4

Producer of Green Products

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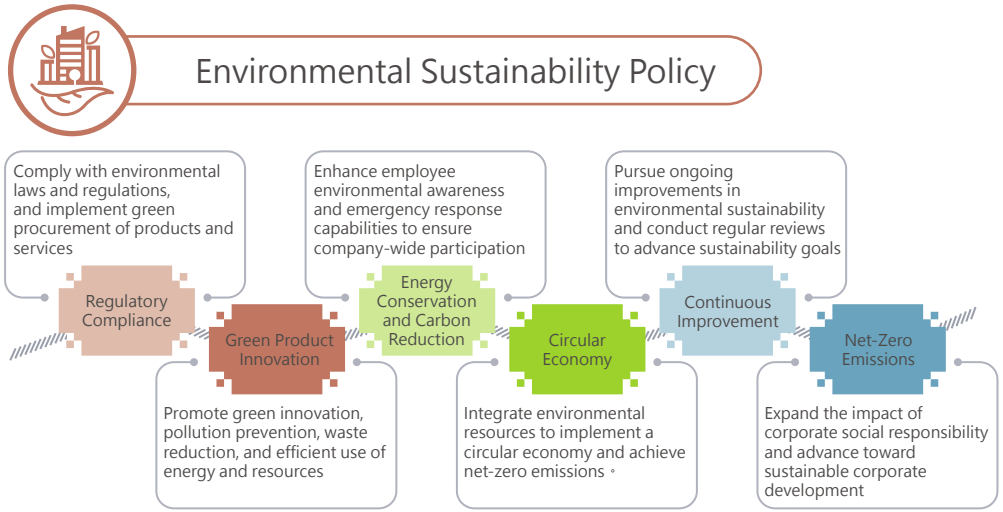
❑ 4.1 Environmental Policy and Investment

Environmental sustainability is a core value embedded in Taiflex Group' s business strategy. The Company is committed to operating and managing its business in ways that align with environmental protection. In full compliance with applicable environmental regulations, we are dedicated to pollution prevention and emissions reduction. Taiflex is actively working toward long-term goals, including achieving net-zero emissions by 2050, 100% renewable energy, and zero waste. Our environmental sustainability policy and corresponding commitments are outlined as follows: :



With "zero environmental incidents" as a fundamental goal, Taiflex adopted the ISO 14001 Environmental Management System and obtained certification in 2004 (as shown in the figure to the right) to ensure full compliance with environmental regulations. Through a comprehensive EHS (Environment, Health, and Safety) management framework, we proactively manage potential environmental risks. The Environmental Protection Department conducts quarterly assessments of regulatory compliance covering air and water pollution, waste management, and toxic substances. For each applicable regulation, Taiflex implements corresponding response measures to ensure compliance. If any risk of non-compliance is identified, corrective and preventive actions are promptly taken. Over the past five years, there have been no environmental penalties imposed on Taiflex, nor any incidents involving significant pollution, leakage, or violations of environmental laws and regulations.

None of the Company' s operational sites are located near ecological conservation areas or habitats of endangered species, and our business activities do not pose adverse impacts on the environment or local biodiversity. Furthermore, no species listed on the IUCN Red List have been identified in the surrounding areas. The Company remains committed to continuously upgrading and improving its pollution prevention and control equipment. Emissions are subject to ongoing monitoring, and in the event of any abnormal readings, on-site personnel follow established emergency response and reporting procedures to prevent environmental pollution and ensure compliance with applicable regulations.

✦ 4.1.1Building a Green Industry Chain

• All Products Comply with International Regulations

In response to the growing global emphasis on environmental sustainability, the use of substrate materials in electronic components increasingly focuses on pollution reduction. As a result, material suppliers have strengthened their research and development capabilities in eco-friendly materials, driving a transformation in the copper-clad laminate (CCL) industry. Leading electronics manufacturers are progressively adopting environmentally friendly substrates. With rising environmental awareness and tightening regulatory standards, the use of eco-friendly substrates is becoming a baseline requirement across the industry.

Through the implementation of the IECQ QC 080000 system, Taiflex updates international regulatory information as needed and incorporates it into the Company' s internal management procedures. We also engage suppliers for relevant feedback to ensure that our FPC materials consistently comply with applicable international regulations and customer requirements regarding hazardous substance management.

Regulation	Description	Product Conformity
EU Restriction of Hazardous Substances Directive (RoHS)	Limits the concentration of Lead (Pb), Cadmium (Cd), Hexavalent Chromium (Cr^{6+}), Polybrominated Biphenyls (PBBs), and Polybrominated Diphenyl Ethers (PBDEs) to below 1,000 ppm. RoHS 2.0 additionally restricts four phthalates: Bis(2-ethylhexyl) phthalate (DEHP), Benzyl butyl phthalate (BBP), Dibutyl phthalate (DBP), and Diisobutyl phthalate (DIBP), each below 1,000 ppm.	Full compliance
Halogen-Free Requirements for Electronic Products	Bromine and chlorine content must each be below 900 ppm, with total halogen content under 1,500 ppm.	Full compliance
Restrictions on Perfluorooctane Sulfonate (PFOS), Perfluorooctanoic acid (PFOA) and Related Substances	No raw materials containing PFOS, PFOA, or related substances are used in the manufacturing process.	Full compliance

Regulation	Description	Product Conformity
EU Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)	Compliance with the REACH, including all substances of very high concern (SVHCs) published under the regulation.	Full compliance
EU Waste Electrical and Electronic Equipment Directive (WEEE)	To address the growing volume of waste electrical and electronic equipment, and to reduce the burden on landfills and incinerators while preventing hazardous substances from entering the environment, this directive is not directly applicable to our products, as they are not end-user goods. FPC materials become part of electronic waste only after the end products are used by consumers, and the responsibility for recycling rests with the manufacturers of those end products.	Not applicable

• Reducing the Environmental Footprint Across the Value Chain

In addition to targeting high-frequency, high-speed, high-density performance and dimensional stability, Taiflex' s R&D efforts focus on developing advanced, energy-efficient, and lightweight substrate materials that align with increasingly stringent environmental standards. By continuously improving process technologies and collaborating closely with upstream raw material suppliers and downstream FPC customers, we aim to reduce resource and energy consumption per unit of production. These efforts help mitigate environmental impacts and contribute to the sustainable development of a greener planet.

We have incorporated environmental performance into our supplier evaluation criteria (see Section 2.5.2 "Evaluation and Audit" of this report for details). Suppliers are required and supported to manage hazardous substances, prevent pollution, conserve energy and water, and reduce waste. After years of continuous effort, a green supply chain has gradually taken shape. To further reduce the environmental footprint of our products, the R&D Center is currently testing and developing copper foil materials made from recycled copper, with the goal of replacing conventional copper foil in the future. In terms of packaging, the recycling volume of tube cores declined significantly in 2023 due to the discontinuation of recovery programs by suppliers. Taiflex actively recovers pallets, wooden crates, and packaging materials for reuse within the Company, as well as among suppliers and customers, in order to minimize waste generation. For data related to packaging material recycling in 2024, please refer to Appendix I: ESG Information - Environmental Data of this report.

✦ 4.1.2 Environmental Investments and Benefits

In 2024, Taiflex' s total environmental expenditure amounted to approximately NT$29,220 thousand. This included activities such as audits of environmental management systems, pollution prevention, environmental monitoring, environmental education programs, and sponsorship of environmental organizations. Collaborative partners included third-party testing, inspection, and certification agencies, resource recycling service providers, professional waste disposal companies, and environmental monitoring organizations.

The purpose of Taiflex' s environmental accounting system is to identify and quantify the Company' s environmental costs, while also assessing the economic benefits derived from the implementation of environmental protection initiatives. This includes evaluating cost reductions and revenues generated through such projects, with the goal of encouraging and promoting environmentally responsible initiatives that also offer financial returns. Economic benefits are calculated based on estimated cost savings from reductions in energy consumption, water usage, and waste generation, as well as revenues from the recycling and reuse of waste materials. In 2024, the total environmental benefit was approximately NT$84,474 thousand.

2024 Environmental Investments and Benefits

Item: Environmental expenditures

Description:
- Pollution control (regulatory fees and charges, such as air pollution control fees)
- Environmental improvement projects to reduce environmental impact (e.g., exhaust treatment system upgrades, permit application fees)
- Industrial waste disposal costs
- Expenditures for enhancing wastewater treatment efficiency
- Environmental management costs (e.g., ISO 14001 system maintenance and certification, ISO 14064-1 verification)

Total spending: NT$29,220 thousand

Item: Environmental benefits

Description:
- Savings from purification and reuse of concentrated exhaust solvents: NT$23,204 thousand
- Savings from reduction, recycling, and reuse of industrial waste: NT$1,427 thousand
- Savings from resource recycling (including recyclable materials, copper foil, and solvents): NT$59,843 thousand

Total savings: NT$84,474 thousand

Item: Improvements

1.Air pollutant emission intensity (VOCs, total suspended particulates (TSP))

Year	Production Volume (1,000 m²)	VOCs (kg/1,000 m²)	TSP (kg/1,000 m²)
2023	26,905	3.703	0.012
2024	29,520	3.538	0.012
YOY Change	10%	-4%	0%

2.Reduction in resource consumption (e.g., recycling and reuse of organic solvent waste)

Year	Factory	Solvent Recovered and Reused (kg)
2024	Kaohsiung factories	158,253

3.Circular benefits from organic waste gas solvent recovery (e.g., conversion of VOC emissions into liquid solvents)

Year	Factory	Recovered for Reuse (kg)	Recycled for Regeneration (kg)
2024	Kaohsiung factories	232,040	108,345

4.Resource recycling and reuse (e.g., wooden crates, mixed paper, plastics, etc.)

Year	Factory	Recycled for Reuse (kg)
2024	Kaohsiung factories	1,487,000

Item: Impact after improvement

Description:
- Reduced energy consumption and improved equipment efficiency, thereby lowering environmental impact.
- Decreased air pollutant emissions, thereby mitigating environmental impact.
- Ongoing upgrades and improvements that enhance the Company' s competitiveness and align with its sustainability goals.

❑ 4.2 Energy and Carbon Emission Management

Material Topics: Energy Management, Green Energy and Net-Zero Emissions

Main Reason	With growing global concern over climate change, governments around the world are promoting renewable energy and net-zero emissions through regulatory frameworks to mitigate climate risks. Energy transition and greenhouse gas (GHG) reduction have become critical priorities for businesses. Companies that fail to shift toward green energy and net-zero emissions will inevitably face risks to their market competitiveness and brand value, making it increasingly difficult to achieve long-term sustainability.
Effect and Impact	● Actual positive impact： Economic: Enhanced equipment efficiency reduces unnecessary electricity expenditures. Environmental: Decreased GHG emissions, including CO_2, from operational activities. Social: Alignment with government policies and support for the development of the green energy industry. ● Actual negative impact： Economic: Additional personnel and resources are required to upgrade production equipment and enable major adjustments to the energy structure. ● Potential positive impact： Economic: The government has announced carbon fee standards for regulated industries. By setting energy-saving targets, the Company is better positioned to reduce the future financial impact of carbon taxes or fees on its operational costs.
Policy	● In line with the principles of corporate development and environmental stewardship, Taiflex adopts a high-efficiency energy management model and is committed to energy conservation, carbon reduction, and the efficient use of energy. The Company continuously advances sustainable development and contributes to environmental protection through tangible actions. ● Taiflex Green Power Co., Ltd. was established to develop renewable energy generation and electricity sales, supporting the Company’s steady transition toward net-zero emissions by 2050. Functional teams under the Sustainable Development Committee are responsible for driving various energy-saving and carbon-reduction initiatives.
Strategy	● Utilize a smart Energy Management System (EMS) to monitor and optimize energy consumption, enhancing both production and operational efficiency. The Company has implemented and continues to maintain compliance with ISO 50001 to ensure a systematic and continuously improving approach to energy management. ● Continuously monitor government policy developments and adjust strategies in a timely manner to effectively respond to potential regulatory risks. Efforts are also focused on improving energy self-sufficiency to keep carbon-related costs under control and reduce the impact of external factors on operations.
Goal and Objective	● Short-term goals (2025-2026)： - Achieve a 1% energy savings compared to the baseline year (2024), in line with the Energy Administration, MOEA - 4% reduction in GHG Scope 1 emissions, using 2021 as the base year - Cumulative installed solar capacity of 2,800 kW by Taiflex Green Power (subsidiary) ● Medium-term goals (2027-2030)： - Continue achieving annual energy savings of 1% compared to the baseline year (2024), as required by the Energy Administration, MOEA - Participate in free energy diagnostics provided by government-commissioned professional agencies to identify additional energy-saving opportunities - Join Taipower’s demand response program - Introduce solar renewable energy - 12% reduction in GHG Scope 1 emissions, using 2021 as the base year - Cumulative installed solar capacity of 2,949 kW by Taiflex Green Power (subsidiary), and installed biomass energy capacity of 280 kW ● Long-term goals (2031-2040)： - Continue achieving annual energy savings of 1% compared to the baseline year (2024), as required by the Energy Administration, MOEA Participate in free energy diagnostics provided by government-commissioned professional agencies to identify additional energy-saving opportunities Join Taipower’s demand response program Introduce solar renewable energy >27% reduction in GHG Scope 1 emissions, using 2021 as the base year Cumulative installed solar capacity of 3,379 kW by Taiflex Green Power (subsidiary), and biomass energy capacity of 280 kW maintained
Management Assessment Mechanism	● The Sustainable Development Center evaluates the feasibility of energy-saving initiatives proposed by each department and sets management objectives within their respective business scopes. The Sustainable Development Committee regularly consolidates the implementation progress of functional teams and reports the outcomes to the Board of Directors at least twice per year. ● In 2023, Taiflex implemented an online carbon management system to enhance data management and information flow, while increasing transparency in data sources.
2024 Goals and Achievements	● **4% reduction in GHG Scope 1 emissions, using 2021 as the base year** → ✕ Not achieved. Due to a 7.09% increase in parent company only revenue in 2024 compared to 2021, production capacity expanded, resulting in a 3.87% increase in Scope 1 GHG emissions relative to 2021. As a result, the original reduction target was not met. ● **Renewable energy to account for 1% of total electricity consumption** → ✕ Not achieved. In 2024, the Company utilized the 10,000 kWh of green power procured through Taipower’s small-scale green power purchase program from the previous year. However, the share of renewable energy remained below 1% of total electricity consumption. ● **Taiflex Green Power (subsidiary) to cumulatively install 1,657 kW of renewable energy capacity** → ✓ Achieved. By 2024, Taiflex Green Power had reached a cumulative installed renewable energy capacity of 1,938 kW, exceeding the original target.

Energy and GHG Inventory

In recent years, climate change has become a major global priority. From governments to private enterprises, all sectors are working toward the shared goal of achieving net-zero emissions by 2050. Major consumer electronics brands have successively announced their commitment to achieving 100% carbon neutrality across their supply chains by 2030. Although Taiflex is not a direct supplier to these brands, we are proactively setting carbon reduction targets to contribute to global climate efforts and help cool the planet.

Since 2022, Taiflex has implemented the ISO 14064-1:2018 GHG inventory system and obtained verification statements from independent third-party assurance providers. In 2023, the Company further introduced a digital GHG emissions management platform to strengthen the efficiency of emissions monitoring and management. Aligned with the ISO 14064-1:2018 standard, the platform consolidates GHG data at the organizational level, moving away from offline Excel spreadsheets toward a digital system that enables decentralized, direct data entry by responsible units. Once the data is entered, the system automatically performs calculations, enabling rapid and clear identification of total company emissions, emission hotspots by facto, and emission categories. The implementation of this platform has significantly enhanced the accuracy, transparency, and traceability of Taiflex' s GHG emissions data.

Looking ahead, we plan to expand the current GHG emissions management system across all subsidiaries to implement a group-wide GHG inventory. This will enable more effective management of GHG emissions across Taiflex' s subsidiaries and ensure compliance with the Financial Supervisory Commission' s Sustainable Development Action Plans for TWSE- and TPEx-Listed Companies, which mandate GHG accounting for parent companies and their subsidiaries.

In addition, the use of more real-time data will support management in gaining clearer insights into corporate carbon emissions. Combined with departmental carbon reduction initiatives, this will further strengthen the Group' s carbon management efforts. Taiflex remains committed to achieving its 2050 net-zero target and becoming a globally recognized expert in environmentally responsible materials.

To effectively reduce energy consumption and GHG emissions, Taiflex has introduced new equipment to enhance production processes and actively optimized its internal energy structure. Currently, the Company' s primary energy sources are electricity and natural gas, accounting for 66.67% and 33.08% of total energy consumption, respectively. Although total energy consumption and combined Scope 1 and Scope 2 GHG emissions increased in 2024 due to revenue growth, energy intensity and GHG emissions intensity decreased by 8.00% and 9.72%, respectively, compared to 2023. These results demonstrate the Company' s continued progress and effectiveness in implementing energy-saving and carbon reduction initiatives.

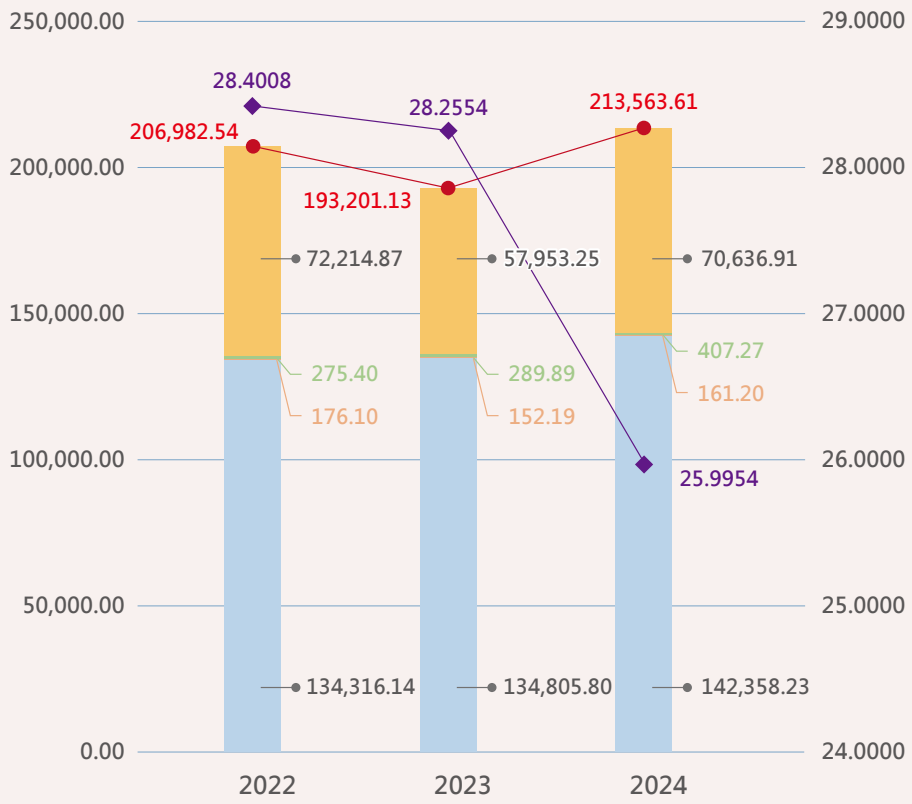
However, as the Company' s parent company only revenue in 2024 increased by 7.09% compared to the designated GHG emissions base year (2021), the corresponding growth in production capacity led to a 3.87% increase in Scope 1 emissions relative to 2021. As a result, the original reduction target was not achieved in 2024. For detailed statistics on energy consumption and GHG emissions over the past three years, please refer to Appendix I: ESG Information - Environmental Data in this report.

2022

2023

Note：The GHG inventory scope covers Taiflex 1, 2, 3, and 5, and excludes the Linkou office and all subsidiaries.

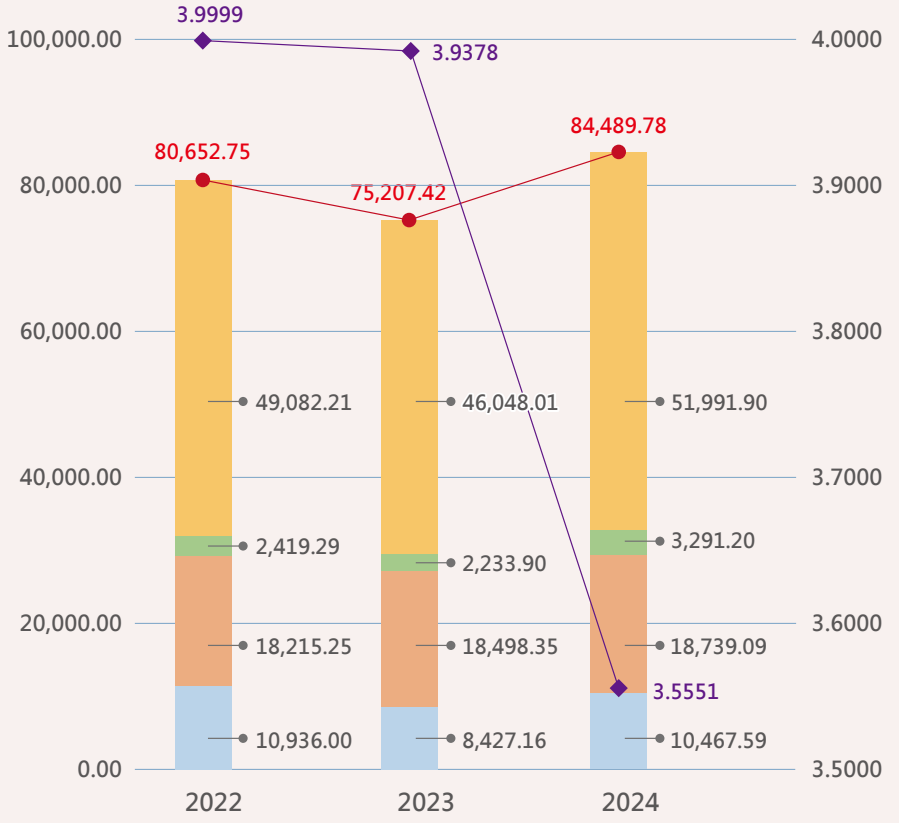
Energy Consumption of the Organization Over the Years



Energy intensity =
Total energy consumption (GJ) / Taiflex' s parent company only revenue for the year (in millions of NT$)

- Electricity(GJ)
- Gasoline(GJ)
- Total Energy Consumption(GJ)
- Diesel(GJ)
- Natural Gas(LNG)(GJ)
- Revenue Energy Intensity (GJ/in millions of NT$)

GHG Emissions of the Organization Over the Years

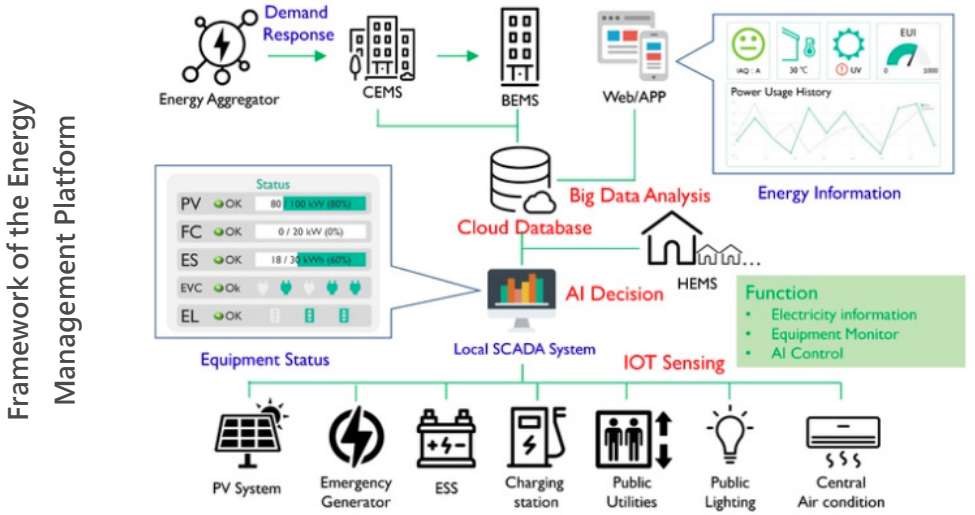


GHG emission intensity =
(Category 1 + Category 2) / Taiflex' s parent company only revenue for the year (in millions of NT$)

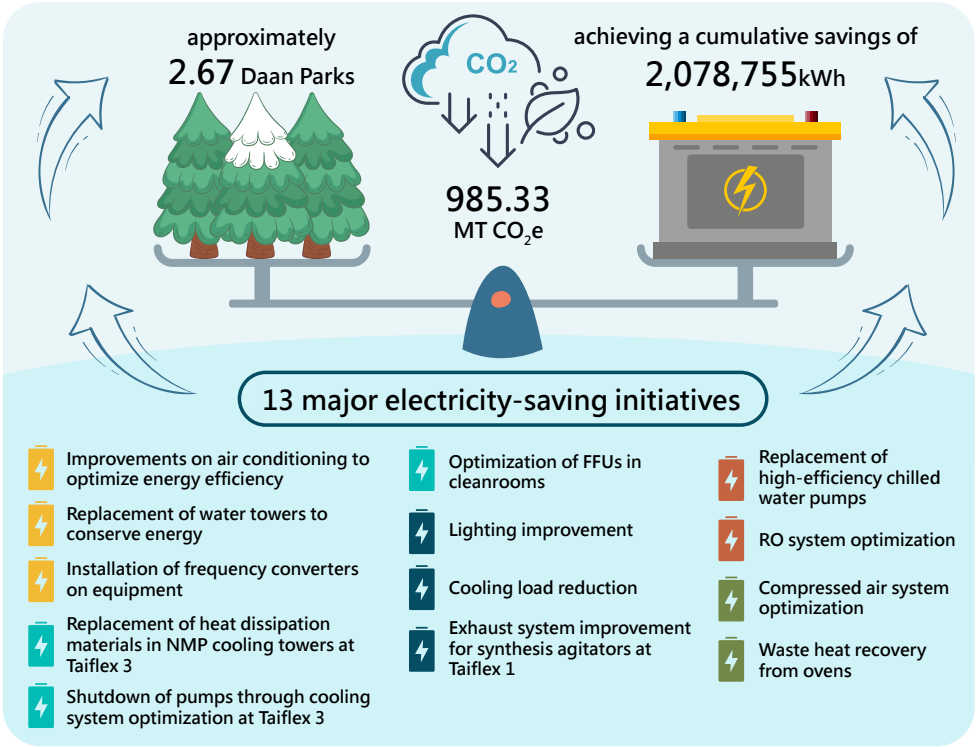
- Category 1(MT CO_2e)
- Category 2(MT CO_2e)
- Category 1~4
- Category 3(MT CO_2e)
- Category 4(MT CO_2e)
- GHG emission intensity (MT CO_2e/in millions of NT$)

Energy Conservation and Carbon Reduction Measures

In support of national energy conservation goals, Taiflex continues to implement a range of energy-saving initiatives. In 2021, the Company completed the establishment of the ISO 50001 Energy Management System platform at its Kaohsiung factories in Taiwan. By optimizing the e-energy management platform, Taiflex is able to conduct comprehensive energy inventories, establish performance indicators for equipment, and develop optimal power usage strategies. These efforts help ensure efficient energy utilization and contribute to achieving the Company' s carbon emissions management objectives.



In 2024, a total of 13 major electricity-saving initiatives were implemented under the ISO 50001 Energy Management System, achieving a cumulative savings of 2,078,755 kWh. This performance exceeded the annual 1% electricity-saving target mandated by the Energy Administration Act. The implemented measures also reduced approximately 985.33 metric tons of CO_2e emissions[Note1], which is equivalent to the annual carbon sequestration capacity of approximately 2.67 Daan Parks[Note2]. For detailed information on the energy-saving initiatives and their carbon reduction benefits, please refer to Appendix I: ESG Information - Environmental Data in this report.



Note1 : The GHG reduction benefit was calculated using the 2024 electricity emission factor of 0.474 kg CO_2e/kWh, as published by the Energy Administration, MOEA.

Note2 : According to the Council of Agriculture, each hectare of forest can sequester 15 metric tons of CO_2 per year. Based on this, Daan Park (25.8 hectares) can absorb approximately 384.6 metric tons of CO_2 annually.

• Expand the Use of Renewable Energy

On December 31, 2020, the Bureau of Energy, MOEA announced that major electricity users with a contracted capacity of 5,000 kW or more are required to, within five years, install renewable energy generation equipment equivalent to 10% of their average contracted capacity in the previous year, or fulfill this obligation by purchasing renewable energy and certificates or by installing energy storage systems, in accordance with the Renewable Energy Development Act. Although the contracted capacities of Taiflex' s factories do not meet the regulatory threshold for major electricity users, and the Company is not yet subject to the relevant requirements, we have proactively aligned with government policy. In March 2021, we established Taiflex Green Power Co., Ltd. In 2022, new photovoltaic (PV) systems were installed at Taiflex 2 (357.9 kW, generating approximately 450,752 kWh annually), and previously leased solar capacity at Taiflex 5 (217.2 kW, generating approximately 349,544 kWh annually) was repurchased. At the end of 2023, Taiflex participated in Taipower' s small-scale green power purchase program, securing a second-round bid for 10,000 kWh in green certificates to be used at Taiflex 2 in 2024. By 2024, the cumulative solar installation capacity under Taiflex Green Power had reached 1,938 kW, achieving the Company' s annual target.

To realize its net-zero emissions goal, Taiflex has established medium- and long-term targets aligned with its global sustainability vision: achieving 10% renewable energy usage, low-carbon operations, and a circular economy for waste by 2030, and reaching 100% renewable energy usage, net-zero emissions, and full circularity by 2050. While enhancing energy efficiency and production at the Kaohsiung factories, the Company has also prioritized green building design for its new facility in Thailand. In addition, a renewable electricity certificate procurement agreement has been signed, making carbon reduction a source of Taiflex' s competitive advantage. Following evaluation by the Sustainable Development Committee and approval by the Board of Directors, the Company' s subsidiary, Taiflex Green Power, has been tasked with expanding the installation of renewable energy systems and managing the operation of green power facilities. In 2023, an additional NT$12.827 million was invested in Taiflex 5, adding 271.2 kW of solar capacity. In 2024, further investment of NT$20.488 million was made in solar PV installations at Echo Way Top Enterprise Co., Ltd. and Pinytex International Ltd., enabling the Company to meet its solar installation target for the year. For more details on the Thailand factory, please refer to the feature article, "Thailand Factory Launch - Expanding Our Global Footprint."

❑ 4.3 Waste Reduction Actions

Material Topic: Air Pollutant Emissions

Main Reason	The production process involves the use of volatile organic solvents, which leads to VOC emissions. Even after treatment through pollution control equipment, these emissions can still result in secondary pollutants such as NOx and TSP. Without effective air pollution emission management, the Company may face reputational risks, potentially leading to allocation of additional resources in the future.
Effect and Impact	● Actual positive impact： Economic: The establishment of recycling systems and new production processes directly reduces the use of raw materials and fuels at the front end, which in turn lowers pollutant generation at the back end and reduces production costs. In addition, reduced carbon emissions and pollutants such as VOCs improve operational efficiency, enhance the Company’s green corporate image, and strengthen market competitiveness. Environmental: Pollutant control and recycling systems help reuse raw materials and reduce environmental impact. Human rights: By promoting environmental awareness and fulfilling its responsibility for environmental protection, the Company helps ensure a healthy living environment for communities near its facilities, safeguarding quality of life for current and future generations. ● Actual negative impact： Economic: Beyond the government-imposed air pollution control fees, further reductions in emissions require additional personnel and resources. Environmental: Air pollutant emissions can significantly deteriorate local air quality and negatively impact ecosystems. ● Potential positive impact： Economic: Carbon reduction is a global trend, and the government has already announced carbon fee standards for regulated industries. The Company’s ongoing investment in air pollution control measures also prepares it to meet future carbon reduction targets.
Policy	“Integrating environmental resources to achieve circular economy and net-zero goals” - The Company is committed to energy conservation, emissions reduction, circular economy, and environmental sustainability, with a clear focus on achieving carbon neutrality and net-zero GHG emissions.
Strategy	In accordance with the Company’s ISO 14001 “Environmental and Occupational Health and Safety Objectives and Program Management Procedures” and the ISO 14064-1 GHG Inventory Management System, Taiflex implements control procedures for air pollution prevention and GHG inventory management. ● Installation of zeolite rotor concentrator systems: Zeolite rotor systems are used in the production process to efficiently remove VOCs and other pollutants, ensuring emissions meet regulatory standards and reducing environmental pollution. ● Installation of solvent condensation and concentration systems: These systems recover solvents from exhaust gases, helping to reduce resource waste and pollutant emissions. The recovered solvents are prioritized for reuse in production processes, thereby minimizing the need for new raw materials. This approach not only lowers the environmental burden but also delivers economic benefits.
Goal and Objective	● Short-term goals (2025-2026)： - Natural gas consumption of air pollution control equipment reduced by 10% compared to 2016 - Volatile Organic Compound (VOC) emissions per unit reduced by 3% compared to the base year (2021) - VOC recovery through condensation and concentration increased by 1% compared to the base year (2021) ● Medium-term goals (2027-2030)： - Natural gas consumption of air pollution control equipment reduced by 20% compared to 2016 - VOC emissions per unit reduced by 10% compared to the base year (2021) - VOC recovery through condensation and concentration increased by 5% compared to the base year (2021) ● Long-term goals (2031-2040)： - Natural gas consumption of air pollution control equipment reduced by 30% compared to 2016 - VOC emissions per unit reduced by 30% compared to the base year (2021) - VOC recovery through condensation and concentration increased by 30% compared to the base year (2021)
Management Assessment Mechanism	● Internal management review procedures have been established in accordance with ISO 14001, with annual assessments of emission management effectiveness carried out using the PDCA cycle. ● Periodic air pollutant monitoring is conducted by testing institutions accredited by the Ministry of Environment to ensure compliance with emission standards for stationary pollution sources..
2024 Goals and Achievements	● **Natural gas consumption of air pollution control equipment reduced by 10% compared to 2016** → ✅ Achieved. In 2024, the total natural gas consumption of air pollution control equipment at Taiflex 2 and Taiflex 3 was reduced by 28.6% compared to 2016. ● **VOC emissions per unit reduced by 3% compared to the base year (2021)** → ✅ Achieved. In 2024, VOC emissions at Taiflex 1, 2, and 3 decreased by 6.87%, 22.62%, and 3.49% respectively compared to the base year. Overall, total VOC emissions across the three factories were reduced by 11.70%. ● **VOC recovery through condensation and concentration increased by 1% compared to the base year (2021)** → ✅ Achieved. Following the completion of the DMAC condensation tower in 2023, the recovery volume of condensed VOCs (NMP and DMAC) in 2024 increased by 12.7% compared to the base year.

Material Topic: Waste

Main Reason	Due to the use of chemical substances such as organic solvents in our production processes, hazardous industrial waste may be generated. Without proper waste management, the Company not only risks regulatory penalties but also faces obstacles in advancing GHG reduction efforts.
Effect and Impact	● Actual positive impact： Economic: Establishing recycling systems and adopting new processes directly reduces the use of raw materials at the front end, thereby decreasing waste generation at the back end and lowering production costs. Environmental: Reducing waste generation and implementing proper waste management help mitigate pollution risks and minimize ecological impacts. Human rights: Preventing outsourced vendors from illegally disposing of waste and damaging the public' s living environment. ● Actual negative impact： Economic: Besides waste disposal fees, additional personnel and resources are required to achieve further source reduction and minimize waste volume. Environmental: Improper waste management may lead to soil and water contamination, affecting local ecosystems. Some treatment methods, such as incineration, can also generate additional carbon emissions, potentially hindering the Company' s carbon reduction goals. ● Potential positive impact： Economic: Carbon reduction and the circular economy are long-term global trends. The Company' s investment in waste recycling supports this vision and enhances its corporate image.
Policy	"Through waste reduction and recycling, circular economy, and environmental sustainability, Taiflex is committed to achieving circular economy and net-zero goals. As a part of our end customers' value chain, we recognize our undeniable responsibility in sustainable environmental management."
Strategy	Taiflex has established a comprehensive waste management system in accordance with ISO 14001. Through strategies such as source reduction, classified waste management, and resource recovery, the Company effectively reduces waste generation and treatment risks. These efforts also contribute to the ongoing promotion of a circular economy and resource sustainability.
Goal and Objective	● Short-term goals (2025-2026)： - Waste conversion rate of 80% ● Medium-term goals (2027-2030)： - Waste conversion rate of 85~88% - Apply for UL 2799 Silver-level landfill conversion certification by 2030 ● Long-term goals (2031-2040)： - Waste conversion rate of 90%
Management Assessment Mechanism	Internal management review procedures have been established in accordance with ISO 14001 to evaluate the effectiveness of waste management annually through the PDCA cycle.
2024 Goals and Achievements	● Waste conversion rate of 60% → ✅ Achieved. In 2024, the NMP and MEK production lines recorded recovery and reuse volumes of 232.04 metric tons and 97.45 metric tons, respectively, with reuse rates of 68.17% for NMP and 61.61% for MEK.

Note：The waste conversion rate is defined as: (reclaiming + reduction + recycling + reuse + waste-to-energy recovery + anaerobic digestion + biofuel + composting) / Total weight of waste generated. The proportion of waste-to-energy recovery must be less than 10%.

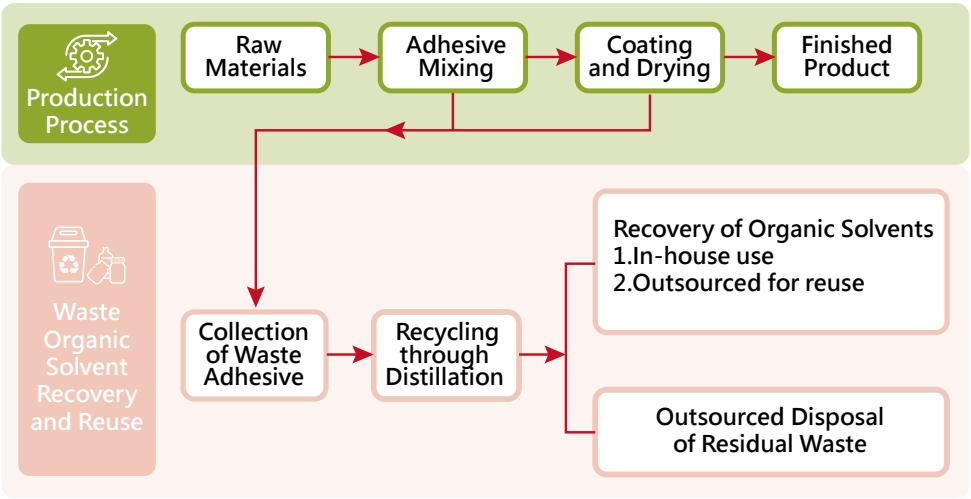
4.3.1 Source Reduction

Taiflex is committed to achieving zero waste. In addition to promoting resource conservation among employees in daily operations, we focus on process optimization to achieve source reduction. This approach not only reduces the consumption of energy, resources, and materials but also minimizes pollutant generation. For air emissions, wastewater, and solid waste that cannot yet be fully eliminated, we have installed pollution control equipment or outsourced treatment to qualified service providers. We remain dedicated to reducing the environmental impact of our operations and continuously seek optimal solutions as we move toward our ultimate goal of zero pollution.

Process Material Recovery

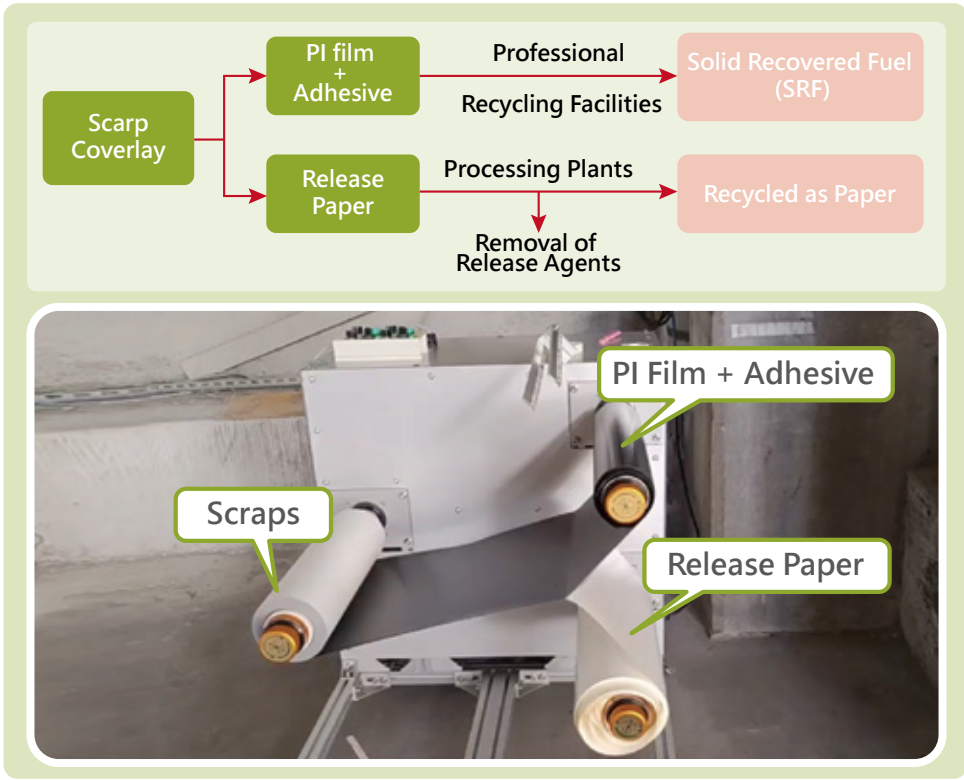
Taiflex has established a waste adhesive recycling system that purifies chemicals into industrial-grade raw materials through distillation, purification, and other related processes for reuse in production lines. This approach not only reduces stationary pollution sources and exhaust emissions, contributing to environmental sustainability, but also lowers raw material procurement volumes, enhancing the Company's competitiveness. Currently, both NMP and MEK recycling volumes have increased year over year, with over 60% being reused in production processes.

In 2024, the recovery and reuse rate of NMP reached 68.17%, a 3.86% increase compared to 2023. This improvement was primarily attributed to expanded production capacity and the stabilized output efficiency of the purification tower. The recovery and reuse rate of MEK remained steady at 61.61%, consistent with the 2023 level. For data related to material recovery in 2024, please refer to Appendix I: ESG Information - Environmental Data of this report.



Taiflex is committed to optimizing raw material usage through the most effective and feasible approaches, aiming to minimize waste generation and reduce production costs to achieve a win-win outcome for both environmental sustainability and economic efficiency. To reduce the heterogeneity of process scraps and enhance recycling efficiency, the Manufacturing Center independently developed film peeling machines in 2023. This equipment peels off the release paper from defective coverlay (PI film + adhesive + release paper), enabling the separated release paper to be collected and recycled as paper waste. The remaining material (PI film + adhesive) is further processed into solid recovered fuel (SRF), supporting the government's "waste-to-energy" initiative. In 2024, a total of 249 metric tons of scrap coverlay were processed, from which approximately 31.4 metric tons of release paper were recovered for recycling.

Scrap Film Peeling Machine

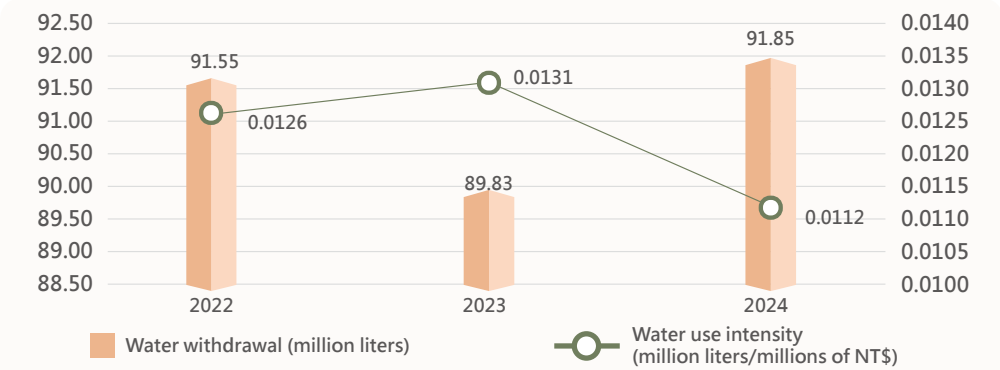


· Efficient Use of Water Resources

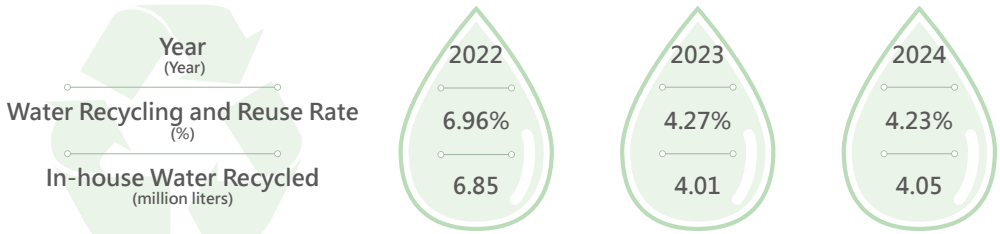
Taiflex operates in the Qianzhen Technology Industrial Park in Kaohsiung, with its water supply sourced from the Fongshan Reservoir. According to the World Resources Institute' s Aqueduct Water Risk Atlas, Taiwan is classified as having a low to medium level of water stress across all regions.

As Taiflex adopts a dry production process, the manufacturing line is not a major consumer of water. Tap water is primarily used for air conditioning cooling, followed by employee domestic use and fire safety purposes. Accordingly, the Company' s water management efforts focus on promoting the conservation of domestic and facility-use water. Measures include recycling reverse osmosis (RO) water and wastewater from drinking fountains for use in air conditioning cooling systems, installing dual-flush toilets, reusing rooftop rainwater and condensate from air conditioning systems for irrigation, and adjusting the conductivity of discharge water from air conditioning systems. For data related to water consumption in 2024, please refer to Appendix I: ESG Information - Environmental Data of this report.

Water Withdrawal and Water Use Intensity Over the Years



Water use intensity =Water withdrawal (million liters) / Taiflex' s parent company only revenue for the year (in millions of NT$).



Water recycling and reuse rate =
In-house water recycled / (Water withdrawal + In-house water recycled) × 100%

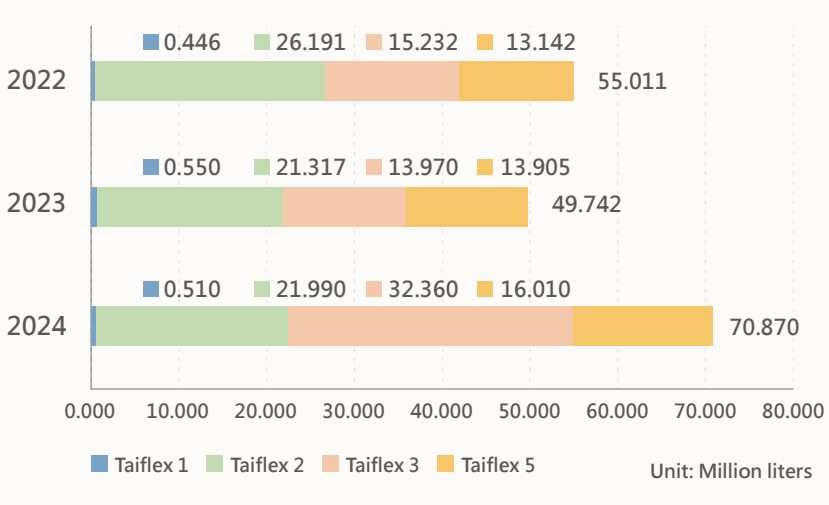
✦ 4.3.2 Pollution Control

· Effluent Compliance with Discharge Standards

Wastewater generated from Taiflex' s operations primarily consists of discharge from factory cooling towers and general domestic wastewater, such as water from washrooms and cleaning of kitchen waste from staff catering. All effluents are discharged into the industrial park' s sewer system and do not pose any impact on the surrounding ecosystem or biodiversity.

As Taiflex 1 operates an etching laboratory, a dedicated wastewater treatment system has been installed to manage the resulting etching wastewater. To ensure that all effluents meet the discharge standards required by the Export Processing Zone, pH meters and flow meters have been integrated into each facility' s wastewater outlets and connected to the central environmental monitoring system for continuous online monitoring. In addition to biannual testing at each discharge outlet, Taiflex also conducts monthly self-testing. All test results consistently comply with, and remain well below, regulatory discharge limits. Since the commencement of operations, the Company has never been subject to penalties by environmental authorities. For detailed effluent quality monitoring data, please refer to Appendix I: ESG Information - Environmental Data of this report.

Effluents Discharged by Factory over the Years

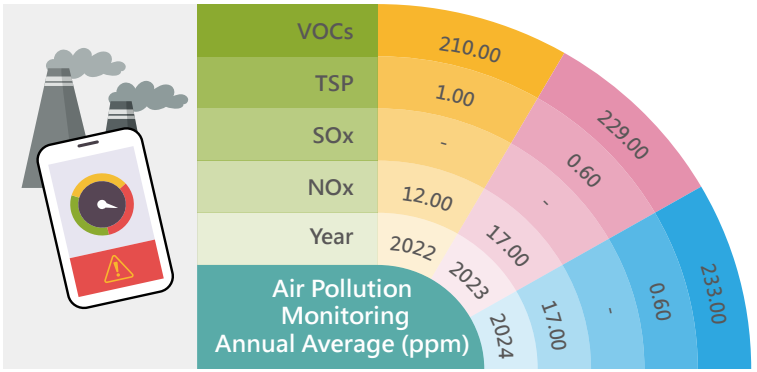


Air Pollution Monitoring and Control Measures

Taiflex' s air pollution control equipment adopts the best available control technologies in compliance with relevant regulations, including the "Air Pollution Control Act" and the "Standards for Air Pollutant Emission from Stationary Pollution Sources." All air pollution control systems across our factories operate continuously, 24 hours a day and 350 days a year, and are equipped with real-time monitoring systems to ensure stable operations. In addition, an independent third-party certification body is commissioned annually to conduct emission concentration tests for various air pollutants. All test results consistently meet and remain well below regulatory limits. For detailed air pollution monitoring data, please refer to Appendix I: ESG Information - Environmental Data of this report.

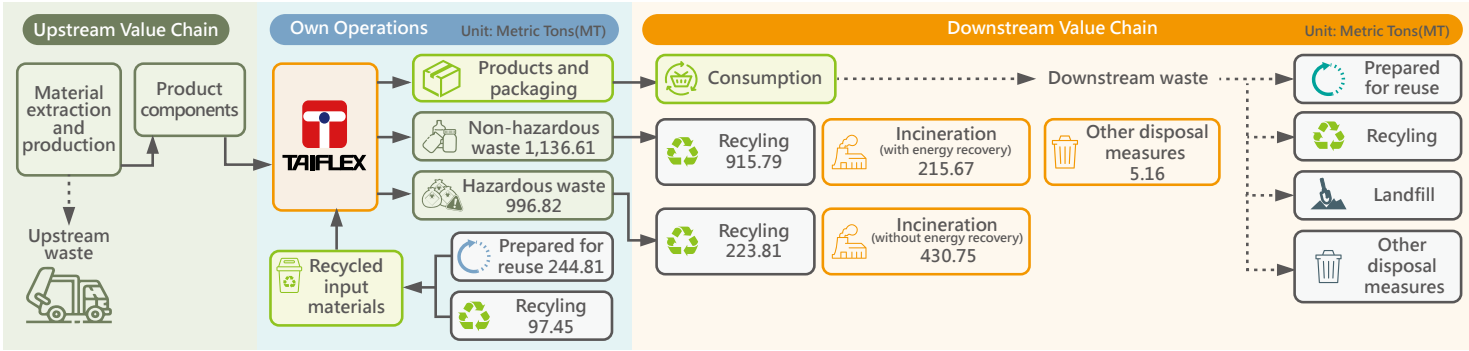
Taiflex primarily uses natural gas as the fuel for its exhaust gas treatment systems. Since the combustion of natural gas generates nitrogen oxides (NOx), the Company has implemented multiple strategies to effectively reduce NOx emissions. These include reducing the overall volume of exhaust gases (organic solvents) through raw material recovery and continuously optimizing pollution control equipment. In 2022, Taiflex 2 replaced the ceramic heat-retaining media in its regenerative thermal oxidizer (RTO) between October and November. Meanwhile, Taiflex 3 installed a zeolite rotor concentrator to concentrate low-concentration VOCs into high concentrations, enabling more efficient combustion as auxiliary fuel. As a result, RTO natural gas consumption in 2024 was reduced by 92.37 km³ compared to 2023, further lowering NOx emissions.

The Company currently operates certain refrigeration equipment that uses R22 refrigerant. To manage organizational GHG emissions, we continue to monitor and quantify R22 leakage. In 2024, total R22 emissions amounted to 0.0046 metric tons. Moving forward, the Company will prioritize the procurement of models that use environmentally friendly refrigerants and will gradually phase out older refrigeration equipment. For data related to Emissions of ozone-depleting substances in last 3 years, please refer to Appendix I: ESG Information - Environmental Data of this report.



Waste Treatment

Synthesis and coating are the core processes at Taiflex. During the FCCL production, hazardous solvent waste is generated. If not properly managed, this waste can pose environmental risks. To address this, the synthesis, front-end, and back-end departments collect spent organic solvents in 53-gallon steel drums. The collected solvents are then purified and reused through in-house recovery systems. This approach significantly reduces the volume of waste requiring outsourced treatment, lowers related disposal costs, and supports the Company' s circular economy efforts. For further details, please refer to section 4.3.1 "Source Reduction."



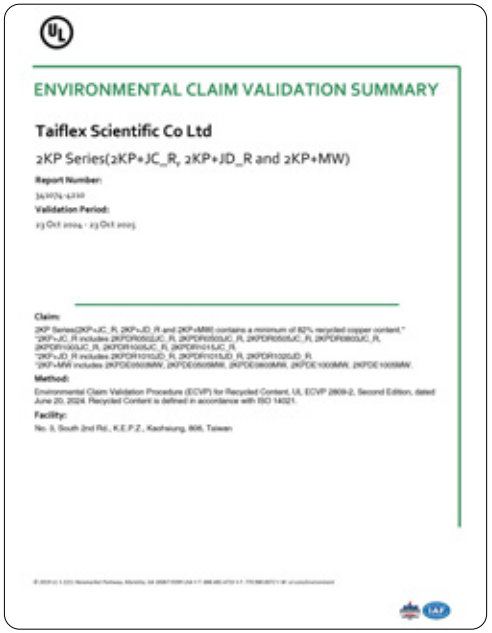
In addition to the in-house reuse of NMP and MEK, Taiflex implemented on-site adhesive washing operations in 2023 as part of its zero-waste policy. All other waste streams are treated off-site. In 2024, to further advance material circularity, waste wood was initially reused as solid recovered fuel (SRF) and was later repurposed as raw material for wood product manufacturing. For detailed waste management statistics, please refer to Appendix I: ESG Information - Environmental Data of this report.

Taiflex places great importance on both on-site and off-site waste management. All end-of-pipe activities, including storage, removal, and reduction, are centrally managed by the Environmental Sustainability Division. The Company actively promotes the concept of reuse across its operations and strives to recover all reusable waste to enhance resource efficiency and reduce environmental impact. Waste that cannot be reused is entrusted to third-party waste treatment providers certified by the Environmental Protection Administration. Taiflex also conducts unscheduled audits of these service providers to ensure that all waste is properly handled and to prevent environmental pollution caused by operational negligence or legal violations.

We are committed to promoting both the resource recovery and the safe, non-hazardous treatment of waste. All related processes are carried out in accordance with the Company' s internal ISO14001 Waste Disposal Management Standard (EI-PD-06), the "Waste Disposal Act" and the "Regulations Governing Determination of Reasonable Due Care Obligations of Enterprises Commissioning Waste Clearance." We continue to pursue the goals of localization, decentralization, and resource reclamation. In 2024, the overall conversion rate (resource recovery rate) reached 69.70%. When including an additional 10.11% from incineration with energy recovery, the total waste conversion rate was approximately 79.81%. The Company aims to achieve a conversion rate of 80% by 2026.

Feature
SPECIAL COLUMN

[Feature] Delivering on Sustainability: A Milestone UL2809 Certification for FPC Materials



ENVIRONMENTAL CLAIM VALIDATION SUMMARY

Taiflex Scientific Co Ltd

2KP Series(2KP+JC_R, 2KP+JD_R and 2KP+MW)

Report Number:

Validation Period:

Claim:

Method:

Facility:

As global ESG momentum continues to rise, leading international brands are setting their sights on carbon neutrality and embracing the circular economy as a key design principle. Against this backdrop, Taiflex has responded to a defining question of our era, "How far can we go for the planet?", with action, not just words. After two years of cross-departmental collaboration and dedicated effort, the Company has successfully earned UL 2809 Environmental Claim Validation certification, a globally recognized mark of sustainability.

UL 2809, issued by UL (Underwriters Laboratories), a leading U.S.-based safety and compliance organization, is part of its Environmental Claim Validation (ECV) program. This certification validates a product's recycled content, sustainable material composition, and alignment with specific environmental performance standards.

"Achieving UL 2809 certification is no easy task. It's a rigorous, resource-intensive challenge that demands long-term commitment." The concept of circularity must be embedded from the earliest stages of product design, and the use of recycled materials in manufacturing is a natural extension of green product design. As a specialist in FPC materials, Taiflex not only focuses on product innovation and technical refinement, but also continually explores how to deliver on its commitments to the environment and stakeholders. Moving beyond declarations, the Company took concrete steps by increasing recycled content in its products and proactively pursuing UL 2809 certification, a demonstration of its dedication to embedding ESG principles into every facet of its operations.

Establishing a robust raw material traceability system requires substantial investment and a complete transformation of existing workflows. It also calls for close alignment with supply chain partners to upgrade systems and practices together. Despite challenges such as global supply chain disruptions and rising raw material costs, Taiflex remains anchored by its core mission: helping customers go further. A dedicated cross-functional team, encompassing procurement, R&D, production, and quality assurance, was formed to lead the certification initiative. Throughout the journey, ongoing supplier engagement, extensive cross-departmental coordination, and continuous process improvement all underscored Taiflex's pursuit of excellence.

Stepping boldly into the future, Taiflex will continue to increase the use of recycled materials in its products and intensify R&D efforts to develop more sustainable, innovative solutions. This certification is not only a significant milestone in the Company's sustainability journey but also reflects Taiflex's commitment to walking alongside its customers in the transition toward a greener economy, co-creating a better and more sustainable future.

Feature
SPECIAL COLUMN

[Feature] Giving New Life to Scrap Wood - Creating a New Model of Public Good Through Circularity

Taiflex continues to champion the regeneration of scrap wood and the promotion of environmental values by transforming these ideals into meaningful action. In collaboration with Professor Tsung-Lin Wang of CTBC University of Technology, we repurposed discarded wooden pallets from our facilities into finely crafted items through precision carving and prototyping. The result: beautifully designed upcycled products such as coasters, pen holders, and phone stands. These creations not only demonstrate the potential of waste-to-resource innovation but also embody the fusion of creativity and sustainability, aligning with our long-term vision for sustainable development.

These products have been used internally as charitable gifts and featured in fundraising events, with all proceeds donated to the Southern Kaohsiung Branch of the Taiwan Fund for Children and Families to support underprivileged children and families. For every dollar raised, Taiflex pledged to match the amount with an equal donation, doubling the impact. These initiatives contribute not only to environmental protection but also to the Company’ s broader social responsibility efforts, enhancing understanding of recycling and circular resource use across the organization and community.

In another initiative, Taiflex partnered with Professor Shih-Hsiang Sung from National Sun Yat-sen University to design and produce creative play equipment made from reclaimed wooden pallets. These playsets feature a variety of interactive challenges that encourage children to engage both mentally and physically, while giving new life to discarded materials. The project not only advances sustainability and innovation but also reinforces Taiflex’ s role in promoting social well-being and underscores the Company’ s ongoing commitment to corporate social responsibility.

Through these efforts, Taiflex has achieved real impact in both environmental protection and social outreach, delivering a positive message to employees and the community alike about the power of resource recovery, creative repurposing, and collective contribution.