site	Cat. 1 tons CO ₂ e	Cat. 2 tons CO ₂ e	Cat. 1+2 tons CO ₂ e	Cat. 3 tons CO ₂ e	Cat. 4 tons CO ₂ e	Total tons CO ₂ e
Global Operations Headquarters	155.7231	168.4822	324.2053	61.5001	74.1927	459.898
1st Plant	3525.7370	12785.2273	16310.9643	2335.4483	32507.6726	51154.085
2nd Plant	8791.0252	8030.8696	16821.8948	1164.5763	26508.0911	44494.562
Electronic Chemical Plant	392.9952	1847.4578	2240.4530	130.4467	1491.0854	3861.985
Pharmaceutical Plant	278.2776	2315.0516	2593.3292	145.1511	879.5599	3618.040
3rd Plant	5370.6966	13633.2373	19003.9339	631.5740	26757.1668	46392.675
4th Plant	130.1220	584.9633	715.0853	90.5790	1886.4212	2692.086
Taichung Office in Taiwan	23.5579	3.2229	26.7808	0.4533	7.1541	34.388
Tainan Office in Taiwan	16.7555	1.8374	18.5929	1.7660	7.1421	27.501

The Global Warming Potential (GWP) defined in IPCC AR6 (2023) has been chosen and correctly referred by the Organization.

Verification Opinion

unmodified
 modified
 adverse



Appendix A to Statement No. C616296-2022-AG-TWN-DNV

APPENDIX A

The greenhouse gas statements of EVERLIGHT CHEMICAL INDUSTRIAL CORPORATION Greenhouse Gas Inventory Management Report (2022) with respect to the following sites:

Site	Address
臺灣永光化學工業股份有限公司第一廠 Everlight Chemical Industrial Corporation (1st Plant)	No. 271, Zhongshan N. Rd., Dayuan Dist., Taoyuan City 33759, Taiwan
臺灣永光化學工業股份有限公司第二廠 Everlight Chemical Industrial Corporation (2nd Plant)	No. 12, Gongye 3rd Rd., Guanyin Dist., Taoyuan City 32853, Taiwan
臺灣永光化學工業股份有限公司電子化學品廠 Everlight Chemical Industrial Corporation (Electronic Chemical Plant)	No. 12, Gongye 3rd Rd., Guanyin Dist., Taoyuan City 32853, Taiwan
臺灣永光化學工業股份有限公司原料藥廠 Everlight Chemical Industrial Corporation (Pharmaceutical Plant)	No. 12, Gongye 3rd Rd., Guanyin Dist., Taoyuan City 32853, Taiwan
臺灣永光化學工業股份有限公司第三廠 Everlight Chemical Industrial Corporation (3rd Plant)	No. 935 & 937, Sec. 2, Chenggong Rd., Guanyin Dist., Taoyuan City 32849, Taiwan
臺灣永光化學工業股份有限公司第四廠 Everlight Chemical Industrial Corporation (4th Plant)	No. 399, Datan N. Rd., Guanyin Dist., Taoyuan City 32841, Taiwan
臺灣永光化學工業股份有限公司全球營運總部 Everlight Chemical Industrial Corporation (Global Operations Headquarters)	6F., No.77, Sec. 2, DunHua S. Rd., Taipei 10682, Taiwan
臺灣永光化學工業股份有限公司台中辦事處 Everlight Chemical Industrial Corporation (Taichung Office in Taiwan)	17F.-3, No. 925, Sec. 4, Taiwan Blvd., Xitun Dist., Taichung City 40767, Taiwan
臺灣永光化學工業股份有限公司台南辦事處 Everlight Chemical Industrial Corporation (Tainan Office in Taiwan)	9F.-B2, No. 189, Sec. 1, Yongfu Rd., West Central Dist., Tainan City 70051, Taiwan

Lack of fulfilment of conditions as set out in the Certification Agreement may render this Certificate invalid.
This Verification Opinion is based on the information made available to us and the engagement conditions detailed above. Hence, DNV cannot guarantee the accuracy or correctness of the information. DNV cannot be held liable by any party relying or acting upon this Verification Opinion.



APPENDIX B

Quantification of Category 3 & Category 4 emissions (tCO₂e):

Category	Indirect GHG emissions from transportation			Indirect GHG emissions from products used by organization		
	Upstream transportation and distribution	Employee commuting (car & scooter)	Business travel (air)	Purchased goods	Fuel-and-energy-related activities (not included in Scope 1 or 2)	Waste generated in operations
Global Operations Headquarters	-	30.6371	30.8630	-	72.9549	1.2378
1st Plant	2,193.3771	139.3592	2.7120	30571.8755	1902.9236	32.8735
2nd Plant	868.6499	282.9094	13.0170	22765.4703	3074.5225	668.0983
Electronic Chemical Plant	44.6486	85.4851	0.3130	1154.0813	336.3044	0.6997
Pharmaceutical Plant	16.3446	127.9903	0.8162	403.5118	417.3137	58.7344
3rd Plant	405.6183	225.2463	0.7094	24872.4502	1127.9747	756.7419
4th Plant	16.9496	73.6294	0	1767.7122	111.0243	7.6847
Taichung Office in Taiwan	-	0	0.4533	-	7.0996	0.0545
Tainan Office in Taiwan	-	0.5807	1.1853	-	4.8704	2.2717

Lack of fulfilment of conditions as set out in the Certification Agreement may render this Certificate invalid. This Verification Opinion is based on the information made available to us and the engagement conditions detailed above. Hence, DNV cannot guarantee the accuracy or correctness of the information. DNV cannot be held liable by any party relying or acting upon this Verification Opinion.