



About this report

TAIFLEX Scientific Co., Ltd. has issued non-financial reports for 11 consecutive years since 2014. This year, we delved into understanding the context of sustainable development, conducted materiality analysis to identify stakeholders' issues of concern, and incorporated external expert opinions to determine 15 material sustainable topics. The report reveals in detail Taiflex's management approach, action plan and performance on various sustainability issues using common phrases and descriptions. In addition to enhancing information transparency for stakeholders, the report demonstrates our determination to implement sustainable developments.

Preparation principles and guidelines

This report has been prepared in accordance with the GRI Standards issued by the Global Reporting Initiatives (GRI) and the "Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies" of the Taiwan Stock Exchange Corporation (TWSE), with an emphasis on the disclosure of Article 4, "Sustainability Disclosure Indicators - Electronic Parts and Components Industry" and Article 4-1, "Climate-related Information" of the latter. We also refer to the Sustainability Accounting Standards Board (SASB), the Task force on Climate-Related Financial Disclosures (TCFD), and the Sustainable Development Goals (SDGs) of the United Nations, and comply with the reporting principles and requirements set forth therein. Financial performance data are calculated and expressed in New Taiwan dollars while energy saving and carbon reduction figures are expressed in International System of Units to enhance the substantiveness and comparability of the report. Information restated in comparison to the 2022 sustainability report is described in the report.

Reporting scope, period and frequency of the report

Taiflex issues a sustainability report every year with the same frequency as financial reports. The report is available on the corporate website at https://www.taiflex.com.tw/english/Home.

This report discloses the Company's sustainable development performance in economic, governance, social and environmental aspects between January 1, 2023 and December 31, 2023. To enhance completeness and comparability of the report, certain content covers both before and after the reporting period. Except for financial data which are extracted from the consolidated financial reports, all other data are based on Taiflex's operation and business in Taiwan (including Taiflex 1, 2, 3 and 5, while excluding subsidiaries). However, in consideration of the Group's sustainable development and planning, some sustainability performance of subsidiaries is included in this report.



Previous report: June 2023 Current report: June 2024 Next report: Scheduled to be released in August 2025

Audit and external verification

The data and information in this report are compiled according to Taiflex's "Procedures for the Preparation and Assurance of Sustainability Reports." They are provided by various departments of the headquarters and factories, reviewed by respective supervisors, and then compiled and edited by the sustainability report preparation unit. After that, they are reviewed and revised by the heads of respective promotion centers within the Sustainability Development Committee, and submitted to President and Chairperson for review before being finalized for publication according to administrative procedures.

To enhance credibility, financial performance in the report is extracted from the annual financial reports audited by Ernst & Young. As for other content, we have commissioned AFNOR Asia Ltd., a subsidiary of AFNOR Group, to undertake assurance. The result indicated that the report is in line with the GRI Standards 2021 and AA1000AS v3, using Type 1 at a moderate level of assurance. The independent assurance statement is detailed in Appendix 2.



Feedback

Please contact us if you have any questions or suggestions regarding the Company or this report. For more information on our sustainability efforts, please access the ESG section of our corporate website.

Responsible units: Sustainable Development Center/TAIFLEX Scientific Co., Ltd.



Address: No. 1, Huangu 3rd Rd., Qianzhen Dist., Kaohsiung City 806011, Taiwan

Telephone number: 886-7-8139989 # 72350 Email address: knight@taiflex.com.tw Sustainable Development Section:

https://www.taiflex.com.tw/english/esg_overview.htm







Message from the Chairperson

In 2023, high inflation, high cost of funds and sluggish end demand put enterprises' operational flexibility and risk response capabilities to the test. We managed to improve our operational flexibility by increasing the proportion of local supplies across all factories, adopting flexible inventory strategies, improving product structures, enhancing production efficiency and exercising cost controls. At the same time, we increased our investments in new material research and development as well as sampling for promotion purpose, striving to expand our market share while awaiting economy recovery to take our operation to the next level. Meanwhile, we achieved a series of significant milestones in sustainable development, especially the establishment of our Thailand factory. As the concept of corporate sustainable management gains momentum, people have high expectations for companies' ESG commitments. Taiflex has been actively promoting various sustainable development measures. On the environmental front, we implemented 29 energy-saving projects within our factories and saved 1,504,834 kWh of electricity, exceeding the annual target of 1% stipulated in the Energy Administration Act. In terms of carbon reduction, with 2021 as the base year, our total direct and indirect greenhouse gas emissions in 2023 had already met the short-term target of 4% reduction in Scope 1, and are steadily progressing towards our long-term carbon reduction target. Apart from our own carbon reduction efforts, the parent company purchased 10,000 kWh of Taiwan Renewable Energy Certificate (T-REC), actively supporting the government's 2050 net zero target. Meanwhile, to fulfill our responsibility as a global citizen, we also installed rooftop solar power system of 430 kW in our Thailand subsidiary and signed a 10-year purchase agreement for 75 million kWh of green power certificates.

As for social responsibility, we advocate for employee diversity and equality, and actively engage with the community. We collaborate with schools to expand on diverse social welfare activities with a focus on youth development and care for children. Regarding corporate governance, in addition to complying with governance policies, we have further strengthened our intellectual property management system and obtained Level-A Taiwan Intellectual Property Management System certification in 2023.

In the future, we will persistently strengthen our core competitiveness with continued investments in the research and development of flexible electronic materials and semiconductor materials, moving towards delivering high value-added products. At the same time, we will leverage our leading position in flexible materials and collaborate with customers to capture the driving forces of market growth and consolidate the foundation for long-term growth. We aim to lead the industry in the pursuit of excellence, and strive to build a better and more sustainable future.







Message from the President

Despite numerous difficulties and challenges in recent years, we have never ceased our pursuit of corporate sustainability. We remain unwavering in our goals of "renewable energy, low carbon emissions, and circular economy by 2030" as well as the "global vision of 100% renewable energy, net zero emissions, and 100% circular economy by 2050."

For energy saving and carbon reduction, we implemented 29 projects in 2023, including "oven heat recovery," "condensation, purification and reuse of solvents" and other technological and equipment improvements. These efforts contributed to an annual saving of more than one million kWh in electricity, which was equivalent to a reduction of over 600 MT of CO_2e . Our newly-established Thailand factory is a green factory adopting green building designs to achieve RE100 target. In addition to installing rooftop solar power systems, it has planned to sign a 10-year purchase agreement for 75 million kWh of green power certificates, making carbon reduction a competitive advantage for Taiflex.

On top of implementing various ESG management and activities within, Taiflex continues to expand its green influence by teaming up with supply chain partners to carry out low-carbon management. Through carbon inventory and energy-saving, carbon reduction consultation, we deepen green supply chain practices. Suppliers are required to sign corporate social responsibility commitments and undergo green supply chain evaluations to jointly fulfill corporate social responsibilities and establish a stable sustainable supply chain.

Taiflex adheres to the people-oriented spirit and continuously engages in social welfare and talent cultivation. Since the establishment of the Kaohsiung City Youth Care Association in 2011, the Company has actively participated in and organized charitable activities, such as hosting study tours in Kaohsiung for underprivileged children and teenagers, and working with the Puren Youth Care Foundation to assist disadvantaged teenagers with their schooling, injecting positive energy into the society. Taiflex is committed to becoming an environmentally friendly materials expert and advancing the development of high-tech products. We collaborate with the College of Semiconductor & Advanced Technology Research of National Sun Yat-sen University to nurture technological talent for the industry.

Corporate social responsibility has always been a serious commitment to Taiflex, as evidenced by our active involvement and execution. We were recognized as an outstanding company in the "Proactive Evaluation on Occupational Health and Safety Index Disclosed in the Sustainability Reports" conducted by the Occupational Safety and Health Administration. Moving forward, we will continue to develop innovative solutions through interdisciplinary cooperation, and implement the concept of corporate sustainable development to instill sustainable values in our corporate culture.







Preface

Practitioner of Sustainable Management

Entrepreneur with Steady Progress

Developer of Innovative Materials

Producer of Green Products

Promoter of Social Prosperity





TAIFLEX Scientific Co., Ltd. was founded in 1997. Our vision is to become a world-class FPC material provider. Our market competitiveness lies in our core competencies of independent basic formula and precision coating process. We provide customers with the most reliable and advanced FPC materials as well as integration of innovative applications. Taiflex is now one of the top three suppliers of FPC materials in the world.

Company overview



Company
TAIFLEX Scientific Co., Ltd.



Paid-in capital

NT\$2,091.20 million



Date of incorporation August 16, 1997



Ticker number

TWSE: 8039 (Listed)



Industry

Electronics components industry



Number of employees

803 employees (as of December 31, 2023)



Chairperson

Ta-Man Sun



Products

FCCL, cover-layer, bonding sheet and composite materials



President

Zong-Han Jiang



Headquarters

No. 1, Huanqu 3rd Rd., Qianzhen Dist., Kaohsiung City 806011, Taiwan



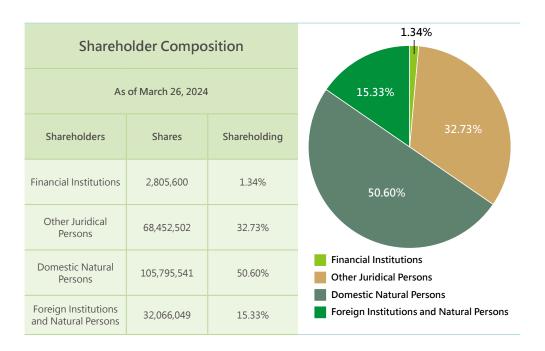
Spokesperson

Chi-Yuan Pan



Location of operation

Taiwan, China, Japan, the U.S. and Thailand



Diversification

Taiflex Group enhances corporate value and expands business scope through diversification. Apart from the businesses in electronics materials, optical films, and heat dissipation materials, the Group has successfully ventured into semiconductor and display packaging materials in recent years. Furthermore, in response to the global trends of carbon reduction and net-zero emission, we have established Taiflex Green Power Co., Ltd. (Taiflex Green Power) to coordinate the renewable energy development within the Group.





Award and Recognition

2019~2023

Year	Award and Recognition
2023	 Received Badge of Accredited Healthy Workplace from Health Promotion Administration, Ministry of Health and Welfare. Received trophy from Kaohsiung Export Processing Zone Administration for participating in blood donation activities. Ranked in the top 5% of the "Small and Mid-Caps" category for the 2022 Corporate Governance Evaluation. Recognized as an exemplary company in the 2023 joint regional complex accident emergency response drill organized at the Kaohsiung Qianzhen Technology Industrial Park. Obtained ISO27001 Information Security Management System certification for eight consecutive years. Obtained the Level-A Taiwan Intellectual Property Management System (TIPS) certification in 2023. Recognized as an outstanding company of the electronics industry in the "Proactive Evaluation on Occupational Health and Safety Index Disclosed in the Sustainability Reports" conducted by the Occupational Safety and Health Administration, Ministry of Labor. Received the certificate of 2023 Enterprises Committed to Corporate Health Responsibility from the Common Health Magazine. Approved to be an Authorized Economic Operator (AEO). Obtained both ISO45001 and CNS45001 certifications. Hosted the Kaohsiung study tours with the Puren Youth Care Foundation for eight consecutive years. Received "Distinction Award" from Environmental Protection Administration for green space sponsorship at air quality purification zone. Teamed up with E.SUN for ESG initiative actions, working together to promote sustainable transformation.
2022	 Received trophy from Kaohsiung Export Processing Zone Administration for participating in blood donation activities. Ranked in the top 5% of the "Small and Mid-Caps" category for the 8th Corporate Governance Evaluation. Established Taiflex Scientific (Thailand) Co., Ltd., and held a groundbreaking ceremony. The 25th Anniversary of Taiflex and Gung Ho with Kaohsiung. Obtained ISO27001 Information Security Management System certification for seven consecutive years. Received the certificate of 2022 Enterprises Committed to Corporate Health Responsibility from the Common Health Magazine. Received 2021 "Community Contribution Excellence Award" from Environmental Protection Bureau, Kaohsiung City Government for green space sponsorship at air quality purification zone in Kaohsiung City. Completed ISO14064:2018 GHG inventory and third-party verification (Year of inventory: 2021.) Received Badge of Accredited Healthy Workplace from Health Promotion Administration, Ministry of Health and Welfare.
2021	 Established a wholly-owned subsidiary, Taiflex Green Power, with a focus on renewable energy to continue our investment in power generation from green energy. Received Enterprise with Outstanding Employment Relations Award from Export Processing Zone Administration, Ministry of Economic Affairs, R.O.C. Received Devotion to Social Welfare Award from Export Processing Zone Administration, Ministry of Economic Affairs, R.O.C. Received Excellent Enterprise Award from Kaohsiung Chamber of Industry. Received a certificate of the Kaohsiung City Government for Mid-Autumn Festival gifts from Sheltered Workshop to Help Disabled Friends. Received a certificate of Social Affairs Bureau, Kaohsiung City Government for supporting Mid-Autumn Festival Gifts from disability organizations. Issued the first overseas unsecured convertible bonds of US\$70 million at the Singapore Exchange Limited on November 30. Obtained ISO50001 Energy Management System certification. Received recognition from the Kaohsiung United Charity Association for One Day Volunteer and donations to help families with financial hardship.
2020	 Received Enterprise with Outstanding Employment Relations Award from Export Processing Zone Administration, Ministry of Economic Affairs, R.O.C. Received Devotion to Social Welfare Award from Export Processing Zone Administration, Ministry of Economic Affairs, R.O.C. Spun off and established a wholly-owned subsidiary, Taichem Materials Co., Ltd. Received Happiness and Friendliness Prize in the 2020 Enterprise Elite Award event organized by the Kaohsiung City Government. Approved by the Customs Administration, Ministry of Finance to be a Security and Safety AEO. Obtained ISO27001 Information Security Management System certification again.
2019	 Received the Occupational Health Promotion Certificate from the Health Promotion Administration, Ministry of Health and Welfare. Obtained ISO45001:2018 Occupational Health and Safety Management Systems certification. Received Devotion to Social Welfare Award and Enterprise with Outstanding Employment Relations Award from Export Processing Zone Administration, Ministry of Economic Affairs, R.O.C. (MOEA). Obtained CNS45001:2018 Chinese National Standard Occupational Health and Safety Management Systems certification. Received Commitment Prize and Jury Prize in the Enterprise Elite Award event organized by the Kaohsiung City Government.





ESG performance and highlights in 2023



Environment Aspect

Implementation of ISO 14064:2018 —

In 2023, we introduced an information-based GHG management system and completed the 2022 GHG inventory pursuant to the ISO14064:2018 version using the information system, as well as passed the third-party verification by an impartial institution.

Reduction of 1,235.99 MT of CO₂e ——

In 2023, the Company implemented 11 types of energy conservation programs, saving a total of 13,377.32 GJ in energy consumption, i.e., a reduction of approximately 1,235.99 MT of CO_2e .

Investment of NT\$63,312 thousand in environmental protection —

In 2023, benefits from pollution control, reduction of industrial waste and recycling amounted to NT\$63,312 thousand.

Recycling of 96 MT -

In 2023, the Company developed film removers and increased the recycling volume of paper, cling wrap, and paper bag by a total of 96 MT.

Conversion rate of 60% ————

In 2023, we recycled 353 MT of NMP solvent and 148.2 MT of MEK solvent, achieving average recycling rates of 64.31% and 61.47%, respectively. These efforts allowed us to meet the target conversion rate of 60%.

Purchase of 10,000 kWh green power -

At the end of 2023, we participated in the auction for small-amount green power purchases organized by Taipower and won the bid for 10,000 kWh, which will be used by Taiflex 2 in 2024.



Social Aspect

Zero occupational accidents —

In 2023, there were no incidents of occupational disease nor major occupational accidents or fatalities.

FSI<0.1 ——

In 2023, we achieved the goal of FSI < 0.1, surpassing the averages of the electronics and semiconductor industries for the past three years.

Zero deficiencies in occupational safety

In 2023, the external occupational health and safety audit resulted in zero deficiencies, with 10 negative observations identified, which we had addressed and achieved a 100% improvement rate.

Community service of NT\$1,058.5 thousand

In 2023, there were 50 volunteers in the Kaohsiung City Youth Care Association with a total spending of NT\$1,058.5 thousand.

In 2023, there were 8,840 participants in employee training for a total of 17,572 training hours. Training expenses amounted to NT\$1,032.47 thousand with a satisfaction rate of 93%.



Corporate Governance Aspect

In 2023, Taiflex ranked in the top 5% of the "Small and Mid-Caps" category of the 2022 TWSE Corporate Governance Evaluation.

Cumulative total of 247 patents —

In 2023, we applied for four patents with an accumulated number of 247 applications by the end of the year, of which 84% are invention patents. There are 50 patents granted in total.

Revenue of NT\$8,151 million ———

In 2023, operating revenue totaled NT\$8,151 million with an earnings per share of NT\$2.02, surpassing the industry average of NT\$1.14.

A-rated for information security ———

In 2023, information security of Taiflex Group was rated A (excellent) by the SSC, an external information security specialist.

Establishment of Chief Information Security Officer

In 2023, Taiflex established the position of Chief Information Security Officer at the level above Vice President.

Customer satisfaction rate of 90.4

In 2023, we secured a customer satisfaction rate of 90.4.