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Chapter 5 Sustainable Environment

This chapter covers four plants in the Taoyuan area, Trend Tone Imaging in Hsinchu, and Everlight Suzhou in mainland China, all of which have obtained ISO 14001 certification for production plants and subsidiaries.

I. Sustainable Environmental Management System

Environmental protection is a significant focus for Everlight, including water resource management, pollution prevention and control, and climate change response and adaptation. From investment in environmental costs to various management indicators, our efforts in environmental protection are reflected. For detailed information, please refer to three major thematic chapters: 5.2 Water Resource Management, 5.3 Pollution Prevention and Control, and 5.6 Climate Change Response and Adaptation.

Environmental Management Policy (GRI 2-23)(GRI 2-24)(SASB RT-CH-530a.1)

We recognize the limited resources of the earth and the importance of sustainable development, and has specifically formulated the environmental policy as " Prepare for environmental risks and move towards environmental sustainability" and abide by its commitments

Environmental Policy

Environmental Management Organizational Structure and Responsibilities

To strengthen sustainable environmental performance, our company has established a comprehensive environmental management organizational structure (as shown below) and assigned respective rights and responsibilities according to hierarchical authority. The Chairman serves as the Director of the Sustainable Development Committee to achieve environmental-related performance indicators.

Environmental Management Organizational Structure

Frequency of environmental management meetings

The "Environmental Management Review Meeting" is held regularly annually.

The "Annual Policy Review Meeting" is held quarterly to continuously improve the company's environmental management performance within the PDCA management cycle.

Environmental Management System and Processes

Our company implements the ISO 14001 Environmental Management System to align environmental management practices with international standards. Everlight Plant I, II, III, IV, Trend Tone Imaging, and Everlight Suzhou have all obtained ISO 14001 certification.

ISO 14001 Certification for Environmental Management System

Each plant regularly convenes "Environmental Management Review Meetings" through the PDCA management cycle to continuously review and improve environmental objectives and their targets. The environmental management process includes the following steps:

1 Operational Review

Management team issues management policies based on environmental issues of concern to stakeholders and assesses their "significant risks and opportunities".

2 Environmental Consideration Assessment

Each plant refers to the established management policies and combines them with environmental considerations and regulatory obligations to identify products, activities, and services with significant environmental impacts, and formulate relevant environmental goals/objectives.

3 Risks and Opportunities Identification

Analyze and identify relevant risks and opportunities and formulate significant risks and opportunities.

4 Planning and Implementation

Plan formulation and implementation.

5 Regular Auditing and Continuous Improvement

Conduct management reviews annually and internal and external audits once a year.

Commitment goals and Communication Responses on Environmental Issues

Since 2021, the scope of communication channels on environmental issues in the sustainability report had expanded to include subsidiary companies. The company has redefined various pollution prevention management items, policies, and goals based on its ability to respond to SDGs #6. Clean Water and Sanitation, #7. Affordable and Clean Energy, #12. Responsible Consumption and Production, and #13. Climate Action. These are implemented after discussion in the Sustainable Development Committee meeting. Additionally, data on water usage, carbon emissions, and waste generation of plants and offices locations for the year 2023 were investigated and analyzed. (as shown in the table below). It was found that the Group environmental impact caused by office locations is small, and therefore statistical disclosure can be omitted. Consequently, subsequent environmental indicator information will be collected and presented based on plant locations.

SDGs	6 CLEAN WATER AND SANITATION	12 RESPONSIBLE CONSUMPTION AND PRODUCTION	7 AFFORDABLE AND CLEAN ENERGY / 13 CLIMATE ACTION
Location	Water usage(ML)	Waste(ton)	Greenhouse Gas Carbon Emissions(tCO$_2$e)
Office (a)	6.0	6.3	818.9
Plant (b) [Note1]	590.0	8,620.4	64,315.9
Environmental impact ratio of the Group based on office locations (%) [Note2]	1.0%	0.1%	1.3%

Note 1: Plant locations include Everlight Plant I, II, III, IV, Trend Tone Imaging, and Everlight Suzhou. For other office locations, please refer to the official website.
Note 2: The environmental impact ratio of the Group based on office locaitons (%) is calculated as follows: [(a) / (a + b)] x 100%

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Setting Environmental Issues and Management Indicators of Everlight Group

For each management item, we refer to GRI, SASB standards, as well as local regulations and customer requirements to establish the following management indicators:

Management Issues	Management Indicators	2021 Actual	2021 Target	2022 Actual	2022 Target	2023 Actual	2023 Target	2024 Target	Mid Term Target (2025) [Note1]	Long Term Target (2030)
Water Resource Management	Water Recycling Rate R2 (%)	86	≥83	93	≥84	95	≥94		≥95	≥96
	Compliance Rate of Wastewater Treatment (%)	100	100	100	100	100	100		100	100
	Total Water Intake (ML)	824.5	≤872	721.5	≤872	593.9	≤872		≤872	≤872
Pollution Prevention	Air Pollution Emission Reduction Rate Per Unit Output (%) [Note2]	6	≥5	-3	≥2	-6	≥2		≥3	≥4
	Waste Recycling and Utilization Rate (%)	71	≥70	72	≥71	71	≥71		≥72	≥73
	Recycling Rate of Hazardous Industrial Waste (%)	3.3	≥3.1	4.3	≥3.1	10.3	≥6.3		≥7.3	≥8.3
Climate Action-Mitigation and adaptation [Note3]	GHG Emission Intensity tCO$_2$e/million NTD in production value) [Note 4,5]	8.8	≤8.6	8.6	≤8.7	8.6	≤8.3		≤8.1	≤6.8

Note 1: The middle and long-term goals of energy intensity, water recycling rate R2 (%), and recycling rate of hazardous industrial waste (%) have been adjusted in consideration of the significant differences in product combination/process characteristics compared to 2021.

Note 2: Air emissions reduction rate per unit output = [1 - ((total emissions of air pollutants per ton of output (kg/ton) / baseline (1.93))] x 100. 1.93 kg/ ton of product was the baseline of the average number for Y2018-2020. However, due to differences in air pollutant emissions from recent product combination /process compared to the baseline, the average number 1.98 for 2022-2023 is used for calculation, which will be more consistent with the current situation of air pollution emission reduction per unit output and will be continuously reviewed. and will continue to be reviewed.

Note 3: In 2022, external expert was invited to assist in short, mediun and long-term reduction targets for energy saving and carbon reduction plan and adjustment of energy intensity and greenhouse gas emission intensity.

Note 4: Greenhouse gas emission intensity: The 2024 target is slightly adjusted based on the 25% carbon reduction target of the "2030 Carbon Reduction Target and Strategy" and recent performance.
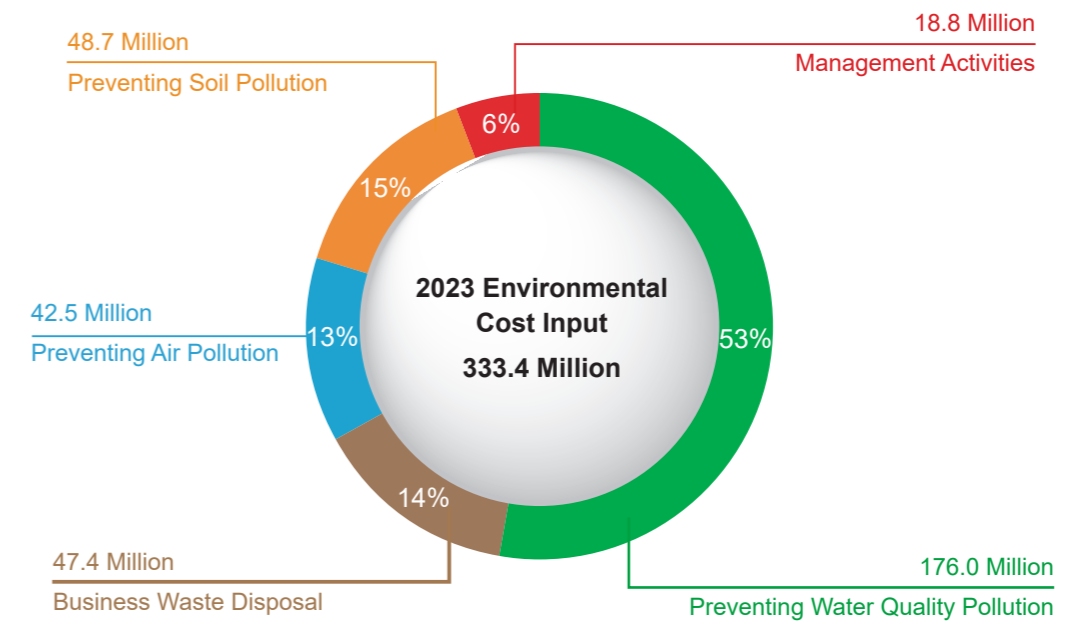
Note 5: The inventory method of the refrigerant emission verification information in 2022 is equipment refrigerant emissions, which is different from the previous independent inventory disclosure method of refrigerant purchase replenishment, thus reverting to verified equipment refrigerant emissions for verification. While there may be slight differences in historical carbon emission revisions due to this change, it does not affect previously established medium and long-term goals.

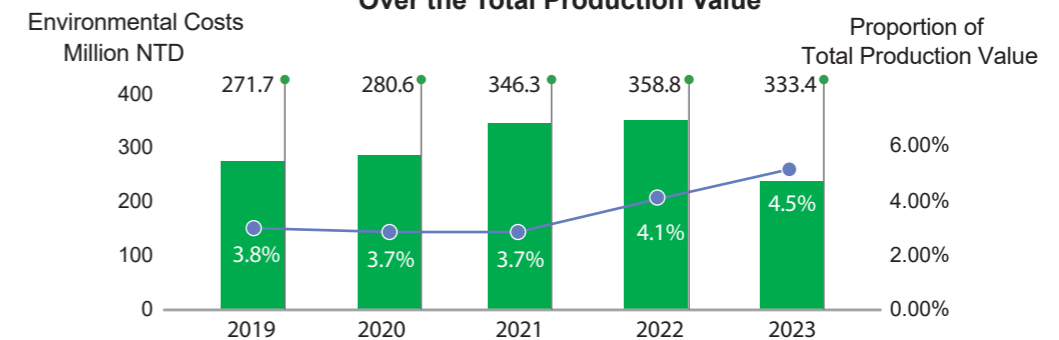## II. Environmental Management Cost Investment

In 2023, the expenditure on environmental costs amounted to 333.4 million NTD, accounting for approximately 4.5% of the total revenue. The highest allocation of environmental cost expenditure was directed towards preventing water pollution and ensuring compliance with wastewater treatment standards across all production sites, with a wastewater treatment compliance rate reaching 100%.

Unit: Million NTD

Items / Year	2021	2022	2023
Prevention of Water Pollution	179.7	178.3	176.0
Business Waste Disposal	94.3	99.8	47.4
Prevention of Air Pollution	43.9	41.1	42.5
Prevention of Soil Pollution	13.6	20.7	48.7
Management Activities	14.8	18.9	18.8
Total	346.3	358.8	333.4

48.7 Million — Preventing Soil Pollution
18.8 Million — Management Activities
42.5 Million — Preventing Air Pollution
47.4 Million — Business Waste Disposal
176.0 Million — Preventing Water Quality Pollution

2023 Environmental Cost Input 333.4 Million

Percentage of Historical Environmental Costs Over the Total Production Value

Environmental Costs Million NTD / Proportion of Total Production Value

	2019	2020	2021	2022	2023
Costs	271.7	280.6	346.3	358.8	333.4
Proportion	3.8%	3.7%	3.7%	4.1%	4.5%

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III. Water Stewardship*(Material Topic) (GRI 2-23)(GRI 2-24)(GRI 303-1)(GRI 303-2)(GRI 303-3)(GRI 303-4)(GRI 303-5)

Water Stewardship mainly includes water intake and recovery management, as well as water pollution prevention and control. In addition, we use the Aqueduct Water Risk Atlas analysis tool developed by the World Resources Institute to identify water resource risks at major production sites of Everlight. Everlight Suzhou is identified as a water-stressed area, so we have enhanced management and made preparations accordingly. The impact assessment and management guidelines for this issue are outlined as follows:

Material Topic #3	Water Stewardship
Impact Assessment	Positive: The company demonstrates effective water resource management practices, including water recovery in processes, efficient water resource utilization, and effective measures for water conservation. It ensures that wastewater discharge complies with regulations, thereby can effectively protect water, etc. Negative: Ineffective water reduction measures by the company or failure to promptly respond to abnormalities in wastewater treatment may potentially lead to water pollution at discharge end, and even extend to coastal areas and affecting nearby marine ecosystems.
Management Policies and Commitments (GRI 2-23) (GRI 2-24) (RT-CH530a.1)	The company recongnizes the limitation of water resources and is committed to increasing the water recovery rate (R2) while continuously enhancing the efficiency of wastewater treatment to reduce environmental burdens.
Governance Structure	• Head Office: Environmental Management Committee • Factory: Environmental Management Team and Environmental Protection Unit
Management Actions	• Water Intake: Installing water recovery measures, conducting water usage surveys • Drainage: Enhancing wastewater treatment efficiency, regular monitoring of treated water quality • Regular assessment of operating sites which are located in water-stressed areas
Resource Allocation	• Establishing water recovery systems, ozone catalytic technology, MD technology, etc. • Utilizing the Aqueduct Water Risk Atlas analysis tool from the World Resources Institute to assess water resource impacts
Indicators and Targets	There are three management indicators: namely Water recovery rate R2 (%), Total drainage volume (ML), and Wastewater treatment compliance rate. • Water Intake: Total water intake (ML) = Sum of all water intake items (tap water, groundwater, industrial water). • Drainage: Wastewater treatment compliance rate (%) = (Volume of discharged wastewater in compliance with regulatory standards / Total volume of discharged wastewater) x 100%. • Recycling: Water recovery rate R2 (%) = [(Total recycled water volume + Total circulating water volume) / (Total water intake + Total recycled water volume + Total circulating water volume)] x 100%. **Targets** • Water intake: Total water intake (ML) ≤ 872 (by 2025, 2030). • Drainage: Wastewater treatment compliance rate (%) = 100% (by 2025, 2030). • Recycling: Water recovery rate R2 (%) ≥ 95% (by 2025), ≥ 96% (by 2030).
Assessment Mechanisms	• Environmental management review (once a year) • Sustainable Development Committee (twice a year) • Plant policy plan review (once a quarter) • Internal environmental management system audit (once a year) • External verification unit (DNV) audit of environmental management system (once a year)

Material Topic #3	Water Stewardship
Ensuring Effective Actions	• Tracked process: Regularly convene "Environmental Safety and Health Management Review Meetings" through the "PDCA management cycle" method to continuously review and improve the status of various environmental goals and their achievement status. • Effectiveness of previous actions: Annually check whether the set goals have been achieved. • Lessons learned: Everlight has been effective in implementing green chemistry and circular economy practices, continuously promoting environmental sustainability, such as increasing atom utilization and process improvements to reduce the carbon footprint of its products. Additionally, Everlight actively participates in community and educational projects to promote environmental awareness.
Implementation Results in 2023	• Water Intake: Total water Intake (ML) = 593.9 ML • Drainage: Wastewater treatment compliance rate (%) = 100% • Recycling: Water recovery rate R2 (%) = 95%
Stakeholder Engagement	Stakeholders include shareholders/investors, customers/brands, suppliers/contractors, neighboring communities, and government agencies. Through regular/irregular communication in various forms.

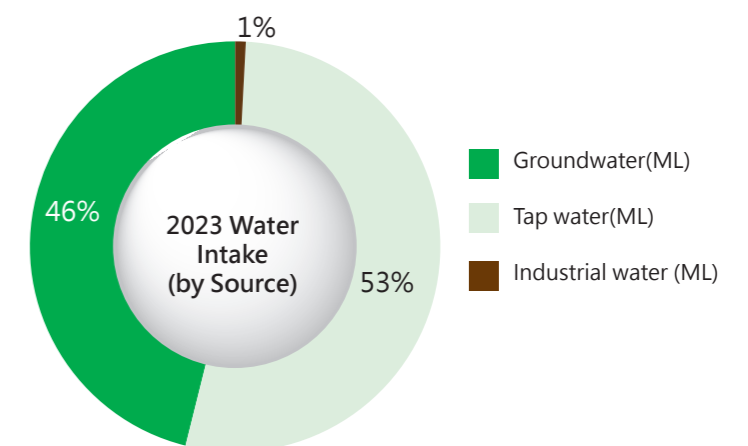### Water Intake Management

Assessing the Need for Enhanced Water Management at Each Site

Water is a shared resource, and we conduct an inventory of water usage at each site and evaluate those located in water-stressed areas. Specifically, for Everlight Suzhou in 2023, the main measures for water resource management are: collecting and recycling concentrated water from the pure water machine in Building C for daily washing and toilet flushing, totaling 5,270 tons.

Water Sources

The primary sources of water for each factory include groundwater, tap water, and industrial water. When planning the intake of water resources, we consider government policies, company development, industry changes, and the water resource needs of surrounding residents. For example, we collaborate with regulatory authorities to establish groundwater intake points for factory use, ensuring that water is available to the public during droughts. This ensures the rational and efficient management, scheduling, and distribution of water resources. Additionally, the volume and method of water intake are carefully managed to minimize any significant negative impacts on the ecological balance of water sources and nearby residents.

To assess water resource risks at each factory, Everlight relies on the Water Risk Assessment Tool developed by the World Resources Institute to identify the water riskd in each factory area. After assessment, only Everlight Suzhou is identified as being in a high risk of water resource shortage area. The primary use of water resources at this factory are domestic and industrial water. In 2023, the water management statistics for this facility are as follows: water intake of 63.3ML, wastewater discharge of 29.8ML, and water consumption of 33.5ML.

2023 Water Intake (by Source)
- Groundwater(ML): 46%
- Tap water(ML): 53%
- Industrial water (ML): 1%

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## Detailed statistics of water Intake and water consumption from 2019 to 2023

In 2023, Everlight's total water Intake is 593.9ML, with groundwater accounting for approximately 52.7% and tap water accounting for 46.6%. The total water consumption is 95.7ML.

Compared to 2022, there was an 18% reduction in total water Intake and a 13% reduction in total water consumption in 2023. This improvement can be attributed to increased demand for liquid products related to customer needs, leading to higher water demand in the manufacturing process (such as digital textile inks, developer, cleaning agents, etc.).

Historical Total Water Intake

Historical Total Water Consumption

Total Water Intake(ML) — — — Total Water Intake Reduction Rate (%)
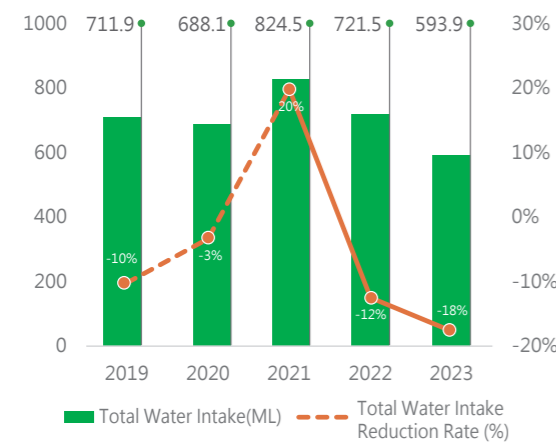
Total Water Intake(ML) — — — Total Water Intake Reduction Rate (%)
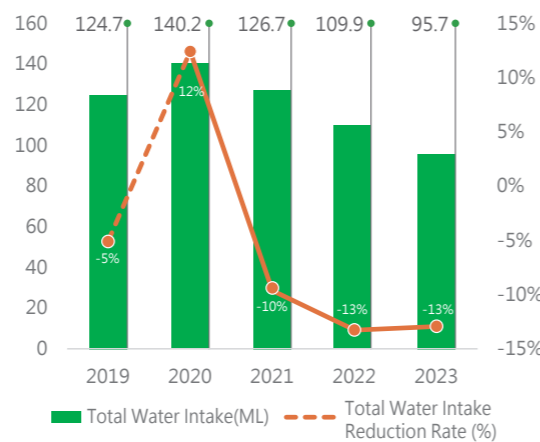
Historical Water Intake and Consumption

Plant / Items	Year	Tap water (ML)	Underground Water (ML)	Industrial water (ML)	Total Water Intake (ML)	Total Water Consumption (ML) [Note1]
Everlight Plant I, II, III, IV	2019	203.9	439.5	2.0	645.4	95.9
	2020	215.8	407.9	2.6	626.3	114.5
	2021	229.3	514.9	3.8	748.0	86.1
	2022	200.2	435.5	5.5	641.2	65.4
	2023	198.7	313.0	4.0	515.7	59.2
Trend Tone Imaging	2019	19.3	-	-	19.3	3.9
	2020	17.3	-	-	17.3	3.4
	2021	18.5	-	-	18.5	3.7
	2022	18.7	-	-	18.7	3.8
	2023	14.9	-	-	14.9	3.0
Everlight Suzhou	2019	47.2	-	-	47.2	24.9
	2020	44.5	-	-	44.5	22.3
	2021	58.0	-	-	58.0	36.9
	2022	61.6	-	-	61.6	40.7
	2023	63.3	-	-	63.3	33.5
Total	2019	270.4	439.5	2.0	711.9	124.7
	2020	277.6	407.9	2.6	688.1	140.2
	2021	305.8	514.9	3.8	824.5	126.7
	2022	280.5	435.5	5.5	721.5	109.9
	2023	276.9	313.0	4.0	593.9 [Note2]	95.7

Note 1: Total Water consumption = Total water intake - Discharge volume.
Note 2: 1 ML (million liters) = 1,000 cubic meters. Therefore, the total water intake for the Group in 2023 is 593.9 thousand cubic meters.
Note 3: The statistical information in the table above is presented by rounding to 1 decimal place.
Note 4: The water intake from each source category is fresh water with a total dissolved solids (TDS) content equal to or less than 1,000 mg/L, expressed in million liters.

Sources of Water Withdrawal at Each Operating Location

Waste Water Discharge Management (GRI 303-4)

Compliance with Regulatory Requirements for Wastewater Discharge Management

Our company manages the industrial wastewater that requires discharge by properly planning wastewater treatment facilities based on the characteristics of the process wastewater source. We implement pollution reduction at the source for each process, classifying and matching with appropriate treatment equipment and technologies. This ensures our wastewater treatment systems effectively reduce pollutants. We also regularly test the quality of the discharged wastewater (e.g., commissioning external organizations for water sampling tests or conducting tests by ourselves according to the standard methods announced by the regulatory authorities) to ensure compliance with regulatory standards. All operational sites obtain the necessary permits from local authorities before discharging, aiming to prevent water pollution and ensure cleanliness of water resource, and maintain the ecological environment system.

Each plant incorporates its domestic sewage and industrial wastewater into industrial park effluent management system, sewage system, or municipal wastewater network (Everlight Plant I is included in the Dayuan Industrial Park effluent management system, Everlight Plant II, III are included in the Guanyin Industrial Park wastewater treatment plant, Everlight Plant IV is included in the Taoyuan Science Park wastewater treatment plant, Trend Tone Imaging is included in the Hsinchu Science Park Wastewater Treatment Plant, and Everlight Suzhou is included in the Suzhou Industrial Park Wastewater Treatment Plant). The discharge quality meets the control standards of the wastewater treatment facilities in each area.

2023 Industrial Effluent Discharge Information for Each Plant

Plant	Wastewater Treatment Method and Discharge Location
Everlight Plant I	After being treated by on-site wastewater treatment facilities, discharged into the Da-Yuan Phase I Industrial Zone Effluent Management System under the Ministry of Economic Affairs, then enter into the Laojie Creek. [Note1]
Everlight Plant II	After being treated by on-site wastewater treatment facilities, then discharged into the wastewater sewer system of the Guanyin Industrial District Service Center under the Ministry of Economic Affairs, where it is treated at the wastewater plant and finally discharged into Fu-Lin Creek.
Everlight Plant III	After being treated by on-site wastewater treatment facilities, then discharged into the wastewater sewer system of the Guanyin Industrial District Service Center under the Ministry of Economic Affairs, where it is treated at the wastewater plant and finally discharged into Da-Ho Creek.
Everlight Plant IV	After being treated by on-site wastewater treatment facilities, then discharged into the exclusive wastewater sewer system of the Taoyuan Technology Industrial Park, where it is treated at the wastewater plant and finally discharged into Guanyin Creek.
Trend Tone Imaging	All domestic wastewater [Note 2] is collected via the sewage sewers and transferred to the sewage treatment plant in the Hsinchu Science Park for treatment, and then discharged into the Ke-Ya Creek through a dedicated pipe.
Everlight Suzhou	After being treated by on-site wastewater treatment facilities, then discharged into the municipal sewage pipe network for treatment at the Suzhou Industrial Park Wastewater Plant, and finally discharged into the Wusong River.

Note 1: To align with the Da-Yuan Industrial Zone's initiative to adopt the inter-gravel zone treatment method in its effluent management system and to aid the government to improve the water quality management of Laojie Creek, Everlight Plant I has been discharging its effluent into the Da-Yuan Industrial Zone Effluent Management System before entering Laojie Creek since November 2021.
Note 2: Trend Tone Imaging only stores a small portion of its wastewater for off-site waste treatment; the rest are domestic wastewaters processed through the sewer system of the Science Park.
Note 3: Each production site sets its water quality discharge standards according to local regulatory requirements and industry characteristics.
Note 4: The effluent discharges from each production site have no significant impact on aquatic environments or related habitats.

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Wastewater Discharge Management Indicators

Wastewater Discharge Compliance Index: The wastewater treatment compliance rate (%) = Discharge Compliance Rate (%) = (Volume of wastewater discharged compliant with regulatory standards/Total volume of wastewater discharged) ×100%

In 2023, the total volume of wastewater discharged is 19% lower compared to 2022. The main reason is that the digital textile inks products have implemented an optimization plan for the purification process. The process included the recycling of permeate back into the desalination stage, significantly reducing the volume of water required for purification in 2023. Additionally, the production volume of this product increased by 56% in 2023. Everlight plans to continue enhancing water recycling measures (such as increasing the use of recirculated water in scrubbing towers), which further contributed to the overall reduction in wastewater output. These actions collectively led to a decrease in wastewater discharge.

The increase in water usage at Everlight Suzhou was due to the addition of a desalination treatment section for recycled liquids, an expansion of the desalination process for reactive inks, and a 12% increase in the production of BOP-DYE compared to 2022.

2019-2023 Discharge Volume Details

Total Wastewater Discharge — Reduction in Total Discharge (%)
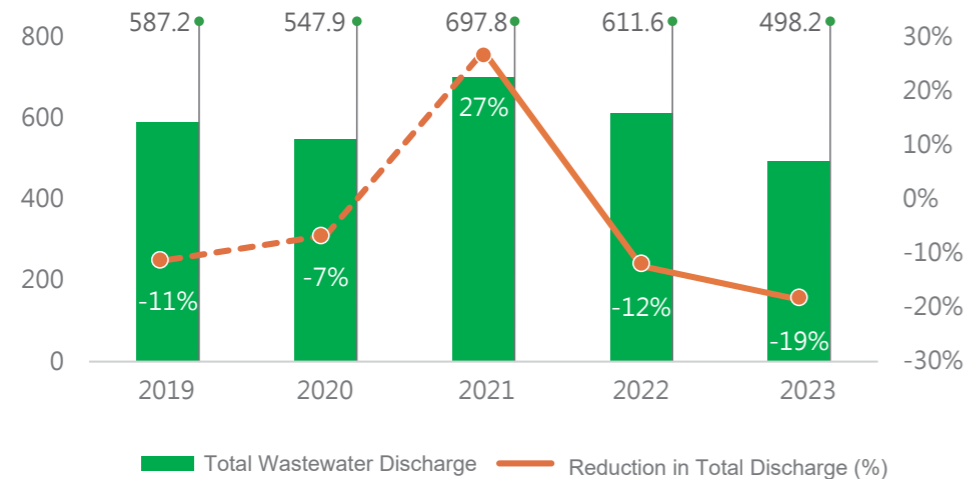
2019-2023 Discharge Volume Details (Unit:ML)

Plant/Year	2019	2020	2021	2022	2023
Everlight Plant I, II, III, IV	549.5	511.8	661.9	575.8	456.5
Trend Tone Imaging	15.4	13.9	14.8	14.9	11.9
Everlight Suzhou	22.3	22.2	21.1	20.9	29.8
Total	587.2	547.9	697.8	611.6	498.2

We selected COD, SS, Ammonia Nitrogen, and Nitrate Nitrogen as the priority discharge items for monitoring, focusing on the disclosure of these key substances. We then compare the results against local regulatory standards to concretely demonstrate and manage the outcomes of our wastewater treatment processes. In 2023, the test results for all these indicators were lower than the regulatory control standards.

Key Emission Disclosure Indicators
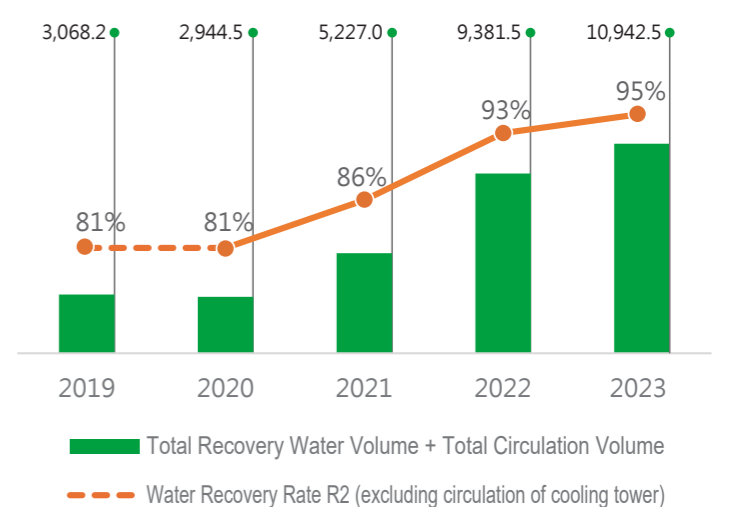

Water Recycling and Reuse

To reduce water consumption, we have previously implemented various water-saving strategies and measures, ranging from daily water use in daily life by staffs to water recycling and reuse equipment, all of which have been effective. However, to further improve the implementation of water recovery, we have established a water recovery rate R2 (excluding cooling tower circulation), which has been listed as a key point for annual management. This allows us to monitor the current water usage, assess the effectiveness of water-saving/recycling programs, and conduct reviews and analysis.

Achievements in 2023

In 2023, the total recycled water plus total circulating water reached 10,942.5 million liters, equivalent to saving the water of 4,377 standard swimming pools [Note 1]. The annual water recovery rate R2 was 95%, an increase of 2% from last year (2022: 93%). This increase was primarily due to a 19% rise in the circulation water volume of the scrubbers compared to the previous year.

Water Stewardship Recycling Volume & Reuse Rate

Total Recovery Water Volume + Total Circulation Volume

Water Recovery Rate R2 (excluding circulation of cooling tower)

Note 1: According to the standard swimming pool size, 50 meters x 25 meters x 2 meters, announced by the Chinese Taipei Swimming Association. This is equivalent to approximately 2.5 million liters of water storage capacity. Thus, the amount of water saved is converted to 10,942.5 million liters divided by 2.5 million liters.

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In 2022, the digital textile ink product was conducted an optimized water purification process, the recycled permeate was back to the desalination stage to reduce the amount of purification water used and achieve positive results. In 2023, in addition to continuing the measures adopted in 2022, the company further increased the circulating water used in scrubbers and the reuse of concentrate from water purifiers.

Statistical details of total recycled water volume and total circulation volume from 2019 to 2023

(Unit: Million Liters)

Items	Methods	2019	2020	2021	2022	2023
Total Recovery Water Volume	Condensate/Rainwater Recovery Volume	38.7	45.2	54.6	49.1	20.5
	Process Wastewater Recovery Volume	361.1	353.3	392.1	334.4	249.9
	Total Secondary Use Recovery Water Volume	17.3	11.5	27.8	30.1	12.8
Total Circulation Water Volume	Circulation Water Volume of Scrubber Tower	2,651.5	2,534.5	4,752.5	8,967.9	10,659.3
Total Recovery Water Volume + Total Circulation Volume		3,068.2	2,944.5	5,227	9,381.5	10,942.5
Water Recovery Rate R2 (excluding circulation of cooling tower)		81%	81%	86%	93%	95%

Historical Water Resource Management Indicators and Mid-term Target Achievement

In 2023, all performance indicators of water resource management and water pollution prevention/control were met the annual goals and effectively implemented the water resource management practices.

Management Indicators/Year	Achievements					Target 2024	Mid –Term Tagget 2025 [Note2]
	2019	2020	2021	2022	2023		
Water Recovery Rate R2 (%) [Note1]	81	81	86	93	95	≥84	≥95
Total Water Intake (ML)	711.9	688.1	824.5	721.5	593.9	≤872	≤872
Wastewater Treatment Compliance Rate (%)	100	100	100	100	100	100	100

Note 1: Given the significant differences in product combination /process characteristics over the last two years compared to 2021, the medium to long-term target for the water recovery rate R2 (%) has been adjusted.
Note 2: For 2021, the scope was expanded to include subsidiaries. Therefore, the Group's feasible medium to long-term goals were formulated based on the Group's performance from 2018 to 2020 and future plans..

IV. Pollution Prevention*(Material Topic) (GRI 2-23)(GRI 2-24)(GRI 305-7)

Prevention and control of Pollution is is an extremely important and urgent issue for the manufacturing industry. Waste management and air pollution management are of particular concern due to their increasingly severe impacts on the environment, health, and sustainable development. We must take proactive measures to prevent pollution in order to protect our planet and the environmemt for future generations. This chapter highlights air pollution and waste management as a Material topic and proposes feasible solutions to promote continued progress in pollution prevention and control efforts.

Material Topic #4	Pollution Prevention
Impact Assessment	**Air Pollution Prevention and Control** Positive: Company complies with air pollution management and control laws to reduce harm and negative impacts on the environment, community and workers. Negative: Company fails to manage air pollution appropriately, violating regulations, causes hazards to the environment, or affects the safety of the community and people. **Waste Management** Positive: Company implements effective waste management practices, recycling and reusing process waste, ensuring compliance in waste disposal, gradually reducing waste output, positively impacting the environment without causing harm to people. Negative: Improper management of waste leads to burdens on the natural environment and the community.
Management Policies and Commitment (GRI 2-23) (GRI 2-24) (RT-CH530a.1)	**Air Pollution Prevention Control**: Our company is committed to maintaining the air quality around our production facilities, continuously employing the best available control technologies to reduce air pollutant emissions. **Waste Management:** Our company values natural resources and actively promotes waste reduction and the recycling of resources.
Governance Structure	• Headquarter: Environmental Management Committee. • Plant Facilities: Environmental Management Teams and dedicated Environmental Protection Units.
Management Actions	• Everlight has established the Circular Economy Promotion Committee focused on waste reduction and waste resource utilization, aiming towards the ultimate goals of zero emissions and zero waste. • In alignment with government regulations on air pollution prevention management, Everlight rigorously implements air pollution control measures to comply with legal requirements. • Everlight endeavors to utilize low-pollution clean energy sources and improve processes to reduce the output and emission of sulfur oxides (SOx) and nitrogen oxides (NOx). • Everlight continuously enhances its air pollution management by adhering to the "Emission Standards for Harmful Air Pollutants from Stationary Sources," aiming to improve air quality.
Resource Allocation	• Adoption of Clean Fuels • Installation of Control Equipment • Enhancement of the adequacy rate of Prevention and Control Equipment Efficiency • Development of Circular Economy and Green Chemistry

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Material Topic #4	Pollution Prevention
Indicators and Targets	• The three key management indicators are Air Pollution Emission Reduction Rate Per Unit Output (%), Waste Recycling and Utilization Rate (%), and Recycling Rate of Hazardous Industrial Waste (%). **Air Pollution** • Air Pollution Emission Reduction Rate Per Unit Output (%) = 1-(Total air pollutant emission (kg) / output (tons)) / baseline) x 100% **Waste Management** • Waste Recycling and Utilization Rate (%) =[Amount of recycled industrial waste / Total amount of industrial waste produced]× 100% • Recycling Rate of Hazardous Industrial Waste (%) = [Amount of hazardous industrial waste recycled volume / Total hazardous industrial waste produced volume] × 100% **Targets** • Air Pollution Emission Reduction Rate Per Unit Output (%) ≥ 3 by 2025. • Waste Recycling and Utilization Rate (%) ≥ 72 by 2025. • Recycling Rate of Hazardous Industrial Waste (%) ≥ 7.3 by 2025.
Assessment Mechanisms	• Environmental Management Review (once a year). • Sustainability Development Committee (twice a year). • Factory Policy and Planning Review (once a quarter). • Internal Environmental Management System Audit (once a year). • External Audit by DNV on Environmental Management System (once a year).
Ensuring Effective Actions	• Tracking process: "Environmental Safety and Health Management Review Meetings" are regularly convened through the "PDCA Management Cycle" to continuously review and improve the status of achieving various environmental targets. • Effectiveness of previous actions: Annually assess whether the set targets have been achieved. • Lessons learned: Everlight has successfully implemented green chemistry and circular economy practices, and continues to promote environmental sustainability, such as increasing atomic utilization and process improvements to reduce the carbon footprint of its products. Additionally, Everlight actively participates in community and educational programs to promote environmental awareness.
Implementation Results in 2023	• Air Pollution Emission Reduction Rate Per Unit Output (%) = -6% • Waste Recycling and Utilization Rate (%) = 71% • Recycling Rate of Hazardous Industrial Waste (%) = 10.3%
Communication with Stakeholders	Related stakeholders include shareholders/investors, customers/brands, suppliers/contractors, neighboring communities, and government agencies. Communication is conducted through regular and irregular meetings in various formats.

Air Pollution

Everlight complies with government-imposed air pollution emission regulations and adopts management practices that exceed legal requirements to control air pollution. We endeavor to use "low pollution clean energy" and implement process improvement programs to reduce SOx and NOx emissions, and we closely monitor domestic emission regulations, such as the "Emission Standards for Hazardous Air Pollutants from Stationary Sources," as additional reference standards for improving air emissions.

According to the company's detailed statistics on air pollution emissions from 2019 to 2023, the unit output of air pollution emission reduction rate for the Group's factories in 2023 was -6%, compared with -3% in 2022, an overall decrease of 9%. This was due to the higher demand in 2023 for products with higher VOC emission coefficients, such as solvent-based products (strippers). The factories will continue to strengthen related management measures, such as increasing the frequency of activated carbon replacement in control equipment, conducting internal and external inspections, and actively maintaining equipment to reduce leakage rates, aiming to demonstrate efforts in emission reduction and control.

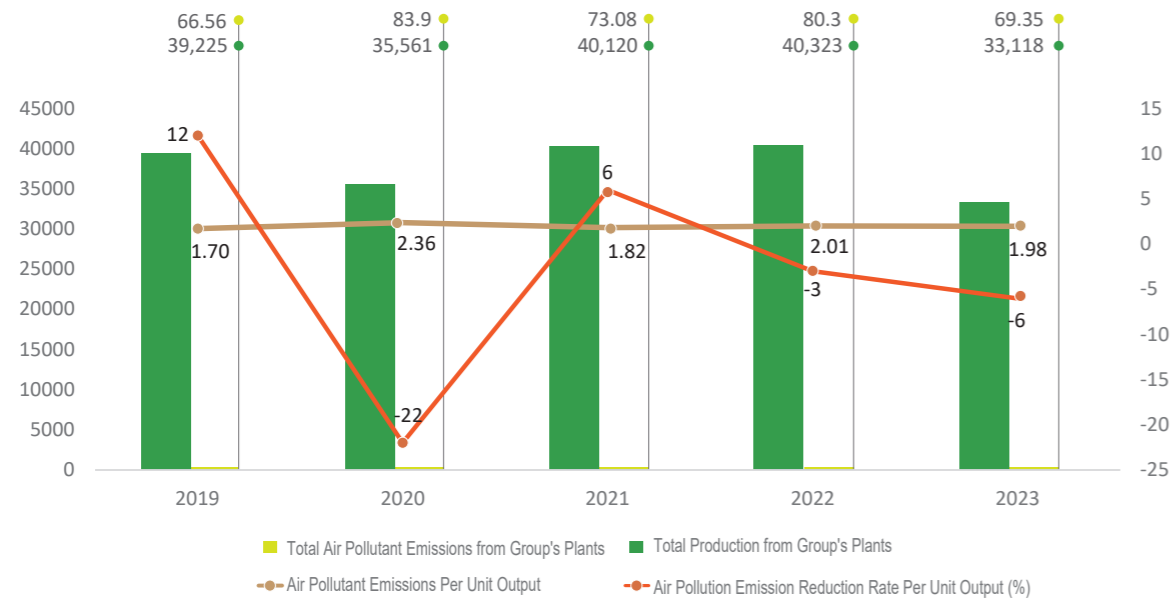**Air Pollution Emissions Statistics 2019-2023 (in tons)**

Plant [Note1]	Year	(1) particulate pollutants	(2) Sulfur oxides	(3) Nitrogen oxides	(4) Organic VOC	(1)+(2)+(3)+(4)
Everlight Plant I, II, III, IV 【Note2】	2019	0.58	0.47	12.04	49.95	63.04
	2020	0.78	3.06	13.78	63.14	80.76
	2021	0.86	3.05	16.55	49.94	70.40
	2022	0.75	2.25	11.54	62.89	77.43
	2023	0.59	2.03	9.90	54.90	67.42
Trend Tone Imaging	2019	-	-	-	2.07	2.07
	2020	-	-	-	1.42	1.42
	2021	-	-	-	1.95	1.95
	2022	-	-	-	1.37	1.37
	2023	-	-	-	1.10	1.10
Everlight Suzhou	2019	0.78	-	-	0.67	1.45
	2020	1.15	-	-	0.57	1.72
	2021	0.46	-	-	0.27	0.73
	2022	0.54	-	-	0.96	1.50
	2023	0.46	-	-	0.37	0.83

Note 1: The units of above information are all metric tons. The emission statistics are derived from annual reporting data and rounded to 2 decimal places.

Note 2: Since 2016, Everlight's plants I to IV have gradually replaced fuel oil boilers with "low-pollution clean energy boilers," achieving significant reductions in SOx and NOx emissions (SOx reduction of 90-98%; NOx reduction of 52-59%. For detailed statistics on plant air pollution emissions from 2018-2020, please refer to the ESG reports).

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We have established the " Air Pollution Emission Reduction Rate Per Unit Output (%) " as a key management indicator. Additionally, the key management indicators of the Group from 2019 to 2023 have been compiled below. This will enable all stakeholders to directly monitor current performance and the implementation status of the mid-term target (2025).

Historical Air Pollution Emissions and Emissions Quantity Per Unit Output

Legend:
- Total Air Pollutant Emissions from Group's Plants
- Total Production from Group's Plants
- Air Pollutant Emissions Per Unit Output
- Air Pollution Emission Reduction Rate Per Unit Output (%)

Historical Air Pollution Emission Reduction Rate Per Unit Output

(Unit: Metric Tons)

Year	2019	2020	2021	2022	2023	Short-term Target 2024	Mid-term Target 2025 [Note1]
Total Air Pollutant Emissions from Group's Plants	66.56	83.90	73.08	80.30	69.35	-	-
Total Production from Group's Plants	39,225	35,561	40,120	40,323	33,118	-	-
Air Pollutant Emissions Per Unit Output [Note2]	1.70	2.36	1.82	2.01	1.98	-	-
Air Pollution Emission Reduction Rate Per Unit Output% [Note3]	12	-22 [Note4]	6	-3	-6 [Note5]	≧ 2	≧ 3

Note 1: Subsidiaries were included in the scope starting in 2021. Therefore, the mid-to-long-term targets for the Group are derived based on the actual performance from 2018 to 2020 and future plans

Note 2: The calculation of air pollutant emissions per unit of output is the total air pollutant emissions (kg) of particulate pollutants, sulfur oxides, nitrogen oxides, and volatile organic compounds divided by the production volume (tons).

Note 3: The calculation of the emission reduction rate per unit output is [1-(Air Pollutant Emissions per Unit of output /Baseline (1.93))]×100

Note 4: The emission reduction rate per unit output for 2020 was -22%. This was primarily due to reduced production capacity caused by the COVID-19 pandemic and an increase in the production of certain high-coefficient products (e.g., cleaning agents, photoresists). The surge in solvent-based product lines in response to market demand (e.g., cleaning agents, photoresists) led to a 24% increase in volatile organic compounds.

Note 5: In recent years, due to variations in air pollutant emissions associated with product combination /processes compared to the baseline, the average air pollutant emissions per unit of output from 2022-2023 (1.98) is used as the baseline for calculations. This reflects the current status of emission reductions per unit output and will be continually reviewed.

Waste Management (GRI 306-1)(GRI 306-2)(GRI 306-3) (GRI 306-4) (GRI 306-5) (RT-CH-150a.1)

Our company recycles the reusable materials generated in raw material procurement, product supply, production processes, environmental pollution prevention, and daily operational activities (including reverse recycling and refilling by suppliers and customers).

Additionally, we enhance process recycling and technological innovations (e.g., dilute acid solutions and iron sludge in different processes into ferrous sulfate for wastewater treatment; phosphoric acid solutions are converted into monosodium phosphate/disodium phophate for process use; introducing thin film membrane concentration to improve solvent recovery rate, etc.). We also strengthen external recycling with the shortest path of external circulation (e.g., delivering by-products like zinc sulfate directly to customers to produce zinc oxide), reducing waste from the source, and actively promoting waste classification and recycling to achieve resource circularity and promote the development of the circular economy.

In accordance with government waste management regulations and our company's "Waste Management Procedures," we handle industrial waste through outsourced recycling, incineration, or landfill disposal. Some hazardous industrial waste (mainly waste solvents) is incinerated on-site to recover the steam for internal use and through reverse recycling with suppliers. All waste disposal processes have all been entrusted to nationally certified professional disposal agencies (with no import, export or transit disposal actions) and properly managed, including:

- On-site classification, storage, and labeling of waste.
- Online reporting and verification of waste disposal declaration and confirmation.
- Evaluation and contracting of disposal vendors.
- Regular audits and random inspections of disposal vendors to ensure proper waste handling (Irregular tracking to ensure that outsourced manufacturers properly handle all types of waste).
- Weighing waste and managing vehicle tracking for waste transportation.
- Emergency response actions to prevent additional environmental burdens and pollution risks caused by waste.

On-Site Management: Some hazardous industrial waste (mainly treated waste solvents processed by Everlight Plant III) is processed on-site and recover the steam for internal use.

Off-Site Management: Waste is handled through reverse recycling by suppliers and outsourcing incineration. All outsourced disposal is entrusted to nationally certified professional disposal agencies (no import-export or transit clean-up activities).

The scope of waste management indicators and results includes subsidiaries (Everlight Suzhou and Trend Tone Imaging). In 2023, the total industrial waste output was 8,616.0 tons (hazardous industrial waste: 1,761.3 tons; general industrial waste: 6,854.7 tons), which is an 18% reduction compared to the total industrial waste output in 2022 (10,497.4 tons). The amount of waste that was recycled and reused was 6,125.2 tons, achieving a waste recycling rate of 71%. Among the total amount of waste of hazardous waste recovered and procesed was 181.3 tons (the rate of hazardous waste recovered and processed was 10.3%).

The performance of waste recycling rates and the recycling rate of hazardous industrial waste has improved year by year due to the implementation of various packaging material recycling measures (such as space bags, one-way drums, plastic bags, etc.) and the reuse of hazardous waste solvents (PGMEA) by a pass-through case.

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Detailed Information on Waste Disposal and Output from 2019 to 2023 (Unit: Metric Tons) 【Note1】

| Everlight Plant | Year | Waste Type | Disposal Methods | | | | Total Statistics Amount by Waste Type 【Note 2】 | Total Amount of Waste Generation 【Note3】 |
			Reuse and Recycling	Incineration	Landfill	Temporary Storage Changes		
Everlight Plant I, II, III, IV	2019	Hazardous	30.8	1,709.1	0	-30.1	1,709.8	10,854.0
		Non-Hazardous	6,864.5	498.5	1,805.1	-32.9	9,144.2	
	2020	Hazardous	46.9	1,372.0	0	34.4	1,453.3	8,634.8
		Non-Hazardous	6,184.1	416.5	531.4	49.5	7,181.5	
	2021	Hazardous	64.4	1,727.2	0	61.6	1,853.2	10,874.4
		Non-Hazardous	7,892.6	391.7	660.6	76.3	9,021.2	
	2022	Hazardous	60.2	1,598.4	0	-44.3	1,614.3	10,102.9
		Non-Hazardous	7,403.5	557.3	662.0	-134.2	8,488.6	
	2023	Hazardous	123.6	1,591.2	0	-32.4	1682.4	8,175.1
		Non-Hazardous	5,757.40	367.4	402.3	-34.4	6,492.70	
Trend Tone Imaging	2019	Hazardous	0	0.2	0	0	0.2	224.7
		Non-Hazardous	48.1	176.4	0	0	224.5	
	2020	Hazardous	0	0.4	0	0	0.4	246.0
		Non-Hazardous	62.8	167.9	14.9	0	245.6	
	2021	Hazardous	0	0.2	0	0	0.2	306.8
		Non-Hazardous	35.3	146.7	63.3	61.3	306.6	
	2022	Hazardous	0	0	0	0	0	289.8
		Non-Hazardous	47.7	126.8	176.6	-61.3	289.8	
	2023	Hazardous	0	0	0	0	0	253.9
		Non-Hazardous	95.3	104.5	54.1	0	253.9	
Everlight Suzhou	2019	Hazardous	0	101.9	0	0	101.9	120.8
		Non-Hazardous	18.9	0	0	0	18.9	
	2020	Hazardous	0	192.8	0	0	192.8	213.3
		Non-Hazardous	20.5	0	0	0	20.5	
	2021	Hazardous	0	117.4	0	0.4	117.8	134.3
		Non-Hazardous	15.4	0	0	1.1	16.5	
	2022	Hazardous	12.9	65.6	0	0.6	79.1	104.7
		Non-Hazardous	10.5	16.2	0	-1.1	25.6	
	2023	Hazardous	57.7	22.2	0	-1.0	78.9	187.0
		Non-Hazardous	91.2	16.9	0	0	108.1	

Note 1: The above data includes both reported and exempted waste (such as scrap iron, scrap plastic, and waste paper, recorded based on weighing data). The unit of measurement is tons.
Note 2: The current location stores the information on the final temporary storage volume of waste for the year. The remaining disposal information is the sum of the quantity statistics for each month and is presented by rounding to 1 decimal place.
Note 3: Total amount of waste generation = total amount of waste disposed of in the current year + the amount of the changes in temporary storage.
Note 4: To more accurately reflect the annual total waste output, this year's report includes a special statistic on the changes in annual on-site waste storage volume.
Note 5: For the 2023 waste information mentioned above, on-site processing quantities include hazardous waste incinerated by self incinerator at Plant III (987.75 tons) and the recycling of permeate from the ink process at Everlight Suzhou (57.7 tons of hazardous waste). All other quantities refer to off-site disposal.
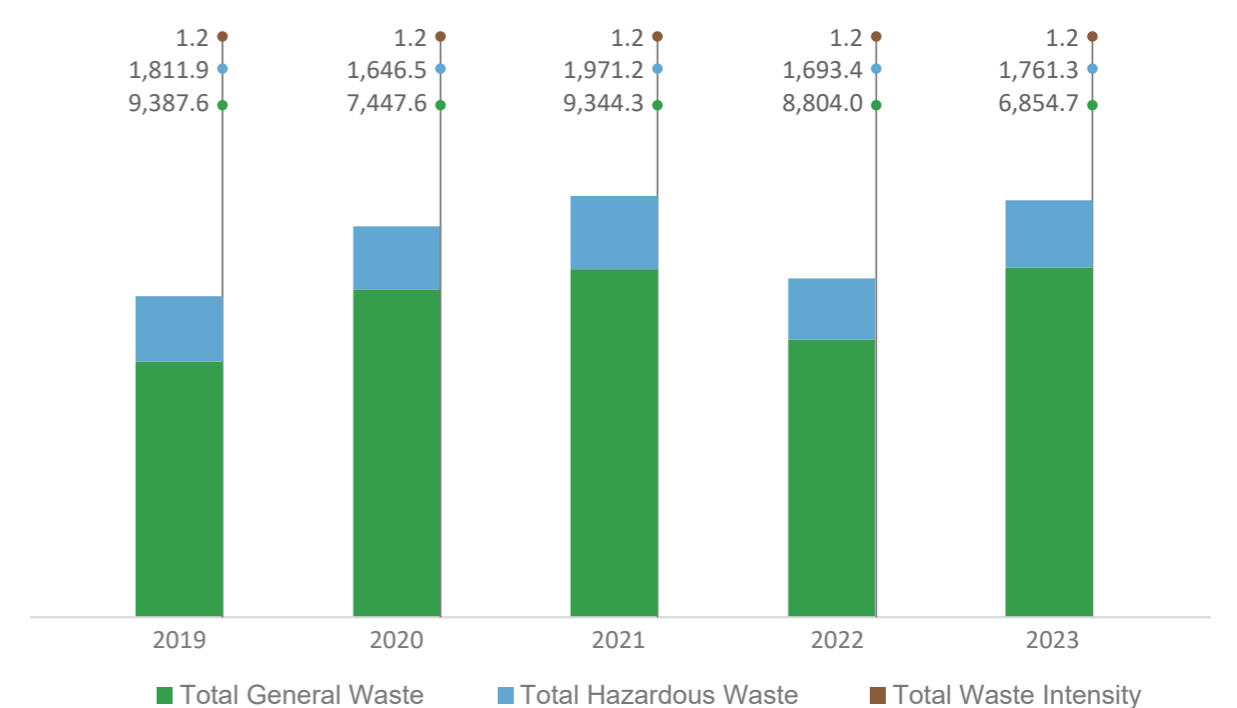
Waste Disposal from 2019 to 2023 (Unit: Tons)

Items / Year	2019	2020	2021	2022	2023
Amount of Recovery Utilization (1)	6,962.30	6,314.30	8,007.70	7,534.80	6,125.20
Directly Disposed Quantity (2)	4,291.20	2,695.90	3,107.10	3,202.90	2,568.60
Temporary Storage (3)	-63.0	83.9	200.7	-240.3	-67.8
Total Waste Generation (1) + (2) + (3)	11,199.50	9,094.10	11,315.50	10,497.40	8,616.00

Waste Intensity from 2019 to 2023 (Unit: Tons)

Management Indicators / Year	2019	2020	2021	2022	2023
Total General Waste	9,387.6	7,447.6	9,344.3	8,804.0	6,854.7
Total Hazardous Waste	1,811.9	1,646.5	1,971.2	1,693.4	1,761.3
Annual Amount of Waste	11,199.5	9,094.1	11,315.5	10,497.4	8,616.0
Total Waste Intensity (divided by production value in millions)	1.2	1.2	1.2	1.2	1.2

Waste Intensity from 2019 to 2023

	2019	2020	2021	2022	2023
Total Waste Intensity	1.2	1.2	1.2	1.2	1.2
Total Hazardous Waste	1,811.9	1,646.5	1,971.2	1,693.4	1,761.3
Total General Waste	9,387.6	7,447.6	9,344.3	8,804.0	6,854.7

■ Total General Waste ■ Total Hazardous Waste ■ Total Waste Intensity

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Historical Waste Management Indicators and Mid-term Target

Management Indicators	2019	2020	2021	2022	2023	Mid-term 2025 [Note1]
Waste Recycling and Utilization Rate (%)	62	69	71	72	71	≥72
Proper Disposal Rate of Hazardous Industrial Waste(%)	100	100	100	100	100	100
Recycling Rate of Hazardous Industrial Waste(%)	1.7	2.8	3.3	4.3	10.3	≥7.3 [Note2]

Note 1: In 2021, subsidiaries were included in the scope. Therefore, the mid-to-long-term targets for the Group are derived based on the actual performance from 2018 to 2020 and future plans.

Note 2: The recycling rate of hazardous industrial waste (%) has been adjusted due to significant differences in product combination/process characteristics in the past two years compared to 2021, leading to a revision of the medium and long-term targets.

V. Greenhouse Gas and Energy Management (GRI 2-23)(GRI 2-24)(GRI 305-1)(GRI 305-2)(GRI 305-4)

Everlight is committed to addressing international climate change and greenhouse gas reduction trends. We continuously implement energy use management and energy efficiency improvement measures to maximize energy usage efficiency and achieve "GHG reduction" goals. Additionally, to mitigate the impacts of climate change, we promote greenhouse gas inventory and emission reduction, and actively introduce various energy management systems and innovative technological equipment to advance energy-saving and carbon reduction measures.

Impact Assessment	Positive: The company effectively uses energy and manages greenhouse gas emissions, reducing negative environmental impacts. Negative: Energy-saving plans that are not specific or poorly executed can increase production costs and the burden on natural resources.
Management Policies and Commitments (GRI 2-23) (GRI 2-24) (RT-CH530a.1)	Everlight's energy management policy is to Enhance energy performance and move towards net-zero sustainability.
Governance Structure	• Headquarter: Environmental Management Committee • Plants: Environmental Management Team and Environmental Protection Units
Management Actions	We adopt the following practices to provide methods for greenhouse gas reduction and control: • Process and equipment optimization • Introduction of innovative management methods • Conducting greenhouse gas inventory following ISO 14064-1 or regulatory standards • Continuously promoting greenhouse gas reduction measures
Resources Allocation	Since 2022, we have adopted the latest version ISO 14064-1 standards and conducted verifications at all operational sites, as well as implemented ISO 50001 energy management system and conducted verifications. In 2023, we completed the carbon inventory for the parent company (including the operating headquarter, Taichung and Tainan offices, and Everlight Plant I, II, III, IV) according to the ISO 14064-1 and passed third-party verification. Additionally, Everlight Plant I, II, III also achieved ISO 50001 energy management system certification. • Adoption of energy-saving equipment • Systematization of energy management • Investment in renewable energy infrastructure • Establishment of a Climate Change Working Group • Enhancement of product energy use efficiency
Indicators and Targets	• Power Saving Percentage (%) = (Power Saved/Total Power Consumption + Power Saved) × 100% • Greenhouse Gas Emission Intensity = Total Greenhouse Gas Emissions (Scope 1 + Scope 2) (tCO$_2$e/million NTD in production value) • Energy Intensity = Total Energy Consumption (GJ/million NTD in production value)
Assessment Mechanisms	• Environmental Management Review (once per year) • Sustainability Development Committee (twice per year) • Review policies and plans for plants (once per quarter) • Internal Environmental Management System Audit (once per year) • External Verification Unit (DNV) Environmental Management System Audit (once per year)
Implementation Results in 2023	• Power Saving Percentage: 1.5% • GHG Emission Intensity: 8.6 (tCO$_2$e/million NTD in production value) • Energy Intensity: 68 (GJ/million NTD in production value)
Communication with Stakeholders	Relevant stakeholders include shareholders/investors, customers/brand owners, suppliers/contractors, neighboring communities and government agencies. Communication regularly/irregularly through various methods.

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Energy Management (Control of Energy Intensity) (GRI 302-1)(GRI 302-3)(GRI 302-4)(GRI 305-1)(GRI 305-2)

In 2023, the Company's total energy consumption is approximately 498.33×10^3 GJ, of which purchased electricity accounts for 55%. Compared with 2022 (626.93×10^3 GJ), the total energy consumption was reduced by 128.60×10^3 GJ (21%). This was mainly due to the replacement of outdated equipment (such as chillers, air compressors, ice makers) and the implementation of various energy-saving improvement measures, with an investment of around NTD 30 million. As a result, the consumption of electricity, diesel, natural gas and steam decreased by 17%, 12%, 21% and 30%, respectively, compared to the previous year. Overall energy intensity also decreased by 4% (68 and 72 GJ/million NTD in production value in 2023 and 2022, respectively). Everlight Plant II obtained self-generated solar power usage on March 1st, 2023, with an installation cost of 21.4 million NTD. By the end of 2023, our utilization rate (renewable energy/total energy) is 0.26%, with an estimated annual generation of 450,000 kWh, reducing carbon emissions by approximately 229 tCO_2e.

> Everlight planned to implement ISO 50001 in Plant I, II, III in 2022 and achieved certification in 2023. Some unplanned plants also sent seed members to participate in this study to gradually expanded to the subsidiaries. This is expected to help identify areas for improvement related to energy supply risks, continuously enhance overall performance, reduce energy consumption and costs. The Company also plans to obtain ISO 50001 certification for Everlight Plant IV and Trend Tone Imaging in 2024.

Detailed Energy Consumption Statistics (2019-2023) (Unit: 10^3 GJ) [Note1]

Plant	Year	Electricity	Steam	Natural Gas	Diesel	Gasoline	Liquefied Petroleum Gas (LPG)	Renewable Energy (Self-Generated Electricity)	Total
Everlight Plant I, II, III, IV	2019	207.50	192.85	163.07	3.19	1.41	0.75	0.00	568.77
	2020	195.30	169.56	154.45	2.85	1.29	0.82	0.00	524.27
	2021	223.28	197.36	198.25	3.14	1.20	0.72	0.00	623.95
	2022	188.05	146.17	148.58	2.68	1.23	0.78	0.00	487.49
	2023	167.26	102.01	117.28	2.39	1.12	0.84	1.32	392.22
Trend Tone Imaging	2019	80.55	0.00	0.00	0.00	0.24	0.00	0.00	80.79
	2020	60.27	0.00	0.00	0.00	0.20	0.00	0.00	60.47
	2021	71.40	0.00	0.00	0.00	0.12	0.00	0.00	71.52
	2022	71.49	0.00	0.00	0.00	0.18	0.00	0.00	71.67
	2023	59.77	0.00	0.00	0.00	0.00	0.00	0.00	59.77
Everlight Suzhou	2019	65.87	0.00	0.00	0.19	0.36	0.00	0.00	66.42
	2020	57.75	0.00	0.00	0.10	0.23	0.00	0.00	58.08
	2021	50.17	0.00	0.00	0.05	0.14	0.00	0.00	50.36
	2022	67.39	0.00	0.00	0.16	0.22	0.00	0.00	67.77
	2023	45.92	0.00	0.00	0.12	0.30	0.00	0.00	46.34
Total	2022	326.93	146.17	148.58	2.84	1.63	0.78	0.00	626.93
	2023	272.95	102.01	117.28	2.51	1.42	0.84	1.32	498.33

Note 1: The unit for purchased energy mentioned above is 10^3 GJ.
Note 2: Calculations are based on the latest calorific values announced by the Energy Administration, Ministry of Economic Affairs, such as the calorific value of electricity: 860 kcal/kWh, and the calorific value of natural gas: 8,000 kcal/m³.
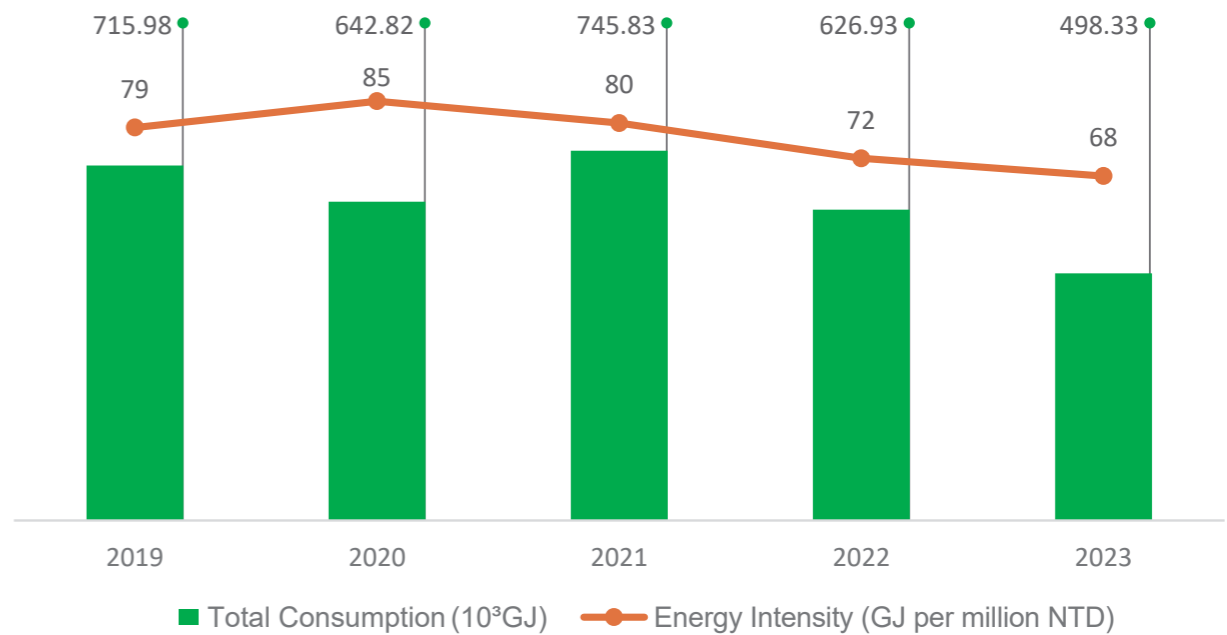Note 3: Energy consumption conversion (GJ) = [Energy Usage (units) x Calorific Value of Each Energy (kcal/unit) × (109)]
Note 4: All statistics in the table are rounded to two decimal places.
Note 5: The reduction in energy consumption is calculated using 2022 as the base year to explore the year-over-year changes in energy consumption.
Note 6: Upon reviewing the monthly electricity data for Trend Tone Imaging in 2021, a minor discrepancy was found in one month. The corrected value is 71.40 × 10^3 GJ, with the total corrected to 71.52 × 10^3 GJ.
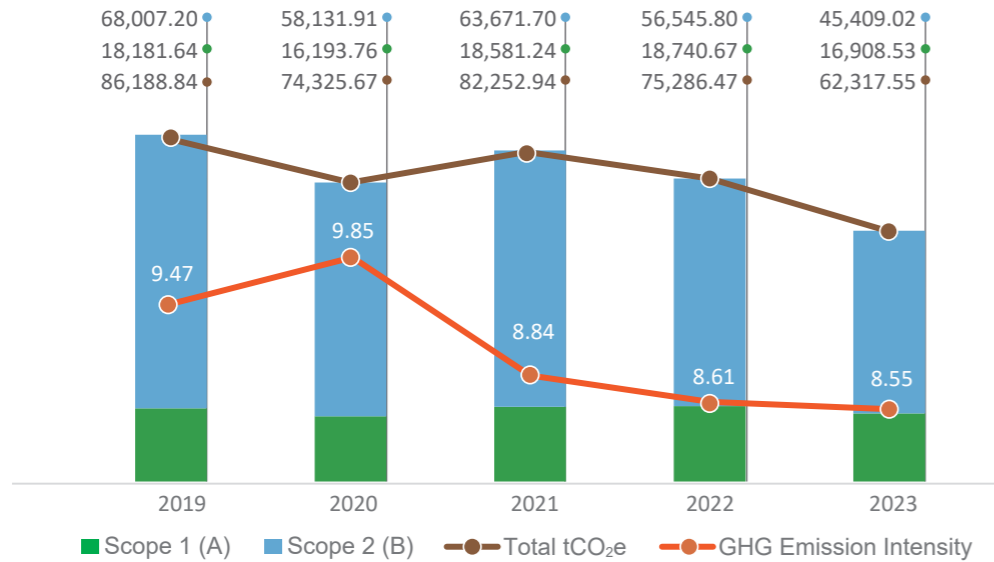
Historical Energy Intensity Information

	2019	2020	2021	2022	2023
Total Consumption (10^3GJ)	715.98	642.82	745.83	626.93	498.33
Energy Intensity (GJ per million NTD)	79	85	80	72	68

Year	2019	2020	2021	2022	2023
Total Energy Consumption (10^3 GJ)	715.98	642.82	745.83	626.93	498.33
Production Value (million NTD)	9,106	7,543	9,311	8,744	7,283
Energy Intensity (GJ per million NTD)	79	85	80	72	68

> With the implementation of various energy consumption improvement measures, the greenhouse gas emission intensity in 2023 was 8.55, rounded to 8.6 tCO2e/million NTD in production value. Although there was no significant decrease compared to 2022 (8.6 tCO_2e per million NTD in production value), it still met the 2023 target (8.7 tCO_2e/million NTD in production value). Thanks to the efforts of all employees, the total greenhouse gas emissions for the year were 62,318 tCO_2e, a decrease of approximately 17% from 2022 (75,286 tCO_2e). Overall, we continue to work diligently according to the Group's carbon reduction plan, including replacing high-energy-consuming equipment and continuously improving processes.

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Historical Greenhouse Gas Emission Intensity Information

Year	Items	Everlight Plant I, II, III, IV	Trend Tone Imaging	Everlight Suzhou	Total tCO₂e (1)	Production Value (million NTD)	GHG Emission Intensity (1)÷(2)
2019	Scope 1 (A)	17,905.92	126.59	149.13	18,181.64	9,106.00	2.00
	Scope 2 (B)	49,070.06	11,923.72	7,013.42	68,007.20		7.47
	Total(A)+(B)	66,975.98	12,050.31	7,162.55	86,188.84		9.47
2020	Scope 1 (A)	15,921.83	122.27	149.66	16,193.76	7,543.00	2.15
	Scope 2 (B)	43,405.64	8,519.64	6,206.63	58,131.91		7.70
	Total(A)+(B)	59,327.47	8,641.91	6,356.29	74,325.67		9.85
2021	Scope 1 (A)	18,341.41	113.62	126.21	18,581.24	9,311.00	2.00
	Scope 2 (B)	48,306.65	9,973.10	5,391.95	63,671.70		6.84
	Total(A)+(B)	66,648.06	10,086.72	5,518.16	82,252.94		8.84
2022	Scope 1 (A)	18,488.90	119.25	132.52	18,740.67	8,744.00	2.14
	Scope 2 (B)	39,196.81	10,105.84	7,243.15	56,545.80		6.47
	Total(A)+(B)	57,685.71	10,225.09	7,375.67	75,286.47		8.61
2023	Scope 1 (A)	16,659.01	106.39	143.13	16,908.53	7,283.00	2.32
	Scope 2 (B)	32,257.18	8,216.95	4,934.89	45,409.02		6.23
	Total(A)+(B)	48,916.19	8,323.34	5,078.02	62,317.55		8.55

Note 1: The greenhouse gas emission factors used for the inventory are primarily based on the "Greenhouse Gas Emission Factor Management Table Version 6.0.4" announced by the Ministry of Environmental Resources, Executive Yuan.

Note 2: The global warming potential data from the Fifth Assessment Report (2013) of the United Nations Intergovernmental Panel on Climate Change (IPCC) is used as the basis for calculations.

Note 3: Our company uses the operational control method to aggregate Scope 1 and Scope 2 greenhouse gas emissions across all production locations. The greenhouse gases included in the inventory are carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride and nitrogen trifluoride.

Note 4: Since Scope 3 emissions are not from "owned or controlled sources," it is more challenging to aggregate and obtain relevant emission data. Therefore, they are currently exempted from the inventory scope.

Note 5: All carbon emission data in the table is rounded to two decimal places for intensity calculations.

Note 6: Since 2005, Everlight has consecutively passed the ISO 14064-1:2006 version verification for six years (for Plants I, II, III). Therefore, the data from 2019-2022 was calculated using the same methodology. According to the company's scheduled timeline, an external verification body verified the data in August 2023. The 2022 carbon emissions for Plants I, II, III, IV have been updated with the verified information. This information is also included in the data revision explanation.

Note 7: The verification method for refrigerant emissions in 2022 involved equipment refrigerant leakage, which differs from the previous self-inventory method that used refrigerant purchase and replenishment amounts. Therefore, the inventory was standardized to the verified equipment refrigerant leakage method, and the historical Scope 1 disclosure information was revised accordingly. This results in slight differences from previously disclosed carbon emission data. This information is also included in the data revision explanation.

Note 8: The 2023 greenhouse gas emissions will be verified in Q3 of 2024, and the updated information will be disclosed in next year's report.

Special Report

Energy Saving and Carbon Reduction Results (GRI 302-4、GRI305-5)

Through continuous efforts and innovation, we have made significant progress in reducing greenhouse gas emissions and improving energy management efficiency. We have not only achieved excellent results in reducing energy consumption and greenhouse gas emissions, but also improved overall operational efficiency and made positive contributions to achieving our sustainable development goals.

Climate Action and Energy Management

Climate change and issues posed by climate policy, emerging technologies and carbon pricing are all bringing changes and impacts to operations. Everlight has set a 25% emission reduction target by 2030 with reference to the 2030 emission reduction target proposed by the National Development Council at the end of 2022. We also conduct climate change-related financial disclosures (TCFD) and promote various carbon reduction plans and initiatives to support the 2050 net-zero carbon emission target.

Climate Action and Energy Management Measures

Firstly, we optimized processes and equipment, and implemented ISO 50001 energy management system to more effectively monitor and control energy consumption. We also followed the ISO 14064-1 standards and continuously promoted greenhouse gas reduction measures to reduce emissions. Additionally, we actively adopted energy-saving equipments, systematized energy management, and invested in renewable energy infrastructure to reduce dependence on traditional energy sources.

Promotion of Energy-Saving and Carbon Reduction Projects

Starting in 2021, we promoted energy-saving and carbon reduction projects, including the replacement of outdated equipment (such as chillers, air compressors and ice makers) and the implementation of various energy-saving measures and process and equipment improvements. The target of these energy-saving and carbon reduction measures is to save at least 1% of electricity annually [Note 1]. In 2023, we saved a total of 1,231,000 kWh of electricity, reducing carbon emissions by approximately 609 tCO₂e, which is equivalent to the annual carbon absorption of 50,750 trees [Note 2]. This equates to approximately 4,435 GJ of energy saved, a total electricity savings of 1.5%.

ISO 14064-1 / ISO 50000 Certifications for Environmental Management System

Note 1: The calculation of electricity savings and carbon reduction in 2023 is based on the latest "2022 Electricity Carbon Emission Factor = 0.495 kg CO_2e/kWh" and the relevant energy coefficient values from the 2022 Energy Statistics Handbook announced by Energy Administration, Ministry of Economic Affairs.

Note 2: According to the article "Contribution of trees to the environment" published by Environmental Quality Protection Foundation (http://www.eqpf.org/sf/3-1.htm), each tree absorbs approximately 12 kg CO_2e annually. Therefore, 609 tons divided by 0.012 tons CO_2e per tree is approximately equivalent to the annual carbon absorption of 50,750 trees.

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Historical Energy Saving Information

Plant	Energy Saving and Carbon Reduction Measures	Electricity Saved (thousand kWh)	Heat Value Saved (10^6 kcal) [Note1]	Carbon Emissions Saved (tCO₂e) [Note2]	Energy Saved (GJ) [Note3]
Everlight Plant I	Replacement of Ice Maker in Building A (A03)	161	138	80	580
	Replacement of Chiller in Building G (G06)	128	110	63	461
Everlight Plant II	Replacement of 1 Chiller (RIW02)	261	225	129	941
	Replacement of 1 Ice Maker (GI01)	112	96	55	403
	Replacement of Air Compressor System in Building M	32	28	16	115
	Installation of Heat Recovery Adsorption Dryer	18	15	9	65
	Replacement of Adsorption Dryer	7	6	4	26
Everlight Plant III	Installation of Variable Frequency Energy Saving in Cooling Tower in Building P	11	9	5	39
	Replacement of Environmental Blower (RD05)	90	77	45	324
Trend Tone Imaging	Replacement of Air Compressor in Building A (200 HP)	20	17	10	72
Everlight Suzhou	Modification of Air Compressor with Permanent Magnet Motor	309	266	153	1,113
	Replacement of Cooling Tower	45	39	22	162
	Replacement of Permanent Magnet High-Efficiency Water Pump	26	22	13	94
	Replacement of Permanent Magnet Blower	11	9	5	40
Total		1,231	1,057	609	4,435

Note 1: Heat Value Saved (kcal) = [Electricity Saved (thousand kWh) × Electricity Heat Value (8.6 × 10⁵ kcal/thousand kWh)]
Note 2: Carbon Emissions Saved (tCO₂e) = [Electricity Saved (thousand kWh)×Latest Annual Electricity Carbon Emission Factor (0.495 tCO₂e/thousand kWh)].
Note 3: Energy Saved (GJ) = [Heat Value Saved (kcal)×Heat Value Coefficient (4.187 × 10³ joules (J)/kcal)]÷10⁹
Note 4: All statistics in the table are rounded to the nearest integer.
Note 5: The scope of the above carbon emission reduction performance conversion is Scope 2.

Historical Ozone-Depleting Substances (ODS) Emission Information (GRI 305-6)

Everlight has gradually reduced the use of ozone-depleting substances (ODS) refrigerants over the years, with the following performance:

Year	2019	2020	2021	2022	2023
R22 Refrigerant Usage (tons) [Note1]	2.27	3.71	1.97	1.60	0.2
CFC-11 Equivalent (tons)	0.12	0.20	0.11	0.09	0.01

Note 1: The ODP value of R22 refrigerant is 0.055 (according to the Montreal Protocol), and the ODP value of CFC-11 is 1. The usage of R22 refrigerant is converted to CFC-11 equivalent (tons) as shown in the above data.
Note 2: The ODS emissions are calculated based on the Ozone Depletion Potential (ODP) coefficients listed in the annex of the Montreal Protocol.

Greenhouse Gas Management Performance

Regarding greenhouse gas inventory and energy use management, Everlight has established three management indicators: (1) Power Saving Percentage, (2) Greenhouse Gas Emission Intensity (tCO₂e/million NTD in production value), and (3) Energy Intensity (GJ/million NTD in production value). In 2023, Everlight Group continued to demonstrate progress towards the Net-Zero mid-term target set for 2025, as declared in 2022.

Historical Management Indicators and Mid-term Target Achievement

Management Indicators	2019	2020	2021	2022	2023	Mid-term Target 2025 [Note1]
Energy Saving Percentage (%)	1.5	0.8 [Note2]	1.2	1.1	1.5	≧ 1
Greenhouse Gas Emission Intensity (tCO₂e/million NTD in production value)	9.5	9.9	8.8	8.6	8.6	≦ 8.1 [Note3]
Energy Intensity (GJ/million NTD in production value)	79	85	80	72	68	≦ 70 [Note4]

Note 1: In 2022, external consultants assisted in planning energy saving and carbon reduction, and adjustments were made to the short, medium, and long-term reduction targets for energy intensity and greenhouse gas emission intensity.
Note 2: The reduction in production capacity due to the COVID-19 pandemic and the increase in the production of some energy-intensive products are the main reasons.
Note 3: The verification method for refrigerant emissions in 2022 was based on equipment refrigerant leakage, differing from the previous self-inventory method that used refrigerant purchase and replenishment amounts. Therefore, the inventory was standardized to the verified equipment refrigerant leakage method. Although the revised historical carbon emission data differ slightly from previously disclosed figures, they do not affect the previously set medium and long-term targets.
Note 4: Considering the significant differences in product combination/process characteristics over the past two years compared to 2021, the medium and long-term targets for energy intensity have been adjusted

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VI. Climate Change Response - Mitigation and Adaptation*(Material Topic) (GRI 2-23)(GRI 2-24)(GRI 201-2)

In the face of global climate change, businesses encounter severe challenges. Everlight, following the requirements of the Financial Supervisory Commission (FSC) and referencing the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), discloses the risks and opportunities brought by climate change based on four core elements: governance, strategy, risk management, and indicators and targets.

To align with the national net-zero carbon policy and the "Sustainable Development Action Plan for Listed Companies" released by the FSC in 2023, Everlight's board of directors has approved the Group's carbon reduction target for 2030, aiming for a 25% reduction based on 2021 carbon emissions levels. Everlight is committed to addressing mitigation and adaptation to climate change and believes that Everlight can jointly create a sustainable future through communication and collaboration with stakeholders.
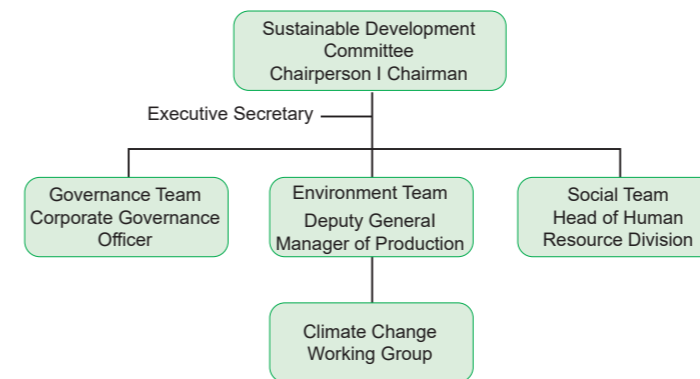
Setting 2021 as the Baseline Year for Carbon Reduction → 25% Reduction by 2030 Compared to 2021 → Achieve Net Zero Carbon Emissions by 2050

Material Topic #6	Climate Change Response - Mitigation and Adaptation
Impact Assessment	Positive: The company formulates and implements carbon reduction plans, which can help stakeholders reduce carbon emissions, support climate action, and mitigate climate change. Negative: The company does not formulate carbon reduction plans or fails to implement them effectively, or continues to increase carbon emissions/water consumption, causing negative environmental impacts.
Management Policies and Commitments (GRI 2-23) (GRI 2-24) (RT-CH530a.1)	The company has set targets to reduce carbon emissions by 25% in 2030 and achieve net zero carbon emissions by 2050, while also signing the "Net Zero Emissions Declaration."
Governance Structure	• Headquarter: Sustainability Development Committee. • Subdivided into three groups: Governance, Social, and Environmental Groups.
Management Actions	• Everlight's board of directors is the highest-level oversight organization for climate-related risks and opportunities. • The Risk Management Committee and the Sustainability Development Committee are responsible for assessing climate change impact-related matters. • The subgroups under the Sustainability Development Committee execute daily actions.
Resource Allocation	• Analyze risks and opportunities based on the TCFD framework, WBCSD chemical industry case guidance, and CDP questionnaire. • Introduce risk management processes referencing "ISO 31000:2018 Risk Management - Principles and Guidelines."
Indicators and Targets	• Greenhouse Gas Emission Intensity (tCO2e/million NTD in production value): ≤ 8.7 (2023 management target).
Assessment Mechanisms	• Sustainability Development Committee: twice per year • Risk Management Committee: twice per year • Governance Group, Environmental Group, Social Group: irregularly
Ensuring Effective Actions	• Tracking Process: Referencing "ISO 31000:2018 Risk Management - Principles and Guidelines" to identify risk attributes and categories, as well as the probability and severity of risks, and to develop risk management strategies. • Through the "Risk Assessment Process": Identify risks → Risk ranking → Risk impact assessment → Risk adaptation and pre-emptive planning. These processes are integrated into the existing risk management system, with continuous review and improvement of the status of achieving various targets and objectives. • Effectiveness of Previous Actions: Annually review whether the set targets have been achieved.
Implementation Results in 2023	Greenhouse Gas Emission Intensity (tCO2e/million NTD in production value): 8.55
Communication with Stakeholders	Relevant stakeholders include: shareholders/investors, customers/brand owners, suppliers/contractors, neighboring communities, and government agencies. Communication is conducted through various forms, both regularly and irregularly.

Governance

Everlight's board of directors is the highest-level oversight organization for climate-related risks and opportunities. The Board and the Audit Committee are responsible for overseeing the effectiveness of risk control. The Board has established the Risk Management Committee and the Sustainability Development Committee, which are responsible for assessing climate change impact-related matters. Board members have a thorough understanding of the importance and impact of climate change, and they consider the impact of climate change issues in major investment decisions. The governance structure of Everlight is as follows:

To enhance senior executives' understanding of the TCFD, the Group will hold a TCFD workshop in January 2024. Participants will include members of the Sustainability Development Committee and its Climate Change Task Force, members of the Risk Management Committee, and senior executives from various operating units of the Group. Management is required to consider climate-related risks and opportunities when managing various tasks, set specific goals to implement into various policies and programs, and build consensus on the Group's climate-related mitigation and adaptation issues.

Sustainable Development Committee Chairperson I Chairman

Executive Secretary

Governance Team Corporate Governance Officer

Environment Team Deputy General Manager of Production

Social Team Head of Human Resource Division

Climate Change Working Group

Strategy

Everlight has set targets to reduce carbon emissions by 25% by 2030 and achieve net zero carbon emissions by 2050. To achieve the vision of low-carbon transformation, the Group's operational strategies are as follows:

Year	2021	2030	2050
Emissions (Ten Thousand Tons)	8.2 Base Year	6.2 25% Reduction Compared to 2021	Net Zero Carbon Emissions

Strategies	• Develop sustainable products
	• Develop green chemical production technologies and promote the circular economy
	• Implement energy management systems
	• Initiate the replacement of high-energy-consuming equipment
	• Carbon inventory and carbon reduction roadmap
		• Continuously develop sustainable products
		• Utilize green chemical production technologies and promote the circular economy
		• Process improvements (reduce by 10,000 tons)
		• Continuously improve the energy management system
		  - Replace high-energy-consuming equipment (reduce by 40,000 tons)
		  - Use renewable energy (reduce by 10,000 tons)
		  - Purchase green electricity and certificates (reduce by 20,000 tons)
		  - Decrease in power carbon emission factor (reduce by 130,000 tons)
		• Implement a carbon risk management system
			• Evaluate energy transition
			• Use low-carbon energy
			• Assess the adoption of carbon capture, utilization, and storage (CCUS) technologies
			• Carbon sinks and negative carbon technologies

The Climate Change Working Group identifies climate-related risks based on the TCFD framework, the World Business Council for Sustainable Development (WBCSD) chemical industry case guidance, the CDP questionnaire, and the specific nature of the chemical industry. Using a risk matrix, climate-related risk issues are prioritized. Based on the company's risk management system, countermeasures are developed to control these risks.

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Short, Medium, and Long-term Risks and Opportunities: Climate-related risks are identified based on their severity and probability of occurrence. A climate risk matrix is created, and the identification results of short, medium, and long-term climate risks and opportunities are organized as follows

TCFD Risk Matrix
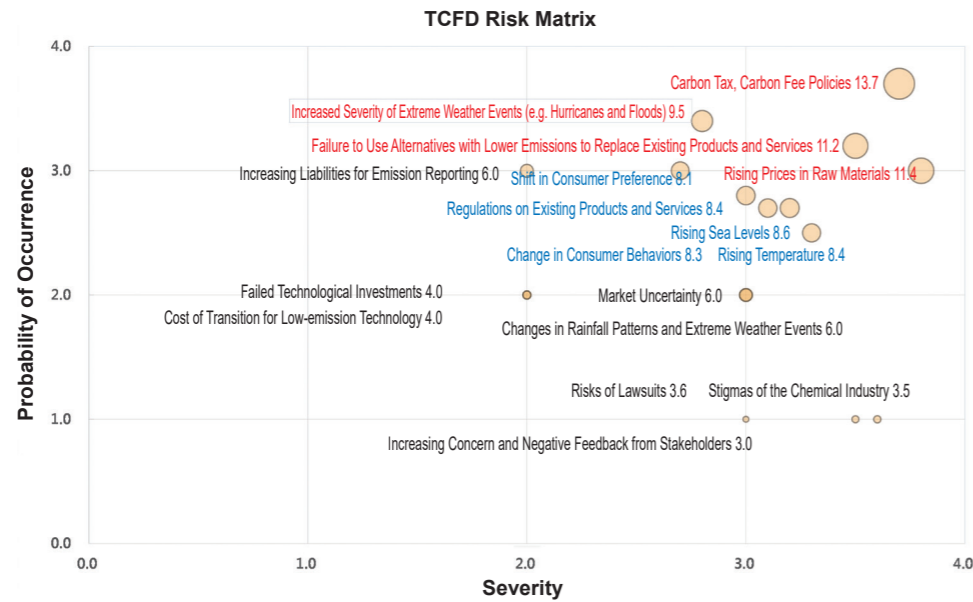
Note 1: The above numbers represent climate risk scores and are for ranking purposes only. Red indicates major risks identified, blue indicates secondary risks, and black indicates minor risks.
Note 2: Severity is divided into 4 levels: Level 1: Acceptable, Level 2: Minor, Level 3: Severe, Level 4: Very Severe.
Note 3: Probability of occurrence is divided into 4 levels based on the frequency of occurrence: Level 1: >15 years, Level 2: 10-15 years, Level 3: 5-10 years, Level 4: 1-5 years.

Identification Results of Short, Medium, and Long-term Climate Risks and Opportunities

Period	Risk Identification Results	Opportunity Identification Results
Short-term	**Physical Risks** Mainly the increased severity of extreme weather events (heavy rainfall, drought, extreme temperature changes, etc.). **Transition Risks** Due to changes in carbon policies, regulation of existing products and services, and market risks, the main impact is the increase in raw material costs and their logistics.	• Long-term development of BCM with flexible response capabilities. • Possess the ability of advanced green chemistry research and development of circular economy processes.
Medium-term	**Physical Risks** The severity of extreme weather events is increasing. Water resource shortages. **Transition Risks** Carbon management costs include capital expenditures or increased management costs resulting from reducing carbon emissions, such as carbon tax/carbon tariffs, high greenhouse gas emission pricing, and the use of renewable energy, all of which require additional costs. Changes in customer behavior and consumer preferences necessitate the introduction of low-carbon products to meet market demand, posing reputational risks. There are also technological risks associated with not replacing existing products and services with those that have lower emissions.	• Everlight emphasizes continuous improvement to develop comprehensive climate adaptation strategies and integrate them into the overall operating strategy. • Possess the ability to develop low-carbon products and sustainable products to help customers reduce carbon emissions. • Possess high-quality product standards and strong technical service capabilities.
Long-term	**Physical Risks** Rising average temperatures leads to changes in lifestyles and consumption patterns, and the potential rise in sea levels could affect the actual operation of factories.	Actively cultivating R&D talents and capabilities will help develop and construct a value chain of low-carbon products and services that meet customer needs.

2023 Process Improvement Cases and Performance, Summarized as Follows:

Specific Measures and Actions in Response to Climate-Related Risks and Opportunities

Specific Measures	Description	Specific Actions and Measures
Develop sustainable products	Develop green/sustainable products that enhance customer efficiency and save energy resources during production.	Eversorb® AQ Series Light Stabilizers for Water-Based Coatings were awarded the Taiwan Excellence Silver Award for their non-toxic, odorless, and weather-resistant environmental characteristics in 2024.
Develop green chemistry production technology	Design and produce products according to green chemistry principles.	Due to the introduction of the 12 principles of green chemistry in the process, we were awarded the Green Chemistry Application and Innovation Awards by Environment Protection Administration in 2019 and 2021.
Promote the circular economy	Enhance resource use efficiency through industry collaboration.	Awarded the TCIA Circular Economy Achievement Award in 2021.
Implement energy management	Improve energy performance.	Passed the external verification of ISO 50001 Energy Management System in 2023.
Carbon inventory projects	Implemented ISO 14064-1:2018 Inventory System. Implemented ISO 14067:2018 Inventory System.	Organizational Carbon Inventory and Verification: 1. Completed verification of the parent company scope in 2023. 2. Verification at all Group locations starting in 2024. Product Carbon Footprint Inventory: Conduct inventory starting in 2023.
Carbon reduction targets and pathway projects	Establish specific carbon reduction targets and pathways for 2030.	In 2023, the Board of Directors approved the 2030 carbon reduction target, aiming for a 25% reduction compared to 2021

2023 Process Improvement Cases and Carbon Reduction Performance (Integrated with Energy Inventory)

Strategy		Process summary description	Total amount of reduction (kg CO_2e)/year
Develop green chemical production technologies	Process Improvements	Increase solid content to reduce drying time	93,738
		Additives to reduce gas consumption and drying time for spray drying	
		Improve wet label dissolution to reduce consumption of gas and time	
		Increase solid content to reduce drying time	
		Simplify process to reduce the use of raw materials and reaction time	
		Add cooling water to reduce electricity consumption during processing	
		Efficiency improvements to reduce electricity and steam consumption during processing	
		Process improvements to reduce filtrate acidification and secondary extraction, shorten working hours, and reduce electricity consumption during processing	
		Improve raw solution process to reduce electricity consumption during processing	
Improve energy efficiency	Equipment Improvements	Insulate jacket to reduce steam consumption	35,475
		Optimize process, improve parameters and filter basket facilities to reduce electricity and nitrogen consumption during processing	
		Optimize operating parameters to save energy consumption of air compressor during processing	
	Total		**129,213**

Evaluating climate mitigation and adaptation strategies must also consider various aspects, including product research and development, manufacturing, supply chain management, and market operations. Carbon issues are managed based on the Group's five main product categories. The organization comprehensively assesses the likely financial impact of low carbon transition actions required for each issue based on an inventory of key risks and opportunities, as shown in the table below. This helps understand the overall financial impact and develop preventative measures and timelines.

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Description of Climate Change Risks and Opportunity Impact and Financial Implications

	Risks and Opportunities	Related Impacts	Financial Impact Before Action	Actions Taken	Cost of Actions Taken
Risks	Increased Cost of Renewable Energy	Slow development of green energy may lead to price increases due to supply shortages.	Generate moderate to high negative impact	Implement ISO 50001 system to improve energy efficiency.	Starting from 2022, the energy management system was supported with approximately 1.2 million NTD; in 2023, the cost of replacing energy-saving equipment was about 30 million NTD.
	Carbon Tax/Carbon Fees	The expansion of EU CBAM regulations and the follow-up by other countries may affect the competitiveness of high-carbon products.	Generate moderate to high negative impact	Replace energy-saving equipment.	From August 2022 to July 2025, about 9.2 million NTD is planned to be invested in implementing an organizational greenhouse gas and product carbon footprint inventory system.
	Rising Costs of Raw Material	Climate change leading to increased demands and higher standards, various restrictions cause supply reductions and rising raw material prices.	Generate moderate negative impact	Implement energy management.	
	Market/Consumer Shift Towards Low-Carbon Products	Carbon pricing results in consumers strictly scrutinizing the carbon emissions of products or services, reducing the competitiveness of high-carbon products.	Generate moderate negative impact	Evaluate and implement carbon footprint and carbon risk management.	Please refer to the opportunity costs.
	Extreme Weather Events	Heavy rainfall, drought, and extreme temperature changes lead to operational disruptions.	Generate moderate negative impact	Evaluate and implement carbon footprint and carbon risk management.	An estimated 500,000 NTD will be invested in professional training of personnel in 2024.
Opportunities	Necessity of Developing Low-Carbon Transition Products	Market/consumers will shift towards low-carbon products, necessitating the development of low-carbon products at the production end.	Generate moderate to high positive impact	Develop low-carbon products and sustainable products with development blueprints.	About 4% of revenue is invested in R&D annually, all of which are used for low-carbon transition products.
	Development of Sustainable Products that Reduce User Carbon Emissions	Market/consumers will shift towards low-carbon products, necessitating the development of low-carbon products for customers.	Generate moderate to high positive impact	Enhance the adaptability of factory infrastructure and personnel.	

Climate Change Risk Management

Everlight refers to "ISO 31000:2018 Risk Management - Principles and Guidelines" to implement risk management processes. Based on different risk attributes and categories (market, political, environmental, legal, financial, operational, others) and the probability and severity of risks, we develop risk management principles and strategies.

1. Climate change risk is part of environmental risk. In 2021, under the Environmental Group of the Sustainability Development Committee, a cross-departmental Climate Change Working Group was established to identify and assess climate change-related risks and opportunities.
2. Climate risks are divided into two major categories: transition risks and physical risks. According to Everlight's current risk management system, assessments of transition and physical risks include policies and regulations, technology, market, corporate reputation, as well as immediate and long-term climate risks that may impact Everlight.
3. The assessment process includes Identifying risks → Risk ranking → Risk impact assessment → Risk adaptation and preemptive planning, integrated into the existing risk management system.
4. When a climate risk issue is evaluated as a major risk, specific countermeasures are proposed according to the risk handling procedure.
5. Risk reporting, response, and monitoring: All responsible units should continuously monitor risks related to operations, track disposed risks to confirm that residual risks are effectively controlled, and review by the Risk Management Committee or through various management system. The status of risks and risk handling results are reported as a reference for adjusting risk control mechanisms and operating strategies.

PDCA Process for Climate Change Risk Management

Organization and function of climate-related risk management system integration

Indicators and Targets

Since 2005, Everlight has consecutively passed third-party verification of greenhouse gas emissions under ISO 14064-1:2006 for six years (for Plants I, II and III). We continue to use this systematic approach to establish the Group's organizational carbon inventory data (including Everlight Plant IV, Trend Tone Imaging, and Everlight Suzhou) to ensure the accuracy of greenhouse gas emissions. Everlight's recent greenhouse gas emission intensity and 2030 targets are shown in the table below.

Greenhouse Gas Emission Intensity in Recent Years and 2030 Targets

Unit: tCO_2e/million NTD in production value

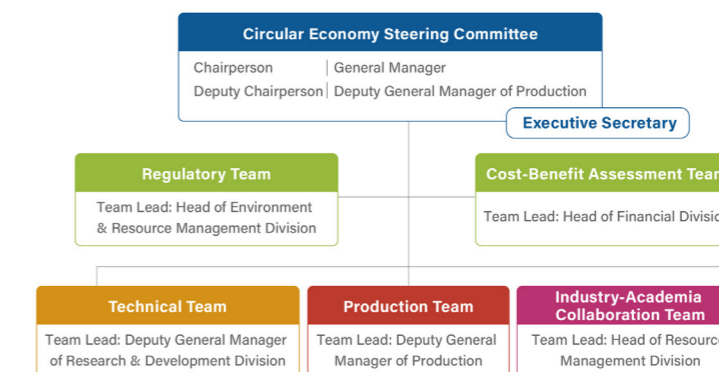| Year	2021			2022			2023			2024	2030
Items	Scope 1	Scope 2	Total	Scope 1	Scope 2	Total	Scope 1	Scope 2	Total	Total	Total
Company	2.4	6.2	8.6	2.6	5.5	8.1	2.8	5.4	8.3	8.1	6.4
Whole Group	2.0	6.8	8.8	2.1	6.5	8.6	2.3	6.2	8.6	8.3	6.6

VII. Circular Economy

Purpose

Everlight adheres to the principles of "maintaining and enhancing natural resources, optimizing resource use, and promoting system effectiveness" to promote the construction of a circular system. Through circular economy methods, we address issues related to energy efficiency, recycling, waste management, water management, material and resource flows, transportation logistics, air pollution prevention, and noise prevention, aiming towards the goal of "zero emissions and zero waste."

Organizational Promotion and Operation

Everlight has established the "Circular Economy Promotion Committee." The committee is organized into three executive teams: technical, production, and industry cooperation, and two advisory teams: regulations and efficiency evaluation.

Circular Economy Steering Committee
Chairperson | General Manager
Deputy Chairperson | Deputy General Manager of Production

Executive Secretary

Regulatory Team
Team Lead: Head of Environment & Resource Management Division

Cost-Benefit Assessment Team
Team Lead: Head of Financial Division

Technical Team
Team Lead: Deputy General Manager of Research & Development Division

Production Team
Team Lead: Deputy General Manager of Production

Industry-Academia Collaboration Team
Team Lead: Head of Resource Management Division

- The committee shall have a chairman who is responsible for promoting and achieving circular economy goals, and the general manager of the company serves as the chairman. A deputy chairman shall assist the chairman in promoting circular economy, and the deputy general manager of the factory serves as the deputy chairman.
- Committee members are the leaders of each executive team.
- An Executive Secretary is appointed, responsible for the relevant work and data collection and release of the Executive Committee's resolutions.
- Operation Method: The committee holds regular meetings in Q2 and Q4 each year to report and review implementation results, revise various circular economy goals and report upward.

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From Product (Internal Circulation) to Industrial Chain (External Circulation) Product (Internal Circulation)

From Product (Internal Circulation)

- Internally, the Company treat used substances through various methods (e.g., filtration, distillation, purification, activation, regeneration) to make them reusable in the production process or for other purposes, achieving circular reuse.

- "Recycling dilute acid to produce ferrous sulfate": In the dye manufacturing process, approximately 950 tons of dilute sulfuric acid are produced annually, which need to be neutralized and treated at a wastewater treatment plant. After improvement, the dilute sulfuric acid is mixed with purchased iron slag to produce ferrous sulfate, used as an environmental wastewater additive. This change is estimated to save about 3.6 million NTD annually in environmental treatment costs for dilute sulfuric acid and reduce the cost of purchasing ferrous sulfate by about 3 million NTD, totaling savings of approximately 6.6 million NTD.

Industrial Chain (External Circulation)

- The Company collaborates with upstream suppliers and downstream customers to recycle packaging materials or regenerate used raw materials, reducing packaging costs and process waste.

- "Replacing raw material iron drum packaging with tank trucks": By coordinating with suppliers to import large quantities of raw materials using tank trucks, Everlight can receive shipments in batches as needed for production. This change reduces 8,000 waste iron drums annually (financial benefit of 7.5 million NTD per year) and alleviates storage space pressure in plants.

- "Recycling plastics for reuse": Collaborating with external companies, the plastic waste used within the plant is recycled and converted into pyrolysis oil, reducing plastic waste disposal costs and achieving circular reuse.

Eight Stages of Industrial Cycle

Sustainable Circulation, Outstanding Illumination Project

Everlight deeply understands the importance of Earth's resources and "sustainable development." From August 8 to December 20, 2023, the Company actively launched comprehensive circular economy experience courses across its 9 plants: Headquarter, Everlight Plant I, II, III (including Specialty Chemicals Division), IV, Group R&D, Electrochemicals Division, Pharmaceuticals Division, and Trend Tone Imaging. A total of 37 sessions were held, aiming to achieve the vision: "Behavioral change for all employees, continuously contributing to the company's circular economy performance."

In 2024, the "Circular Economy Competition" will be held, inviting experts from various plants to compete. This competition is expected to spark more creativity and wisdom. Through interaction and experience sharing among the plants, Everlight is committed to embarking on the path of sustainable development and creating a new future for the company.

2024 Circular Economy Competition Planning Schedule

STEP 01	STEP 02	STEP 03	STEP 04
4/1-5/15	6月-10月	11月	12月
Registration Period	Implementation Period	Preliminary Review (Written Examination)	Final Presentation (Presentation)