



證券櫃檯買賣中心
Taipei Exchange

2022

SUSTAINABILITY REPORT



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About the Report

This is the 2022 Sustainability Report (hereinafter as the "Report") of Taipei Exchange (hereinafter as "TPEX"). TPEX, adhering to the principle of integrity and transparency, aims to present its communications with stakeholders throughout 2022, demonstrating its philosophy of sustainable development and involvement in various sustainability issues.



Scope of Disclosure

The disclosure period of this Report covers the year 2022 (January 1, 2022 to December 31, 2022). The Report covers the performance of TPEX in the economic, social, environmental, and governance aspects. Considering the information comparability, certain performance information includes data from the past three years, except for some that have not been collected systematically.

The disclosure scope of this Report covers TPEX Guting Office (Headquarters) in Taipei City, Banqiao Office in New Taipei City, Banqiao server room in New Taipei City, and remote backup server room in Taichung City. For data covering different scopes, clarifications are provided in the relevant texts or notes.



Reporting Basis

This Report is prepared and disclosed in accordance with:

1. the GRI Sustainability Reporting Standards (GRI Standards) 2021 issued by the Global Reporting Initiative (GRI).
2. the Sustainability Accounting Standards Board (SASB) industry standards issued for the Security & Commodity Exchanges sector in the Financials industry.
3. Sustainable Development Goals (SDGs) issued by the United Nations.



Report Issuance

Since 2019, TPEX has been publishing Sustainability Reports (formerly CSR Reports) on a yearly regular basis, with the previous Chinese reports issued in June 2022. The annual Sustainability Reports of TPEX are available on TPEX's official website and its dedicated ESG section:



Official website
www.tpex.org.tw/web/index.php?l=en-us



ESG Section
www.tpex.org.tw/web/esg/index.php?l=en-us



Information Disclosure

The financial performance data disclosed herein are based on CPA audited financial statements, and all financial figures are represented in New Taiwan Dollar (NT\$). Other non-financial data in the Report were compiled and calculated by TPEX and are presented in common values that are rounded. The data or information disclosed herein are provided by the respective responsible departments of TPEX, and compiled by the Sustainability Reporting Task Force. The Report has been published after approval.



Report Assurance

This Report is prepared in accordance with the common standards and thematic standards issued by the Global Reporting Initiative (GRI). We have engaged Deloitte Taiwan to conduct a limited assurance on specific performance indicators in accordance with the Assurance Standards 3000 (TWSAE3000), Assurance Engagement of Examinations and Audits of Non-historical Financial Information, issued by the Accounting Research and Development Foundation, ROC.

In accordance with ISO 14064-1: 2018, TPEX completed the construction of greenhouse gas inventory and management procedures setup, and commissioned Deloitte Taiwan to conduct greenhouse gas assurance. The Limited Assurance Report and The Greenhouse Gas Assurance Report are attached to the Appendix of this Report.



Contact Information

If you have any questions about this report or any suggestions for TPEX, please contact us through the following methods:
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Since its establishment in 1994, TPEX has successively built multi-tiered market segments to provide enterprises at all stages of development with a high-quality environment for financing, nurturing and growing. As of the end of 2022, it has helped 1,849 companies enter the Emerging Stock Market and 1,362 companies enter the TPEX Main Board Market. It has successfully assisted more than 2,400 public companies to enter the capital market. By the end of December 2022, there were 808 Main Board companies and 299 Emerging Stock Market companies, respectively, and such companies were growing steadily. TPEX was recognized by the World Bank in the latter's January 2015 Policy Research Working Paper as one of the most successful SME exchanges in the world.

In 2022, the world continued to be affected by the COVID-19 pandemic, supply chain restructuring and the Russia-Ukraine War. Major developed countries were under a severe inflation crisis. Central banks around the world, led by the U.S. Fed, have adopted a policy of sharp interest rate hikes, resulting in significant fluctuations in the global capital markets. With well-controlled pandemic in Taiwan and solid infrastructure, the dual-core businesses of stocks and bonds of TPEX continued to demonstrate the vitality. In terms of the stock market, the average daily trading value of TPEX Main Board stocks was the second highest ever, and the proportion of foreign-invested transactions exceeded the historical record. There were 22 and 67 (including 12 applications for registration on Pioneer Stock Board) new applications for listing on TPEX Main Board and registration on the Emerging Stock Market in 2022, respectively, and the work targets set at the beginning of the year were achieved. In the midst of the volatility of global stock markets and exchange markets, the performance of the TPEX market was solid, indicating that TPEX has not stopped its pace in assisting enterprises to access the capital market to raise funds and improve the market mechanism. It continued to provide innovative enterprises with convenient financing and trading services to strengthen multi-tiered market development.

In terms of the bond market, TPEX focused on the domestic sustainable finance. After the consolidation of Green Bond, Sustainability Bond and Social Bond into Sustainable Bond Market in 2021, Sustainability-Linked Bond (SLB) was launched in 2022 to help enterprises obtain long-term stable working capital through the issuance of SLB and convey the determination of sustainable development to the market at the same time. SLB

does not restrict the use of funds, thus, the use of funds is more flexible. Also, the bonds' principal and interest terms are linked to the sustainability performance targets enterprises, which can more effectively assist enterprises to implement ESG commitments on the premise of achieving their overall sustainable development strategies. In 2022, the issuance volume and issuance balance of the Sustainable Bond Market exceeded NT\$110 billion and NT\$360 billion, respectively, creating a new milestone in the domestic bond market. The issuers are rather diversified, covering domestic banks, branches of foreign banks in Taiwan, state-owned enterprises, domestic private production enterprises and foreign financial institutions, etc., which shows that the Sustainable Bond Market can effectively attract various issuers to participate in the domestic bond market.

TPEX has a multi-faceted impact on sustainable development. In addition to the commitment to assisting Main Board companies to invest in sustainable development, TPEX also actively created sustainable commodities and mechanisms, guided enterprises and investors to attach importance to sustainable topics through market mechanisms, and guided funds to pay attention to ESG development and transformation, so as to improve the operation of the sustainable finance ecosystem. In terms of promoting and developing ESG-related products, in 2022, TPEX launched the "TIP Customized TPEX ESG High Dividend Total Return Index" and the "TIP Customized TPEX ESG 30 Index" with higher yield. The former is the first domestic dividend-bearing tracking index of ETN, while the latter selects Main Board companies with good performance in investment and sustainable development, with a view to becoming a high-quality option for investors to exert sustainable influence and lead enterprises to invest in sustainable development.

In terms of deepening corporate governance, in 2022, TPEX continued to align the Corporate Governance Roadmap and relevant policies, framed by Financial Supervisory Commission, and continued to encourage companies to make sustainability reporting. In view of the increasingly severe impact of climate change on the global environment, reference has been made to international standards and regulations such as the Task Force on Climate-related Financial Disclosures (TCFD) and Sustainability Accounting Standards Board (SASB), which require Main Board companies to strengthen the disclosure of risks and opportunities caused by climate change and the relevant corresponding measures taken in the sustainability reports. Meanwhile, in order to help Main Board companies to establish carbon management capabilities as early as possible, on May 12, 2022, a

“Sustainability Roadmap Section” was set up on TPEX business promotion website, and a sustainable development roadmap consultation group was set up to provide Main Board companies with consultation channels on relevant issues to strengthen the disclosure of sustainable information. In the future, TPEX will continue to promote Main Board companies to refer to the disclosure quality of the TCFD sustainability reports, and link climate risks to corporate governance, so as to improve information transparency, guide companies to attach importance to climate change issues, and enhance their ability to respond to climate change. At the same time, it will continue to provide relevant resources to help Main Board companies to reduce carbon emissions and achieve the national carbon reduction development goal.

In recent years, TPEX has integrated the sustainable development concept of co-existence with the environment and social prosperity into its daily business operations, integrated environmental protection into operational policies at all levels, adopted electronic administrative processes, promoted energy conservation, and reduced paper consumption. The first transformed supply of green electricity was completed in January 2022. In order to meet the 2050 Taiwan net zero transformation target and deepen its own ESG sustainable development, the sustainability committee was established in May 2022, and the greenhouse gas inventory project was launched in August; In addition, in order to promote environmental protection and ecological conservation, over 6,700 trees were planted in the coastal and mountainous areas of Keelung, Yilan, Taichung, Hualien, and Kaohsiung in 2022 to continuously promote the sustainable development of our ESG through diversified means.

In addition, while pursuing market growth and business performance, TPEX upholds its corporate citizenship responsibility and extends its care and love to the society to a broader

level, including promoting financial knowledge on campus, actively cultivating securities talents, and sponsoring students from disadvantaged families. It also implements the concept of caring for the society through activities such as helping the disadvantaged groups, sponsoring sports development and cultural root, supporting environmentally friendly agriculture and donating to local communities. Internally, TPEX is also committed to providing a high-quality working environment, creating a harmonious and happy healthy workplace, continuously improving welfare measures and talent training system, taking sustainable management as a root in daily business execution, and promoting employees' centripetal force by raising their awareness of sustainable development, so as to create a happy and enterprising environmental culture.

Looking forward, with the overall relaxation of the epidemic prevention policies of various countries and interest rate hikes may slow down, TPEX will continue to create a friendly financing environment, attract enterprises into multi-tiered capital market, diversify the development of commodities, promote financial supervision technology, boost market trading momentum and information security, continue to strengthen investor education, and promote international exchange and cooperation. Besides, in addition to continuing to develop the capital market in Taiwan, it is expected that in the coming year, TPEX will continue to follow ESG principles, sustainable development goals, corporate governance and other relevant policies to assist enterprises to achieve sustainable transformation and the goal of net zero emissions, and jointly promote the sustainable development of the capital market.

Chairman
Philip Chen



Managing Director & CEO
Edith Lee




證券櫃檯買賣中心
Taipei Exchange

1. Basic information

Name	Taipei Exchange
Location of headquarters	15F., No. 100, Sec. 2, Roosevelt Rd., Zhongzheng Dist., Taipei City
Year established	1994
Primary scopes of service	Helping emerging small-to-medium-sized and micro-enterprises primarily in the high-tech industry, and the innovation and creativity industry to become listed and raise funds. Operating the market trading business of diverse instruments, such as stocks, bonds, ETFs, ETNs, call (put) warrants, and over-the-counter derivatives, including centralized trading and negotiation features.
Primary market	Taiwan
Business locations	Guting Office, Taipei City Banqiao Office, New Taipei City Banqiao Server Room, New Taipei City Taichung Remote Backup Server Room, Taichung City
Number of employees	287 persons
Total assets	NT\$18.576 billion



證券櫃檯買賣中心
Taipei Exchange

2. History

Taiwan's over-the-counter (OTC) market took shape with the Taiwan Securities Association since February 1988. The Ministry of Finance subsequently decided in 1993 to establish TPEX, a non-profit institution, to formalize and strengthen Taiwan's capital market and specifically the OTC market. TPEX was established in accordance with the Securities and Exchange Act on July 27, 1994, and became officially operative on November 1. The initial funds were joint donations from the Taiwan Stock Exchange (hereinafter as TWSE), the Taiwan Securities Association, and the Taiwan Depository & Clearing Corporation (hereinafter as TDCC). The competent authority is the Financial Supervisory Commission (hereinafter as FSC).

1994~1999

Starting

- **1994/11** TPEX formally established
- **1994/12** Electronic trading system (for the main board) formally launched
- **1995/11** TPEX Capitalization Weighted Stock Index formally announced
- **1996/5** Regulations Governing Implementation of the Market Surveillance System for Securities Traded on the TPEX promulgated
- **1996/7** TPEX trading opened to foreign investment
- **1998/12** Launched Administration of the Joint Responsibility System Clearing and Settlement Fund
- **1999/1** Margin trading launched
- **1999/8** TPEX block trading system rules published and implemented

2000~2004

Growing

- **2000/7** Electronic Bond Trading System (EBTS) launched for outright trading
- **2002/1** Established the Emerging Stock Market
- **2002/5** Joined IOSCO as an affiliate member
- **2002/8** Officially launched the "Market Observation Post System (MOPS)"
- **2003/3** Launched call (put) warrants
- **2003/9** Emerging Stock Computerized Price Negotiation and Click System introduced

2005~2009

Maturing

- **2005/3** Bond Repo Trading Platform launched (integrated into the Electronic Bond Trading System)
- **2005/10** Obtained ISO 9001 quality management system certification
- **2006/11** First foreign currency-denominated bond launched
- **2006/11** Obtained ISO 27001 information security management system certification
- **2007/3** Derivatives trading system introduced
- **2009/5** First registration of shares as emerging stock by a foreign enterprise
- **2009/11** Launched system for trading of foreign government bonds

2010~2014

Expanding

- **2010/4** Became WFE Affiliate Member
- **2010/4** Launched "TPEX 50 Index" and "Taiwan Treasury Benchmark Index"
- **2010/6** First primary listing of shares by a foreign enterprise on the TPEX
- **2010/12** Information Platform for the Chain of Industrial Value Creation formally launched
- **2011/1** TPEX 50 ETF and Taiwan Government Bond ETF listed on the TPEX
- **2011/2** First TPEX listing of TDRs of a foreign enterprise
- **2011/10** Gain a full membership in WFE
- **2012/10** Obtained ISO 20000 information service system certification
- **2013/3** First Renminbi-denominated bond launched, named Formosa Bond
- **2013/4** Gain a full membership in AOSEF
- **2013/9** Joined CCP12 as a member
- **2013/9** Obtained BS10012 personal data management system certification
- **2014/1** Launched the "Go Incubation Board for Start-up and Acceleration Firms (GISA)"
- **2014/5** Launched TPEX Labor Employment 88 Index
- **2014/8** Launched TPEX Compensation Index
- **2014/10** Launched listed open-ended funds platform
- **2014/11** Launched IRS early unwind system
- **2014/12** Launched IRS trading system platform

2015~2019

Deepening

- **2015/1** Officially launched the gold trading platform
- **2015/4** Launched "Equity Crowdfunding Conducted by Securities Firms" business
- **2016/9** Launched gold warrants
- **2017/5** First batch of green bonds listed
- **2018/3** Awarded "Green Bond Pioneer Exchange introducing new listing guidelines in 2017"
- **2019/3** Launched "TPEX 200 Index"
- **2019/4** First 3 ETNs listed
- **2019/6** Permitted the issuance and listing of Sukuk (Islamic fixed-income securities)
- **2019/9** Recognized by US SEC as designated offshore securities market

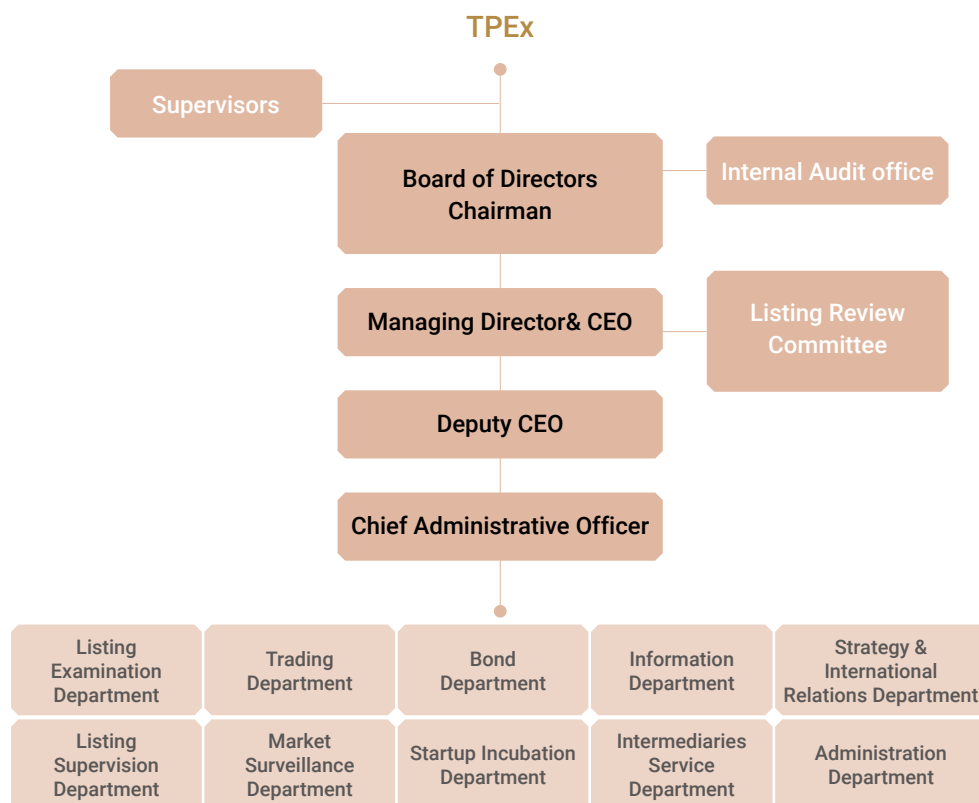
2020~2024

Leaping

- **2020/1** Announced the regulations governing Security Token Offerings (STO)
- **2020/3** Adopting continuous trading
- **2020/6** TIP TPEX ESG Index introduced
- **2020/10** Established the Sustainability Bond Market
- **2020/10** Adopting Intraday odd lot trading
- **2020/12** Obtained ISO 22301 business continuity management system certification
- **2021/5** Established the Social Bond Market
- **2021/5** Sustainable Bond Market launched
- **2021/6** Adopting Market Maker and Liquidity Provider Programs
- **2021/7** Pioneer Stock Board (PSB) established
- **2022/7** Sustainability-Linked Bonds market launched
- **2022/9** Launched TIP TPEX ESG 30 Index

3. Organizational Structure

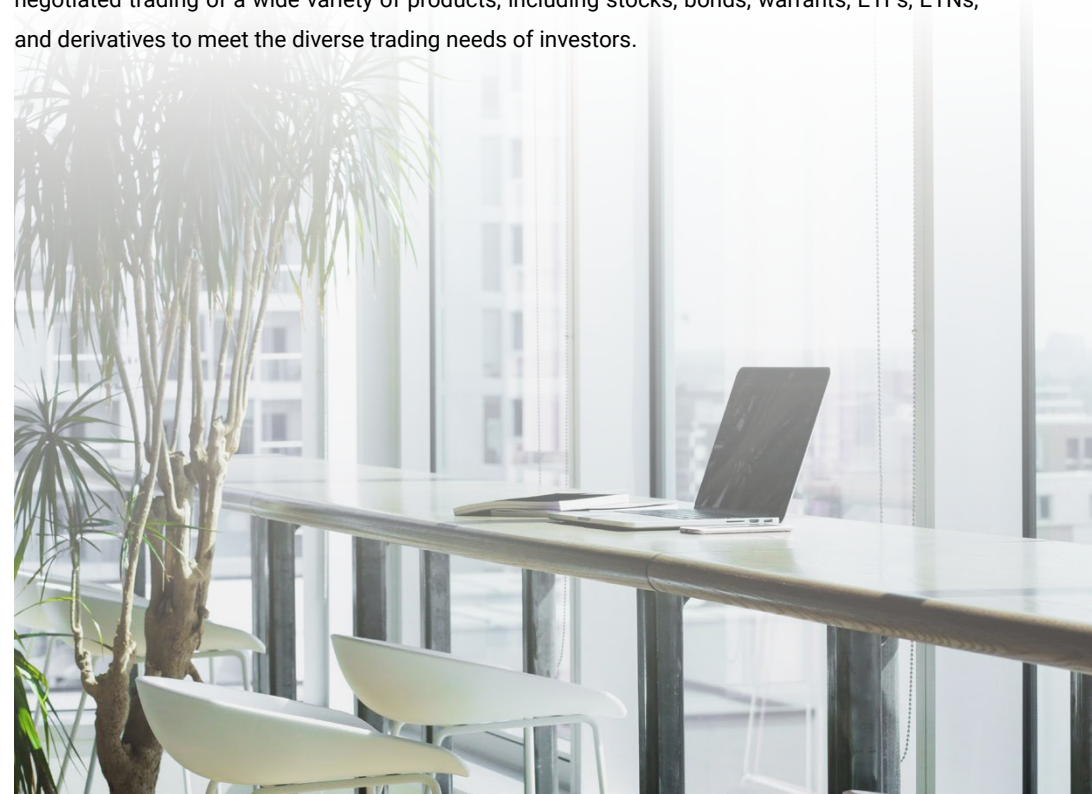
The Board of Directors is the highest governance body. The Chairman convenes and serves as the chairman of the meeting. The Board of Directors is composed of 15 members and has 5 supervisors to supervise its operation. TPEX has one Managing Director& CEO who manages organization business in accordance with the business policies decided by the Board of Directors, while one or two Deputy CEOs along with one Chief Administrative Officer assist the Managing Director& CEO in handling business. TPEX has 10 business departments including the departments for Startup Incubation, Listing Examination, Listing Supervision, Trading, Market Surveillance, Bond, Information, Intermediaries Service, Administration, Strategy & International Relations as well as an Internal Audit Office that reports directly to the Board of Directors. Please refer to the official website of TPEX for the main business of each department. (<https://www.tpex.org.tw/web/about/introduction/organization.php?l=en-us>)



4. Core Businesses

As one of the major pillars in Taiwan's securities market, TPEX aims to promote economic development. In support of government economic policies, TPEX endeavors to foster Taiwan's local characteristic enterprises, develop new products, boost market turnover, and actively engage in exchanges and cooperative programs with other capital markets to expand the business. Today, after years of steady growth and development, TPEX is now a highly unique provider of financial products and trading services in the international market.

Under the strategic goal of building a multi-functional and multi-tiered full-fledged exchange, TPEX has strived to become a service center for corporate financing and financial products trading, and has remained dedicated to fostering emerging and high-tech industries, creative industries, small and medium enterprises, and micro-enterprises by providing a viable channel for public listing and capital raising. TPEX has also endeavored to grow into a multi-functional market that offers platforms for both centralized trading and over-the-counter negotiated trading of a wide variety of products, including stocks, bonds, warrants, ETFs, ETNs, and derivatives to meet the diverse trading needs of investors.



TPEX Trading Services and Financial Products

TPEX Market	Centralized Computer Bidding System	TPEX Listed Securities	<ul style="list-style-type: none"> • TPEX Main Board Stocks • Taiwan Depository Receipts (TDR) • Convertible/exchangeable corporate bonds • Call (put) warrants • Exchange-Traded Funds(ETFs) • Exchange-Traded Notes (ETNs)
		Emerging Stock Market - Pioneer Stock Board (PSB)	
	System Negotiated Transaction	Emerging Stock Market - Emerging Stock Board (ESB)	
		Listed Open-Ended Funds	
		Gold	
	System Negotiated Transaction and OTC Negotiation	Bonds	<ul style="list-style-type: none"> • Government bonds • Corporate bonds • International bonds • Financial debentures • Foreign bonds • Beneficiary certificates
		Derivatives	<ul style="list-style-type: none"> • Interest rate derivatives • Bond derivatives • Credit derivatives • Equity derivatives • Structured notes • Foreign exchange derivatives • Asset swaps
	Equity Crowdfunding	Go Incubation Board for Startup and Acceleration Firms (GISA) stocks	
	Information Platform	Industrial Value Chain Information Platform	

TPEX Commodity Trading Methods

Trading methods of Main Board securities and emerging stocks:

Item	Main Board securities	Emerging stocks	
		PSB Stocks	ESB Stocks
Trading methods	1. Order driven 2. Computerized automatic trading 3. Price priority + time priority 4. The opening and closing adopt call auction; the intraday transactions are conducted on continuous trading.	1. Computerized automatic trading 2. The advisory recommending securities firms shall act as liquidity providers.	1. Quotation driven 2. System negotiated transaction 3. Quotation from the recommending securities determines the transaction price 4. The system automatically assists in concluding the transactions of the orders meeting the price quoted; the recommending securities firms click and select the order not meeting the price quoted for concluding the transactions.
Trading time	09:00 ~ 13:30 (the closing may be postponed until 13:33)		09:00 ~ 15:00

Trading methods of bonds and derivatives

Item	System negotiation	OTC negotiation	
Participants	Dealers only	All	
Trading bonds	Book-entry bonds, regular corporate bonds and financial debentures	All	
Trading time	9:00 ~ 13:30	9:00 ~ 15:00	
Trading methods	Online quotation transactions	Telephone transactions	
Trading unit	NT\$50 million	Government bonds	NT\$0.1 million
		Financial debentures and corporate bonds	NT\$0.01 million
		International bonds	Depending on the currency

Trading Value

unit:NT\$ 1 billion

Average daily trading value of stock	Main Board	60.482
	Emerging Stock Market	2.428
	Emerging Stock Board	2.426
	Pioneer Stock Board	0.002
Average daily trading value of equity warrants		0.543
Average daily trading value of ETFs/ETNs and open-ended fund	ETFs	0.927
	ETNs	0.008
	Open-ended fund	0.00003
Average daily trading value of bond market	Government bonds	7.608
	Financial debentures	0.718
	Corporate bonds (including regular corporate bonds and convertible corporate bonds)	3.688
	Beneficiary certificates	0.017
	International bonds	0.987
Accumulated trading value of new financial commodities of securities	Fixed income trading of convertible bond asset swap	48.749
	Option trading of convertible bond asset swap	132.220
	Interest rate derivatives	408.680
	Structured products	267.773
	Credit derivatives	7.768
	Equity derivatives	81.878
	Foreign exchange derivatives	91.633
	Foreign exchange margin trading	934.223
	Commodity CFD	710.325
	Equity CFD	235.723

5. Business Performance

Unit: NTD

	2020	2021	2022
Operating revenues	2,744,010,944	3,888,544,584	3,317,334,096
Operating expenses	1,809,056,754	2,313,984,349	2,113,253,911
Non-operating income and expenses	86,969,920	87,186,208	61,338,323
Surplus after income tax	833,896,408	1,343,196,926	1,019,584,141
Income tax expense	188,027,702	318,549,517	245,834,367

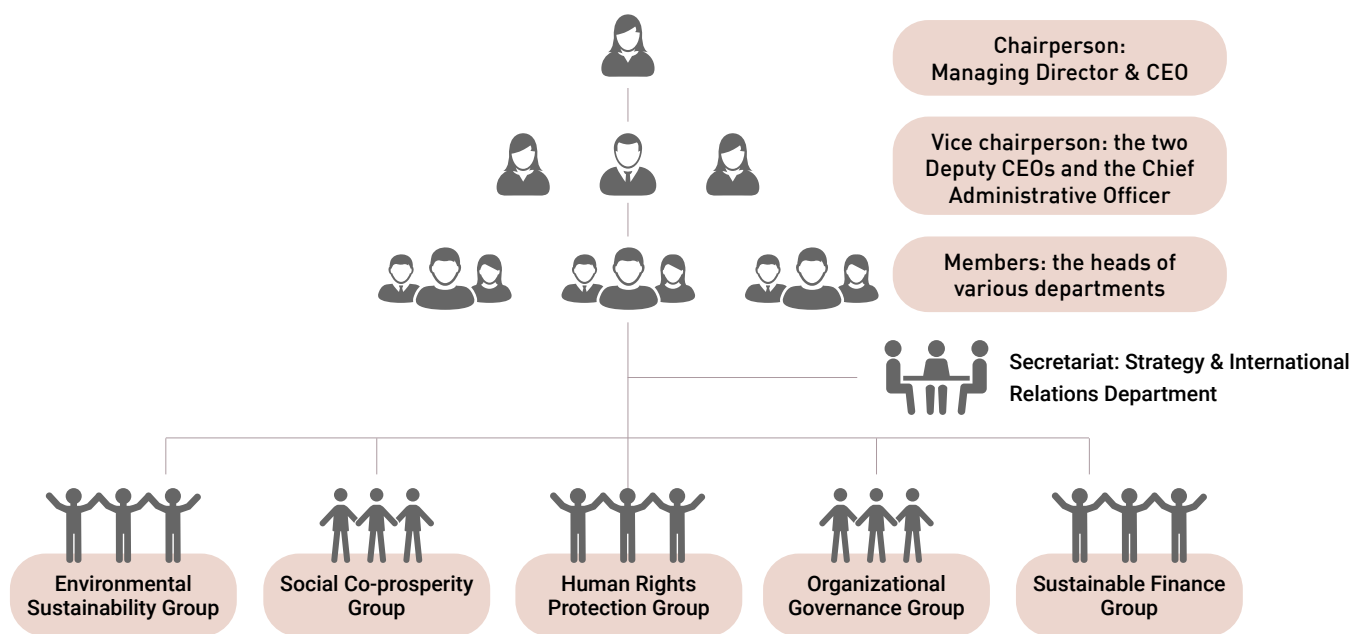


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Sustainable Strategy

1. Sustainable Promotion Organization

TPEX has established the Sustainable Development Committee, an internal task-oriented organization responsible for coordinating and promoting sustainable development, of which the Managing Director & CEO serves as the chairperson, the Deputy CEOs and the Chief Administrative Officer serve as the vice chairpersons, and the heads of various departments serve as members. The committee has five functional promotion groups, namely Environmental Sustainability, Social Co-prosperity, Human Rights Protection, Organizational Governance and Sustainable Finance, which are responsible for promoting and implementing the sustainable development strategies, aiming to achieve the goal of net zero emission, implement the responsibility of sustainable development, continue to operate effectively and promote the steady development of the capital market, formulating specific goals and strategies, and tracking the implementation results for sustainable development related work such as Environmental Sustainability (E), Social Responsibility (S), Corporate Governance (G) and Market Development (M).



In principle, the Sustainable Development Committee of TPEX convenes two meetings each year, and may hold additional meetings in due course depending on the needs of business promotion. To facilitate its smooth operation, TPEX has set up a secretarial department headed by the Strategy & International Relations Department, which is responsible for analyzing and assessing the sustainable development goals and strategies, coordinating meeting-related matters and compiling the sustainability report ¹.

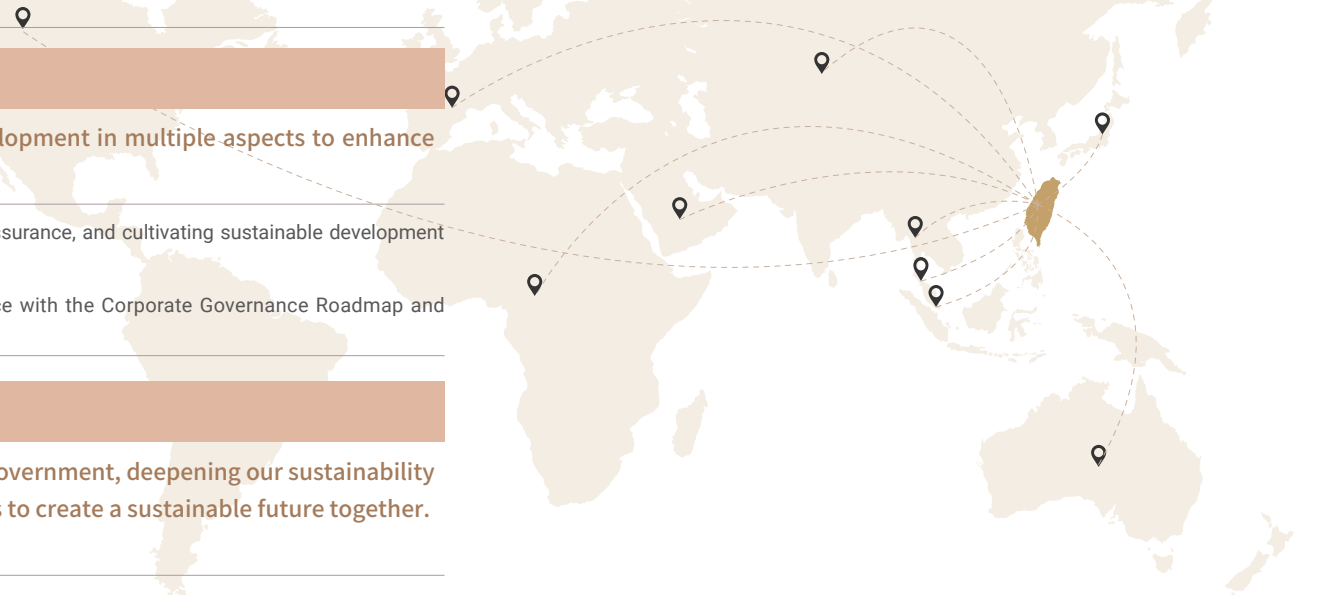
The Sustainable Development Committee held meetings in May and November 2022, respectively. The key reports and discussions in May include the structure and operation of the Sustainable Development Committee and the important schedule of the greenhouse gas inventory project. The key reports and discussions in November include the results of the functional steering group meetings, the preparation of the 2023 sustainable development goals and strategic plans, the preparation of the sustainability report and the follow-up planning and handling of the greenhouse gas inventory.

¹ The sustainability report of TPEX is compiled by the Sustainable Development Committee and approved by the Chairman of the Board, and is published on the official website of TPEX.

2. Sustainable Development Goals

With the vision of Embracing Sustainable Finance, Creating Win-Win-Win for Customers, the Market and the Environment, TPEX implements a three ESG aspects-oriented strategy and formulates the execution strategies from three levels, namely TPEX, the real economy and the capital market.

Capital market	
Goal	Guiding funds into ESG transition, and offering diversified products and services to improve the operation of the sustainable finance ecosystem.
Strategies	<ul style="list-style-type: none"> Promoting diversity and innovation of sustainable products, guiding funds to support the sustainable transformation of enterprises, and providing investors with more responsible investment underlying assets. Continuously optimizing products and services, conducting financial education seminars, creating a friendly market environment, and implementing inclusive finance. Cooperating with the competent authorities to promote the sustainable development and transformation of securities firms. Improving the market system and enhancing the transparency of sustainable information to increase the security, fairness and stability of transactions.
Real economy	
Goal	Assisting enterprises to strengthen ESG sustainable development in multiple aspects to enhance the competitiveness.
Strategies	<ul style="list-style-type: none"> Guiding enterprises to implement greenhouse gas inventory and assurance, and cultivating sustainable development competitiveness. Strengthening the promotion of corporate sustainable development. Promoting various corporate governance measures in accordance with the Corporate Governance Roadmap and relevant policies.
TPEX	
Goal	Following the international trend and responding to the government, deepening our sustainability and supporting the net-zero transformation of enterprises to create a sustainable future together.
Strategies	<ul style="list-style-type: none"> Setting carbon reduction targets and specific implementation measures with reference to international initiatives or national policies such as Taiwan's 2050 Net Zero Emissions Pathway. Using internal resources to train and retain talents, care for society, and cultivate the sustainable value and ESG culture. Strictly abiding by the ethic management guide, improving service resilience, and strengthening the disclosure of TPEX ESG information and communication with stakeholders.



1. Stakeholder Identification

To strengthen and enhance communication with stakeholders, TPEX identified important stakeholders extensively investigated issues of concern to stakeholders, and adjusted the sustainable development strategies.

Identification process of stakeholder



Inventorying communication targets

9 major categories of stakeholders

Considering past experience and operations in 2022, TPEX first identified 9 major categories of stakeholders.



Focusing on communication priorities

6 major categories of important stakeholders

- Adopted the AA1000 Stakeholder Engagement Standard stressing the 5 dimensions of “responsibility, tension, influence, diverse perspectives, and dependency” .
- 12 senior executives of TPEX assessed the influences between stakeholders and TPEX by questionnaire, and discussed and analyzed the results in a cross-departmental meeting.
- In 2022, 6 categories including government agencies and surrounding units of securities and futures, customers, intermediary agencies, employees, investors and media were taken as important stakeholders and prioritized communication targets.

2. Stakeholder Engagement

2022 stakeholder engagement list

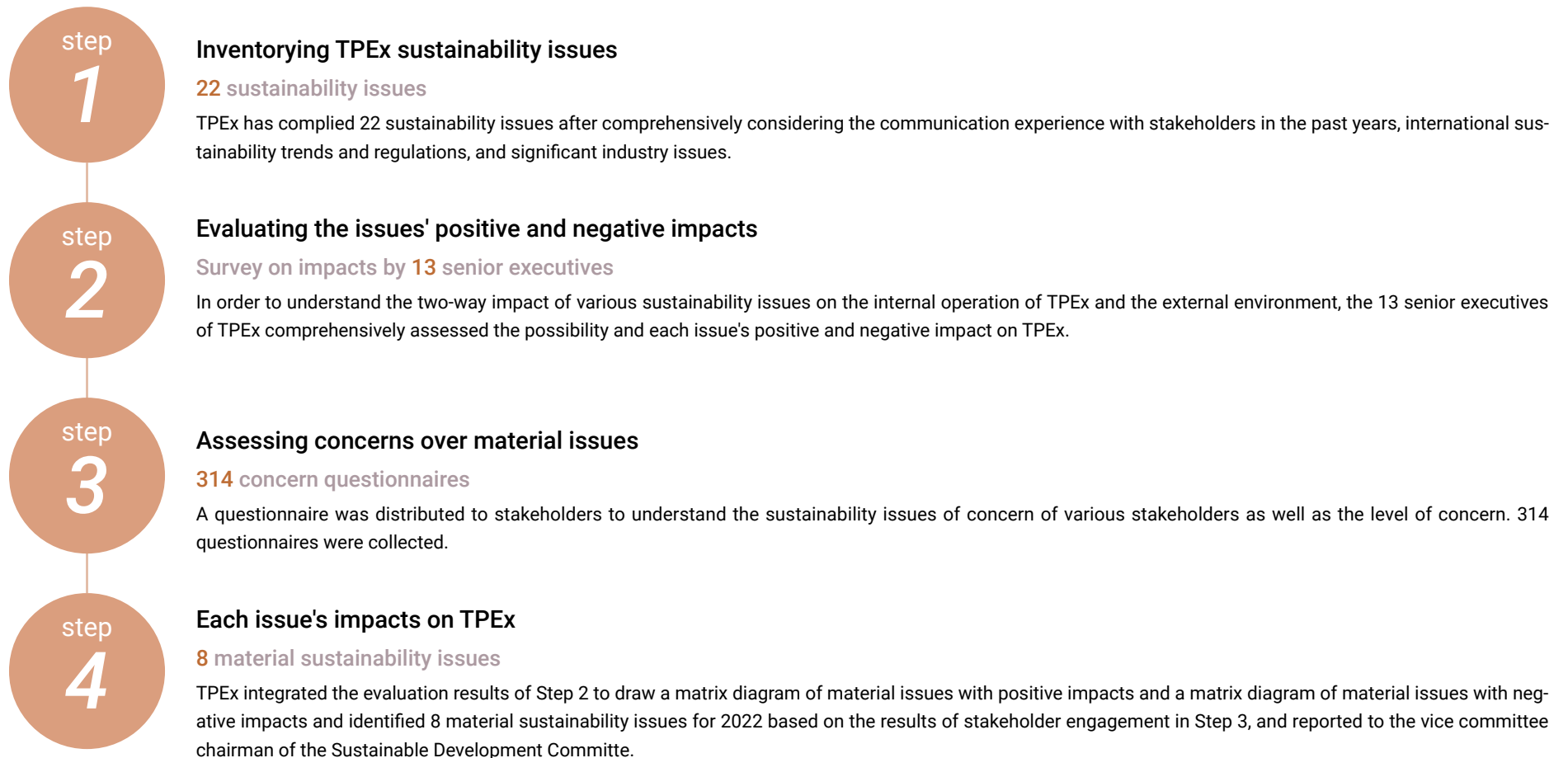
Stakeholders	Importance to TPEX	Expectations for TPEX	Main communication channels and frequency	Main communication results
Government agencies and surrounding units of securities and futures	TPEX is a franchise business and is subject to the approval of the competent authority; as such, it is obligated to cooperate with the competent authority's supervision and inspection. Government agencies at all levels have influence, binding force and legal authority on TPEX daily operations, and surrounding units of securities and futures are important partners of TPEX to promote relevant policies.	Build a healthy capital market, follow financial laws and regulations, maintain market order, supervise listed/registered companies and protect investors' rights and interests.	<ul style="list-style-type: none"> • Meetings, public hearings (irregular), formal correspondence (irregular) • Phone calls, fax, and e-mail (irregular) • Compiling and reporting important business statistics (irregular) 	<ul style="list-style-type: none"> • TPEX cooperated with the competent authority in reviewing and revising various rules and regulations, and the TPEX market operated smoothly in 2022. • There were no major penalties in 2022.
Customers	After receiving the counseling and examination by TPEX, domestic and foreign companies issue stocks to be listed on the Main Board, ESB or GISA, or issue bonds to raise funds, thus facilitating economic growth and capital mobility.	Improve the examination and supervision structure as well as laws and regulations, improve examination efficiency, maintain smooth consultation and communication channels, and improve the provision of diversified financing instruments such as stocks and bonds and related services.	<ul style="list-style-type: none"> • Field visits (irregular) • Symposiums, educational promotion, forums and public hearings (irregular) • TPEX family networking events (annual) • Formal correspondence (irregular) • Phone calls, fax, and e-mail (irregular) • Routine audits (regular/quarterly/monthly) • Special audits (irregular) 	<ul style="list-style-type: none"> • By the end of 2022, 808 domestic and foreign companies were listed on the Main Board, 299 domestic and foreign companies were registered on the Emerging Stock Market, and 97 domestic companies were registered on GISA. • By the end of 2022, the balance of the bond market reached NT\$16.3 trillion. • In 2022, a total of 44 sustainable bonds were issued, with an issue amount of NT\$112.247 billion, and both the number of issuance and the amount of issuance reached record highs.
Intermediary agencies	Intermediary agencies are important partners in helping enterprises access into the capital market. The professional institutions serve as an important bridge to improve TPEX's counseling and examination and promote the matching of high-quality enterprises with market funds.	Handle promotion and education seminars on various newly revised laws, and regulations, and establish a communication channel with TPEX.	<ul style="list-style-type: none"> • Meetings, seminars and promotional events (irregular) • Formal correspondence (irregular) • Phone calls, fax, and e-mail (irregular) • Intermediary agency award ceremonies (annual) • Listing examination satisfaction survey(annual) 	<ul style="list-style-type: none"> • In 2022, TPEX distributed questionnaires to 19 securities underwriters. The response rate was 100%, and the overall satisfaction with TPEX services reached 100%. • A total of 2 sessions of "Application for TPEX Listing Educational Seminar for Intermediaries" were held. • TPEX organized the 2022 Intermediaries Award Ceremony to commend and enhance communication with 7 securities dealers and 4 accounting firms with outstanding contributions. • Conducted a total of 119 audits of securities firms, including routine and special audits, risk assessments, and audits for the prevention of money laundering, etc.

Stakeholders	Importance to TPEX	Expectations for TPEX	Main communication channels and frequency	Main communication results
Employees	Employees are important assets of TPEX responsible for developing new products, maintaining various trading mechanisms, supervising the market, promoting corporate fundraising and activating the securities market. High-quality and competent talents are the core key to strengthening TPEX's competitiveness.	Recruit qualified employees, cultivate high-quality talents, maintain a harmonious labor-employment relationship and establish a fine working environment to consolidate high quality human resources.	<ul style="list-style-type: none"> • Education and training for management associates and all employees (irregular) • Encouragement meetings (quarterly) • Sports meets (irregular) • Year-end thanksgiving parties (annual) • Employee/employer meetings (quarterly) • Personnel appraisal group meeting (held once every six months, and may be held irregularly in addition) • Sexual harassment complaint handling committee (irregular) • Employee Pension Fund Management Committee and Labor Retirement Reserve Supervision Committee (held once every quarter, and may be held irregularly in addition) 	<ul style="list-style-type: none"> • In 2022, it was harmonious between employers and employees and no major discussion topics have arisen. • 100% of employees who applied for parental leave were reinstated in 2022, and 100% of them remained employed one year after the reinstatement. • According to the employee opinion survey on the 2022 education and training plans, employees responded well to the education and training.
Investors	With the mission of providing a fair and safe trading environment and meeting the investors' needs, TPEX provides diverse instruments such as bonds, stocks, warrants, ETFs, ETNs, derivatives, enabling investors of different attributes and types to participate.	Make the capital market more active and facilitate the circulation of funds, and supervise the operation of the market, so as to make the market information open and transparent and to protect the rights and interests of investors.	<ul style="list-style-type: none"> • TPEX Corporate Day Events (quarterly) • Education Seminars: The Taipei Exchange Market (irregular) • Market Observation Post System updates (regular, irregular) • Market announcement and press release (irregular) • Investor email, service hotline (irregular) • Official website and social media (irregular) 	<ul style="list-style-type: none"> • In 2022, the total number of investors performing transactions in TPEX market exceeded 2.7 million. • There is a dedicated hotline for investors and a consultation hotline for Emerging Stock Market investors set up for Emerging Stock Market transactions, each of which is answered by dedicated personnel, and 100% of the messages have been conveyed to the relevant business department for handling and replying to the investors.
Media	TPEX promotes various systems, businesses and publicity, involving the rights and interests of investors in the market. Due to the wide contact between the media and investors and the rapid transmission of information, investors can obtain information efficiently through the media and strengthen the service and protection of investors.	Manage various systems, operations and promote the publication of news and information, and establish a good communication channel with TPEX.	<ul style="list-style-type: none"> • Phone calls, fax, and e-mail (irregular) • Network communication software (irregular) • Press conference and release (irregular) 	<ul style="list-style-type: none"> • Regular and occasional press releases through the print media. • Handle news release and advertising matters of the TPEX market through online news media. • Handle online advertising matters through advertising media such as Facebook, Google and YouTube.

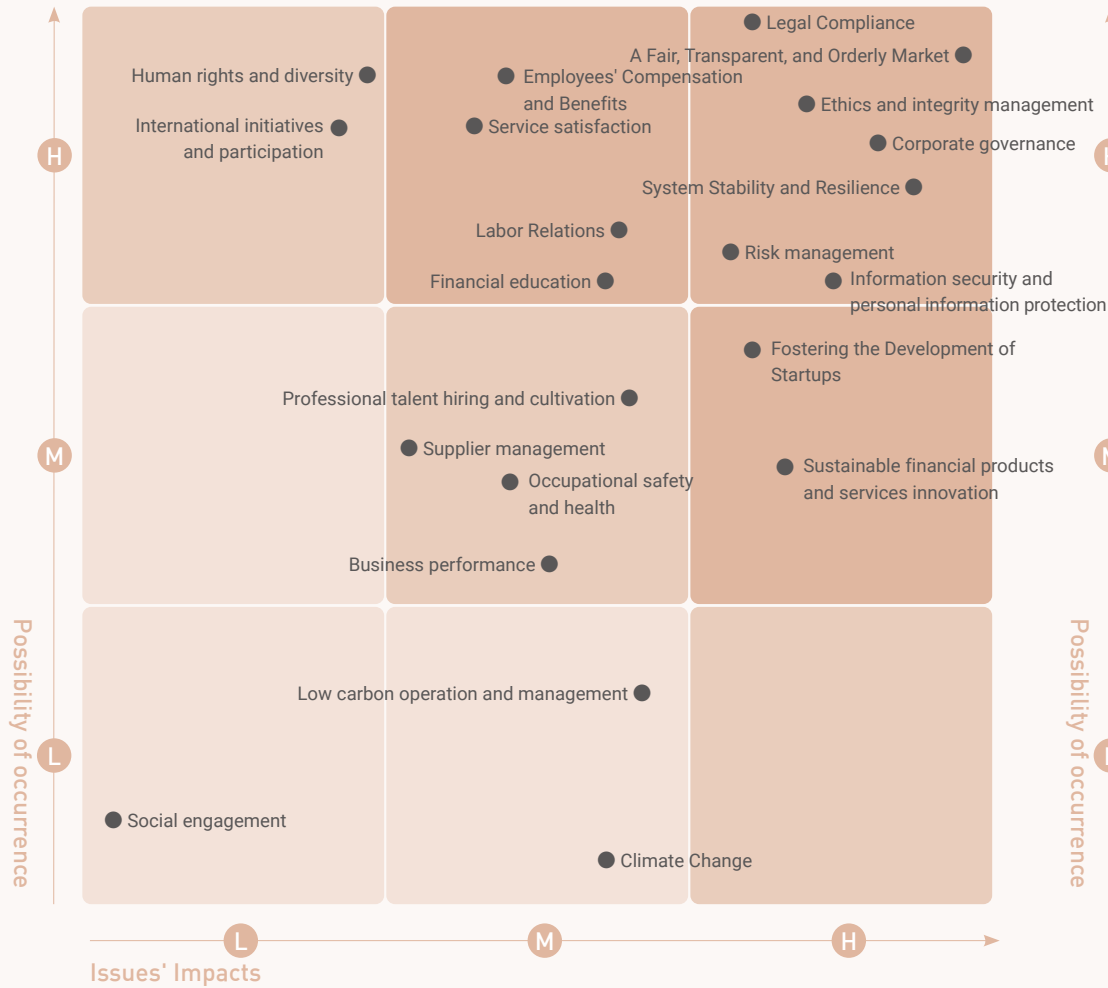
1. Material Topics Analysis

Based on the analysis of 13 questionnaires on positive and negative impact issues completed by the senior executives of TPEX, as well as the 314 “Questionnaire on the Level of Concern on the Sustainability Issues of TPEX” completed by stakeholders, the highest level of both positive and negative operational impacts were selected. With reference to the results of the stakeholders' level of concern, the 8 material issues in 2022 were “A Fair, Transparent, and Orderly Market”, “Ethics and Integrity Management”, “Corporate Governance”, “System Stability and Resilience”, “Legal Compliance”, “Operational Performance”, “Climate Change” and “Information Security and Personal Information Protection”. Compared with 2021, “Climate Change” and “Business Performance” are newly added, while “Risk Management” is not included as a material issue in 2022.

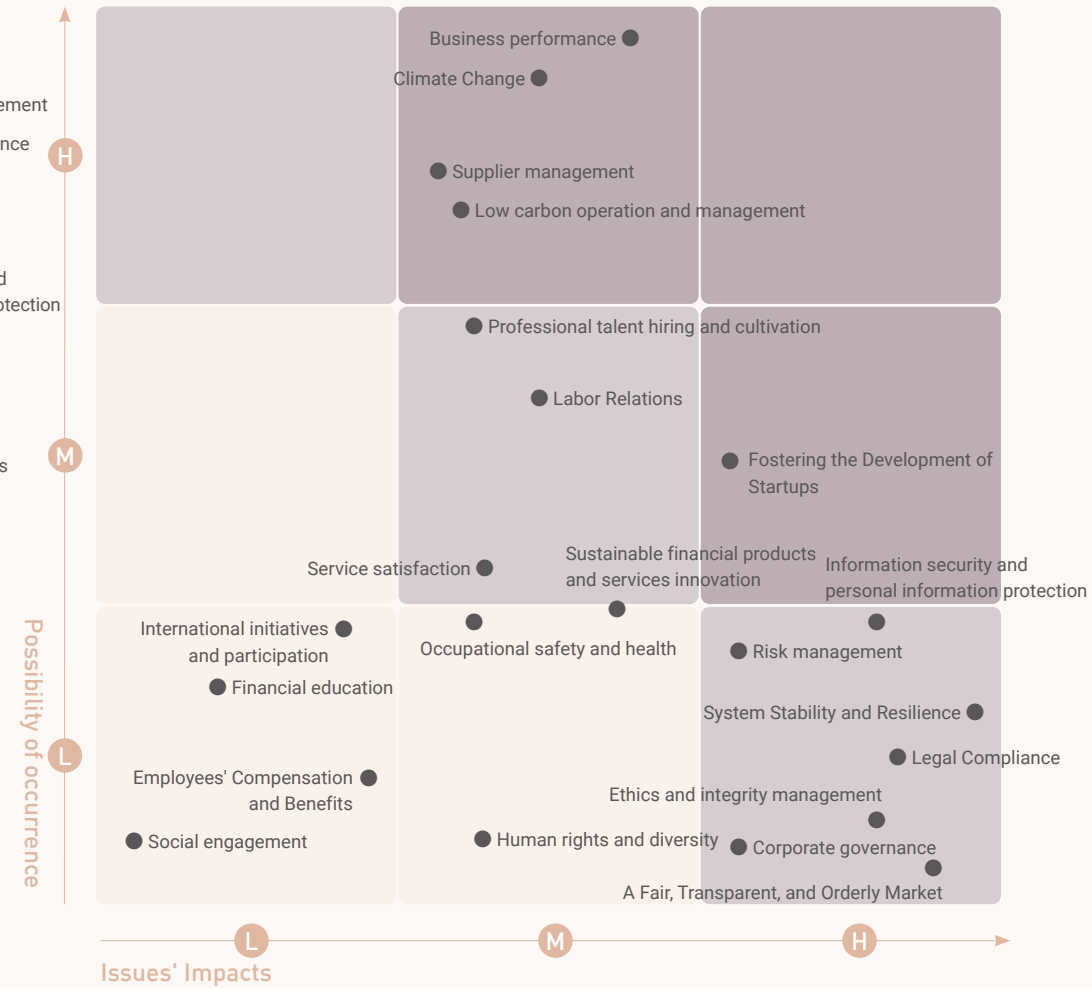
Identification process of material issues



Matrix diagram of material issues with positive impacts



Matrix diagram of material issues with negative Impacts



2. Material Topics Management

Involvement degree in the impact of material issues

Material Issues	Internal	External				
	Employees	Government agencies and surrounding units of securities and futures	Customers	Investors	Intermediary agencies	Media
A Fair, Transparent, and Orderly Market	Yes	Yes	Yes	Yes	Yes	Yes
Ethics and Integrity Management	Yes	Yes	Yes	Yes	Yes	Yes
Corporate Governance	Yes	Yes	Yes	No	Yes	No
System Stability and Resilience	Yes	Yes	Yes	Yes	Yes	Yes
Legal Compliance	Yes	Yes	Yes	Yes	Yes	Yes
Business Performance	Yes	Yes	No	No	No	No
Climate Change	Yes	Yes	Yes	Yes	Yes	No
Information Security and Personal Information Protection	Yes	Yes	Yes	Yes	Yes	Yes

Management approaches of material topics

A Fair, Transparent, and Orderly Market	Potential or actual impacts	Description of positive impacts	Description of negative impacts
		Attract domestic and foreign high-quality enterprises to enter into TPEX market and expand the scale of TPEX market; promote more active transactions and protect the rights and interests of investors.	Being detrimental to integrity, reputation among stakeholders declines, the number of listed / registered companies decreases, and investors' willingness to invest declines
	Policies / commitments	<ul style="list-style-type: none">• Implement securities firm audits, transaction monitoring and company supervision services.• Efforts are made in the direction of more transparent, fair, efficient, and safe transaction mechanisms to promote more active transactions.	
	Short-term, medium-term and long-term goals	Short-term (1 ~ 3 years)	
<ul style="list-style-type: none">• Promote the six core strategic industries to enter the multi-tiered market of TPEX and expand the scale of TPEX market.• Strengthen the promotion of and emphasis on sustainable development of Main Board companies and Emerging Stock Market companies to enhance its quality and information transparency.• Strengthen supervision measures to maintain market stability.• Continue to promote various trading mechanisms and remind investors of investment risks.			
Medium-term (3 ~ 5 years)			
<ul style="list-style-type: none">• Review and amend relevant systems and regulations of TPEX market in a timely manner.• Collect opinions from all parties and optimize the issuance system, trading mechanism and supervision measures.			
	Long-term (After 5 years)		
	<ul style="list-style-type: none">• Continue to improve the market issuance, supervision and trading mechanism to provide diversified needs of enterprises and investors.• Continue to understand the needs of enterprises, review and amend relevant regulations in a timely manner in line with international standards, promote more high-quality enterprises to enter the capital market, assist enterprises in meeting international competition and challenges, and jointly promote the sustainable development of the capital market.		

A Fair, Transparent, and Orderly Market	Grievance/evaluation mechanisms	<ul style="list-style-type: none"> Investor hotline and mailbox. Dedicated service windows for each listed / registered companies as well as online and offline communication channels. Seminars and communications with intermediary agencies. Cooperate with the competent authority to promote new trading mechanisms. Implement tiered management of routine and exception regulation, and internal control audits on listed / registered companies. Manage the information reporting and material information release of listed / registered companies. Maintain and regularly review the transaction declaration and information disclosure of various bonds. Holding of promotional seminars.
	2022 accomplishments	<ul style="list-style-type: none"> Continued to promote the Pioneer Stock Board, GISA, Sustainable Bond Market, etc. Conducted a total of 292 and 52 material information audits on listed and registered companies, respectively. Conducted a total of 209 and 34 routine regulation and financial report reviews on listed and registered companies, respectively. Conducted a total of 93 and 23 internal control system implementation status audits on listed and registered companies respectively. A total of 4 sessions of promotional seminars on information reporting of Emerging Stock Market companies were held. 6 sessions of “Promotional seminar on new trading mechanisms and related services of TPEX market” , 15 education seminars for investors and 5 promotional sessions of Pioneer Stock Board were held. Conducted a total of 119 audits of securities firms, including routine and special audits, risk assessments, and audits for the prevention of money laundering. Maintained the yield curve of Government bonds and Corporate bonds, and provided the fair price of bonds for investors' reference.
	GRI/self-designated material topics	Self-designated Topic: A Fair, Transparent, and Orderly Market

Ethics and integrity management	Potential or actual impacts	Description of positive impacts	Description of negative impacts
		Ethics and integrity management, reputation enhancement and stakeholder trust.	Violation of ethics and integrity management may result in a decline in reputation, affect investor's confidence and market order, and even result in punishment.
	Policies / commitments	<ul style="list-style-type: none"> TPEX formulates several self-discipline standards for integrity management to establish an organizational culture of impartiality, equality, and anti-corruption. Prevent conflicts of interest and eliminate dereliction of duty. 	
	Short-term, medium-term & long-term goals	Adhere to the code of integrity management, regularly review relevant self-regulatory norms, avoid any violation, and conduct education and training for colleagues to cultivate the spirit of rule of law (because ethics and integrity management are the basic elements for the operation of TPEX and short-term, medium-term and long-term goals are the same).	
	Grievance/evaluation mechanisms	<ul style="list-style-type: none"> TPEX has established measures for the implementation of the whistleblowing system and set up reporting hotline and reporting e-mail. TPEX audits employees' trading of Main Board, Emerging Stock Market, and GISA securities every quarter according to the annual audit plan. The Internal Audit office then forwards the results to the supervisors for review by the end of the following month, and reports to the Joint Meeting of Directors and Supervisors on a quarterly basis. TPEX formulates self-discipline norms related to integrity management, such as: Guidelines for Employee Ethical Conduct, Employee Confidentiality Measures, and Disciplinary Standards for Securities Supervisors. 	
	2022 accomplishments	No reports of crimes, fraud, or violations of laws and regulations by employees were received for the whole year.	
	GRI/self-designated material topics	GRI 205 anti-corruption	

Corporate Governance	Potential or actual impacts	Description of positive impacts	Description of negative impacts
		TPEX has excellent corporate governance, smooth operation, good reputation and positive demonstration effect on listed / registered companies as a whole.	If the corporate governance is poor and is rectified by the competent authority, the reputation will be reduced.
	Policies / commitments	TPEX establishes a comprehensive corporate governance structure toward improving the quality of corporate governance.	
	Short-term, medium-term & long-term goals	Attach great importance to the interests of stakeholders. In order to establish a good corporate governance system and promote the sound development of the core business, TPEX improves the quality of corporate governance with a professional management team, a complete board of directors with independent supervision functions, a strict internal control mechanism, and transparent and real-time communication channels, which has a positive demonstration effect on listed / registered companies.	
	Grievance/evaluation mechanisms	<ul style="list-style-type: none"> Formal correspondence, reports to Joint Meetings of Directors and Supervisors, investor mailbox. The Internal Audit office regularly reports to supervisors, tracks improvements, and reports to the Joint Meeting of Directors and Supervisors every quarter. 	
	2022 accomplishments	<ul style="list-style-type: none"> The internal audit team's proposed suggestions to various departments have been sent to the supervisors for monthly review, and reported to the Joint Meeting of Directors and Supervisors on a quarterly basis, and have been rectified. TPEX convenes a Joint Meeting of Directors and Supervisors every month, with a 96% average attendance rate of directors and supervisors. 	
	GRI/self-designated material topics	GRI 2 general disclosure GRI 405 diversity and equal opportunity	

System Stability and Resilience	Potential or actual impacts	Description of positive impacts	Description of negative impacts
		Maintain the stability of the market trading system to ensure the continuous operation of the system in times of disasters.	It influences the market order and harms the rights and interests of investors.
	Policies / commitments	<ul style="list-style-type: none"> Establish a business continuity policy. The business continuity policy of TPEX is that the system shall be reliable, the information shall be correct, and the transaction shall be continuous. 	
	Short-term, medium-term & long-term goals	Short-term (1 ~ 3 years) <ul style="list-style-type: none"> There shall be no critical business interruption incidents exceeding the maximum tolerable interruption time. The core trading system backup drill completed the launch within the targeted recovery time. 	
		Medium-term (3 ~ 5 years) <ul style="list-style-type: none"> Maintaining system stability and continuous operation. All information system backup drills completed the launch within the targeted recovery time. 	
		Long-term (After 5 years) <ul style="list-style-type: none"> Ensure the operation continuity plan of the organization. Enhance the resilience of the information system. 	
	Grievance/evaluation mechanisms	<ul style="list-style-type: none"> Various operational ongoing needs are negotiated and addressed through business contact window. Perform external and internal audits every six months. Convene regular Information Security Management Review meetings. There shall be no critical business interruption incidents exceeding the maximum tolerable interruption time. 	
	2022 accomplishments	<ul style="list-style-type: none"> The certificate continues to be valid after passing the ISO 22301 standard review carried out by the British Standards Institution (BSI). Implemented two same-site and two different-site system backup test drills, with a 100% success rate. Successfully conducted the information security incident notification drills and distributed denial-of-service (DDoS) attack drills and the results showed that all the attacks could be effectively defended. 	
	GRI/self-designated material topics	Self-designated Topic: System Stability and Resilience	

Legal Compliance	Potential or actual impacts	Description of positive impacts	Description of negative impacts
		Good compliance with laws and regulations, enhanced reputation and enhanced the trust of stakeholders.	This results in a decline in reputation, an impact on social perception and even the imposition of penalties.
	Policies / commitments	Fully comply with laws, regulations and requirements, actively maintain smooth communication and contact with stakeholders, and prevent possible illegal events.	
	Short-term, medium-term & long-term goals	The relevant laws and regulations are regularly reviewed to avoid any illegal events, and colleagues are educated and trained to cultivate the spirit of the rule of law (because legal compliance is the basic requirement for the operation of TPEX and short-term, medium-term and long-term goals are the same).	
	Grievance/evaluation mechanisms	<ul style="list-style-type: none"> Every six months, each department performs a self-assessment of compliance with laws and regulations. Every year, the Internal Audit Team performs inspections of compliance in all departments. 	
	2022 accomplishments	In 2022, there were no irregularities rectified by the competent authorities.	
	GRI/self-designated material topics	GRI 2 General Disclosure	





Business Performance	Potential or actual impacts	Description of positive impacts	Description of negative impacts
		TPEX will be able to provide a high-quality market platform for enterprises and the investing public to achieve the goal of “circulating securities and activating the economy” .	The inability to provide a high-quality market platform affects the market order and harms the rights and interests of investors.
	Policies / commitments	<ul style="list-style-type: none"> Building a “multi-functional and multi-tiered comprehensive exchange” . Building a diversified commodity trading market to meet investors' diversified trading needs. 	
	Short-term, medium-term & long-term goals	Short-term (1 ~ 3 years)	
		Maintain a healthy financial performance.	
		Medium-term (3 ~ 5 years) In line with the promotion of various major economic policies of the government and the prosperity of the capital market, TPEX will provide a better market platform for enterprises and the investing public to achieve the goal of “circulating securities and activating the economy” .	
		Long-term (After 5 years)	
		Working with all stakeholders to continuously create sustainability value.	
	Grievance/evaluation mechanisms	<ul style="list-style-type: none"> A monthly income and expenditure balance sheet and balance sheet analysis are prepared and reported at the Joint Meeting of Directors and Supervisors every month. Every year, accounting firms are engaged to verify the financial statements of TPEX and issue an accounting verification report. 	
	2022 accomplishments	While supporting the major economic policies of the competent authorities and building a prosperous capital market, TPEX maintained a sound financial performance in 2022.	
	GRI/self-designated material topics	GRI 201 Economic Performance	









Climate Change	Potential or actual impacts	Description of positive impacts	Description of negative impacts
		Early identification of risks and opportunities of climate change and formulation of relevant response strategies to reduce the impacts when it actually occurs.	Extreme weather events affect operating sites as well as facilities and systems, the most severe of which may cause operation disruption.
	Policies / commitments	<ul style="list-style-type: none"> In October 2020, TPEX formally supported the Task Force on Climate-related Financial Disclosures (TCFD). TPEX introduced the TCFD Disclosure Framework to identify risks and opportunities and propose countermeasures. 	
	Short-term, medium-term & long-term goals	TPEX will formulate future carbon reduction targets and renewable energy purchase targets based on the results of the greenhouse gas inventory in 2022.	
	Grievance/evaluation mechanisms	Regularly discuss issues related to climate change at the Sustainable Development Committee.	
	2022 accomplishments	In 2022, issues such as TCFD disclosure framework and greenhouse gas inventory were discussed at the Sustainable Development Committee.	
	GRI/self-designated material topics	Self-designated Topics: Climate Change Governance	


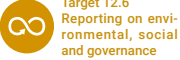

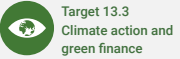



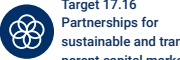
Information security and personal information protection	Potential or actual impacts	<p>Description of positive impacts</p> <p>To ensure the privacy and security of customers' and stakeholders' information, and maintain market stability.</p>	<p>Description of negative impacts</p> <p>The privacy and security of information of customers and stakeholders are compromised and the market order is susceptible to hazards.</p>
	Policies / commitments	<ul style="list-style-type: none"> • TPEX protects the confidentiality, integrity, and availability of information assets, thereby ensuring safe and stable information services. • TPEX ensures that the collection, processing and use of personal data comply with legal requirements and reduce the risk of improper disclosure of personal data. • TPEX ensures no leakage of confidential information. 	
	Short-term, medium-term and long-term goals	<p>Short-term (1 ~ 3 years)</p> <ul style="list-style-type: none"> • No leakage of confidential information is allowed. • The entire Exchange passed the ISO 27001 standard verification. <p>Medium-term (3 ~ 5 years)</p> <ul style="list-style-type: none"> • Ensure the privacy and security of customers' and stakeholders' information. • Ensure the continuous effectiveness of the ISO 27001 certificate of the entire Exchange. <p>Long-term (After 5 years)</p> <ul style="list-style-type: none"> • Protect the confidentiality, integrity, and availability of information assets, thereby ensuring safe and stable information services. • Ensure that the collection, processing and use of personal data comply with legal requirements and reduce the risk of improper disclosure of personal data. • Continuously improve the overall protection of asset security. • To ensure the continued effectiveness of the ISO 27001 certificate of the entire Exchange. 	

Information security and personal information protection	Grievance/evaluation mechanisms	<ul style="list-style-type: none"> • Information Security Management Review meetings. • Personal Data Management Review meetings. • Investor hotline and investor mailbox. • Formulate information security policies, personal data protection manuals and related procedures, and perform external and internal audits every six months. • Convene Information Security Management Review meetings and Personal Data Management Review meetings. • All employees receive information security and personal information education and training every year.
	2022 accomplishments	<ul style="list-style-type: none"> • TPEX has passed continuous and effective verification of ISO 9001, ISO 27001, ISO 20000 standards of British Standards Institution (BSI) (the scope of verification is information system development, computer operation, host network and machine room equipment and facilities management maintained by the Information Department). • TPEX handled the related operations of the verification of the ISO 27001 information security standards introduced by the entire Exchange. • 2 Information Security Management Review meetings and Personal Data Management Review meetings, respectively. • No instances of hacking, tampering or leakage of personal data in 2022. • The completion rate of all employees participating in information security and personal information protection courses reached 100%.
	GRI/self-designated material topics	GRI 418 Customer Privacy

1. SDGs

SDGs/SSE	Targets/Indicators	Specific Actions in 2022
	<ul style="list-style-type: none"> Eliminating all forms of poverty 	<ul style="list-style-type: none"> Joining hands with TPEx family to donate funds and supplies to vulnerable groups through 1919 Food Bank. Responding to the joint donation activity of “The Joint Donation to the Food(Necessities) Banks” organized by the FSC and the Taiwan Futures Exchange to help the economic marginal households suffering from urgent difficulties and urgent needs of life, but have not received government subsidies.
	<ul style="list-style-type: none"> Eliminating hunger, achieving food security, improving nutrition and promoting sustainable agriculture 	<ul style="list-style-type: none"> Sponsoring the “Food Plan for the Single Underprivileged Elders” of Hongdao Elderly Welfare Foundation. Purchasing organic rice from Xing Jian Village and donating to social welfare groups. Sponsoring the “Clean Source Plan” in the Pinglin Tea District to promote organic farming in water conservation areas. Sponsoring the Guandu National Nature Park Care Plan to create an environment suitable for birds and other creatures, and to have comprehensive maintenance management for the paddy fields.
	<ul style="list-style-type: none"> Ensuring health and promoting well-being for all ages 	<ul style="list-style-type: none"> Setting up vaccination stations in the workplace to provide COVID-19 vaccination and influenza vaccination services to increase vaccination rates. Distributing rapid screening reagents for COVID-19 during the pandemic, and launching a diversion mechanism for off-site office and home office, as well as adopting anti-pandemic measures such as wearing masks and measuring body temperature to reduce the rate of disease infection. Funding a number of medical institutions to replace or purchase medical equipment. Donating to the NTU Children's Health Foundation - Critical Care for Children to support and assist NTU Children's Hospital in providing better medical treatment for children.
	<ul style="list-style-type: none"> Ensuring education for vulnerable groups Ensuring learners have access to knowledge and skills that promote sustainable development, including appreciation of cultural diversity, etc. 	<ul style="list-style-type: none"> Participating in the “Financial Services Education Charity Fund” to help young students from disadvantaged families successfully complete their studies. Donating to the Taiwan Fund for Children and Families of local communities and providing scholarships for disadvantaged students. Donating to the “Ministry of Education – School Education Savings” to help disadvantaged students in school with peace of mind. Investing in rural education resources, sponsoring the “Zero Distance Art Realization Project” of the National Theater & Concert Hall, the “Thomas Edison's Adventure” public welfare learning activity of the National Taiwan Science Education Center, the “Original Sound School Education Program” of the Vox Nativa Taiwan, and the program of subsidizing the school art education of the Ministry of Education. Donating to the “College Student Financial Employment Public Welfare Program” organized by the Taiwan Depository & Clearing Corporation to help college students with poor family economy improve their financial expertise and enhance their employment competitiveness. 82 schools participated in the “Financial Talent Camp”, with a total of 412 teams and 1,433 students enrolled, hitting a record high.

SDGs/SSE	Targets/Indicators	Specific Actions in 2022
  Target 5.5 Board room diversity and gender equality	<ul style="list-style-type: none"> Achieving gender equality and empowering all women Ensuring that women enjoy maternity-related benefits 	<ul style="list-style-type: none"> Collaborating with the Small and Medium Enterprise Administration (SMEA), Ministry of Economic Affairs (MOEA) in holding 2 “Women Entrepreneurship Salons” and 1 “Waltz of Elite Gatherings” . Female employees accounted for 56% and 38.9% of management positions. Employees who took parental leave were 100% reinstated in 2022, and 100% continued to be employed one year after reinstatement.
	<ul style="list-style-type: none"> Ensuring clean water resources and sustainable management 	<ul style="list-style-type: none"> Sponsoring the tea plantation in the water conservation zone of Jade Reservoir to promote organic farming program. Responding to the Guandu National Nature Park Care Plan, and assisting it in improving the maintenance and management of wetlands.
	<ul style="list-style-type: none"> Investing in clean energy technology 	<ul style="list-style-type: none"> Funding the construction of solar power facilities to facilitate the development of green energy industry. In January 2022, the first green electricity supply was completed. In 2022, 296 renewable energy certificates issued by the Ministry of Economy were obtained, accounting for 22.41% of renewable energy.
  Target 8.3 SME growth and sustainable development	<ul style="list-style-type: none"> Ensuring smooth operation of the capital market, promoting sustainable economic growth, supporting and encouraging the growth of micro and small enterprises Promoting corporate financing and stock market transactions to create economic growth momentum 	<ul style="list-style-type: none"> By the end of 2022, there were a total of 1,204 companies that listed / registered on Main Board / Emerging Stock Market and GISA. <ul style="list-style-type: none"> In 2022, the number of companies applied for listing on Main Board and for registering on the Emerging Stock Market were 22 and 67, respectively (including 12 companies applied for listing on Pioneer Stock Board.) In 2022, the total number of newly registered GISA companies and companies applied for counseling service were 54. The average daily trading value of Main Board stocks was NT\$60.482 billion, which was the second highest in history. In the whole year, the proportion of foreign investment transactions reached 20.47%, an increase of 17.25%, a record high.
  Target 10.5 Security market regulation	<ul style="list-style-type: none"> Ensuring equal opportunities, promoting the improvement of regulations and supervision of financial markets and financial institutions from policy and regulatory perspectives, and strengthening the implementation of relevant regulations 	<ul style="list-style-type: none"> The trading value of Pioneer Stock Board in 2022 increased by nearly 15% as compared to 2021. Established a Sustainability-Linked Bond Market. In line with the “Corporate Governance 3.0 - Sustainability Roadmap” , TPEX issued the Reference guide for Independent Director and Audit Committee, promoted the introduction of corporate risk management mechanism by Main Board companies, and added regulations which requested Main Board companies to add a special area on the website to disclose relevant information on corporate governance. Suppliers are required to sign the “Corporate Sustainability Development Commitments” , with a total of 188 letters signed in 2022.


SDGs/SSE	Targets/Indicators	Specific Actions in 2022
 	<ul style="list-style-type: none"> Promoting corporate sustainable development 	<ul style="list-style-type: none"> The 8th Corporate Governance Evaluation was completed, with 28 companies newly ranked in the top 20% of Main Board companies and 9 companies newly ranked in the top 5%, and 6 of them made it on the list for the first time. In 2022, a total of 196 Main Board companies issued the 2021 sustainability report, of which 145 were voluntary. Set up the Sustainability Road Map Consultation Team to provide consultation channels for relevant issues of Main Board companies. An “ESG Section” with a single inquiry entrance has been established to continuously maintain and enrich the contents of the section.
 	<ul style="list-style-type: none"> Taking relevant measures to respond to climate change and its impact 	<ul style="list-style-type: none"> In 2022, a total of 44 Sustainable Bonds were issued, with an issue amount of NT\$112.247 billion. Both the issue size and amount reached a record high. In 2022, the “TIP TPEX ESG Sustainable High Dividend Total Return Index” and the “TIP Customized TPEX ESG 30 Index” were launched to reflect the performance of equity portfolio with sustainable characteristics in TPEX market. Promoting electronic operations; using energy-efficient lamps, reducing heat to lower electricity usage; in addition, the contract for solar energy has been completed, and the first green electricity supply has been completed in January 2022. In 2022, TPEX has obtained 296 renewable energy certificates issued by the Ministry of Economy, accounting for 22.41% of renewable energy.
	<ul style="list-style-type: none"> Conservation and sustainable use of terrestrial ecosystems to ensure biodiversity and prevent land degradation 	<ul style="list-style-type: none"> Sponsoring the organic farming program in the water conservation area of Jade Reservoir. Sponsoring the Guandu National Nature Park Care Plan to improve the maintenance and management of wetlands. There are expected to be over 6,700 reforestation plants in coastal and mountainous areas.
	<ul style="list-style-type: none"> Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels 	<ul style="list-style-type: none"> Responding to the disaster relief action in Ukraine and supporting the International Assistance Program in Ukraine.
 	<ul style="list-style-type: none"> Strengthening the implementation of sustainability and activating the global partnership for sustainability 	<ul style="list-style-type: none"> TPEX continued participating in major international conferences, including: <ul style="list-style-type: none"> The 61st annual meeting and general assembly video conference of WFE and WFE-IOMA Clearing & Financial Derivatives Conference online seminar. Affiliated Members Consultative Committee (AMCC) 2022 online seminar; AMCC 2022 mid-year meeting; IOSCO 2022 World Investor Week (WIW) video conference. The Global Association of Central Counterparties (CCP12) 2022 annual and special annual meeting video conference. AOSEF 2022 Working Committee video conference and online seminars. Meetings of other securities-related organizations, such as video conferences or seminars organized by Citadel Securities, Korea Exchange and Asian Corporate Governance Association (ACGA).

2. ESG Section


TPEX actively promotes sustainability, including responding to the United Nations Sustainable Development Goals, continuously encouraging Main Board and Emerging Stock Market companies to attach importance to corporate governance, and actively optimizing the mechanism of green finance and ESG-related commodities. Various ESG-related information has been set up on the official website for public reference. In order to provide enterprises and the investing public with one-stop information on the sustainability of TPEX, an ESG Section single inquiry portal was established on September 29, 2022, covering four major themes, namely “Sustainable Bond Market”, “ESG for Listed Companies”, “ESG Indices & ETP” and “Our Sustainability”, to facilitate market participants' inquiries.



ESG Section




Sustainable Bond Market




To facilitate investors' understanding of the issuer's overall sustainable bond strategy and execution effectiveness, enhance the disclosure of sustainable bond information, and assist the issuers in providing more comprehensive information to establish investor confidence, ESG Section provides sustainable bond issuance overview, research papers and news. In addition, in November 2022, the "Issuer-Level Sustainability Strategies" and "Impacts of Sustainable Bonds" sections were added to provide investors with more comprehensive information about sustainable bonds. In the future, TPEX will continue to enhance the disclosure of information in the ESG Section based on the information provided by the websites of major stock exchange in the world.

ESG for Listed Companies




TPEX provides the introduction to sustainable development, sustainability reports, Sustainable Development Roadmap, Corporate Governance Evaluation System, relevant rules and best-practice principles, and other references for Main Board companies as references for enhancing their ESG efforts. In the future, TPEX will update the relevant information in accordance with ESG.

ESG Indices & ETP



TPEX exerts multiple influences to promote sustainability. In addition to assisting Main Board companies in engaging in sustainable development, TPEX proactively created sustainable products and innovative systems. This includes launching ESG indices and products, using market mechanisms to guide enterprises in prioritizing sustainability issues, and providing investors with responsible investment products and information.

Our Sustainability



TPEX recognizes and supports the United Nations' efforts to promote sustainable development goals in the areas of environment, society, and governance. TPEX actively responds to the United Nations' initiative for "Sustainable Stock Exchanges". Apart from integrating sustainable activities into its daily operations, TPEX also proactively extends these efforts to the market, aiming to encourage more market participants to collectively prioritize sustainable development.

3. Anti-Financial Investment Fraud Zone

In order to cooperate with the work plan of anti-financial investment fraud publicity project of the competent authority, TPEx participated in the publicity ceremony for anti-financial investment fraud on September 19, 2022, and actively continued to conduct the anti-financial investment fraud publicity through multiple channels.

In view of the increasing prevalence of financial investment fraud cases, in order to enable investors to be alert and raise their awareness of fraud prevention, TPEx established the “Anti-Financial Investment Fraud Zone” on its official website on September 30, 2022, which integrates press release, video clips, Facebook posts and other information to strengthen the public's awareness of anti-financial investment fraud through diversified means.



Publicity Ceremony for Anti-Financial Investment Fraud on September 19, 2022



September 30, 2022
TPEx Investor Seminars (Taipei) - Promotion on Anti-Financial Fraud



October 3, 2022
Financial Talent Camp - Promotion on Anti-Financial Fraud

Promotion performance in 2022

Action	Performance
Continuous release of FB posts	In 2022, 67 posts on anti-financial investment fraud were published on the FB fan page of TPEx.
Press releases	In 2022, a total of 4 press releases were issued to remind investors to be vigilant and be cautious about the traps, so as to protect their property safety.
Produced anti-fraud publicity video	In 2022, 6 anti-financial investment fraud publicity videos were produced and were placed in the Anti-Financial Investment Fraud Zone of TPEx for investors to browse and enhance investors' awareness of anti-financial investment fraud.
Held an online prize-winning contest	Held a 5-week “Anti-Investment Fraud Quizzes with Award” from September 26, 2022 to October 30, 2022, which allows investors to understand the current common online financial investment fraud pattern through online prize-winning games, thereby reviewing their self-awareness of online fraud and their awareness of fraud prevention. A total of 78,882 investors across the province participated in the event.
Publicity in physical activities	<ul style="list-style-type: none"> • 4 “Education Seminars: TPEx Trading Practices and Other Business” and 2 Education Seminars: The Taipei Exchange Market were held in 2022. • “Financial Talent Camp” was held on October 3, 2022. • “FinTech Taipei 2022” was held on October 28 and 29, 2022, respectively. • “2022 GISA Pitch” were held on November 9, 2022. • “2022 Meet Taipei - Startups for Tomorrow” was held in 2022.
Assisting in the detection of fraud in cross-border securities and futures trading	The search system was set up in July 2022 to regularly collect the names and keywords of more than 500 cross-border trading platforms and 11,000 web channels. 33 abnormal messages suspected of fraud or erotic information have been collected, have been reported to Anti-fraud hotline 165 and 2 cases of fraudulent websites have been successfully blocked.

4. Strengthening the Disclosure of Sustainable Information of Main Board Company

Formulate relevant guidelines and FAQs

With the official launch of Sustainable Roadmap for TWSE/TPEX Listed Companies by the FSC on March 3, 2022, TPEX and the TWSE, with reference to the international capital market regulations and development trends, announced the amendment of the “Rules Governing the Preparation and Filing of Sustainability Reports by Main Board Company” on September 26, 2022. On December 21, TPEX and the TWSE jointly issued the Directions for the Implementation of Assurance Institutions for the Sustainability Report of TWSE/TPEX Listed Companies and formulated application documents and relevant FAQs to assist Main Board company to promote the disclosure of greenhouse gas information and ensure the quality of information, with a view to cooperating with the third-party assurance institutions to jointly TWSE/TPEX Listed Companies in facilitating the greenhouse gas inventory.

Strengthen the disclosure of ESG information of Main Board companies

Main Board companies should report relevant information or state the current status of corporate information disclosure at Market Observation Post within six months after the end of each fiscal year. The seven major issues disclosed at the early stage of the report include greenhouse gas emissions, energy management, water resources management, waste management, human resources development, and communication with the board and investors, with a total of 29 indicators. The ESG information disclosure and declaration operation system and the query website were launched on May 31, 2022. Investors can inquire about the information of individual companies or industries through the website of Market Observation Post\ Corporate Governance\ Information relating to corporate social responsibility \ ESG information.

Set up a “Sustainability Roadmap Section”

In order to help Main Board companies to build carbon management capabilities as early as possible, on May 12, 2022, TPEX has set up a “Sustainability Roadmap Section” on TPEX Service Portal which contains information on the applicable schedule for each stage, description of promotion planning, FAQs and resource sharing, communicates and shares resources with Industrial Development Bureau, MOEA (IDB), the Bureau of Standards, Metrology and Inspection

and relevant counseling agencies and continuously updates the resources of the section for the reference of Main Board companies.

According to the planning of the Sustainability Roadmap, TPEX conducts relevant practical publicity, promotes the disclosure of greenhouse gas information and ensures the quality of information, and continues to share resources with government units to assist and guide Main Board companies to establish greenhouse gas inventory capabilities.

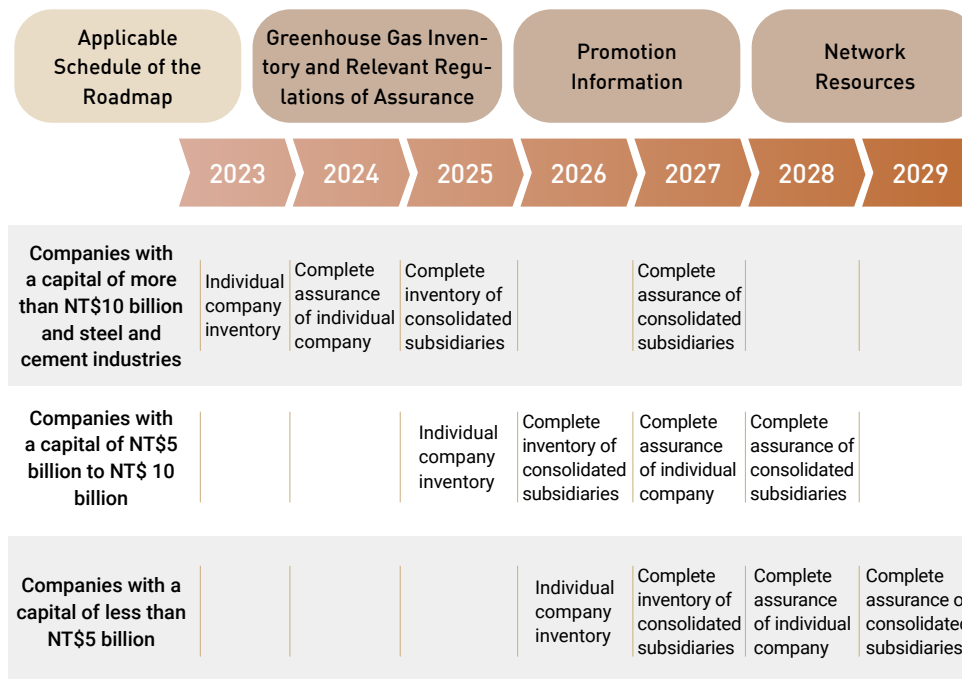
Set up a sustainable development roadmap consultation group

TPEX conducted a number of internal education and training courses on greenhouse gas inventory and assurance guideline, strengthened the professional knowledge of colleagues, and set up a sustainable development roadmap consultation group to provide Main Board companies with consultation channels on relevant issues.



Sustainability Roadmap

Sustainability Roadmap



Conducting greenhouse gas inventory and assurance promotional events

TPEX joined hands with the TWSE to hold a number of promotional courses:

One public hearing was held to exchange opinions with the Main Board companies on carbon inventory and information disclosure to understand the problems and difficulties faced by the Main Board companies, so as to assist the Main Board companies in building the greenhouse gas inventory capability.



Two practical teaching promotion courses on greenhouse gas inventory were held together with the TWSE through online video.

Three “Sustainability Roadmap Industry Theme Publicity Meetings” were held to organize different practical courses for the Directors, Supervisors and dedicated business personnel of TPEX.



One “Assurance Institution for Sustainability Report Management Seminar” was held to promote relevant regulations and procedures for the assurance organization, which is expected to help the assurance organization to jointly guide the Main Board companies to promote greenhouse gas inventory and assurance.

Subsequent planning direction and focus

The greenhouse gas inventory information disclosed in the current Sustainability Roadmap includes Scope 1 and Scope 2. The indirect greenhouse gas emission information in Scope 3 is increasingly valued by the international community. In order to promote the planning for subsequent policies, TPEX will continue to review the implementation ability of the enterprise to disclose and assure the greenhouse gas emission in Scope 3, consider the international trend and the domestic development situation, follow the policy of the Financial Supervisory Commission, continue to plan in the future based on the overall implementation status, and continue to conduct promotional events to help Main Board companies promote the sustainable development.



Successful “Assurance Institution for Sustainability Report Management Seminar”

5. Sustainability-Linked Bond (SLB)

In order to help enterprises achieve their overall sustainable development strategic goals, move towards zero emission and sustainable transformation, and expand the scope of Taiwan's Sustainable Bond Market, TPEX has taken into account the relevant principles of the international market and the practices of the international sustainable development bond market. On July 8, 2022, the "Taipei Exchange Operation Directions for Sustainable Bonds" were amended and the sustainability-linked bond (SLB) was launched and Sustainability Bond Market was established, with an aim to provide more diversified sustainable development financing and investment tools for domestic and foreign issuers and investors, and to align with the international market trends.

The SLB refers to bonds for which the principal and interest payment terms are linked to the issuer's sustainability performance targets (SPTs) and does not impose restrictions on the use of proceeds, and is characterized by a mechanism that ensures that the issuer incorporates sustainable development objectives into its business decisions and business model by setting sustainability performance targets (SPTs) and linking these SPTs to principal and interest payment terms.

The main difference between SLBs and sustainable Use-of-Proceeds (UoP) bonds is that the funds of SLB can be used for general business purposes rather than for specific investment projects. SLBs ensure that issuers incorporate sustainability into their operational strategies and business models by setting Key Performance Indicators (KPIs) and Sustainability Performance Targets (SPTs), which are linked to the principal and interest payment terms of the bonds.

On September 14, 2022, TPEX held the first batch of "Sustainability-linked Bond Listing Ceremony". Far Eastern New Century and CHI MEI each issued NT\$2.5 billion and NT\$1 billion of Sustainability-linked Bond (SLB), becoming the leaders in the SLB market. TPEX invited competent authorities, issuers and evaluation agencies to deliver a speech, and invited Mr. Nicholas Pfaff, the Deputy Chief Executive Officer and Head of Sustainable Finance of the International Capital Market Association (ICMA), to record a video congratulating on the first batch of Sustainability-linked Bond issuance and exchange, which was recognized by the



ICMA
Deputy Chief Executive Officer and Head of Sustainable Finance Mr. Nicholas Pfaff

issuers and international sustainable development bond promotion agencies, effectively improving the international visibility of Taiwan and helping the public understand the sustainable bond market of Taiwan. As at December 31, 2022, the accumulated issuance number of SLB was two and the accumulated issuance amount was NT\$3.5 billion.

In order to encourage more market participants to join the SLB, TPEX will continue to hold the SLB publicity seminar and release media reports and press releases, and will actively visit potential issuers, investors and intermediaries to promote the issuance system and investment and financing advantages of SLB. In addition, TPEX will continue to track the development trend of the international SLB market, including the relevant standards of SLB updated and issued by major international organizations, and provide relevant information to market participants in a timely manner to assist domestic companies to issue SLB that meets international standards and enhance investors' investment willingness.

Examples

An issuer selects to link the bond to greenhouse gas emissions performance. ——— KPI

The target is to reduce emissions by 30% by the end of 2025 compared to the end of 2018. ——— SPT

The coupon rate will be increased by 0.25% if the target is not met on the ——— Bond Principal and Interest Payment Terms



Listing Ceremony of Sustainability-Linked Bonds of Far Eastern New Century and CHI MEI

6. ESG Indices and Index Linked Products

In order to further transform enterprise's investment in sustainable development into a positive impact on the capital market, TPEX has actively launched ESG-related indices and promoted index-linked products since 2020. On June 29, 2020, TPEX launched the first benchmark “TIP Taiwan TPEX ESG Index”. The index is prepared based on the corporate Corporate Governance Evaluation System and the sustainability reports promoted by the competent authorities, with a view to urging Main Board companies to continuously improve the quality of corporate governance, and encouraging Main Board companies to record their actions in E, S and G in detail. The index has successfully attracted the attention of the Main Board companies and the capital market after its launch, which not only provides a good reference for investors who value sustainable decisions, but also encourages the Main Board companies to continuously improve their own effectiveness in sustainable operation, with a view to being included as a constituent stock of the index, thereby improving company's visibility.

TPEX continued to promote the sustainable-related index. In 2021, after combining the ESG theme with the advantages of the clustering of electronic stocks in the TPEX market and the high growth characteristics of small and medium-sized enterprises, TPEX has cooperated with Taiwan Index Plus Corporation and Taiwan Business Council for Sustainable Development to prepare and launch the “TIP Customized TPEX ESG IT Elite Total Return Index” and the “TIP Customized TPEX ESG Growth Total Return Index”, and in 2022, the “TIP Customized TPEX ESG High Dividend Total Return Index” and the “TIP Customized TPEX ESG 30 Index” were launched to provide more market participants with more targeted observation indicators:

TIP Customized TPEX ESG High Dividend Total Return Index

code: IR0173

The Index is designed to reflect portfolio performance of TPEX-listed companies that contain sustainability, dividend performance, good liquidity and considerable market capitalization.

The collaboration among Taiwan Index Plus Corporation (TIP), TPEX and Business Council for Sustainable Development of Taiwan built up the evaluation model and ESG scores by leveraging the sustainability reports, annual reports and further public information. TIP utilizes ESG scores, 3-year dividend yield and market capitalization to select 10 to 15 TPEX-listed stocks and applies free-float adjusted market capitalization and liquidity as weighting scheme; TIP designs TIP Customized TPEX ESG High Dividend Total Return Index (abbr. TIP TPEX ESG HD Total Return Index) to reflect portfolio performance of TPEX-listed stocks that contain sustainability, dividend performance, good liquidity and considerable market capitalization. The Index was also an ETN tracking target and was the first ETN with a distribution type in domestic at that time.

TIP Customized TPEX ESG 30 Index

code: IX0177

The index focuses on ESG performance and financial indicators, which excludes high-polluting and high-energy-consuming industries, selects TPEX listed companies with good investment capacity and sustainable development performance.

TPEX collaborated with Taiwan Index Plus Corporation (TIP) and Center for Corporate Sustainability from the College of Business at National Taipei University (NTPU), and designs “TIP Customized TPEX ESG 30 Index” on September 26, 2022. The index adopts the model of Taiwan Sustainability Ratings System developed by Center for Corporate Sustainability from the College of Business at National Taipei University to review whether an enterprise has an appropriate sustainable vision, and removes the constituent stocks of high pollution, high energy consumption industries and financial indicators. It also further excludes the controversial industries that affect social development, including companies engaged in military-controversial weapons, gambling (game), adult entertainment, tobacco and alcohol, tropical rainforest logging and drugs. Meanwhile, it has a cap on industrial weight to avoid concentration in a single industry. Its preparation of each link is highly in line with market trends, and it is expected to become a tracking target of listed ETF products, with a view to enabling the ETF investors to exert sustainable influence, and leading the enterprises to invest in high-quality options for sustainable development.

In recent years, responsible investment has become a trend. ESG information has become an important factor for investors to consider when deciding on investment decisions. Institutional investors use ESG-related indices as a tracking target of financial products to develop diversified ESG products, which is expected to effectively guide the capital market funds to invest in sustainable development. In cooperation with the “Sustainable Development Roadmap” and the “Sustainable Development Action Plans for TWSE / TPEX Listed Companies (2023)” published by the competent authorities, TPEX will continue to promote sustainable investment. In addition to the ESG integrated index, relevant indices on sustainability issues will be compiled according to the investment needs of the market, for example, taking into account the trend of international index preparation, planning and launching climate change related indices in a timely manner, etc., with a view to provide a more diversified reference index for the market.

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Robust Market

CHAPTER 1

1.1.1 Trading Mechanism Optimization

Considering that natural persons account for 70% of transaction value, TPEX has committed to promoting a more efficient and convenient trading environment. Promoting transaction efficiency is the main development direction of TPEX to achieve fair competition between natural persons and legal persons in an environment.

Continuously promoting Market Maker and Liquidity Provider Programs

In June 2021, TPEX launched the Market Maker and Liquidity Provider Programs. After the launch of the Program, the market maker actively fulfilled its quotation obligations and improved the trading opportunities of Main Board stocks of high quality with low liquidity. Over 93% of high quality stocks with low liquidity selected by the market makers in 2022 have met their quotation obligations, which is conducive to increasing the liquidity of underlying assets and the opportunities for investors to make transactions.

In order to encourage securities dealers to actively participate in the Market Maker and Liquidity Provider Programs, TPEX provides a fee reduction of more than a certain percentage of participating securities dealers in a system that meets the quotation obligations or trading thresholds. Moreover, TPEX continues to organize the market maker competitions to reward “market makers” with outstanding performance. In the future, TPEX will continue to refer to foreign practices and observe domestic implementation status, timely evaluate and adjust the selection criteria for stock, and the qualifications for market makers and liquidity providers, and continuously promote the plan to improve the effectiveness of the operation of the Market Maker and Liquidity Provider Programs.

In order to continue to encourage stock market makers to more actively make a market and respond to the international trend of promoting sustainable development, TPEX has planned an award event for the competition of stock market makers in the first half of 2023, and offered a higher award rate for “Sustainable Development Concept Shares” to continuously encourage stock market makers to actively make a market and improve the liquidity of high-quality and low-liquidity Main Board stocks.

The matching periods of odd lot trading were shortened to 1 minute

It has been more than 2 years since the launch of the TPEX intraday odd lot trading system. Both the trading value and the number of odd lot trading have increased significantly. In order to further enhance the matching opportunity and efficiency of odd lot trading and take into account the thinking time for investors to prudently place orders, the matching periods of odd lot trading on Main Board were shortened from 3 minutes to 1 minute from December 19, 2022.

Multiple promotion channels

Communicate opinions with securities companies through Taiwan Securities Association, and hold seminars for securities companies.

Hold education seminars, set up investor hotline, and investor mailbox.

TPEX sets up the website (TPEX official website > Mainboard > Trading System > Market Maker or > Intraday odd lot trading) and social network sites.

1.1.2 Diverse Financial Instruments

As the main promoter, TPEX is committed to developing and promoting a number of financial product and policies, building a dynamic and sound financial environment to meet the product diverse needs of investors.

Launching of relevant ESG indexes and thematic investment products

In order to meet the needs of sustainable investment, TPEX launched the “TIP Taiwan TPEX ESG Index” in 2020. In 2021, TPEX launched the “TIP Customized TPEX ESG IT Elite Total Return Index” and “TIP Customized TPEX ESG Growth Total Return Index”, combined with the advantages of the clustering of electronic stocks in the TPEX market and the high growth characteristics of small and medium-sized enterprises, by working with Taiwan Index Plus Corporation and Business Council for Sustainable Development of Taiwan. The performance of the two indexes was outstanding. Besides, securities companies also issued ESG-themed ETN products, providing investors with more diversified sustainable investment solutions.

In 2022, TPEX continued to cooperate with Taiwan Index Plus Corporation and domestic ESG evaluation institutions. In July and September 2022, the “TIP Customized TPEX ESG High Dividend Total Return Index” and the “TIP Customized TPEX ESG 30 Index” were launched respectively. The former was the tracking target of ETN of securities companies and was listed on the market on October 3, 2022. The latter is expected to be a linked index for the issuance of ETF products, with a view to providing investors with more diversified sustainable-related indexed investment solutions.

Establishing the Sustainability-Linked Bond (SLB) Market

In 2022, in order to expand the category of sustainable bond products, and help more enterprises to utilize financing tools with zero emission and sustainable transformation, TPEX has established the Sustainability-Linked Bond (SLB) Market with reference to international financial market standards and development trends, so as to further diversify the domestic sustainable bond products and facilitate the diversified development of Sustainable Bonds issuers. In the future, TPEX will continue to take into account the development trend of the international market and provide more diversified financing and investment products in line with the ESG spirit de-

pending on market demand. (Please refer to the Sustainability-Linked Bond (SLB) under Sustainable Strategy for relevant information on SLB.)

The issuance volume of the sustainable bonds market hit a new high

With regard to the sustainable bond market in 2022, the issuance volume and balance broke the mark of NT\$110 billion and NT\$360 billion, respectively, setting a new milestone in the domestic bond market. In 2022, a total of 44 sustainable bonds were issued, with an issuance amount of NT\$112.247 billion. Both the number of issued bonds and the issuance amount reached a record high, representing an increase of 26% and 6% as compared with 2021 (35 bonds and NT\$105.83 billion), respectively. At the end of 2022, there were a total of 126 bonds outstanding, with a total outstanding amount of NT\$363.334 billion, representing an increase of 39% as compared to the total outstanding amount at the end of 2021 (NT\$261.297 billion).

The number and amount of issued bonds on the Sustainable Bond Market in 2022

	Green Bonds	Sustainability Bonds	Social Bonds	Sustainability-linked Bonds
Number of issuances	27	12	3	2
Issuance amount (NT\$100 m)	794.23	237.24	56	35

In terms of issuers, the participation of domestic issuers was higher than foreign issuers in 2022. The domestic issuance amount reached NT\$82.6 billion, more than twice the foreign issuance amount (NT\$ 29.647 billion). Among domestic issuers, in addition to E.Sun Bank, Land Bank, Taiwan Semiconductor Manufacturing Company, Vanguard International Semiconductor Corporation and Taipower, which continue to participate in the issuance, there are also four new domestic issuers, namely, ChungHwa Telecom, Far EasTone Telecom, Solar and Shanghai Commercial Bank, participating in the issuance for the first time, adding new impetus to revive the domestic market; In addition, in 2022, the participation in the domestic production industry was more active, with the issuance amount reaching NT\$60.2 billion, accounting for 73% of the do-

mestic issuance amount, indicating that more and more domestic enterprises have been able to effectively make use of Taiwan's Sustainable Bond Market to raise funds for sustainable transformation.

The scale of the International Bond Market continued to grow and develop toward diversification

By the end of 2022, there were 872 international bonds and the balance reached NT\$6.17 trillion, which was a new record high. With the active participation of the TPEX in promoting the diversification of issuers, by the end of 2022, there were a total of 135 issuers in the International Bond Market, distributed in 33 different countries. In terms of the industrial attributes of issuers, there are 16 different categories, including 8 sovereign bonds and 1 local government bond.

Five new issuers were added in 2022, registered in Spain, India and the U.S. in the financial services and energy sectors, indicating that the international bond market in Taiwan has become one of the most important bond financing markets in the world, which also helps to provide investors with more diversified products and options, and diversify investors' investment risks.

Product diversity and innovation is the key to the growth of capital market

TPEX is committed to new indexes, new products, new systems and promotions, and con-

ducts information exchanges through holding seminars and actively visiting issuers and intermediaries. With the joint efforts and active participation of all market participants, TPEX hopes to effectively utilize capital market funds and transform them into a momentum for supporting industrial entrepreneurship transformation and injecting real economic growth.

Average Daily Number and Volume of Trades Executed at TPEX in 2022

Products / asset types	Average Daily Number of Trades in 2022 (Times)	Average Daily Volume of Trades in 2022 (NT\$)
Stocks	487,082	60,482,372,720
Call (put) warrants	20,321	543,665,267
Exchange-Traded Funds (ETFs)	7,931	927,473,083
Exchange Traded Notes (ETNs)	194	7,829,579
Local Currency Bonds (government bonds, corporate bonds, financial debentures)	1,601	116,186,636,413
Foreign Currency Bonds	27	2,777,594,028



1.1.3 Expanding the Capital Market

The main purpose of TPEX is to support the development of emerging enterprises, provide enterprises with convenient fund-raising channels to facilitate efficient financing in the primary market, and assist them to develop and thrive in the future to create employment opportunities and economic momentum, while taking into account the protection of investors' rights and interests and meeting the fund-raising needs of enterprises. TPEX will also follow the development trend of domestic and foreign markets, review and revise relevant regulations/rules and supporting measures in a timely manner, and improve various systems to create a fair, efficient, innovative, open, diversified, and internationalized capital market.

A multi-tiered capital market

As of the end of December 2022, 808 companies in total (777 domestic companies and 31 foreign companies) were listed on Main Board, 299 companies (296 domestic companies and 3 foreign companies) were registered on the Emerging Stock Market, and 97 domestic companies were registered on GISA.

The multi-tiered market structure of the TPEX enables enterprises of different scales and developing stages to choose suitable board for financing. It also allows investors to select markets and targets that meet their investment needs after taking into account their own financial conditions, risk tolerance and investment strategies. The main features of each board are as follows:

Market Category	Positioning	Company Attributes	Characteristics of the Registered (Listing) Companies
GISA	Provide professional counseling and fundraising functions	Non-public offering	Micro, small and medium-sized enterprises with innovative and creative ideas
Emerging Stock Market-Pioneer Stock Board	Preparation for listing on the Main Board, stage-by-stage incubation applies	Public offering ^{Note1}	1. Innovative enterprises focusing on six core strategic industries- ^{Note2} , most of which are still in the development stage 2. Adopting the mechanism of securities firm counseling
Emerging Stock Market-Emerging Stock Board	Preparation for listing on the Main Board, stage-by-stage incubation applies	Public offering	1. Mainly small and medium-sized enterprises with relatively mature operations 2. Adopting the mechanism of securities firm counseling
Main Board	Main Board Market	Public offering	Small and medium-sized enterprises or companies in emerging industries with relatively mature operations and certain performance and scale

Note 1: The application for PSB registration and filings for simplified public issuing can be submitted to TPEX at the same time.

Note 2: 6 core strategic industries: (1) information and digital industries (IoT, AI, etc.), (2) cybersecurity industry which can integrate with 5G, digital transformation, and national security, (3) biomedical technology industries in line with international standards, (4) national defense and strategic industries integrating military and civilian business (aerospace and space, etc.), (5) green and renewable energy industries, (6) Strategic stockpile industries relating to the provision of critical supplies.

Encourage domestic and foreign high-quality enterprises to register on Emerging Stock Market (Emerging Stock Board/Pioneer Stock Board) or apply for listing on Main Board

- Held or participated in 14 domestic and foreign business promotional briefings (two of which were conducted online), and visited and received visits from 85 domestic and foreign enterprises.
- A total of 12 “Main Board and Emerging Stock Market Promotion Seminars” were held with intermediaries.
- In order to attract high-quality overseas companies to apply for listing / registering on Main Board or Emerging Stock Market, 1 session of “Foreign Issuer Listing on TPEX” was held online with accounting firms; in addition, a dedicated service window for overseas companies has been set up to handle the business promotion.
- Visited 5 high-quality Taiwanese enterprises in Ho Chi Minh City, Vietnam.
- Continue to communicate or cooperate with governments to jointly promote high-quality enterprises to enter the capital market.
- In order to promote the Pioneer Stock Board and introduce systems, TPEX has visited 24 companies.
- Arrange business promotion activities, including potential cases provided by intermediaries such as securities firms and accounting firms.

Encourage domestic enterprises to register on GISA

- A total of 24 GISA companies have been successfully transferred to public offering, of which 19 are currently registered on the Emerging Stock Market, and 2 companies have been successfully listed on Main Board.
- Participated in a total of 48 promotional seminars related to GISA; subsidized 35 GISA companies to participate in domestic professional exhibitions; TPEX participated in the “2022 InnoVEX Online Exhibition”, “2022 Meet Taipei - Startup Festival”, and “2022 Meet Greater South Expo” with 16 GISA companies.
- Organized 2 startup investment (and business) matching meetings, and assisted 15 GISA companies to conduct one-on-one negotiations with large enterprises, venture capitals or investors with business collaboration opportunities or investment possibilities.
- Provision of one-on-one legal consulting services for GISA companies.



TPEX participated in “2022 Meet Greater South Expo” with GISA companies

Since its establishment, TPEX has followed the development trend of the international capital market and actively supported small and medium-sized enterprises to enter the capital market. With the strategic goal of building “multi-functional and multi-tiered comprehensive exchange”, after years of development, TPEX has built a complete multi-tiered capital market structure. Through stage-by-stage incubation, it assists micro, small and medium-sized, and even large enterprises to select suitable listing boards based on their own scale and development needs. At the same time, through relevant counseling mechanisms, financing channels and appropriate supervision systems, the companies can continuously strengthen their operation quality through the capital market platform. TPEX has been recognized as one of the most successful SME exchanges in the world by the World Bank with its excellent development performance.

TPEX will actively pursue national policies to promote industrial development, continue to understand the needs of enterprises, review and revise relevant regulations in a timely manner, promote more high-quality enterprises to enter the capital market while protecting the interests of investors and shareholders, and assist enterprises to meet international competition and challenges in a rapidly changing business environment, so as to achieve the goal of sustainable development.

1.1.4 Expanding Investment Participation

TPEX provides bonds, stocks, warrants, ETFs, ETNs, and derivatives to attract investors of different attributes and types to participate in the investment. A variety of incentives and promotional activities have been planned and designed.

Enhancing market visibility and investor participation of Pioneer Stock Board

From August 23, 2022, TPEX adjusted the financial proof threshold for natural eligible investors from “NT\$10 million” to “NT\$5 million”, hoping to increase the participation of natural eligible investors in the PSB market on the condition that investors and securities firms assume a reasonable risk tolerance.

In order to enhance the market visibility of Pioneer Stock Board, TPEX has held a series of promotional activities since January 2022, including a number of reward activities for accredited natural person investors and securities dealers, including “The Drawing Game for the Natural Persons Meeting the Criteria for Qualified Investors”, “The PSB Incentive Programs for Securities Brokers to Increase the Number of Natural Persons Meeting the Criteria for Qualified Investors”, “Securities Firms Reward Program” and “Promotion Subsidy Activities for Securities Firms”, etc., with a view to enabling more securities dealers and investors to understand Pioneer Stock Board through diversified rewards.

According to the statistics, as of the end of December 2022, the number of qualified investors in the PSB has officially exceeded 110,000 (as of the end of 2021: 66,000), of which the number of natural persons meeting the criteria for qualified investors has increased to 43,000



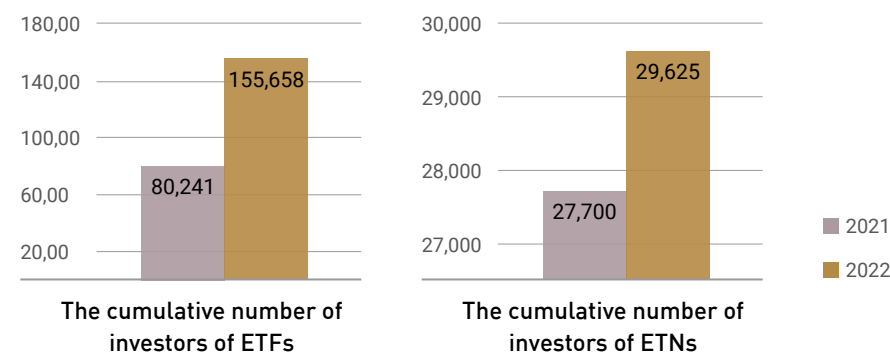
TPEX held a seminar for Pioneer Stock Board with intermediary agencies

(as of the end of 2021: 4,000), and the trading value of stocks on Pioneer Stock Board in 2022 has also increased by nearly 15% compared with 2021, indicating that various promotion activities on Pioneer Stock Board have effectively attracted the participation of securities dealers and qualified investors.

The investors of the listed bond ETFs and ETNs continued to increase

The effect of the decentralization of the bond ETFs and ETNs vigorously promoted by TPEX has gradually emerged, and the listing number and issuance size of the bond ETFs ranked first among the major stock exchanges in Asia and Australia and ranked seventh among the major stock exchanges in the world.

The number of the bond ETFs listed in 2022 was 81, with an issuance size of NT\$1.19 trillion, and the cumulative number of investors increased by more than 90% compared to 2021, and almost all of the new investors were natural persons, with the number of new natural person investors exceeding 70,000. For the ETNs, as of the end of 2022, there were 10 ETNs listed on Main Board, and the number of investors increased by 1,925 compared to the previous year.



As ETFs and ETNs have the advantages such as low transaction costs, high transparency, and good liquidity, they are financial instruments suitable for the investing public. TPEX will continue to launch incentive activities to encourage more investors to participate in the investment in index linked products listed on Main Board.

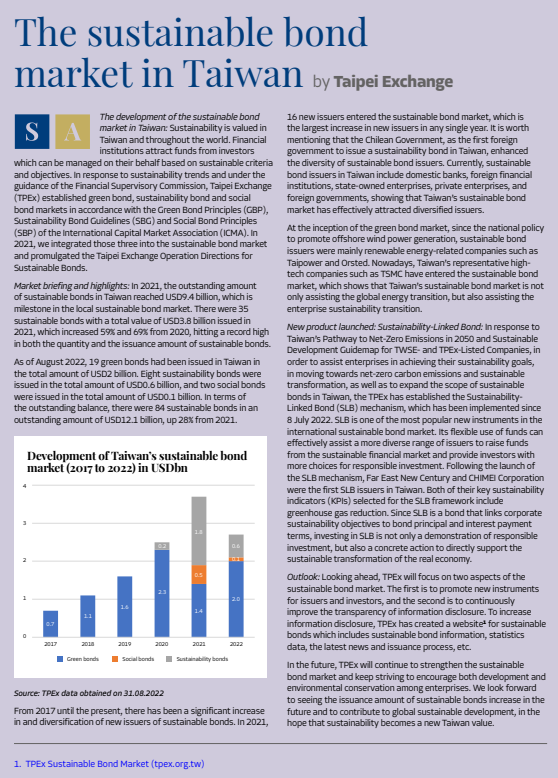
Action	Performance	Highlights
The Drawing Game for the Natural Persons Meeting the Criteria for Qualified Investors ^{Note}	24,000 participants	Encourage investors to participate in transactions of Pioneer Stock Board and expand the transaction level.
Bond ETF Investor Reward Program	In 2022, a total bonus of nearly NT\$2 million was distributed to 640 winners and 5 winning securities firms.	The effect of the decentralization of bond ETFs has gradually emerged. In 2022, the cumulative number of investors in bond ETFs listed on Main Board Market has exceeded 150,000, an increase of 75,000 over last year, an increase of 94%.

Note:Activity period: the first quarter, the second quarter and the fourth quarter of 2022

Sustainable bonds have been connected to the international market

According to the Quarterly Report of ICMA for the fourth quarter of 2022, TPEX marketed the sustainable bond market of Taiwan together with ICMA. By cooperating with ICMA, TPEX has made positive contributions in mastering international market trends, improving the international visibility of the sustainable bond market of Taiwan, aligning the market systems with international standards, and promoting the sustainable bond market of Taiwan, making TPEX become the leader in the international market of sustainable bonds.

TPEX introduced the sustainable bond market of Taiwan in the Quarterly Report of ICMA for the fourth quarter of 2022



TPEX builds a diverse investment-friendly environment and strengthens the risk awareness of young investors

Through conducting seminars and visiting issuers and intermediaries, we exchange information with market participants, encourage market participants to invest, and enhance the vitality of the stock market. In addition, in order to help young people establish investment discipline and strengthen risk awareness, TPEX continues to widely reach the young generation through the Internet or social media, and produces lively and interesting promotional media such as promotional videos or online programs (collaborating with well-known financial online programs/live streamers, for key opinion leaders (KOLs) young people agree with to lead the topics) as well as uses various online channels to promote and publicize, so that the themes can be more complete and young people can grasp the key points.

In particular, TPEX has invited financial expert HSIA,YUN-FEN and Secretary LIN,MING-CHUN of the Prevention Division, Criminal Police Bureau to jointly produce an investment fraud prevention publicity video and record the Podcast program, combining the actual cases in the form of interviews, talking about the most common investment fraud practices and the contingency measures to be taken when encountering frauds. In the video, the experts specially provided multi-directional practical experience sharing to new investors, and explained the importance of investment risk control and investment fraud prevention in an interesting and practical way, as well as the important information on how to avoid risks before and during investment, hoping to help the investor group to better grasp the investment situation and stay away from the fraud traps.



1.2

Promoting Sustainable Market

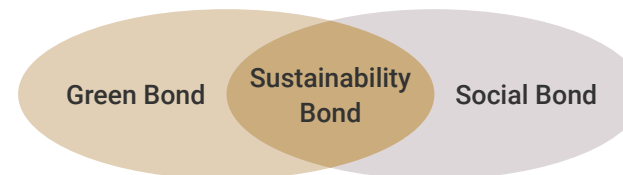
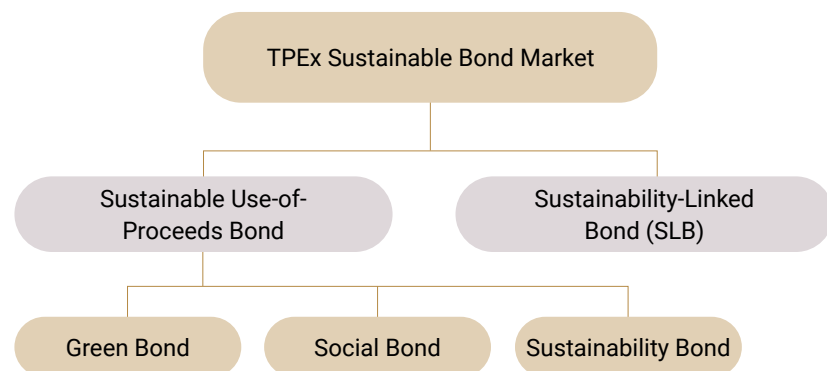
1.2.1 Promotion of Green Finance

TPEX hopes to promote sustainable products and green finance through the financial market, encourage enterprises and investors to provide further consideration to environmental, social, and, corporate governance issues, and facilitate a virtuous cycle of investment and industrial pursuit of sustainable development, which will enable Taiwan to accelerate the low-carbon transition and to realize a sustainable development vision.

In line with the government's "Green Finance Action Plan", TPEX launched Green Bond, Sustainability Bond, and Social Bond from 2017 to 2021. To complete the range of sustainable products, TPEX also launched the "Sustainable Bond Market" in 2021.

To strengthen the Sustainable Bond Market, TPEX revised the "Taipei Exchange Operation Directions for Sustainable Bonds" on March 24, 2022, which added relevant regulations for information disclosure of Sustainable Bonds and strengthened the evaluation mechanism for the issuance of Sustainable Bonds by domestic government agencies, so as to improve the Sustainable Bond Market. In addition, TPEX established Sustainability-Linked Bond (SLB) Market on July 8, 2022, to provide a fund-raising channel for medium and long-term funds for sustainable development of market diversification.

Types of Sustainable Bonds in 2022



Green Bond	A bond whose proceeds are used exclusively for green projects
Social Bond	A bond whose proceeds are used exclusively for social projects
Sustainability Bond	A bond whose proceeds are used exclusively for a combination of both green projects and social projects

In 2022, the new issuance number and volume of Green Bonds reached a record high, with a total of 27 bonds amounting to NT\$79.423 billion, representing an increase of 97.1% as compared to 2021 (NT\$40.295 billion). In terms of Sustainability Bonds a total of 12 Sustainability Bonds were issued in 2022, with an issuance amount of NT\$23.724 billion and an outstanding balance of NT\$80.762 billion, representing an increase of 41.6% as compared to 2021 (NT\$57.038 billion).

The issuers of Green Bond and Sustainability Bond in Taiwan are considerably diversified, covering local banks, local branches of foreign banks, state-owned enterprises, domestic private producers, and foreign financial institutions, etc., demonstrating that the fund-raising platform of Green Bond and Sustainability Bond in Taiwan has effectively attracted all kinds of issuers to participate in Taiwan's bond market.

Type of sustainable bond	Time launched	2021		2022	
		Number of issuance	Issuance amount (NT\$1 billion)	Number of issuance	Issuance amount (NT\$1 billion)
Green Bond	April 2017	19	40.295	27	79.423
Sustainability Bond	October 2020	9	51.238	12	23.724
Social Bond	April 2021	7	14.297	3	5.6
Sustainability-linked Bond	July 2022	NA	NA	2	3.5
Total		35	105.830	44	112.247

Green and Renewable Energy Successfully Raised Funds through Capital Markets (2017~2022)

Issuance of Sustainable Bonds					
Company name	 Taipower	 TSMC	 Orsted	 ECOVE	 Chailease
Number of issuance	14	13	5	1	3
Issuance amount	NT\$54.25 billion	NT\$47.6 billion	NT\$27 billion	NT\$1 billion	NT\$4.2 billion
Investment plans	Solar, wind, hydroelectric and geothermal energy generation	Construction of green buildings	Offshore wind power construction	Solar power construction	Solar power construction

Emerging Stock Market registration and listing on Main Board: A total of 8 green energy or circular economy industrial companies were registered on Emerging Stock Market and 1 was listed on Main Board.

2022 publicity and promotion activities

1 online bond promotion and briefing session to introduce the sustainable bond market to the issuers, underwriters, and valuation agencies respectively.

1 online “Sustainable Bond Market (applied for Government Bonds)” to introduce the relevant regulations and assessment mechanism for Sustainable Bonds (applied for Government Bonds) to the local government, the Ministry of Finance, and the Central Bank of the Republic of China.

1 online “Sustainability-linked Bonds Market Introduction” to promote the information reporting of Sustainable Bond to the issuers.

7 online marketing seminars to promote enterprises to use quotes acceptance mechanism of TPEX Derivatives Trading System and achieve paperless operation.

5 visits to high-quality enterprises in the green energy or circular economy industries to promote their access to the capital market.

Participated in the sun optoelectronic system Investment and financing seminar, held by Taiwan Photovoltaic Industry Association and the ESG innovation and circular economy forum held by Concord Securities Co.,Ltd. to introduce the multi-tiered market of TPEX to all green energy and circular economy companies.

International participation

In 2018, TPEX became a member of the Climate Bonds Initiative (CBI).

TPEX won the “Exchanges introducing new listing guidelines 2017” and was granted a certificate of recognition in 2018, which was selected and awarded by The Green Bond Pioneer Awards Committee. ^{Note}

In 2021, TPEX became a member of ICMA.

In 2022, the first Sustainability-linked Bonds was listed. Mr. Nicholas Pfaff, the Deputy Chief Executive Officer and the Head of Sustainable Finance of ICMA, recorded a video to congratulate and exchange views.

The Quarterly Report published in the fourth quarter of ICMA in 2022 marketed Taiwan's sustainable bond market.

Note: The Green Bond Pioneer Awards Committee was jointly set up by the CBI and the London Stock Exchange Group

1.2.2 Market Supervision

In order to protect the investors, TPEX has rolled out many supervisory measures, including regular audits of financial reports and internal control, audits on companies' information reporting, and exceptional management checks. With the implementation of various supervision, it's expected to build an efficient platform to promote the sound development of listed / registered companies, and protect the rights and interests of shareholders.

2022 supervisory measures and performance

Unit: cases

Supervisory measure	Emerging Stock Market Companies	Main Board Companies
Reviewing financial report		
Formality review	All Companies	All Companies
Substantive review	34	209
When material incidents happen, performing exception management analysis in accordance with regulations	1	482
Auditing expert opinion letter	3	10
Auditing the implementation of the internal control system	23	93
Analyzing in accordance with financial and business early warning indicators	27	40
Auditing material information	52	292
For companies that have been placed on alert, and where the latest financial information should be published according to TPEX standards, contacting the company to release material information	189	228
Reviewing the annual report of the shareholders' meeting	69	185

In 2022, due to the pandemic, TPEX continued to, via video and online briefings, organize several events of Emerging Stock Corporate Day, courses of Regulations and Business Practices for listed and registered companies, and Corporate Governance Evaluation Educational Online Programs, so as to continuously promote high-quality enterprises to enter the TPEX market, so that investors were kept up-to-date on the development of listed / registered companies, their compliance with laws, regulations and the quality of their corporate governance practices.

TPEX will continue to handle promotion and education seminars on newly revised laws and regulations, and establish a sound communication channel with the companies. TPEX will also strengthen the education and training of the industry database and the industry knowledge and inspection cases of the supervisors to enhance the supervision over high-risk companies. Furthermore, TPEX reviews and revises the relevant supervision regulations of TPEX in line with the policies of the competent authorities and the new International Financial Reporting Standards (IFRSs) to promote listed / registered companies' corporate governance and supervision system reform. To establish a sound corporate governance system, TPEX promotes companies to pay attention to corporate governance (including ESG information disclosure) by conducting corporate governance evaluations, praising outstanding companies, and continuing to improve the degree of discrimination with the policies of the competent authorities. In addition, TPEX will strengthen supervision with technologies.



1.2.3 Transaction Monitoring

To ensure fairness and investor protection, TPEX has issued relevant regulations that cover issuance, trading, and surveillance to maintain the order of securities market transactions.

Issuance

- Considering the occurrence of incidents that have a significant impact on a company's financial conditions, TPEX has formulated the trading suspension mechanism in order to reduce information asymmetry.
- With the “Taipei Exchange Procedures for Verification and Disclosure of Material Information of Companies with TPEX Listed Securities” , TPEX hopes to ensure that relevant information can be disclosed in time when Main Board companies encounter matters having a significant impact on shareholders' equity or securities prices (including changes related to corporate financial soundness, major corporate transactions, positive or negative news about the company's products, changes in key management personnel, regulatory or control developments that affect the company's operational capabilities, legal events and other major events related to shareholders meetings).

Key actions and performance in 2022:

- 4 times: Main Board companies applied for information-related trading suspension.
- 10 times: Emerging Stock Market companies applied for information-related trading suspension.

To avoid severe deviations in transaction prices due to violent market fluctuations, relevant measures are in place:

Main Board stocks

When transaction price rises or falls by more than 3.5% of the reference price with violent stock price fluctuations from the first matching of the day to 5 minutes before the market closes, TPEX will delay the matching for 2 minutes and continue to accept key-in, cancellation, and changes of buy/sell orders within the delayed matching period, and match after the currently delayed matching period ends.

Emerging Stock Market stocks

TPEX has introduced the trading halt mechanism for abnormal stock price fluctuations. When the weighted average trading price of individual stocks during the trading hours of each business day rises or falls to more than 50% of the weighted average trading price of the previous business day, trading will be halted until the end of trading hours for the day.

Trading

The timing and number of trading interruptions and trading suspensions in 2022:

	Times	Duration
Trading suspensions due to intra-day volatility interruption of Main Board stocks	18,037	36,074 minutes
Trading suspensions due to intra-day volatility interruption of Emerging Stock Market stocks	9	2,473 minutes
Trading halts of Main Board stocks due to public disclosure of information	4	36 hours ^{Note}
Trading halts of Emerging Stock Market stocks due to public disclosure of information	10	60 hours ^{Note}

Note: Daily trading hours of Main Board stocks (including block matching trades and trade-by-trade) are from 8:00 am to 5:00 pm (9 hours in total), daily trading hours of ESB stocks are from 9:00 am to 3:00 pm (6hours in total), and daily trading hours of PSB stocks are from 9:00 am to 2:30 pm (5 hours 30 minutes in total).

Supervision

TPEX's supervisory measures include surveillance and early warning, and audits on illegal transactions.

Surveillance and early warning

For securities traded at abnormal prices and volumes, TPEX makes an announcement of attention or takes disposal measures. TPEX publishes daily announcements on the website regarding securities that meet the criteria. If the condition remains for consecutive days, TPEX will implement advance collection of funds and securities and extended matching time to remind investors of trading risks.

Audits on illegal transactions

TPEX audits abnormal securities trading. If there is suspected illegal manipulation or insider trading, the violation shall be reported to the competent authority and judicial authority for handling to protect the investors and maintain market order. TPEX also distributes information on illegal transactions among issuers and securities firms to enhance their awareness.

Key actions and performance in 2022:

- In 2022, Announcement of Attention Main Board Securities has been announced 2,522 times among 472 securities; Announcement of Disposition Main Board Securities has been announced 130 times among 90 securities; Announcement of Attention Emerging Stock Market Securities has been announced 188 times among 77 securities; Announcement of Disposition Emerging Stock Market Securities has been announced 1 time among 1 security.
- In 2022, TPEX held 6 workshops on the prevention of illegal transactions for securities firm practitioners as well as insider ownership workshops.

Information

In 2022, the trading system operated normally, and there was no service interruption.

In order to further remind investors of the trading risks, on July 4, 2022, TPEX announced the amendments to certain provisions of “Directions for Announcements or Notices of Attention to Trading Information and Dispositions for Emerging Stocks” . For stocks with abnormal trading activities, TPEX will announce their names and the contents of the attention, or implement advance collection of funds and securities for investors who buy and sell on a daily basis, so as to reduce the situation of recommending securities companies to increase the number of quotations to help increase the share price, and remind investors to pay attention to the trading risks through implementing advance collection of funds and securities.

In the future, TPEX will revise relevant regulations and adjust the early warning system with various products, trading mechanisms, and market development to remind investors to be aware of the trading risks. In the aspect of illegal transaction audits, supervision technology will be utilized to strengthen the effect of market supervision, so as to improve the audit efficiency and quality of market supervision operations. TPEX also continues to cooperate closely with the competent authorities and judicial authorities to enhance the capability of market monitoring and illegal transaction audits through different aspects from discussions in meetings or case studies.

1.2.4 Securities Companies' Audit

With the development of the securities market, the countermeasures taken by TPEX for the management of securities companies have been progressively adjusted to maintain the stable operation of the securities market.

Routine audits

In accordance with the reform plan and the principle of differentiated management, TPEX works with TWSE to perform audits on the financial, business, internal audit, and other operational aspects of securities firms. There are also routine audits on securities firms operating only equity crowdfunding, those only security token offerings, financial institutions only operating bonds, and leveraged traders.

Special audits

In terms of special audits, TPEX acts according to the Article 7 of “Operational Guidelines for Follow-up, Assessment, and Guidance in Regard to Securities Firm Audit Deficiencies” .

Securities companies' risk management and evaluation operations

Securities companies that concurrently operate securities brokerage, underwriting, and proprietary business are selected as the targets in the performance of annual evaluation. In 2022, a total of 15 evaluations were carried out. In order to strengthen the overall risk control of securities companies, the strengthening mechanisms such as risk limit control, profit, and loss limit monitoring, exception management sign-off procedures, and stress testing have been incorporated into relevant evaluation index items, and the relevant weights have been adjusted.

Type of audit / Promotional seminars	Cases / Times
Routine audits on securities firms	12
Routine audits on financial institutions operating bonds	20
Audits on anti-money laundering schemes	4
Risk assessments of securities firms	8
Routine audits on leverage transaction merchants	5
Routine audit on securities firms only engaged in intermediary business of trading and exchanging fund beneficiary certificates	1
Routine audit on underwriting bidding and book building cases	7
Irregular special audits	60
Held promotional seminars on the amendments of the regulations for establishing internal control systems of securities firms with surrounding units	18 ~1800 participants

In order to strengthen the risk management and information disclosure of securities firms on climate change issues, and continuously review the companies' compliance with climate risk management regulations and information disclosure, in May 2022, TPEX revised the “Risk-Management Evaluation Procedures for Securities Firms - Risk Management Implementation Sampling Test Report Form” , “Self-inspection Form for the Risk Management Mechanism of Securities Firms” and relevant schedules of Risk-Management Evaluation Procedures for Securities Firms which have been implemented from January 1, 2023.

1.2.5 Investment Protection

While innovating mechanisms and products to meet the needs of investors and companies, TPEX also adheres to the principle of protecting the rights and interests of investors and shareholders, and works closely with the competent authorities to implement securities market supervision laws and regulations. By continuing to implement and strengthen market management, trading, and settlement as well as other mechanisms, TPEX seeks to create an open, transparent, and sound market.

Relevant actions to protect the investors of listed / registered companies in 2022

Action	Performance	Highlight
Handling of Corporate Governance Evaluation	From March 2 to March 16, 2022, the “2022 Corporate Governance Evaluation Educational Online Programs” was held online to promote the contents of the revision of the corporate governance evaluation system, the focus of the recent regulatory amendments and the disclosure guidelines of the newly issued annual report of the shareholders meeting, the disclosure of ESG information, and the introduction of the video conference platform of the shareholders meeting.	In line with “Corporate Governance 3.0 - Sustainability Roadmap”, accelerating the promotion of corporate governance of listed companies, assisting enterprises in sound development, and enhancing market confidence.
Performance presentations of listed / registered companies	<p>Performance presentations of Main Board companies: Three major institutional investors, four major funds, and investors were invited to participate, and the presentations were conducted with the theme of TPEX family distinctive industries (including TPEX 200, biotechnology and medical care, IC design, etc.). There were a total of 34 sessions, and a total of 97 Main Board companies participated.</p> <p>Performance presentations of Emerging Stock Market companies: On May 16 and August 25, 2022, TPEX conducted 2 events of Emerging Stock Corporate Day via online live broadcast, inviting 4 Emerging Stock Board companies and 2 Pioneer Stock Board companies to participate.</p>	Improve services for listed / registered companies, establish a platform for direct communication and interaction between companies and investors, and increase information disclosure.
Promotional briefings and seminars	<p>Courses of regulations and business practices for listed and registered companies: From October 3 to 31, 2022, “the courses of Regulations and Business Practices for listed and registered companies” was held online to promote various new laws and regulations, including the new revision regulations of major information and the explanation of information reporting practice.</p> <p>Intermediary agencies training course: The course was held on April 25 and November 28, 2022, lecturing on the newly revised regulations of listed / registered companies, the review focus of enterprise application for listing /registering on Main Board / Emerging Stock Market, and conducting case sharing and exchange.</p> <p>Promotional seminar on new trading mechanisms and related services of the TPEX market: In 2022, 6 sessions were conducted for associated persons of securities firms, providing the latest and most real-time market information for various important businesses and the latest revised market regulations.</p> <p>Promotional seminars of Pioneer Stock Board: 5 sessions were held for investors to introduce the newly-registered companies of the Pioneer Stock Board and the trading mechanism of the Pioneer Stock Board.</p> <p>Bond promotional seminars: On February 22, 2022, the bond promotional seminar was held online to introduce the Sustainable Bond Market to issuers, underwriters, and evaluation bodies. On July 14, the online promotional seminar on the “Sustainability-Linked Bond Market Introduction” was held to introduce the regulations of the Sustainability-Linked Bond Market. On November 16, the online promotional seminar on information reporting for Sustainable Bond was held by recording audio and video files to promote the relevant matters of information reporting of Sustainable Bonds to the issuer.</p> <p>Investor seminars: In 2022, TPEX held the seminars in cooperation with a number of securities companies, of which 3 sessions were broadcast online and 12 sessions were held physically. The topics covered TPEX market trading mechanism (including Main Board Stocks and Emerging Stocks) and index linked products (such as ETF, ETN, and index futures).</p>	Assist listed / registered companies in understanding the key points of the latest amendments to the TPEX laws and regulations. Performing well in legal compliance and information disclosure makes the companies implement the compliance and internal control and audit systems to strengthen the quality of corporate governance, and protect the rights and interests of investors. In addition, relevant briefing sessions were held for securities dealers to assist in obtaining the latest and comprehensive market information.

Action	Performance	Highlight
Promotional seminars on financial reports filing	From November 16 to December 14, 2022, TPEX and surrounding units jointly handled the “International Financial Reporting Standard (IFRSs) Conference” and held a total of 4 briefings across Taiwan. A total of 320 accounting personnel from TWSE / TPEX listed / registered companies participated.	Assist enterprises to respond to the needs of reporting financial information related to sustainability.
Set up investor hotline and mail-box	In 2022, 1,703 calls and 363 emails were received, all of which were handled and replied to investors by the competent department according to the nature of business, with a handling rate of 100%.	Establish a platform for direct communication and interaction with investors to protect their rights and interests.

In addition to the relevant operations mentioned above, there were relevant management mechanisms implemented specifically for listed / registered companies to enhance investor protection:

1. Strengthening the supervision mechanism of the TPEX primary listed companies and foreign emerging stock companies: cooperating with the FSC to strengthen the examination and control of fundraising cases of the TPEX primary listed companies, the sponsorship period for fundraising cases of securities underwriters will be extended from 2 years to 3 years, and TPEX has been entrusted to handle the suspension of the public issuance of shares of the TPEX primary listed companies and foreign emerging stock companies, and to collaborate on the revision of relevant regulations of TPEX.
2. In the event that the chairman or the CEO of listed / registered companies are wanted, the relevant material information shall be released.
3. Listed / registered companies shall establish an internal procedure for material information processing by the end of 2022, and keep records of the relevant evaluation process and the mechanism for handling violations.
4. From 2023 onwards, Main Board companies with new paid-in capital of NT\$0.6 billion or more shall hold at least 1 investor conference each year. If Main Board companies are “invited” to attend an investor conference, such companies shall upload the audio and video link “at least once in the invited year” .
5. From the first quarterly financial report of 2024 onwards, material information should be released at the same time when Main Board companies handle financial reports or the annual self-assessed financial information for the board of directors to convene a meeting.

1.3

Collaboration with All Walks of Life

1.3.1 Participation in Guilds and Associations

TPEX is currently a member of 16 domestic associations. In addition to participating in regular meetings, TPEX also actively attends activities and seminars organized or co-organized by various associations.

Participation status of TPEX in associations in 2022

Name of entity	Participation status	Name of entity	Participation status
Taiwan Financial Services Roundtable	Member/Director	Corporate Operation Association	Member
Securities Analysts Association, Chinese Taipei	Member/Director	Taiwan Stock Affairs Association	Member
Taiwan Corporate Governance Association	Member	Taiwan Mergers & Acquisitions and Private Equity Council	Member
The Institute of Internal Auditors, R.O.C.	Member	Banking Education Association of Taiwan	Member
The Business Council for Sustainable Development of Taiwan	Member	Taiwan Bio Industry Organization	Member
Chinese Association of Business and Intangible Assets Valuation	Member	Financial Planning Association of Taiwan	Member
Chinese International Economic Cooperation Association, Taiwan	Member	Taiwan Finance Association	Member
Chinese National Association of Industry and Commerce, Taiwan	Member	Financial Engineering Association of Taiwan	Member

1.3.2 International Interactions

Due to the continuous impact of the COVID-19 pandemic in 2022, TPEX was unable to participate in physical international exchange activities in the first three quarters. However, TPEX is still actively participating in activities held by important securities-related institutions. In addition to regularly participating in membership conferences and relevant seminars every year to exchange views and explore cooperation opportunities with peers, TPEX also actively responds to the relevant initiatives of the international securities organizations to enhance the international awareness of TPEX.

Participation status of TPEX in international organizations membership and initiatives in 2022

WFE	Full member
AOSEF	Full member
IOSCO	Affiliated member ^{Note}
CCP12	Full member
CBI	Partner
Task Force on Climate-related Financial Disclosures	Signed for support in October 2020
ICMA	Full member

Note: FSC, the competent authority, is a full member

Actively engaging in international events

Participation in related organizations and activities in the international securities market	
WFE	<ul style="list-style-type: none"> • 2022 seminars (2 video conferences) • 61st annual meeting and general assembly of WFE (physical meeting: Republic of Malta) • WFE Clearing & Financial Derivatives Conference (video conference) • WFE Working Committee Meeting (video conference)
IOSCO and AMCC	<ul style="list-style-type: none"> • IOSCO and AMCC 2022 seminars (2 video conferences) • AMCC 2022 mid-year meeting (video conference) • IOSCO 2022 World Investor Week (WIW) (video conference) • International Financial System Certification Phase I Seminar (video course)
CCP12	<ul style="list-style-type: none"> • 2022 annual meeting (video conference) • 2022 special annual meeting (video conference)
AOSEF	<ul style="list-style-type: none"> • 2022 Working Committee (2 video conferences) • 2022 seminar (3 video conferences)
Participation in meetings of other securities-related organizations	
Citadel	<ul style="list-style-type: none"> • 1 video seminar
ACGA	<ul style="list-style-type: none"> • The 21st Annual Meeting in 2022 (physical meeting: London, UK)
Korea Exchange	<ul style="list-style-type: none"> • 2022 Global ETP Conference in Seoul (video conference)

In support of the WFE's "Ring the Bell for Gender Equality" and the "Ring the Bell for Financial Literacy" Event co-hosted by the WFE and the IOSCO during the "WIW 2022", TPEX also held a ceremony to celebrate these two events.

Holding online overseas institutional investor briefing

TPEX has arranged abroad roadshows for Main Board companies since 2007 to expand the TPEX market and enhance the international visibility of Main Board companies. Due to the impact of COVID-19 in 2022, TPEX organized online overseas institutional investor briefings in June and October for foreign institutions to have a better understanding of Taiwan's capital market and guidance to invest in Taiwan.

Promoting Overseas Enterprises' Listing / Registration on TPEX Main Board / Emerging Stock Market

Due to the easing of the global pandemic, TPEX resumed the physical promotion of overseas business in November 2022 and visited Vietnam to encourage overseas enterprises' listing on TPEX. TPEX also held 1 webinar to promote listing on TPEX of overseas companies. In 2022, 3 new foreign companies received advisory services for listing applications from recommending securities. As of year-end, TPEX had 31 foreign companies listed on its Main Board and 3 foreign companies registered on the Emerging Stock Market. These companies are based mainly in China and Southeast Asia.



TPEX attaches great importance to gender equality and held a gong striking ceremony in response to WFE on gender equality








TPEX jointly held the 2022 Financial Elite Camp Award Ceremony and "Striking the Gong for Financial Literacy Campaign" to support WIW



After three years, TPEX visited Vietnam after the pandemic for the first time to promote listing of overseas enterprises on Main Board

1.3.3 TPEx service promotion

To help capital market participants understand and make use of the services provided by TPEx, we plan and promote through various channels, including:

Promotional channel	Description	Promotional channel	Description
 TPEx official website	<ul style="list-style-type: none"> Considering the participants' diversity in the capital market, "Focus Areas" was set up on the homepage. Visitors can browse according to their identity or the topics they are interested in. The "TPEx Events" and "Media Gallery" sections were set up to promote relevant policies, key businesses, and recent activities. 	 Anti-Financial Investment Fraud Zone	In order to prevent financial investment fraud, an "Anti-Financial Investment Fraud Zone" was set up on September 30, 2022, on the official website. Through the integration of FB promotional graphics and short videos, anti-financial investment fraud award-winning quizzes and news reports, TPEx promoted anti-financial investment fraud information to investors.
 Facebook fan page	<ul style="list-style-type: none"> Considering that the younger generations are more familiar with Facebook, a social media manager has been appointed to actively interact with the public, promote key products or systems, and disseminate information in an interesting way. Posts on the fan pages of competent authorities are shared on the TPEx fan page to facilitate policy communication. 	Promotional seminars	TPEx promotes various important businesses, systems, and the latest revised regulations for listed / registered companies, investors, and securities firms.
 TPEx ESG Section	In order to provide enterprises and investors with one-stop access to the sustainability information of the TPEx, an "ESG Section" for the enquiry has been provided on September 29, 2022, including four major themes, namely "Sustainable Bond Market", "ESG for Listed Companies", "ESG Indices & ETP" and "Our Sustainability".	On-site visits	TPEx makes on-site visits to domestic and foreign companies as well as listed / registered companies to introduce the multi-tiered capital market.
		Networking/ matching activities	TPEx regularly organizes business promotion networking and matchmaking activities for enterprises in the TPEx market.
		Media	TPEx promotes its services and products through the media from time to time.
 TPEx HOME education	Considering the needs of young people who are new to the capital market to learn securities knowledge, the online learning resources of TPEx are collected, allowing the public to easily learn at home.	Investor hotline/ fax	TPEx upholds a professional stance and a fair and objective attitude in processing investor complaints, petitions, or consultations, in a timely manner. All investor telephone and emails received in 2022 were forwarded to the relevant business departments for processing after receipt. Investor service hotline: (02-2366-6100) Emerging Stock Market investor consultation hotline: (02-2369-6102) Email address of Investor Mailbox: Click on "Contact Us" on the TPEx Official website to access the Investor Mailbox

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Sustainable Governance

CHAPTER 2

2.1

Fostering Corporate Sustainability

2.1.1 Corporate Governance Evaluation

Since the launch of the Corporate Governance Evaluation in 2014, TPEX has been progressively promoting the best practices among TWSE / TPEX listed companies with different institutional indicators. By commending the outstanding companies, the Corporate Governance Evaluation helps create benchmarks for industry peers and raise market-wide awareness of corporate governance and corporate social responsibility.

TPEX has cooperated with TWSE to prepare the “2022 Corporate Governance Evaluation Educational Online Programs” and uploaded it on the business promotion website of TPEX for public viewing since March 2, 2022, which guided Main Board companies to plan and handle relevant indicators of corporate governance evaluation in advance to improve the evaluation results.

Due to the severe pandemic situation in 2022, the results of the 8th Corporate Governance Evaluation were announced by video to commend companies with excellent corporate governance. In addition, the top 20% Main board companies ranked in the evaluation results were listed in the “TPEX Corporate Governance Index” .

Compared with the 7th evaluation, a total of 28 companies were newly included in the top 20% of the ranking list of the 8th evaluation of the Main Board companies, while 9 companies were newly included in the top 36 companies of the top 5% and 6 of them were newly included in the list for the first time, demonstrating the importance that Main Board companies attached to corporate governance evaluation and were competing to improve corporate governance.



The revised corporate governance evaluation indicators in 2022 are as follows:

Project items	Point-adding items (included in 2023 indicators)
Protecting shareholder rights and interests and treating shareholders equitably	<ul style="list-style-type: none"> • Whether a written specification on finance and business-related operations between the stakeholders has been created • Whether material transactions between related parties are proposed to the Board for approval and proposed to the shareholders meeting for approval or reporting • Whether the important contents of shareholders' questions and the company's replies are recorded in the minutes of the regular shareholders meeting • Whether the shareholders meeting adopts the way of online live streaming or uploads uninterrupted audio recordings and videos after the shareholders meeting
Increasing information transparency	<ul style="list-style-type: none"> • Whether to upload the changes in shareholding of insider in the previous month to the Market Observation Post System (MOPS) before the 10th day of each month (inclusive)
Promoting sustainable development	<ul style="list-style-type: none"> • Whether to develop policies to promote workplace diversity or gender equality and disclose implementations • Whether to assess risks or opportunities to the community and take corresponding measures • Whether to invest resources to support domestic cultural development • Whether to invest in energy-saving or green energy-related environmental and sustainable machinery and equipment, green energy industry in Taiwan, issue or invest in green projects or social projects and sustainable financial products with substantial benefits

Since the implementation of corporate governance evaluation, Main Board companies have made significant progress in various corporate governance statistics, including the establishment of audit committee, provision of English information, preparation of sustainability reports, etc., and the number of companies has grown year by year. In the future, TPEx will continue to conduct corporate governance evaluation, and expect to optimize the corporate governance evaluation indicators every year to strengthen the effectiveness of corporate governance evaluation and improve the identification, gradually guide TPEx to adopt various good corporate governance measures, guide the healthy competition of enterprises, and continuously promote the sound development of corporate governance.

2.1.2 Driving Corporate Action

In 2014, TPEX formulated the “Taipei Exchange Rules Governing the Preparation and Filing of Sustainability Reports by TPEX Listed Companies” (hereinafter as the sustainability report rules) to require listed companies shall prepare a sustainability report with the GRI standards, enhance environmental, social, and corporate governance (ESG) risk assessments, and disclose climate-related issues. On September 26, 2022, TPEX announced the amendments to the sustainability report rules, with reference to international standards such as the TCFD and SASB, to strengthen the disclosure of sustainability reports, which were compliance with the trend of international capital market and the demand of information users for ESG information.

On September 26, 2022, TPEX announced the amendments to the sustainability report rules. The main amendments are as follows:

Addition of the indicators to be disclosed in the food, chemical and financial industries, which have to obtain the opinion of the accountants on the sustainability indicators.

New industries such as cement, plastic, steel, oil and gas, semi-conductor, computer and peripheral equipment, optoelectronics, communication networks, electronic parts, electronic access and other electronics industries shall be disclosed according to the category of industries. (For any enterprise whose paid-in capital is less than 5 billion, it will be applied from 2024)

To enhance corporate exposure to climate-related risks and opportunities, Main Board companies that are forced to disclose climate-related information in a dedicated chapter. In addition, the disclosure and assurance of Scope 1 and Scope 2 greenhouse gas emissions shall be handled according to the “Sustainable Development Roadmap”.

The certified public accountants and their affiliated firms that handle the sustainable indicators, as well as the certified personnel and their affiliated institutions that handle the greenhouse gasses shall comply with the relevant provisions of “Directions for the Implementation of Assurance Institutions for the Sustainability Report of TWSE/TPEX Listed Companies” (applicable from 2024).

TPEX also encouraged listed companies to voluntarily compile sustainability reports through promotional events, company visits, and corporate governance evaluations. In recent years, the voluntary compilation of sustainability reports has grown significantly, exceeded the number of compulsory preparations.

Number of listed companies that have compiled sustainability reports in the last 4 years

Year of the report	2018	2019	2020	2021
Mandatory	46	46	48	51
Voluntary	72	80	108	145
Total number of preparing companies	118	126	156	196
Percentage of total number of listed companies	15.23%	16.11%	19.80%	24.26%

Securities firms' climate change risk management and sustainability report preparation

Regarding climate change issues, the table of “Assessment of Securities Firms’ Risk Management System” and the correction table of “Self-inspection Form for the Risk Management Mechanism of Securities Firms” published by TPEX in July 2022. The securities firms shall disclose climate risk management information for the first time by the end of June 2023, which will be published regularly by the end of June each year. TPEX will review the enterprises’ compliance with climate risk management regulations and information disclosure when handling the annual securities firms’ risk management assessment. Furthermore, to promote the sustainable development of the securities and futures industry, the competent authority plans to gradually promote the preparation and announcement of the sustainability report.

Timeline for Securities Firms' Sustainability Report Release

2023	2024	2025
<ul style="list-style-type: none"> • TWSE/TPEX listed groups' securities or futures subsidiaries • Securities firms with a share capital of more than 2 billion • Securities investment trust businesses with an asset under management of over 600 billion 	<ul style="list-style-type: none"> • Integrated securities firms with a share capital of less than 2 billion • Securities investment trust businesses with an asset under management of 300~600 billion 	<ul style="list-style-type: none"> • Non-integrated securities firms or futures dealers with a share capital of less than 2 billion • For securities investment trust businesses with an asset under management of less than 300 billion, those with an asset under management of less than 100 billion, simplified disclosure is applicable

2.2

Strengthening Operational Governance

2.2.1 Integrity Governance of TPEX

The Board of Directors is the highest governance body

The Board of Directors is the highest governance body of TPEX, and the selection of Directors is subject to the provisions of the Donation of Association of Taipei Exchange. The Board of Directors consists of 15 members. In addition to being appointed by the competent authority in accordance with the relevant regulations, the directors are selected from the donors, experts and scholars and securities traders. The relevant term and the proportion of directors of the donors are clearly defined. The selection of directors shall also take into account their professional qualifications and other conditions, so that the relevant decisions can better meet the characteristics of the industry in the capital market and the needs of future development.

TPEX regularly reports to the Board of Directors on the financial operations of the business. The Board of Directors shall convene at least once a month to receive the reports about operating performance and financial position. When the agenda working group of the Board of Directors provides each proposal and report information to the directors, the agenda working group shall review in advance whether the report is related to the stakeholders, the directors or the supervisors, and issue corresponding reminders in advance.

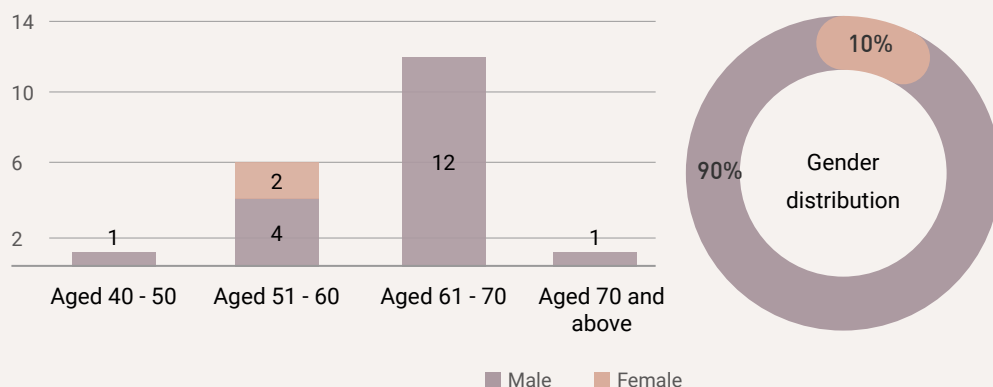
The directors of the current session acted as the representative of stakeholders of TPEX as follows:

Name of Director	Representative of Stakeholders
Chien-yi Chang	Dean of Taiwan Institute of Economic Research
Han-Chiang Chu	Chairman of the Taiwan Depository & Clearing Corporation
Lih-Chung Chien	Managing Director & CEO of TWSE
Chun-Hong Chen	Chairman of Master Link Securities
Jerry Guo	Chairman of Taishin Securities
Huang Bing Jing	Chairman of Grand Fortune Securities
Jiunn-Chih Wang	Chairman of Capital Securities
Leo Cheng	Chairman of Fubon Securities

In addition to carrying out business in accordance with the Donation of Association, the work plan of TPEx, the annual financial report, the evaluation of the effectiveness of the internal control system, the appointment (dismissal) of accountants and the appointment and removal of managers shall be approved by the Board of Directors. The Board of Directors delegates the authority to the Chairman to deal with economic, environmental and social issues related to corporate governance at least once a month through regular and irregular meetings, or assign relevant units, which have to report to the Chairman or the Board of Directors based on the materiality and necessity of the issues.

With expertise in finance, accounting, law, and public finance, the directors of TPEx are all outstanding talents in the industry and academia with the commitments of being independent and upholding the public interest. Among them, there are 2 female directors and 10 directors delegated by the competent authority. The term of the Directors of TPEx is three years. The term of the current (10th) Board of Directors is from August 10, 2021 to August 9, 2024. The average attendance rate of the Board of Directors in 2022 is 96%, showing TPEx's emphasis on corporate governance and its determination to lead by example.

Information on age and gender distribution of the 10th directors and supervisors



In addition, TPEx has 5 supervisors who are responsible for supervising the performance of the duties of the Board of Directors and reviewing the annual income and expenditure, budget and final accounts, etc. The term of the supervisors is three years. They are also experts and scholars with expertise in accounting and finance and other areas.

Every year, the Board of Directors considers the interests of all stakeholders and formulates major strategies to provide important guidelines for all aspects of operation and management. Under the guidance of the policies of the competent authorities, the long-term sustainable development direction of TPEx is to “actively create multi-functional and multi-tiered all-round exchanges, continuously improve the market system, and provide diversified needs of enterprises and investors”, and to convey the vision and concept to the leadership. The Chairman, the Managing Director & CEO, the Directors and the senior management will jointly transform the long-term vision into a medium-term plan and annual work plan, set short-term goals and implementation guidelines, and regularly review the implementation of relevant plans. Each year, the directors and supervisors of TPEx are required to assess their own performance contribution to the organization and report to the competent authorities.

According to the Donation of Association of TPEx, directors and supervisors are not remunerated, but the chairman is a special person and his remuneration is determined by the Board of Directors. TPEx reviews the revenue and expenditure budget of the following year including the remuneration of the senior management in the first two months every year, and submits the same to the competent authorities for approval after the approval of the Board of Directors. The overall remuneration of the key management is disclosed in the annual financial report, which is also reported to the Board of Directors.

There are functional committees and an internal audit team at TPEX. Their main roles and operations are as follows:

Committee	Main responsibilities	Members	Operations
Sustainable Development Committee	Coordinate and promote the sustainability strategies of TPEX, and make decisions, track and review related sustainability work, so as to implement the promotion goals of the sustainability strategies.	The Managing Director & CEO of TPEX serves as the chairperson, the Deputy CEO and the Chief Administrative Officer serve as the vice chairpersons, and the heads of various departments serve as members.	Meetings are convened at least twice a year.
Risk Management Committee	Review the effectiveness of the promotion and implementation of risk management policies and crisis management operations of TPEX.	The Managing Director & CEO of TPEX serves as the chairperson, the Deputy CEO, Chief Administrative Officer, heads of various departments and commissioners serve as the committee members.	<ul style="list-style-type: none"> • Meetings are convened at least once a year. • Review the implementation of risk management policies, clarify major risks, and strengthen the risk management mechanism to facilitate the sustainable growth of the organization.
Business Continuity Committee	Coordinate and supervise the business continuity management system of TPEX to ensure the appropriateness and effectiveness of the system and the coordination between departments.	The Managing Director & CEO of TPEX serves as the chairperson, the Deputy CEO, Chief Administrative Officer, heads of various departments and commissioners serve as the committee members.	<ul style="list-style-type: none"> • Meetings are convened at least once a year. • Responsible for business continuity plans and crisis management related matters, and implement relevant handling procedures for prevention, drills and recovery of emergency and abnormal incidents in advance.
Personal Data Protection Management Committee	Strengthen the implementation of various personal data protection mechanisms and resolve opinions on personal data management review.	The Managing Director & CEO of TPEX serves as the chairperson, the Deputy CEO and the Chief Administrative Officer serve as the vice chairpersons, and the heads of various departments serve as members.	Hold 2 personal information management review meetings every year, and conduct contingency training and simulation drills for personal data infringement incidents.
Internal audit team	Ensure the effectiveness of risk management.	Chief auditor, a team leader and 2 coordinators.	<ul style="list-style-type: none"> • Meetings are convened at least once a year. • Risk items are identified by each department.

Ethics and integrity management

Being an important participant in Taiwan's capital market, TPEX aims to promote economic development and assist companies in raising funds. Ethics and integrity management is the cornerstone of sustainable development. In order to ensure that businesses can be implemented fairly and objectively, TPEX has established a complete legal compliance system and implemented the “Ethical Corporate Management Best Practice Principles” since June, 2019 (<https://www.tpex.org.tw/web/about/introduction/honest.php?l=en-us>). The implementation situation is reported to the Board of Directors every six months. In 2022, TPEX has not been involved in any action that may affect the order of the capital market, such as fraud, insider trading, antitrust, anti-competitive practices, market manipulation, discrimination incidents, human rights infringement incidents and related drawbacks.

In order to implement the ethics and integrity management of TPEX, and for the purpose of sustainable development, TPEX has formulated various codes of conduct and regularly conducts ethical education and training. In addition, when issuing companies apply for listing on Main Board or registering on Emerging Stock Market or GISA, TPEX will notify the colleagues by email to remind them of the compliance with the relevant discipline regulations of TPEX, so that the colleagues can have a clearer direction for each stakeholder.

Codes of Conduct

All employees	• “Employee Confidentiality Measures”
	• “Guidelines for Employee Ethical Conduct”
	• “Precautions for Employees Acquiring or Disposing of TPEX-traded Securities and GISA Stocks”
Reviewers and supervisors	• “Disciplinary Standards for Securities Listing and Registration Examiners and GISA Counselors”
	• “Securities Supervisors' Discipline Regulations”
Personnel performing company audits	• “Statement of the Person Performing the Audit”

Furthermore, TPEX has set up the “Implementation Measures for the Whistleblower System.” Anyone who suspects TPEX employees of committing crimes, fraud, or violating laws and regulations can file a report. It can strengthen integrity and accountability through internal and external oversight mechanisms. In 2022, there were no incidents of employee corruption, violation of the law, or internal complaints.

In order to strengthen the awareness of integrity, TPEX regularly organizes education and training courses for all employees to widely publicize the importance of ethical management. In 2022, TPEX held 3 sessions courses entitled “Corporate Integrity and Whistleblowing System” , with a total of 293 participants, accounting for 100% of all employees.

Complaint-filing Channel



Regulatory compliance

To ensure compliance with laws and regulations, TPEX has set up legal personnel under the Administration Department responsible for legal compliance and regulatory amendments. TPEX makes necessary amendments to relevant internal rules, which will be available in the Law Inquiries section on the official website of TPEX, so as to ensure that TPEX can abide the latest laws and regulations.

To ensure effective legal compliance and internal control system, each TPEX department performs legal compliance self-evaluations every six months, and submits the results to the internal audit team for review. The internal audit team further performed annual legal compliance audits and the audit results showed no anomaly in 2022.

2.2.2 Risk Management

Risk management policy

TPEX has built an appropriate risk management mechanism considering the overall operation strategies and the business and legal environment. By integrating risk management into the decision-making process, and requiring each department to effectively identify, measure, monitor, prevent and control various risks when engaging in business planning and promotion, TPEX is capable of keeping potential risks within tolerable levels.

In order to implement integrated risk management and crisis management, prevent the occurrence of risks and minimize the possible impacts to achieve the business objectives and enhance the performance, TPEX has formulated the “Taipei Exchange Risk Management Policy and Crisis Management Operating Guidelines” .

Risk Management Committee

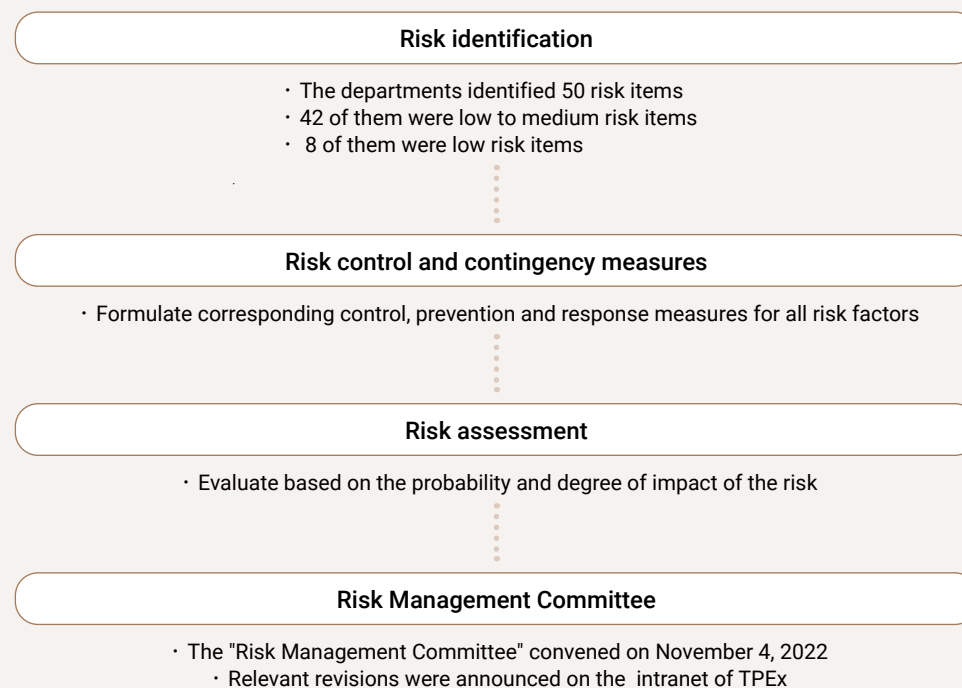
TPEX established a risk management committee chaired by the Managing Director & CEO, with the Deputy CEO, Chief Administrative Officer, heads of all departments, and commissioners as the committee members. The Risk Management Committee supervises the implementation

of TPEX’s Risk Management Policy, reviews major risks and response mechanisms, and incorporates risk and crisis managements into TPEX’s decision-making considerations to strengthen the risk management culture. In principle, meetings are held once a year or when necessary. There were no adjustments regarding organization and procedures in 2022.

Risk response measures

All TPEX departments are responsible for improving risk management mechanisms according to their respective functions. Through the process of risk identification, analysis and assessment, various business risks are comprehensively evaluated and responded to with risk management countermeasures. TPEX’s Risk Management Committee convened on November 4, 2022, and announced the relevant revision on November 14 for internal compliance.

Risk Management Process and Implementation Results in 2022



Business continuity plan

To ensure that critical businesses can immediately respond and resume within the expected time after disruptions, TPEX established Business Continuity Committee. All the departments of TPEX update business continuity plans and emergency and abnormal situation handling manuals every year based on its business status. On November 4, 2022, the Business Continuity Committee held an annual meeting to approve the updates of relevant plan and manual; on December 16, TPEX conducted a paper simulation drill for abnormal communication equipment and data lines, and the failure of computer system abnormal operations to continue. The activation of the off-site backup system was required, and the computer emergency situation affected the normal operation of the computer trading system and the notification of information security incidents. The scenario was “a 5-level severe earthquake occurred in Taipei during business hours, the external network of the Banqiao Server Room was completely disrupted, and all the information systems including the Global Information Network of TPEX could not provide services, and the trading system of TPEX could not operate normally, and it was required to switch to the off-site backup system”.

In addition, in response to the COVID-19 pandemic, TPEX co-operated with the Central Epidemic Command Center to implement relevant epidemic prevention measures to ensure the health of all employees. Besides, to maintain normal market operations amidst the COVID-19 pandemic, TPEX further adopted the backup plan with splitting and distancing, and implemented the work-from-home and rotation plan. The intercommunications and gatherings of the capital market are conducted through video conferencing and a comprehensive response mechanism was established.

For avoiding the high probability of abnormal failure of old equipment, the various host replacement projects have been promoted. In 2022, TPEX had replaced the expired equipment, including transaction hosts, network equipment, database host and virtual host system disk space expansion to maintain the stable operation of the system and business continuity.



ISO 22301 Business continuity management systems certification

In order to ensure the establishment of a compliant disaster response and recovery mechanism to protect the safety of TPEX market transactions and the rights and interests of the investing public, TPEX was successfully certified according to the ISO 22301 Business Continuity Management Systems in November 2020.

Scope of introduction: Main Board Stock Trading System, Electronic Bond Trading System(EBTS), Emerging Stock Computerized Price Negotiation System, and Click system and Derivatives Trading System.

Internal Audit

TPEX has formulated an internal control and audit system based on the “Regulations Governing the Establishment of Internal Control Systems by Service Enterprises in Securities and Futures Markets”, and each department has developed internal control system regarding its business processes. With details disclosed in the "Internal Control and Audit Section" on TPEX intranet, TPEX operated the internal control system accordingly to ensure the continued effectiveness.

The Internal Audit Team, under the Board of Directors, is responsible for performing audits on each department, making timely suggestions for improvement, monitoring the improvement progress, and submitting monthly results to each supervisor for review. The Team reports to the Joint Meeting of Directors and Supervisors on a quarterly basis, and consequently reports to the competent authority for reference. Suggestions made to each department in 2022 have been improved in 2022.

In response to the changing environments and amendments to laws and regulations, TPEX accordingly amends relevant rules and standard operating procedures. Upon completion, TPEX immediately announces details on the intranet and inform colleagues through emails and internal education and training sessions. In addition to conducting monthly self-assessments in accordance with regulations, all departments also conduct assessments on the effectiveness of the internal control system. After review by the internal audit team, there are no cases of failed implementation.

2.2.3 Information Security

Information Security Management System

TPEX has obtained certification for ISO 9001 on quality management, ISO 27001 on information security, and ISO 20000 on information service, and continues to entrust certifying bodies to perform reviews every six months and re-examinations every three years in accordance with regulations. The certificates have continued to be valid so far. An information security management review meeting chaired by the Supervisory Head of the Information Department is held every six months to regularly review the implementation of the information security management system to ensure its appropriateness and effectiveness. There were no instances of confidential information leakage in 2022.

Complete education and training provided by a full-time responsible unit	<ul style="list-style-type: none"> TPEX set up a dedicated information security team responsible for information security management. They hold 15 hours of information security professional training for information security supervisors and personnel and 3 hours of information security advocacy training for all colleagues to enhance awareness.
Information security protection and monitoring	<ul style="list-style-type: none"> TPEX established an information security protection system and a security operations center (SOC), and has carried out security inspections including diagnostics, server vulnerability scanning, web program vulnerability scanning, program source code and penetration testing in 2022. TPEX has also introduced ISO 22301, formulated relevant disaster response and recovery mechanisms for events such as natural disasters, active sabotage, system failures, and performed drill tests. TPEX implements risk identification and management, management review meetings, internal audits, drills and tests, and regular review by certification bodies to continue improving the business continuity management system.
Information security enhancement	<ul style="list-style-type: none"> Establish vulnerability analysis and notice system(VANS) Establish early warning mechanism for the information system Strengthen the sharing mechanism of information security intelligence to the Financial Security Operation Center (FSOC)
Information security internal audit	<ul style="list-style-type: none"> TPEX's internal audit team conducted audits on information security according to the 2022 Audit Plan. The audit results reflect no deficiencies.
Information security external audit	<ul style="list-style-type: none"> TPEX established an information security management system (ISMS) according to the ISO 27001 standard. In 2022, TPEX underwent two audits conducted by the British Standards Institution (BSI) and successfully passed. As a result, the ISO 27001 certification remains valid.

Same-site and Different-site backup system

All TPEX transaction systems have the same-site and different-site backup system. Besides formulating emergency procedures, including “Business Continuity Plan” , “Emergency and Abnormal Situation Handling Manual” , “Computer Trading System Abnormal Incident Handling Procedures” and “Full Backup Maintenance and Handling Procedures” , TPEX conducts 2 same-site and 2 different-site backup system test drills every year. In 2022, no transaction was affected due to the errors of the information system procedures, and no service interruptions due to capacity factors were found with success rate of 100% in the backup system test drills. All information security goals have been met in 2022.

Protection of Personal Data

TPEX is committed to maintaining personal data security, thus ensuring that the data collection, processing, and utilization comply with confidentiality, integrity, availability, and legal requirements and reducing the risk of personal information breaches. These measures protect the implicated parties' rights and interests and ensure the sound operations of the capital market.

To ensure that the rights of the parties are effectively handled, to respect the parties' rights to their personal data, and to handle complaints about personal data effectively and correctly, TPEX has established channels for complaints and consultations, and will provide the processing results to the parties. There are no personal information breaches in 2022.

TPEX has also introduced a personal information protection management system in accordance with the provisions of the “Personal Data Protection Act”, and has established a personal data protection management manual and various instructions and procedures to provide all colleagues with a unified compliance mechanism in the collection, processing and utilization of personal data. In addition, TPEX reviews business operations related to personal data protection through external and internal audits once every six months.

Personal data protection management committee	<ul style="list-style-type: none"> • TPEX has set up a “Personal Data Protection Management Committee”, chaired by the Managing Director & CEO, to organize cross-departmental tasks. • In 2022, the committee held two personal data management review meetings: January and June 2022.
Continuing Education for Employees	<ul style="list-style-type: none"> • All colleagues participated in the 3-hour “Personal Data Protection Act and Sharing of Information Security Practices” education and training course. • For colleagues in charge of personal data business in each department, conduct “Personal Data Protection Cognition Education and Training” courses.
Internal/External audits	<ul style="list-style-type: none"> • The British Standards Institute (BSI) conducts an audit every six months: January and July 2022. • In July 2022, BSI completed the second review every three years. The BS10012:2017 PIMS certification continued to be valid and a new certificate was issued. • The internal audit team conducts an audit every six months: May and November 2022.
Contingency Training for Personal Data Violation Incidents	<ul style="list-style-type: none"> • No personal data infringement incidents occurred in 2022. • To strengthen colleagues' ability to respond to personal data infringements and crisis awareness, in September 2022, the deputy of the Personal Data Protection Management Committee selected scenarios for conducting personal data infringement incident response training and simulation exercises.

2.2.4 Supplier Management

The main suppliers of TPEX are divided into 6 categories, including general services, equipment, and engineering services. These categories encompass information services, security services, electronic equipment, telecommunications, furniture, and renovation projects. In addition to the “Property Procurement and Management Guidelines^{Note}” as the guiding principle for the procurement procedure, TPEX also regards suppliers as important partners. Since November 2020, TPEX has been requiring suppliers to sign a “Corporate Sustainability Development Commitments” and has urged suppliers in complying with regulations on occupational safety and health, labor human rights, and environmental protection, realizing corporate social responsibility into practice and promoting environmental sustainable development and safeguarding basic human rights. TPEX regularly reviews their services to confirm whether they are consistent with the contract specifications.

Note: Property Procurement and Management Guidelines: Conducting price negotiation, price comparison and bidding procedures based on the purchase items and amounts.

100%

Proportion of local suppliers of TPEX in 2022

188 letters

The percentage of suppliers agreeing to sign the “Corporate Sustainability Development Commitments” was 100% in 2022.

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Environmental Protection

CHAPTER 3

3.1 Climate Change Governance

Given the intensifying impact of climate change, the international community is paying increasing attention to climate-related risks. While facing negative climate impacts, enterprises may also identify climate-related opportunities. As such, exchanges have gradually formed a consensus on the importance of promoting climate change-related disclosures and strategies. In October 2020, TPEX formally supported the Task Force on Climate-related Financial Disclosures (TCFD) and will continue to introduce the TCFD structure in the future. After preliminary assessment, the environmental “risks” and “opportunities” caused by climate-related factors, and the relevant impacts and response strategies of TPEX are as follows:

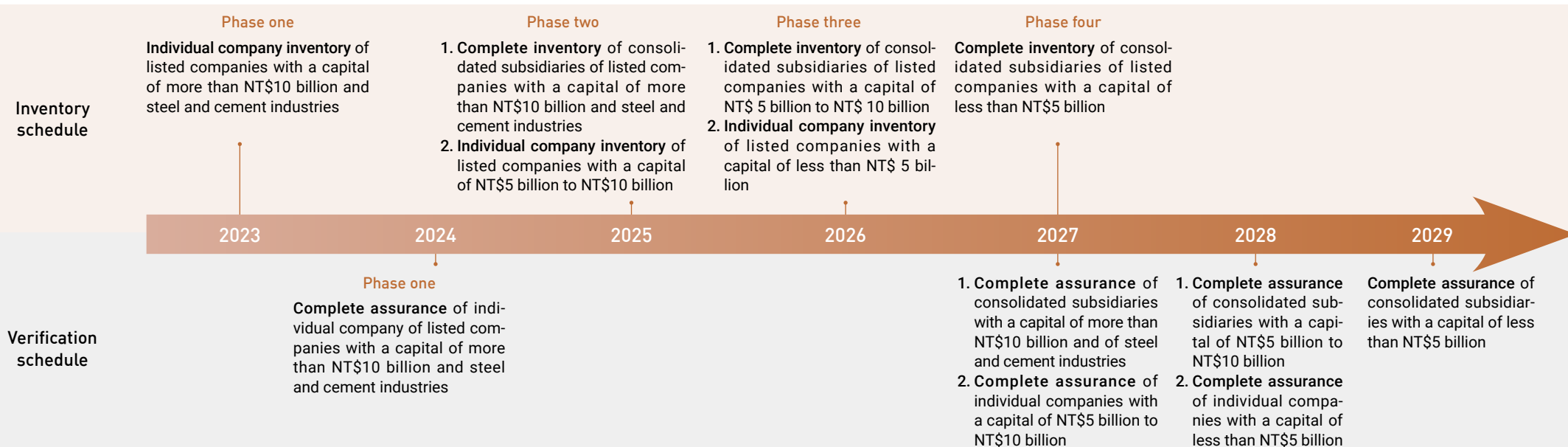
	Climate-related factors	Impact description	Possible financial effects	Response strategies
Environment-related risks	The disclosure requirements of Carbon emissions (short-term risk)	Policies and regulations drive the disclosure of greenhouse gas emissions and proposal of carbon reduction goals, and increase operating costs	Increase in operating costs	<ul style="list-style-type: none"> In August 2022, TPEX implemented the greenhouse gas inventory and issued the 2022 greenhouse gas inventory report in June 2023. The future direction of greenhouse gas reduction will be planned according to the results of the greenhouse gas inventory and with reference to the international major exchanges' own carbon reduction goals and climate change risk response measures. Promote energy conservation programs and set annual energy conservation targets.
	The government strengthens the requirements and supervisions of TPEX market enterprises (short-term risk)	Strengthen the supervision of energy-intensive or climate change-related industries, impacting industry structure by policies and regulations and raise the threshold for entering the capital market	Increase in operating costs	<ul style="list-style-type: none"> Revise relevant laws and regulations such as the Taipei Exchange Rules Governing the Preparation and Filing of Sustainability Reports by TPEX Listed Companies to promote and assist companies in introducing climate change risks and opportunities.
	Extreme weather events strike operating sites and disrupt operations (short-term risk)	Extreme weather events affect operating sites as well as facilities and systems, the most severe of which may cause operation disruption	Decrease in operating income/ Increase in operating costs	<ul style="list-style-type: none"> Regularly track and report climate change trends, establish a notification mechanism for major events, and conduct regular drills. Regularly conduct drills in the remote backup center and review the current ISO 22301 and Business Continuity Plan (BCP) to strengthen the timeliness of key system recovery.
Environment-related opportunities	Development of products and services related to sustainable finance (mid-term opportunities)	<ul style="list-style-type: none"> In response to government policies and regulations to promote sustainable development, guide the investment and development in green energy technology and renewable energy industries Increased market demand for paperless, digital, and mobilized services and products 	Increase in operating income/ Decrease in operating costs	<ul style="list-style-type: none"> Assist green finance and climate change adjustment-related industries to enter the capital market. Develop and promote sustainable financial products and digital financial services to invigorate trading. Continue to simplify internal processes and promote paperless and digital service.
	Promote green procurement and evaluate carbon reduction plans (short-term opportunities)	<ul style="list-style-type: none"> Become a benchmark for promoting energy saving and renewable energy to enhance potential reputation and increase market opportunities Improve operational resilience in response to future carbon emissions disclosure and carbon reduction plans 	Decrease in operating costs	<ul style="list-style-type: none"> Evaluate the renewable energy or purchase the renewable energy certificates. Implement the greenhouse gas inventory, and then plan the direction of greenhouse gas reduction in the future based on the results of the greenhouse gas inventory, with reference to the international major exchanges' carbon reduction goals and climate change risk response measures.

The Taipei Exchange Rules Governing the Preparation and Filing of Sustainability Reports by TPEX Listed Companies requires listed companies to strengthen the governance of climate-related risks and opportunities disclosures in the Sustainability Report. TPEX is now mulling over the international standard TCFD examples to promote enhanced disclosure of climate risks and links of climate risks to corporate governance with reference to international standards. TPEX guides the companies to attach importance to climate change issues so that their ability to respond to climate change can be enhanced.

In line with the government's 2050 net-zero emission target, TPEX has established a schedule for the disclosure of greenhouse gas inventory of listed companies, so that companies can follow and set carbon reduction targets, and cooperate with the government's carbon reduction plan, through connecting the supply chain of listed companies.

The matters			
	2022 Q2	2022 Q4	2023 Q1 ----- 2029
Securities and Futures Bureau	Announce the guidelines for the parent company's greenhouse gas inventory and verification operations	Announce the guidelines for the subsidiary's greenhouse gas inventory and verification operations	Continuously promote and guide listed companies
TWSE TPEX	Inventory of the number, distribution, and greenhouse gas inventory status of listed subsidiaries in phase one	Inventory of the number, distribution, and greenhouse gas inventory status of listed subsidiaries in other phases	
TWSE / TPEX listed companies	The Board of Directors completes the parent company's greenhouse gas inventory and verification scheduling, and controls it on a quarterly basis		The Board of Directors completes the greenhouse gas inventory and verification scheduling of the group (including subsidiaries), and controls it on a quarterly basis

Schedule for the disclosure of greenhouse gas inventory



TPEX mainly engages in securities trading and information services and has been no instance of violations against environmental regulations or complaints received to date. However, TPEX still shoulders the mission of operating sustainably and integrating environmental values into business policies at all levels. These initiatives include digitalized administrative processes, selection of environmentally friendly materials for office equipment, promotion of energy conservation, and reduction of paper consumption and have been integrated into daily operations. In addition, TPEX has completed the contract for procurement of solar photovoltaic power, and the first green electricity supply has been completed in January 2022. In 2022, 296 renewable energy certificates issued by the Ministry of Economic Affairs have been obtained. TPEX actively implements low-carbon operations at different levels and implements the concept of environmental sustainability.

3.2.1 Energy/Greenhouse Gas Emissions Management

In the face of extreme changes in global climate, environmental issues have become a common topic for global citizens, and ESG has become an important indicator of corporate competitiveness. In order to achieve net-zero transformation, TPEX conducted the 2022 greenhouse gas inventory in accordance with ISO 14061-1: 2018, handled the greenhouse gas emissions through international standards, and carried out follow-up carbon reduction plans based on it. In addition, in order to improve the credibility of the inventory information and reports, third-party assurance organizations were arranged to carry out assurance operations for Category 1 (direct greenhouse gas emissions) and Category 2 (indirect greenhouse gas emissions from imported energy).

In 2022, TPEX sets the organizational boundary according to the operational control approach. The identified organizational boundary includes Guting Office, Banqiao Office, Banqiao Server Room, and Taichung Remote Backup Server Room. The source of energy consumption is mainly purchased electricity (including 77.59% of general energy and 22.41% of renewable energy), followed by gasoline for official vehicles. The increase in 2022 compared with the previous two years is due to the combined calculation of the power consumption of the Banqiao server room in New Taipei City and the public power consumption of each location.

2022 Energy consumption

Category 1	Vehicle gasoline (liter)		5,397.01
	Vehicle gasoline (GJ)		176.25
Category 2	Purchased electricity	Non-renewable (kWh)	1,049,427.53
		Non-renewable (GJ)	3,777.94
		Renewable (kWh)	303,031.00
		Renewable (GJ)	1,090.91
Total energy consumption (GJ)			5,045.10
Energy consumption per unit (GJ/person)			17.58

Note 1: All data of this report for 2022 cover Guting Office in Taipei City, Banqiao Office in New Taipei City, Banqiao server room in New Taipei City and the remote backup server room in Taichung City. All data from 2020 to 2021 only cover Guting Office in Taipei City, Banqiao Office in New Taipei City and the remote backup server room in Taichung City, excluding the Banqiao server room in New Taipei City. The total energy consumption in 2020 and 2021 were 3,442.13 GJ and 3,449.09 GJ, respectively.

Note 2: Vehicle gasoline, purchased electricity, total energy consumption, and energy intensity calculations are all rounded to two decimal places.

Note 3: Purchased electricity includes the use of renewable energy. The electricity purchased by Guting Office in Taipei City is based on the metered number specified on Taiwan Power Company's utility bills; those of other locations are based on the metered numbers stated on respective property management service providers' statements.

Note 4: The heating value coefficient is based on the GHG Emission Factor Management Table Version 6.0.4 issued by the Environmental Protection Administration, according to which vehicle gasoline is 7,800 kcal/ liter.

Note 5: 1 gigajoule (GJ) = 10⁹ joules (J); 1 kilocalorie (Kcal) = 4,186.8 joules (J); 1 kilowatt-hour (kWh) = 3.6 megajoules (MJ).

Note 6: Energy intensity was calculated based on the number of employees on December 31, 2022, namely 287.

2022 Greenhouse gas emissions

Greenhouse gas emissions	Location based	Market based
Category 1 (tCO ₂ e)	13.95	13.95
Category 2 (tCO ₂ e)	688.40	534.16
Gross emissions (tCO ₂ e)	702.35	548.11
Emission intensity (tCO ₂ e/person)	2.45	1.91

Note 1: All data of this report for 2022 cover Guting Office in Taipei City, Banqiao Office in New Taipei City, Banqiao server room in New Taipei City and the remote backup server room in Taichung City. All data from 2020 to 2021 only cover Guting Office in Taipei City, Banqiao Office in New Taipei City and the remote backup server room in Taichung City, excluding the Banqiao server room in New Taipei City. The emissions of Category 1 in 2020 and 2021 were 14.91 tCO₂e and 13.29 tCO₂e, respectively; the emissions of Category 2 were 457.44 tCO₂e and 456.30 tCO₂e, respectively; the calculations are all rounded to two decimal places.

Note 2: According to ISO 14064-1:2018, the use of electricity should be quantified by region, and the market segment should be increased to present the benefits of carbon reduction in the use of green electricity (decrease of 154.24 tCO₂e in 2022).

Note 3: This report adopted the operational control approach for greenhouse gas emissions inventory check. The calculation goes: activity data * emission factor* GWP (the emission factor based on the GHG Emission Factor Management Table Version 6.0.4 issued by the Environmental Protection Administration and the GWP is quoted from the IPCC Sixth Assessment Report in 2021. If the sixth assessment report is not updated, the calculation is based on the IPCC Fifth Assessment Report in 2013.)

Note 4: The calculation of greenhouse gas emission intensity includes Category 1 and Category 2 greenhouse gas emissions; Category 2 GHG emissions are mainly purchased electricity. 2022 electricity emission factor adopted 2021 carbon emission factor of electricity from the Bureau of Energy of the Economic Ministry, 0.509 kg CO₂e/kWh; 2021 electricity emission factor adopted 2021 carbon emission factor of electricity of the Bureau of Energy, Ministry of Economic Affairs, R.O.C., 0.509 kg CO₂e/kWh; 2020 electricity emission factor adopted 2020 carbon emission factor of electricity from the Bureau of Energy, Ministry of Economic Affairs, R.O.C., 0.502 kg CO₂e/kWh.

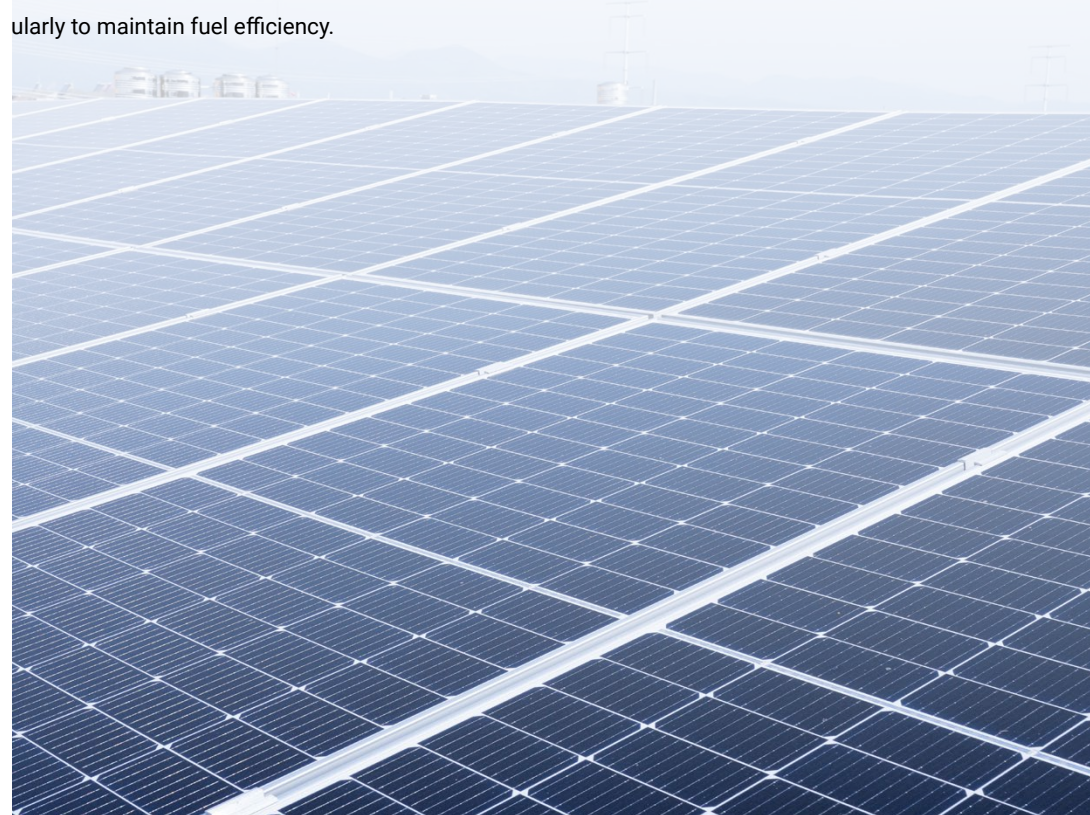
Note 5: Energy intensity was calculated based on the number of employees on December 31, 2022, namely 287.

Note 6: After assessing the factors such as expected users, proportion of emissions, degree of impact, data quality and employee participation, the 2022 greenhouse gas inventory determines to quantify the “indirect greenhouse gas emissions from the use of products” in Category 4, with emissions of 119.29 tCO₂e.

Note 7: Greenhouse gasses include Carbon Dioxide (CO₂), Methane (CH₄), Nitrous Oxide (N₂O), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), Sulfur Hexafluoride (SF₆), Nitrogen Trifluoride (NF₃).

In terms of electricity management, TPEX practices division of responsibility and regular tracking, using energy-saving lamps, and maintaining air-conditioning facilities regularly to improve efficiency. In addition, colleagues are reminded to practice energy conservation from time to time, including turning off air-conditioning in unused spaces, using only necessary lighting, and shutting doors to avoid air-conditioning leakage. Before leaving the office, colleagues are asked to turn off the power of all electrical equipment and remove unnecessary plugs. The last person in each department leaving the office should check whether the power has been turned off. Before the consecutive holidays, colleagues are also reminded to turn off all unused electrical appliances and unplug power supplies. In addition, TPEX has actively purchased green electricity. In 2022, the utilization rate of green electricity in Guting office is about 33.13%, and TPEX is also planning and negotiating for the use of green electricity in the rest offices.

In terms of fuel management, all TPEX departments provide employees with official-use EasyCards to encourage taking public transportation. Private use of official vehicles is strictly forbidden, and rides are shared in principle. Maintenance and inspection are also carried out regularly to maintain fuel efficiency.



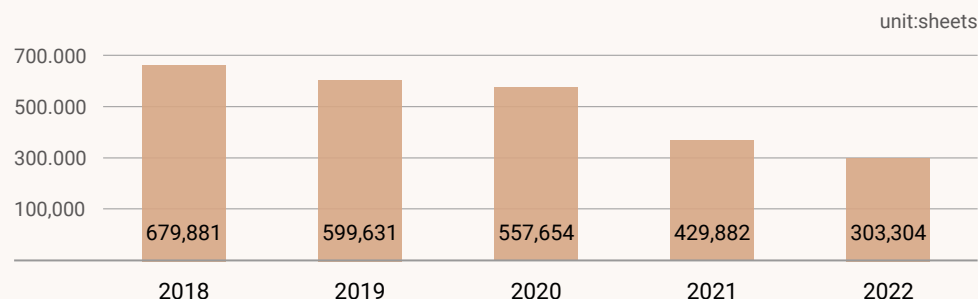
3.2.2 Resource Management

Paper resources management

TPEX's main consumables are photocopy papers. Over the past few years, we have been actively promoting digitalized and paperless processes. In addition to improving productivity, these efforts have also enabled us to achieve resource efficiency.

Internally, TPEX requires colleagues to process official documents electronically. The usage rate of electronic official documents increased by 74% in 2022 with 48,916 signed off. In addition, meeting materials shall be transmitted electronically as much as possible; necessary photocopying or printing should also be double-sided. In 2022, the number of papers used by photocopiers reduced by 29% compared to 2021. Since 2022, 100% of the paper purchased by TPEX is recycled paper.

Photocopier Paper Consumption



Externally, TPEX has been continuing to promote various electronic reporting services since 2015. To this end, it has successively digitalized declaration operations in place of paper-based. The listed / registered companies or intermediary agencies can now download the necessary information from the TPEX website, and complete relevant online declarations in the electronic certification and declaration system of the Market Observation Post System (MOPS).



Document download section for listed and registered companies

- The list of the matters to be handled by the listed / registered companies, registration form for press conferences regarding material information of companies, registration statements for listing of new shares for capital increase, registration statements for capital reduction, various Checklists, and Q & A, etc., are available online



The electronic certification and declaration system of MOPS

- Listed / registered companies' stock listings, such as new shares from capital increase, cancellation of treasury shares, restricted stock awards, private placement of common shares, and over-the-counter trading of renamed new shares, etc.
- Securities firms joining midway and resigning from recommending Emerging Stock Market stocks
- Bond online listing

TPEX advocates listed/registered companies and the issuing companies before registration on the Emerging Stock Market to join the electronic official document exchange system to reduce the transmission of hard-copy documents. As of December 31, 2022, the proportion of listed/registered companies that have accessed the electronic official document exchange system reached 96.75%.

Waste Management

TPEX mainly engages in securities trading and information services and is therefore not associated with concerns over pollution or waste. At present, resource recycling bins are set up on each floor to enable the sorting of recyclables, and colleagues are required to practice resource recycling. Moreover, environmentally friendly toner is used throughout our offices, and 100% of the used toner cartridges are handed over to the original manufacturer for recycling to avoid causing pollution and resource wastage.

Water Management

Taiwan Water Corporation provided all the water used at TPEX, while no groundwater or other water sources are used. TPEX's operating activities have not affected water sources, and the sewage after use is discharged into the sewerage system. In addition to reminding colleagues to practice various water-saving measures, TPEX has installed water-saving devices, cleaned the buildings' water towers regularly, conducted water quality testing at the same time, and inspected water equipment from time to time.

3.3 Building Environmental Sustainability

Plant the seeds of sustainability



TPEX has been paying close attention to environmental sustainability issues for a long time, and responding to the “United Nations Sustainable Development Goals SDG 13 Climate Action and SDG15 Life on Land” with practical actions. By planting trees to protect forests and promote forest conservation, TPEX has achieved the effect of carbon dioxide absorption and storage. On April 9, 2022, Edith Lee, Managing Director & CEO of TPEX, led colleagues and their families to plant trees in Keelung Chaojing Park in an effort to coastal afforestation and environment protection. Through tree planting activities, TPEX hopes to cultivate a sustainable culture and plant sustainable seeds into the hearts of the next generation through parent-child interaction.

In light of implementing environmental protection, TPEX has planted over 6,700 saplings in coastal and mountain areas in Keelung, Yilan, Taichung, Hualien, and Kaohsiung in 2022.

County/City	Number of plants	Type of plants	Main functions
Keelung City	1,000	Pittosporum tobira, Ligustrum japonicum, Rhapsiolepis umbellata, Pongamia pinnata, Cerbera manghas	Wind-proof, sand-setting, greening, and beautification
Yilan County	2,000	Calophyllum inophyllum, Palaquium formosanum Hayata, Hibiscus tiliaceus, Bischofia polycarpa, Cerbera manghas, Melia azedarach, Ficus microcarpa	Maintain the biodiversity of the native coastal forests and prevent sand from flying of shelter forest
Taichung City	1,700	Acer morrisonense, Picea asperata, Platycladus orientalis	Protection of reservoir catchment areas and increasing climate resilience
Kaohsiung City	150	Scaevola taccada, Hibiscus tiliaceus, Vitex negundo	Ecological Construction and Preserving the Qie ding Wetland
Hualien County	1,905	Taiwan juniper, Taiwan cedar, Taiwan alder, Fagaceae	Sustainable production of forestry



TPEX led colleagues and their families plant tree saplings in Keelung Chaojing Park in an effort to coastal afforestation

Guandu Nature Park Adoption Plan



The “Guandu Nature Park” has a diversified ecological environment with a relatively rich range of animals, plants, and species, not only the breeding land of local birds and Xiahou birds, but also a major winter area for many migratory birds. In response to the National Nature Park Adoption Plan, TPEX expects to have sound maintenance management for the trees and green-belts and paddy fields in the park, and create an environment suitable for birds and other biological reproduction.

Clean water source plan of Tse-Xin Organic Agriculture Foundation



The Tse-Xin Organic Agriculture Foundation is aware that the Pinglin Tea District is located in the catchment area of the Feicui Reservoir. The conventional agricultural method of spraying pesticides, chemical fertilizers and herbicides not only poses threats to the ecological environment, but also poses hidden concerns to the water safety of the public in the Greater Taipei area. It has decided to promote organic farming in the water conservation area and help farmers to understand the ecological conservation of farmland. In addition to reducing the ecological threats of pesticides, chemical fertilizers, and herbicides, the clean water source plan has also found that the Tea Plantation has gradually built a healthy biodiversity and restored a complete ecosystem, which also echoes the achievements of the United Nations Environmental Sustainable Development Goals in conserving land ecology, water purification and sanitation. In response to the clean water source plan, TPEX is expected to help farmers to overcome the difficulties of reducing tea production at the early stage of the Tea Plantation. It will also allow more mountains in Pinglin to restore natural vitality and protect the clean water of the Feicui Reservoir!

Adoption of the Organic Field of Xingjian Village and donation to social welfare organizations



Xingjian Village, Sanxing Township, Yilan County insists on adopting the organic agricultural law that is non-toxic, pesticide-free and chemical-free, and voluntarily forms the “Responsibility Guarantee for Production Cooperative of Xingjian Village, Yilan County Organic Agricultural” to promote 100% of the local organic food ingredients in Taiwan through joint marketing. Being aware of the importance of ecological environment conservation and identifying with the concept of residents in Xingjian Village, since 2016, TPEX has been purchasing organic rice produced in Xingjian Village, Sanxing Township, Yilan County, and donating it to disadvantaged families through social welfare agencies, thus extending TPEX's love for the land to those in need. In 2022, 3,600 kilograms of organic rice were purchased by TPEX, which were then donated to 19 social welfare organizations.

Green Energy Charity Plan



TPEX joined hands with Taiwan Green Energy for Charity Association, a juridical association, and Sunnyfounder to cooperate in the “Green Energy Charity Plan” . By donating solar panels to help build power generation facilities, the green energy generated can contribute to the reduction of environmental carbon, and the income from the wholesale of green energy can be donated to the aspects in need of help. It can also bring 20 years of stable resources to disadvantaged units with insufficient resources, so that Green Energy can no longer be just a heartless technology, and it can help the disadvantaged in society and bring more “energy benefits” through “love donation” .

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Prospering with the Community

CHAPTER 4

4.1

Involvement in Social Care

4.1.1 Social Innovation

Driving startup development



In the early stage of operation, innovative and creative enterprises are mostly faced with bottlenecks such as small capital, low product awareness, insufficient R&D resources, and incomplete internal control. In 2014, TPEX set up the GISA, which provides two key services of entrepreneurship counseling and financing channels for innovative and creative enterprises, that is, to help enterprises overcome bottlenecks through the resources of the capital market.

Under the strategic goal of creating a “multi-functional and multi-tiered comprehensive exchange”, TPEX actively supports emerging small-to-medium-sized and micro-enterprises primarily in the high-tech industry, and the innovation and creativity industry to become listed and raise funds. In order to promote the development of startups and social innovation, the GISA has specially set up an industry category of “social enterprise”, and actively encourages social innovation enterprises to apply on the GISA, so that they may use the counseling resources on the GISA to accelerate the growth of enterprises and exert social influence. Meanwhile, in order to encourage social innovation enterprises to register on the GISA, the procedure for registration on the GISA is simplified for social enterprises registered in the “Social Innovation Database” of the Small and Medium Enterprise Administration, Ministry of Economic Affairs.

As of December 31, 2022, there were 12 companies that were social enterprises and registered in the Social Innovation Database of the Small and Medium Enterprises Administration of the Ministry of Economic Affairs among the GISA companies, and the amount of funds raised reached NT\$192 million. In addition, TPEX also organizes matchmaking activities for GISA social innovation enterprises to assist them in establishing cooperation or investment opportunities with domestic medium and large enterprises or investment institutions.

Building female power



There are many female entrepreneurs with abundant innovation energy in Taiwan, and TPEX spares no effort to support female entrepreneurs. Also, understanding that funds and resources are urgently

needed to develop creativity and expand development in the process of starting a business, in order to promote the exchange and growth of more female entrepreneurial elites, TPEX takes the initiative in providing relevant government counseling resources for female entrepreneurs, and gives them the support needed to thrive at the early stage of business development with the hope of increasing female participation in the business world.

Through collaboration with the Small and Medium Enterprise Administration, Ministry of Economic Affairs, TPEX has targeted and invited female entrepreneurs to conduct publicity or forum activities to promote the counseling resources of GISA to them, and at the same time enhance their financial knowledge, entrepreneurial knowledge, global industrial development, and economic trends, so to enhance women's entrepreneurial and economic capabilities.

Elite entrepreneurs conferences

AI-RAN HE, head of the Startup Incubation Department of TPEX, and representatives of enterprises such as Rose Tsou, Chairman of World Vision Taiwan, YI-JIA CIOU, General Manager of Fontrip and SIAO-TING LIN, General Manager of Tan Kong Precision, etc., attended the event to share their experiences and opinions.



Women entrepreneurship salon series seminars

There were 2 sessions in this series, analyzing how women use their unique traits to succeed in different fields of work. In the event on May 31, 2022, AI-RAN HE, head of the Startup Incubation Department of TPEX, together with LI-SIAN HE, Chief Sustainability Officer of CTCL, female entrepreneurial representatives, including TING-TING ZENG, president of NewGreen Tech and WAN-PING BI, CEO of Sunpower Energy and other entrepreneurial representatives, attended the focus discussion of this event, with the theme of solving the key business opportunities of “net zero emission”, sharing how to use GISA's guidance mechanism to establish a good internal control and accounting system for the company, enhance the company's strength and popularity, and give full play to the benefits of business expansion, as well as teaching the business owners how to make good use of GISA resources to enhance the company's strength.



Organized the Financial Talent Camp to cultivate outstanding securities professionals and propagate financial knowledge



Since 2008, TPEX has held the Financial Talent Camp every year, which has been the 15th year since 2022. The camp activity in 2022 has been accepted for registration since May 30. Due to the impact of the epidemic, online learning and competitions have been adopted. The award ceremony was successfully held on October 3, with 412 teams and 1,433 students from 82 tertiary institutions had enrolled for the camp, which is a record high. In the end, a total of 320 teams with 1,125 students from 82 tertiary institutions completed the online course and produced videos to participate in the investment portfolio competition.

Edith Lee, Managing Director & CEO of TPEX, gave special encouragement to students at the award ceremony. She pointed out that financial knowledge is a basic skill in today's society. Good financial knowledge should cover a full understanding of the overall market and commodity characteristics, and risk awareness is indispensable. Through financial education and publicity of this event, students were reminded to be prudent in financial management, love credit, and identify information sources to prevent financial investment fraud. In addition, a number of students from the non-finance department actively participated in the competition. This cross-field active learning attitude and the joint efforts of each group of members to achieve the goal through team cooperation are precious and worthy of encouragement.



Group Photo of Financial Talent Camp Award Ceremony

Opinions of camp participants

After the activity, a questionnaire survey was conducted on the participating students. The students all expressed their affirmation of this workshop and were willing to continue to participate in other activities organized by TPEX, or recommend classmates to sign up. The 4 online workshops were very practical, allowing most of the participating students to better understand the operation of the capital market, the main business of TPEX, market characteristics, and trading practices. Students thought that the online investment portfolio competition for TPEX products was extremely challenging and gave positive affirmation. Furthermore, the online method spared participants the hassle of traveling and provided flexible learning time. It is suggested that the online method shall still be preferred in the future, even if the pandemic is over.

The training courses in the 2022 Financial Talent Camp, which enable most participating students to have a better understanding of the operation of the capital market, the main business and services, market characteristics, and trading practices of TPEX, are very practical. Students suggested adding relevant financial-themed courses such as experience sharing by investment experts, introduction of foreign capital markets and current financial market trends, domestic industry orientation, general economic trend analysis, asset allocation, and future investment development trends such as ESG sustainable investment, with a view to further enhance financial expertise. TPEX has taken the valuable suggestions of students as a reference for the next event.

Student HSU: I would like to express my gratitude to TPEX for its persistence in holding this competition even during the pandemic. At the beginning of registration, I was very worried about my insufficient contribution to the entire group because I did not have any investment experience. The patient guidance of team members and the exquisite learning film recorded by TPEX enabled me to have a better understanding of the investment market in Taiwan and let me know how to allocate assets in the risk market to achieve the highest effectiveness.

Student HUANG: The investment competition of the Securities Talent Camp gave me an opportunity to discuss and learn from each other with team members, and to learn more about the capital market and TPEX. In the past, I did not start an actual investment due to various reasons. However, I experienced a series of pre-preparations of investors in this competition: to analyze the macro environment, understand the industry, understand the individual stock, calculate risks, and learn from team members in the process of discussion. The simulation investment competition enabled me to have a better understanding of the relevant information of each subject and market, and I hope that these experiences will become an integral part of my actual operation in the future.

4.1.2 Actively Support the Disadvantaged

TPEX upholds the spirit of “giving back to the society from which it benefits”. Specifically, the provisions of the Donation of Association of Taipei Exchange stipulate that a certain percentage of the previous year's after-tax surplus must be allocated as donations for social welfare. Furthermore, TPEX has formulated the “Management Measures for Charitable Donations” that stipulates the implementing principles and mechanisms.

Care in multiple ways

TPEX categorized charitable donations into six dimensions: caring for the “healthcare” “disadvantaged and social welfare groups”, “children and youth”, “elderly”, “cultural and sports activities”, and “environment”. TPEX regularly assesses the specific needs, direct related resources, and connect demands of different dimensions to amplify the impacts.

Medical support



TPEX has long been caring for healthcare. In 2022, it donated to Centers for Disease Deployment Hospital, Wanfang Hospital, Guandu Hospital, Shuang Ho Hospital, etc., and assisted in replacing or purchasing medical equipment to improve medical quality and enable the public to obtain better medical services. In addition, TPEX made donations to support the reconstruction of Penghu Huimin Hospital to help create a better medical and health care environment.

TPEX donated to NTU Children's Health Foundation - for children with critical illness, hoping to provide more professional and comprehensive care for children with critical illness.

In order to implement the concept of A Gift that Saves Lives, the Taiwan Academy of Banking and Finance, the Taiwan Futures Exchange, TPEX, and the Taipei Blood Center jointly organized and invited other financial institutions adjacent to the office to participate in the “Love from the Financial Sector: No More Blood Supply Shortages” blood donation activity. To encourage the public to actively participate in blood donation activities, in addition to providing gifts to the blood donors on the day of the activity, we also arranged vehicles on a regular basis to encourage employees to actively participate in blood donation.

Caring for the elderly



TPEX has been sponsoring “Hot Meal Program for Disadvantaged Elderly Living Alone” of Hondao Senior Citizen's Welfare Foundation, the program of bathing aids for disabled people of Private Catholic Chinese Notre Dame Social Welfare Charity Foundation, the program of constructing a building for elderly care of Maria Social Welfare Foundation, A Kernel of Wheat Foundation and etc. TPEX has been actively taking care of the elderly in various parts of Taiwan and has spared no effort.

Donations to the disadvantaged



Since 2013, TPEX has continuously supported the charitable activities of the 1919 Food Bank, getting enthusiastic responses from TPEX employees; in order to more actively utilize its charitable powers, since 2015, TPEX has been continuing to invite listed and registered companies to join in the charitable initiatives. In 2022, TPEX succeeded in urging 22 listed and registered companies to jointly support activities of public interest and collect caring supplies. The listed and registered companies will continue to sponsor this meaningful event in response to ESG and in the spirit of giving more blessed than receiving.

Chinese Christian Relief Association stated that TPEX has been enthusiastic in supporting the 1919 Food Bank for 10 years, which fully reflects the spirit of continuous uninterrupted and still water runs long.



TPEX joined hands with listed and registered companies in the charitable initiatives

In addition, the Taiwan Futures Exchange has responded to the call of the competent authorities since 2015, and invited surrounding units and financial institutions to participate in the joint donation activity of “The Joint Donation to the Food(Necessities) Banks”, and provided people's livelihood necessities for disadvantaged families in remote villages with the help of private bulk commodities. TPEX has continued to support the activity since 2020 to fulfill its corporate social responsibility.

Inclusive education



In order to encourage the financial industry to fulfill its social responsibilities, assist young students from disadvantaged families to successfully complete their studies, and provide financial education courses to implement the effect of School-enterprise cooperation, Taiwan Financial Services Roundtable initiated the establishment of Financial Services Education Charity Fund to give full play to the synergy of giving back to the society. It is jointly donated and established by TPEx, the Financial Business Association, other financial surrounding units, and financial institutions. TPEx has been donated and sponsored every year since 2015; In addition, TPEx supported disadvantaged students by donating Taiwan Fund for Children and Families in Northern, Central, and South Taiwan (12 branches in 2022) to provide financial aid for disadvantaged students.

Since 2018, TWSE has invited six institutions, including TPEx, TDCC, TAIFEX, JCIC, FISC, and TWCA, to jointly make donations to the “Ministry of Education - School Education Savings Account” to help economically vulnerable students with low-and middle-income households, whose families have suffered sudden changes or other exceptional circumstances that prevent them from receiving school education.

With a view to allow children in remote villages to have the opportunity to have access to music, art, and sports activities, TPEx has been supporting and sponsoring National Theater & Concert Hall's “Zero Distance Art Realization Project” , National Taiwan Science Education Center's “Thomas Edison's Adventure” , Vox Nativa Taiwan's “Vox Nativa Education Program” and the Ministry of Education's program to subsidize the school art education.



TPEx sponsored National Theater & Concert Hall's “Zero Distance Art Realization Project” to allow children in remote villages to enjoy performances at the National Concert Hall.

In addition, to help the disadvantaged whose families are financially vulnerable to enhance their financial knowledge and enter the financial industry for employment, TDCC has invited the financial, securities and futures peripheral institutions to set up the College Student Financial

Employment Public Welfare Program to provide financial industry resources and a series of financial professional training courses for the disadvantaged students, help them obtain financial certification and strengthen their employment competitiveness. After the completion of the training, job-matching activities are also provided, which enable students to quickly connect with enterprises and give them the opportunity to turn their lives around. TPEx has made annual donations since 2015.

Sports promotion



TPEx supports the project of promote enterprises to sponsor sports of the Sports Department of Ministry of Education and encourages potential and excellent players or teams to participate in strict sports training to improve their competitiveness. In 2022, TPEx sponsored the Baseball Team of Da Tung Primary School in Yilan County, the Judo Team of Timur Primary School in Ping Tung, the Judo Team of Tong-Fu Junior High School in Nantou County, and the Taekwondo Team of Smangus Primary School in Hsinchu County. In addition, TPEx has sponsored the training fees for China Golf Association sports players for three consecutive years since 2020, hoping to contribute to the cultivation of golf talents for Taiwan.



The Sports Department held the enterprise appreciation meeting and the sports school presented a certificate of appreciation

Advocating for peace



In response to the Relief Action for Ukraine refugees, TPEx donated to the international assistance project in Ukraine, and gave full play to the humanitarian care to specifically fund the medical assistance and biological materials required by Ukraine refugees. TPEx hoped to end the war as soon as possible and people from Ukraine, who are suffering from hardships, can return to their hometowns as soon as possible and restore to a safe and secure life.

4.2

Creating a Happy Workplace

4.2.1 People-Oriented Philosophy

Our people-oriented approach

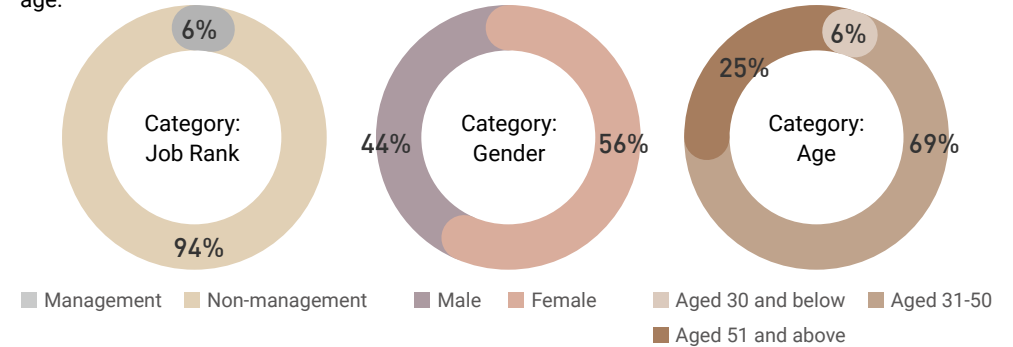
TPEX believes that “people” are the most important asset of an organization, and is therefore committed to ensuring that every employee can work with peace of mind and give full play to their expertise. In order to implement the sustainable development concept and treat all workers with respect, TPEX, in addition to complying with the relevant labor laws of Taiwan, also recognizes and supports international human rights conventions such as the Universal Declaration of Human Rights, The Ten Principles of the UN Global Compact, The Convention on the Elimination of all Forms of Discrimination Against Women (CEDAW) and the International Labour Conventions, and implements human rights protection in accordance with the following implementation guidelines:

- 01 Diversity, inclusion, and equal opportunity
- 02 Prohibition of child labor
- 03 Prohibition of forced labor
- 04 Establish a smooth labor-man-agement communication channel
- 05 Create a safe and healthy working environment
- 06 Promote the physical and mental health and work-life balance of all employees
- 07 Review and assess relevant human rights policies as appropriate

TPEX offers stable salaries, excellent welfare, and a high-quality working environment to attract outstanding talents, maintain long-term good labor relations, improve employee satisfaction and build a happy enterprise. With a comprehensive salary, welfare, and education and training system, we engage in employee retention and training by assisting employees to continuously improve their professional skills and provide proper care.

At the end of 2022, 287 full-time staff (all being full-time employees who entered into irregular labor contracts) were employed at TPEX, of which 126 employees are male and 161 employees are female, and 20 external employees (of

which 11 employees are male and 9 employees are female, including drivers, security guards, cleaners, and attendants, etc.). All of the employees (including senior management) are citizens of Taiwan. The following charts indicate the composition of employees by gender, job rank, and age:

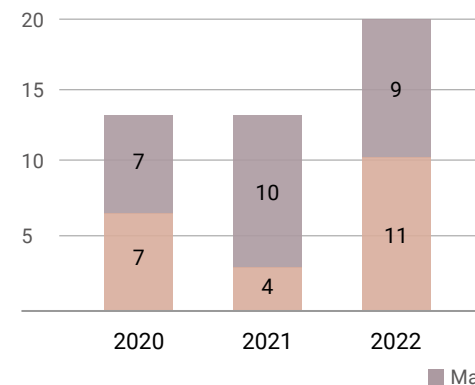


Note: Management refers to staff above department manager (inclusive)

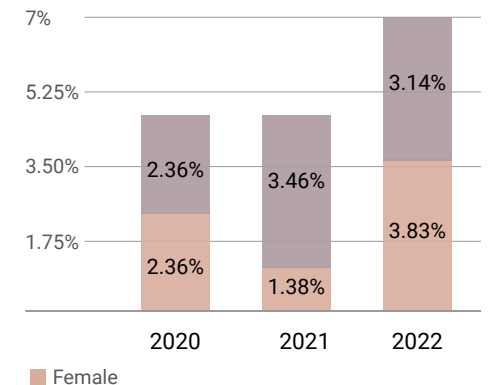
Employment equality

In terms of recruitment, appointment, training, rewards, promotion, and retirement, TPEX does not discriminate or practice unequal treatment on the basis of race, religion, nationality, gender, sexual orientation, and physical and mental disabilities. Salaries for all new recruits are determined based on their academic experience and professional certificates held. Employees' salary increases and promotions are also handled fairly and equally. Those of the same job rank receive the same salaries in accordance with the policy of equal pay for equal work.

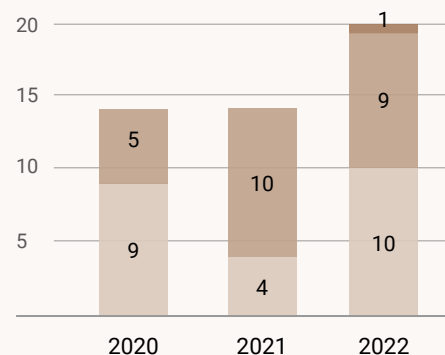
Number of new recruits (by gender)



New recruits rate (by gender)

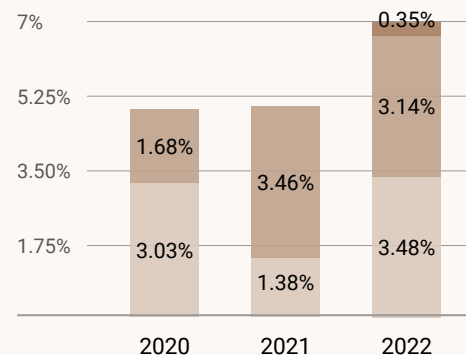


Number of new recruits (by age)

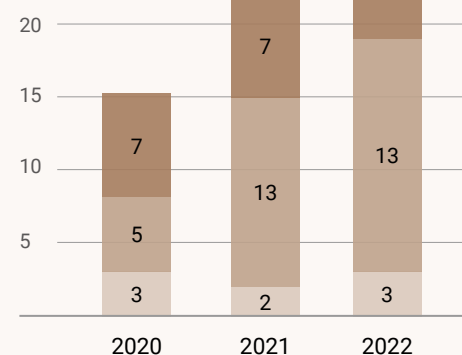


■ Aged 30 and below ■ Aged 31-50 ■ Aged 51 and above

New recruit rate (by age)

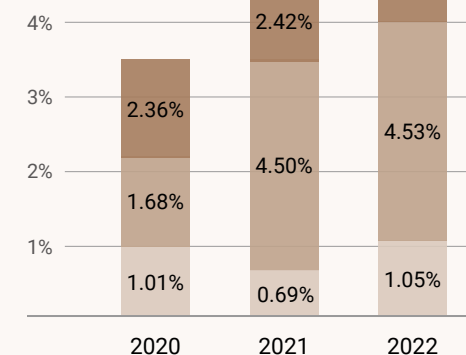


Number of departed employees (by age)

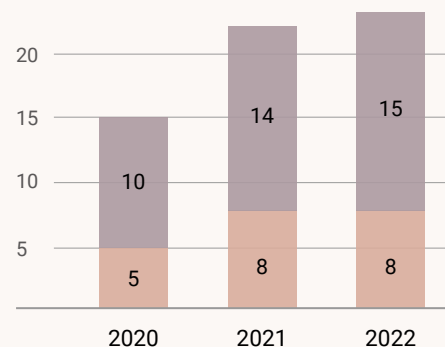


■ Aged 30 and below ■ Aged 31-50 ■ Aged 51 and above

Employees turnover rate (by age)

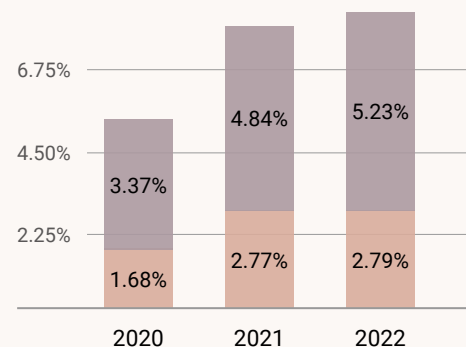


Number of departed employees (by gender)



■ Male ■ Female

Employees turnover rate (by gender)



For employee care, TPEX offers every employee the following welfare provision aside from the statutory rights, including labor insurance, health insurance, secured parental leave, etc.

Health protection	Group insurance, health examination subsidies
Family care	Children's education subsidies, wedding and funeral subsidies, and pension benefits are superior to the basic protection guaranteed by the law
Leisure benefits	Travel subsidies, birthday gifts, and club activity subsidies
Encouragement of further studies	Subsidies for further studies, special leave superior to the basic protection guaranteed by the law

TPEX's recruitment and appointment policies of employees with disabilities is equal to the regular employees, which also applies to their training, reward, and promotion. At year-end from 2020 to 2022, the number of employees with disabilities employed by TPEX was 6, ensuring an inclusive workplace beyond the requirements of the People with Disabilities Rights Protection Act.

4.2.2 Compensation and Welfare Support

Labor-management meetings

The members of TPEX Labor-Management Meetings comprise ten labor representatives and ten management representatives. The labor representatives are elected by all employees from among candidates with the highest votes in each department to fully incorporate each department's opinions. Meetings are convened every quarter to coordinate relations, promote cooperation, and improve operational efficiency. In 2022, TPEX held four labor-management meetings, discussing issues including employee education and training. There were no significant special concerns.

Employee compensation

TPEX offers employees stable salaries, a good welfare system, and a high-quality working environment. While giving employees equal opportunities for salary increases and promotions, TPEX provides higher remuneration compared with the basic wage, thus enhancing employee job satisfaction and building a happy enterprise.

The ratio of TPEX minimum starting salary over the years to the minimum wage stipulated by the Labor Standards Act

	Male minimum starting salary	Female minimum starting salary	Minimum wage
2020	1.97	1.97	1
2021	1.95	1.95	1
2022	1.68	1.79	1

Salary statistics for the past three years

Year	Level of position	Female	Male
2020 年	Management	1.03	1.00
	Non-management	0.86	1.00
2021 年	Management	1.11	1.00
	Non-management	0.89	1.00
2022 年	Management	1.06	1.00
	Non-management	0.88	1.00

Note: The ratio is converted based on the salary of male employees as 1 unit.

Employee benefits

TPEX is committed to creating a healthy, happy, harmonious and balanced working environment, and regards employees' physical and mental health as wealth. Employees are not engaged in positions with high risks of health and safety or high incidence of specific diseases. TPEX offers a comprehensive welfare scheme throughout every employee's life journey, so that each highly committed employee can receive proper benefits supporting both personal and family well-being.

LIFE CARE

- Marriage and childbirth subsidies
- Hospitalization and major disaster subsidies
- Child education and childcare allowances
- Funeral subsidy

FAMILY CARE

- Film appreciation
- Employee family day
- Family sports meet
- Travel subsidy
- Company retreats



FURTHER STUDY

- Subsidy for seeking further education abroad
- On-the-job master's degree subsidy
- Tuition subsidy for credit class courses
- Subsidy for foreign language training

INSURANCE CARE

- Labor health insurance
- Group insurance

Parental leave policy and childcare measures

Women account for 56% of TPEX employees, and many are of childbearing age. To support female employees in achieving work-family balance, we provide considerate benefits for all stages of parenthood, from pregnancy, childbirth, and breastfeeding, to childcare. Prenatal leave provides female colleagues who experience pregnancy discomforts with time for recuperation and prenatal checkups. At childbirth, we provide maternity bonuses, maternity leave, paternity leave for spouses, parental leave, etc. Upon postpartum, employees can use breastfeeding rooms and bottle sterilizers placed in the office. In addition, family care leave and flexible commuting further enable colleagues to attend to both family and work. The employees' children enjoy tuition subsidies during their schooling stage.

All full-time employees of TPEX are entitled to have parental leave in accordance with the law. In 2022, the reinstatement rate and retention rate from parental leave were both 100%. The high reinstatement rate and high retention rate demonstrates that TPEX takes care of colleagues and their families while facilitating work-family balance

The situation of parental leave in 2022 is as follows:

Item	Female	Male	Total
Number of parental leave in 2022	2	0	2
Number of employees who should be reinstated after parental leave in 2022 (A)	2	0	2
Actual number of employees who were reinstated after parental leave in 2022 (B)	2	0	2
Number of employees who should be reinstated after parental leave in 2021 (C)	3	0	3
Number of employees who were reinstated after parental leave in 2021 and remained employed 12 months after reinstatement (D)	3	0	3
Reinstatement rate%= B/A	100%	NA	100%
Retention rate%= D/C	100%	NA	100%

Subsidy policy for further education

To enhance employees' competencies and efficiency, TPEX provides in-house training courses and also selects employees to participate in training or visits through seminars or

training courses offered by professional institutions at home and abroad to strengthen core and cross-field professional training. In order to encourage employees to continue to improve their professional skills, TPEX provides tuition subsidies to employees enrolled in on-the-job master's degrees or above and credit courses in law or accounting. We also offer a special salary increase to employees who obtain professional licenses such as attorneys, accountants, or analysts during their employment.

Club activities

TPEX has issued the Club Management Measures and subsidizes club activities to encourage employees to engage in leisure activities and thereby improving their physical and mental health. These clubs can be categorized into ball games, sports and leisure, arts and culture, and religious groups by their nature. At present, 14 clubs have been established, including the billiard club, badminton club, tennis club, basketball club, baseball club, physical fitness club, Tai Chi club, swimming club, yoga club, mountaineering club, photography club, music singing club, Yuanzhi club, and Lutheran club.

In the first half of 2022, in response to the severe and special infectious pneumonia (Covid-19) pandemic, friendly matches and competitions for surrounding units of the clubs were suspended. As the pandemic slowed down in the third quarter, in addition to regular club activities, TPEX actively participated in various friendly matches and competitions of external units to enhance the bonding between TPEX's clubs and the surrounding units.

TPEX Employee Club Activities in 2022

Name of event	Time	Location
Yuanzhi Buddhist club held the "Collective Cultivation: Medicine Buddha Sutra"	January 8, 2022	Classroom on 11th Floor of TPEX
Billiard club held the "35th Securities Cup Billiards Tournament"	October 30, 2022	National Taiwan Normal University Stadium
Yoga club participated in the "11th Securities and Futures Surrounding Units Yoga Friendly Match"	November 12, 2022	Taiwan Depository & Clearing Corporation
Badminton club participated in the "6th Zicheng Cup Badminton Tournament in 2022"	December 11, 2022	Chenggong High School Sports Center
Swimming club held the "TPEX Winter Swimming 50" event	December 16, 2022	National Taiwan Normal University Swimming Pool
Lutheran club held the "2022 Christmas Lunch"	December 16, 2022	Classroom on 11th Floor of TPEX

4.2.3 Talent Cultivation and Development

Regarding employees as the most valuable assets, TPEX actively carries out talent training to enhance employees' professionalism. TPEX formulates a diversified annual education and training plan each year according to the yearly talent development demand. In order to accurately grasp the work performance of employees, assist and guide employees to continuously grow and improve, and jointly promote the operation and development, TPEX has formulated the annual appraisal method. 100% of employees who have served TPEX for six months in 2022 have completed the performance appraisal.

The 2022 education and training plans focused on the three major dimensions of “professional training”, “foreign language proficiency” and “general education” to enhance employees' professionalism, stimulate enthusiasm, creativity, and a global vision.

Course category		Example of the course content
Professional training	Focusing on “professional value” and “innovative products”, for “professional value”, such as global economic development trends and industry practices; for “innovative products”, such as the introduction of new products, new systems or businesses.	<ul style="list-style-type: none"> • 2022 Economic Outlook and Technology Industry Investment Trend and Financial Crime Investigation Practice Sharing • Yield curve and fair price theories and practices for bonds • Rental issues and accounting treatment of common employee reward and compensation tools • Financial service industry's response to greenhouse gas emissions inventory and related countermeasures and cases sharing • Asset allocation practice sharing • Discussion on the theoretical framework of the early exit model for interest rate swap • Description of carbon inventory counseling resources and carbon inventory calculator • Seven elements of big data success: A to G • Adjustment of supply chain of Taiwanese enterprises under the international situation and the innovative development of smart healthcare in Taiwan • Sharing of financial crime detection practices

Foreign language proficiency	Foreign language further education subsidies:
	<ul style="list-style-type: none"> • Different amounts of foreign language further education subsidies are given according to the target employee to effectively improve individually differentiated foreign language skills.
	Professional foreign language training:
	<ul style="list-style-type: none"> • Provide corporate business English courses, corporate business Japanese courses, and other project-based courses. The physical courses of professional foreign language training were suspended due to the continuous severe pandemic in the first three quarters of 2022.

General education	Including statutory, management, and humanities general education.	Statutory general education:
		<ul style="list-style-type: none"> • Information Security Education and Training and Personal Data Protection Act • Corporate Integrity and Whistleblowing System • Workplace Ethics and Sexual Harassment Prevention • Fire Safety Education and Training
		Management general education:
		<ul style="list-style-type: none"> • In order to improve the management ability, communication and coordination ability and crisis handling ability of managers at all levels, relevant training and professional courses are planned.
		Humanities general education:
		<ul style="list-style-type: none"> • In order to improve the humanistic quality of employees and promote the healthy development of body and mind, soft courses such as “Health Medicine Series”, “Lohas Experience Series” and “Sports Series” are provided, including courses on immunology, sports and health and stress relief, home sports, new tourism knowledge and plant and floral art and handicrafts, etc.



Talent cultivation

In 2022, TPEX arranged a variety of physical and online training courses and also selected employees to participate in training or visits through seminars or training courses offered by professional institutions at home and abroad to strengthen core and cross-field professional training.

To understand the results of education and training, TPEX conducts the employee survey on training every year as the reference for future training arrangements. According to the 2022 questionnaire results, 100% of colleagues agreed that TPEX has provided sufficient core and general education training hours.

TPEX also arranged employees to participate in external education and training other than internal courses. According to statistics, employees participated in professional training courses and foreign language courses organized by external professional institutions in 2022 for a total of 6,695 hours. In 2022, the employees of TPEX received a total of 17,305 hours of internal and external education training, with an average of 60.30 hours per employee, indicating that TPEX places great emphasis on improving the professional quality of human resources, stimulating employees' workplace energy and creativity, and enhancing international competitiveness.

Employee internal education and training hours for the past three years

	2020	2021	2022
Training hours received	8,962	11,114	10,610
Number of employees	297	289	287
Average training hours per employee	30.17	38.46	36.97

Employees' internal and external education and training hours in 2022

	Management		Non-management		Total
	Male	Female	Male	Female	
Internal education and training hours	337	141	4,111	6,021	10,610
External education and training hours	181	100	2,150	4,264	6,695
Number of employees	10	6	116	155	287
Average training hours per employee	51.80	40.17	53.97	66.35	60.30

4.2.4 Staff Care and Communication

TPEX understands that talents are the most important assets of an enterprise and only a healthy workplace can bring out the best of our employees. With the goal of allowing every employee to work with peace of mind and make full use of their expertise, TPEX actively builds a sound health management system, and continues to carry out various health promotion activities to shape a workplace health culture.

Maintain physical and mental health of employees	Enhance office environment	Improve emergency response measures
<ul style="list-style-type: none"> • Provide employees with health checkup subsidies, and provide employees undergoing health checks 1 day of official leave • Implementation of the Ergonomic Hazards Prevention Program, the Abnormal Workload-triggered Diseases Prevention Plan, the Prevention Plan for Illegal Infringement at Work and the Maternal Health Protection Plan • Contracted doctors and nurses are arranged to provide health education/health consultation services to employees three times a year and three times a month, respectively • Offer courses related to stress relief, healthy diets, and LOHAS experience education 	<ul style="list-style-type: none"> • Reinforce the cleaning and disinfection of the office environment, and conduct regular carbon dioxide concentration testing • Set up a gym and regularly maintain or replace gym equipment • Arrange work environment monitoring institutions approved by the Ministry of Labour to conduct regular work environment monitoring to provide a safe work environment 	<ul style="list-style-type: none"> • Conduct national earthquake evacuation drills every year • Annual fire drills • Train first-aid personnel certified through occupational safety and health education and training and retrain regularly • Set up Automated External Defibrillator (AED)

TPEX gym

In order to help colleagues develop exercise habits, TPEX has set up a gym in a separate space of the office building, so that employees can make good use of their spare time during working hours to exercise. The gym space was continued to expand and related equipment was added, including equipment such as treadmills, cross-training recumbent bikes, upright bikes, abs training chairs, back stretchers, spinning bikes, and dumbbells, and colleagues were encouraged to make good use of them.



Appendix 1: GRI Standards Index	85
Appendix 2: SASB Standards Index	88
Appendix 3: Independent Auditors' Limited Assurance Report	89

Appendix

CHAPTER 5

Appendix 1: GRI Standards Index

Statement of use	TPEX has reported in accordance with the GRI Standards for the period from January 1, 2022 to December 31, 2022.
GRI 1 used	GRI 1: Foundation 2021
Applicable GRI industry standards	No applicable industry standards

No.	Disclosure	Corresponding Chapters	Page
GRI 2: General Disclosures 2021			
2-1	Organizational details	Introduction to TPEX	06
2-2	Entities included in the organization's sustainability reporting	About the Report	03
2-3	Reporting period, frequency and contact point	About the Report	03
2-4	Restatements of information	No information restatements in 2022	
2-5	External assurance	About the Report	03
		Appendix 3 Independent Auditors' Limited Assurance Report	89
2-6	Activities, value chain and other business relationships	2.2.4 Supplier Management	64
2-7	Employees	4.2.1 People-Oriented Philosophy	78
2-8	Workers who are not employees	4.2.1 People-Oriented Philosophy	78
2-9	Governance structure and composition	Sustainable Promotion Organization	12
		2.2.1 Integrity Governance of TPEX	57
2-10	Nomination and selection of the highest governance body	2.2.1 Integrity Governance of TPEX	57
2-11	Chair of the highest governance body	Introduction to TPEX (Organizational Structure)	08
2-12	Role of the highest governance body in overseeing the management of impacts	Sustainable Promotion Organization	12
		Material Topics Analysis	17
		2.2.1 Integrity Governance of TPEX	57
2-13	Delegation of responsibility for managing impacts	Sustainable Promotion Organization	12
2-14	Role of the highest governance body in sustainability reporting	Sustainable Promotion Organization	12
2-15	Conflicts of interest	2.2.1 Integrity Governance of TPEX	57

No.	Disclosure	Corresponding Chapters	Page
GRI 2: General Disclosures 2021			
2-16	Communication of critical concerns	Material Topics Analysis	17
2-17	Collective knowledge of the highest governance body	2.2.1 Integrity Governance of TPEX	57
2-18	Evaluation of the performance of the highest governance body	2.2.1 Integrity Governance of TPEX	57
2-19	Remuneration policies	2.2.1 Integrity Governance of TPEX	57
2-20	Process to determine remuneration	2.2.1 Integrity Governance of TPEX	57
2-21	Annual total compensation ratio	Information on the highest paid employees and median employee compensation of TPEX have not been disclosed due to the involvement of sensitive information.	
2-22	Statement on the sustainable development strategy	Message from the Chairman and CEO	04
2-23	Policy commitments	2.2.1 Integrity Governance of TPEX	57
		4.2.1 People-Oriented Philosophy	78
2-24	Embedding policy commitments	2.2.1 Integrity Governance of TPEX	57
2-25	Processes to remediate negative impacts	Material Topics Management	19
		2.2.1 Integrity Governance of TPEX	57
2-26	Mechanisms for seeking advice and raising concerns	2.2.1 Integrity Governance of TPEX	57
2-27	Compliance with laws and regulations	Material Topics Management	19
2-28	Membership of associations	1.3.1 Participation in Guilds and Associations	50
2-29	Approach to stakeholder engagement	Stakeholder Identification and Engagement	14
2-30	Collective bargaining agreements	None	

No.	Disclosure	Corresponding Chapters	Page
GRI 3: Material Topics 2021			
3-1	Process to determine material topics	Material Topics Analysis	17
3-2	List of material topics	Material Topics Analysis	17
A fair, transparent, and orderly market			
GRI 3: Material Topics 2021			
3-3	Management of material topics	Material Topics Management	19
Self-designated Topics			
	A fair, transparent, and orderly market	1.2.2 Market Supervision	44
		1.2.3 Transaction Monitoring	45
Ethics and Integrity Management			
GRI 3: Material Topics 2021			
3-3	Management of material topics	Material Topics Management	19
GRI 205: Anti-corruption 2016			
205-3	Confirmed incidents of corruption and actions taken	2.2.1 Integrity Governance of TPEX	57
Corporate Governance			
GRI 3: Material Topics 2021			
3-3	Management of material topics	Material Topics Management	19
GRI 2: General Disclosures 2021			
2-9	Governance structure and composition	Sustainable Promotion Organization	12
		2.2.1 Integrity Governance of TPEX	57
GRI 405: Diversity and Equal Opportunity 2016			
405-1	Diversity of governance bodies and employees	2.2.1 Integrity Governance of TPEX	57
		4.2.1 People-Oriented Philosophy	78
System Stability and Resilience			
GRI 3: Material Topics 2021			
3-3	Management of material topics	Material Topics Management	19

No.	Disclosure	Corresponding Chapters	Page
Self-designated Topics			
	System stability and resilience	1.2.3 Transaction Monitoring	45
		2.2.3 Information Security	63
Legal Compliance			
GRI 3: Material Topics 2021			
3-3	Management of material topics	Material Topics Management	19
GRI 2: General Disclosures 2021			
2-27	Compliance with laws and regulations	Material Topics Management	19
Business Performance			
GRI 3: Material Topics 2021			
3-3	Management of material topics	Material Topics Management	19
GRI 201: Economic Performance 2016			
201-1	Direct economic value generated and distributed	Introduction to TPEX (Business Performance)	10
Climate Change			
GRI 3: Material Topics 2021			
3-3	Management of material topics	Material Topics Management	19
Self-designated Topics			
	Climate change	3.1 Climate Change Governance	66
Information Security and Personal Information Protection			
GRI 3: Material Topics 2021			
3-3	Management of material topics	Material Topics Management	19
GRI 418: Customer Privacy 2016			
418-1	Substantiated complaints concerning breaches of customer privacy or losses of customer data	2.2.3 Information Security	63
GRI 200: Economic			
GRI 202: Market Presence 2016			
202-1	Ratios of standard entry level wage by gender compared to local minimum wage	4.2.2 Compensation and Welfare Support	80

No.	Disclosure	Corresponding Chapters	Page
202-2	Proportion of senior management hired from the local community	4.2.1 People-Oriented Philosophy	78
GRI 204: Procurement Practices 2016			
204-1	Proportion of spending on local suppliers	2.2.4 Supplier Management	64
GRI206: Anti-competitive Behavior 2016			
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	2.2.1 Integrity Governance of TPEx	57
GRI 300: Environmental			
GRI 302: Energy 2016			
302-1	Energy consumption within the organization	3.2.1 Energy/Greenhouse Gas Emissions Management	68
302-3	Energy intensity	3.2.1 Energy/Greenhouse Gas Emissions Management	68
GRI 305: Emissions 2016			
305-1	Direct (Scope 1) GHG emissions	3.2.1 Energy/Greenhouse Gas Emissions Management	68
305-2	Energy indirect (Scope 2) GHG emissions	3.2.1 Energy/Greenhouse Gas Emissions Management	68
305-3	Other indirect (Scope 3) GHG emissions	3.2.1 Energy/Greenhouse Gas Emissions Management	68
305-4	GHG emissions intensity	3.2.1 Energy/Greenhouse Gas Emissions Management	68

No.	Disclosure	Corresponding Chapters	Page
GRI 400: Social			
GRI 401: Employment 2016			
401-1	New employee hires and employee turnover	4.2.1 People-Oriented Philosophy	78
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	4.2.1 People-Oriented Philosophy	78
		4.2.2 Compensation and Welfare Support	80
401-3	Parental leave	4.2.2 Compensation and Welfare Support	80
GRI 403: Occupational health and safety 2018			
403-3	Occupational health services	4.2.4 Staff Care and Communication	83
403-6	Promotion of worker health	4.2.4 Staff Care and Communication	83
GRI 404: Training and Education 2016			
404-1	Average hours of training per year per employee	4.2.3 Talent Cultivation and Development	82
404-3	Percentage of employees receiving regular performance and career development reviews	4.2.3 Talent Cultivation and Development	82
GRI 406: Non-discrimination 2016			
406-1	Incidents of discrimination and corrective actions taken	2.2.1 Integrity Governance of TPEx	57



Appendix 2: SASB Standards Index

Topic Disclosed	Code	Category	Metric Disclosed	Corresponding Chapters/ Additional Information	Page
Promoting Transparent & Efficient Capital Markets	FN-EX-410a.1	Quantitative	(1) Number and (2) average duration of (a) halts related to public release of information and (b) pauses related to volatility	1.2.3 Transaction Monitoring	45
	FN-EX-410a.2	Quantitative	Percentage of trades generated from automated trading systems	Introduction to TPEx (Core Businesses)	06
	FN-EX-410a.3	Discussion & Analysis	Description of alert policy regarding timing and nature of public release of information	1.2.3 Transaction Monitoring	45
	FN-EX-410a.4	Discussion & Analysis	Description of policy to encourage or require listed entities to publicly disclose environmental, social, and governance (ESG) information	2.1.2 Driving Corporate Action	56
Managing Conflicts of Interest	FN-EX-510a.1	Quantitative	Total amount of monetary losses as a result of legal proceedings associated with fraud, insider trading, anti-trust, anti-competitive behavior, market manipulation, malpractice, or other related financial industry laws or regulations	2.2.1 Integrity Governance of TPEx	57
	FN-EX-510a.2	Discussion & Analysis	Discussion of processes for identifying and assessing conflicts of interest	2.2.1 Integrity Governance of TPEx	57
Managing Business Continuity & Technology Risks	FN-EX-550a.1	Quantitative	Number of significant market disruptions and (2) duration of downtime	1.2.3 Transaction Monitoring	45
	FN-EX-550a.2	Quantitative	(1) Number of data breaches, (2) percentage involving personally identifiable information (PII), (3) number of customers affected	2.2.3 Information Security	63
	FN-EX-550a.3	Discussion & Analysis	Description of efforts to prevent technology errors, security breaches, and market disruptions	2.2.3 Information Security	63
Activity Metrics	FN-EX-000.A	Quantitative	Average daily number of trades executed, by product or asset class	1.1.2 Diverse Financial Instruments	36
	FN-EX-000.B	Quantitative	Average daily volume traded, by product or asset class	1.1.2 Diverse Financial Instruments	36

Appendix 3: Independent Auditors' Limited Assurance Report

Independent Auditors' Limited Assurance Report for the Report of 2022

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INDEPENDENT AUDITORS' LIMITED ASSURANCE REPORT

Taipei Exchange

We have performed a limited assurance engagement on the selected subject matter information (see Appendix) in the Sustainability Report ("the Report") of Taipei Exchange ("TPEX") for the year ended December 31, 2022.

Responsibilities of Management for the Report

Management is responsible for the preparation of the Report in accordance with Universal Standards, Sector Standards and Topic Standards published by the Global Reporting Initiative (GRI), and for such internal control as management determines is necessary to enable the preparation of the Report that are free from material misstatement.

Auditors' Responsibilities for the Limited Assurance Engagement Performed on the Report

We planned and conducted our work on the selected subject matter information (see Appendix) in the Report in accordance with the Statements of Assurance Engagements Standards 3000 "Assurance Engagements Other than Audits or Reviews of Historical Financial Information" issued by the Accounting Research and Development Foundation of the Republic of China to issue a limited assurance report on the preparation, with no material misstatement in all material respects, of the Report. The nature, timing and extent of procedures performed in a limited assurance engagement are different from and more limited than a reasonable assurance engagement and, therefore, a lower assurance level is obtained than a reasonable assurance.

We applied professional judgment in the planning and conduct of our work to obtain evidence supporting the limited assurance. Because of the inherent limitations of any internal control, there is an unavoidable risk that even some material misstatements may remain undetected. The procedures we performed include, but not limited to:

- Obtaining and reading the Report.
- Inquiring management and personnel involved in the preparation of the Report to understand the policies and procedures for the preparation of the Report.
- Inquiring the personnel responsible for the preparation of the Report to understand the process, controls, and information systems in the preparation of the selected subject matter information.
- Analyzing and examining, on a test basis, the documents and records supporting the selected subject matter information.

Inherent Limitations

The subject information included non-financial information, which was under more inherent limitations than financial information. The information may involve significant judgment, assumptions and interpretations by the management, and the different stakeholders may have different interpretations of such information.

Independence and Quality Controls

We have complied with the independence and other ethical requirements of the Norm of Professional Ethics for Certified Public Accountant in the Republic of China, which contains integrity, objectivity, professional competence and due care, confidentiality and professional behavior as the fundamental principles. In addition, the firm applies Statement of Quality Management Standard 1 "Quality Management for Public Accounting Firms" issued by the Accounting Research and Development Foundation of the Republic of China and, accordingly, requires the firm to design, implement and operate a system of quality management, including policies or procedures regarding compliance with ethical requirements, professional standards, and applicable legal and regulatory requirements.

Conclusion

Based on the procedures performed and evidence obtained, nothing has come to our attention that causes us to believe that the selected subject matter information in the Report is, in all material respects, not prepared in accordance with the above mentioned reporting criteria.

Other Matters

We shall not be responsible for conducting any further assurance work for any change of the subject matter information or the criteria applied after the issuance date of this report.

The engagement partner on the limited assurance report is Yin-Chou Chen.

Deloitte & Touche
Taipei, Taiwan
Republic of China

June 20, 2023

Notice to Readers

For the convenience of readers, the independent auditors' limited assurance report and the accompanying summary of selected subject matter information have been translated into English from the original Chinese version prepared and used in the Republic of China. If there is any conflict between the English version and the original Chinese version or any difference in the interpretation of the two versions, the Chinese-language independent auditors' limited assurance report and summary of selected subject matter information shall prevail.

Independent Auditors' Limited Assurance Report for the Report of 2022

APPENDIX A

SUMMARY OF SELECTED SUBJECT MATTER INFORMATION

#	Assurance Subject Matter	Descriptions of Indicators	Corresponding Section	Applicable Criteria
1.	GRI 404-1:2016	Average hours of training per year per employee	4.2.3. Talent Cultivation and Development	Employees are divided by gender and rank, and the average number of hours each employee receives internal and external education and training each year.
2.	Designated indicator 1	The number of participants in the securities elite seed online training camp for college students	4.1.1. Social Innovation	The number of participants who signed up for and completed the competition was counted from the website data of the "On-line Securities Talent Camp".
3.	Designated indicator 2	Electronic official documents approval ratio	3.2.1 Energy/Carbon Management	The ratio of the number of signed electronic official documents divided by the total number of official documents (the total number of paper-signed documents and electronically signed documents).
4.	Designated indicator 3	Number of issuances and issuance amount of sustainable bonds	1.1.2. Diverse Financial Instruments 1.2.1. Promotion of Green Finance	The number and amount of issuance of sustainable bonds.
5.	Designated indicator 4	Information system backup system test drill success rate	2.2.3. Information Security	The success rate of drills for co-site and off-site backup system drills that have passed the inspection.
6.	Designated indicator 5	The number of activities for the prevention of financial investment fraud and the number of participants in the online quiz activity	ESG Zone: Anti-Financial Investment Fraud Zone	Handle the number of activities for the prevention of financial investment fraud and the number of participants in the online quiz with prizes.

Independent Auditors' Limited Assurance Report for Greenhouse Gases Inventory of 2022



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INDEPENDENT AUDITOR'S LIMITED ASSURANCE REPORT

Taipei Exchange

We have undertaken a limited assurance engagement of the accompanying greenhouse gas (GHG) statement of Taipei Exchange for the year ended December 31, 2022 (see Appendix 1).

Taipei Exchange's Responsibility for the GHG Statement

Taipei Exchange is responsible for the preparation of the GHG statement in accordance with ISO 14064-1:2018 ("Greenhouse gases - Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals") issued by the International Organization for Standardization (ISO). This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation of a GHG statement that is free from material misstatement, whether due to fraud or error.

As discussed in Note 6 to the GHG statement, GHG quantification is subject to inherent uncertainty because of incomplete scientific knowledge used to determine emissions factors and the values needed to combine emissions of different gases. The data and the method used in making the estimate may also result in estimation uncertainty. Different measurement techniques may generate significantly different outcomes and thus lead to the GHG statement subject to estimation uncertainty.

Independence and Quality Control

We have complied with the independence and other ethical requirements of the Norm of Professional Ethics for Certified Public Accountant in the Republic of China, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.

The firm applies Standard on Quality Management 1 "Quality Management for Public Accounting Firms" issued by the Accounting Research and Development Foundation of the Republic of China, which requires the firm to design, implement and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, professional standards, and applicable legal and regulatory requirements.

Auditor's Responsibility

Our responsibility is to express a limited assurance conclusion on the GHG statement based on the procedures we have performed and the evidence we have obtained. We conducted our limited assurance engagement in accordance with International Standard on Assurance Engagements 3410, Assurance Engagements on Greenhouse Gas Statements ("ISAE 3410"), issued by the International Auditing and Assurance Standards Board. That standard requires that we plan and perform this engagement to obtain limited assurance about whether the GHG statement is free from material misstatement.

Independent Auditors' Limited Assurance Report for Greenhouse Gases Inventory of 2022

A limited assurance engagement undertaken in accordance with ISAE 3410 involves assessing the suitability in the circumstances of Taipei Exchange's use of ISO 14064-1:2018 as the basis for the preparation of the GHG statement, assessing the risks of material misstatement of the GHG statement whether due to fraud or error, responding to the assessed risks as necessary in the circumstances, and evaluating the overall presentation of the GHG statement. A limited assurance engagement is substantially less in scope than a reasonable assurance engagement in relation to both the risk assessment procedures, including an understanding of internal control, and the procedures performed in response to the assessed risks.

The procedures we performed were based on our professional judgment and included inquiries, observation of processes performed, inspection of documents, analytical procedures, evaluating the appropriateness of quantification methods and reporting policies, and agreeing or reconciling with underlying records.

Given the circumstances of the engagement, in performing the procedures listed above we:

- A. Through inquiries, obtained an understanding of Taipei Exchange's control environment and information systems relevant to emissions quantification and reporting, but did not evaluate the design of particular control activities, obtain evidence about their implementation or test their operating effectiveness.
- B. Evaluated whether Taipei Exchange's methods for developing estimates are appropriate and had been consistently applied. However, our procedures did not include testing the data on which the estimates are based or separately developing our own estimates against which to evaluate Taipei Exchange's estimates.
- C. Undertook site visits at three sites to assess the completeness of the emissions sources, data collection methods, source data and relevant assumptions applicable to the sites. The sites selected for testing were chosen taking into consideration their emissions in relation to total emissions, emissions sources, and sites selected in prior periods. Our procedures we performed include testing information systems to collect and aggregate facility data, or the controls at these sites.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had we performed a reasonable assurance engagement. Accordingly, we do not express a reasonable assurance opinion about whether Taipei Exchange's GHG statement has been prepared, in all material respects, in accordance with the ISO 14064-1:2018.

Limited Assurance Conclusion

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that Taipei Exchange's GHG statement for the year ended December 31, 2022 is not prepared, in all material respects, in accordance with the ISO 14064-1:2018.

Other Matters

We shall not be responsible for conducting any further assurance work for any change of the subject matter information or the criteria applied after the issuance date of this report.

The engagement partner on the limited assurance report is Yin-Chou Chen.

Deloitte & Touche
Taipei, Taiwan
Republic of China

June 15, 2023

Notice to Readers

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