



# GROWTH FOR

## BUSINESS | INDUSTRY | SOCIETY

### Annual Report 2022

The Stock Exchange of Thailand









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# Contents

<b>01</b>	• <b>Message from the Chairman</b>	<b>4</b>
	• <b>Message from the President</b>	<b>6</b>
<b>02</b>	• <b>SET at-a-Glance</b>	<b>8</b>
<b>03</b>	• <b>Structure and Operation of the SET Group</b>	
	Vision and Mission	14
	Key Strategies and Developments in 2022	15
	The Capital Market Condition in 2022	19
	SET's Development Direction	20
	Nature of Business	22
	Revenue Structure	25
	Shareholding Structure	27
<b>04</b>	• <b>Management Discussion and Analysis</b>	<b>30</b>
<b>05</b>	• <b>Risk Management</b>	
	Risk Management Policy and Guidelines	39
	Risk Factors	40
<b>06</b>	• <b>Internal Control</b>	<b>44</b>
<b>07</b>	• <b>Driving Business for Sustainability</b>	
	Sustainability Management Policies and Goals	45
	Management on Stakeholders in the Business Value Chain	46
	SET's Sustainability Management	49

## 08 • Corporate Governance Policy

Corporate Governance Structure and Policy	80
Compliance with Corporate Governance Policy	81

## 09 • Information on the Board of Governors and Executives

Information on the Board of Governors	86
Information on Committees	96
Information on Executives	105
Organization Structure	110
Other Significant Information	112

## 10 • Report on Key Performance Regarding Corporate Governance

The Board of Governors' Performance of Duties	114
Audit Committee Report	123
Nomination and Remuneration Committee Report	125
Sustainability Committee Report	127
Risk Management Committee Report	129
Information Technology Committee Report	131
Legal Committee Report	133

## 11 • Significant Information

Financial Highlights	134
Sustainability Performance	135

## 12 • Financial Report

Report of the Board of Governors Relating to Responsibility for Financial Reporting	139
Independent Auditor's Report	140
Financial Statements and Notes to Financial Statements	143



“The future of The Thai stock exchange will be driven by three pillars – **inclusivity, efficiency and sustainability** – to make the capital market for everyone. The three pillars will be carried out on a continuous basis, equipped with state-of-the-art technology, to support the Thai capital market’s development amid global changes.”

A handwritten signature of Dr. Prasarn Trairatvorakul in white ink, written in a cursive style.

**Dr. Prasarn Trairatvorakul**  
Chairman



## Message from the Chairman

### What's your view on domestic and global changes and developments, and how will they influence the Thai economy and society?

Very rapid high inflation was a phenomenon in 2022. The global economy was exacerbated by the Russia - Ukraine war, leading to the deglobalization and the US Federal Reserve's decision to sharply raise rates. There were concerns about economic slowdown that would affect investments. As a result, investment assets, both equities and bonds, plummeted. In 2023, we reach a situation so-called the inflection point, when it becomes more difficult to predict the future. In the beginning of the year, the global economy faced mild inflation and mild slowdown, briefly giving a boost to the financial market. Nevertheless, the Fed and major economies' central banks could not delay policy rate hikes with the view that inflation remained unabated and became more complicated. Concerns about persistently high rates for a long period of time returned to the financial market and that made investments more uncertain. In Thailand, after the easing of the COVID-19 pandemic and the reopening, the tourism sector made a faster-than-expected rebound. The Thai economy recovers at the faster pace but given global slowdown and deglobalization, the export sector that was a key economic engine slowed down amid unpredictable global economy.

### What drives the Thai capital market and make it an economic pillar, amid these changes?

The Stock Exchange of Thailand (SET) and the bond market have been resilient so far thanks to their strong fundamentals, as reflected in a diverse range of products from the shares of listed companies, corporate debentures and government bonds. The Thai exchange shows breadth and depth. It accommodates 810 listed companies, including sustainable stocks. Twenty-six companies are included in S&P Global's DJSI, the highest in ASEAN for nine consecutive years. More than THB 127.84 billion was raised from initial public

offerings (IPOs), the highest value in ASEAN and the 4<sup>th</sup> biggest in Asia. The market has also enjoyed the highest liquidity in ASEAN since 2012. In 2022, the average daily trading value was tuned at THB 76.77 billion. These factors are the main reasons on the stability of the Thai stock index being stable while many markets went down.

### What role did the SET Board of Governors play to steer the organization through changes in the past year?

The SET Board of Governors gave the direction and ensured the exchange's alignment with global trends, as guided by the 3 pillars.

- 1. Inclusivity:** Support all types and all sizes of businesses and investors under the "To Make the Capital Market 'Work' for Everyone" vision.
- 2. Efficiency:** Improve rules and regulations, with uses of technology and data analytics, to develop capital market infrastructure, digital assets and digital exchanges to complement the traditional market and collaborate with regulatory agencies to ensure the laws and regulations are enforceable and not so excessive that they incur extra costs or deter new developments.
- 3. Sustainability:** Prepare infrastructure such as the database for analytic use or further developments, and support the national approach on sustainable development.

### What's the direction of the exchange as envisaged by the SET Board of Governors?

The Thai exchange will proceed with the three aforementioned pillars, to make the capital market work for everyone, accessible, comprehensive with practicality. We strongly believe that these three pillars will support the aspiration to make the capital market an anchor for the Thai economy and society.



“We need to continuously adapt to the world’s rapid changes. **It is essential to have the right organizational mindset, involving our work processes,** regulations and engagement with stakeholders, both intermediaries and regulators. In addition, we need more information exchange and disclosure for the analysis and decision-making processes.”

A handwritten signature in white ink, consisting of stylized initials and a surname.

**Dr. Pakorn Peetathawatchai**  
President



# Message from the President

## How do economic, social and environmental changes influence the formulation of organizational strategies and targets?

Internal and external factors have been factored into our strategies. We analyze internal strengths, as well as opportunities and emerging challenges to manage risks and ensure sustainable growth of the capital market. We monitor external factors as they have become more impactful to SET given the more rapid and complex changes and greater uncertainties. We place an emphasis on sustainable practices for a more comprehensive risk analysis and management, inclusive of economic, social and environmental risks.

## How did SET manage organization amid changes in the past year?

SET's important strengths – resiliency and agility enabled us to efficiently tackle risks and challenges at an appropriate time and learn about the causes and effects on each stakeholder. With technology deployment, challenges were timely handled and immediately rectified. SET was also supported by proactive work processes and teamwork to deliver value added to our customers.

## What were SET's major developments in 2022 and what lessons were learnt for the next moves?

SET's operations are in three areas; the stock exchange business, the development of capital market infrastructure, and business sustainability supports. We have worked together with all stakeholders - listed companies, intermediaries, investors, and other partners.

The stock exchange has made great stride in business operation development. As a trustworthy market, SET has gained depth demonstrated the depth by the liquidity of the market; and breadth by market capitalization of the market. Regarding the infrastructure development, it engaged the entire value chain and that broadened the market size and created new opportunities to all relevant

parties. On business sustainability supports, SET adhered to the sustainability framework for a broader and more comprehensive review of risks as well as the continuous financial literacy promotion to reach a wide scale of target groups.

## What are SET's plans for the next few years and a longer term?

SET will continue to adjust the organizational mindset. Not only that the work processes and regulations are to be aligned with future global trends, we need to work with all relevant parties, both intermediaries and regulators to exchange and utilize information more for decision making. "Information" is crucial for the analysis and decision making process of the entire industry as each has its own objective, technology, customers and risks. The "one size fits all" approach is no longer applicable. Regarding the supervision, rules must be able to adapt to rapid changes. Looking forward, SET maintains the goal to achieve quality growth, chiefly through working with partners in ASEAN and beyond. For the market to grow, sustainability and wellbeing are the starting points, followed by new S-Curve industries that capture global investors' attention.

## What is your message to and what will you request from stakeholders?

First of all, many thanks to all parties that supported the Thai capital market's development. In the future, collaborative partnerships will become more essential, to reduce redundancy over investment while raising efficiency, serviceability, and individual strengths. The capital market will then achieve continuous and solid growth and this will ensure sustainable economic growth of the country. Thailand's financial industry sits on vibrant and potential resources and foundation. We need to work together to further strengthen the industry and national competitiveness. Importantly, we need a long-term and holistic vision and SET will hold onto our vision "To Make the Capital Market 'Work' for Everyone."



## 02 SET at-a-Glance

### Change Factors

In 2022, The Stock Exchange of Thailand (SET) encountered both internal and external factors, resulting in adaptation and operational process development to be suitable for the situations and enable SET to carry out operation in accordance with the vision “To Make the Capital Market ‘Work’ for Everyone”, especially expanding to the broader coverage of related sectors.

### The Change Factors that Affected the Thai Economy and the Capital Market in 2022



#### Technological Innovations

Thailand's industrial structure was concentrated on technology of the past, with limitations in transitioning to new technologies and reliance on foreign technology necessary to be adjusted in accordance with the Thai context.



#### Geopolitical Tension

Economic and political issues among superpowers and the monetary policy of central banks in many countries have dealt a blow on the world economic growth and affected recovery of export and tourism-reliant Thailand.



#### Climate Change

There is chance of more severe flooding and drought while agricultural productivity reduces. Moreover, dense industrial sector in high-risk flood zones could cause business operation interruption.



#### Hyper-Aged Society

Labor shortage is seen in the market. People are unprepared for retirement in sufficient and timely manner, while social security system might not be able to support elderly population structure in the future.



#### COVID-19 Repercussion

Household debt stays at high level and income disparity is widened. It is necessary for people to adapt and have better understanding on how to adjust and harness from digital economy.



## Adapting to the Changes

In 2022, SET carried out operations in line with the strategic framework “Connecting opportunities x Transforming possibilities” to cope with various challenging situations and the ever-changing digital world, based on four strategies, each having goals to benefit all sectors, as follows:

### Strategy 1:

#### Bridging Seamless Opportunities Across All Segment



- Promote fundraising of high potential companies
- Enhance trade surveillance quality
- Develop investment channels to be more accessible
- Connect investment opportunities abroad

### Strategy 2:

#### Bonding Innovative Infrastructure with Trust



- Expand secure and efficient digital infrastructure
- Develop platform that connects trading from traditional to digital assets
- Create business opportunities using data analysis

### Strategy 3:

#### Branching Financial Sustainability for Thais



- Increase the quantity and upgrade ESG professionals for the Thai capital market
- Promote financial literacy and create financial discipline
- Collaborate with alliances to tackle social and environmental problems
- Promote cybersecurity for the Thai capital market

### Strategy 4:

#### Building Resilient Foundation for Exponential Growth



- Develop a flexible core system
- Improve work processes with digital technology
- Support business agility
- Build quality personnel, ready to adapt and learn new things

## Highlights of Key Developments in 2022

The implementation of the strategic plan in all four areas has created positive results according to the set goals, generating more opportunities for all sectors, and accelerating the growth of Thailand inclusively in the SET businesses, the capital market industry and the society (Growth for Business, Industry, and Society).

### Supporting Fundraising and Investment... for Businesses

- In 2022, the IPOs' offering value in the Thai stock market amounted to THB 127.84 billion, the highest in ASEAN, and the 4<sup>th</sup> in Asia, with nine listed companies in new economy industries, as such helping create diversity and attractiveness for the capital market.
- SET has recorded the highest liquidity in ASEAN since 2012. In 2022, the average daily stock trading value was THB 76.77 billion.
- Thailand Futures Exchange PCL (TFEX) recorded an average daily trading volume of 565,627 contracts.
- SET developed new DRx or Fractional Depository Receipt products namely AAPL80X, and TSLA80X based on Apple Inc. and Tesla Inc., respectively. Both stocks are listed on the Nasdaq Stock Exchange in the United States. The launch of DRx is aimed to expand investment opportunities particularly for small-sized retail investors as the product requires a small amount of investment, while increasing the opportunity to diversify investment in foreign markets.
- The first three securities listed on LiVeX Exchange (LiVeX) are Advanced Web Service Pcl (AWS22), Sitron Power Pcl (SITRON22), and Storage Asia Pcl (ISTORE22). This initiative is considered an alternative to fundraising in the capital market for small companies like SMEs and startups.
- SET formulated guidelines for improving operational processes and mechanisms related to securities trading, consisting of customer screening, customer information center developing, securities acceptance, trading rules adjustment, information examining, so as to increase the efficiency of operational mechanisms for all sectors involved.



**IPOs'** offering value of THB **127.84** billion, highest in ASEAN and **4<sup>th</sup>** in Asia, with **9** new companies in **new economy** industries

Average trading value of THB **76.77** billion per day, **highest in ASEAN**



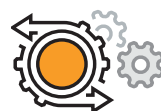
**2 DRx** products

Expanding investment opportunities



**3** securities in **LiVeX** consisting of **AWS22, SITRON22, ISTORE22**

**LiVeX**



Enhancing operational processes and mechanisms related to **securities trading**

## Developing Infrastructure and Utilizing Information and Technology... for the Capital Market

- Thai Digital Assets Exchange Co., Ltd. (TDX) has received a license to operate a digital token exchange business from the Ministry of Finance and the Securities and Exchange Commission (SEC) after having passed all readiness requirements. TDX will provide services on investment and utility token trading platforms to meet investors' need on new type of investment.
- FundConnex, centralized system for mutual fund, recorded 31,400 transactions per day.
- FinNet Innovation Network Co., Ltd. (FinNet)'s payment transactions accounted for 25 percent of the capital market and continuously extended its services comprising Interbank, Intranet, QR Code and Direct Debit Registration (DDR) to other investment products in the capital market to cover transactions of mutual funds and derivatives.
- Developed the e-Meeting, an end-to-end system for organizing shareholders' meetings to accommodate the new normal lifestyle. In 2022, 80 listed companies used the service.
- SMART Marketplace has added ESG information and financial information of listed companies to provide information service via API to more than 50 companies and will continue to expand this service.
- SET has launched ESG Data Platform, a database on ESG aspects of listed companies, significantly considered a mechanism to connect business and investment in a sustainable manner.

### TDX

has obtained business license ready to provide services.



### FundConnex

recorded **31,400** transactions daily.



### FinNet

covered **25%** of the industry's stock market payments.



### e-Meeting

provided services to **80** listed companies to support the **new normal** era.

**ESG** data and **listed company** data have been added to **SMART Marketplace**.



### ESG Data Platform

has been launched to link sustainability data.

## Nurturing the Society and the Environment... for the Country

- SET has continuously created financial learning for the Thai people by building financial discipline via “Happy Money App” online channels. In 2022, the download increased 127 percent with a total of 318,254 cumulative downloads since the project was launched in 2019, and a total of 53,975 active users. Entrepreneurs and interested public joining, learning and using various services on the LiVE Platform totaled over 180,000 users.
- SET has promoted social enterprise (SE) with 62 business co-creations between listed companies and SEs.
- A total of 26 listed companies have been included in the Dow Jones Sustainability Indices (DJSI) by S&P Global, the largest number in ASEAN for the ninth consecutive year.
- Over 400 Thai listed companies have joined the Climate Care Collaboration project to reduce global warming, and the Care the Bear project was presented to international audiences at the APEC 2022 conference hosted by Thailand.

### Happy Money App

recorded **318,254** downloads,  
an increase of **127%**



### LiVE PLATFORM

Over **180,000** entrepreneurs  
and interested public have learned  
and used the **LiVE Platform** services.



**62** business co-creations  
between listed companies and SEs



**26** listed companies in DJSI,  
the most in ASEAN

Over **400** companies participated in reducing  
global warming via **Climate Care Collaboration**



## SET Movement in 2022

At the end of 2022, SET Index closed at 1,668.66 points, rising 0.7 percent from the previous year. The industry groups that fared better than the SET Index were Services, Technology, Resources, and Property & Construction. mai Index closed at 584.16 points, up 0.4 percent from the end of 2021. The market capitalization of SET and mai at the end of 2022 amounted to THB 20.98 trillion, an increase of 4.59 percent from the preceding year.

The average daily trading value of SET and mai in 2022 was THB 76.77 billion, and the Thai stock market has continued to be the most liquid market in ASEAN since 2012.

SET's and mai's total trading value classified by type of investors in 2022 consisted of 1) Local retail investors with an average daily trading value of THB 29.96 billion, or 39.02 percent of the total trading value, 2) Foreign investors with an average daily trading value of THB 34.98 billion, representing 45.56 percent, 3) Local institutional investors

with an average daily trading value of THB 5.72 billion or 7.45 percent, and 4) Securities companies' proprietary trading with an average daily trading value of THB 6.12 billion or 7.96 percent.

For investor base, the number of trading accounts continued to grow and hit record highs. The number of securities trading accounts at the end of 2022 totaled 5.85 million accounts, an increase of 12.01 percent from the end of 2021, with an active account trading at least once a month at an average of 11 percent, and the average value of internet trading of retail investors for the year 2022 was at 35.17 percent of the total market trading value.

As for the dividend yields of SET and mai as at the end of 2022, the average returns were 2.76 percent and 1.29 percent, respectively, while the forward P/E of SET and mai at the end of 2022 were 16.08 times and 38.50 times, respectively.

TFEX's trading volume in 2022 was a total of 136.32 million contracts or 565,627 contracts per day, similar to the previous year. The open interest at the end of December 2022 rose 5.34 percent from a year earlier to 3.98 million contracts. The number of total derivatives trading accounts rose 7.47 percent from the previous year to 290,628 accounts at the end of 2022.

Most active products were Stock Futures and SET50 Futures which accounted for 41.86 percent and 40.16 percent of total trading volume, respectively, followed by gold products consisting of Gold Online Futures and Gold Futures, and USD Futures. USD Futures increased significantly in trading volume, surging 191.57 percent from the preceding year due to the higher volatility in exchange rates and the extended trading hours of USD Futures. In addition, the sharp increase in trading volume was seen in SET50 Options at 22.74 percent and SET50 Futures 14.97 percent.

**SET Index**

closed at

**1,668.66** points
 Up **0.7%**
**mai Index**

closed at

**584.16** points
 Up **0.4%**
**Market  
capitalization  
(SET and mai):**THB **20.97** trillion
 Up **4.59%**
Average daily trading value  
(SET and mai):THB **76.77** billion,  
highest in ASEAN**TFEX:** Average daily trading volume of**565,627** contracts,  
mainly from **Stock Futures**  
and **SET50 Futures****SET's dividend yield**at **2.76%**, andmai's at **1.29%****Number of trading accounts**  
hit new record high at end-2022 at**5.85** million accounts, up **12.01%**Number of  
**active accounts\***  
averaged **11%****Note:** \* Trading at least once a month**Internet trading value**averaged **35.17%**  
of the total trading value





## 03 Structure and Operation of the SET Group

### 3.1 Vision and Mission

The Stock Exchange of Thailand (SET) is a market or a center for securities trading and providing related services. Incorporated under the Stock Exchange of Thailand Act 1974, SET is a legal entity currently operating under the Securities and Exchange Act 1992.

#### Vision

### “To Make the Capital Market ‘Work’ for Everyone”

The capital market is an integral part in driving a holistic economy, so we strive to create the capital market that benefits all sectors of the society. We believe that quality business growth will strengthen the country and this in turn will improve the Thai people's quality of life.

#### Mission

	To “plant” state-of-the-art financial Platform Development that is both innovative and accessible to our customers locally, regionally, and globally
	To innovatively “grow” Product Development that not only caters to market needs but also resonates with the sustainable growth
	To “foster” People Development to ensure that our people will be best equipped with effective and proactive working spirit with synergy, while adhering to professional integrity
	To “implant” an Inclusive Growth Approach that will enable us to perform as the best business partners and social supporters
	To continuously “cultivate” ourselves and our stakeholders by investing in Knowledge Management, creating, sharing and generating knowledge as part of an intangible asset

#### Headquarters Location

93 Ratchadaphisek Road, Din Daeng Subdistrict, Din Daeng District, Bangkok 10400, Thailand

Tel: +66 209 9999 Fax: +66 209 9991

Email: SETContactCenter@set.or.th

Website: www.set.or.th

## Achievement Awards in 2022

SET received “European Award for Best Practices 2022” from the European Society for Quality Research (ESQR), a Switzerland-based quality research organization. “European Award for Best Practices 2022” was offered to organization with outstanding operations in quality management, reflecting SET internationally recognized as a fundraising source of entrepreneurs of all sizes; and for developing a variety of products to meet investor demand, driving capital infrastructure development and internal operation, and enhancing market participants to place emphasis on environmental, social and governance (ESG) aspects. Moreover, SET for the second straight year was granted an award by ESQR. In 2021, SET received “ESQR Quality Achievements Award 2021” given to organizations that have achieved quality development.



SET has prioritized operating with sustainable social and environmental responsibility as witnessed by the fact that efficient use of resources and zero are SET Building’s focus. In 2022, SET Building was awarded “LEED Zero Waste Certification” and “TRUE Certification” at the Platinum level from the U.S. Green Building Council (USGBC). It is ASEAN’s first building that receives both prestigious certifications.



Furthermore, SET received an honorary plaque with “gold level” award for excellence in wastewater management for the year 2022 from the Pollution Control Department, Ministry of Natural Resources and Environment. The assessment covers all dimensions of wastewater management, the control of wastewater discharge to reduce environmental impact, and the efficient use of resources.



## 3.2 Key Strategies and Developments in 2022

SET has set up a strategic framework for the operations in 2022 under the concept of “Connecting opportunities x Transforming possibilities” consisting of four strategies: (1) Bridging seamless opportunities across all segments, (2) Bonding innovative infrastructure with trust, (3) Branching financial sustainability for Thais, and (4) Building Resilient foundation for exponential growth. SET believed that the implementation of this plan will lead to achieving the goal of linking investment in the present with the future. This will enable the SET group to be the country’s investment center, ready to promote financial skills of the Thai people for better financial quality of life under the new normal era, while committedly support the business sector’s responsibilities towards the society and the environment, with an aim for the country’s sustainability. The key developments according to the 2022 strategic plan are as follows:

### Strategy 1: Bridging Seamless Opportunities Across All Segment

Goal	Key Development															
Promoting fundraising of high potential companies	SET is committed to being a fundraising channel for the business sector to grow. In 2022, there were 45 newly listed securities, 24 of which were listed on SET, 18 on Market for Alternative Investment (mai), and three on LiVE Exchange (LiVEx).															
	In 2022, 12 companies in the new target industry were listed. Nine of them are in the country’s new economy sectors and the rest is SMEs and Startups listed on LiVEx, helping create diversity and interest for the Thai capital market. The nine companies are Turnkey Communication Services pcl (TKC), BBGI pcl (BBGI), Bioscience Animal Health pcl (BIS), Thai Eastern Group Holdings pcl (TEGH), Asia Medical and Agricultural Laboratory and Research Center pcl (AMARC), Precise Corporation pcl (PCC), Betagro pcl (BTG), Make To Win Holding pcl (MTW), and D.T.C. Enterprise pcl (DTCENT). Another three SMEs / startups consist of Advance Web Service pcl (AWS22), Sitron Power pcl (SITRON22), and Storage Asia pcl (ISTORE22).															
	Newly Listed Companies (IPOs) Classified by Types of Securities in 2022															
	<table><tr><th>Type of Securities</th><th>Number of Securities</th><th>Issued Size (THB million)</th><th>Market Capitalization at IPO (THB million)</th></tr><tr><td>Ordinary share</td><td>43</td><td>85,641</td><td>495,372</td></tr><tr><td>REIT</td><td>2</td><td>12,407</td><td>12,407</td></tr><tr><td>Total</td><td>45</td><td>98,048</td><td>507,779</td></tr></table>	Type of Securities	Number of Securities	Issued Size (THB million)	Market Capitalization at IPO (THB million)	Ordinary share	43	85,641	495,372	REIT	2	12,407	12,407	Total	45	98,048
Type of Securities	Number of Securities	Issued Size (THB million)	Market Capitalization at IPO (THB million)													
Ordinary share	43	85,641	495,372													
REIT	2	12,407	12,407													
Total	45	98,048	507,779													

Goal	Key Development																																		
	<div>Issued Size and Market Capitalization of Listed Companies Classified by Type of Fundraising in 2022</div> <table><tr><th rowspan="2">Type of Fundraising</th><th colspan="3">Issued Size (THB million)</th><th colspan="3">Market Capitalization (THB million)</th></tr><tr><th>2020</th><th>2021</th><th>2022</th><th>2020</th><th>2021</th><th>2022</th></tr><tr><td>Initial Public Offering: IPO</td><td>136,044</td><td>98,125</td><td>98,048</td><td>555,299</td><td>454,016</td><td>507,779</td></tr><tr><td>Secondary Offering: SO</td><td>95,867</td><td>381,419</td><td>159,354</td><td>132,649</td><td>578,878</td><td>327,517</td></tr><tr><td>Total</td><td>231,911</td><td>479,544</td><td>257,402</td><td>687,948</td><td>1,032,894</td><td>835,296</td></tr></table>	Type of Fundraising	Issued Size (THB million)			Market Capitalization (THB million)			2020	2021	2022	2020	2021	2022	Initial Public Offering: IPO	136,044	98,125	98,048	555,299	454,016	507,779	Secondary Offering: SO	95,867	381,419	159,354	132,649	578,878	327,517	Total	231,911	479,544	257,402	687,948	1,032,894	835,296
Type of Fundraising	Issued Size (THB million)			Market Capitalization (THB million)																															
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Secondary Offering: SO	95,867	381,419	159,354	132,649	578,878	327,517																													
Total	231,911	479,544	257,402	687,948	1,032,894	835,296																													
Raising quality of market surveillance	SET has enhanced market surveillance measures to increase the efficiency of securities trading supervision, as well as preventing risks for investors and securities trading system as a whole by tightening measures, and adding the toughest measure by suspending trading for one business day which have been effective from April 4, 2022.																																		
Developing more accessible investment channels	<p>SET has increased investment accessibility for the general public, aiming to build financial stability. In 2022, there were over 5.8 million new investor accounts, a 12-percent increase from the previous year. In terms of demographic, the Gen Y group made up for 54 percent, with the ratio of the Gen Z group increase to 14 percent from 6 percent, reflecting the new generation's financial and investment planning awareness.</p> <p>In addition, SET has encouraged the easy access to investment for general public, to match need in the digital era, such as opening an online investment account (e-Open account), providing information and knowledge via end-to-end digital channels, enhancing potential and creating investment experience for new investors and existing investors, both online and onsite, such as seminars, workshops, SET in the City investment expo, and activities for investors on an ongoing basis.</p> <p>In order to increase new channels, SET has expanded cooperation with lifestyle and life insurance partners via the project called “Point to Invest” for investors to easily redeem accumulated credit card points to invest in mutual funds. Currently, the project has reached over 29 million customers who have reward points.</p> <p>In 2022, the new SET and Settrade websites were launched as a one-stop investment information service with ideas suitable for users’ risk appetite and investment goals. In addition, SET has utilized social media channels of the SET group to communicate and promote various information, knowledge and activities, with an addition of TikTok channel to reach the new generation. Currently, there are over three million followers in total.</p>																																		
Connecting investment opportunities abroad	<p>SET has increased investment alternatives by continuously developing products using foreign securities as underlying assets. In 2022, DRx or Fractional Depositary Receipt was developed, with two DRx issued on Apple Inc. and Tesla Inc.</p> <p>DRx is a certificate representing shares in foreign securities that are able to trade in less than one full share. Investors will receive the same benefits as directly investing in foreign securities or ETFs with a small initial investment. Trading can be either in baht or in fractional unit, catering to the new generation investors who can access to global stocks with a small amount of money. Moreover, DRx also opens for trading during the trading hours of the foreign exchange where the underlying securities are listed in global markets. Investors can therefore monitor the price movements of the underlying securities and adjust accordingly in a timely manner.</p> <p>In addition, Thailand Futures Exchange (TFEX) focuses on developing products and services to better suit investors’ demand, such as adding more currency pair for Currency: EUR/USD Futures and USD/JPY Futures, as well as collaborating with members in providing knowledge and trading tools to investors and boosting market liquidity.</p>																																		
Strategy 2: Bonding Innovative Infrastructure with Trust																																			
Growing a secure and efficient digital infrastructure	<p>SET continues to develop the SETLink platform to support listed companies’ operations by improving services for listed companies in the process of corporate action, shareholders’ meetings and capital increase to be more efficient throughout the entire process (end-to-end process); initiating SETLink Chatbot to help answer questions about regulations, system usage and registrar operations; and providing tools and knowledge centers necessary for operations and personnel development of listed companies, such as the Listed Company Journey, the Listed Company Classroom, and the ESG Academy that supports listed companies to grow sustainably.</p> <p>Furthermore, SET has developed a function to meet the needs of data providers, such as One Report Data Structure, ESG Data Platform, and Listed Company Snapshot, while also helping data users to access and compare data or analyze data more conveniently.</p>																																		



Goal	Key Development
<b>Developing a platform that connects trading of current to digital assets</b>	<p>Thai Digital Assets Exchange Co., Ltd. (TDX) received a license to operate a digital token exchange business from the Ministry of Finance in March 2022, and was granted an operating permission from the Securities and Exchange Commission (SEC) in September 2022, after all the readiness requirements have been examined.</p> <p>TDX will provide an investment and utility token trading platform with the world-class trading system. TDX is an open platform ready for partners to be engaged to develop into a digital asset trading center that meets new investment needs.</p>
<b>Generating business opportunities via the use and analysis of insights</b>	<p>Promoting the sustainability ecosystem of the Thai capital market to grow. SET has initiated an ESG Data Platform service that gathers environmental, social and governance (ESG) data of listed companies, covering the process from the company data submission, processing, to dissemination of information to data users such as investors and regulators, and various assessors in an end-to-end system. The platform emphasizes data formats that are easy for co-analysis with financial data. In the first phase, listed companies were requested to submit ESG data into the system, and in the next phase, the information will be disseminated via various channels.</p> <p>In order to encourage stakeholders to better access, analyze and make decision on information, SET has developed the SMART Marketplace service, an information service via an API, with ESG information and basic information of listed companies being added. This includes day-end trading price, statistics of each stock, such as P/E, dividend yield, financial statements and financial ratios. Users can apply for the service via online channels and can receive information immediately.</p>

### Strategy 3: Branching Financial Sustainability for Thais

<b>Increasing the number and elevating ESG personnel for the Thai capital market</b>	<p>SET is committed to gathering, increasing, and elevating quality of ESG professionals. In 2022, the SET ESG Experts Pool network had more than 240 members. In addition, SET has continuously developed and disseminated sustainability knowledge in all dimensions via SET ESG Academy.</p>
<b>Promoting knowledge and creating financial discipline</b>	<p>Building financial discipline for the public is one of SET's important and long-term missions. Via online channels, Happy Money Application has accumulated 318,254 downloads (from 2019-2022), an increase of 127 percent from the end of 2021, with 53,975 active users. In addition, SET has developed a new function called Gamification to answer financial-related questions and encourage consistent usage, making Happy Money Application a money management tool that help people learn and alter spending behavior for their financial well-being.</p> <p>SET has continued to carry out the Happy Money financial mentors project, in collaboration with partner organizations from both public and private sectors to develop financial mentors in the organizations, and disseminate knowledge and understanding of financial planning via online and offline channels. Since 2017, there were 10,543 financial mentors, disseminating knowledge through 633 alliance organizations, covering 3.07 million persons among the target groups. Notably, SET has jointly organized a workshop called "Happy Money in Action" with the Police Housewives Association to develop financial management and debt management skills for police officers to learn the knowhow and shift spending behavior leading to tangible financial success. After the session, the participants have gained 30.51 percent more knowledge. Significantly, the workshop has created 11 role models for developing financial management and debt management skills.</p> <p>In 2022, SET launched the official SET Fin Quizz website with partners to promote financial literacy tests throughout the year, with 23,631 Unique ID of testers. SET has also developed everyday financial knowledge media according to the six areas of content framework in the quiz, and developed additional tests to cover knowledge of how to invest in securities and how to select stocks.</p>
<b>Collaborating with partners to solve social and environmental problems</b>	<p>SET has continuously worked with partners through Climate Care Collaboration to jointly manage the environment in a sustainable manner.</p> <p><b>Care the Wild</b> - In 2022, private partner organizations (58 companies) raised funds for afforestation in eight community forests totaling 173.5 rais, with 34,700 trees. The initiative managed to absorb 312,300 kgCO<sub>2</sub>e of greenhouse gases (GHG) emissions, up 29 percent from the previous year.</p> <p><b>Care the Whale</b> - There were 24 organizations participating in the waste management project, including enterprise and organizations that play a role in the circular economy value chain. In 2022, participating enterprises have expanded their project implementation to various regional branches in several provinces, resulting in a reduction of GHG emissions by 13,712,368 kgCO<sub>2</sub>e throughout the year, a 40 percent increase from the previous year.</p> <p><b>Care the Bear</b> - In 2022, a total of 152 organizations participated in the behavior change project to reduce GHG emissions from events or activities, jointly lowering GHG emissions by 4,773,412 kgCO<sub>2</sub>e, an increase of 140 percent from the previous year.</p>

Goal	Key Development
	Most importantly, SET has reinforced its position as a leading stock exchange with the goal of balanced and sustainable growth. At the Asia-Pacific Economic Cooperation (APEC 2022) during November 14 - 19, 2022, SET in collaboration with the Ministry of Foreign Affairs and various partners consisting of Bangchak Group, Siam Cement plc (SCC), and PTT Oil and Retail Business plc (OR), has promoted organizing a low-carbon event through the six Care the Bear practices on the working space of both Thai and international media of over 22,000 square meters at Queen Sirikit National Convention Center (QSNCC). This initiative is considered a behavior change process to reduce GHG emissions, in line with the carbon neutrality goal of the APEC meetings. The collaboration helped reduce GHG emissions by 30,295.40 kgCO <sub>2</sub> e throughout the event.
<b>Promoting digital security for the Thai capital market</b>	<p>SET emphasizes on elevating information technology (IT) and information technology communication (ITC) security standards, both at the corporate level and in the capital market sector, so as to reinforce confidence in providing services and readiness to cover the entire industry in a concrete manner. The project is also in line with the country's national cybersecurity strategy, certified by international standards inclusive of information technology security standard: ISO 27001 (Information Security Management), information technology service standard: ISO 20000 (IT Service Management), and information technology personal information management standard: ISO 27701 (Privacy Information Management), as well as continuously reinforcing the guidelines on detection, responses, and threats monitoring within the organization.</p> <p>In addition, SET has raised awareness of IT security among listed companies through organizing seminars and Cyber Resilience Survey projects in collaboration with specialists, to empower listed companies for conducting self-assessments in cyber management and self-protection, with effective distribution of management reports and relevant details. This leads to jointly benefits in developing and increasing the potential of IT security management of a number of listed companies, leading to confidence in the industry as a whole.</p>

#### Strategy 4: Building Resilient Foundation for Exponential Growth

<b>Developing a flexible core system</b>	<p>SET and TFEX have partnered with Nasdaq Technology (Nasdaq), a global leading trading platform for the equity and derivatives markets, in developing a New Trading System and related systems, covering trading information dissemination system, and trading supervision system, by using the most advanced technology and innovations at world-class standards, with high efficiency, faster order management, capabilities to support the increasing transaction volume in the future, while ready to support innovative investment products to match the needs of both local and foreign investors, eventually leveling up the Thai capital market's global competitiveness and connectivity.</p> <p>Regarding this project, SET, TFEX and market participants have jointly developed and continuously conducted the system testing. The New Trading System will be launched in 2023.</p> <p>SET has improved the SETNET3 network to be more efficient and able to support the amount of network traffic up to four times of existing capacity. Furthermore, SET will replace certain equipment to be more modern, enhancing the processing and memory performance to increase the speed of data transmission, so as to effectively support new business needs and services in the future.</p>
<b>Improving work processes with digital technology</b>	<p>SET has adopted the DevOps development practice for development and deployment of new applications and services in order to increase competitive capabilities and operational efficiency. The DevOps has been applied to the internal systems, such as Automated Test Dashboard, Performance Testing Services, Developer Portal, Done-Point, etc., and prepared to be applied to the systems that support market participants.</p> <p>The DevOps development process can accelerate the speed of application development and delivery to end-users. The system security is monitored and examined throughout the process to support the expansion which uplifted SET's fundamental IT structure.</p>
<b>Facilitating business agility</b>	SET has improved the process, developed the accounting and financial management system of the organization, and has brought Robotic Process Automation (RPA) to assist the operating process in order to shorten the working time and further increase efficiency.
<b>Building quality personnel, ready to adapt and learn new things</b>	<p>SET emphasizes on development to enhance potential of employees, ready to support the business and the succession planning, in both soft skills and technical skills, as well as realizing the importance of social and environmental responsibility.</p> <p>Furthermore, welfare and benefits have been adjusted to be more flexible and better meet employee needs.</p>

### 3.3 The Capital Market Condition in 2022

In 2022, a series of US Federal Reserve (Fed) rate hikes to contain inflation and the looming economic recession risks in several countries dragged down global stock markets throughout the year.

The SET Index, however, had less volatility and was one of the few indices in the world that yielded positive returns in 2022. Offshore fund flows flooded into ASEAN stock exchanges, especially the Thai bourse in the wake of the country's ongoing economic turnaround and China's border reopening. Analysts forecast that number of foreign tourist arrivals to Thailand and export value will bounce back to growth in the near future as the baht skews to upside versus the greenback. Moreover, the SET Index rose 0.7 percent from a year earlier to end 2022 at 1,668.66 points due to Thai listed companies' business adaptability coupled with benefits from recovery of tourism and service sectors. Services, Technology, Resources, and Property & Construction industry groups fared better than the SET Index. The Stock Exchange of Thailand (SET)'s and Market for Alternative Investment (mai)'s combined market capitalization increased 4.59 percent year-on-year to THB 20.98 trillion at the end of 2022.

Foreign investors bought a net THB 196.89 billion in Thai shares, the highest level since the data available in 1992, while local retail investors, institutional investors and securities companies' proprietary trading cashed out a net THB 39.03 billion, THB 154.42 billion and THB 3.43 billion, respectively.

In 2022, as it has been since 2012, the Thai stock market was the most liquid market in ASEAN, although the average daily trading value decreased from a year ago, somehow in line

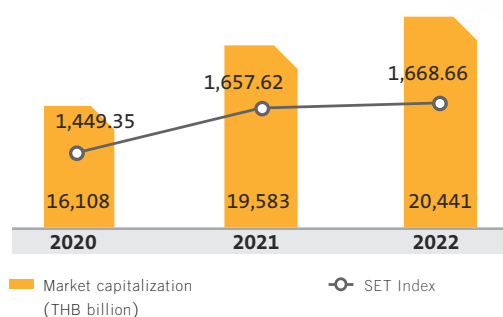
with other stock exchanges in the region. The average daily trading value of SET and mai in 2022 was THB 76.77 billion, down 18.2 percent from the previous year, and close to the 2020 level. Furthermore, Thailand Futures Exchange (TFEX) recorded average daily trading volume of 565,626 contracts, similar to the preceding year.

For investor base, the number of securities trading accounts in 2022 continued to increase to a record high from the previous year. Securities trading accounts at the end of 2022 totaled 5.85 million accounts, or a 12.01 percent increase from end-2021. In 2022, the number of accounts that were traded at least once a month (active account) averaged at 11.0 percent. The value of Internet trading of retail investors averaged 35.17 percent of the total market trading value.

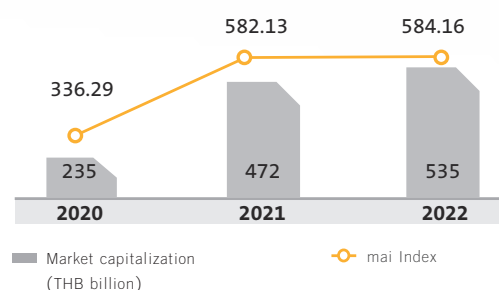
The fundraising in 2022: The Thai stock market had the highest IPO offering value in ASEAN, and the 4<sup>th</sup> in Asia with large companies from various industries being listed. In terms of quality, Thai listed companies continued to deliver outstanding performance with the rising number of those included in various international ESG indices every year and the highest number in ASEAN for several consecutive years.

The average dividend yield of SET and mai at the end of 2022 was 2.76 percent and 1.29 percent, respectively, while the forward P/E ratio of SET and mai was 16.08 times and 38.50 times, respectively.

The Stock Exchange of Thailand (SET)



Market for Alternative Investment (mai)



Source: SETSMART

### 3.4 SET's Development Direction

Amid the global economic recovery uncertainty from high inflation and the ongoing geopolitical risks affecting volatility of capital mobility, combined with the development of financial technology that could change investor behavior rapidly and long-term impact from COVID-19 significantly reeling lives and business operations, while Thailand entering into hyper-aged society, SET has focused on reinforcing the Thai capital market's competitiveness and sustainable development in terms of ESG to make capital market benefit all sectors. This move is in line with the vision "To Make the Capital Market 'Work' for Everyone" to grow together inclusively: the business, the industry, the capital market,

the society and the country, under the Strategic Direction 2023-2025 of "Growth for Business, Industry, and Society". SET will focus on developing central infrastructure, linking (the investment ecosystem in the current capital market with that in the future, and continuously driving sustainability both inside and outside the organization through collaboration with partners, so that the capital market and the Thai economy can grow in a balanced and sustainable manner.

Based on the above goals, SET has formulated strategic plans for 2023-2025 in four key areas, as follows:

#### 2023 - 2025 Growth for Business, Industry, and Society

- 1 Make fundraising & investment simple
- 2 Move industry & ecosystem with standard
- 3 Match partners for synergy
- 4 Merge ESG with substance



Supporting Fundraising and Investment ... **for Businesses**



Developing Infrastructure ... **for the Capital Market**



Nurturing the Society and the Environment ... **for the Country**

#### Make Fundraising & Investment Simple

SET has moved towards making the capital market easier for entrepreneurs through the increase in funding opportunities so that businesses of all sizes can utilize the capital market more, particularly supporting new industries that use technology and innovation to create added value exponentially, and potential business groups from abroad. This will be carried out by improving the process from providing information, preparing readiness for listing in a more flexible way, and being an end-to-end one-stop service, while developing platforms for SMEs and startups, scaling up from LiVE Academy and LiVE Platform to LiVE Exchange, a fundraising source that supports the business sectors with high growth potential.

Business support: SET is ready to enhance the processes related to listed companies by developing efficient communication channels and information delivery together with reducing the burden of doing business via the Digital IPO system, SET Link and SETPortal, and support listed companies to access and benefit from various information platforms, such as e-Filing (IPO) and e-One Report in cooperation with the SEC, among others.

In addition, SET has developed TDX by positioning as a platform for trading digital tokens that everyone trusts, enabling trading in both investment tokens and utility tokens.

Investment: SET focuses on boosting investment opportunities with a variety of products to make investments more accessible, especially products that do not require



large amount of money to invest for small-sized investors to be able to start investing easily. SET has explored the development of products related to the environment (environment-linked) as an alternative investment in line with the changing investors' values. Moreover, SET has explored the extension of securities trading hours for more investment convenience, as well as the development of a securities issuance platform for foreign stock options products. SET also focuses on enhancing efficiency of the investment account opening process (e-Onboarding), and developing Settrade's platform to be a "Capital Market Super App" to connect investment opportunities and cater for a variety of assets.

### Move Industry & Ecosystem with Standard

SET continues to develop a reliable and efficient digital infrastructure by developing New Trading Systems and related systems. This development will add more functions to support more complicated securities trading, while upgrading trading standards to align with international level to support the exponential growth of the system usage, and increasing the efficiency of the overall electricity consumption rate. Therefore, SET has a plan to develop and transform the new operating system towards the higher ratio of cloud computing.

SET adheres to being a trusted service provider of the capital market infrastructure for market participants, by jointly with the capital market participants in leveling up cybersecurity to enhance preventive capabilities and mitigate potential vulnerabilities arising from today's increasing cyber risks. Moreover, SET has modernized relevant trading rules & criteria in line with rapidly changing market conditions.

### Match Partners for Synergy

SET has pushed operation development to add value with innovation in collaboration with partners by disseminating data via SMART Marketplace, adding diverse data and analytical function to solve more complex functions, as well as extending thematic and issue-based research studies that meet the needs of specific groups to be able to put such insights into practice.

At the same time, SET has collected ESG data from listed companies to store on the ESG Data Platform, and extended cooperation with partner entities towards ESG Data Platform (Phase 2) that collaborates with listed companies to develop ESG data for more comprehensive data sets, catering to current investment needs. In addition, SET has developed ESG Ratings to support the launch of ESG-related investment products.

### Merge ESG with Substance

SET has adopted the ESG concept to drive operations, both internal and external processes, by working with partners leading to sustainable growth.

**Environmental:** SET continues to develop ESG personnel in the capital market and educational institutions, and promote the presence of ESG champions in environmental stewardship via the ESG Academy. In addition, SET has carried on developing the Climate Care Platform by building on the success of the three main initiatives: Care the Bear, Care the Whale, and Care the Wild, focusing on environmental management functions and data connectivity jointly with partner entities. SET aims to achieve net zero greenhouse gas emissions (Net Zero) by setting up a working group to drive greenhouse gas emission reduction, in order to push the organization towards such goal, through raising realization among employees, and formulating a plan to reduce greenhouse gas emissions from operating activities. SET has also developed an infrastructure project that will help reduce greenhouse gas emissions via the use of Cloud, while increasing the energy efficiency of the Data Center (Green Data Center).

**Social:** SET aims to promote financial literacy for retirees and low-income groups through the development of knowledge media materials, while utilizing community approach to promote financial planning jointly with partners, such as the creation of "Financial Mentoring, Know How to Overcome Debts" and the "Happy Money, Retirement Money Management" projects. SET has conducted the financial literacy test to segment the knowledge level of the Thai people to help develop contents and channels accordingly. As for entrepreneurs, SET focuses on enhancing potential of entrepreneurs concerning family business via the LiVE Platform in collaboration with partners such as the Thai Institute of Directors Association (IOD) and Baker McKenzie Thailand in implementing family business courses for growth. In addition, SET promotes SE development process in collaboration with universities and vocational education to create a new generation of entrepreneurs. This is driven through the SET Junior Entrepreneur project, in collaboration with teachers, to introduce "Business and Entrepreneurship" subject among students.

Simultaneously, SET has prepared a succession plan to prepare readiness for upcoming employee retirement, by recruiting potential employees, and continuously developing essential skills among SET personnel in four key areas: technology adoption, problem-solving, team-working, and self-management, to support the capital market's future growth.

**Governance:** SET has accelerated the adjustment of regulatory rules and criteria to be suitable and in line with the current situation, while developing efficient governance tools to be able to support new products. SET also coordinates with the government and regulatory entities together with the expansion of collaboration networks to various organizations to jointly drive capital market development in the long run. As for the internal process, SET is well-prepared to uplift the enterprise risk management, while enhancing

the Robotic Process Automation (RPA) technology, and utilizing in-depth analysis to continuously improve work processes to increase efficiency, simultaneously with the development of the monitoring system and investment management in order to collect important information that supports the organization's overall work.

## 3.5 Nature of Business

SET acts as an intermediary connecting potential entrepreneurs to access capital sources and raise funds for business expansion. In addition, SET develops channels to facilitate investors and the public to invest in a variety of businesses and financial products in order to manage the savings and generate return on investment. When all sectors grow with stable and quality, positive outcome on economic system will be seen. The SET group's end-to-end services consist of the main functions as follows:

### Stock Market Business

#### 1. Equity Business

- **Securities listing and trading:** The SET group is a center for listing and trading of equity and debt instruments focusing on enabling entrepreneurs to raise funds in the primary market and trade securities in the highly liquid secondary market. The SET group listing venues consist of SET, Market for Alternative Investment (mai), and LiVE Exchange (LiVEx) which is a broad for small and medium-sized businesses (SMEs) and startups so that entrepreneurs can raise funds from investors and investors, in turn, can trade securities. As of December 31, 2022, 612 were listed companies on SET, 198 on mai, and three on LiVEx.

Other types of instruments are entitled to list and trade on stock exchanges operated by the SET group. Those instruments include warrants, derivative warrants, depositary receipts, exchange-traded funds (ETFs), real estate investment trusts (REITs) and infrastructure funds.

- **Securities clearing and settlement (delivery):** The SET group is a center for clearing and settlement (delivery) of securities traded on stock and bond markets by acting as a clearing house in order to reduce the counterparty risk from securities trading, by providing service as contractual counterparty and guaranteeing all transactions made in the market (central counterparty: CCP). If any member fails to comply with the contract, the clearing house will be responsible for by paying or delivering securities to the counterparty instead of trading in the market. In addition, SET provides clearing & settlement services for over-the-counter (OTC) trading of the debt instrument.

- **Securities depository:** The SET group is a securities depository center for both equity and debt instruments using the scripless system that is safe and efficient, by providing securities depository services, withdrawal of securities, transfer of securities, pledge and revocation of pledged securities.

- **Supervisory and surveillance:** The SET group supervises and oversees the trading of investors and duty of member securities companies to ensure that the market is reliable, transparent and efficient, reflecting the real price of securities, as well as supervising and overseeing the disclosure of listed securities to investors in order to ensure accuracy, transparency and in a timely manner.

## 2. Derivatives Business

SET has a subsidiary, named TFEX, as the sole central market place for trading derivatives in Thailand. TFEX has launched a wide range of financial derivatives, including equity, precious metal, agricultural, currency and interest rate derivatives, designed to suit Thai financial market and the need of investors for managing risks or enhancing returns of their investment efficiently. In addition, the SET group provides a fully integrated derivatives trading, clearing, settlement and depository services, together with the appropriate supervision to maintain a fair and transparent market and remain customer oriented.

## 3. Capital Market's Technology and Infrastructure Services Business

The SET group provides the capital market's technology and infrastructure services to support customer needs and to help reduce costs for the industry, so that entrepreneurs can access and utilize technology more, while shortening the length of time to develop products and services for market participants.

- **Online trading of securities and funds**, consisting of a system for sending orders to buy and sell securities (Front-office Service Bureau: FSB), securities trading system via Internet and Back-office Service Bureau (BSB) for securities companies
- **Services on the dissemination of trading information and market data**, for data vendors and investors for making investment decisions, including the preparation and dissemination of key stock indices that are used globally
- **Services on the payment system for the capital market**, connecting between intermediaries in the capital market and commercial banks to increase efficiency of the payment process in the capital market
- **FundConnex service** to help broaden access to mutual funds, a central system that connects investment management companies to investment unit sales agents for greater efficiency, enabling investors quick and easy way to invest in mutual funds by opening an account with only one fund broker, but trade with multiple investment management companies

- **Digital identification service (NDID Proxy)**, by connecting information between National Digital ID Co., Ltd. (National Digital ID: NDID) and entrepreneurs so that investors can open trading accounts for securities, mutual funds, life insurance and other types of accounts conveniently and quickly via a fully digital process
- **Electronic stamp duty purchase and payment service**, by connecting with the Revenue Department conveniently, quickly, safely, as such reducing the process, meeting the needs of entrepreneurs in doing business, such as affixing duty stamps for contracts, power of attorney and proxies to vote at meetings
- **Electronic conference system service (e-Shareholder Meeting)**, to facilitate listed companies and shareholders to attend shareholders' meetings via online channels
- **Trading or exchanging digital assets services**, via TDX, currently in the process of preparing readiness to offer trading or exchanging services for digital tokens, settlement system for trading and digital token storage services

In addition, SET acts as the main operator, in conjunction with the Association of Thai Securities Companies (ASCO) and the Thai Bankers' Association, under the support of the Capital Market Development Fund (CMDf), to develop the Thai capital market infrastructure. The key projects consist of digital infrastructure services for the Thai capital market, of which corporate bond system is under development as a pilot project. Other under development projects include training and license renewal system for professionals in the capital market (Prof. Link Application).

## 4. Registrar Service Business

The SET group takes responsible for overseeing and keeping securities information, and preparing the registration of securities holders to ensure that the information and data are accurate, complete and updated at all times. The registrar business unit manages shareholder benefits information, link to the securities depository system, and control the shareholding ratio of foreign investors' securities tradable on SET in compliance with the rules and regulations of relevant government entities. Moreover, there is a data storage, collection and processing systems in the securities registration; and security room system to keep securities certificates and rights documents safely for both listed companies and shareholders.



## Long-Term Capital Market Development

The SET group aims to promote sustainable long-term development of the Thai capital market which will lead to enhancing the country's competitiveness, and quality growth of the capital market participants and the Thai society. The SET group has set three main strategies for long-term capital market development as follows:

### 1. Developing and promoting financial and investment knowledge (Capital Market Education)

The work is divided into five target groups: (1) the public and potential investors: the development of financial and investment knowledge skills to create financial stability and to help support the expansion of the investor base in the long run, (2) school students, university students, and the general public: the development of the capital market knowledge and basic finance for students, as well as developing capital market learning centers to be accessible to the general public, such as the Maruey Library, INVESTORY Investment Discovery Museum, (3) professionals in the capital market: raising standards of knowledge and competency (4) personnel in listed companies: entrepreneur knowledge development and (5) key players of the country, organizational leaders, and new generation entrepreneurs: creating knowledge, understanding and utilization of the capital market mechanism, while also building a network of influencers in the capital market among countries in the Greater Mekong Subregion and ASEAN.

### 2. Promoting listed company development for sustainability (Sustainable Development)

SET focuses on the development of listed companies in four main areas: (1) promoting knowledge and developing sustainable business development and investment ecosystems for the capital market; (2) developing work systems and infrastructure for the capital market

to support the growth of the ecosystem of business development and sustainable investment; (3) promoting knowledge and developing the ecosystem of social enterprises (SE) in Thailand to grow continuously through the SET Social Impact Platform; and (4) Building networking and collaboration to promote environmental management of the business sector in a sustainable manner through the Climate Care Platform.

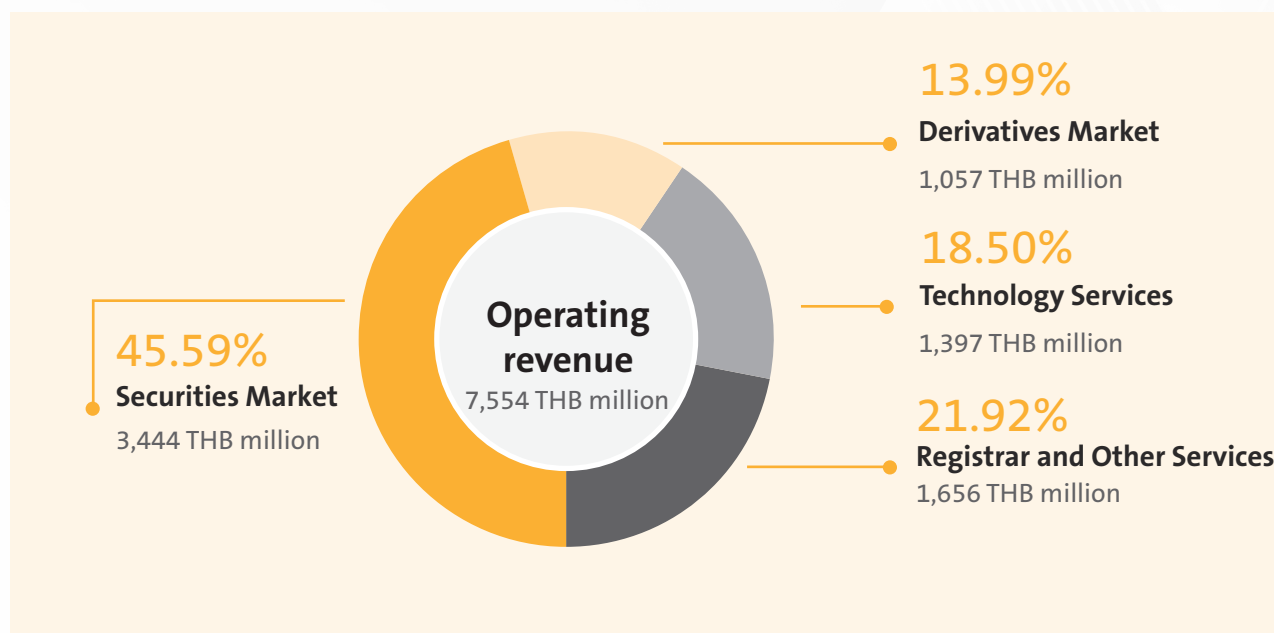
### 3. Developing capital market research

SET plays an important role in capital market research development in five main areas: (1) producing and disseminating capital market research and disseminating the country's capital market index (leading indicator) that market participants, organizations, and the general public can use as reference; (2) developing important capital market databases for researchers and other business sectors to use for further benefits; (3) linking the capital market knowledge between research producers and entrepreneurs in order to build on and utilize research results, while promoting the capital market research among the general public; (4) collaborating with CMDP to develop quality research such as the capital market infrastructure development project, developing the potential of personnel in the capital market and promoting knowledge and understanding of the capital market; and (5) connecting the capital market business sector and the education sector to produce research studies on the capital market that are academically accepted and applicable in practice and can be further developed to benefit the capital market and the Thai economy.

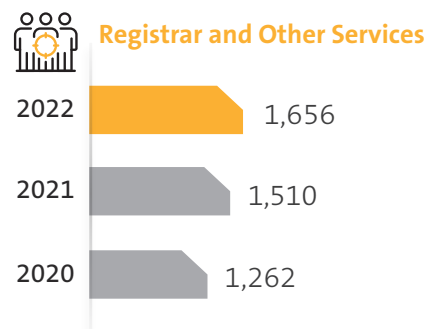
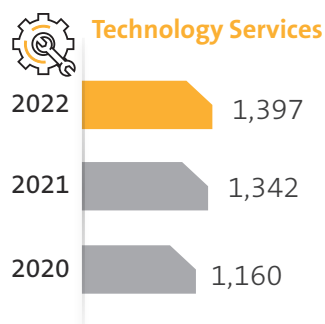
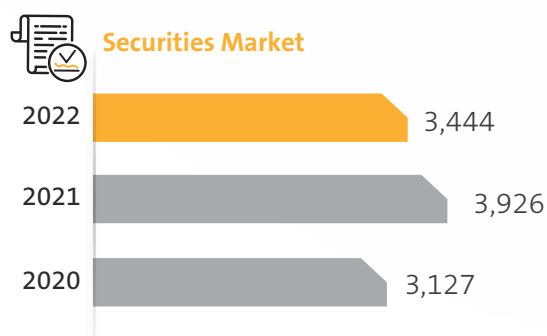


### 3.6 Revenue Structure

Operating revenue by key business segment consisting of Securities Market, Derivatives Market, Technology Services, and Registrar and Other Services is as follows:



(Unit: THB million)



(Unit: THB million)

Products and Services	2022		2021		2020	
	Revenue	%	Revenue	%	Revenue	%
<b>Securities Market</b>						
- Trading fees	1,850	24.50	2,262	29.24	1,667	25.46
- Listing fees	668	8.84	696	9.00	682	10.42
- Clearing and Settlement fees	492	6.51	557	7.20	450	6.87
- Depository fees	402	5.32	379	4.90	296	4.52
- Membership fees	32	0.42	32	0.42	32	0.49
<b>Total</b>	<b>3,444</b>	<b>45.59</b>	<b>3,926</b>	<b>50.76</b>	<b>3,127</b>	<b>47.76</b>
<b>Derivatives Market</b>						
- Trading fees	717	9.49	647	8.37	677	10.34
- Clearing fees	308	4.08	278	3.59	290	4.43
- Membership fees	32	0.42	32	0.41	32	0.49
<b>Total</b>	<b>1,057</b>	<b>13.99</b>	<b>957</b>	<b>12.37</b>	<b>999</b>	<b>15.26</b>
<b>Technology Services</b>						
- Member services fees	477	6.32	507	6.56	437	6.67
- Information services fees	431	5.71	424	5.48	378	5.77
- IT support fees	489	6.47	411	5.31	345	5.27
<b>Total</b>	<b>1,397</b>	<b>18.50</b>	<b>1,342</b>	<b>17.35</b>	<b>1,160</b>	<b>17.71</b>
<b>Registrar and Other Services</b>						
- Securities registrar fees	1,595	21.12	1,458	18.85	1,229	18.77
- Fund services fees	38	0.50	32	0.41	24	0.36
- Payment services fees	10	0.13	13	0.17	9	0.14
- Digital Gateway Services fees	13	0.17	7	0.09	-	-
<b>Total</b>	<b>1,656</b>	<b>21.92</b>	<b>1,510</b>	<b>19.52</b>	<b>1,262</b>	<b>19.27</b>
<b>Total operating revenue</b>	<b>7,554</b>	<b>100.00</b>	<b>7,735</b>	<b>100.00</b>	<b>6,548</b>	<b>100.00</b>

## Business competitors

The interconnectedness in the global capital markets always compels the SET group to compete in both regional and the global levels, though the group is currently the country's only stock exchange service provider. The laws and regulations related to the stock exchange business tend to be more open to allow new players to enter the fray, however. Fundraisers

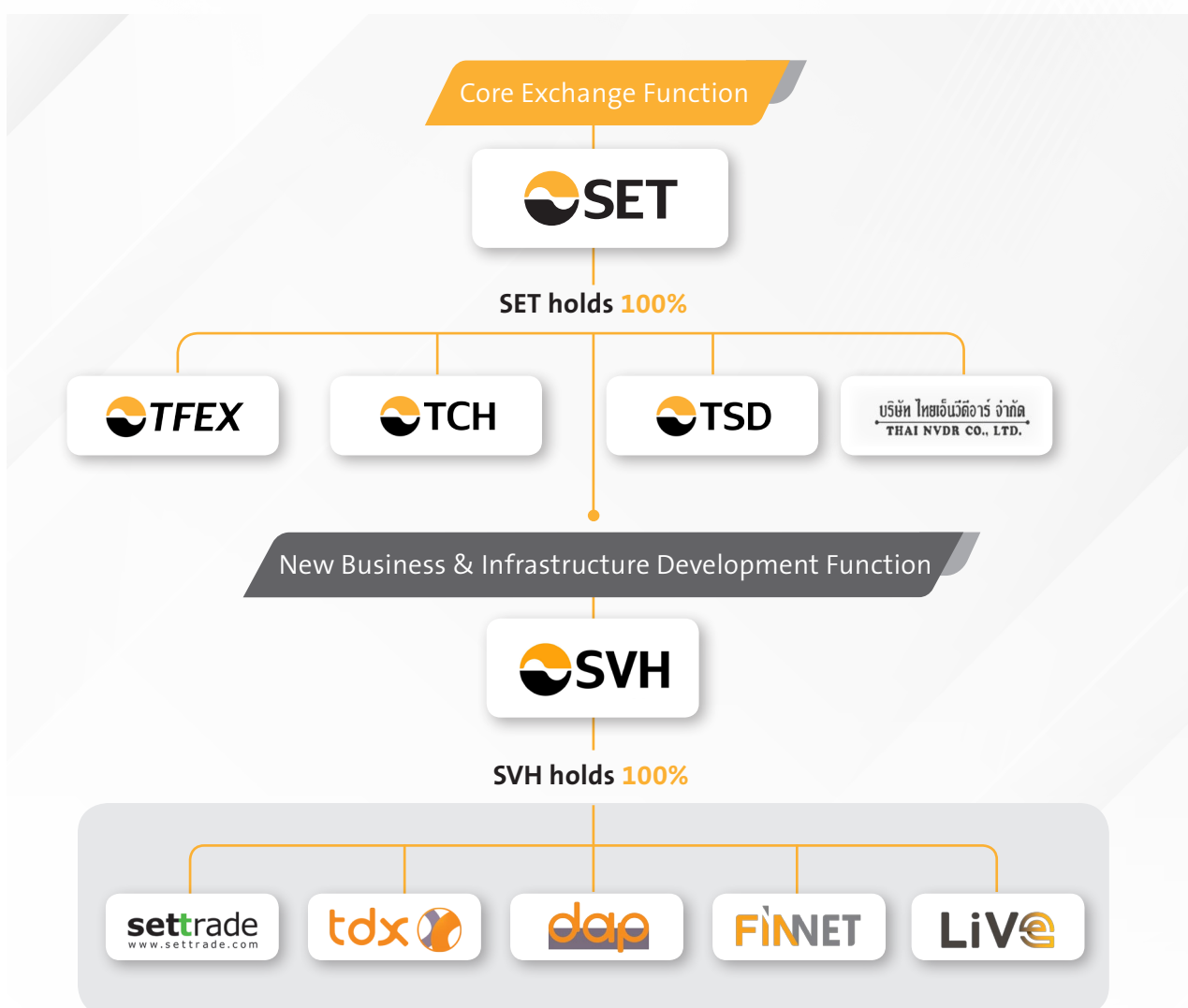
are able to list overseas or choose other options while investors themselves can freely pour money into foreign securities. Moreover, SET's competitors are able to develop similar or substitute products of the SET group to attract both domestic and foreign investors.

Furthermore, SET has to keep pace with the global trends in the stock exchange business abroad, such as Alternative Trading System (ATS) and the growth of the digital asset ecosystem that have opened up new business opportunities (e.g. ICO portal, digital asset exchange, and digital asset wallet) becoming larger in line with digital asset value growth. Harnessing new technologies such as blockchain and AI to optimize work processes to meet the diverse needs of financial service users, can be both an opportunity for business collaboration and SET's competitors in the future.

**Note:** Important statistics of The Stock Exchange of Thailand compared to foreign stock exchanges available via the website [www.set.or.th](http://www.set.or.th)

### 3.7 Shareholding Structure

The SET group consists of SET and subsidiaries which can be classified by the SET group's business structure into two main groups as follows:



## Core Exchange Function

Business in this group is directly associated with the SET operations as stipulated in the Securities and Exchange Act. This business group comprises SET and subsidiaries as follows:



### The Stock Exchange of Thailand (SET)

SET was incorporated under the Securities Exchange of Thailand Act, B.E. 2517 (1974) to be the center for the trading of listed securities, and to provide related services, operating on a nonprofit-sharing basis. SET's role is to promote savings and long-term capital fundraising for the country's economic development. Currently, SET operates under the legal framework of the Securities and Exchange Act, B.E. 2535 (1992). SET's core operations are the listing of securities, the supervision of information disclosures by listed companies, the securities trading & surveillance, the monitoring of member companies involved in securities trading, as well as the dissemination of information and the promotion of education among investors.



### Thailand Futures Exchange PCL (TFEX)

TFEX was established as a derivatives exchange, governed by the Derivatives Act B.E. 2546 (2003) and under the supervision of the Securities and Exchange Commission (SEC). TFEX is allowed to trade futures and options, where the permitted underlying assets are equities, debt instruments, commodities, exchange rates, other indices and others as may be announced by the Securities and Exchange Commission (SEC).



### Thailand Securities Depository Co., Ltd. (TSD)

TSD acts as a central scripless securities depository and registration for listed securities in SET and Market for Alternative Investment (mai), including unlisted securities such as bond and government bond.



### Thailand Clearing House Co., Ltd. (TCH)

TCH acts as a Clearing House for clearing all securities and derivatives traded on the SET, mai, and TFEX.



### Thai NVDR Co., Ltd. (TNVDR)

TNVDR is responsible for executing the purchase or sale of those listed company shares whose investors wish to trade through NVDRs. This service is offered to all, irrespective of the number of securities held or the holder's nationality. NVDR holders receive the same full financial benefits as they would receive had they invested directly in shares (i.e. dividends, rights, and warrants) but there are no voting rights for NVDR holders.

## New Business & Infrastructure Development Function

Business in this group focuses on new business and those relevant to infrastructure development to support SET's business operations and lay solid foundation regarding the capital market's infrastructure for market participants. The business group not only upgrades services by reducing the overall industry's overlapping process but also cuts down the industry's costs. The group consists of SET's subsidiaries as follows:



### SET Venture Holding Co., Ltd. (SVH)

SVH is a holding company that invests in subsidiaries engaged in all new business and infrastructure development.



### Finnet Innovation Network Co., Ltd. (FinNet)

FinNet is a service provider for payment of infrastructure system of capital market clearing by acting as an intermediary that connects payment transactions with commercial banks.

**Live Fin Corp Co., Ltd. (LiVe)**

LiVe is a service provider platform that enhances the strength and competitiveness of SMEs and Startups through professionally-curated educational contents, services to heighten the organization's capability, and entrepreneurial development programs to prepare them for the capital market.

**Settrade.com Co., Ltd. (Settrade)**

Settrade provides Online Trading Platform in relation to Securities, Derivatives and Mutual Funds through Streaming and Streaming Fund+ applications. Settrade also provides various work systems that support the operations of member companies e.g. Derivatives Back Office and Online customer on boarding system.

**Digital Access Platform Co., Ltd. (DAP)**

DAP provides infrastructure services for financial industry focusing on efficiency enhancement by streamlining connectivity process through Fund Connex and Digital Gateway services. FundConnex acts as a standardized platform for both asset management companies and selling agents to facilitate mutual funds transaction including order routing and settlement. Digital Gateway provides a single access point and proxy service for various services related to identity verification, eMeeting and eStamp duty.

**Thai Digital Assets Exchange Co., Ltd. (TDX)**

TDX is a licensed Digital Asset Exchange offering a secured, reliable and transparent Digital Token trading platform. We aim to broaden an opportunity for a company to raise fund and provide an opportunity for a customer to diversify their portfolios.

## Joint Venture and Other Companies of which SET Is a Shareholder

Joint Venture and Other Companies of which SET Is a Shareholder		Shareholding
	<b>1. TSFC Securities PCL (TSFC)</b> TSFC is to be the main source of securities funding for both securities companies and investors. It was established to complete credit services for the securities financing in accordance with the needs of securities business and support the government policies to help and develop the country's securities and capital market businesses.	<b>40.65%</b>
	<b>2. TRIS Corporation Co., Ltd.</b> A credit rating institution to assess the creditworthiness of debt instruments for investors to make an informed decision	<b>13.34%</b>
	<b>3. National Digital ID Co., Ltd.</b> NDID aims to be the country's infrastructural digitization that can help building new creative services and businesses in the digital economy.	<b>7.5%</b>
	<b>4. InnoSpace (Thailand) Co., Ltd.</b> A center to help and support Thai startups ecosystem. InnoSpace (Thailand) intends to promote Thai startups to be the next frontier in driving Thailand's economic development according to the 4.0 Thailand policy. (Not for profit but profitable)	<b>9.52%*</b>

**Note:** \* Including shareholding ratio of LiVe Fin Corp Co., Ltd. (a SET subsidiary) in InnoSpace (Thailand) Co., Ltd. at 2.72 percent



## 04 Management Discussion and Analysis (MD&A)

### Overview

The operating results of the SET group for the year ended December 31, 2022 were as follows:

(Unit: THB million)	For the year ended December 31			
	2022	2021	Increase / (Decrease)	
			Amount	%
Operating revenue	7,554	7,735	(181)	(2)
Other income	197	180	17	9
Total operating revenues	7,751	7,915	(164)	(2)
Operating expenses	(5,134)	(5,036)	98	2
Revenues over expenses from operation	2,617	2,879	(262)	(9)
Investment income (loss), net	(365)	369	(734)	(199)
Non-operating revenue	29	46	(17)	(37)
Revenues over expenses before contribution to CMDF and income tax	2,281	3,294	(1,013)	(31)
Income tax expense	(336)	(1,114)	(778)	(70)
Revenues over expenses before contribution to CMDF	1,945	2,180	(235)	(11)
Contribution to CMDF	(539)	(583)	(44)	(8)
Revenues over expenses, net	1,406	1,597	(191)	(12)

In 2022, the SET group had total operating revenues of THB 7,751 million, a decrease of THB 164 million or 2% from the previous year due to a decrease in revenue from securities market of THB 482 million on trading fees. Clearing and settlement fees decreased in line with the decrease in average daily trading volume of equity. Other business income increased by THB 318 million, especially securities registrar services and other services with an increase of THB 146 million in accordance with the increasing volume of corporate action transactions and number of securities. Total operating expenses amounted to THB 5,134 million, a 2% increase, mainly resulting from the increase in registrar service expenses in line with the increase in its revenue. Technology expenses increased according to the new IT system and its maintenance. Regarding the investment performance in 2022,

the investment loss of THB 365 million because of the stock market and the bond market where prices dropped sharply was caused by central banks, particularly the US Federal Reserve, implementing strict monetary policy to control price stability. As a result, financial markets and capital markets around the world have fluctuated throughout 2022. Consequently, the SET group had total revenue over expenses before remittance to the CMDF and taxes of THB 2,281 million in 2022.

SET had provided the annual contribution to CMDF totaling THB 539 million at end 2022, accounting for 90% of the revenue after deduction of expenses, taxes and reserves, based on the SET group's 2022 consolidated financial statements. As a result, the SET group had net revenue over expenses of THB 1,406 million in 2022.

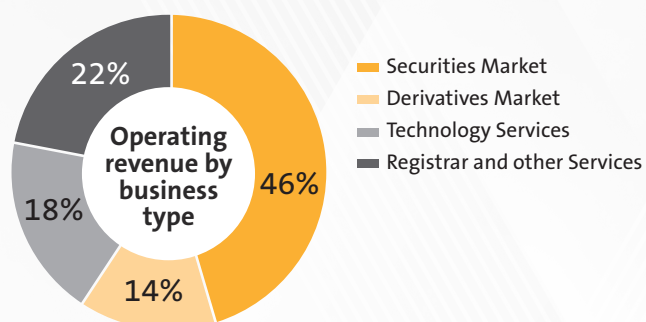


## 1. Analysis of Operating Results

### 1.1 Operating revenue

#### Operating revenue by business type

Operating revenue classified by key business type consists of Securities Market, Derivatives Market, Technology Services, and Registrar and other services.



For the year ended December 31, 2022		(Unit: THB million)
<b>Securities Market</b>		
- Trading fees		1,850
- Clearing and settlement fees		492
- Listing fees		668
- Depository fees		402
- Membership fees		32
<b>Total</b>		<b>3,444</b>
<b>Derivatives Market</b>		
- Trading fees		717
- Clearing fees		308
- Membership fees		32
<b>Total</b>		<b>1,057</b>
<b>Technology Services</b>		
- IT support fees		489
- Member services fees		477
- Information services fees		431
<b>Total</b>		<b>1,397</b>
<b>Registrar and other Services</b>		
- Securities registrar fees		1,595
- Fund services fees		38
- Digital Gateway services fees		13
- Payment services fees		10
<b>Total</b>		<b>1,656</b>
<b>Total operating revenue</b>		<b>7,554</b>

**1.1.1 Securities Market**

(Unit: THB million)	2022	2021	Increase / (Decrease)	
			Amount	%
<b>Revenue - Securities Market</b>	<b>3,444</b>	<b>3,926</b>	<b>(482)</b>	<b>(12)</b>
Trading fees	1,850	2,262	(412)	(18)
Clearing and settlement fees	492	557	(65)	(12)
Listing fees	668	696	(28)	(4)
Depository fees	402	379	23	6
Membership fees	32	32	-	-
<b>Key market index indicators</b>				
SET Index at the end of the year (points)	1,668	1,657	11	0.7
Average daily trading value - Equity (THB million)	76,773	93,846	(17,073)	(18)
Average market capitalization (THB trillion)	20.06	18.49	1.57	8
Number of listed securities (securities)	3,193	3,007	186	6

Operating revenue from securities market, net of discounts and promotional activities on various types of fees as relief measures for stakeholders during the COVID-19 pandemic, decreased by THB 482 million or 12%. The decrease was mainly from trading fees and clearing and settlement fees in correlation with the drop in average daily trading value, whereas the depository fees also increased in accordance with the increase in average market capitalization.

**1.1.2 Derivatives Market**

(Unit: THB million)	2022	2021	Increase / (Decrease)	
			Amount	%
<b>Revenue - Derivatives Market</b>	<b>1,057</b>	<b>957</b>	<b>100</b>	<b>10</b>
Trading fees	717	647	70	11
Clearing fees	308	278	30	11
Membership fees	32	32	-	-
<b>Key market index indicators</b>				
Average daily trading volume - Derivatives (contracts)	565,627	560,652	4,975	1

Average daily trading volume: derivatives rose by 1%, particularly the rise of SET 50 Index Futures, Currency Futures and Gold Online Futures. As a result, operating revenue from derivatives market, net of a reduction in trading fees to mitigate the impact of COVID-19 pandemic to stakeholders increased by THB 100 million or 10%.



**1.1.3 Technology Services**

(Unit: THB million)	2022	2021	Increase / (Decrease)	
			Amount	%
<b>Revenue - Technology services</b>	<b>1,397</b>	<b>1,342</b>	<b>55</b>	<b>4</b>
IT support fees	489	411	78	19
Member services fees	477	507	(30)	(6)
Information services fees	431	424	7	2

Operating revenue from technology services increased by THB 55 million or 4%, driven mainly by the rise in IT support fees in line with the higher number of users.

**1.1.4 Registrar and Other Services**

(Unit: THB million)	2022	2021	Increase / (Decrease)	
			Amount	%
<b>Revenue - Registrar and other services</b>	<b>1,656</b>	<b>1,510</b>	<b>146</b>	<b>10</b>
Securities registrar fees	1,595	1,458	137	9
Fund services fees	38	32	6	19
Digital Gateway services fees	13	7	6	86
Payment services fees	10	13	(3)	(23)

Operating revenue from registrar and other services, net of discounts on annual registrar fees as part of the COVID-19 relief to stakeholders, rose by THB 146 million or 10%, mainly due to the increase in corporate actions services in accordance with the increasing number of securities.

**1.2 Other income**

(Unit: THB million)	2022	2021	Increase / (Decrease)	
			Amount	%
<b>Total other income</b>	<b>197</b>	<b>180</b>	<b>17</b>	<b>9</b>
Revenue from fees of funds management	48	49	(1)	(2)
Revenue from education activities	29	17	12	71
Revenue from rental and utilities	10	9	1	11
Revenue from fines	14	8	6	75
Revenue from securities borrowing and lending (SBL)	1	4	(3)	(75)
Revenue from others	95	93	2	2

Other income increased by THB 17 million or 9%, mainly from education activities, which increased in line with training activities after the COVID-19 situation started to subside.

### 1.3 Operating expenses

(Unit: THB million)	2022	2021	Increase / (Decrease)	
			Amount	%
<b>Operating expenses</b>	<b>5,134</b>	<b>5,036</b>	<b>98</b>	<b>2</b>
Employee expenses	2,162	2,146	16	1
The SEC fees	746	910	(164)	(18)
Direct service expenses	608	523	85	16
Depreciation and amortization	536	520	16	3
Technology expenses	337	271	66	24
Building and office expenses	212	184	28	15
Marketing expenses	167	134	33	25
Fees and compensation expenses	148	103	45	44
Donations and CSR expenses	61	112	(51)	(46)
Educational activities expenses	48	38	10	26
Others	109	95	14	15

Operating expenses in 2022 amounted to THB 5,134 million, a 2% increase, mainly from the increase in direct service expenses, the growth in corporate action transactions, the increasing number of securities, and increasing technology expense in line with new IT system and maintenance, whereas the fees contributed to the SEC decreasing due to the decrease in equity trading volume.

### 1.4 Investment income (loss)

(Unit: THB million)	2022	2021	Increase / (Decrease)	
			Amount	%
<b>Investment income (loss)</b>	<b>(365)</b>	<b>369</b>	<b>(734)</b>	<b>(199)</b>
Interest income	206	147	59	40
Dividend income	35	67	(32)	(48)
Realized gain (loss) from investments	(258)	(235)	(23)	10
Unrealized gain (loss) from investments	(357)	395	(752)	190
Reversal (allowance) for expected credit loss	9	(5)	14	(280)

In 2022, the SET group had a net loss on investment of THB 365 million, compared to the year 2021 with a net gain on investments of THB 369 million (down THB 734 million or 199 percent), mainly due to the sale of investments and unrealized losses from the valuation of investments (mark to market) in the global equities and the global bond, which was directly affected by the inflation rate and the rising policy interest rate, resulting in the volatility of global capital markets and global financial markets throughout the year 2022.

## 2. Analysis of Financial Position

(Unit: THB million)	Dec 31, 2022	Dec 31, 2021	Increase / (Decrease)	
			Amount	%
Total assets	56,306	56,881	(575)	(1)
Total liabilities	25,442	27,512	(2,070)	(8)
Funds balances	30,864	29,369	1,495	5

Significant changes in assets, liabilities and funds of the SET group as at December 31, 2022 in comparison with the balance as at December 31, 2021, were as follows:

### 2.1 Analysis of assets

As at December 31, 2022, total assets of the SET group amounted to THB 56,306 million, a decrease of THB 575 million or 1%. Significant details are as follows:

**2.1.1 Cash and cash equivalents, cash at banks for financial benefits payable, and financial assets** were THB 21,015 million or 37% of total assets, which the balance was closely the same as the end of 2021, categorized as follows:

(Unit: THB million)	Dec 31, 2022	Dec 31, 2021	Increase / (Decrease)	
			Amount	%
<b>Cash and cash equivalents</b>	<b>5,621</b>	<b>9,017</b>	<b>(3,396)</b>	<b>(38)</b>
<b>Cash at banks for financial benefits payable</b>	<b>84</b>	<b>84</b>	<b>-</b>	<b>-</b>
<b>Financial assets</b>	<b>15,310</b>	<b>11,865</b>	<b>3,445</b>	<b>29</b>
- Investment in debt instruments measured at FVTPL	10,992	10,605	387	4
- Investment measured at amortized cost	1,795	1,206	589	49
- Investment in debt instruments measured at FVTOCI	1,612	-	1,612	n/a
- Investment in equity instruments measured at FVTOCI	911	54	857	1,587
<b>Total</b>	<b>21,015</b>	<b>20,966</b>	<b>49</b>	<b>0.2</b>

The SET group has a policy to invest in various types of investments such as cash deposit at banks, debt instruments (e.g. government bonds, corporate debentures, etc.), mutual funds and other domestic and foreign financial instruments, enabling total cash and financial assets incremental to yearly operating results. The investment portfolio of each type of financial asset has been adjusted to suit the investment trend and conditions as well as overall market volatility. In 2022, additional investments were made in equities of non-listed companies, in the believe that the SET group and capital market participants will gain various benefits from this investment. In addition, the portfolio adjustment in debt securities with clear objectives to maintain liquidity will also enable an increase of investments in debt instruments and equity securities measured at fair value through other comprehensive income.

**2.1.2 Assets for margin deposits and benefits, and assets for clearing system protection and benefits** recorded at THB 20,737 million or 37% of total assets, a decrease of THB 1,088 million or 5%. This resulted from the withdrawal of collaterals of Thailand Clearing House Co., Ltd. (TCH)'s members, who are obliged to place the assets as collateral for derivatives trading at the specified rate.

**2.1.3 Property, plant and equipment and intangible assets** amounted to THB 5,182 million or 9% of total assets, a THB 155 million or 3% rise, mainly from additional investment in developing IT system to support business operations.

## 2.2 Analysis of liabilities

As at December 31, 2022, total liabilities of the SET group amounted to THB 25,442 million, a decrease of THB 2,070 million or 8%. Significant details are as follows:

**2.2.1 Margin deposits and assets for clearing system protection and benefits payable** amounted to THB 20,587

million or 81% of total liabilities, a decrease of THB 1,096 million or 5%. The decrease resulted from the lower risk of derivatives, and the diminishing of the underlying assets in the market. Therefore, the withdrawal of collaterals of Thailand Clearing House Co., Ltd. (TCH)'s members was incurred.

**2.2.2 Trade and other payables** amounted to THB 2,213 million or 9% of total liabilities, a decrease of THB 788 million or 26% mainly from the Thai NVDR Co., Ltd.'s subscription money for new shares in excess of the rights to be returned to the shareholders totaling THB 709 million at end 2021.

## 2.3 Analysis of funds

As at December 31, 2022 the total funds of the SET group amounted to THB 30,864 million, an increase of THB 1,495 million or 5%. The SET group's revenue over expenses for 2022 reached THB 1,406 million with gain from the actuarial adjustment of THB 77 million, and gain on revaluation of investment in other comprehensive income of THB 12 million.

## 3. Analysis of Liquidity

Cash flows of the SET group for the year ended December 31, 2022 and 2021 can be summarized as follows:

(Unit: THB million)	2022	2021	Increase / (Decrease)	
			Amount	%
Cash flows from operating activities	1,037	3,297	(2,260)	(69)
Cash flows used in investing activities	(4,410)	(2,320)	2,090	90
Cash flows used in financing activities	(16)	(16)	-	-
Cash and cash equivalents at the end of year	5,705	9,101	(3,396)	(37)

Cash and cash equivalents as at December 31, 2022 amounted to THB 5,705 million, a decrease of THB 3,396 million or 37% from the year 2021. The details of the inflows and outflows are as follows:

- Net cash from operating activities totaled THB 1,037 million.
- Net cash used in investing activities totaled THB 4,410 million, mainly from the purchase of financial assets of net THB 3,811 million and investment in new assets amounted to THB 677 million, especially in the developing of IT system to support business operations.



#### 4. Reserves and Contribution to the Capital Market Development Fund (“CMDf”)

The Securities and Exchange Act (No. 6), enacted on April 16, 2019, requires the Stock Exchange of Thailand (SET) to contribute to CMDf no less than 90% of the revenue after deduction of expenses, tax and reserves. In this regard, the consolidated financial statements of SET shall be used to calculate the contribution amount. The provision of reserves shall be in accordance with the type and amount specified by the SET’s Board of Governors. Details are as follows:

##### 4.1 Reserves

The type, allocation principles, and reserve amount are presented as follows:

Type of reserve	Principles for reserve allocation to ensure adequacy of funding sources	Reserve amount (THB million)	
		2022	2021
1. Reserves set aside according to law or criteria in business operation as specified, including reserve amount to accommodate special situations	1.1 Legal reserve	10	17
	1.2 Reserves according to business operation such as European Market Infrastructure Regulation (EMIR), Principles for financial Market Infrastructures (PFMI) to meet an increase (decrease) of business operation each year	(113)	26
	1.3 Reserves allocated for specific funds such as approval of additional capital in specific funds during the year, benefit sharing of Securities Investor Protection Fund (SIPF), Derivatives Investor Protection Fund (DIPF), Clearing Fund (CLF) or other similar funds	5	13
	1.4 Reserves allocated to accommodate financial risks from operations including emergency supporting measures	514	467
2. Reserves set aside to accommodate the fluctuation of investments	According to unrealized gain (loss) during the year	(357)	395
3. Reserves set aside for investment in businesses or fixed assets	According to the investment amount in businesses and fixed assets approved by the Board of Governors	1,287	614
<b>Total reserves</b>		<b>1,346</b>	<b>1,532</b>

## 4.2 Contribution to CMDF

The annual contribution has been calculated as follows:

(Unit: THB million)	2022	2021
Revenue over expenses before contribution to CMDF (according to the statement of comprehensive revenue and expenses)	2,281	3,294
<u>Less</u> Income tax expense	(336)	(1,114)
Revenue after deduction of expenses and tax before reserves	1,945	2,180
<u>Less</u> Reserves	(1,346)	(1,532)
Revenue after deduction of expenses, tax, and reserves	599	648
Annual contribution amount at the rate of 90%	539	583

Accumulated contribution expenses to CMDF as of December 31, 2022 can be presented as follows:

	(THB million)
Money transferred to CMDF in 2019	5,700
Annual contribution amount for 2020	362
Annual contribution amount for 2021	583
Annual contribution amount for 2022	539
<b>Total accumulated contribution expenses</b>	<b>7,184</b>



## 05 Risk Management

### 5.1 Risk Management Policy and Guidelines

The Board of Governors (BoG) of The Stock Exchange of Thailand (SET) has set up enterprise risk management policy of the SET group in accordance with the Enterprise Risk Management (ERM) guidelines of the Committee of Sponsoring Organizations of the Treadway Commission (COSO). SET also covers environmental, social, and governance (ESG) issues. To cope with this very challenging task, SET is committed to manage risks in such a way to create opportunities, and to minimize risks that affect profitability, competitiveness, corporate image, as well as confidence in the capital market, by identifying (1) factors that cause risks to the organization, (2) assessment of the control efficiency, and (3) assessment of inherent risk and residual risk in order to manage risks at acceptable level.

In 2022, the SET group enhances the technology capabilities to increase efficiency and agility in various aspects of the organization's operations, as well as to use information for analysis and decision making in order to drive the business according to the SET group's strategic plan.

#### 1. Governance and Risk Management Structure

The SET BoG has assigned the Risk Management Committee (RMC) to govern, oversee, consider, and provide opinions on the SET group's enterprise risk management policy before presenting to the SET BoG for approval. In addition, the BoG has encouraged everyone in the organization to monitor and manage risks both at departmental and project levels, such as Risk and Control Self-Assessment (RCSA), risk management for new projects, among others. The Risk Management Department shall provide the business units with advice on risk assessment and management, and shall regularly prepare reports on the status of key risks of the SET group to the management, the RMC and the SET BoG.

#### 2. Enterprise Risk Management Guidelines

The changing economic/political conditions, information technology (IT), and such internal factors as strategy

formulation, organization management, and IT management, etc., are well-recognized by the SET BoG. The SET BoG places importance on risk management, which is one of the key elements to a good corporate governance system that will strengthen the internal control system to cope with the current changes in a timely manner, to reduce probable operational obstacles, to boost competitiveness internationally, while creating added value to stakeholders. The risk management policy and guidelines of the SET group consist of the key points as follows:

- (1) To specify that **risk management is the responsibility of employees at all levels** who must realize the potential risks in work process in their departments and the organization. There shall be the monitoring and preventing of various risks at an adequate and appropriate level.
- (2) To set the risk management process to align with the international practice guidelines and with the same direction enterprise-wide by **utilizing the risk management system as part of the decision making, strategic planning, business plans, and operations of the SET group** in search of excellence in operations and confidence among related parties
- (3) To **set up the guidelines of risk prevention and mitigation** for the operations of the SET group, in order to avoid damage or loss that may occur, including the **monitoring and assessing of the risk management** on a regular basis
- (4) **To report risk management information to the senior management, the RMC, the Audit Committee (AC), the SET BoG,** and the board of directors of the SET subsidiaries, on a continuous basis
- (5) **To specify certain risk management policies** in accordance with the current context of business operations, such as Business Continuity Management policy, and IT Security policy which covers IT risk management.



## 5.2 Risk Factors

In 2022, the SET BoG governs and oversees the management to closely assess and monitor the situations with effects on the organization, the capital market, the economy and the society to ensure that SET group's operations can drive the capital market efficiently amid risks, impact and uncertainties, which may affect the stakeholders' confidence. The SET BoG has specified the risk factors that are important to the business operations of the SET group covering social, environmental and governance (ESG) issues, including emerging risks that may have impact on the SET group's operations in the next three to five years.

Risk Factors	Explanation	Potential Impacts	Risk Management Measures
<b>Strategic Risks</b>			
<b>Digital technology disruption risk</b>	Realizing the technological advancements of domestic and international capital markets, SET has adapted to cope with the growth of the digital capital market and the rapid change of investment behavior.	Financial and operational impacts of the SET group	Expanding equal access to the capital market for entrepreneurs in line with the current traditional capital market, simultaneously with the development of infrastructure to support digital capital markets such as Thai Digital Assets Exchange (TDX) as a platform for trading digital tokens planned to be launched in 2023, and the development of Live Exchange (LiVEx) as an alternative to fundraising in the capital market for SMEs and startup entrepreneurs in all industries to raise capital for potential growth. It is expected that these enterprises will continue to develop and grow to become large-sized listed companies on SET and mai.
<b>Operational Risks</b>			
<b>Critical system failure and business interruption risk</b>	SET plays a key role in providing securities trading services on a continuous basis. SET must therefore regulate, control, and oversee the organization's computer and IT systems to ensure security, equipped with reporting process concerning operational damage incidents, root cause analysis, and improvement guidelines to achieve continuity of operations.	<ul style="list-style-type: none"> <li>Impact on the securities trading system, including the operation of the capital market and the economy as a whole</li> <li>Impact on the confidence of related parties in the capital market</li> </ul>	<ul style="list-style-type: none"> <li>Implement the Business Continuity Management (BCM) covering emergency response plan, business continuity plan, and IT disaster recovery plan</li> <li>Review, rehearse and conduct practical tests jointly with the entities in the capital market regularly every year, in order to prepare for and respond to various critical situations in an efficient and timely manner. After the COVID-19 pandemic situation, SET has adapted the operating model to be more digital to support the operations of the capital market for more efficiency. Furthermore, SET has provided various resources to support employees in performing their work in accordance with the situation and ensure continuity of SET's operations.</li> </ul>



Risk Factors	Explanation	Potential Impacts	Risk Management Measures
<b>Cyberattack risk</b>	Advances in technology pose threats and risks from cyberattacks and cyber threat, which can damage properties and confidence among stakeholders. SET prioritizes this issue and has therefore set up the action plan in accordance with the international standards, equipped with advanced preventive security tools, and has continuously educated employees on the IT usage and applications.	<ul style="list-style-type: none"> <li>Impact on financial performance of the organization</li> <li>Impact on the securities trading system, including the operation of the capital market and the economy as a whole</li> <li>Impact on the confidence of related parties in the capital market</li> </ul>	<ul style="list-style-type: none"> <li>Manage security risks of key data, and IT system in compliance with the relevant laws and regulations, and relevant international standards namely ISO27001 (Information Security Management System), ISO20000 (IT Service Management System), and ISO27701 (Privacy Information Management System)</li> <li>Review and assess IT security management guidelines regularly to keep pace with the emerged situation and test cybersecurity readiness regularly, as well as participating in the cybersecurity testing with the regulatory entities and other related entities</li> <li>Set up a working group to handle the cybersecurity and cyber threat incidents in order to give advice and recommendations, support the operations, while providing useful guidelines to cope with IT cyber threats</li> <li>Provide various types of advanced preventive and precautionary cybersecurity tools with international standards, such as Antivirus and AntiMalware, Firewall, DDoS Protection, etc.</li> <li>Communicate and share knowledge on IT security with staff and related parties regularly</li> </ul>
<b>Fraud and corruption</b>	SET is one of the country's leading financial institutions, with an end-to-end securities trading and investment services. Therefore, if there is a case of corruption involving SET's operating process, it will seriously damage the stakeholders and SET's reputation.	<ul style="list-style-type: none"> <li>Impact on SET's financial and business operations</li> <li>Impact on the confidence of related parties in the capital market</li> </ul>	<ul style="list-style-type: none"> <li>Set up anti-corruption measures in accordance with the guidelines of the Anti- Corruption Practice Guide of the Thai Private Sector Collective Action Coalition Against Corruption Council (CAC) project</li> <li>Specify that each department must assess and identify risk measures on fraud and corruption regularly every year to ensure that the risk is at an acceptable level. Moreover, there is also an internal control system that can examine the effectiveness of such measures continuously.</li> <li>Implement in compliance with good corporate governance guidelines, such as the segregation of duties, the review of operations both by business units and by the Internal Audit department, as well as the insistence for employees to perform duties in compliance with employee Code of conduct, etc.</li> <li>Communicate and provide knowledge on anti-corruption measures and 'No Gift' policy in SET's operating process with all groups of stakeholders</li> </ul>

Risk Factors	Explanation	Potential Impacts	Risk Management Measures
<b>Financial Risks</b>			
<b>Counterparty or Clearing and Settlement risk</b>	<p>TCH is a center for clearing and settlement of securities, and is also a central counterparty (CCP) for SET for both the buyers and sellers. TCH takes the risks of the liabilities of the clearing and settlement of all transactions of securities and derivatives traded on SET and TFEX. In the event that a TCH member is unable to fulfill its obligations, whether it be clearing and settlement, or delivery, as such, TCH has the duty to manage risks whether it be the dealing with the outstanding status of a defaulting member, including the provision of funding sources for settlement on behalf of the TCH member, inclusive of the value of the damage that may occur in order that the market participants can operate the business.</p>	<ul style="list-style-type: none"> <li>• The impact of liquidity risk of TCH which has the duty to handle the clearing and settlement on behalf of the members</li> <li>• The impact from the fact that TCH has to handle on behalf of the members who cannot comply with the obligations in clearing and settlement of securities due to the members' liquidity problem and/or bankruptcy (credit risk)</li> </ul>	<ul style="list-style-type: none"> <li>• TCH specifies membership qualifications based on financial strength, risk management, operation system, and workforce of those who want to be members to ensure their business stability and minimize potential risks to the industry, including regularly monitoring members' eligibility and compliance. In 2022, TCH reviewed the operation approach and monitoring guideline in case members' financial qualifications are below the set criteria, in compliance with the guidelines of the Securities and Exchange Commission.</li> <li>• TCH requires all members of SET and TFEX to place collaterals to prevent any damage that may occur from holding the member's positions. The collateral value varies depending on the purpose, whether it be to accommodate risks occurring in a normal situation or risks under a stressful event. The collateral placed by the member must have low market risk, liquidity risk, and credit risk, to be able to support cases that TCH may enforce such collateral to settle the unpaid debts or cover the damages incurred.</li> <li>• TCH manages financial resources to accommodate damages that may arise from default or delivery of securities, including Clearing Fund, and SET Reserve Fund. TCH clearly specifies the "Default Waterfall" according to each market, and conducts the "Stress Testing" to test capital sources adequacy in the event of a crisis.</li> <li>• In 2022, TCH revised the approach to contributing funds to the Clearing Fund, by considering risks at each member's level. If any member does not have enough money in such fund to support their own risk, that member must make additional contribution to the Clearing Fund. If a member has sufficient fund to support their own risk, that member does not need to pay additional amount.</li> </ul>

Risk Factors	Explanation	Potential Impacts	Risk Management Measures
			<ul style="list-style-type: none"> <li>TCH will assess each member's Clearing Fund contributions regularly on a monthly basis. The new approach was scheduled to be implemented in January 2023.</li> <li>TCH monitors, evaluates, and provides liquidity resources to cover damages that may arise due to failure of members or related parties to meet their obligations within the specified time.</li> </ul>
<b>Investment risk</b>	Investment risks can be classified by asset classes such as funds, equities, bonds, gold, and commodities, etc., which may be caused by volatility in the overall market conditions and economy.	Impact on SET's financial performance and reserves	<ul style="list-style-type: none"> <li>Invest in accordance with the investment management policy and ratio set by the SET BoG. In addition, there is an Investment Committee (IC) to control and oversee so that the investment is in line with the specified policy and ratio. Moreover, the status of investment risks is monitored and reported to the Investment Committee (IC), the RMC, the AC, and the SET BoG regularly to ensure that the risk is within the set level.</li> <li>Diversify investment in various types of securities and set an investment limit to each financial institution or issuer to ensure the appropriate investment diversification and the limited impact on investment if any damage occurs. In addition, the Value at Risk (VaR), a statistical calculation risk analysis tool, has been used to control the overall level of risk in the portfolio within a specified limit.</li> <li>In the case of debt instruments, SET invests in various types of securities such as government bonds, bank deposits, money market mutual funds, and corporate bonds with at least "A-" credit rating or equivalent.</li> </ul>



## 06 Internal Control

The Board of Governors (BoG) places importance on good internal control systems by supporting the management to set regulations and operation practices, and considering the segregation of duty for check and balance. In addition, the delegation of authority has been clearly determined and documented. The Audit Committee (AC) has been assigned to supervise and audit the operations of the SET group. The Internal Audit Department has been assigned to review the internal control system concerning operations, financial reporting, and regulatory compliance, based on the internal control guidelines framework of The Committee of Sponsoring Organization of Treadway Commission (COSO). In 2022, the AC viewed that the SET group had an adequate and appropriate internal control system and risk management. There were no significant deficiencies in internal control.

### Structure of the Internal Audit Unit

The Internal Audit Department is an independent unit reporting directly to the AC while the administrative functions shall report directly to the SET President. The AC considers and approves the appointment, the transfer or the termination of employment, and the performance evaluation of the head of the internal audit unit, as well as approving the budget of the Internal Audit Department. At the end of 2022, the department's highest-ranking executive was Yossavadee Debhasdin Na Ayudhya, Vice President – Head of Internal Audit Department.

### Internal Audit Operations

The scope of internal audit work covers business and operation of SET group as well as the systems supporting the operation. The Internal Audit Department has the rights to access to the information necessary for auditing, carry out the auditing, as well as assessing the sufficiency, suitability and efficiency of the internal control system of various processes and systems according to the audit plan as approved by the AC. The annual audit plan has been prepared based on the risk-based approach, with support to the organization's strategic plan, which will be reviewed during the year in line with the changing risks. The Internal Audit Department regularly reports the audit results and the management's progress monitoring results directly to the AC.

In 2022, SET held a number of projects to enhance effectiveness of its internal control and internal audit systems with details summarized below:

- SET prioritizes the development of computer systems to enable good control, perform rigorous system test, and be compliance with the set criteria. SET has assigned the Internal Audit Department to conduct the pre-implementation review accordingly. In 2022, the Internal Audit Department reviewed the New Trading System before providing the service in the first quarter of 2023, and also hired an outside expert to review the system of Thai Digital Assets Exchange Co., Ltd. (TDX) before the inauguration.
- In performing the audit work, the Internal Audit Department has utilized audit tools to analyze and verify data in order to boost efficiency in both speed and number of random items to be checked. In addition, an Internal Audit Management System has been set up to support the audit process of the Internal Audit Department so as to meet the standards and enhance efficiency.
- SET encourages and supports the training and ongoing development of internal auditors. In 2022, the internal audit officers attended training courses and took professional examinations to gain additional certifications, i.e. CDPSE (Certified Data Privacy Solutions Engineer) and BCMS ISO 22301:2019 Lead Auditor. In the year, the staff of the Internal Audit Department attended training sessions for a total of 144 days (man-days).

### Internal Audit Quality Assessment

SET regularly arranges an internal audit quality assessment review (QAR) with reference to international professional practices framework. The Internal Audit Department conducts self-assessed peer review on an annual basis and the assessment by independent external expert every five years to ensure that the quality of the internal audit work meets international standards. Consequently, this will help support SET's operations to achieve the set goals by having a transparent, efficient and effective internal control system. The latest assessment was conducted by an independent external assessor in 2021.





## 07

## Driving Business for Sustainability

## 7.1 Sustainability Management Policies and Goals

To ensure the continuously efficient implementation of the organization's policies and strategies, SET in 2022 reviewed the strategy that takes into consideration economic, social and environmental changes in all aspects. SET reinforces the position as the center of the Thai capital market under the concept of **"Growth for Business, Industry, and Society"** to create opportunities for all sectors to benefit from the capital market in an efficient way. Significantly, SET has integrated the policies and goals of sustainability management to be part of the corporate strategy by analyzing material issues that will lead the organization towards

sustainability in line with the expectations of stakeholders and the factors that are instrumental to achieving the organization's short and long-term goals.

In 2022, the SET Board of Governors (BoG) approved three key material issues: Sustainable Finance and ESG Products, Financial and Social Inclusion, and Climate Action as part of the corporate strategy. Notably, these issues are in line with the process of defining key material issues based on the Global Reporting Initiative (GRI) standards framework and the UN Sustainable Development Goals (SDGs).

## Growth for Business, Industry, and Society

Corporate  
strategy

Make Fundraising &amp; Investment Simple

Move Industry &amp; Ecosystem with Standard

Match Partners for Synergy

Merge ESG with Substance

## Sustainable Finance and ESG Products

1. Corporate Sustainability Development for Listed Companies
2. Capacity Building for Intermediaries
3. Sustainable Investment Promotion
4. Product, Service, and Innovation Development for Capital Market

## Social and Financial Inclusion

1. Supporting Access to Capital for Entrepreneurs
2. Investment and Financial Literacy Promotion for the Public
3. Social Impact Platform
4. Fostering the Quality of Life

## Climate Action

1. Policy and Initiative to Achieve Net Zero Target
2. Environmental Management
3. Collaboration Platform for Climate Action

Good Corporate Governance

Sustainable Risk Management

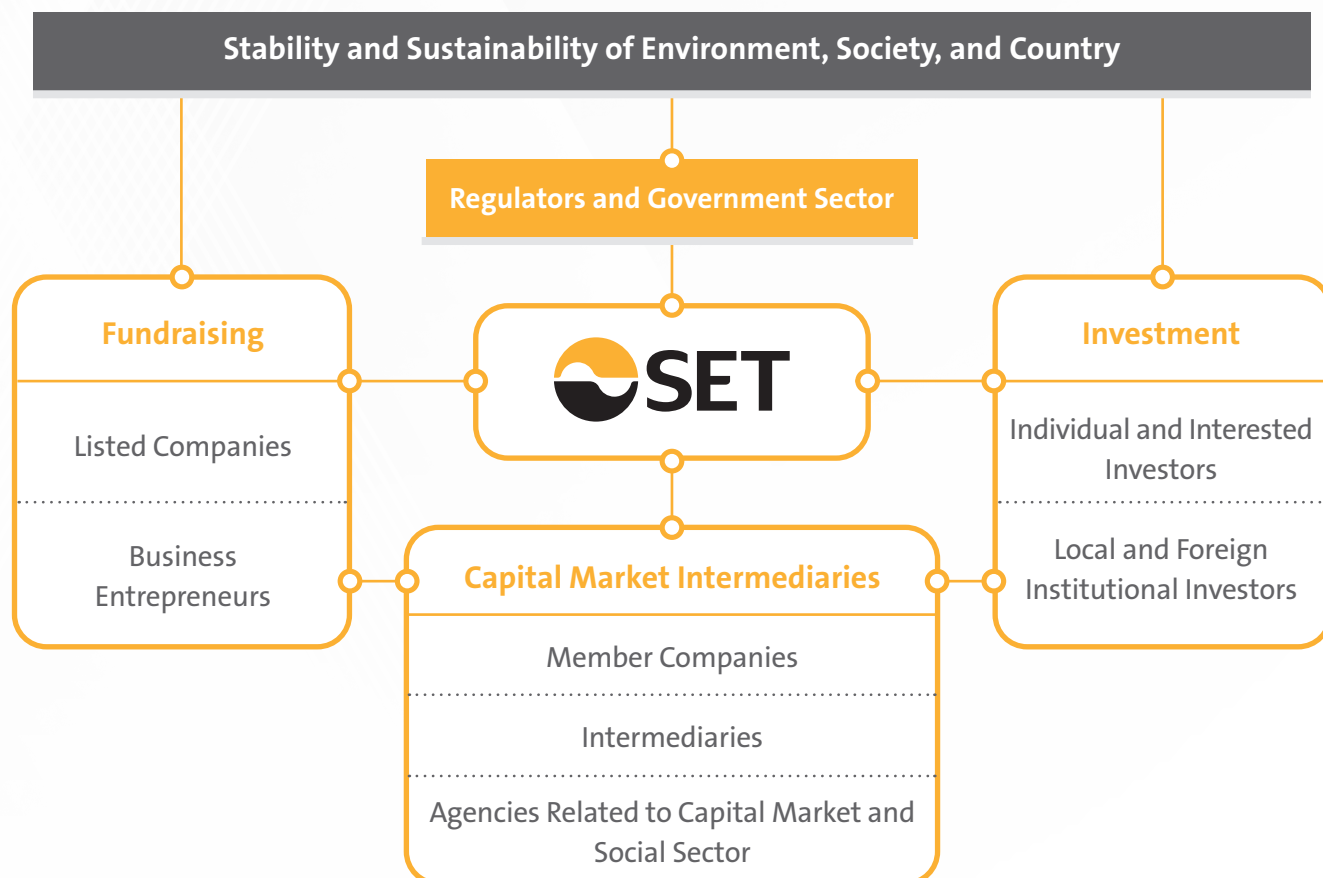
Employee Development and Care



## 7.2 Management on Stakeholders in the Business Value Chain

### 7.2.1 Business Value Chain

SET is an intermediary that connects entrepreneurs to capital access and fundraising so that they can expand their business. At the same time, SET is also a channel to increase investment opportunities through a variety of products with good corporate governance, transparency and efficiency in accordance with international standards, while creating sustainable opportunities for everyone. Significantly, SET places importance on engagement with stakeholders throughout the value chain in creating synergy to drive the economy, society and environment to grow hand in hand in a sustainable manner.



#### Primary Activities of SET consist of:

- **Fundraising:** SET has enabled entrepreneurs to access to capital market through various services such as providing preparation and giving advice to companies lining up to list on stock market, etc.
- **Capital market's intermediary:** SET has provided services that connect all transactions in the capital market including securities trading system and post-trade securities service, etc.
- **Investment:** SET has supported and developed investment alternatives, for example, investment information service, developing diverse investment products, and promoting and disseminating financial and investment literacy.

#### Support Activities of SET consist of:

Important tasks that help organization perform efficiently. For example, human resource management activity enables the workforce to respond well to the changing environment and effectively support employee development while risk management activity helps assess and manage all enterprise risks.

## 7.2.2 Analysis of Stakeholders in Business Value Chain

SET has various stakeholders, involving in its operation either directly and indirectly, along its value chain. To create an efficient collaboration, SET emphasizes on stakeholder engagement and feedback in various modes, so that everyone can access to its information and news, and express opinions via channels that match the interests of each stakeholder group. SET always gathers information and opinions of the stakeholders to formulate efficient operation plans to respond to their expectations.

In 2022, SET's key stakeholders consisted of 1) Listed companies and entrepreneurs, 2) Member companies and intermediaries, 3) Investors, 4) SET group's employees, 5) Regulators and government sector, 6) Agencies related to capital market and social sector.

Stakeholders	Engagement Channel	Expectation of Stakeholders	Implementation in Response to Expectation
<b>Listed companies and entrepreneurs<sup>1</sup></b> <ul style="list-style-type: none"> <li>• SET- and mai-listed companies</li> <li>• Companies with potential and interest in listing on stock exchange</li> </ul>	<ul style="list-style-type: none"> <li>• Consulting</li> <li>• Training and seminar</li> <li>• Communication via websites and social media</li> <li>• Satisfaction survey</li> <li>• Whistleblowing channels</li> <li>• Review of the disclosed stakeholder documents (desktop review)</li> </ul>	<ul style="list-style-type: none"> <li>• Access to funding easily and conveniently</li> <li>• Fundraising instruments suitable for each business</li> <li>• Improving business competitiveness</li> <li>• Confidence and acceptance from both local and international stakeholders</li> <li>• Convenient, fast and accurate investment information and services</li> <li>• Data security</li> </ul>	<ul style="list-style-type: none"> <li>• Developing both online and offline service channels</li> <li>• Grooming potential companies to list on the exchange</li> <li>• Providing business knowledge and consulting services via various channels, such as <a href="http://www.set.or.th">www.set.or.th</a>, <a href="http://www.setinvestnow.com">www.setinvestnow.com</a>, <a href="http://www.setsustainability.com">www.setsustainability.com</a>, etc.</li> <li>• Developing and providing consultation on financial instruments and sustainable business development</li> <li>• Connecting businesses to investors via various channels, such as Opportunity Day, Thailand Focus, SET in The City, etc.</li> </ul>
<b>Member companies and intermediaries<sup>1</sup></b> <ul style="list-style-type: none"> <li>• Securities firms</li> <li>• Asset management companies</li> <li>• Securities professionals, such as investment consultants, investment analysts, investment planners, etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Consulting</li> <li>• Training and seminar</li> <li>• Communication via websites and social media</li> <li>• Satisfaction survey</li> <li>• Whistleblowing channels</li> <li>• Business performance reporting</li> </ul>	<ul style="list-style-type: none"> <li>• Securities trading system with stability and efficiency</li> <li>• Rules and regulations suitable for business operations</li> <li>• Streamlining trading processes, and rules &amp; regulations</li> <li>• A wide range of investment products and services</li> <li>• An increasing number of quality investors</li> <li>• Securities professionals with high potential</li> <li>• Data security</li> </ul>	<ul style="list-style-type: none"> <li>• Upgrading trading system and post-trading service continuously</li> <li>• Developing investment product alternatives</li> <li>• Developing knowledge and increasing the potential of securities professionals</li> <li>• Developing infrastructure and digital systems to support the capital market expansion</li> </ul>
<b>Investors<sup>1</sup></b> <ul style="list-style-type: none"> <li>• Individual investors</li> <li>• Institutional investors</li> <li>• Foreign investors</li> </ul>	<ul style="list-style-type: none"> <li>• Training and seminar</li> <li>• Communication via websites and social media</li> <li>• Whistleblowing channels</li> <li>• Business performance reporting</li> <li>• Review of the disclosed stakeholder documents (desktop review)</li> </ul>	<ul style="list-style-type: none"> <li>• Good and steady investment returns</li> <li>• Low investment costs and risks</li> <li>• A wide range of Investment products and services</li> <li>• Efficient and transparent Securities trading system</li> <li>• Easy-to-access financial and investment data and knowledge that are sufficient for investment decision making</li> <li>• Personal data protection</li> </ul>	<ul style="list-style-type: none"> <li>• Expanding various investment channels, with convenient access</li> <li>• Providing end-to-end and accurate investment &amp; capital market information services via fast and easy-to-access channels</li> <li>• Promoting investor knowledge via various channels continuously, such as <a href="http://www.set.or.th">www.set.or.th</a>, <a href="http://www.setinvestnow.com">www.setinvestnow.com</a>, <a href="http://www.setsustainability.com">www.setsustainability.com</a>, etc.</li> <li>• Supporting communication channels between listed companies and investors, both offline and online, such as Opportunity Day, Thailand Focus, SET in The City, etc.</li> </ul>

Stakeholders	Engagement Channel	Expectation of Stakeholders	Implementation in Response to Expectation
<b>The SET group's employees</b> <sup>2</sup>	<ul style="list-style-type: none"> <li>• Meetings</li> <li>• Training and seminar</li> <li>• Communication via websites and social media</li> <li>• Satisfaction or engagement survey</li> <li>• Whistleblowing channels</li> <li>• Business performance reporting</li> </ul>	<ul style="list-style-type: none"> <li>• Career advancement and job stability</li> <li>• Respect for human rights and fair treatment of employees</li> <li>• Self-development, and learning-conducive working environment</li> <li>• Work-life balance</li> <li>• Fair compensation</li> <li>• Safe working environment</li> <li>• Personal data protection</li> <li>• Transparent communication between executives and employees</li> </ul>	<ul style="list-style-type: none"> <li>• Employee development plans at all levels in line with the direction of business development, via online and offline learning channels</li> <li>• Employee scholarships and learning programs according to employee interests</li> <li>• Survey of employee's engagement to the organization</li> <li>• Flexible work, such as remote working or work from home (WFH), including flexible time basis</li> <li>• Developing a safe working environment</li> <li>• Employee participation via SET's Employee Club, Welfare Committee, and online communication channels, such as Facebook, LINE and virtual meeting, etc.</li> <li>• Continuous communication and management of personal data protection systems within the organization</li> </ul>
<b>Regulators and government sector</b> <sup>1</sup> <ul style="list-style-type: none"> <li>• The Securities and Exchange Commission (SEC)</li> <li>• Government agencies</li> </ul>	<ul style="list-style-type: none"> <li>• Meetings</li> <li>• Review of the disclosed stakeholder documents (desktop review)</li> </ul>	<ul style="list-style-type: none"> <li>• Compliance with the Securities and Exchange Act</li> <li>• Cooperation in implementing policy</li> </ul>	<ul style="list-style-type: none"> <li>• Cooperation in developing regulations and mechanisms to enhance the efficiency of capital market supervision &amp; surveillance</li> <li>• Participation via meetings and hearings from relevant agencies</li> </ul>
<b>Agencies related to capital market and social sector</b> <sup>1</sup> <ul style="list-style-type: none"> <li>• Capital market-related association</li> <li>• Media</li> <li>• Educational institutions</li> <li>• General public</li> <li>• Business/ social enterprise</li> <li>• Foundations, community networks or groups</li> </ul>	<ul style="list-style-type: none"> <li>• Meetings</li> <li>• Training and seminar</li> <li>• Communication via websites and social media</li> <li>• Whistleblowing channels</li> <li>• Review of the disclosed stakeholder documents (desktop review)</li> </ul>	<ul style="list-style-type: none"> <li>• Thorough access to capital market information and news</li> <li>• Promoting financial and investment literacy to the public</li> <li>• Business promotion and participation in social cooperation networks</li> <li>• Promoting cooperation to boost development in all sectors</li> </ul>	<ul style="list-style-type: none"> <li>• Disseminating financial and investment knowledge curriculum for the public</li> <li>• Continuously upgrading financial and investment learning resources, such as SET's Maruey Library and INVESTORY Investment Discovery Museum (<a href="https://investory.set.or.th/">https://investory.set.or.th/</a>)</li> <li>• Supporting infrastructure and being a hub to connect the capital market and society via the SET Social Impact platform: <a href="http://www.setsocialimpact.com">www.setsocialimpact.com</a></li> <li>• Supporting operations of the SET Foundation</li> <li>• Organizing seminars and supporting activities of various associations related to the capital market</li> <li>• Organizing a monthly press conference to communicate the development of organization and capital market</li> </ul>

**Note:**<sup>1</sup> External stakeholders<sup>2</sup> Internal stakeholders



## 7.3 SET's Sustainability Management

### 7.3.1 Corporate Governance and Economic Dimensions

#### 7.3.1.1 Policies and Practices on Corporate Governance and Economy

The Stock Exchange of Thailand (SET) realizes that corporate governance (CG) is the fundamental of sustainable growth for the organization and the capital market. SET's Board of Governors (BoG) has therefore set up the vision, missions, and the structure and system of good corporate governance in business operations. SET informs the governors, executives and employees to strictly adhere to corporate governance policies. *Details on SET's corporate governance are in page 80 to page 122.* In addition, good corporate governance is a factor that drives the organization with capabilities to compete, develop and create innovations amid changing environments. The key performances for business and the stakeholders are as follows:

#### 7.3.1.2 Sustainability Performance on Corporate Governance and Economy

Driving economic ecosystems to grow sustainably requires cooperation from all sectors including the capital market which is a vital mechanism for Thailand's economic development for over 50 years. Every year, the capital market faces challenges from complex industrial, environmental and social changes which play an instrumental role in setting the global economic direction. Therefore, the success of the capital market depends on the commitment to environmental, social and good corporate governance development in order to grow together in a balanced manner to be the foundation of confidence that leads to the creation of new opportunities for everyone in the society.

For over 20 years, SET has developed and promoted sustainability of the capital market, starting from developing corporate governance for listed companies, promoting financial and investment knowledge among the general public, to developing the concept of business development towards sustainability.

SET has recently established **SET ESG Academy** with the objective to be a source of knowledge on sustainability development for the capital market, containing over 2,000 learning materials. Moreover, the academy is a platform that amplifies knowledge to all sectors via training, consulting, and seminars for executives and ESG practitioners of listed companies, intermediaries, and investors. Moreover, this platform cultivates DNA to upgrade sustainability professionals in the capital market, educational institutions, public and private agencies, via the **SET ESG Experts Pool** network, currently having over 240 members.

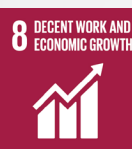


SET also places importance on engagement with each group of stakeholders in the capital market appropriately to ensure that various agencies in the capital market will be able to strengthen business in a sustainable manner as follows:

## Corporate Sustainability Development for Listed Companies

SET realizes the importance of the quality of listed companies, especially the preparation of human resources to support the quality growth of industries and capital markets. Furthermore, SET educates and disseminates the principles of business development and investment taken into consideration environmental and social issues that can affect long-term business operations.

Build a quality capital market through business development and responsible investment for sustainable growth



Plan/Project	Performance in 2022
<b>Listed Companies Classroom</b>	<p><b>New Breed IR project</b></p> <ul style="list-style-type: none"> <li>Organized training to enhance knowledge, and provide opportunities for 176 students nationwide to get advice from the management and team members of listed companies for practical knowledge and inspiration regarding investor relations (IR) profession</li> <li>Organized workshops and in-depth consultations for 65 students to equip them with basic knowledge and skills in IR work, of which 70 percent were offered work in the capital market, such as IR, finance and investment officer, accountant, etc.</li> </ul> <p><b>Courses to enhance knowledge for personnel of listed companies and companies preparing for going public</b></p> <ul style="list-style-type: none"> <li>Organized training to level up knowledge for the Chief Financial Officer (CFO) to enhance skills and fulfill the qualifications of being a CFO as specified by the Securities and Exchange Commission (SEC) and SET, on a continuous basis</li> <li>Organized training for accounting and finance personnel to enhance knowledge and understanding of current professional criteria and standards to enable efficient work</li> <li>Organized training for IR of listed companies to enhance knowledge, as well as promoting ethical operations to enable them to adapt, equipped with communication skills to handle stakeholders in line with industry trend</li> </ul> <p><b>Developed financial knowledge source for listed companies</b></p> <ul style="list-style-type: none"> <li>Developed contents of knowledge necessary for their operations, covering accounting and finance, information disclosure, and criteria and practices that personnel of listed companies should know. In 2022, there were 167 accumulated learning materials, with over 40,000 views accessing knowledge via: <a href="http://www.setlink.set.or.th">www.setlink.set.or.th</a></li> </ul>
<b>Sustainable business development for listed companies</b>	<p><b>Promoting sustainable business development</b></p> <ul style="list-style-type: none"> <li>Continued to implement <b>the Sustainable Development Journey (SD Journey) project</b> to provide in-depth advice to medium and small-sized listed companies. The goal is to integrate key environmental, social and corporate governance (ESG) issues into strategy and risk management, and promote internal participation in the organization to ensure that listed companies' executives and those in operational level can implement ESG issues in a concrete way. In 2022, 28 listed companies participated in the project, and 142 companies joined the project since the start in 2020.</li> <li>Provided training and supported in terms of tools to equip businesses with new concept of adaptation to the current business environment. The courses consisted of: 1) Customer Insights and Engagement, 2) Business Model Reinvention for Corporate Sustainability, 3) HR Strategy in New Normal, and 4) Digital Transformation. A total of 332 listed companies participated in the project with an average satisfaction rate of 91 percent.</li> <li>Prepared and disseminated <b>the ESG Impact Assessment Report</b> that compiled ESG best practices of 170 listed companies in the THSI list, presenting case studies and information that reflect the benefits to businesses and stakeholders, to be used as guidelines for other listed companies to apply in accordance with their own business contexts.</li> </ul>

Plan/Project	Performance in 2022
	<ul style="list-style-type: none"> <li>Developed <b>ESG Health Check</b> in collaboration with the United Nations Development Programme (UNDP) to improve, develop and disseminate online business development assessments on sustainability or <b>ESG Health Check</b> for listed companies that have just started their development journey. The online service via <a href="https://esghealthcheck.set.or.th/home">https://esghealthcheck.set.or.th/home</a> has been available since November 2022.</li> <li>Prepared the readiness of potential listed companies to be added to international sustainability indices, by organizing seminars on sustainability assessment criteria of S&amp;P Global, MSCI and FTSE, and the DJSI Corporate Sustainability Assessment (CSA) Coaching project. In 2022, a total of 26 listed companies were selected as constituents of the Dow Jones Sustainability Indices (DJSI), the highest number in ASEAN. Moreover, 42 listed companies were also included in MSCI ESG Universal Index, and 43 in the FTSE4Good Index. (data as of February 2023).</li> <li>S&amp;P Global released 'The Sustainability Yearbook 2023', ranking the sustainability of leading companies around the world. The record showed that Thai companies ranked the 5th highest in the world, consisting of 37 companies, of which 12 companies received a Gold Class Sustainability Assessment, ranked number one in the world.</li> </ul> <p><b>Upgrading disclosure quality</b></p> <ul style="list-style-type: none"> <li>Organized training, workshops and in-depth one-on-group consultations in <b>the Sustainability Report Development Project for Listed Companies by Industry Group</b>. A total of 274 participants from 35 listed companies participated in the project. Listed companies' average test score increased to 91 percent after having attended the training program from 86 percent in pre-test, and the average satisfaction of the project was at 86 percent.</li> <li>Prepared and disseminated <b>the sustainability reporting guide for listed companies, along with introduction document of sustainability indicators (ESG Metrics) by industry group</b>, for listed companies and various agencies in the capital market to use as guidelines for disclosing sustainability information. This guide focuses on the assessment via sustainability indicators in the ESG dimension that are in line with the contexts of Thai listed companies and disclosure criteria from the Securities and Exchange Commission (SEC) (56-1 One Report), and other standards such as GRI Standards, SDGs, etc. In addition, SET has designed webinar (online) courses to introduce the use of such guidance and documents, attended by over 800 participants from more than 300 listed companies and other agencies.</li> </ul> <p><b>Assessing the quality of sustainability performance of listed companies</b></p> <ul style="list-style-type: none"> <li>Assessed and selected listed companies with outstanding sustainability performance to be included in the Thailand Sustainability Investment (THSI) list. A total of 170 listed companies passed the selection criteria, an increase of 18 percent from the previous year, representing 73 percent of total market capitalization as at the end of 2022.</li> <li>Organized activities to enhance business operations in line with the Thailand Sustainability Investment (THSI). In 2022, a total of 209 listed companies participated in the activities.</li> <li>Supported the Thai Institute of Directors (IOD) to assess <b>the Corporate Governance Report (CGR) of Thai Listed Company</b>. In 2022, all 750 listed companies had an average score of 85 percent, reflecting the transparent disclosure of good corporate governance information of listed companies.</li> </ul>

## Capacity Building for Intermediaries

SET together with relevant agencies and associations have jointly enhanced the knowledge and potential for the operations of securities professionals such as investment analysts, investment consultants, securities support officers and students to make them ready to enter the capital market industry, focusing on critical thinking skills that will enable them to adapt to changes. The key initiatives are as follows:

Enhancing necessary knowledge and skills for securities professionals, aiming to support the operation of intermediaries in the capital market for the benefit of the economy and Thai society as a whole.



Plan/Project	Performance in 2022
Developed new CISA courses	<p>SET has continuously offered scholarships for the Certified Investment and Securities Analyst (CISA) training course to capital market personnel and students. In addition, SET has proactively promoted the foundation level of CISA or Accredited Investment and Securities Analyst (AISA) curriculum to be taught in higher education, in order to prepare qualified personnel to become securities professionals in both analysis and investment management. Moreover, SET has cooperated with the Association of Thai Securities Companies (ASCO), Investment Analysts Association (IAA), the Association of Investment Management Companies (AIMC), the Thai Life Assurance Association (TLAA), and Thai Listed Companies Association (TLCA), to set guidelines for personnel development as follows:</p> <p><b>AISA Scholarship project</b></p> <ul style="list-style-type: none"> <li>Developed and publicized the new CISA curriculum, comprising two levels of content: Foundation Knowledge, which is a basic investment analysis and management course, or <b>Accredited Investment and Securities Analyst (AISA)</b>, and advanced knowledge level, which is an advanced investment analysis and management course or <b>Certified Investment and Securities Analyst (CISA)</b>. SET has also offered scholarships for training and testing of AISA courses, granting to over 2,100 personnel from 452 listed companies, financial institutions and relevant agencies</li> </ul> <p><b>Migration for New CISA project</b></p> <ul style="list-style-type: none"> <li>Developed a training specifically for those who have passed the previous CISA curriculum or <b>Migration for New CISA</b> in order to upgrade knowledge and skills of the participants to be in line with the new CISA curriculum and the changes in the capital market. Those who have passed the training will have the qualifications equivalent to those passing the new CISA course. They can further submit the new certificate for registration as a security professional as specified by the SEC, and for registration of the new CISA qualifications. There were 372 applicants participating in the project in 2022.</li> </ul> <p><b>New Breed Financial Professional project</b></p> <ul style="list-style-type: none"> <li>Supported scholarships for the training and testing of the AISA program for the 3<sup>rd</sup> year (junior) university students and up, with the following key activities: <ul style="list-style-type: none"> <li>Building experience and knowledge through Open House activities and Exclusive Company Visit to create learning opportunities outside classroom, practice in the finance field trained by executives and professional practitioners and exchange information about profession in the capital market</li> <li>Supporting learning materials in the form of e-Learning and Live Streaming, easily accessed on the e-Learning for CISA platform, as such helping increase learners' knowledge for a total of over 120 hours</li> </ul> </li> </ul>



Plan/Project	Performance in 2022
	<ul style="list-style-type: none"> <li>In 2022, 162 out of 1,347 applicants from 66 higher education institutions nationwide passed the criteria and received scholarships for the AISA training and testing program.</li> </ul> <p><b>AISA Program towards Higher Education Learning</b></p> <ul style="list-style-type: none"> <li>Linked the AISA curriculum with four more higher education institutes, making a total of 7 higher education institutes consisting of: University of the Thai Chamber of Commerce; Srinakharinwirot University, King Mongkut's Institute of Technology Ladkrabang, Chiang Mai University, Khon Kaen University, Prince of Songkla University, and Bangkok University. The AISA curriculum is taught at the bachelor's degree of six universities and the master's degree of one university. About 700 students are expected to take this program each year.</li> </ul>
<b>Professionals Classroom</b>	<ul style="list-style-type: none"> <li>Continued to develop intermediaries' personnel, by cooperating with ASCO and IAA to develop training courses that are in line with the roles and duties of related officers, while enhancing professional skills with the concept of Sustainable Investment, a new investment opportunity for the future</li> <li>Developed knowledge among intermediaries' personnel through various channels: 20 newly developed Live Training courses in 2022 and e-Learning courses on <b>the website of Professionals Classroom</b>, with a total of 8,880 visitors consisting of 7,507 investment consultants, 368 investment analysts, and 1,005 securities operations and human resources officers</li> </ul>
<b>Setting testing and training standards of license renewal for securities professionals</b>	<ul style="list-style-type: none"> <li>Reviewed course contents and tests in line with professional standards and current investment developments, such as fundraising in LiVE Exchange (LiVEx), Thai Digital Assets Exchange (TDX), and new investment products such as DRx, etc.</li> <li>Upgraded security and standard of digital exam via Cloud Server, to be used instead of Notebook Server, and promoted the exams via Safe Exam Browser system, by revising and improving the security standard of the testing system and continuously enhancing the testing centers manual. In addition, a total of 36 random audits of the standard assessment of the testing centers and training institutions were also conducted to ensure that the examination process is transparent and efficient.</li> <li>Supported remote exam to cope with uncertain situations, beginning from 2023 onwards</li> <li>Approved new course of license renewal of securities professionals for 16 training institutes and 176 courses, aiming to improve the course contents in order to support knowledge development for license holders</li> <li>Developed additional functions of the Prof. Link Application, such as a system for submitting training results and following up on training results for license renewal, and developed a microsite on the website: <a href="https://member-proflink.set.or.th">https://member-proflink.set.or.th</a>, to increase access channels using multiple devices, and make it more convenient for the use of training for license renewal. In 2022, there were 40,352 downloads, an increase of 158 percent from the previous year.</li> </ul>



## Sustainable Investment Promotion

SET together with relevant agencies and associations have jointly enhanced the knowledge and potential for the operations of securities professionals such as investment analysts, investment consultants, securities support officers and students to make them ready to enter the capital market industry, focusing on critical thinking skills that will enable them to adapt to changes. The key initiatives are as follows:

Promoting sustainable investment to cultivate a sustainable investment culture in the Thai capital market



Plan/Project	Performance in 2022
<b>Promoting sustainable investment knowledge</b>	Developed ESG courses and knowledge materials for investors and professionals in the capital market. In 2022, SET developed four new courses focusing on ESG data analysis and strategies for valuation and investment decision (for investment analysts and fund managers), sustainable investment advice (for investment consultants), ESG information disclosure to create value added for new IPOs (for financial advisors), as well as guidelines for selecting ESG stocks into investment portfolio (for investors and interested persons). In addition, 27 pieces of knowledge materials have also been developed in the form of articles, e-books, e-Learning and podcasts, for disseminating via the SET group's easy-to-access website.
<b>SETTHSI Index</b>	Disseminated <b>SETTHSI Index</b> that tracks stocks passing the criteria for Thailand Sustainability Investment (THSI) list to reflect the price movements of listed companies operating business by taking into account their impact on economy, society and environment. Moreover, THSI is the benchmark index to measure investment performance and an underlying index for issuing other financial products such as mutual funds or Exchange Traded Funds (ETFs) that use THSI list as underlying assets. At the end of 2022, 98 companies were listed in the SETTHSI Index, accounting for 62 percent of the total market capitalization.

## Product, Service, and Innovation Development for Capital Market

SET is the center for the development of modern securities trading systems and infrastructure for the capital market to support the rapid technological changes and facilitate convenience for market participants to access products and services that meet investment needs in the digital age, under the principles of good corporate governance. SET places importance on IT governance management and capital market governance and surveillance with transparency. SET also prioritizes cybersecurity by conducting regular testing and building a culture of technology security enterprise-wide in order to create awareness and prepare preventive plan in a timely manner.

Developing innovations with cybersecurity in mind is fundamental to developing a digital infrastructure in order to support access to sustainable investment.



## SET's Technology Standard

**Information Security  
Management Standard  
ISO 27001  
(Information  
Security Management)**

**Information Technology  
Service Standard ISO 20000  
(IT Service Management)**

**Privacy Information  
Management Standard  
ISO 27701  
(Privacy Information  
Management)**

### 1) Transaction and digital system development

Plan/Project	Performance in 2022
<b>New Trading System Development project</b>	SET has developed New Trading System to support the capital market expansion, while upgrading the Order Entry System and disseminating market data at the same standard level as the global leading stock exchanges. SET and member companies have jointly tested the work system continuously to examine the readiness of the system and ensure stability for securities trading. This new system for both SET and TFX is expected to commence in the second quarter of 2023.
<b>Cyber Resilience Survey project to raise IT security standard</b>	Organized a seminar on <b>Cyber Resilience Survey project</b> in liaison with experts to encourage listed companies to self-assess their cyber management and protection systems, in order to build awareness on the IT industry security in the capital market
<b>DevOps Enablement Project</b>	Developed applications and platforms that can increase the speed of development, and continuous delivery of new applications and systems to users within the organization / users outside the organization (the general public). Moreover, there is continuous security from the system development process, to auto-scaling of system expansion. The applications and platforms are able to fix initial errors by self-healing via a monitoring system from the data that are efficient metrics. The development of such systems has helped increase the agility in business management and responded quickly to user needs.
<b>SETNET3 Network efficiency optimization</b>	Upgraded the SETNET3 network to accommodate up to four times more network traffic volume, while adjusting and modernizing the equipment, as well as continuously improving the processing and memory systems that can support the increasing amount of data transmission and types of service

Plan/Project	Performance in 2022
<b>FundConnex mutual fund trading system</b>	<p>In 2022, 56 selling agents used <b>FundConnex</b> mutual fund trading system, an increase of 10 firms from the previous year. In addition, the system has been continuously developed, such as</p> <ul style="list-style-type: none"> <li>• Added more channels to support the trading of ETF as an alternative investment tool for Investors</li> <li>• Developed a system to support fund transfers from redemption and dividend payments, by connecting to the Interbank Direct Credit service of FinNet Innovation Network Co., Ltd. (FinNet)</li> </ul>
<b>The system to connect entrepreneurs with the Digital Gateway Authentication Platform</b>	<p>Developed and improved the system to facilitate transactions and verify identity via Digital Gateway, resulting in the exponential growth in transaction volume from the previous year, as follows:</p> <ul style="list-style-type: none"> <li>• National Digital ID Proxy (NDID Proxy) service, with a 122-percent increase in the number of transactions</li> <li>• Linked data with the Department of Provincial Administration to check ID card status (DOPA Gateway), with a 106-percent increase in the number of transactions</li> <li>• Connected data with the Anti-Money Laundering Office (AMLO Gateway), with a 244-percent rise in the number of transactions</li> </ul>
<b>Developing real-time Interbank direct credit for FinNet</b>	<ul style="list-style-type: none"> <li>• Added real-time cross-bank payment services and QR Code payment channels, as well as developing payment services to support DRx products, making the payment process more efficient. In 2022, the number of customers using payment service increased by 250 percent from the previous year.</li> </ul>

## 2) Developing investment products and information services

Plan/Project	Performance in 2022
<b>DRx</b>	<p>Developed depositary receipt that does not need to be traded for whole unit, or Fractional Depositary Receipt (DRx), as an alternative for investors who want to invest in foreign stocks or investment units. The initial investment is only 0.0001 units and can be traded in Thai baht or investment units. This provides investors with the opportunity to access world-class stocks. In addition, DRx is open for trading during the trading hours of overseas underlying securities, enabling investors to monitor the price movements of the underlying securities and adjust their investment portfolios in a timely manner. In 2022, Two DRx representing global stocks: Apple Inc. (NASDAQ: AAPL) and Tesla Inc. (NASDAQ: TSLA), were launched with the first day of trading on September 29, 2022.</p>
<b>SMART Marketplace</b>	<p>Added market data service that provides financial data (such as end-of-day trading prices, individual stock statistics, financial statements, and financial ratio) and non-financial data such as ESG data of listed companies, in the form of Application Programming Interface (API)</p>
<b>ESG Rating</b>	<p>Provided information on ESG Rating from five world-ESG raters, namely ESG Book, Moody's ESG Solutions, MSCI, Refinitiv, and S&amp;P Global. Such information has been disseminated to the general public via the website: <a href="http://www.settrade.com">www.settrade.com</a> to provide information for investors and interested public.</p>

Plan/Project	Performance in 2022
<b>ESG Data Platform</b>	Providing ESG data management system for listed companies, starting from the data entry to the dissemination of information to users such as investors, regulators, various groups of raters, etc. The ESG Data Platform has been designed for relevant parties to utilize the information for business development planning and investment decision making.
<b>56-1 One Report delivery system</b>	Providing the information submission system according to the annual registration statement/annual 56-1 One Report form specified by the SEC. Listed companies must prepare the structured data and submit the annual reports in electronic files to the SEC. The 56-1 One Report form delivery system will be connected to the ESG Data Platform to reduce redundancy in data submission. In addition, such information will be published on the SET website for stakeholders to conveniently access information of listed companies.

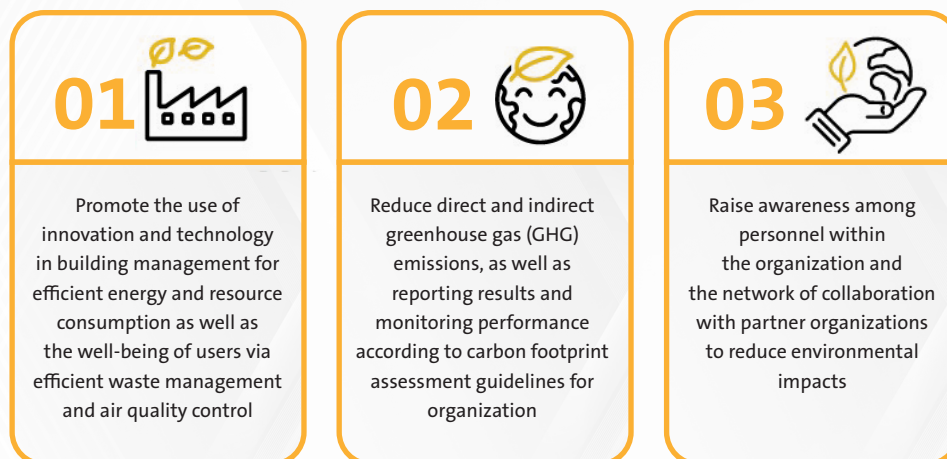
### 3) Governing and overseeing the capital market with transparency

Plan/Project	Performance in 2022
<b>Regulatory Revision</b>	<p>Revised regulations to support the capital market's business operations by focusing on easing the burden of entrepreneurs, in conjunction with the capital market surveillance with transparency for the benefit of all stakeholders. The key performance results are as follows:</p> <ul style="list-style-type: none"> <li>• Set the criteria for SMEs / startups to list on LiVEx, inclusive of the qualifications of issuers, trading, and regulatory guidelines to suit the nature of the business and investors</li> <li>• Exempted the Tick Rule for market makers of depository receipt (DR), DRx and ETF units to support the market maker's task, enabling them to offer DR, DRx and ETF trading at a price in line with the underlying price, as such allowing investors to trade securities at reasonable prices</li> <li>• Increased the efficiency of securities trading surveillance to suit the changing trading conditions that are not in consistent with the fundamental factors, preventing investors and the overall securities trading system from risks, by leveling up and adding measures to temporarily suspend trading for one business day as the strictest measure. After the launch of these new measures on April 4, 2022, the number of securities subject to such measures has decreased significantly from 2021.</li> <li>• Reviewed and improved the time frame for members to adjust in case of business cession to be able to return to business as usual within a period of five years. Members shall submit improvement plans and report the progress every six months until resuming the business, so that members have appropriate time to take actions and prevent overburden.</li> <li>• Minimized the burden of operators and entrepreneurs by adjusting the regulations to be in line with the SEC's and/or the Ministry of Commerce's, such as the disclosure of information about making a tender offer, and share repurchase program, and reviewing the definition "Institutional Investor" for the regulations governing securities trading by cash</li> </ul>

## 7.3.2 Environmental Dimension

### 7.3.2.1 Environmental Policies and Practices

To create participation in sustainable environmental management, SET has established environmental policies and practices in compliance with relevant laws, regulations and international standards, consisting of three important practices as follows:



For Internal environmental management, SET has established energy conservation and environmental management policies as guidelines for enterprise operations and participation. In addition, SET has set up a working group on energy and environmental management to continuously monitor and report the performance to the energy and environmental management audit team. Moreover, SET has promoted a green procurement and communicates to suppliers to acknowledge the code of conduct through the procurement process.

### 7.3.2.2 Environmental Performance

The global environment has been changing rapidly, causing businesses and human activities to cope with uncertainties partly due to climate change. SET is therefore committed to managing the environment and preparing readiness to handle climate change via integration into the organization's corporate strategy and business goals, as well as promoting collaborative network process and organizing activities to provide knowledge and raise realization of the environmental impact among employees and stakeholders.

#### Policy and Initiative to Achieve Net Zero Target

In 2022, SET formulated an environmental management strategy to reduce greenhouse gas (GHG) aiming for net zero emissions by setting up a working group as a driver of GHG emissions reduction to study the process of targeting and reducing GHG emissions according to internationally accepted guidelines, such as the Science-based Targets initiative (SBTi) to cover all of the SET operations. The project is expected to be completed by 2023.

Realizing the importance of global climate change, SET is committed to driving operations to achieve net zero emissions. This has been carried out through corporate strategy formulation and implementation planning to create value for the society, community and environment.





## Environmental Management

SET is a center of investment services and learning hub for the Thai capital market, consisting of the office space and the public area such as the Maruey Library and the INVESTORY Investment Discovery Museum, to facilitate visitors and service users, keeping them comfortable with a pleasant environment. SET has selected the concept of Green Building in building design, construction, and management, which has already been certified according to the Leadership in Energy and Environmental Design (LEED) and Fitwel international standards to ensure efficient use of energy and well-being. In 2022, the scope of environmental data collection was expanded for wider coverage of the SET Buildings. However, there were more users and visitors to SET's buildings due to the government's relaxation of the COVID-19 restrictions. As a result, the amount of GHG emissions, energy consumption, water consumption and waste volume increased significantly compared to the previous year when the COVID-19 pandemic still escalated.

Focusing on using resources efficiently and reducing direct and indirect environmental impact by taking into consideration the public impacts, jointly with partners to manage climate vigorously to reduce GHG emissions sustainably.



### 1) Energy Management

Plan/Project	Performance in 2022																									
Electrical conservation	<ul style="list-style-type: none"><li>In 2022, the volume of electricity consumption within the organization totaled 13,386 megawatt-hours or a 10.34 percent increase. The electricity sources can be classified into two parts: the purchased electricity from third-party for internal consumption totaling 13,250 megawatt-hours, or a 9.76 percent increase; and the electricity consumption from renewable energy within the organization totaling 136 megawatt-hours, a 126.67 percent increase.</li></ul>																									
	<table><tr><th>Indicator</th><th>Unit</th><th>2021<sup>1</sup></th><th>2022</th><th>%YOY</th></tr><tr><td>Electricity purchased from third-party</td><td>Megawatt-hours</td><td>12,072</td><td>13,250</td><td>9.76%</td></tr><tr><td>Electricity consumption from renewable energy</td><td>Megawatt-hours</td><td>60</td><td>136</td><td>126.67 %</td></tr><tr><td>Total electricity consumption within the organization</td><td>Megawatt-hours</td><td>12,132</td><td>13,386</td><td>10.34 %</td></tr><tr><td>Ratio of total electricity expenses to total electricity consumption within the organization</td><td>THB/ Megawatt-hours</td><td>3,417</td><td>3,968</td><td>16.11%</td></tr></table>	Indicator	Unit	2021 <sup>1</sup>	2022	%YOY	Electricity purchased from third-party	Megawatt-hours	12,072	13,250	9.76%	Electricity consumption from renewable energy	Megawatt-hours	60	136	126.67 %	Total electricity consumption within the organization	Megawatt-hours	12,132	13,386	10.34 %	Ratio of total electricity expenses to total electricity consumption within the organization	THB/ Megawatt-hours	3,417	3,968	16.11%
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SET has plans to improve energy usage efficiency and invest more in technologies powered by renewable energy sources in line with the environmental management strategy to reduce GHG and drive towards net zero emissions.																										
<ul style="list-style-type: none"><li>Installed a new solar roof system, of which generation capacity doubles to 95 megawatt-hours in 2022, and then moved the existing solar roof system to another area, which can substitute the electricity in that area by about 40 megawatt-hours.</li><li>Recovered the heat from the air conditioners and transferred to the dishwasher's hot water system, reducing the electricity consumption of the dishwasher by about 27 percent</li></ul>																										

#### Note:

<sup>1</sup> During the COVID-19 outbreak, the building usage was lowered than usual.

Plan/Project	Performance in 2022				
<b>Fuel conservation</b>	<ul style="list-style-type: none"> <li>In 2022, the corporate vehicles' fuel consumption totaled 73,421 liters, an increase of 16.46 percent.</li> </ul>				
	Indicator	Unit	2021 <sup>2</sup>	2022	%YOY
	Corporate vehicles' fuel consumption	Liter	63,046	73,421	16.46%
	Ratio of corporate vehicles' fuel expenses to fuel consumption	THB/liter	26	34	26.72%
	<ul style="list-style-type: none"> <li>Promoted the use of electric vehicles instead of gasoline-powered vehicles. The corporate's electric vehicles substituted about 2,700 liters of fuel.</li> </ul>				

## 2) Water Management

Plan/Project	Performance in 2022				
<b>Efficient water management</b>	<ul style="list-style-type: none"> <li>In 2022, water consumption and wastewater discharge increased to 62,675 cubic meters or 15.37 percent, and 18,795 cubic meters or 16.08 percent, respectively. Even though the water source for internal use is from a low water stress area, SET has applied the Green Building concept to manage and encourage personnel to save water and use it wisely.</li> </ul>				
	Indicator	Unit	2021 <sup>2</sup>	2022	%YOY
	Water withdrawal for consumption in the organization	cubic meters	54,325	62,675	15.37%
	Water discharge	cubic meters	16,191	18,795	16.08%
	Ratio of total water expense to water withdrawal for consumption	THB/cubic meters	19	17	-6.36%
	<ul style="list-style-type: none"> <li>Installed a highly efficient filter system with a maximum capacity of two cubic meters per hour, leading to recycle wastewater from the wastewater treatment system and reuse it in the cooling tower</li> <li>Received a plaque of honor for wastewater management "Gold level" for the year 2022 from the Pollution Control Department, Ministry of Natural Resources and Environment. The assessment covered all aspects of wastewater management, the control of wastewater discharge to reduce environmental impact, and efficient use of resources reflecting the operation with social and environmental responsibility.</li> </ul>				

**Note:**

<sup>1</sup> During the COVID-19 outbreak, the building usage was lowered than usual.

<sup>2</sup> During the COVID-19 outbreak, the fuel consumption was less than usual.

## 3) Waste Management

Plan/Project	Performance in 2022																				
Efficient waste management	<ul style="list-style-type: none"><li>In 2022, the total volume of waste was 71.52 tons, a 46.11 percent increase. Additionally, this waste could be classified into 7.81 tons of hazardous waste and 63.71 tons of non-hazardous waste.</li></ul>																				
	<table><tr><th>Indicator</th><th>Unit</th><th>2021<sup>1</sup></th><th>2022</th><th>%YOY</th></tr><tr><td>Total non-hazardous waste</td><td>Tons</td><td>45.27</td><td>63.71</td><td>40.73%</td></tr><tr><td>Total hazardous waste</td><td>Tons</td><td>3.68</td><td>7.81</td><td>112.23%</td></tr><tr><td>Total waste</td><td>Tons</td><td>48.95</td><td>71.52</td><td>46.11%</td></tr></table>	Indicator	Unit	2021 <sup>1</sup>	2022	%YOY	Total non-hazardous waste	Tons	45.27	63.71	40.73%	Total hazardous waste	Tons	3.68	7.81	112.23%	Total waste	Tons	48.95	71.52	46.11%
	Indicator	Unit	2021 <sup>1</sup>	2022	%YOY																
	Total non-hazardous waste	Tons	45.27	63.71	40.73%																
	Total hazardous waste	Tons	3.68	7.81	112.23%																
Total waste	Tons	48.95	71.52	46.11%																	
<p><b>Note:</b> Hazardous waste includes infectious waste.</p>																					
<ul style="list-style-type: none"><li>Participated the campaign to reduce the amount of waste by encouraging employees to realize waste issues, and promoting participation in waste reduction and separation properly according to the “Invisible Waste” concept under SET’s Care the Whale project</li><li>Accredited by the U.S. Green Building Council (USGBC), United States of America, consisting of “LEED Zero Waste Certification” and “TRUE Certification at Platinum level”, being the first in ASEAN to receive both certifications. Significantly, SET focuses on managing office buildings by using resources efficiently and reducing waste to zero (Zero Waste).</li><li>Participated in sending used paper to the recycling process, jointly with SCGP Recycle (by SCG Packaging plc), a Circular Economy project, in exchange for new paper, by recycling 19,000 kilograms of used paper, equivalent to planting 323 trees, and reducing GHG emissions by over 107,800 kilograms of carbon dioxide equivalent. The new paper received could be used to replace paper in the stock for more than one month</li></ul>																					

## 4) GHG Management

Plan/Project	Performance in 2022				
Thailand Voluntary Emission Reduction Program: T-VER	<ul style="list-style-type: none"><li>Participated in the Thailand Voluntary Emission Reduction Program (T-VER). During 2021-2022, SET could reduce GHG emissions by 1,819 tons of CO<sub>2</sub> equivalents from the solar power generation project and the replacement of LED light bulbs.</li></ul>				
GHG reporting	<ul style="list-style-type: none"><li>In 2022, SET prepared a report on GHG emissions according to the Carbon Footprint for Organization assessment guideline, covering GHG emissions in Scope 1 and Scope 2. It was found that the GHG emission totaled 6,834 tons of CO<sub>2</sub> equivalent per year, with an increase of 10.05 percent. However, the GHG emissions data are currently reviewed for verification request from Thailand Greenhouse Gas Management Organization (TGO).</li></ul>				
	Indicator	Unit	2021 <sup>1</sup>	2022	%YOY
	Total GHG emissions - scope 1	Tons of CO <sub>2</sub> e	175	210	20.00%
	Total GHG emissions - scope 2	Tons of CO <sub>2</sub> e	6,035	6,624	9.76%
	Total GHG emissions from scope 1 and scope 2	Tons of CO <sub>2</sub> e	6,210	6,834	10.05%

**Note:**








<sup>1</sup> During the COVID-19 outbreak, the building usage was lowered than usual.

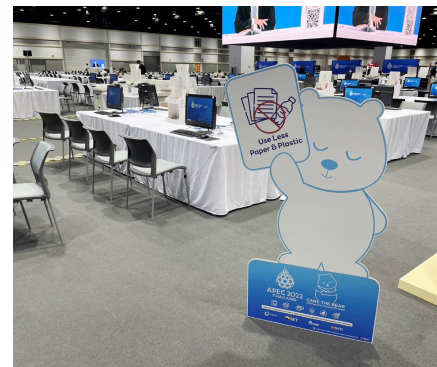
## Collaboration Platform for Climate Action

SET has initiated a network of cooperation to reduce and absorb GHG via the Climate Care Collaboration Platform, consisting of three main projects: Care the Bear, Care the Whale and Care the Wild, with key action plans and performance as follows:





Building a collaborative network to solve environmental problems via various initiative projects aiming at encouraging Thai people to learn, adjust their behavior, and jointly push forward, as well as repeating and enhancing environmental management to be another good thing in the culture of the Thai people.



Plan/Project	Performance in 2022
<b>Care the Bear project</b>	<ul style="list-style-type: none"> <li>SET has encouraged listed companies and interested organizations to adjust behavior to reduce GHG emissions, via both online and onsite activities, according to the six practices of the Care the Bear project, as follows: <ul style="list-style-type: none"> <li> Promoting use of public transport or carpooling</li> <li> Cutting back on paper or plastic</li> <li> Zero use of foam</li> <li> Energy efficiency</li> <li> Application of recyclable decorative materials</li> <li> Food waste reduction</li> </ul> </li> <li>SET, in collaboration with the Ministry of Foreign Affairs, Bangchak Group, The Siam Cement plc, and PTT Oil and Retail Business plc, synergized to drive a low-carbon society through the Care the Bear project at the Asia-Pacific Economic Cooperation Conference (APEC 2022) in Bangkok during November 14 - 19, 2022. Throughout the event, a total of 30,295.40 kilograms of carbon dioxide equivalent (kgCO<sub>2</sub>e) of GHG was reduced, equivalent to planting 3,266 trees aged 10 years.</li> <li>In 2022, 152 organizations participated in the project, altogether reducing GHG emissions by 4,773,412 kgCO<sub>2</sub>e, an increase of 140 percent from the previous year.</li> </ul> <div>  <div> <p><b>Reducing GHG emissions by</b></p> <p><b>4,773,412</b></p> <p>kgCO<sub>2</sub>e,</p> <p><b>up 140%</b></p> </div> </div>





Plan/Project	Performance in 2022
<b>Care the Whale project</b>	<p>Promote waste management from the origin with the concept of “Invisible Waste” by using the Circular Economy principle to properly take care and manage waste by taking action with a network of alliances, using the Ratchadaphisek Road area (one of Bangkok’s business districts) as an implementation model. In 2022, the details of the implementation are as follows:</p> <ul style="list-style-type: none"> <li>• Invisible Waste Station project at Bang Kachao river bend (near Bangkok), in collaboration with allies, namely Chak Daeng Temple, Saha Pathanapibul pcl, Osotspa pcl, Princ Hospital Suvarnabhumi, local community networks, shops, Tambon Administrative Organization and schools under the concept “Synergy of Communities @Khung Bang Kachao” promoting household waste segregation and exchanging waste for consumer goods. In 2022, 16,384 kilograms of waste were collected to turn into consumer goods, resulting in a reduction of GHG emissions (from this project implementation) by 11,439 kgCO<sub>2</sub>e.</li> <li>• In 2022, a total of 24 organizations participated in the project. In 2022, the participating organizations expanded the Care the Whale project to other provinces in various regions, resulting in a collective reduction of GHG emissions by 13,712,368 kgCO<sub>2</sub>e, or an increase of 40 percent.</li> </ul> <div style="display: flex; align-items: center;"> <div style="text-align: center; margin-right: 20px;">  <p><b>CARE THE WHALE</b> ชุมชนล่องหน</p> <p>Reducing GHG by <b>13,712,368</b> kgCO<sub>2</sub>e, <b>up 40%</b></p> </div>  </div>
<b>Care the Wild project</b>	<p>Collaborative projects to raise funds for reforestation, restoration, and promotion of forest care through the Reforestation Alliance Network aiming to create a balanced ecosystem by increasing the number of trees and expanding the forest in a tangible way. The details of the implementation in 2022 are as follows:</p> <ul style="list-style-type: none"> <li>• A total of 58 private organizations participated in fundraising for planting forests in eight community forests: Ban Nong Thidsorn, Ban Aoi and Ban Boonruang, Ban Mai, Sahakon Nikhom, Ban Hlung Khao, Ban Khok Phluang, Ban Na Wai, and Ban Phu Tum, totaling 173.5 rais, consisting of 34,700 trees, absorbing GHG emissions of 312,300 kgCO<sub>2</sub>e.</li> </ul> <p>In the future, the project plans to use tracking technology for the reforestation to ensure that the planted trees mature and 100 percent survive according to the set goals.</p> <div style="display: flex; align-items: center;"> <div style="text-align: center; margin-right: 20px;">  <p><b>CARE THE WILD</b> Reforestation Collaboration</p> <p>Absorbing GHG emissions by <b>312,300</b> kgCO<sub>2</sub>e, <b>up 29%</b></p> </div>  </div>



### 7.3.3 Social Dimension

#### 7.3.3.1 Social Policies and Practices

The Stock Exchange of Thailand (SET), as a capital market service provider with social and stakeholder responsibilities, has set up policies and best practices in the social aspect, such as employee code of conduct; supplier code of conduct; whistleblowing policy; stakeholder engagement policy; occupational health, safety and working environment policy, etc., in line with human rights principles. Employees at all levels are encouraged to adhere to and practice accordingly. In addition, SET is committed to the principles of equal treatment of employees and stakeholders without discrimination on race, gender, religion, and strictly in compliance with labor and employment laws, while creating a "SET DNA" corporate culture for employee engagement.



#### 7.3.3.2 Social Performance

Human resource development is the heart of building a quality society. SET values people and aims to develop the employees as well as the society as a whole, under the vision "To Make the Capital Market 'Work' for Everyone". The objectives are to minimize inequality and create opportunities for everyone to have equal access to the capital market through the learning process, promoting participation, and act as an intermediary in connecting all sectors, as such enabling them to equally utilize the capital market.

#### Employee Development and Care

Employees are at the heart of the development of the organization and the capital market to grow stably. SET realizes that caring, equal opportunity and fair treatment according to human rights principles from recruitment, employee care, employee development, performance appraisal to remuneration payment will build employee commitment and engagement in the organization. Moreover, SET has set up a process to ensure that employees are treated fairly and can develop their potential through various activities and projects. The key plans and performance are as follows:

Determining to create happiness and provide equal opportunities, while adhering to labor laws and human rights, in order to create good and talented people for the organization, the capital market, and the society with value and sustainability.

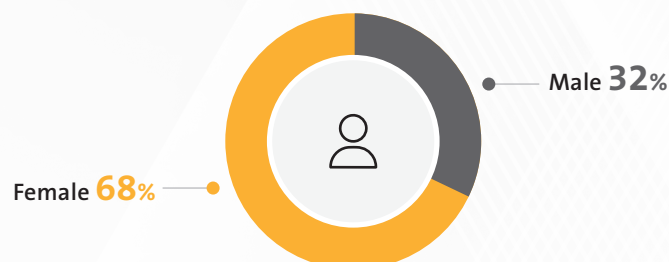
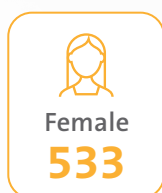
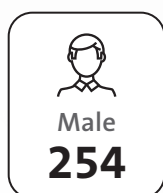


## 1) Employment

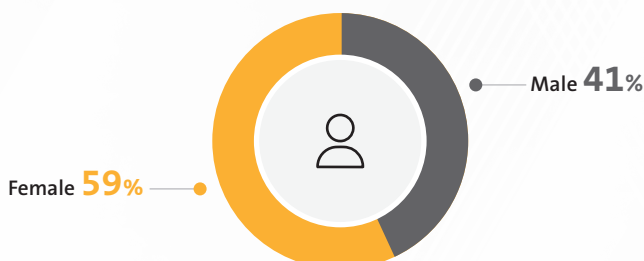
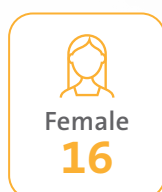
SET prioritizes employee recruitment by considering the ability and qualifications suitable for the positions and corporate values. SET adheres to equality without discrimination on race, gender, religion, religious beliefs and political opinion. In 2022, SET hired employees with details as follows:

Total full-time employees **787 persons**    Average working period **15 years**    Average age of employees **43 years**

Number of full-time employees classified by gender



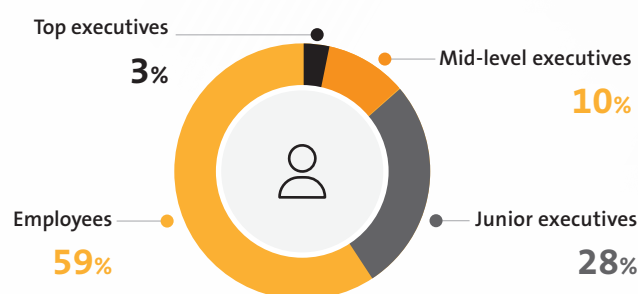
**27** full-time employees  
voluntarily resigned by gender



Employee voluntary resignation rate **3.4%**

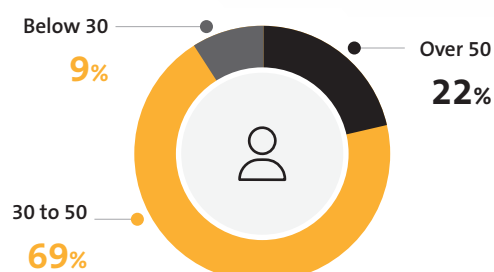
Number of full-time employees classified by level

Employee level	Male	Female
Top executives	15	12
Mid-level executives	30	47
Junior executives	79	137
Employees	130	337
<b>Total</b>	<b>254</b>	<b>533</b>



Number of full-time employees classified by age

Age	Male	Female
Over 50	38	133
30 to 50	190	356
Below 30	26	44
<b>Total</b>	<b>254</b>	<b>533</b>




Number of employees with disabilities: **1 person**

**Note:** SET hired eight persons with disabilities (One full-time employee and seven temporary employees) in compliance with the ratio as prescribed by law.

Average salary and remuneration ratio  
between male and female employees

**1: 0.8**

## 2) Occupational safety and health of employees

Plan/Project	Performance in 2022
<b>Safety, Occupational Health and Working Environment Committee</b>	<ul style="list-style-type: none"> <li>The Safety, Occupational Health and Working Environment Committee held meetings to jointly recommend measures to improve workplace safety, as well as promoting and supporting SET's workplace safety activities, such as organizing an Ergonomics project to prevent and ease the Office Syndrome, suggesting measures to take care of employees and building users during the COVID-19 pandemic situation, organizing an annual fire drill in June 2022 with 100 percent participation, reviewing legal compliance conducted by an external auditor, etc.</li> <li>Organized a training course for safety officers in the supervisory and management levels, and for new employees</li> </ul>
<b>Measures to prevent the spread of COVID-19</b>	<ul style="list-style-type: none"> <li>Provided COVID-19 vaccines for employees and employee's relatives including booster doses</li> <li>Provided COVID-19 protective gears for employees and building users, such as face masks and alcohol gels, etc.</li> <li>Disseminated the workflow for using the COVID-19 virus detection service for employees at risk and policies &amp; guidelines for adjusting the New Way of Work form according to the severity of the COVID-19 situation, consisting of measures for entering into the office and how to conduct oneself when inside the building, welfare arrangement, and screening measures</li> </ul>
<b>Employee health care</b>	<ul style="list-style-type: none"> <li>Provided Mental Health Service by consulting psychiatrists and psychologists via website or application. A room for pumping breast milk and a milk freezer for breastfeeding has been provided to facilitate employees. Moreover, SET has started to have specialists in Orthopedics and Allergy available with check-ups twice a month at SET's medical room.</li> <li>Organized the schedules of an annual checkup for all employees, enabling everyone to receive the service at any hospital convenient for them instead of previously arranging health check-ups at the office building, while encouraging employees to get influenza vaccination</li> <li>In 2022, employees had an average sick leave rate of 2.7 working days, and there is neither absence due to work-related injury nor work-related fatality, achieving all goals of occupational health, safety and working environment: zero work-related injury absence and fatality.</li> </ul> <div>  <p><b>Work-related fatalities and injury absence</b></p> <p><b>"Zero"</b></p> </div>

## 3) Appropriate and fair allocation of welfare


Plan/Project	Performance in 2022
<b>Gathering of employees to discuss employee welfare and benefits</b>	The Welfare Committee and the Provident Fund Committee held meetings to discuss between management representatives, and elected and appointed employees to jointly consider various employee benefits in line with current conditions and fair to all employees.
<b>Increasing savings potential and financial planning for employees</b>	<ul style="list-style-type: none"> <li>Established a provident fund (PVD) for employees where employees shall have a choice to save up to 15 percent of their salary and SET shall contribute another 10 percent of the salary. In 2022, SET contributed to the provident fund totaling THB 103.73 million. In addition, SET has communicated, and provided knowledge of provident fund investment plans among employees continuously. In 2022, 100 percent of all employees participated in the PVD.</li> <li>Established a savings cooperative as a savings channel for SET employees. In 2022, there were a total of 573 employees registered as members, representing 72.8 percent of all employees.</li> <li>Organized housing and loan welfare for employees, such as loans for housing repairs, car hire purchases, etc.</li> </ul>
<b>Promoting education among employees</b>	Allocated scholarships for employees from master's degree up, both at local universities and abroad, in related fields so that employees can have the opportunities to enhance their knowledge and experience and further help enhance the organization in return

## 4) Participation and engagement of employees

Plan/Project	Performance in 2022
<b>SET Employee Club</b>	<ul style="list-style-type: none"> <li>Supporting an establishment of the SET Employee Club (Sor.Por.Tor.), of which 21 committee members are elected and appointed from the employees with a one-year term. The duty is to organize activities that promote employee participation based on SET DNA corporate values. SET Employee Club is also a channel for employees on-the-job training in order to develop necessary skills beyond their regular work, and to practice their leadership skills, creativity, and social responsibility. In 2022, SET Employee Club organized various activities to strengthen enterprise-wide relationship between executives and employees, both on-site and online. A total of eight activities were organized, consisting of Valentine's Day: #Far in distance but close at heart, Songkran Day: Year of the Tiger ... Blessed with happiness, SET's Anniversary activities, Voluntary activities ... SET Volunteer: Reforestation under the Care the Wild project, Mother's Day activities, Questions from SET Points activities, Blood donation activity with the Thai Red Cross Society, and SET New Year Party 2023 activities.</li> </ul>
<b>Employee communication channels</b>	<ul style="list-style-type: none"> <li>The "Pee Pui Chuan Chat" (Chat with President Pakorn) program via Facebook Live, an online two-way communication channel to exchange viewpoints and to communicate between executives and employees regarding current news and important policies of the organization that every employee should know. In 2022, this program was live eight times.</li> <li>SET Town Hall meeting, aiming to communicate to employees on an annual basis to keep employees at all levels well-informed about the current performance and strategic direction for the upcoming year</li> <li>SET Open Talk, an online channel, aiming to discuss and exchange perspectives between employees and the President on work and life within the organization. The feedback and suggestions have been used to develop and improve the operations for further benefits of the organization.</li> </ul>

Plan/Project	Performance in 2022
<b>Employee engagement</b>	Jointly with Kincentric, a leading consulting firm in personnel management, in surveying and evaluating employee engagement with the organization, in order to bring the feedback to develop and manage human resources. In 2021, 100 percent of employees responded the survey. According to the survey, the average score of employee engagement towards the organization recorded at 78 percent, the same ratio as in 2020. The survey is conducted every two years starting from 2022 onwards. The next survey will be conducted in 2023.

## 5) Employee development

Plan/Project	Performance in 2022
<b>70-20-10 Learning model</b>	<ul style="list-style-type: none"> <li>Developing employees' knowledge from working and experience: at 70 percent, from coaching system: at 20 percent, and from learning via training courses: at 10 percent, implemented by building on previous knowledge (up-skill), adding new knowledge (re-skill), and promoting various knowledge (multi-skill) necessary for self-development and expertise according to the job responsibilities. In 2022, the total cost for employee development was THB 29.8 million, with a total of 707 training courses, and 58 hours of training per person per year on average.</li> </ul> <p>Average training hours of all employees</p>  <p><b>58 hours per person per year</b></p> <ul style="list-style-type: none"> <li>Developing an online platform as an alternative channel for employees to learn. The content of the training course continues to focus on developing and strengthening of leadership and management, sustainability fundamentals, and continuously organizing internal Sharing Sessions for employees aiming to disseminate knowledge about the work systems, capital market products, and risk prevention and management</li> </ul>
<b>Individual Development Plan (IDP)</b>	Monitoring and assessing learning outcomes of each employee continuously in order to use the information to develop and extend the annual IDP to make it suitable for employees' learning process

## 6) Fair performance assessment and remuneration

Plan/Project	Performance in 2022
<b>Assessment of employee performance</b>	Assessing performance based on the Balance Scorecard management tool, combined with the employee's competency according to the SET DNA corporate value, defined as an indicator of corporate and individual employee's level, with clear criteria and performance monitoring. This is conducted via the SAP SuccessFactors system taking into consideration the security of personal information, while enabling executives and employees to conveniently access the assessment system via website or application.
<b>Employee remuneration</b>	In 2022, SET paid remuneration and benefits to employees totaling THB 2.16 billion, consisting of salaries, bonuses and provident funds, etc., based on the organization's achievements, economic conditions, and the average remuneration of the industry, as well as the performance of individual employee.



## Supporting Access to Capital for Entrepreneurs

SET promotes fundraising for entrepreneurs with growth potential towards stability under good corporate governance principles to become the foundation of the Thai economic system. SET has therefore created opportunities for entrepreneurs to prepare for entering the capital market by supporting learning channels for entrepreneurship, business development tools, network to create opportunities among entrepreneurs, and the development of fundraising platforms for small-sized entrepreneurs and startups. In 2022, the key performance are as follows:

Developing potential of entrepreneurs in order to enhance quality businesses, and preparing for equal access to capital sources



Plan/Project	Performance in 2022
<b>LiVE Platform</b>	<p><b>Education Platform / Entrepreneur Classroom</b></p> <p>Enhancing important knowledge for entrepreneurs, SMEs and startups in a variety of ways:</p> <ul style="list-style-type: none"> <li>Developed e-learning courses and learning materials for entrepreneurs via Education Platform, totaling 167 items in 2022 which are e-Learning, video clips, articles, and infographics. The record showed over 2 million visits and views via the website and over 360,000 persons have registered for e-Learning courses.</li> <li>Collaborated with the Office of the Vocational Education Commission to develop the SET Junior Entrepreneur curriculum to disseminate knowledge and inspire teachers and personnel in five pilot vocational colleges with the aim to disseminate entrepreneurship knowledge or courses among vocational students</li> </ul> <p><b>Scaling Up Platform</b></p> <p>Increasing capabilities in doing business via various services and tools to meet the needs of entrepreneurs in various fields:</p> <ul style="list-style-type: none"> <li>Collaborated with KPMG Thailand in offering e-Learning services: Family Business courses</li> <li>Developed 2 services in self-assessment: LiVE Self-Assessment tools which are capital market readiness assessment form, and accounting readiness assessment form (in conjunction with the Federation of Accounting Professions), used by over 300 entrepreneurs.</li> <li>Prepared Standard Legal Agreements, in collaboration with Baker McKenzie, such as service contract, confidentiality agreement, and employment contract, etc. currently having 13 standard agreements</li> <li>Collaborated with partners to provide business advice to entrepreneurs via LiVE GURU Q&amp;A and LiVE GURU Sharing services</li> </ul> <p><b>LiVE Academy (Entrepreneurship development program)</b></p> <ul style="list-style-type: none"> <li>Prepared entrepreneurship development project in collaboration with leading alliances, consisting of the Federation of Thai Industries (FTI), KPMG, The Thai Chamber of Commerce and the University of the Thai Chamber of Commerce, Center for Building Competitive Enterprises (CBCE), Thailand Center of Excellence for Life Sciences (TCELS) and RISE ACCEL to increase the capabilities and readiness to enter the capital market, such as mini-incubation program, incubation program, and acceleration program. In 2022, there were a total of 12 projects, and over 700 entrepreneurs participated in the program.</li> </ul>

Plan/Project	Performance in 2022
<b>LiVE Exchange</b>	<ul style="list-style-type: none"> <li>Launched the service of LiVE Exchange (LiVEx), as a source of funding and trading for SMEs and startups as well as being a secondary market for investors, on March 31, 2022</li> <li>In 2022, there were three companies raising funds and listing on LiVEx: Advanced Web Services pcl (AWS22), Sitron Power pcl (SITRON22) and Storage Asia pcl (ISTORE22), raising a total of THB 196 million.</li> </ul>

## Investment and Financial Literacy Promotion for the Public

SET recognizes the importance of developing and disseminating financial knowledge together with promoting savings through investment to the public inclusively and equally. SET takes into consideration the contents that meet the needs of the target groups both online and onsite via workshops and coaching, suitable for today's lifestyles that require flexibility and agility in learning. The major plans and implementation are as follows:

### 1) Promoting basic financial literacy for all

Providing opportunities for everyone in the society to access quality financial and investment learning sources in order to strengthen the country's economic stability





Plan/Project	Performance in 2022
<b>Maruey Library and INVESTORY Investment Discovery Museum</b>	<ul style="list-style-type: none"> <li>INVESTORY was resumed for service under the new concept of 'Inspire to Invest for Sustainability' on June 1, 2022, to inspire and open up the world of learning towards sustainable business and investment</li> <li>Developed the services of the Maruey Library to be able to link all types of resources, both the existing books inside and electronic resources so that the general public can study, do research and acquire knowledge of the capital market as needed. In addition, SET has initiated the SET Fin Lab project, a financial lab service in the library space, catering to the target group of university professors, researchers and students entering the capital market.</li> <li>Organized activities to learn about Thai valuables under the name "Sap Siam" for the second year in a row, including disseminating past activities via online channels. Sap Siam tells historical stories about investment opportunities of gold, rice, Thai fabrics, Thai gems, art paintings, stamps and economic plants.</li> <li>Prepared and disseminated a series of video clips: Once in the Stock Exchange, which is a memoir of capital market knowledge from the original individuals, and a series of video clips: Only one in the heart, which conveys the concept of self-improvement through reading and continuous learning of current young executives from listed companies and organizations in the capital market</li> <li>Organized learning activities to enhance skills and create a life-long learning society under the name "Maruey Book Talk" every two weeks throughout the year. In addition, the library has also disseminated the rerun of activities via online channels, highlighting knowledge about the economy, investment and self-development.</li> <li>In 2022, the access to the services of the Maruey Library and the INVESTORY Investment Discovery Museum recorded at over 2.01 million times/visits via all channels.</li> </ul>





Plan/Project	Performance in 2022
<b>Developing knowledge media and quizzes on financial and investment literacy in daily life</b>	<ul style="list-style-type: none"> <li>Officially launched SET Fin Quizz website and promoted testing entry in cooperation with various partners, including setting up booths and promoting widely and continuously all year round under the main campaign 'SET Fin Quizz Mega Challenge'</li> <li>Developed media learning materials to support the need for financial knowledge in everyday life, consisting of income management, expense management, debt management, savings management, investment management, and risk management in terms of life and property</li> <li>Developed additional tests for the Thai people to use to measure knowledge and skills, covering financial knowledge in everyday life and how to select stocks</li> </ul>
<b>Disseminating financial planning and investment knowledge to schools and libraries networks</b>	<ul style="list-style-type: none"> <li>Organized online Mobile Exhibition on Schools activities covering educational institutions in 60 provinces nationwide</li> <li>Organized a boardgame activity called Moneyfolio at INVESTORY Investment Discovery Museum (INVESTORY) for teachers' network both online and in workshops</li> <li>Organized training on financial planning and investment, and supporting the electronic resources: Maruey eLibrary, with continuous supplies all year to the university library network, companies' libraries, and public libraries, covering 18 provinces nationwide</li> <li>In 2022, the use of services by the network of schools and libraries nationwide, in all channels: access to electronic resources, participation in activities, and participation in training sessions in investment and financial planning knowledge of the social sector, totaled 99,111 times.</li> </ul>

## 2) Promoting knowledge on financial planning

Plan/Project	Performance in 2022
<b>Happy Money Application</b>	<p>Developed new function: Gamification that answers financial knowledge questions, aiming to promote the use of Happy Money Application's and encourage continuous use via the "Happy Money Application's campaign called 'Answer now, Get it now', making Happy Money Application's a money management tool that today's consumers learn and adjust spending behavior. This will lead to financial well-being. In 2022, it recorded a 127 percent increase in downloads and a total of 318,254 downloads since the project's launch in 2019, with 53,975 active users per year.</p> <div style="display: flex; justify-content: space-around; align-items: center;">   </div>



Plan/Project	Performance in 2022
<b>Happy Money, Financial Mentoring project</b>	<ul style="list-style-type: none"> <li>Collaborated with alliances in both public and private sectors, creating in-house financial mentors, and disseminating knowledge and understanding of financial planning to target groups via online and offline channels</li> <li>Organized Happy Money in Action workshops jointly with the Police Housewives Association, aiming to develop financial management skills and debt management for police officers. After the sessions, the participants gained more knowledge by 30.51 percent and were able to create 11 role models in developing financial management and debt management skills.</li> <li>In 2022, there were 10,543 financial mentors (accumulated) with dissemination of knowledge through 633 partner organizations, covering the target groups of 3.07 million persons since the year of the project in 2017.</li> </ul> 
<b>21-Day Challenge: Invest in Smart Start mutual funds</b>	<ul style="list-style-type: none"> <li>Organized the “21-Day Challenge” campaign for investing in Smart Start mutual funds aiming to promote knowledge for beginners to invest in mutual funds, starting from the basics of investment up to strategy formulation and fund portfolio management. In 2022, a total of 2,744 persons participated in the campaign.</li> <li>Prepared “Playbook”, a guide to investing in mutual funds, packed with contents and numerous links to a variety of knowledge media, such as e-Learning, articles, infographics, video clips, focusing on practical application in mutual fund investment, embracing 9,715 downloads</li> <li>Organized training sessions via Facebook Live every week, summarizing contents by expert gurus, with a total of 19,398 live viewers. In addition, the audience could attend classes via SET e-Learning, with 4,203 cumulative registers.</li> </ul> 

Plan/Project	Performance in 2022
<b>Disseminating financial and investment literacy</b>	<ul style="list-style-type: none"> <li>Organized a Happy Money campaign called “Know how to overcome debts” to promote knowledge about debt management among the general public via new media: a 40-second short clip on debts, and a tie-in with the long-time favorite comic book named “Selling Laughs”</li> <li>Organized a training course on investment basics for beginners via Live! Investor Classroom activities, participated by 14,016 views</li> <li>Developed a variety of knowledge sources such as articles, video clips, infographics, e-Books, calculation programs, etc., ready to disseminate knowledge via online channels, covering financial planning, tips for beginner investors, and investment products. At present, these knowledge banks contain 1,572 items.</li> <li>In 2022, the number of persons who accessed knowledge contents via websites and social media totaled 31.77 million views.</li> </ul> 
<b>SET e-Learning Platform for acquiring financial and investment planning knowledge</b>	<ul style="list-style-type: none"> <li>Developed 35 new courses on financial planning and investment, for example, jointly with the Association of Provident Funds (AOP) to develop a course on provident funds, jointly with the Bank of Thailand and Sukhumvit Asset Management Co., Ltd. to develop debt management courses, age-appropriate financial planning courses, Money style#2 sufficiency economy courses, ESG stock selection courses, and digital asset investment courses, etc. In 2022, the e-Learning platform contained a total of 112 courses.</li> <li>Rearranged the playlist function to include the knowledge package of the SET e-Learning courses, enabling the target groups of investors and the general public to access more easily quickly, and conveniently.</li> <li>Collaborated with partners to reach more target groups of users, for example, the Student Loan Fund (Kor Yor Sor) provided support by allowing the attendance of 35 SET e-Learning courses to be used to count as public service hours as required. In 2022, the course enrollment (repeat count) totaled 2.5 million times, an increase of 122 percent compared to 2021.</li> <li>In 2022, the survey showed that the students studying financial and investment planning on the SET e-Learning Platform responded an average overall learning satisfaction of 93.44 percent.</li> </ul>



## Social Impact Platform

SET has continuously developed and promoted business potential through social impact creation for social entrepreneurs. In addition, SET encourages collaboration with the business sector via the enhancement of hands-on and practical business potential. This year, a course on social entrepreneurship has been designed in collaboration with the Thai General Education (Thai GE) Network to be used as a general education subject in universities nationwide, aiming to cultivate the attitude of doing business simultaneously with social responsibility among the students. The key plans and implementation results are as follows:

Developing and promoting collaboration between social entrepreneurs and the business sector continuously in order to achieve sustainable social change for the better



Plan/Project	Performance in 2022
<b>SET SE101 Online Offering</b>	<ul style="list-style-type: none"> <li>Developed the course on "Introduction to Social Entrepreneurship" so that entrepreneurs and interested persons can access and learn broadly via online channels in the form of how-to knowledge combined with inspiration, such as tax laws, juristic person registration, business plan writing, and inspiration building, with social enterprise samples, totaling 11 episodes with over 385,000 views</li> </ul> 
<b>SET SE101@GE</b>	<ul style="list-style-type: none"> <li>Developed curriculum on "Social Entrepreneurs" (SE101@GE) in collaboration with the Thai General Education (Thai GE) Network under the Ministry of Higher Education, Science, Research and Innovation in the general education subject consisting of five topics: Introduction to Sustainability, Introduction to Social Enterprise (SE), Business Models to Solve Social Problems, Initial Social Impact Outcome Assessment, and Creating Preliminary Business Plan Canvas. Universities with general education curriculum can convert the course units to semester credit starting from the 2023 academic year. Moreover, workshops (Train the Trainer) were held and attended by 42 teachers from 19 universities nationwide.</li> </ul> 

Plan/Project	Performance in 2022
<b>SET SE201 for Corporate</b>	<ul style="list-style-type: none"> <li>Developed a 2-week short-term workshop program to encourage listed companies to upgrade their social responsibility work towards sustainable development work that takes into consideration the business value chain, while creating concrete social results. Participants in the program can apply their knowledge to develop and reform the working system of social responsibility in a concrete way.</li> </ul>
<b>SET Social Impact Gym</b>	<ul style="list-style-type: none"> <li>Jointly organized the SET Social Impact Gym project for the sixth consecutive year for social enterprises by introducing business guidelines as well as enhancing strengths so that social entrepreneurs can solve and take care of the society in a sustainable manner according to the goals to do business further. A total of 27 senior executives from 25 listed companies on SET and mai joined the project as voluntary coaches. In 2022, there were eight social entrepreneurs participating in the project.</li> </ul> 

## Fostering the Quality of Life

SET and the SET Foundation are intermediaries that connect all sectors to participate in social responsibility through the support in resources and knowledge that will enhance the quality of life of the Thai people. The major plans and implementation results are as follows:

Encouraging the capital market to participate in upgrading the quality of life of the people in the society through creative support and activities to create good outcomes for the society



Plan/Project	Performance in 2022
<b>Helping and alleviating the suffering of the people during the COVID-19 situation</b>	<ul style="list-style-type: none"> <li>Supported and alleviated the suffering of the people during the COVID-19 situation in 15 places, consisting of 13 hospitals and medical units, and two charitable organizations, with the total amount of THB 45.1 million, with details as follows:</li> </ul>

## Plan/Project

## Performance in 2022



Extending a helping hand to  
people amid the COVID-19  
pandemic

**THB 45.1 million**


- Supported the Thai Red Cross Society for construction of “National Blood Service Sector Building in Honor of Her Royal Highness Princess Maha Chakri Sirindhorn”, at two locations to the tune of THB 10 million, and a project to assemble two four-bed mobile blood donation vehicles worth THB 7.2 million for the total amount of THB 17.2 million
- Supported the Chaipattana Foundation in the project to build a True Negative Pressure room for four hospitals in need, in four provinces: Bangkok, Tak, Chonburi and Sa Kaeo, totaling THB 13 million. In addition, SET also supported six Semi ICU rooms for four hospitals in need, in four provinces: Bangkok, Nonthaburi, Pathum Thani and Chonburi, totaling THB 3 million, altogether for the amount of THB 16 million.



- Supported five emergency ambulances for transporting COVID-19 patients, both in Bangkok and hospitals in remote provinces: Nong Khai, Yasothon, Surat Thani and Phetchabun, totaling THB 11.9 million






Plan/Project	Performance in 2022
<b>Project to promote table tennis potential</b>	<p>Promoting the ability of Thai youth in table tennis for the ninth consecutive year since 2014. In 2022, the number of athletes increased by 94 persons having athletes altogether 794 persons in the SET Star Table Tennis project. SET granted funds as moral support to table tennis athletes, as follows:</p> <ul style="list-style-type: none"> <li>• Granted funds to Thai table tennis national team players who made history at the 31<sup>st</sup> SEA Games in Vietnam, winning eight medals, the most medals won by table tennis in the history of the SEA Games, organizing 31 times over 63 years</li> <li>• Provided "Scholarships for Rising Star Athletes" for talented young athletes to become professional athletes, creating sustainability for Thai table tennis players, for the first year, totaling six scholarships</li> <li>• Granted scholarships to Thai table tennis athletes with disability who performed well in the 11<sup>th</sup> ASEAN Para Games "Solo 2022" in Indonesia, winning a total of 14 medals and a SET employee was among the athletes</li> </ul>
<b>Project to develop brain skills for children and youth's healthcare</b>	<p>A project to develop the skills of the frontal lobes (Executive Functions: EF) that play an important part in growing up as adults with appropriate characteristics in both emotional and social well-being, consisting of</p> <p><b>Public health network</b></p> <ul style="list-style-type: none"> <li>• Using the model from such implementation of Phaya Mengrai Hospital, Chiang Rai province in northern Thailand in promoting and developing mother and child work in Phaya Mengrai district, while adding knowledge on promoting EF brain skills to the early childhood development work since 2016. In 2022, EF models were developed in 12 role model districts, creating 2,561 EF trainers. The groups that gained benefits are early childhood children, parents and families, totaling 21,784 persons.</li> </ul> <p><b>School network</b></p> <ul style="list-style-type: none"> <li>• Supported Lamplaimat Pattana School, Buriram province, a role model school aiming to promote learning with a comprehensive approach to developing brain skills, through the cooperation of schools, educational officers and parents. In 2022, a total of 30 schools in the network were developed, creating a total of 529 EF Trainers, benefiting 12,558 early childhood children, parents and families.</li> </ul> 

Plan/Project	Performance in 2022
<b>Project to assist vulnerable and underprivileged groups</b>	<p><b>Sarn Fun Scholarship Project</b></p> <p>Supporting scholarships, jointly with the Equitable Education Fund (EEF), to white elephant children or underprivileged children and youth whose families have income below the poverty line, for three consecutive years, so they can acquire education until the end of high school or continue further studies in vocational education. In 2022, a total of 200 students received scholarships, with 99 percent of students within the education system and 85 percent of them having a GPA of 3.00.</p> <p><b>Positive energy music project "Dek Phum Dee band"</b></p> <p>Collaborating with the Sukree Charoensuk Foundation to support children who lack opportunities but talented to acquire musical skills to build youth immunity away from drugs. In 2022, a total of 600 students benefitted from this project, performing bands at 31 various events. A total of seven role model schools were created.</p>
<b>Quality of life development project</b>	<p><b>Sustainable Learning Center Project: Relearning Space @ Library</b></p> <p>Having implemented a role model project with Thai Library Association (TLA) since 2020, using the space of the public libraries as continuous learning centers for communities who want to learn and create "second career". The project aims to increase income for the community. In 2022, 32,973 persons attended the training and earned extra income. There are currently five learning centers in five provinces, developing 195 courses, generating income totaling THB 2.2 million.</p> <p><b>Positive power of the music project: Wong Ploi Kae</b></p> <p>Promoting the quality of life of the elderly to be energetic and happy by using music as a medium to do activities together to create good outcomes for well-being. A model vocal band "Ploi Kae" has been set up at Ban Kha district, Ratchaburi province. In 2022, a total 480 elderly people participated in the project, conducting 28 performances in various events, including the SET Awards 2022 event and Amata Siam Concert at Thailand Cultural Center Hall. This model has been expanded to six more communities in five provinces: Ratchaburi, Chiang Mai, Yala, Nakhon Sawan, and Buriram.</p> <p><b>The project to overcome the crisis by developing grassroots economy and society in accordance with His Majesty's initiatives</b></p> <p>Operated by the Pid Thong Lang Phra Foundation, the project has made progress under the royal initiatives to develop water resources in areas of repeated drought troubled by water shortage in five provinces: Nakhon Ratchasima, Ubon Ratchathani, Surin, Sisaket and Buriram. This project has helped solve the problem of water infrastructure and can improve the quality of life of the people in terms of water management for agriculture, as part of sustainable drought solution. In 2022, a total of 10 water sources were developed, providing benefits to 758 households, with an average income increase of THB 7,000/rai.</p> <p><b>The project to build food security and income for the elderly jointly with students and youth</b></p> <p>The SET Foundation, in collaboration with Mechai Pattana School in Buriram province, has geared up the project to create food security and income for the elderly by passing on knowledge about food security to the elderly in the community. This project aims to help solve poverty problems by using schools as the base, then expanding to communities. In 2022, the implementation covered 12 areas, providing benefits to a total of 180 households, with the elderly earning a cumulative income of THB 1.19 million (THB 553/family/month), and 456 elderly persons having received care and training.</p>



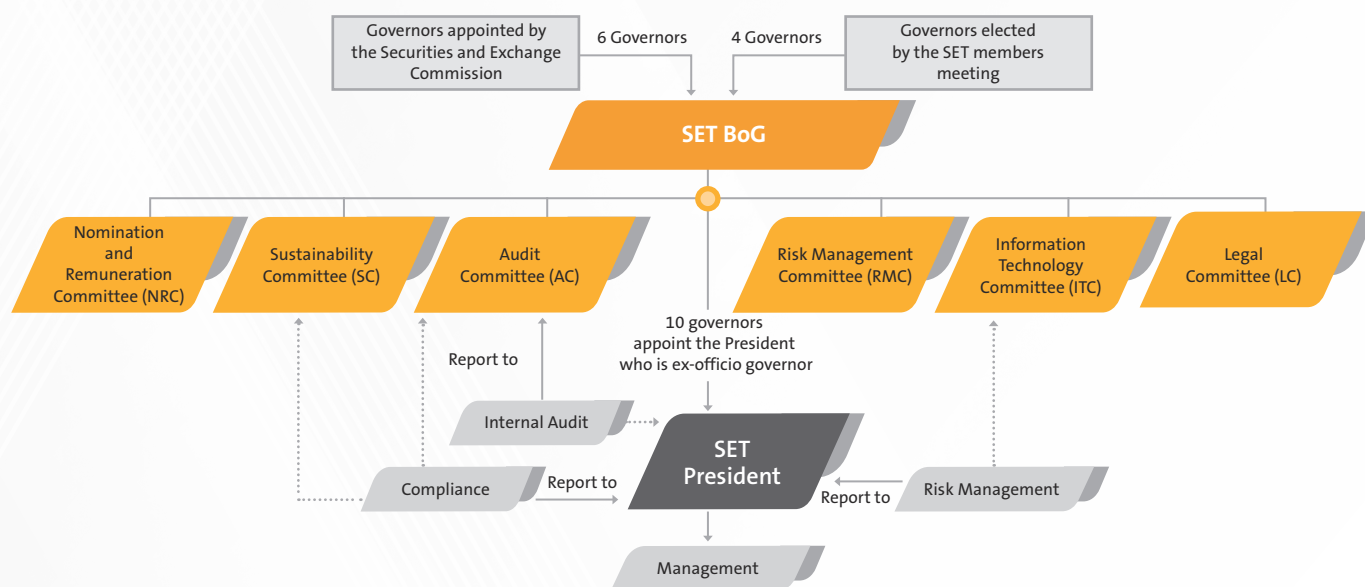
Plan/Project	Performance in 2022
<b>Project to promote environmental care</b>	<p><b>Care the Wild</b></p> <p>Voluntary executives and employees of SET and the mai- Listed Company Association (maiA), in collaboration with the Royal Forest Department and community people who love and cherish the green forest, jointly planted 91 rais of trees to increase the forest area in the Ban Aoi community forest area and Ban Boon Rueang in Ban Viang sub-district, Rong Kwang district, Phrae province (northern Thailand). In 2022, a total of 91 rais of trees in the forest area was increased, with 18,200 more trees, which could absorb 163,800 kilogram of carbon dioxide equivalent (kgCO<sub>2</sub>e) of greenhouse gas emissions.</p>
<b>Project to promote and maintain religion</b>	<p><b>Kathin ceremony 2022 for the restoration of Wat Pa Phra That Khao Noi and education support for schools in Ratchaburi province</b></p> <p>The SET group co-hosted the Kathin ceremony 2022 at Wat Pa Phra That Khao Noi in Ratchaburi province (southwest of Bangkok) and donated over THB 1.5 million to renovate the old abode for monks, and support education for Bankhawitthaya School and Ban Kha Kindergarten: THB 600,000 to support the temple and abode renovation, and THB 900,000 to support education and scholarships to Ban Kha Kindergarten and Ban Kha Wittaya School</p> <p><b>Kathin ceremony, Wat Yai Suwannaram Worawihan Mueang district, Phetchaburi province</b></p> <p>SET participated in the Royal Kathin Ceremony with Kathin robes graciously granted by His Majesty the King at Wat Yai Suwannaram Worawihan on Saturday, October 29, 2022. The Office of the Welfare Promotion Commission for Teachers and Educational Personnel has been granted the royal permission to present the Kathin robes in this ceremony. On this occasion, Wat Yai Suwannaram Worawihan invited the event attendees to contribute for the restoration of the religious ceremony hall which is an ancient landmark built in the Ayutthaya period in order to promote and maintain the historical values to be passed on to future generations. SET has contributed THB 1 million for the renovation of the ancient wooden hall for religious ceremonies built in Ayutthaya period.</p>
<b>Pan Hoon Aom Boon and Pan Pol Aom Suk projects</b>	<p>SET's Thailand Securities Depository (TSD) has gathered shares or monetary benefits to donate to foundations and entities: Sai Jai Thai Foundation under the Royal Patronage, Ramathibodi Foundation under the Royal Patronage, and Faculty of Medicine of Vajira Hospital. Donors can donate stocks and dividends as intended. In 2022, there were 544 accumulated donors, totaling 677 transactions, with cumulative value of approximately THB 11.6 million.</p> <div>  <div> <p><b>Cumulative value of donated stocks</b></p> <p><b>THB 11.6 million</b></p> </div> </div>



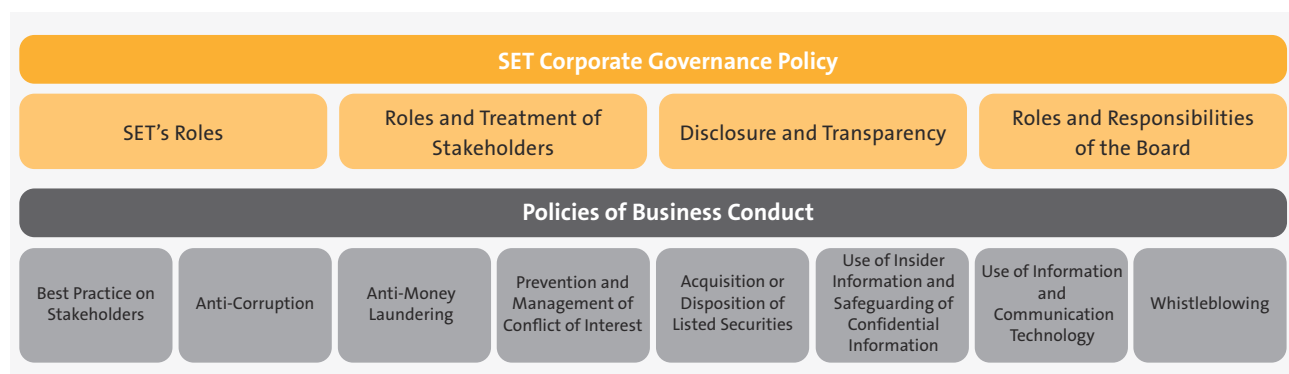
# 08 Corporate Governance Policy

## 8.1 Corporate Governance Structure and Policy

The Board of Governors (BoG) of The Stock Exchange of Thailand (SET) has the authorities and duties to set up regulatory policies, steer operations of the SET group, and perform other duties in compliance with the Securities and Exchange Act, having SET President as the highest-ranking executive who adopts the policies from the BoG and implements to achieve the goals. In addition, the SET BoG has set up committees to screen important governance-related issues to the governors, and assign other internal functions to govern, oversee and audit the implementation for efficiency and transparency. The Corporate Governance Structure is illustrated below:



The BoG is committed to performing its duties in accordance with good corporate governance principles with integrity, transparency and fairness under a reliable and efficient operating system to strengthen the Thai capital market for sustainable development and growth in both quantity and quality. The BoG has approved the “Corporate Governance Policy and Code of Conduct of the SET group” and conduct annual reviews as guidelines for governors, committees, experts and employees at all levels. Accordingly, such policy comprises of guidelines in accordance with the international standards of The Organization for Economic Co-operation and Development (OECD). In addition, the good corporate governance principles for listed companies have been applied in line with the SET’s structure and operating environment. The summary of SET’s overall corporate governance policy, and policies of business conduct is shown in the picture below.



SET has disseminated the full version of the SET group's Corporate Governance Policy and Code of Conduct, including the Charter of SET Board of Governors and the charters of various committees on SET's website. The Corporate Governance Policy and Code of Conduct of the SET group as well as related measures and guidelines have been communicated to keep the governors and employees well-informed via SET's omnichannel internal communications in various forms, such as

- Dissemination via internal e-network for governors and employees
- Orientation sessions for new governors and employees
- Dissemination of communication articles, e-Newsletter via Intranet and email, including SET Application (on mobile phones)

- Communication at executive meetings and the Compliance Champion meetings
- Preparation of CG Education courses for employees to learn and take assessment tests in an online format. All employees have completed the training and testing of the CG Education courses.

Therefore, it can be concluded that in 2022 the governors and all employees (100 percent) were informed of the compliance with the SET group policies, measures and practices on corporate governance.

### CG Training Course for Employee



1. Corporate Governance (CG) towards Sustainability
2. Best Practice on Stakeholders
3. Acquisition or Disposition of Listed Securities
4. Anti-Fraud and Anti-Corruption
5. Prevention and Management of Conflict of Interest
6. Preventing Use of Insider Information and Safeguarding of Confidential Information
7. Use of Technology and Communication
8. Taking Whistleblowing and Complaint
9. Key Laws Employees Need to Know and Comply
10. Personal Data Protection Act: PDPA

## 8.2 Compliance with Corporate Governance Policy

The BoG requires that the SET group's Corporate Governance (CG) Policy and Code of Conduct be reviewed, including important CG policies on an annual basis. The Compliance Department (under the Corporate Secretary and Compliance Group that reports directly to the President) is responsible for reviewing the policies and practice guidelines related to good corporate governance, as well as giving advice and monitoring to ensure compliance with the policies, rules and regulations set by the organization, including monitoring to ensure that various departments comply with laws and regulations issued by regulatory units in the SET group. The Compliance Department regularly reports the operating results to the Sustainability Committee (SC) and the Audit Committee (AC), having the Internal Audit Department responsible for auditing the operations in compliance with related policies and laws.

In 2022, the SET group inclusively operated in compliance with the CG policy, that is, there was no complaint about inappropriate practices or violation of the ethics of the SET governors, executives and staff of SET and subsidiaries in various matters, such as the use of insider information, corruption, or other conflict of interest, etc. The SET group had no disputes with competitors, nor cases of a violation of

customers' personal information, with no violations, breach, or non-compliance with the laws related to the operation of SET or subsidiaries including the Securities and Exchange Act, Derivatives Act, Anti-Money Laundering Act, Labor and Human Rights laws, and Copyrights or Intellectual Property rights.

### Roles of The Stock Exchange of Thailand

The SET BoG realizes the importance of SET's corporate governance as being a securities trading center, responsible for offering the core business and other related services, while taking a role as key economic mechanism of the country. SET adheres to good corporate governance principle by specifying that the functions responsible for customer service and market supervision must be clearly separated from each other for independence purpose. These will maintain check and balance, prevent the acquisition of confidential information between functions and employees (Chinese Wall measures), and the information classification practices. SET places emphasis on SET information disclosure to the public and stakeholders by taking into consideration correctness, transparency, timeliness, and such information which will be disclosed through channels that are easy-to-access, equal, and reliable.



## Best Practices on Stakeholders

SET conducts service satisfaction survey to obtain feedback from the clients on the services provided by the SET group, such as among the securities companies, listed companies, and asset management companies on a yearly basis. In 2022, the result of the survey showed an overall satisfaction score of 90 percent (according to the set target of not less than 80 percent), an increase from 87 percent in 2021. SET has continuously focused on enhancing customer service with the synergy of working with capital market participants in three areas: (1) Expanding opportunities for fundraising and investment for businesses and investors; (2) Upgrading infrastructure for the capital market; and (3) Promoting the country's social and environmental sustainability, simultaneously with taking care of each group of stakeholders in accordance with the law, policies, and related operational standards without violating the rights of stakeholders.

SET believes that by operating in compliance with the policies and ethics in treating stakeholders, it will create confidence among stakeholders leading towards utmost efficiency among capital market participants and will promote the enhancement of business capabilities and personnel potential, especially excellence in work according to the corporate strategy.

In 2023, SET prepared the readiness to drive the organizational development towards "To Make the Capital Market 'Work' for Everyone" to make access to the capital market an easy thing to do, and raise the industry's standard while creating opportunities beyond limits. SET continues to adhere to sustainability principles as the driving force in working with the business sector and the society to grow hand in hand. SET has continuously focused on service development by targeting the score based on customer satisfaction surveys on the services of the SET group at not less than 80 percent.

## Anti-Corruption

SET specifies that each department must carry out risk assessment on fraud and corruption, as well as setting measures to manage these risks regularly every year in order to oversee risks at acceptable level. The Risk Management Department is responsible for monitoring and updating risk status for the management team, the Risk Management Committee (RMC), and the BoG on a regular basis, while the Internal Audit Department is in charge of examining the outcome and the effectiveness of the related internal control measures.

The Compliance Department is responsible for giving practical advice to employees, and ensuring compliance with the anti-fraud and anti-corruption measures. In the case of having received whistleblowing complaints of the actions which could be fraud and corruption, the Internal

Audit Department will be responsible for conducting a fair and transparent investigation process for all related parties, and preparing a summary report to SET President and the AC on a regular basis. Moreover, SET is committed to practicing the "No Gift Policy" which has been continuously conducted aiming to build good standard of the SET group's operations altogether with integrity and transparency.

In 2022, executives and employees participated in activities showing the organization's intention to not support fraud and corruption, such as giving interviews by SET President aired in the program called "Investment Minutes" (Natee Long Thun) on TV Channel 9 MCOT HD concerning the SET group's policy on anti-fraud and anti-corruption and the role of "leader" on this matter, participating in the Anti-Corruption Day 2022 on September 9, 2022 and joining the International Anti-Corruption Day (Thailand) on December 6, 2022, etc.

Moreover, SET continues to drive and build cooperation with stakeholders in conducting business with honesty, transparency and jointly prevent all forms of fraud and corruption, especially in dealing with business partners or those interested in becoming business partners with the SET group. The operation process can be summarized as follows:

- Setting guidelines for treating all business partners with equality by considering selecting companies that will be business partners with the SET group through a transparent and fair process. There will be announcements of procurement requirements delivered to interested partners via various channels to give the bidders enough time in advance to prepare information for submitting a job proposal. In the process, the procurement unit will examine together with the working group appointed by the President before submitting to the authorized person for approval according to the limit of approval authority as specified in the operational authority manual. After the approval, a written agreement or contract will be made with fair conditions and equality for business partners, inclusive of monitoring and evaluating the performance of business partners regularly to improve business undertakings between both parties in a sustainable manner.
- Communicating the essence of anti-fraud and anti-corruption practices to business partners or those who wish to become business partners through a variety of channels, such as specifying a statement showing the intention to fight against fraud and corruption in the tender announcement, purchasing order, supply requirements, etc.
- Proceeding to make the SET group's business partners acknowledge the "Code of Conduct Manual for Business Partners" through various channels that the SET group uses to communicate with business partners. The manual covers the contents of conducting business with integrity and ethics, including measures to prevent fraud and corruption.

## Money Laundering Prevention

SET formulates policies for companies in the SET group to place importance on compliance with laws relating to the prevention and suppression of money laundering, the financing of terrorism and the proliferation of weapons of mass destruction, while not accepting, transferring or converting any property related to the commission of an offense, including not supporting transactions that may be subject to money laundering to prevent anyone from using the SET group as a means or tool to camouflage the source of illegal property.

In 2022, SET and companies in the SET group strictly complied with relevant laws, and SET did not find the use of the SET group as a means or tool to camouflage the source of illegal property.

## Prevention and Management of Conflict of Interest

SET has set up the policy to prevent and manage the conflict of interest for governors and employees. In the event that any person has an interest in the matter to be considered, that person must leave the meeting room and refrain from participating in any decision-making on such matters. In addition, SET has specified guidelines for the prevention and management of conflict of interest in various matters, such as:

- Prohibiting employees from being a board member of or an advisor to listed companies and/or member companies
- Holding position in other company or legal entity, subject to the President's approval; and in the case of the President, an approval from the Chairman of the BoG is required.

In case of an employee or a related person of such employee wants to be a business partner of the SET group, that employee must not take part in the consideration to the purchase (procurement) of such product or service.

## Policy on Acquisition or Disposition of Listed Securities, and Reporting on Conflict of Interest

The SET BoG has set up regulations on the acquisition or disposition of governors' and employees' listed securities and the reporting of the conflict of interest (COI) of governors in order to safeguard against the use of insider information and the issue of conflict of interest. Such regulations consist of key criteria for practices, such as:

- Practices and prohibitions on the acquisition or disposition of listed securities of governors and employees
- Criteria for governors in COI reporting, such as reporting on shareholdings of listed securities, shareholdings of listed companies, position-holding as directors, executives or advisors in any listed company or any other company, etc. Those reports will be kept at the Corporate Secretary Department.

In 2022, each SET governor held positions as directors in up to five listed companies in compliance with the Principles of Good Corporate Governance for listed companies and the Charter of SET Board of Governors.

## Preventing the Use of Insider Information and the Safeguarding of Confidential Information

SET has formulated the policies on the prevention of the use of insider information and the safeguarding of confidential information for the governors and employees, such as not using information received from performing duties to seek benefits for oneself or others, not revealing confidential information of the organization even after the status or termination of work at the organization, etc. Moreover, SET has specified additional guidelines for employees, such as measures to prevent information leakage among departments and employees (Chinese Wall measures), the information classification practices, etc.

In 2022, no violations or failure to comply with the policies and regulations were found regarding the use of insider information and confidentiality among governors and employees.

## The Use of Information Technology (IT) and Communication

SET has formulated the IT Security Policy to ensure that SET's business operations are in line with the principles of security and risk management in the area of IT. SET regularly communicates to all employees via Intranet, Cybersecurity Awareness course, and surprise test on cybersecurity threats, aiming to motivate employees to realize the importance of the compliance with IT security measures for both in the office and work-from-home (WFH).

In addition, the SET group has allocated both human and financial resources to committedly oversee, prevent, and monitor the IT security, such as setting up various IT Security units under the Information Technology Division, appointing an internal working group to deal with threats in IT security (Computer Security Incident Response Team:





CSIRT working group), appointing Chief Information Security Officer (CISO) for the benefit of various operations related to IT security and cyber threats, including the preparation of standard manual for operations and report of any unusual IT-related incidents, etc. SET is also equipped with efficient information technology management in line with international standards, such as ISO27001 (Information Security Management System), ISO20000 (Information

Technology Service Management System) and ISO27701 (Privacy Information Management System). SET has emphasized that employees use IT and communication system and process carefully so as to prevent any negative impact on the organization or stakeholders, by providing knowledge in various forms, such as organizing online training and Phishing Mail testing. In 2022, there was no case of leakage of key information of SET and subsidiaries.

## Whistleblowing and Complaints

SET provides channels for whistleblowing and complaints to the SET group and has disclosed those channels via the SET website, as follows:

<b>For stakeholders</b>	Chairman of the Audit Committee (AC) ChairmanOfTheAuditCommittee@set.or.th	or by postal mail: The Stock Exchange of Thailand, 93 Ratchadaphisek Road, Din Daeng, Bangkok 10400
	Internal Audit Department whistleblow@set.or.th	
	SET Contact Center www.set.or.th/contactcenter or +66 2009 9999 (during business days and hours)	SET Contact Center will further submit the whistleblowing information and complaints to SET's Internal Audit Department.
<b>For employees</b>	Report whistleblowing or file complaints to Internal Audit Department, Human Resources Management Department, Compliance Department, or supervisors whom employees at all levels trust.	

The whistleblowing information and complaints submitted to SET will be examined, processed and screened to assess possible impact. The matters will be presented to the AC to consider taking the appropriate actions in line with the complaints handling process.

In 2022, there were neither whistleblowing nor complaints about inappropriate practices or unethical actions, no fraud nor corruption, and no use of insider information by the governors, executives and employees of SET and subsidiaries.









## 09 Information on the Board of Governors and Executives

### 9.1 Information on the Board of Governors

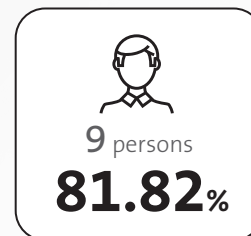
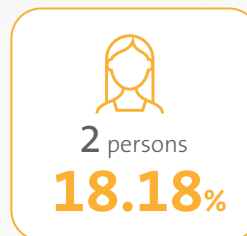
Ratio of female to male governors **1:4.5**

#### Structure of the Board of Governors

The structure and term of the Board of Governors (BoG) are in accordance with the Securities and Exchange Act. The essence of the information is as follows:

1) The BoG consists of six governors appointed by the Securities and Exchange Commission (SEC), and four governors elected by the members. All ten governors shall appoint SET President who is considered as an ex-officio governor. The BoG shall elect one governor who is not SET President to be the Chairman of the BoG, as well as electing another governor to be the Vice Chairman of the BoG.

2) The term of governor is three years and may be reappointed or re-elected, but shall not hold office for more than two consecutive terms. The tenure of the SET President shall hold office for a term of not exceeding four years and may be reappointed.



#### The Secretary to the Board of Governors

The BoG has appointed the Secretary to the BoG, namely Rongrak Phanapavudhikul, currently holding the position of Senior Executive Vice President - Head of Legal Affairs Division and Head of Corporate Secretary and Compliance Group.

#### Name and Position of the SET Board of Governors

Name of the BoG		Position in Committee					
Name-Surname	Position	AC	NRC	SC	RMC	ITC	LC
1. Dr. Prasarn Trairatvorakul	Chairman						
2. Pichet Sithi-Amnuai	Vice Chairman				//	/	
3. Dr. Anuchit Anuchitanukul	Governor				/	//	
4. Adjunct Professor Kitipong Urapeepatanapong	Governor		/	/			//
5. Adjunct Professor Dr. Kittipong Kittayarak	Governor	/		//			/
6. Dr. Kulpatra Sirodom	Governor	/	//		/		
7. Paiboon Nalinthrangkurn	Governor		/		/	/	
8. Sopawadee Lertmanaschai	Governor	//	/	/			
9. Supachoke Supabundit	Governor	/			/	/	
10. Thiti Tantikulan	Governor	/	/		/		
11. Dr. Pakorn Peetathawatchai	President			/	/	/	/

// stands for Chairperson

/ stands for committee members

**Note:** The names of qualified experts or external experts have not been included in the above list of the RMC, the ITC, and the LC.

## Roles, Duties and Responsibilities of “the Board of Governors” and “President”

The SET BoG shall have the power and duty to formulate policies and governs the operation of the SET group and perform any other function in accordance with the Securities and Exchange Act and laws relating to the operation of the SET group, as well as the duties and responsibilities specified in the BoG Charter. The clear separation of roles and duties between the BoG and the President can be summarized as follows:



**QR Code**  
SET Board of  
Governors Charter

### The Clear Separation of Roles, Duties, and Responsibilities

The Board of Governors	<ul style="list-style-type: none"> <li>- To set strategic directions, policies and goals of the organization, as well as govern and oversee the management so as to implement according to the policies, regulations as well as in compliance with , and comply with related laws</li> <li>- To approve the strategic plan, annual budget and manpower plan of the SET employees</li> <li>- To govern and oversee to ensure that the accounting system, financial reporting, internal control, internal audit, corporate governance tasks, and risk management systems are effective and reliable</li> <li>- To assign and delegate authority to the management at appropriate level with good internal control system</li> </ul>
The President	<ul style="list-style-type: none"> <li>- To be responsible for managing SET's businesses according to the policies, strategic goals, laws and regulations as specified by the BoG</li> <li>- To update the progress of the operations according to the strategic plans, and SET's performance, including the key operating results of subsidiaries and joint ventures, to the BoG on a quarterly basis</li> </ul>

In addition, according to the SET's authority manual which has been set up for the purpose of delegation of responsibility and authority to make decisions based on the assigned duties and the power to implement remains the BoG's authority to approve, such as the approval of the adopt or change of accounting policies and principles, the approval of the procurement of goods and services in the amount of more than THB 20 million and the bad debt write-off in the amount of more than THB 100,000, etc.

## Board of Governors

Data as of December 31, 2022



**Dr. Prasarn Trairatvorakul**

Chairman



**Pichet Sithi-Amnuai**

Vice Chairman



**Dr. Anuchit Anuchitanukul**

Governor



**Adjunct Professor Kitipong Uraepatanapong**

Governor



**Adjunct Professor Dr. Kittipong Kittayarak**

Governor





**Dr. Kulpatra Sirodom**

Governor



**Paiboon Nalinthrangkurn**

Governor



**Sopawadee Lertmanaschai**

Governor



**Supachoke Supabundit**

Governor



**Thiti Tantikulanan**

Governor



**Dr. Pakorn Peetathawatchai**

President

## Board of Governors

### Dr. Prasarn Trairatvorakul

Chairman

Age 70 years

Assume the position of Chairman on February 5, 2021

#### Education

- Doctor of Business Administration, Harvard University, Massachusetts, USA
- Master in Business Administration, Harvard University, Massachusetts, USA
- Master of Engineering in Industrial Engineering and Management, Asian Institute of Technology
- Bachelor of Engineering, First class Honors in Electrical Engineering, Chulalongkorn University
- Honorary Doctor of Economics, Chulalongkorn University
- Honorary Doctor of Philosophy, National Institute of Development Administration
- Honorary Doctor of Economics, The University of the Thai Chamber of Commerce
- Honorary Doctor of Economics, Khon Kaen University
- Honorary Doctor of Business Administration, Rajamangala University of Technology Suvarnabhumi

#### Executive Program

- Certificates:
  1. The Role of the Chairman Program
  2. Director Certification Program
  3. Ethical Leadership Program
  4. Board Nomination and Compensation Program
  5. IT Governance and Cyber Resilience Program
- Thai Institute of Directors Association
- Diploma, the Joint State-Private Sector Course, the National Defense College
- Certificate, the Executive Program of Energy Literacy for a Sustainable Future, Thailand Energy Academy

#### Other Current Positions

##### Position in Listed Companies

- Chairman, Central Retail Corporation Public Company Limited
- Chairman, SCG Packaging Public Company Limited
- Chairman, Pruksa Holding Public Company Limited
- Independent Director, the Siam Cement Public Company Limited

##### Position in Private Limited Companies or Other Businesses

- Chairman, Capital Market Development Fund
- Chairman, Thailand Futures Exchange Public Company Limited
- Chairman, the SET Foundation
- Director, Crown Property Bureau Equity Company Limited
- Director, Siam Sindhorn Company Limited
- Senior Advisor, Central Group
- Chairman of the Board of Governance, Equitable Education Fund
- Chairman of the Board of Directors, Thailand Development Research Institute
- Executive Director, Thai Red Cross Society
- Advisor, Crown Property Bureau
- Member, Property Management Committee, Chulalongkorn University
- Member, Asset Management Committee of Vajiravudh College

#### Past Experiences

- Secretary-General, Securities and Exchange Commission
- President, Kasikornbank Public Company Limited
- Governor, Bank of Thailand
- Chairman, National Economic Reform Committee of Thailand
- Chairman, Public Procurement Committee of Thailand
- Member, Education Reform Committee of Thailand
- Member, State Enterprises Supervisory Board of Thailand
- Chairman of the Board, Mahidol Wittayanusorn School

### Pichet Sithi-Amnuai

Vice Chairman

Age 57 Years

Assume the position of Vice Chairman on February 5, 2021

#### Education

- Master of Education (Early Childhood Education) Chulalongkorn University
- Master of Business Administration, University of Texas at Austin, USA
- Bachelor of Engineering (Industrial Engineering), Chulalongkorn University

#### Executive Program

- Certificates:
  1. Director Leadership Certification Program
  2. Director Certification Program
  3. Audit Committee Program
  4. Role of the Compensation Committee
  5. Corporate Governance for Capital Market Intermediaries
  6. Monitoring Fraud Risk Management
  7. Monitoring the Internal Audit Function
  8. Monitoring the Quality of Financial Reporting
  9. Successful Formulation & Execution the Strategy
  10. Anti-Corruption for Executive Program
  11. What the Board Should Do in a Turnaround Situation
- Thai Institute of Directors Association
- Certificate, TLCA Leadership Development Program
- Certificate, TLCA Executive Development Program
- The Executive Program in Energy Literacy for a Sustainable Future, Thailand Energy Academy
- Business Revolution and Innovation Network, The Federation of Thai Industries
- Certificate, Capital Market Academy Leadership Program, The Stock Exchange of Thailand

#### Other Current Positions

##### Position in Listed Companies

-

##### Position in Private Limited Companies or Other Businesses

- Director, Thailand Futures Exchange Public Company Limited
- Director, CMDP Digital Infrastructure Company Limited
- Chairman, Association of Thai Securities Companies
- President, Bualuang Securities Public Company Limited
- Director and Chairman of Risk Management Committee, TSFC Securities Public Company Limited
- Director, SS Family Holding Company Limited
- Director, HO HO Kitchen Company Limited
- Director, ASCO Business Promotion Company Limited

#### Past Experiences

- Independent Director and Chairman of the Audit Committee, Mermaid Maritime Public Company Limited
- Managing Director, Play & Music Company Limited
- First Vice President of Corporate Finance Department, Jardine Fleming Thanakom Securities Company Limited
- Assistant General Manager, International Business Division, MMC Sittipol Company Limited

**Dr. Anuchit Anuchitanukul**

Governor

Age 51 Years

Assume the position of governor on February 5, 2021

**Education**

- Doctor of Philosophy in Computer Science, Stanford University, USA
- Master of Science in Computer Science, Stanford University, USA
- Master of Business Administration, Chulalongkorn University
- Bachelor of Engineering (1st Class Hons), Chulalongkorn University

**Executive Program**

- Strategy and Innovation for Businesses in Asia (SIBA 2012), CMMU-MIT
- Top Executive Program in Commerce and Trade, University of the Thai Chamber of Commerce
- Certificate, Director Certification Program, Thai Institute of Directors Association
- Certificates:
  1. Thailand Insurance Super Leadership Program
  2. Thailand Insurance Leadership Program
- Office of Insurance Commission
- Executive Education (Program for Senior Management 4), Fiscal Policy Research Institute (FPRI) Kellogg-Schulich-Maxwell
- Certificate, TLCA Executive Development Program, Thai Listed Companies Association
- Certificate, Economics & Investment Analysis, Faculty of Economics, Chulalongkorn University
- Certificate, Capital Market Academy Leadership Program, The Stock Exchange of Thailand

**Other Current Positions****Position in Listed Companies**

- Independent Director and Member of the Audit Committee, I.C.C. International Public Company Limited
- Director, WHA Industrial Development Public Company Limited
- Director and Member of the Risk Management Committee, WHA Corporation Public Company Limited
- Advisor to Chief Executive Office, Kiattakin Phatra Bank Public Company Limited

**Position in Private Limited Companies or Other Businesses**

- Chairman, SET Venture Holding Company Limited
- Chairperson of The Information Technology Committee, Chairperson of The Securities Investor Protection Fund Committee and Member of The Risk Management Committee, The Stock Exchange of Thailand
- Director, The SET Foundation
- Chairman and Member of the Audit Committee, Arkitura Company Limited
- Director, Aksorn Education Company Limited
- Director and Member of the Audit Committee, Capital Market Development Fund Committee
- Expert Member, Commission Policy on Private Participation in State Affairs, State Enterprise Policy Office
- Advisor to the Digital Economic and Social Council of Thailand
- Electronic Transactions Committee/Computer Science Qualified Committee/ Subcommittee on Standards and Governance/Strategic and Promotion Subcommittee
- State Enterprise Development Assessment Sub-committee for Digital Transformation and Knowledge and Innovation Management, State Enterprise Policy Office
- Director, Bee Systems Company Limited
- Director, Fourgles (Thailand) Company Limited
- Director, KKP Dime Company Limited
- Working Group, Eastern Special Development Zone (EEC) Policy Committee

**Past Experiences**

- Director, Committee For The Protection Of Credit Information
- Advisor and Member in Committee for the Digitalization of the Revenue Department, The Revenue Department
- Director and Member of the Risk Management Committee, Bangchak Corporation Public Company Limited
- Subcommittee on Digital Strategy of Capital Markets
- Advisor, National e-Payment Committee, Ministry of Finance
- Directors of the Big Data Steering and Management Committee, Ministry of Finance
- Director, KTB Computer Services Company Limited
- Director, Krungthai Panich Insurance Company Limited
- Director, National ITMX Company Limited
- Director, KTB Securities Company Limited
- Senior Executive Vice President & Managing Director, Krungthai Bank Public Company Limited
- Director of Business Development and Technology, Freewill Solutions

**Adjunct Professor Kitipong Urapeepatanapong**

Governor

Age 68 Years

Assume the position of governor on August 5, 2022

**Education**

- LL.B., Chulalongkorn University
- Admitted as Thai Barrister-at-law
- LL.M., Chulalongkorn University
- Master of Laws, Chulalongkorn University
- Master of Laws, The University of British Columbia
- Honorary Doctorate Degree, Faculty of Law, Hatyai University

**Executive Program**

- Top Executive Program in Commerce and Trade (TEPCoT), Class 1, Commerce Academy, University of the Thai Chamber of Commerce
- Certificates:
  1. Directors Certification Program
  2. DCP Refresher Course
  3. Role of Chairman Program
  4. IT Governance and Cyber Resilience Program
- Thai Institute of Directors Association
- Certificate Executive Program, J.L. Kellogg School of Management, Northwestern University, USA
- Certificate, Corporate Governance, Yale University, School of Management
- Certificate of Completion on Company Directors, Australian Institute of Company Directors, Australia
- Certificate, Capital Market Academy Leadership Program, The Stock Exchange of Thailand

**Other Current Positions****Position in Listed Companies**

- Independent Director and Member of Governance and Nomination Committee, SCG Packaging Public Company Limited
- Independent Director and Member of Risk Management Committee, Pruksa Holding Public Company Limited

**Position in Private Limited Companies or Other Businesses**

- Chairperson of The Legal Committee, Member of The Nomination and Remuneration Committee and Member of The Sustainability Committee, The Stock Exchange of Thailand
- Director, Independent director, Non-executive director, Chairman of Sustainability
- Development Committee, Member of Nomination and Remuneration Committee, CJ More Company Limited
- Committee Member, Committee on Economic and Investment Stimulus Measures to Attract High Potential Foreigners to Thailand
- Member of Advisory board of School of Law, University of the Thai Chamber of Commerce (UTCC)
- Independent Director, Member of the Audit Committee and Member of the Risk Management Committee, ThaiNamthip Corporation Company Limited
- Chairman, Thai Institute of Directors Association (IOD)
- Member of the Hatyai University Council
- Independent Director and Member of the Corporate Governance and Nomination Committee, SCG Chemicals Public Company Limited
- Chairman, The Thai Credit Retail Bank Public Company Limited
- Chairman, VNB Holding Company Limited
- Advisor, Baker & McKenzie Company Limited
- Chairman and Independent Director, Chotiwat Manufacturing Public Company Limited
- Member of the Sub-Committee, Office of Social Enterprise Promotion
- Member of the Law Sub-Committee and Advisor, The Board of Investment of Thailand
- Member of the Economics Situation Administration Committee, Center for COVID-19 Situation Administration (CCSA)
- Audit Committee, Bangkok University
- Member of the Professional Expert of Steering Committee, Office of the National Higher Education, Science, Research and Innovation Policy Council
- Director, Thailand Institute of Justice (Public Organization)
- Honorary Member of the National Reform Commission (Legal and member of the Critical Issues Committee)
- Member of the Professional Expert Committee, National Commission for Justice Administration Development
- Chairman, Cheevamitr Social Enterprise Company Limited
- Vice President, National Reform Committee on Legal
- Chairman, Tax and Regulatory Commission, Thai Chamber of Commerce
- Director, Siam Piwat Retail Holding Company Limited
- Executive Director, Siam Piwat Company Limited
- Director, Business Strategic Holding Company Limited

**Past Experiences**

- Chairman, Baker & McKenzie Company Limited
- Independent Director of Krungthai Bank Public Company Limited
- Member of the National Reform Commission
- Director, Rachakarn Asset Management Company Limited
- Director, The Hub 99 Company Limited



**Adjunct Professor Dr. Kittipong Kittayarak**

Governor

Age 64 Years

Assume the position of governor on August 5, 2022

**Education**

- Doctor of the Science of Laws (J.S.D.), Stanford University, USA (Fulbright Scholarship)
- Master of Laws (LL.M.), Harvard University, USA (Fulbright Scholarship)
- Barrister-at-Law, Institute of Legal Education, Thai Bar Association
- Master of Laws (LL.M.), Cornell University, USA (Royal Thai Government Scholarship)
- Bachelor of Laws (Honors), Chulalongkorn University

**Executive Program**

- Certificates:
  1. Director Accreditation Program
  2. Advanced Audit Committee Program
- Thai Institute of Directors Association

**Other Current Positions****Position in Listed Companies**

- Independent Director, Chairman of the Corporate Governance and Social Responsibility Committee and Member of the Compliance Committee, Krungthai Bank Public Company Limited
- Independent Director / Nomination, Remuneration and Corporate Governance Committee, Dusit Thani Public Company Limited
- Independent Director, Member of Audit Committee, Member of Corporate Governance and Sustainable Development Committee, Charoen Pokphand Foods Public Company Limited
- Independent Director, Member of the Nomination and Remuneration Committee, and Chairman of the Corporate Governance Committee, True Corporation Public Company Limited

**Position in Private Limited Companies or Other Businesses**

- Chairperson of the Sustainability Committee, Member of the Audit Committee and Member of the Legal Committee, The Stock Exchange of Thailand
- Chancellor, King Mongkut's Institute of Technology Ladkrabang
- Chairman, The Council of Bangkok University
- Vice Chairman and Member of Executive Committee, Friends in need (of "PA") Volunteers Foundation, The Thai Red Cross Society Executive Committee
- Member of Executive Committee, Bajrakitiyabha Fund for Legal Education
- Director, Siriraj Piyamaharajkarun Hospital
- Director, Ramathibodi Foundation Under the Royal Patronage of His Majesty the King, Her Royal Highness Princess Maha Chakri Sirindhorn
- Deputy Chairman, The Legal Committee, Thai Red Cross Organ Donation Center
- Member of the Board of Committee, Thai Bar under the Royal Patronage

**Past Experiences**

- Independent Director/Chairman of the Audit Committee, PTT Public Company Limited
- Executive Director, Thailand Institute of Justice (Public Organization)
- Vice Chairman, Mahidol University Council
- Committee, Mahidol University Council
- Permanent Secretary, Ministry of Justice

**Dr. Kulpatra Sirodom**

Governor

Age 66 Years

Assume the position of governor on February 5, 2021

**Education**

- Doctor of Philosophy in Finance, University of Pittsburgh, USA
- Master of Business Administration in Finance, West Virginia University, USA
- Bachelor of Business Administration in Finance, Thammasat University

**Executive Program**

- Certificates:
  1. Director Certification Program
  2. Audit Committee Program
  3. Director Leadership Certification Program
- Thai Institute of Directors Association
- Certificate, Global Association of Risk Professionals
- Certificate, Capital Market Academy Leadership Program, The Stock Exchange of Thailand

**Other Current Positions****Position in Listed Companies**

- Independent Director, Chairperson of the Audit Committee and Member of the Corporate Governance Committee, Thai Group Holdings Public Company Limited
- Independent Director and Chairperson of the Audit Committee, Thai President Foods Public Company Limited
- Independent Director and Chairperson of the Audit Committee, The Erawan Group Public Company Limited
- Independent Director, Chairperson of the Audit Committee and Member of the Corporate Governance Committee, Thai Wacoal Public Company Limited
- Independent Director, Member of the Audit Committee and Member of the Risk Oversight Committee, SCB X Public Company Limited

**Position in Private Limited Companies or Other Businesses**

- Chairperson of The Nomination and Remuneration Committee, Member of The Audit Committee, and Member of The Risk Management Committee, The Stock Exchange of Thailand
- Member, The Fund Performance Evaluating Committee, Capital Market Development Fund
- Advisor, Social Enterprise Thailand Association
- Director and Chairman of the Audit Committee, Thai Listed Companies Association
- Director and Chairman of Nomination and Remuneration Committee, Thai Institute Of Directors (IOD)
- Independent Director and Chairperson of the Audit Committee, Mae Fah Luang Foundation
- Director and Member of the subcommittee, The SET Foundation
- Director, The Siam Commercial Foundation
- Director, Professor Sangvian Indaravijaya Foundation

**Past Experiences**

- Independent Director and Member of the Audit Committee, TISCO Bank Public Company Limited
- Member, the Appeals Committee, The Stock Exchange of Thailand
- Independent Director, Thailand Securities Depository Company Limited
- Independent Director and Chairperson of the Risk Management Committee, Thailand Clearing House Company Limited
- Director, Member of the Audit Committee and Member of the Corporate Social Responsibility Committee, The Siam Commercial Bank Public Company Limited
- Independent Director, Total Industrial Services Company Limited
- Expert Member of The Board of Director, Member of the Risk Management Committee and Member of the Investment Risk Management Sub-Committee, Social Security Fund
- Advisor, Federation of Accounting Professions Under The Royal Patronage of His Majesty The King
- Member, Revolving Evaluation Sub-Committee, Comptroller General's Department
- Member, Risk Management Sub-Committee, Government Pension Fund
- Director, H.R.H. Prince Pijitjirapa Tevakul Foundation
- Dean, Faculty of Commerce and Accountancy, Thammasat University



**Paiboon Nalinthangkurn**

Governor

Age 56 Years

Assume the position of governor on August 5, 2019

**Education**

- Master of Business Administration in Finance, Indiana University at Bloomington, USA
- Bachelor of Arts in Computer and Information Sciences, University of California at Santa Cruz, USA

**Executive Program**

- Certificates:
  1. Director Certification Program
  2. Director Accreditation Program
  3. Corporate Governance for Capital Market Intermediaries Thai Institute of Directors Association
- Certificate, Chartered Financial Analyst, CFA Institute, USA
- Certificate, Capital Market Academy Leadership Program, The Stock Exchange of Thailand

**Other Current Positions****Position in Listed Companies**

- Senior Executive Vice President, TISCO Financial Group Public Company Limited

**Position in Private Limited Companies or Other Businesses**

- Chief Executive Officer, TISCO Securities Company Limited
- Director, Capital Market Development Fund
- Director and Member of the subcommittee, The SET Foundation
- Member of the Corporate and Sustainability Committee, Member of the Risk Management Committee and Member of the Information Technology Committee, The Stock Exchange of Thailand
- Chairman of the Research Committee, Member of the Investment Committee and Member of the Nomination and Remuneration Committee, Capital Market Development Fund
- Honorary Advisor to the Senate Committee on the Economy
- Chairman, Investment Analysts Association

**Past Experiences**

- Chairman, Federation of Thai Capital Market Organizations
- Director, Thai Capital Market Development Committee, Ministry of Finance
- Honorary Advisor, National Reform Steering Assembly Committee on the Economy
- Chairman, the Sub-committee on Capital Market Reforms, the National Reform Council
- Member, the National Reform Council
- Member, Joint Public and Private Sector Consultative Committee

**Sopawadee Lertmanaschai**

Governor

Age 69 Years

Assume the position of governor on August 5, 2019

**Education**

- Master of Science (Accounting), Thammasat University
- Bachelor of Law, Thammasat University
- Bachelor of Science (Accounting), Thammasat University

**Executive Program**

- The Wharton Advanced Management Program, University of Pennsylvania, USA
- Certificates:
  1. Director Certification Program
  2. Director Accreditation Program
  3. Audit Committee Program
  4. Corporate Governance for Capital Market Intermediaries
  5. Director Certification Program Update
  6. Successful Formulation and Execution of Strategy Thai Institute of Directors Association
- King Prajadhipok's Institute, Intermediate Certificate Course in Good Governance for Executives
- Certificate, Capital Market Academy Leadership Program, The Stock Exchange of Thailand

**Other Current Positions****Position in Listed Companies**

- Independent Director and Chairperson of Audit Committee, Central Plaza Hotel Public Company Limited
- Independent Director and Chairperson of Audit Committee, Maybank Securities (Thailand) Public Company Limited
- Independent Director and Chairperson of Audit Committee, JSP Pharmaceutical Manufacturing (Thailand) Public Company Limited

**Position in Private Limited Companies or Other Businesses**

- Chairperson of The Audit Committee, Member of The Nomination and Remuneration Committee and Member of The Sustainability Committee, The Stock Exchange of Thailand
- Director, The SET Foundation
- Director and Secretary, Professor Sangvian Indaravijaya Foundation
- Director, Chotiwat Manufacturing Public Company Limited
- Chairperson and Independent Director, KTBST REIT Management Company Limited
- Advisor to Chairman of the Board of Directors and Member of the Investment Committee, Dhipaya Insurance Public Company Limited
- Chairperson and Director of Audit Committee, Cheese Digital Network Company Limited

**Past Experiences**

- Independent Director and Member of The Audit Committee, Intouch Holdings Public Company Limited
- Independent Director, Dohome Public Company Limited
- Director and Chairperson of Audit Committee, Metropolitan Electricity Authority
- Director and Executive Directors, Government Pharmaceutical Organization
- Commissioner, The Securities and Exchange Commission, Thailand
- Secretary General, Government Pension Fund
- Director, IRPC Public Company Limited
- Director, Nok Airlines Public Company Limited



**Supachoke Supabundit**

Governor

Age 47 Years

Assume the position of governor on August 5, 2022

**Education**

- Master of Business Administration (Finance and Strategy) Sasin Graduate Institute of Business Administration of Chulalongkorn University
- Bachelor of Arts (Economics) Boston University, USA

**Executive Program**

- Certificate, Director Accreditation Program (170/2020), Thai Institute of Directors Association
- Certificates:
  1. Thailand Insurance Super Leadership Program (1/2020)
  2. Thailand Insurance Leadership Program (5/2016) Office of Insurance Commission (OIC)
- Certificate, Executive Development Program (EDP 10/2012), Thai Listed Companies Association (TLCA)
- Certificate, Capital Market Academy Leadership Program, The Stock Exchange of Thailand

**Other Current Positions****Position in Listed Companies**

- Member of the Executive Committee, Kiatnakin Phatra Bank Public Company Limited

**Position in Private Limited Companies or Other Businesses**

- Director, KKP Capital Public Company Limited
- Director and President, Kiatnakin Phatra Securities Public Company Limited
- Director, Kiatnakin Phatra Asset Management Company Limited
- Director, KKP Dime Securities Company Limited
- Director, ASCO Business Promotion Company Limited
- Director, Association of Securities Companies
- Director, Phuket Suite Pavilion Company Limited
- Director, Paholyothin Suite Company Limited
- Director, Sub Supabundit Company Limited

**Past Experiences**

- President, KKP Capital Public Company Limited
- Managing Director Investment Banking & Capital Markets Group, Kiatnakin Phatra Securities Public Company Limited

**Thiti Tantikulanan**

Governor

Age 53 Years

Assume the position of governor on August 5, 2019

**Education**

- Bachelor's degree (Business Administration), University of Washington, USA

**Executive Education**

- Certificate, Corporate Governance for Capital Market Intermediaries, Thai Institute of Directors Association
- Certificate, Thailand Insurance Leadership Program, OIC Advanced Insurance Institute
- Certificate, Capital Market Academy Leadership Program, The Stock Exchange of Thailand

**Other current positions**

- Member of The Audit Committee, Member of The Nomination and Remuneration Committee, and Member of The Risk Management Committee, The Stock Exchange of Thailand
- Director, The SET Foundation
- Director, Association of Thai Securities Companies
- Director, ASCO Business Promotion Company Limited
- Executive Chairman, Kasikorn Securities Public Company Limited
- Capital Markets Business Division Head, Kasikornbank Public Company Limited

**Past experience**

- Member of The Information Technology Management Committee and Member of the Legal Committee, The Stock Exchange of Thailand
- Director, TRIS Corporation Limited
- Director and Member of The Audit Committee, The Thai Bond Market Association
- President, ACI Thailand
- Capital Markets Business Head, Kasikornbank Public Company Limited
- Vice President and Head of Trading, HSBC, Bangkok
- Vice President and Head of Trading, JP Morgan, Bangkok
- Vice President and Head of FX Trading, Citibank, Bangkok
- Trader, Standard Chartered Bank, Bangkok

**Dr. Pakorn Peetathawatchai**

President

Age 58 Years

Assume the position of President on June 1, 2018

**Education**

- Doctoral of Business Administration in Finance and Economics, Boston University, USA
- Master of Business Administration, Finance Major, University of Wisconsin, USA
- Bachelor of Engineering, Electronics, King Mongkut's Institute of Technology Ladkrabang

**Executive Program**

- Certificates:
  1. Directors Accreditation Program (DAP) 47/2005
  2. Director Certification Program (DCP) 188/2014
  3. Corporate Governance for Capital Market Intermediaries (CGI) 12/2016 Thai Institute of Directors Association
- Columbia Senior Executive Program, Columbia University, USA
- Certificate, The Executive Program of Energy Literacy for a Sustainable Future, Thailand Energy Academy
- Certificate, Capital Market Academy Leadership Program, Capital Market Academy

**Other Current Positions****Position in Listed Companies**

-

**Position in Private Limited Companies or Other Businesses**

- Member, Capital Market Development Committee
- Member and Secretariat, Federation of Thailand Capital Market
- Director, Capital Market Development Fund
- Chairman, Thailand Clearing House Company Limited
- Chairman, Thailand Securities Depository Company Limited
- Chairman, Thai NVDR Company Limited
- Vice Chairman, Thailand Futures Exchange Public Company Limited
- Vice Chairman, SET Venture Holding Company Limited
- Director and Secretariat, The SET Foundation

**Past Experiences**

- Chairman, Thai Digital Assets Exchange Company Limited
- Chairman, Settrade.com Company Limited
- Chairman, FinNet Innovation Network Company Limited
- Chairman, LiVE Fin Corp Company Limited
- Vice Chairman of the Emerging Markets Working Group and Director of World of Federation of Exchanges
- Senior Executive Vice President, Head of Corporate Strategy Division and Head of Finance and Investment Division, The Stock Exchange of Thailand
- Senior Executive Vice President, Chief Marketing Officer, The Stock Exchange of Thailand
- Senior Executive Vice President, Corporate Finance, Mittr Phol Sugar Corporation Limited
- Executive Vice President, Group Head, Treasury Group, Siam Commercial Bank Public Company Limited
- Director and Chairman of the Investment Committee, Siam Commercial New York Life Insurance Public Company Limited

## 9.2 Information on Committees

### Committees Related to Good Corporate Governance

The Board of Governors (BoG) has appointed committees to oversee good corporate governance and support the SET BoG's duties. The six Committees are the Audit Committee (AC), the Nomination and Remuneration Committee (NRC), the Sustainability Committee (SC), the Information Technology Committee (ITC), the Risk Management Committee (RMC) and the Legal Committee (LC). Each committee has clearly specified the scope of duties and responsibilities as appeared in the Charter of each committee, already disseminated via the SET website.



**QR Code**  
Committees on Good  
Corporate Governance  
Charter

### Committees on Relevant Laws and Regulations

The committees on relevant laws and regulations have been appointed by the BoG to support the operations in accordance with the relevant laws, consisting of three Committees: the Disciplinary Committee, the Appeals Committee, and the Securities Investor Protection Fund Committee.

### List of the SET Committees for the Year 2022

as of December 31, 2022

#### 1. Audit Committee (AC)

**Overseeing unit** : Internal Audit Department

**Composition** : 1. At least three, but not more than five SET governors

2. Not less than half of the members must be SET governors appointed by the Securities and Exchange Commission (SEC).

3. At least one member possesses knowledge, understanding or experience in accounting, finance or auditing

**Term of office** : In accordance with the tenure of the SET BoG.

Name	Position
1. Sopawadee Lertmanaschai	Chairperson
2. Adjunct Professor Dr. Kittipong Kittayarak <sup>1</sup>	Member
3. Dr. Kulpatra Sirodom	Member
4. Supachoke Supabundit <sup>1</sup>	Member
5. Thiti Tantikulanan <sup>1</sup>	Member

#### Duties of the AC are as follows:

##### 1. Financial reporting

- (1) To review the financial report of the SET group and the SET Foundation
- (2) To consider and review accounting policies as well as correctness and appropriateness of financial reports
- (3) To review key or irregular transactions that could impact the financial statement

##### 2. External audit

- (1) To provide advice concerning the appointment, termination, remuneration and performance assessment of the auditor of the SET group
- (2) To review the audit scopes and auditing plans of the auditors of the SET group

<sup>1</sup>Appointed to replace 1) Norachet Sangruji, 2) Voravan Tarapoom, and 3) Dr. Seree Nonthasoot on August 22, 2022



### 3. Internal audit

- (1) To consider and review the operation of the internal audit function
- (2) To consider and approve the internal audit plan
- (3) To consider and approve the budget and resources of the internal audit function
- (4) To consider and approve the appointment, transfer, termination of employment, remuneration, and appraisal of the head of internal audit function's performance

### 4. Internal control and risk management

To consider and assess the adequacy and appropriateness of the internal control and risk management of the SET group

### 5. Compliance with relevant laws, rules and regulations

- (1) To ensure compliance with the laws and regulations set by SET regulatory authorities, as well as standards and internal regulations stipulated by the SET group
- (2) To consider and provide advice concerning related party transactions or any transaction which may cause conflict of interest with the SET group's benefit

### 6. Whistleblowing and fraud

- (1) To review and take actions concerning whistleblowing cases and investigate any controversial or suspicious action considered against the laws, ethics, infringement of rights, incorrect financial report, defective internal control system and fraud
- (2) To review the process for safeguarding and detecting fraud

### 7. Other duties

- (1) To review the financial report of the SET Foundation on a six-month and an annual basis before presenting to the Board of the SET Foundation
- (2) To provide advice on the appointment, termination, remuneration, work performance assessment, and the auditing scope and plan of the auditor of the SET Foundation
- (3) To perform additional duties assigned by the SET BoG

## 2. Nomination and Remuneration Committee (NRC)

**Overseeing unit :** Human Resources Management Department

**Composition :** 1. At least three but not more than five members  
2. Not less than half of their members must be governors appointed by the SEC  
3. Chairperson of the committee must be a governor who has been appointed by the SEC.

**Term of office :** In accordance with the office term of the SET governors

Name	Position
1. Dr. Kulpatra Sirodorn	Chairperson
2. Adjunct Professor Kitipong Urapeepatanapong <sup>2</sup>	Member
3. Paiboon Nalinthrangkurn <sup>2</sup>	Member
4. Sopawadee Lertmanaschai	Member
5. Thiti Tantikulan	Member

### Duties of the NRC are as follows:

#### 1. Nomination

- (1) Consider and screen the list of candidates for members of the committee of the SET prior to propose for approval from the SET BoG for further appointment including to consider and screen the list of directors and members of the committees of subsidiaries prior to propose for approval from the Board of Directors of subsidiaries for further appointment

<sup>2</sup>Appointed to replace 1) Norachet Sangruji, 2) Voravan Tarapoom, on August 22, 2022

- (2) To consider and screen the list of experts of SET and subsidiaries prior to propose for approval from the SET BoG or the Board of Directors of subsidiaries (as the case may be) for further appointment
- (3) To consider and recruit persons to hold the office of vice president and equivalent position to the SET head of division, including chief executive officer of subsidiaries in order to propose for approval from the SET BoG or the Board of Directors of subsidiaries (as the case maybe) for further appointment
- (4) To consider succession plan for significant positions of SET prior to presenting such to the SET BoG for consideration and review on an annual basis
- (5) To perform other tasks as assigned by the SET BoG

## 2. Remuneration

- (1) To consider and review policies, criteria and payment of remuneration to the SET BoG, committees, experts, and Board of Directors of subsidiaries appointed by the SET BoG prior to propose for further approval from the SET BoG or the Board of Directors of subsidiaries (as the case may be)
- (2) To consider and review policies, criteria, and SET's overall employee remuneration structure, prior to propose for further approval from the SET BoG
- (3) To consider and review the budget for annual salary adjustment and annual bonus of SET's employees prior to propose for further approval from the SET BoG
- (4) To consider and review criteria pertaining to payment of remuneration including criteria for adjustment of salary and annual remuneration rate of executives who were nominated by the committee prior to propose for further approval from the SET BoG
- (5) To perform other tasks as assigned by the SET BoG

## 3. Sustainability Committee (SC)

**Overseeing unit** : Sustainable Business Development Department

**Composition** : 1. At least three but not more than five SET governors  
2. At least half must be SET governors appointed by the SEC Board  
3. The committee's chairperson can be a governor who has been appointed by the SEC Board or a governor elected by the SET member companies

**Term of office** : In accordance with the tenure of the SET governors

Name	Position
1. Adjunct Professor Dr. Kittipong Kittayarak <sup>3</sup>	Chairperson
2. Adjunct Professor Kitipong Urapeepatanapong <sup>3</sup>	Member
3. Sopawadee Lertmanaschai	Member
4. SET President	Member

### Duties of the SC are as follows:

#### 1. Corporate governance and sustainability aspects for the SET group

##### 1.1 Corporate governance

- (1) To consider and provide suggestions to the SET BoG on the formulation of the corporate governance framework in accordance with SET's operational structure, comparable with international practice or principles
- (2) To assess the appropriateness and adequacy of the SET group Corporate Governance Policy and Code of Conduct, including updating these in accordance with internationally recognized corporate governance practices or principles, before presenting to the SET BoG for consideration
- (3) To review the SET's Corporate Governance report which is disclosed in the Annual Report
- (4) To provide recommendations on the preparation of the SET group's corporate governance development plan, in accordance with the Corporate Governance Policy

<sup>3</sup>Appointed to replace 1) Voravan Tarapoom and 2) Dr. Seree Nonthasoot on August 22, 2022, and Paiboon Nalinthrangkurn who resigned on August 22, 2022

- (5) To provide advice, recommendations and suggestions that will be beneficial to the SET BoG and management in enhancing the SET group's corporate governance
- (6) To provide recommendations on the appropriateness of the Charter of the SET BoG, before presenting to the SET BoG for consideration
- (7) To consider and provide recommendations concerning the performance assessment process of the SET BoG, including preparing a performance assessment summary to be presented to the SET BoG

#### 1.2 Sustainability

- (1) To consider and provide suggestions on the SET group's sustainability development policy and guidelines standardize these matters in accordance with international guidelines or principles, as such enabling the SET group to operate with efficiency, responding to stakeholders' needs, with social and environmental responsibility for sustainable growth of the SET group
- (2) To provide recommendations on the SET group's sustainability development plan in accordance with the set policy framework
- (3) To provide consultations, recommendations and suggestions that will be beneficial to the SET BoG and management in enhancing the SET group's sustainability development

#### 2. Corporate governance and sustainability for related stakeholders in the capital market

- 2.1 To provide recommendations to stakeholders on the formulation of the corporate governance and sustainability development policy and guideline framework to ensure that stakeholders are knowledgeable and understand in such a way as to be able to develop a good corporate governance framework and system including best practices, together with the operating of business with social and environmental responsibility; as well as promote responsible investments
- 2.2 To provide advice, recommendations, and suggestions that will be beneficial to the SET BoG and management in enhancing corporate governance and sustainability in the capital market

#### 3. Perform any other duties as assigned by the SET BoG that are within the committee's scope of work.

### 4. Risk Management Committee (RMC)

**Overseeing unit :** Risk Management Department

**Composition :** 1. At least five but not more than nine members

2. At least two SET governors

3. SET President

4. At least two experts in finance, accounting, risk management or information technology, at least one of whom must be an information technology expert and another must be a risk management expert

**Term of office :** 1. The committee member who is a SET governor or SET President shall have an office term pursuant to the office term of the SET governor or SET President, as the case may be.

2. The committee member who is a third party and is not a SET governor<sup>4</sup>, shall have an office term ending on December 31, 2023.

Name	Position
1. Pichet Sithi-Amnuai	Chairperson
2. Dr. Amporn Sangmanee <sup>5</sup>	Member
3. Dr. Anuchit Anuchitanukul	Member
4. Dr. Kulpatra Sirodom	Member

<sup>4</sup> The committee member who is a third party, and is not a SET governor shall have a term of office for three years, and may be eligible for reappointment after the end of the office term provided that he or she may not hold the position for more than two consecutive office terms unless the SET BoG has considered and opined that it is necessary for him or her to hold the position for a longer period, in which case the position may be extended for another 1 office term albeit the office term shall not consecutively exceed nine years. Upon the end of such term, he or she must hold may be eligible for reappointment after a period of one year has lapsed.

<sup>5</sup> Appointed to replace Dr. Vachira Arromdee on October 19, 2022

Name	Position
5. Paiboon Nalinthangkurn	Member
6. Somkiat Sirichatchai	Member
7. Supachoke Supabundit <sup>6</sup>	Member
8. Thiti Tantikulanan	Member
9. SET President	Member

#### Duties of the RMC are as follows:

1. To consider and provide opinions on the Risk Management Policy and Framework of the SET group, including the Information Technology Security Policy to present to the SET BoG for consideration and approval
2. To consider and provide opinions on setting Risk Appetite and Risk Tolerance to present to the SET BoG for consideration and approval
3. To acknowledge, consider and provide opinions on the results of risk assessment, risk management guidelines and measures, and operational plan to manage risks to be at an acceptable level, where such risks covering information technology risks (IT risks), cybersecurity risks, operational risks, and financial and investment risks, environment, social and governance risks (ESG risks), and emerging risks
4. To monitor the operational plans to continuously manage risks
5. To provide recommendations on enterprise risk management as well as continuously encourage and support the improvement and development of the SET group's internal risk management system
6. To regularly report the corporate's key risk status and the risk management implementation to the SET BoG for acknowledgment
7. To provide opinions and recommendations on engaging the services provided by external third parties to ensure that independent advice on risk management is given to the risk management department
8. To preliminarily consider and review the appointment of risk management experts in case of the absence of relevant committee before proposing to the NRC's meeting for consideration
9. To perform other tasks as assigned by the SET BoG within the relevant scope of work

### 5. Information Technology Committee (ITC)

**Overseeing unit :** Information Technology Division

**Composition :** At least five, but not more than nine committee members as follows:

1. At least two SET governors
2. SET President
3. Information Technology experts
4. Chairperson of the Information Technology Club of the Association of Thai Securities Companies

**Term of office :** 1. The member committee who is a SET governor or SET President shall have an office term pursuant to the office term of SET governors or SET President, as the case may be.  
2. The member committee who is a third party and is not a SET governor<sup>7</sup> shall have an office term of three years ending December 31, 2023.

<sup>6</sup> Appointed to replace Norachet Sangruji on August 22, 2022

<sup>7</sup> The committee member who is a third party and is not a SET governor shall have an office term of three years on each occasion and may be eligible for reappointment after the end of the office term provided that he or she may not hold the position for more than two consecutive terms unless the SET BoG has considered and opined that it is necessary for him or her to hold the position for a longer period, in which case the position may be extended for another one office term albeit the office term shall not consecutively exceed 9 years. At the end of such office term, at least a period of one year shall lapse before he or she becomes eligible for reappointment.



Name	Position
1. Dr. Anuchit Anuchitanukul	Chairperson
2. Chakhorn Tonghoon <sup>8</sup>	Member
3. Paiboon Nalinthrangkurn	Member
4. Pannaporn Sapsomboon	Member
5. Pichet Sitthi-Amnnuai	Member
6. Supachoke Supabundit <sup>9</sup>	Member
7. SET President	Member

#### Duties of the ITC are as follows:

1. To provide advice and recommendations on information technology development strategy and policy of the SET including New Information Technology Strategic Projects of the SET group in order to support operation as being center of capital market, to promote operation and give opinion which can benefit the development of information technology operations of the SET group so as to meet the acceptable standard in the industry and to support innovation development and proper use of technology to raise the standard of Thai capital market to be comparable and able to compete with leading stock exchange within the region
2. To consider and approve the following procurement:
  - (1) Procurement pertaining to information technology project with a limit Exceeding THB 20 million but not more than THB 50 million. As for the transaction which exceeds THB 50 million, the ITC shall review prior to proposing to the SET BoG for further approval
  - (2) Procurement pertaining to information technology maintenance with a limit exceeding THB 20 million (no limit ceiling) is subject to approved budget. In this regard, the committee shall report the approval of procurement under item (1) and (2) to the SET BoG for further acknowledgement.
3. To perform any other duties as assigned by the SET BoG

### 6. Legal Committee (LC)

**Overseeing unit** : Legal Department

**Composition** : At least five, but not more than nine members as follows:

1. At least one SET governor appointed by the SEC
2. Legal and/or capital market qualified experts
3. SET President

The SET governor shall be the Chairperson of the LC. The members of the LC shall not be authorized directors of securities companies, managers, vice-managers or persons holding equivalent positions under other names in securities companies.

**Term of office** : 1. The committee member who is a SET governor and SET President shall have an office term pursuant to the office term of the SET governor or SET President, as the case may be.

2. The committee member who is a third party and is not a SET governor<sup>10</sup> shall have an office term of three years on each occasion ending December 31, 2023.

<sup>8</sup> Appointed to replace Prakrit Thanwalai on April 25, 2022

<sup>9</sup> Appointed to replace Thiti Tantikulanan on August 22, 2022

<sup>10</sup> The LC member who is a third party and is not a SET governor shall have an office term of three years on each occasion and may be eligible for reappointment after the end of the office term provided that he or she may not hold the position for more than two consecutive office terms unless the SET BoG has considered and opined that it is necessary for him or her to hold the position for a longer period, in which case the position may be extended for another one office term albeit the office term shall not consecutively exceed nine years and after the end of such term of office, must have an interval of at least one year before being able to be re-appointed.

Name	Position
1. Adjunct Professor Kitipong Uraepatanapong <sup>11</sup>	Chairperson
2. Adjunct Professor Dr. Kittipong Kittayarak	Member
3. Professor Dr. Kumchai Jongjakapun	Member
4. Associate Professor Pises Sethsathira	Member
5. Somkiet Kuwawattananont	Member
6. Surasak Vajisit	Member
7. SET President	Member

#### Duties of the LC are as follows:

1. To provide advice, opinions and recommendations to the SET BoG and SET on matters relating to legal issues pursuant to the laws on the securities and the exchange, derivatives, and any other laws, rules and regulations of SET
2. To consider matters relating to important information which is beneficial to the future operation of SET (forward looking) and provide advice on matters relating to the operation of the SET based on a proactive approach or a precaution approach for the interest of SET, opinion or recommendations on various matters which will be beneficial to the operation of SET, and perform any other duties as assigned by the SET BoG

### 7. Disciplinary Committee

**Overseeing unit** : Appeal and Litigation Department

**Composition** : Five committee members as follows:

1. At least one SET governor
2. At least one member must have knowledge and experience in the stockexchange business, securities business, or finance business
3. At least one member must be a legal expert.
4. At least one member shall be SET President or an executive at executive vice president level or above as delegated by SET President

**Term of office** : In accordance with the SET regulations on Disciplinary Proceedings and Disciplinary Action B.E. 2543 (2000)

Name	Position
1. Associate Professor Tithipahan Chuerboonchai	Chairperson
2. Chao Arunyawat	Member
3. Adjunct Professor Dr. Kittipong Kittayarak <sup>12</sup>	Member
4. Yingyong Nilasena	Member
5. Paveena Sriphothong	Member

#### Duties of the Disciplinary Committee are as follows:

1. To examine any alleged wrongdoing and punish any individual or juristic person who violates or associates with others in violating SET's rules and regulations, and to report the punishment to the SET BoG, except in the following cases where the Disciplinary Committee is required to consider and provide viewpoints before escalating the cases to the SET BoG for consideration of the wrongdoings and punishments:

(1) Securities delisting

(2) Temporary trading suspension of a member company

<sup>11</sup> Appointed to replace Dr. Seree Nonthasoot on August 22, 2022

<sup>12</sup> Appointed to replace Voravan Tarapoom on August 22, 2022

- (3) Membership revocation
  - (4) Other cases as specified by the SET BoG
2. To examine and give explicit instructions according to SET's rules and regulations, including taking any other actions necessary for the disciplinary process

## 8. Appeals Committee

**Overseeing unit** : Appeal and Litigation Department

**Composition** : At least three but not more than five members. Each of these members must be an expert who possesses comprehensive knowledge and experience in legal matters, accounting and finance, and securities business

**Term of office** : In accordance with the SET regulations on Consideration and Decision on Appeal B.E. 2543 (2000)

Name	Position
1. Kaisri Nuengsigkapan <sup>13</sup>	Chairperson
2. Chatrapee Tantixalerm <sup>14</sup>	Member
3. Chavalit Chindavanig <sup>13</sup>	Member
4. Somkiet Kuwawattananont <sup>13</sup>	Member
5. Yaowaluk Aramthaveethong <sup>14</sup>	Member

### Duties of the Appeals Committee are as follows:

1. To review any appeal made against any punishment order issued by the SET BoG, the Disciplinary Committee, and SET President, and to determine the innocence or guilt of appellants.
2. To review any request for suspension of execution of punishment orders (if any) and may specify conditions or collaterals as necessary
3. To present recommendations to the SET BoG regarding punishments, punishment reduction, punishment omissions or confirmation of the appealed punishment orders, or any other matters raised by appellants.
4. To order the termination of any withdraw appeal prior to or during consideration by the Appeals Committee

## 9. Securities Investor Protection Fund Committee

**Overseeing unit** : Member Supervision Department

**Composition** : Six committee members as follows:

1. One SET governor appointed by the SEC
2. One SET governor elected by the SET members
3. Fund member elected by the Fund members
4. The Thai Investors Association President
5. SET President or an executive delegated by SET President
6. One SET executive being at least Executive Vice President in charge of the Member Supervision Division

**Term of office** : In accordance with the membership agreement of the Securities Investor Protection Fund

<sup>13</sup>Term of office from December 2, 2021 to December 1, 2024

<sup>14</sup>Term of office from January 23, 2022 to January 22, 2025

Name	Position
1. Dr. Anuchit Anuchitanukul	Chairperson
2. Pichet Sithi-Amnuai	Member
3. Pornpring Suksantisuwan <sup>15</sup>	Member
4. Yingyong Nilasena	Member
5. Aphisak Kiewkarnkha	Member
6. Paveena Sriphothong	Member and Secretary

**Duties of the Securities Investor Protection Fund Committee are as follows:**

1. To determine the investment policy of the fund which may be in securities or other assets, with other alternatives to gain profits, as appropriate
2. To consider all relevant facts and evidences, and present the viewpoints to the SET BoG in order to protect the investors who have submitted requests for protection from the Securities Investor Protection Fund
3. To boost investor confidence in buying or selling securities traded on SET
4. To carry out any other tasks assigned by the SET BoG

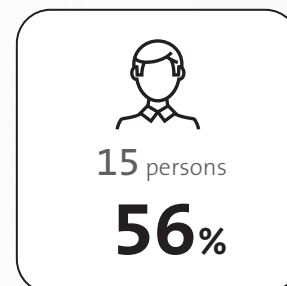
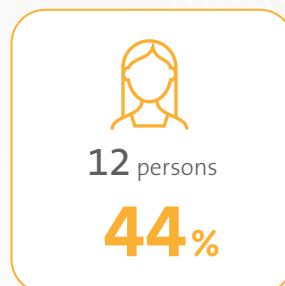
<sup>15</sup> Terminated the position of the Securities Investor Protection Fund Committee member on October 25, 2022



### 9.3 Information on Executives

SET senior executives consist of SET President, eight Senior Executive Vice Presidents and 18 Executive Vice Presidents, totaling 27 persons, with the duty to manage and drive the strategies as assigned by the BoG so as to achieve the set goals.

In addition, SET places importance on gender equality as seen by the executive structure that reflects equal opportunities of females to become leaders in the organization. SET's top executives consist of 15 males and 12 females, with the ratio of male to female executives at 1 : 0.8.



### Remuneration of President and Senior Executives

The Nomination and Remuneration Committee (NRC) takes responsibility for the remuneration policy and criteria consideration for committee members, SET President, and high-ranking executives in order to be presented to the BoG for approval.

The criteria to assess the performance of the president and top executives are based on the assessment of two aspects:

- 1. Corporate KPI:** according to the essence as the President has presented to the BoG for approval each year
- 2. Competency:** The BOG shall assess the President in various aspects, consisting of Leadership, Strategy, Workforce, Operation and Stakeholders.

The Secretary of the NRC shall gather and summarize the performance assessment of SET President in order to propose to the NRC and the BoG for consideration. The BoG shall keep the President informed of the assessment and the BoG's expectation viewpoints. Significantly, the performance assessment of SET President for the year 2022 exceeded the set target.

As of December 31, 2022, the SET Management Team (President, Senior Executive Vice Presidents, and Executive Vice Presidents) received remuneration covering salaries, bonuses, and provident fund contributions, etc. from SET for the year 2022 worth a total of THB 287.08 million.

## Executives

Data as of December 31, 2022



**Dr. Pakorn Peetathawatchai**

President

**Manpong Senanarong**

Senior Executive Vice President  
Head of Issuer & Listing Division



**Prapan Charoenprawatt**

Executive Vice President  
President - Market for Alternative  
Investment  
and President - Live Fin Corp Co., Ltd.

**Rungtip Charoenvisuthiwong**

Executive Vice President  
Head of Issuer Group 2

**Amnouy Jiramahapoka**

Executive Vice President  
Head of Issuer Group 1



### Dr. Rinjai Chakornpipat

Senior Executive Vice President  
Head of Market Division  
and Managing Director - Thailand Futures Exchange Public Company  
Limited



### Piyaporn Krongchan

Executive Vice President  
Head of Digital Marketing & Investor  
Channel Group and Head of Product  
& Investor Marketing Group

### Triwit Wangvorawudhi

Executive Vice President  
Head of Customer Relations Group and  
Head of Business Management - IT Solutions Group  
Co-Managing Director - Settrade.com Co., Ltd.  
and Managing Director -  
Digital Access Platform Co., Ltd.

### Dr. Chakkaphan Tirasirichai

Executive Vice President  
Head of Product Development  
Group



### Pataravasee Suvarnsorn

Senior Executive Vice President  
Head of Operations Management  
Division  
and Managing Director -  
Thailand Clearing House Co., Ltd.



### Yupawan Sirichainarumitr

Executive Vice President  
Head of Market Operations Group  
and Managing Director -  
Thailand Securities Depository Co., Ltd.

### Paythai Petcharat

Executive Vice President  
Head of Capital Market Support Group  
and Managing Director -  
FinNet Innovation Network Co., Ltd.





### Thirapun Sanpakit

Senior Executive Vice President  
Head of Information Technology Division



### Nat Luengnaruemitchai

Executive Vice President  
Head of IT Operations Group



### Pattana Wongnirund

Executive Vice President  
Head of IT Development Group



### Putthipong Skonthawat

Executive Vice President  
Head of IT Solutions Business Group  
and Co-Managing Director -  
Settrade.com Co., Ltd.



### Dr. Soraphol Tulayasathien

Senior Executive Vice President  
Head of Corporate Strategy Division  
and Head of Sustainable Market  
Development Division



### Pannavadee Ladavalaya Na Ayudhya

Executive Vice President  
Head of Capital Market Education Group



### Ratvalee Anantanont

Executive Vice President  
Head of Sustainable Development  
Group





### Rongrak Phanapavudhikul

Senior Executive Vice President  
Head of Legal Affairs Division  
and Head of Corporate Secretary  
& Compliance Group



### Apisak Kiewkarnkha

Senior Executive Vice President  
Head of Finance & Administration  
Division



### Kirati Kosicharoen

Executive Vice President  
Head of Accounting & Finance Group  
and Head of Corporate Services Group



### Paveena Sriphothong

Senior Executive Vice President  
Head of Market Supervision Division



### Duangrat Samudavanija

Executive Vice President  
Head of Listing & Disclosure Group



### Rosyupa Migasena

Executive Vice President  
Head of Member  
& Market Surveillance Group



### Noppakao Sucharitakul

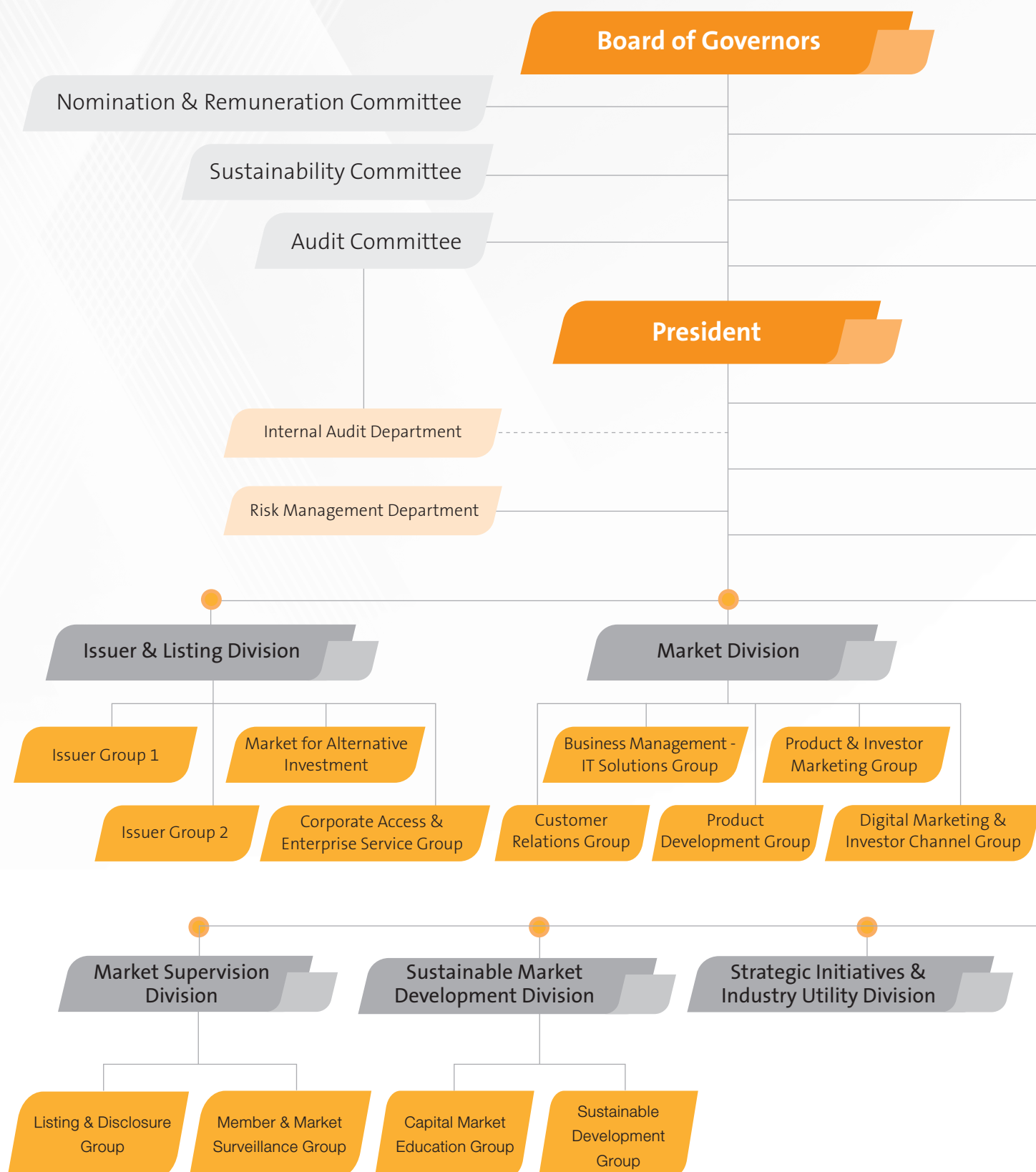
Executive Vice President  
Head of Corporate Communications  
and Social Development Group



### Kitti Sutthiatthasil

Executive Vice President  
Strategic Initiatives & Industry Utility Division  
and Managing Director - Thai Digital Assets Exchange Co., Ltd.

## Organization Structure



Effective from February 1, 2023



## 9.4 Other Significant Information

### 9.4.1 Secretary to the Board of Governors

The Board of Governors (BoG) has appointed Rongrak Phanapavudhikul as the Secretary to the BoG. Rongrak is Senior Executive Vice President - Head of Legal Affairs Division and Head of Corporate Secretary and Compliance Group.

### 9.4.2 Vice President of Internal Audit Department

As of end-2022, Yossavadee Debhasdin Na Ayudhya was Vice President - Head of the Internal Audit Department as considered and approved the appointment by the Audit Committee (AC).

### 9.4.3 Auditor's Remuneration

In 2022, SET hired EY Office Limited to provide auditing services. The remuneration details are as follows:

- Audit Fee: In 2022, the total fee for the auditing of SET and subsidiaries paid to the auditor amounted to THB 3.5 million.
- Other fees: No









# 10

## Report on Key Performance Regarding Corporate Governance

### The Board of Governors' Performance of Duties

#### Good Corporate Governance of the SET Group

##### (1) Formulation or Review of Policy on Corporate Governance (CG) and the Charters of the Board of Governors (BoG) and Committee Related to CG in 2022

- The BoG approved the review of the Charters as well as various policies according to the 2022 annual review cycle in order to reflect the current practices of the SET group and to be in line with CG standard, namely: (1) Review of CG Policy and Code of Conduct of the SET group (2) Review of the Charter of SET Board of Governors and the Charters of SET's various committees (3) Review of the SET group's risk management policy, and (4) Review of the SET group's information technology (IT) security policy.
- The BoG has approved the specifying or revising of other regulations to support corporate governance policies, such as the revision of regulations relating to trading of listed securities for governors and employees to cover digital token trading practices, the formulation of policies relating to the employment of public officers, the review of guidelines on segregation of roles between the market supervision function and customer service function, etc.

##### (2) Formulation and Review of the Vision, Mission, Goal, and Corporate Strategy

- The SET BoG has approved the vision, missions, goals and long-term corporate strategy as the management has assessed the environment and tendency of structural change of possible risks in the long run. SET has therefore placed importance on agility, preparedness to cope with the 'new normal' in terms of customer behavior, innovative technologies and the needs of market participants, as well as the environmental, social and governance (ESG) changes that will have impact on the SET group's operations.

- In 2022, the BoG considered and approved the three-year strategic framework (2023-2025) under the theme "Growth for Business, Industry, and Society". This concept is in line with the vision "To Make the Capital Market 'Work' for Everyone", as well as the missions approved by the BoG.

- The BoG approved both the short-term and long-term goals or corporate KPIs, budget, manpower and the 2023 corporate KPIs, while governing and overseeing the operations according to the set plan efficiently and effectively. The management has regularly reported the status of the corporate KPIs, the progress of the strategic plan's implementation, and SET's performance to the BoG on a quarterly basis.

##### (3) Succession Plan for Top Executives

- The SET BoG recognizes the importance of being well-prepared in terms of readiness of personnel to succeed the top executive positions to ensure seamless and consistent operations. The succession plan is carried out and reviewed regularly every year. The process of nomination and grooming of successors has been jointly carried out with a consulting firm with expertise by taking into consideration the candidate's knowledge, experiences, capabilities, attitudes, and integrity.
- In 2022, the Nomination and Remuneration Committee (NRC) considered, analyzed and approved the implementation of the succession plan of senior executives which has already been presented to the BoG for acknowledgment of the report on such operations for the year 2022.

#### (4) Information Disclosure and Transparency

The BoG governs and oversees SET and subsidiaries to disclose information to the public and stakeholders in an accurate, timely and transparent manner. The information disseminated via the SET website in both Thai and English is as follows:

- Corporate information (for example, organizational and business group structure, list of the BoG and senior executives, good governance policies, news releases, etc.), regulations related to the capital market participants (for example listed companies, member companies, clearing house members, depository members, etc.), products and services of SET and subsidiaries, information on securities and futures contracts.
- The financial reports of SET and subsidiaries, consisting of annual financial statements and Management Discussion and Analysis (MD&A), are usually disseminated on the website within 60 days from account closing date (same as the criteria for the dissemination of financial statements of listed companies). The 2022 annual financial statements were published on February 25, 2023, together with the report of the BoG's responsibilities for the financial reports, as well as the auditor's report as appeared in the annual report, to ensure that the financial reports reflect actual operating results and financial position according to generally accepted accounting principles. In addition, these financial statements must be reviewed by the Audit Committee before submitting to the BoG for approval and then presenting to the meeting of the SET members.

- In 2022, SET hired EY Office Limited to provide audit services for SET and subsidiaries. Details of remuneration payment are as follows:

Audit Fee / Remuneration	THB 3,500,000
Other service fees	None

- The SET's Annual Report is usually disseminated on the website within 120 days from the end of the calendar year. (The same as the regulation for the dissemination of annual reports of listed companies) by submitting the annual report to SET's members for acknowledgment at the annual general meeting of member companies on April 26, 2023.
- SET provides channels for inquiries, information requests, and advice on how to use services of the SET group via SET Contact Center. Inquiries can be made via various channels, such as phone calls, Facebook chat, and postal mail. In 2022, SET handled the matters as appropriate and responded the results to the inquirers accordingly.

#### (5) The Independence of the BoG

Governance Best Practice Standard	SET BoG
The Chairman is an independent non-executive director, not the same person as the President and has no relationship with management.	/
The Chairman is not a member of any of the committees.	/
Governors have independence and impartiality in carrying out their duties.	/
Governors shall report the acquisition or disposition of listed securities and other interests.	/
Governor held positions as directors in not more than five listed companies in compliance with the Principles of Good Corporate Governance for listed companies.	/

## (6) Governance and Oversight of Subsidiaries and Joint Ventures

The SET group consists of SET and subsidiaries which are categorized into two main groups of businesses functions: Core Exchange Function, and New Business & Infrastructure Development Function. In addition, there are also joint ventures (JV) and other companies that SET holds stake in order to support SET's policy-related operations. Details of business structure and shareholding have been disclosed via the SET website.

- SET has set the governance and oversight policy for subsidiaries and joint ventures in the CG and Code of Conduct policy, covering various key issues, such as the governance guidelines by implementing key governance and management policies of the SET group, governance guidelines by cascading the key operational management policies through the SET representatives assigned to serve as the board of directors of the affiliates. In 2022, the BoG acknowledged the report on the operations of the subsidiaries and JV firms on a quarterly basis.
- In 2022, the BoG reviewed the operating authority framework to be used to oversee the operations of the subsidiaries to ensure clarity and reflect the authority framework for conducting business according to the governance structure as approved by the BoG. The BoG has approved the formulation of the regulations relating to the trading of digital tokens for governors, employees and those who operate or perform duty for the Thai Digital Assets Exchange Co., Ltd. (TDX), a company under the SET group which received a license to be a business operator of digital assets in the category of digital token exchange. Such regulations reflect that the BoG places importance on promoting honest and transparent business operations and preventing any unfair dealings in digital token trading, as well as being guidelines for TDX to be used as regulations for the company's business in the future.

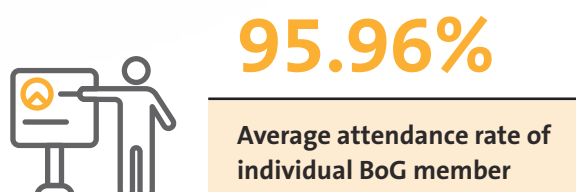
## Promoting Sustainability Development (ESG) for the Capital Market

SET is committed to continuously driving the Thai capital market towards sustainability (Sustainable Capital Market) by making investors realize the importance of sustainable investment, as well as supporting listed companies to operate in a sustainable manner. This will reflect the true value of the business to achieve balanced growth. The ESG Development Framework has been implemented in five areas as follows:

- (1) Sustainable Business: developing business operations for listed companies broadly and deeply
- (2) ESG Data and Disclosure: raising the standard of quality and disclosure of sustainability information of listed companies
- (3) Sustainable Investment: encouraging investors to make sustainable investments and supporting intermediaries to develop related products and services
- (4) Education: developing knowledge and understanding of ESG among listed companies, investors and intermediaries
- (5) Communication and Promotion: creating realization about ESG movement to a wider public in order to interconnect and benefit all groups of stakeholders in the capital market

Details of practices in ESG development for the capital market are available in SET Sustainability Report for the year 2022.

## Meetings of the Board of Governors and the Committees Related to Good Corporate Governance



Meetings are scheduled on a monthly basis in advance for the entire year. There are also additional quarterly meetings, of which the BoG will be informed of the meeting schedule in advance for effective time allotment. The meeting process can be summarized as follows:



- The Chairman and the President shall consider and approve the agenda of the meeting before proposing to the BoG.
- Meeting invitation letter and documents will be distributed at least seven days prior to each meeting to allow sufficient time for the BoG to study the information. The exception is for urgent matters, of which the meeting documents can be delivered less than seven days in advance.
- In the case that any governor and/or committee member has conflict of interest in the matter to be considered, such person must inform the meeting of such conflict of interest and is not allowed to participate in the consideration of such matter, and this matter must be recorded in the meeting minute accordingly.

- The Chairman of the BoG encourages non-executive directors to hold meetings among themselves when necessary to discuss various issues without participation of the management.

In 2022, a total of 18 BoG meetings were held, and there were two meetings without participation of the management. After each of these meetings, the issues from the meetings were communicated to the President.

## Meetings of the Board of Governors and Attendance of Each Governor in 2022

BoG Meeting in 2022	Physical Meeting at the SET office	e-Meeting	Total Number of Physical Meeting and e-Meeting
Name of the current SET BoG as of December 31, 2022			
1. Dr. Prasarn Trairatvorakul	6	12	18/18
2. Pichet Sithi-Amnuai	7	11	18/18
3. Dr. Anuchit Anuchitanukul	3	15	18/18
4. Adjunct Professor Kitipong Uraepatanapong <sup>1</sup>	4	5	9/9
5. Adjunct Professor Dr. Kittipong Kittayarak <sup>1</sup>	3	4	7/9
6. Dr. Kulpatra Sirodom	5	13	18/18
7. Paiboon Nalinthrangkurn	5	11	16/18
8. Sopawadee Lertmanaschai	3	15	18/18
9. Supachoke Supabundit <sup>1</sup>	3	6	9/9
10. Thiti Tantikulan	5	11	16/18
11. Dr. Pakorn Peetathawatchai	7	11	18/18
BoG terms ended during the year			
1. Norachet Sangruji <sup>2</sup>	1	8	9/9
2. Dr. Seree Nonthasoot <sup>2</sup>	1	7	8/9
3. Voravan Tarapoom <sup>2</sup>	-	9	9/9

<sup>1</sup> Appointed on August 5, 2022

<sup>2</sup> Completed term of office on August 4, 2022

## Meetings of Committees Related to Good Corporate Governance in 2022

Committee	AC	NRC	SC	RMC	ITC	LC
Number of Meeting	14 times	14 times	5 times	8 times	13 times	10 times
Name of current committee member as of December 31, 2022						
<b>Board Committee</b>						
1. Pichet Sithi-Amnuai				8/8	12/13	
2. Dr. Anuchit Anuchitanukul				8/8	12/13	
3. Adjunct Professor Kitipong Uraepatanapong <sup>1</sup>		6/6	1/1			4/4
4. Adjunct Professor Dr. Kittipong Kittayarak <sup>1</sup>	6/6		1/1			3/4
5. Dr. Kulpatra Sirodom	14/14	14/14		8/8		
6. Paiboon Nalinthrangkurn		4/6		8/8	12/13	
7. Sopawadee Lertmanaschai	14/14	14/14	5/5			
8. Supachoke Supabundit	6/6			4/4	4/6	
9. Thiti Tantikulan	5/6	13/14		8/8		
10. Dr. Pakorn Peetathawatchai			5/5	8/8	12/13	10/10
<b>External Expert / Advisor</b>						
1. Dr. Amporn Sangmanee <sup>1</sup>				2/2		
2. Chakhorn Tonghoon					9/9	
3. Professor Dr. Kumchai Jongjakapun						10/10
4. Pannaporn Sapsomboon					13/13	
5. Associate Professor Pises Sethsathira						10/10
6. Somkiat Sirichatchai				8/8		
7. Somkiet Kuwawattananont						10/10
8. Surasak Vajasit						9/10
<b>Committee terms ended in 2022</b>						
1. Norachet Sangruji		8/8		4/4		
2. Paiboon Nalinthrangkurn	8/8		3/4 <sup>2</sup>			
3. Dr. Seree Nonhasoot	8/8		4/4			6/6
4. Thiti Tantikulan					6/7	
5. Voravan Tarapoom	8/8	8/8	4/4			

Committee	AC	NRC	SC	RMC	ITC	LC
Number of Meeting	14 times	14 times	5 times	8 times	13 times	10 times
6. Prakrit Thanwalai <sup>3</sup> (External Expert / Advisor)					3/3	
7. Dr. Vachira Arromdee <sup>4</sup> (External Expert / Advisor)				6/6		

<sup>1</sup> Appointed on October 19, 2022 as a member of the RMC

<sup>2</sup> Resigned from the position on August 21, 2022

<sup>3</sup> Retired from the position on March 23, 2022

<sup>4</sup> Retired due to retirement at the Bank of Thailand as of end of September 2022

## Remuneration for Governors

The NRC is the committee that considers criteria for the remuneration and benefits of the governors to be presented to the BoG meeting prior to presenting to the SET members' meeting, which is in compliance with the Securities and Exchange Act, for an approval. Details of the remuneration of each governor in 2022 are as follows:

Monthly Fee (THB)	Board	AC	NRC	SC	RMC	ITC	LC
Chairman / Chairperson	135,000	75,000	52,500	52,500	52,500	52,500	52,500
Governors / Committee Members	90,000	50,000	35,000	35,000	35,000	35,000	35,000

Name of the BoG	Total remuneration of governor in 2022 (THB) (excluding the President)						
	Board	AC	NRC	SC	RMC <sup>1</sup>	ITC <sup>1</sup>	LC
1. Dr. Prasarn Trairatvorakul	6,060,000 <sup>2</sup>						
2. Pichet Sithi-Amnuai	1,080,000				630,000	420,000	
3. Dr. Anuchit Anuchitanukul	1,080,000				420,000	630,000	
4. Adjunct Professor Kitipong Urapeepatanapong	438,387		170,484	151,290			226,935
5. Adjunct Professor Dr. Kittipong Kittayarak	438,387	216,129		226,935			151,290

Name of the BoG	Total remuneration of governor in 2022 (THB) (excluding the President)						
	Board	AC	NRC	SC	RMC <sup>1</sup>	ITC <sup>1</sup>	LC
6. Dr. Kulpatra Sirodom	1,080,000	600,000	505,242		420,000		
7. Paiboon Nalinthrangkurn	1,080,000		170,484	249,516	420,000	420,000	
8. Sopawadee Lertmanaschai	1,080,000	900,000	420,000	420,000			
9. Supachoke Supabundit	438,387	216,129			151,290	151,290	
10. Thiti Tantikulanan	1,080,000	235,323	420,000		420,000	249,516	

**Note:**

<sup>1</sup> Excluding the remuneration of some Committee members who are qualified experts / external experts.

<sup>2</sup> Including the monthly special remuneration of the Chairman approved by the members' meeting at the rate of THB 370,000 per month to comply with the additional duties assigned by the BoG

## Performance Assessment of the Board of Governors and Committees Related to Good Corporate Governance

The BoG and the committees related to good corporate governance conduct the assessment of performance of duties regularly every year to review their performance of duties and increase working efficiency in line with the principles of good corporate governance. The Sustainability Committee (SC) has been assigned the task to consider and provide advice on the assessment process, and prepare the summary of assessment results for presentation to the BoG, except for the performance of the Chairman. As for the assessment of the BoG Chairman, the Chairperson of the SC shall report directly to the BoG Chairman.

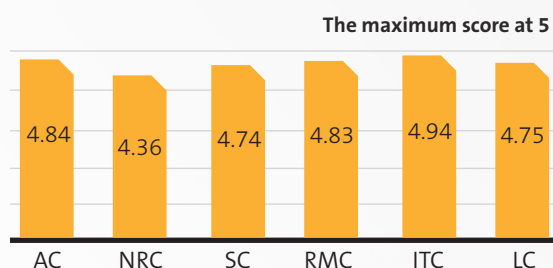
In 2022, the BoG was informed of the assessment results of the BoG and all the committees related to good corporate governance, namely the Audit Committee (AC), the NRC, the SC, the Risk Management Committee (RMC), the Information Technology Committee (ITC), and the Legal Committee (LC). The assessment of performance of duties of the BoG and the committees related to good corporate governance consists of the format, assessment topics, and assessment results of the BoG and committees related to good corporate governance, as follows:

	Type of Assessment	Example of Assessment Topic
<b>The SET BOG</b>	1. Assessment of the BoG as a whole	<ul style="list-style-type: none"> <li>- Strategy formulation and business planning</li> <li>- Risk management and internal control</li> <li>- Performing duties and responsibilities</li> <li>- Board meetings</li> <li>- Good corporate governance and social responsibility</li> <li>- Overseeing to prevent possible conflict of interest</li> <li>- Personnel preparation and succession planning</li> </ul>
	2. Individual assessments 2.1 Self-assessment 2.2 Cross evaluation	<ul style="list-style-type: none"> <li>- Performing duties and responsibilities</li> <li>- Board meetings</li> <li>- Independence</li> <li>- Readiness and self-enhancement</li> </ul>
	3. Assessment of Chairman's performance	Duty performance of the Chairman
<b>Committees Related to Good Corporate Governance</b>	Assessment of the committees as a whole	Scope of duties and responsibilities as specified in the Charter of each committee which has been disseminated via the website.



In addition, each governor has undergone the assessment of skills, knowledge, and expertise by oneself, separately from the self-assessment in performing duties, to be included in SET's Experts Pool.

#### Performance Assessment Results of the BoG and Committees Related to Good Corporate Governance in 2022



- The total BoG's performance assessment score result was at 4.82, and the average score of each committee related to good corporate governance exceeded 4.3 (total score: 5), as illustrated in this graphic.
- The governors' individual performance: self-assessment and cross-evaluation results were 4.85 and 4.88 (total score: 5), respectively.

The recommendations from the governors based on the 2021 assessment results were implemented by the management to develop and improve for more efficiency in performing their duties. In 2022, a series of seminars (courses) was organized to enhance knowledge or provide information on the issues of interest to the governors for further studies, such as the course on the topic of Block Chain and Digital Assets, etc.

### Knowledge Enhancement for the Board of Governors

SET prioritizes the continuous and ongoing development of the BoG, providing the governors with knowledge training and visits of related business both local and international markets to enhance knowledge and maintain far-sighted vision.

For all governors who have been appointed or elected for these new positions, SET regularly provides an overview of the operation, activities plans and overview of operations of the subsidiaries, including important information that the BoG should know which will be beneficial to the performance of duties as governors, in addition to the orientation for new governors. The various topics are such as basic information of the stock market and companies in the SET group, the duties of the BoG under the Securities and Exchange Act, the policy on corporate governance, the code of conduct for governors, the duties according to the BoG Charter, information regarding strategic plans, budgets, and organizational indicators, both short-term and long-term, etc., presented by senior executives and the Secretary to the BoG.

In 2022, governors attended training and seminars to enhance their understanding of their roles and responsibilities, and continuously promote skills in performing duties as a governor, both in courses organized by the Thai Institute of Directors Association (IOD) and other courses such as

- Participation in an online seminar hosted by the SEC on the topic of Easy Listening: accounting tips that the AC should not miss
- Participation in the seminar on Block Chain Technology and Digital Assets Landscape

## Summary of Training Courses at IOD as at End-2022

Name of Governors / Courses	DAP	DCP	DLCP	RCP	ACP	AACP	RCC	CGI	Other courses
Dr. Prasarn Trairatvorakul		/		/					BNCP, ELP, ITG
Pichet Sithi-Amnuai		/	/		/		/	/	AACP, MIA, MIR, MFM, SFE
Dr. Anuchit Anuchitanukul		/							
Adjunct Professor Kitipong Uraepatanapong		/	/	/					DCP Re, ITG, TT
Adjunct Professor Dr. Kittipong Kittayarak	/					/			
Dr. Kulpatra Sirodom		/	/		/				
Paiboon Nalinthrangkurn	/	/						/	
Sopawadee Lertmanaschai	/	/			/			/	DCPU, SFE
Supachoke Supabundit	/								
Thiti Tantikulan								/	
Dr. Pakorn Peetathawatchai	/	/						/	

**Remark:** In 2022, Norachet Sangruji attended the AACP training course (completed his term of office on August 4, 2022).

AACP: Advanced Audit Committee Program

AACP: Anti-Corruption for Executive Program

CGI: Corporate Governance for Capital Market Intermediaries

DCP: Director Certification Program

DCPU: Director Certification Program Update

ELP: Ethical Leadership Program

MFM: Monitoring Fraud Risk Management

MIR: Monitoring the System of Internal Control and Risk Management

RCC: Role of the Compensation Committee

TT: Train the trainers

ACP: Audit Committee Program

BNCP: Board Nomination and Compensation Program

DAP: Director Accreditation Program

DCP Re: DCP Refresher Course

DLCP: Director Leadership Certification Program

ITG: IT Governance and Cyber Resilience Program

MIA: Monitoring the Internal Audit Function

MFR: Monitoring the Quality of Financial Reporting

RCP: The Role of Chairman Program

SFE: Successful Formulation and Execution of Strategy

## Audit Committee Report

The Stock Exchange of Thailand (SET)'s Audit Committee (AC) consists of five independent non-executive directors with knowledge, expertise and experience in various fields including capital markets, accounting, finance, management, and legal affairs. It is chaired by Sopawadee Lertmanaschai, with Adjunct Professor Dr. Kittipong Kittayarak, Dr. Kulpatra Sirodom, Thiti Tantikulanan and Supachoke Supabundit as committee members. Both Sopawadee Lertmanaschai and Dr. Kulpatra Sirodom graduated with degrees in Accounting and Finance and have related experience in these two fields.

The Board of Governors (BoG) appointed Adjunct Professor Dr. Kittipong Kittayarak, Thiti Tantikulanan and Supachoke Supabundit as committee members, effective from August 22, 2022.

In 2022, the committee held 14 meetings, one of which was a joint meetings with the Risk Management Committee (RMC). There were three meetings with the external auditor to discuss the audit plan and to review the audit results where one of the meeting was held without the presence of the management in order to discuss and be informed of the independent views of the external auditor. The attendance record of the committee members is available in the Report on Key Performance Regarding Corporate Governance. (Please find details on page 118).

The committee performs its duties and expresses its views independently under the scope of the authority, duty and responsibilities assigned by the BoG, as specified on page 96-97 The committee reports its performance to the BoG on a quarterly basis. A summary of key operations and activities in 2022 is as follows:

**Reports of financial statements:** The committee reviews the quarterly financial reports together with the management, and reviews the annual financial reports together with the management and the external auditor where the key objectives are to examine the accuracy of the financial reports, the appropriateness of the accounting policy, and the adequacy of information disclosure and internal controls related to the reports of the financial statements.

**Risk management:** The committee is to review that the key risk management systems are in place. In 2022, the committee held one meeting jointly with the RMC on the operations and results of the Climate and Energy Action and IT Cyber Security. In addition, the committee on a quarterly basis meets with management who oversee the Risk Management team in order to establish a good understanding of their roles and responsibilities, including coordination and cooperation, and to ensure an alignment between risk management and the internal audit tasks. This will help bring the internal audit

operations in line with the key risks which should fully benefit the organization.

**Internal control system:** The committee reviews the adequacy, efficiency and effectiveness of the SET's internal control system based on the audit results presented by the Internal Audit Department. The committee also monitors the progress of internal control system upgrades and the external auditor's opinions. The committee invites executives of key departments to provide information and viewpoints. Furthermore, the committee reviews the adequacy of the annual assessment of the internal control system as per the standard of the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

**Oversees of internal audit operation:** The committee approves the annual internal audit plan and budget and considers the adequacy and suitability of the resources and the independence of the Internal Audit Department. The committee also provides recommendations to improve the audit process. In particular, the committee places the utmost importance on the Pre-implementation Review of the new trading system which the Internal Audit Department was assigned to review the system before the start of its operation in the first quarter of 2023. The committee has recommended the hiring of an external expert to perform a system audit of the Thai Digital Assets Exchange (TDX) before its service begins. The Internal Audit Department learn while working together with the external expert which will help increase their skills for future auditing. In addition, there was one meeting with the top executives, without the presence of the internal audit team, to discuss on the Internal Audit Department's operation.

The committee encourages and supports the training and ongoing development of internal auditors. In 2022, the internal audit officers attended training courses and took professional examinations to gain additional certifications, i.e. CDPSE (Certified Data Privacy Solutions Engineer) and BCMS ISO 22301:2019 Lead Auditor. The committee encourages and supports the adoption of audit tools to analyze and verify data and procurement of an Internal Audit Management System. This is aimed to improve the efficiency and standards of the Internal Audit Department's operations.

**Whistleblowing and fraud reports:** The SET provides channels for employees and stakeholders to report the inappropriate activities within the SET group. This includes unlawful and unethical conducts, violations of rights, inaccurate financial reporting and faulty internal control. The SET has disclosed the reporting channels for the whistleblowing channels on the SET's website under the "Whistleblowing Policy" section.

**Compliance with related laws, rules and regulations:**

The committee on a regular basis meets with the legal and regulatory management team to ensure that the SET's operations are in compliance with the relevant laws, rules and regulations. The meetings with the management team are to ensure that the SET's supervisory operations are in comply with the Personal Data Protection Act. In 2022, there were no practices that were non-compliant with the relevant laws and regulations.

**Related party transactions:** The committee reviews the related party transactions on a quarterly basis. In 2022, there were no related party transactions with persons or businesses which are not SET's subsidiaries.

**Appointment of external auditor 2023:** The committee is responsible for providing opinions regarding the appointment of an external auditor of which key considerations include the auditor performance, independence of the auditor in carrying

out the duties and other non-audit services. The committee, on the back of audit expertise, experience and independence, nominates EY Office Limited as the auditor of the SET and its subsidiaries for its financial statement of 2023 with the proposed audit fee of THB 5.38 million. The nomination and the proposed audit fee will be presented to the SET BoG for consideration and to the SET member companies for approval.

In summary, the committee has carried out its duties completely in accordance with the Audit Committee Charter, and the committee is of the opinion that the SET has prepared its financial statements according to Generally Accepted Accounting Principles and that the financial statements are accurate in essence, and with adequate information disclosure. In addition, the committee views that the internal control system and the risk management are sufficient and appropriate for the business operations.



(Sopawadee Lertmanaschai)

Chairperson  
Audit Committee  
January 23, 2023



## Nomination and Remuneration Committee Report

The current Nomination and Remuneration Committee (NRC) has been appointed by the Board of Governors of The Stock Exchange of Thailand (SET), effective from August 22, 2022. NRC consists of five SET governors, namely Dr. Kulpatra Sirodom as Chairman, with Adjunct Professor Kitipong Urapeepatanapong, Paiboon Nalinthrangkurn, Sopawadee Lertmanaschai and Thiti Tantikulanan as committee members.

In 2022, the committee held a total of 14 meetings to carry out duties within the scope of responsibilities specified in the Committee's Charter. The essence can be summarized as follows:

### Nomination

- 1) Considered the extension of the term of SET's Appeals Committee members who have completed the tenure
- 2) Considered the list of Board of Directors of SET's subsidiaries and associated companies for the year 2022
- 3) Considered the criteria for the selection of qualified members for the 2022 Capital Market Development Fund (CMDf) committee
- 4) Considered and reviewed the database of Experts Pool to adjust by taking out and adding new names to the list for nomination and appointment as governors, committee members, and experts in various fields
- 5) Considered the guidelines for nomination of governors to replace those whose terms end
- 6) Considered the guidelines for appointment of the Performance Review Committee of the CMDf for the year 2022
- 7) Considered the renewal of the Securities Investor Protection Fund (SIPF) committee members, the appointment of the Derivatives Investor Protection Fund (DIPF) committee members, and the Information Technology Committee (ITC) members, only regarding the Chairperson of ASCO's IT Club
- 8) Reviewed the composition of the Board of Directors of companies in the New Business group under SET Venture Holding Company Limited (SVH), aiming at efficient management, and more in line with the business strategy and direction of each company
- 9) Considered the formulation of a Skill Matrix in considering the list of persons to be elected as governor to be considered and appointed by the Securities and Exchange Commission (SEC), in line with the corporate direction and strategic plan in the coming years

- 10) Considered and screened the list of persons to be elected as governors to be considered for appointment by the SEC's board of directors
- 11) Considered and approved the promotion of Executive Vice President (EVP) to Senior Executive Vice President (SEVP)
- 12) Considered and approved the names of members of various committees to fill the vacant positions
- 13) Considered the change in the person who holds the position of Managing Director of Digital Access Platform Co., Ltd. (DAP)
- 14) Considered the appointment of the CMDf Performance Review Committee members for the year 2022
- 15) Considered the appointment of SET's and Thailand Clearing House Co., Ltd. (TCH)'s Risk Management Committee members, to fill the vacancy
- 16) Acknowledged the appointment of SET's committee members, to fill the vacancy

### Remuneration

- 1) Considered the remuneration of employees for the year 2021
- 2) Considered the remuneration of the SET President for the year 2021
- 3) Acknowledged the overview of the remuneration allocation for executives and employees for the year 2021
- 4) Considered the salary restructuring for SET employees by hiring a consulting firm to study and review the remuneration of the employees
- 5) Considered the results of the studies of the "SET Pay Benchmarking" project by Mercer in order to adjust the salary structure of SET employees, by comparing it with the labor market in similar businesses to be competitive and to enable the recruitment of potential talents from outside
- 6) Considered the guidelines for performance assessment of the SET President for the year 2022
- 7) Acknowledged the remuneration of the governors and committee members for the year 2021 by comparing their remunerations, and that of directors of the SET subsidiaries with other organization

## Others

- 1) Reviewed the current 2022 NRC Charter, with no need to be revised as already in line with the current operation
- 2) Acknowledged the overall operation of the Human Resources and Corporate Development Division during 2019 - 2022

In summary, the committee has performed the duties appropriately in accordance with the duties, experiences and responsibilities assigned to each committee member, in compliance with the good corporate governance principles set by SET as operational guidelines.



(Dr. Kulpatra Sirodom)

Chairperson

Nomination and Remuneration Committee

March 22, 2023

## Sustainability Committee Report

The Sustainability Committee (SC) consists of four members three of which are not involved in The Stock Exchange of Thailand (SET) management affairs and the other is governor-cum-SET president. In 2022, a total of five meetings were convened (The attendance record of the committee members is available in “Report on Key Performance Regarding Corporate Governance” section of the Annual Report). SC has completed its duties in accordance with the scope of responsibilities as indicated in the Charter and as assigned by the SET Board of Governors (BoG). Furthermore, SC has delivered quarterly reports to the SET BoG.

Here is a summary highlighting SC’s undertaking for 2022.

### 1. Development of the SET Group Corporate Governance

SC has presented the following for the BoG’s consideration and approval:

- 1.1 Reviewed and updated the SET group Corporate Governance Policy and Code of Conduct to correspond to the restructured corporate governance of subsidiaries in the New Business group under SET Venture Holding Company Limited (SVH). This includes applying SET’s corporate governance policy and guidelines to new business company operations and updating the policy for preventing and managing conflicts of interest by adding measures to ensure a clearer separation of roles and responsibilities of SET units responsible for business operations and those responsible for market supervision and regulation. Also included is the increase in channels for providing leads or lodging complaints.
- 1.2 Updated the rules for governor and employee securities trading to cover digital tokens traded via the Thai Digital Assets Exchange Company Limited to promote transparency and prevent insider trading
- 1.3 Promoted and monitored of corporate governance matter such as boosting awareness and understanding of corporate governance concept adherence, employee code of conduct, personal data protection practices, ICT use, and SET group rules and regulations via electronic platforms as well as communication with SET group subsidiaries to ensure that all operations are aligned
- 1.4 Reviewed the appropriateness of the Charter and the performance assessment of the SET BoG, and SC, as well as its approval of the SET Corporate Governance Report and Sustainability Committee Report before making these available in the 2022 annual report

### 2. SET Group Sustainability Development

SC has approved the SET group’s sustainability development plan to attain a standard level and show responsibility for society and the environment. This aims to reduce the greenhouse gas emissions seen in the SET group’s workflow and procedures towards its “Net Zero” goal. This also involves designating the plan to set goals for lowering SET’s net greenhouse gases to zero as a strategic SET plan in 2023.

### 3. Sustainability Development for Listed Companies and Capital Market Stakeholders

SC has issued a policy for the formulation of a sustainability development plan for listed companies and intermediaries in line with SET’s sustainability development framework which corresponds to the UN Sustainable Stock Exchanges Initiative and global standards related to SET’s context. The details are as follows:

#### 3.1 Sustainability development for listed companies and intermediaries

SC has offered recommendations for the formulation of the annual plan and for monitoring operational adherence to the plan toward sustainability development regarding listed companies and intermediary institutions in four main plans. These are the following:

- 1) Sustainable Business: Promote and elevate the ESG quality of listed companies via development tools best suited to the readiness and context of each. This will allow the companies to incorporate ESG in their operations, strengthen these organizations, and enhance their competitiveness thus enabling them to grow sustainably and be of interest to investors.
- 2) ESG Data Platform: Develop the ESG Data Platform to bring about systematic ESG data recording and collection for listed companies to support effective data analysis and reporting and for industry-wide benefit
- 3) Sustainable Investment: Promote sustainable investment and sustainable development of intermediaries as well as further educate personnel and officers of securities firms, fund management companies, institutional investors, and stakeholders. This also includes supporting ESG-related product development and boosting awareness concerning tools used in investment decision making.

- 4) SET ESG Academy: The academy is a mechanism to support and further widespread awareness of sustainability; create positive change both at the individual and organizational levels; provide a platform to cultivate and disseminate sustainability knowledge to listed companies, SMEs, investors, and any member of the public who might be interested; and create and develop ESG professions that can play a key role in driving forward sustainability development in the capital market.

### 3.2 Sustainability development for capital-market-related organizations

SC has issued a policy and recommendations concerning development of organizations and capital market stakeholders through development and educational projects. Examples expanding on the creation of social enterprises, developing and providing knowledge of startups and SMEs, and educating professionals, investors, officers, school students, university students, and retirees. The key guidelines for these efforts are the following:

- 1) Provided knowledge on finance and managing household debt to build immunity and lessen financial burdens during times of economic recession and widespread impact, developing financial management tools to educate newer generations and encourage them to change their spending habits for financial prosperity, developing capital market professionals to possess financial knowledge and skills, equipping youth with entrepreneurial skills, and teaching responsible investing to support sustainable capital market development

- 2) Set a policy to develop and expand on social enterprises to bring about concrete societal outcomes through learning curricula and practical activities and organizing training programs for corporate executives under the theme of CSR transformation, which involves integrating CSR into a business's value chain for sustainable operations
- 3) Promoted a policy of caring management of the environment to lower the greenhouse gas emissions of listed companies and companies in general via three projects, namely Care the Bear, Care the Whale, and Care the Wild. All three initiatives will be interlinked via a single platform and there are plans to link the Climate Care Platform with the SET-ESG Data Platform to enable listed companies to conveniently include their greenhouse gas emission reduction reports for all three initiatives in the 56-1 One Report.

In conclusion, SC is of the opinion that SET has carried out its efforts to further develop corporate governance and sustainability for the SET group, listed companies, and stakeholders appropriately and efficiently and in line with the goals to support and develop the Thai capital market sustainability. Furthermore, it has made the information public in its performance report in accordance with the corporate governance concept in a transparent and appropriate manner meeting international standards.



(Adjunct Professor Dr. Kittipong Kittayarak)

Chairperson  
Sustainability Committee  
March 1, 2023



## Risk Management Committee Report

The current Risk Management Committee (RMC) has been appointed by The Stock Exchange of Thailand (SET)'s Board of Governors (BoG). RMC consists of nine committee members: six Board members, two non-executive experts, and the SET President, as follows:

1. Pichet Sithi-Amnuai (Chairperson)
2. Dr. Anuchit Anuchitanukul
3. Dr. Kulpatra Sirodom
4. Paiboon Nalinthrangkurn
5. Supachoke Supabundit\*
6. Thiti Tantikulan
7. Dr. Amporn Sangmanee\*\*(expert)
8. Somkiat Sirichatchai (expert)
9. Dr. Pakorn Peetathawatjai

\* appointed effective from August 22, 2022

\*\* appointed effective from October 19, 2022

RMC oversees and considers the risk management process to ensure that such process complies with the policy, framework, and process of the risk management of the organization. In addition, RMC also regularly reports key risk status of the SET group to the BoG according to the scope of responsibilities specified in the RMC Charter.

In 2022, RMC held eight meetings, including one joint meeting with the Audit Committee (AC). The attendance record of each committee member is available in the Report on Key Performance Regarding Corporate Governance (Please see details on page 118). A summary of key activities and performance in 2022 is as follows:

- **Risk management of businesses / new projects:** RMC considered and provided opinions and additional suggestions on risk management covering Common Infrastructure for Brokers' Back Office system service, risk management guidelines of the New Trading System project, as well as risk management policy and guidelines for digital asset-related business operations.

- **Risk management of SET's subsidiaries :** RMC has continuously and regularly considered and provided suggestions on the risk management of SET's subsidiaries to ensure that the risk management of the subsidiaries are carried out in alignment with the SET group. In 2022, these consisted of services under SET's Digital Access Platform Company Limited (DAP) in providing additional linkage services to database providers with customer profile and risk assessment, as well as additional Point Gateway services. Moreover, RMC considered and suggested that the appropriateness for the linkage service to Mobile ID of The National Broadcasting and Telecommunication Commission be reviewed.

- **Risk management of key operations:** RMC considered and provided suggestions on the risk management of various key operations, such as 1) Risk profile of the SET group for 2022; 2) The review of the SET group's policies related to risk management; 3) The annual review of Directors & Officers (D&O) and Financial Institutions Professional Indemnity (FIPI) insurance policy of the SET group for 2022; 4) The overview of investment risk management; and 5) Business Continuity Plan (BCP) Test for 2022, etc.

- **Risk status monitoring:** RMC has regularly monitored the status of key risks of the SET group, to ensure continuous and efficient risk monitoring and supervision. In addition, RMC reports the performance of RMC to the BoG on a quarterly basis.

- **Risk management and internal audit:** RMC has communicated, exchanged information and coordinated with related parties regarding risk management and internal audit. In 2022, RMC held one joint meeting with the AC so as to be informed of the implementation result of the Climate and Energy Action, and the report on the operating result of IT Cyber Security 2022. All these will benefit the development and enhancement of SET's operations.

In summary, RMC viewed that in 2022 SET has continuously implemented the enterprise risk management activities to cover all the key aspects and monitoring process of the SET group, in line with the changing situations. In addition to RMC's regular meetings, RMC has conducted a joint meeting

with the AC, all of which have enabled SET's risk management operations to be efficient and appropriate, while being able to control and minimize risks at acceptable level.



(Pichet Sithi-Amnuai)

Chairperson  
Risk Management Committee  
February 24, 2023

## Information Technology Committee Report

The current Information Technology Committee (ITC) was appointed by the Board of Governors (BoG) of The Stock Exchange of Thailand (SET) on December 30, 2020, consisting of four SET governors, Chairperson of the Information Technology Club (IT Club) under the Association of Thai Securities Companies (ASCO), one IT expert, and SET President. The list of seven ITC members is as follows:

1. Dr. Anuchit Anuchitanukul (Chairperson)
2. Paiboon Nalinthangkurn
3. Pichet Sithi-Amnuai
4. Supachoke Supabundit
5. Chakhorn Tonghoon (Chairperson of IT Club, ASCO)
6. Pannaporn Sapsomboon (Expert)
7. Dr. Pakorn Peetathawatchai

In 2022, the SET BoG resolved the appointment of Chakhorn Tonghoon as a member of ITC, in his role as Chairperson of the IT Club under ASCO, replacing Prakrit Thanwalai, with a term of office from April 21, 2022 to December 31, 2023. In addition, the SET BoG resolved the appointment of Supachoke Supabundit as a member of ITC in his role as a SET governor, replacing Thiti Tantikulanan, with a term of office from August 22, 2022 to the end of his term as SET governor.

In 2022, the committee held a total of 13 meetings, the details of each member of the Committee's attendance appeared in the topic of "Report on Key Performance Regarding Corporate Governance". ITC has performed the duties and expressed opinions within the scope of authority, duties and responsibilities assigned by the SET BoG, regarding consultation on the strategy and policy of IT development, taking into consideration all groups of stakeholders in all aspects. In addition, the operation results have been reported to the BoG for acknowledgement every quarter. The essence of the duties and operations can be summarized as follows:

### Strategic Project Implementation and Improvement of Key Systems to Support Business Operations

- Considered and provided advice and suggestion for IT projects in the SET group to comply with industry-accepted standards, so as to up level the Thai capital market to be on a par with and competitive to leading stock exchanges in

the region, such as the New Trading System development project, the Common Infrastructure for Brokers Back Office System development project, the Network Firewall Refreshment equipment procurement project, operation system infrastructure & related regulations development project to support the service of Thai Digital Assets Exchange (TDX)

- Delivered policies and provided recommendations for the improvement of key systems to support trading transaction growth in a sustainable manner, such as the Market Surveillance System (SMARTS)
- Delivered policies to consider the impact and risks related to regulations that require approval from the Securities and Exchange Commission (SEC) in developing the systems to support new products in the future
- Delivered the management policy to change Network equipment to avoid risks affecting key systems and projects, for the overall benefit of the organization and the stakeholders

### Cybersecurity

- Followed up continuously the operations related to the cybersecurity of the SET group's systems, such as Black box penetration test (from experts), and Security Awareness test among employees via Phishing email and SMS activities so that the SET group's employees realize and understand the situation and prepare an effective cyber defense plan when an incident occurs. ITC also provided opinions useful for carrying out various activities such as organizing training on various topics to keep all employees well-informed and knowledgeable.
- Considered and provided recommendations in cooperating with the SEC and ASCO in enhancing cybersecurity for the capital market (Sectorial CERT)
- Considered and provided suggestions on the review of the IT security policy to be in line with the announcements of the SEC and BOT, as well as in accordance with the international standards (ISO) as SET has been certified
- Delivered policies to manage risks on the stability of the network that provides services to external systems, by considering conducting a user readiness assessment before connecting (Conformance Assessment)

## Consideration and Approval of Procurement to Support Business Operations

- Considered and approved the technology procurement qualifications in the SET group to suit business goals and maximize benefits for the organization, such as procurement of hardware equipment, additional system development (Change Request), IT Consult for securities trading system development project (New Trading System), network management service providers of SETNET3, and Network Firewall Refreshment devices
- Delivered appropriate policies for hiring service providers (Vendor/Outsource), as such helping reduce costs for businesses in sustainable way

In summary, ITC has performed the duties according to the ITC Charter, based on the experiences and the changing situations suitable for business operations. The committee also considered the operational guidelines and monitored the progress of major projects, as well as making suggestions on technology aspects with benefits to the industry as a whole, and in compliance with the principles of SET's good corporate governance.



(Dr. Anuchit Anuchitanukul)

Chairperson  
Information Technology Committee  
February 14, 2023



## Legal Committee Report

The Stock Exchange of Thailand (SET)'s current seven-member Legal Committee (LC) has been appointed by the SET Board of Governors (BoG), consisting of two SET governors, four experts in law and/or capital market, and SET President. The list of the seven members is as follows:

1. Adjunct Professor  
Kitipong Uraepatanapong\* (Chairperson)
2. Adjunct Professor Dr. Kittipong Kittayarak\*
3. Professor Dr. Kumchai Jongjakapun (expert)
4. Associate Professor Pises Sethsathira (expert)
5. Somkiet Kuwawattananont (expert)
6. Surasak Vajasit (expert)
7. Dr. Pakorn Peetathawatchai

\* Appointed on August 22, 2022

During the year of 2022, an LC member, Dr. Seree Nonthasoot, retired due to the expiration of his term of office as a SET governor since August 4, 2022. The SET BoG, therefore, resolved the appointment of Adjunct Professor Kitipong Uraepatanapong, in his role as a SET governor, to replace Dr. Seree Nonthasoot as an LC member and Chairperson of the LC. In addition, the SET BoG has also

appointed Adjunct Professor Dr. Kittipong Kittayarak as an additional LC member in his role as a SET governor. Both LC members shall have the term of office from August 22, 2022 to the end of their term as SET governors.

In 2022, LC held a total of 10 meetings, of which each member's attendance appeared in SET's Good Corporate Governance Report. Certain key performing duties of LC in 2022 are as follows:

1. Considered and provided advices, opinions and recommendations to the SET BoG and SET regarding legal issues associated with securities and exchange law, derivatives law and other laws, as well as rules and regulations of SET
2. Considered and provided opinions on the enactment or improvement of the rules and regulations of SET, such as setting regulations for investment companies, improving regulations regarding fee collection, etc.
3. Considered and provided advices on matters that purport to protect and maintain the benefits of SET, including providing opinions or suggestions that will be beneficial to SET's operations

LC has fulfilled all of the duties as specified in the Charter, and has provided recommendations on various matters which are for the benefits of SET's operation.



(Adjunct Professor Kitipong Uraepatanapong)

Chairperson  
Legal Committee  
February 10, 2023



# 11

## Significant information

### 11.1 Financial Highlights

#### SET Group Financial Highlights

(In Million Baht)

	2022	2021	2020
<b>Consolidated statements of revenues and expenses</b>			
Total revenues	7,751	7,915	6,711
Operating revenues	7,554	7,735	6,548
Other income <sup>1</sup>	197	180	163
Operating expenses	5,134	5,036	4,289
Revenues over expenses from operation	2,617	2,879	2,422
Investment income (loss), net	(365)	369	(364)
Contribution to the Capital Market Development Fund	539	583	362
Revenues over expenses, net	1,406	1,597	1,354
<b>Consolidated statements of cashflows</b>			
Net cash provided by operating activities	1,037	3,297	2,312
Net cash provided by (used in) investing activities	(4,410)	(2,320)	3,397
Net cash used in financing activities	(16)	(16)	(14)
<b>Consolidated statements of financial position</b>			
Total current assets <sup>2</sup>	32,690	35,220	34,516
Total assets	56,306	56,881	54,427
Total current liabilities <sup>2</sup>	21,193	23,498	23,471
Total liabilities	25,442	27,512	26,720
Fund balances	30,864	29,369	27,707
Assets / payables of margin deposits and benefits <sup>2</sup>	18,458	19,776	20,326
<b>Key financial ratios</b>			
Total revenue growth (%)	(2.07)	17.94	5.89
Operating revenue growth (%)	(2.34)	18.13	11.17
Operating expenses to operating revenues (%)	67.96	65.11	65.50
Net profit margin <sup>3</sup> (%)	18.14	20.18	20.18
Return on fund balance (%)	4.56	5.44	4.89
Current ratio (Times)	1.54	1.50	1.47
Debt to fund ratio (Times)	0.82	0.94	0.96

<sup>1</sup> Other income mainly consist of educational activities income, revenues from fees and management funds etc.

<sup>2</sup> Other current assets and other current liabilities included margin deposits and benefits at the same amount (as the guarantee for derivative contracts of the clearing house)

<sup>3</sup> Net profit margin calculated by revenues over expenses, net / total revenues

## 11.2 Sustainability Performance

### SET's Sustainability Performance

Material Topics	Indicators	Unit	Performance					
			2022 <sup>6</sup>		2021		2020	
Good Corporate Governance								
Good Corporate Governance	Male governors	Persons	9	82%	8	73%	8	73%
	Female governors	Persons	2	18%	3	27%	3	27%
	Total number of governors	Persons	11	100%	11	100%	11	100%
	Average governor age	Years	60		59		60	
	Average board meeting attendance	%	96		100		97	
	Number of cases or complaints related to corruption in SET’s operations	Case (s)	0		0		0	
	Number of cases or complaints on violations of regulations on the acquisition or disposition of securities by governors, executives, and employees	Case (s)	0		0		0	
	Number of cases or complaints related to insider trading by governors, executives, and employees	Case (s)	0		0		0	
Sustainable Risk Management								
Sustainable Risk Management	Number of cyberattacks or system malfunctions	Case (s)	0		0		0	
Sustainable Finance and ESG Product								
Corporate Sustainability Development for Listed Companies	Number of listed companies in the Thailand Sustainability Investment (THSI) list	Companies	170		146		124	
	Market capitalization of listed companies in the THSI list to total market capitalization	%	73		66		69	
	Number of SET’s listed companies in the Dow Jones Sustainability Indices (DJSI)	Companies	26		24		21	
	Average Corporate Governance Report (CGR) score of listed companies	Scores	85		84		83	

Material Topics	Indicators	Unit	Performance					
			2022 <sup>6</sup>		2021		2020	
Sustainable Investment Promotion	Number of listed companies in the SETTHSI Index	Companies	98		77		58	
	Market capitalization of listed companies in the SETTHSI Index to total market capitalization	%	62		60		61	
	Number of investors and investment professionals accessing the Sustainable Investment Education	Persons	8,800		9,200		-	
Employee Development and Care								
Employee Development and Care	Male permanent employees	Persons	254	32%	246 <sup>3</sup>	32%	244	32%
	Female permanent employees	Persons	533	68%	517 <sup>3</sup>	68%	509	68%
	Total number of permanent employees	Persons	787	100%	763 <sup>3</sup>	100%	753	100%
	Average employee engagement score	%	- <sup>5</sup>		78		78	
	Employee voluntary turnover rate	%	3.4		3.7 <sup>3</sup>		2.4 <sup>3</sup>	
	Employee development expenses	THB million	29.80		38.00		34.70	
	Average training hours of permanent employees	hours	58		69		54	
	Total number of permanent employees joining employee provident fund	%	100		100		100	
	Number of cases or incidents of work-related injuries or fatalities of employees	Case (s)	0		0		0	
	Average sick leave rate of employees	working days/ person	2.70		1.72		1.62	
	Number and rate of fatal work injuries	Persons	0		0		0	
		Persons/ 1 million hours worked	0		0		0	
	Lost-Time Injury Frequency Rate (LTIFR)	Incidents	0		0		0	
		Persons	0		0		0	
		Persons/ 1 million hours worked	0		0		0	



Material Topics	Indicators	Unit	Performance		
			2022 <sup>6</sup>	2021	2020
Social and Financial Inclusion					
Investment and Financial Literacy Promotion for the Public	Number of visits to the Capital Market Education Center <sup>1</sup>	Million visits	2.01	1.72	1.12
	Number of individuals learning about financial planning through the Happy Money Project	Million people	3.06	3.00	2.44
Social Impact Platform	Number of social enterprises benefitting from the SET Social Impact Platform	Organizations	100	114	94
	Number of partners of the SET Social Impact Platform	Organizations	430	300	250
	Number of views accessing the SET Social Impact website	Views	433,310	260,000	192,798
Fostering the Quality of Life	Charitable Contributions	THB million	61	112 <sup>2</sup>	11
	Accumulated value of shares donated via Pan Hoon Aom Boon and Pan Pol Aom Suk projects	THB million	11.60	11.46	11.00
Climate Action					
Environmental Management <sup>4</sup>	Greenhouse gas emissions (GHG emissions)				
	Total GHG emissions - scope 1	tons CO <sub>2</sub> e per year	210	175	178
	Total GHG emissions - scope 2		6,624	6,035	5,902
	Total GHG emissions from scope 1 and scope 2		6,834	6,210	6,080
	Energy consumption in the organization				
	Electricity purchased from third-party	Megawatt-hours	13,250	12,072	11,807
	Electricity consumption from solar energy		136	60	70
	Total electricity consumption		13,386	12,132	11,877
	Fuel consumption of stationary combustion	Liters	7,781	7,237	4,842
	Fuel consumption of mobile combustion		73,421	63,046	67,263
	Total fuel consumption		81,202	70,283	72,105
	Water withdrawal from low water stress area by source				
	Third-party water	Cubic meters	62,675	54,325	55,865

Material Topics	Indicators	Unit	Performance		
			2022 <sup>6</sup>	2021	2020
	Water discharge to low water stress area by source				
	Total water discharge to surface water	Cubic meters	18,795	16,191	16,957
	Waste				
	Total non-hazardous waste	Tons	63.71	45.27	98.33
	Total hazardous waste		7.81	3.68	0.26
	Total waste		71.52	48.95	98.59
	Proportion of green procurement	%	86	84	77
Collaboration Platform for Climate Action	Care the Bear project – GHG reduction	kgCO <sub>2</sub> e per year	4,773,412	1,988,360	2,742,426
	Care the Whale project – GHG reduction		13,712,368	9,760,868	4,350,688
	Total reduction of greenhouse gas emissions from the Climate Care Collaboration Platform		18,485,780	11,749,228	7,093,114
	Total absorption of greenhouse gas emissions from Care the Wild project		312,300	243,000	-

**Note :**

<sup>1</sup> Based on the number of on-site visitors and views (online channels) in the Maruey Library and INVESTORY.

<sup>2</sup> Donation to healthcare related agencies for assistance and alleviation of social impact from the COVID-19 pandemic in a tune of THB 103 million

<sup>3</sup> Reviewed and revised data

<sup>4</sup> Scope of data collection was expanded for wider coverage of the SET Buildings. The disclosed data in this section were not verified by external agencies but reviewed by related department to ensure accuracy and completeness.

<sup>5</sup> The survey will be conducted every two years.

<sup>6</sup> In 2022, there were more users and visitors to SET's buildings due to the government's relaxation of the COVID-19 restrictions. As a result, the amount of greenhouse gas emissions, energy consumption, water consumption and waste volume increased significantly compared to the previous year when COVID-19 pandemic influenced on the number of users and visitors to SET's building and fuel consumption was less than usual operation.

N/A is not applicable

Symbol (-) is to show that there is no data record for the year or project has yet to operate



# 12 Financial Report

## Report of the Board of Governors Relating to Responsibility for Financial Reporting

The Board of Governors is responsible for the consolidated financial statements of The Stock Exchange of Thailand (SET) and its subsidiaries, and the separate financial statements of The Stock Exchange of Thailand, including the financial information presented in this annual report. The financial statements for the year ended December 31, 2022 have been prepared in accordance with Thai Financial Reporting Standards. In preparing the financial statements, appropriate accounting policies have been adopted and regularly adhered to, using careful discretion and reasonable estimates. Important information has also been adequately disclosed in the notes to financial statements, so as to reflect the financial status, performance and cash flows in an accurate and transparent manner, providing benefits to the public.

The Board of Governors has provided and maintained the risk management system, internal control system, internal audit system and effective corporate governance to ensure that accounting records are accurate, complete and adequate to secure its assets and prevent risks, while preventing fraud or irregular operations in essence as well.

To accomplish this task, the Board of Governors has appointed an Audit Committee, consisting of independent

non-executive directors, to be responsible for the quality of financial reports, the review of internal control system, internal audit system and risk management system. The opinions of the Audit Committee are included in the Audit Committee Report section of this annual report.

The consolidated financial statements of The Stock Exchange of Thailand (SET) and its subsidiaries, and the separate financial statements of The Stock Exchange of Thailand have been examined by an external auditor, EY Office Limited. In conducting the audit, SET has provided supporting information and documents so that the auditor could examine and express opinions in accordance with Thai Standards on Auditing. The auditor's opinion is presented in the auditor's report as part of this annual report.

The Board of Governors is of the opinion that the SET's overall internal control system is adequate and appropriate, and can create confidence that the consolidated financial statements of The Stock Exchange of Thailand (SET) and its subsidiaries, and the separate financial statements of The Stock Exchange of Thailand for the year ended December 31, 2022 are reliable and in compliance with Thai Financial Reporting Standards and related regulations.

**(Dr. Prasarn Trairatvorakul)**

Chairman

**(Dr. Pakorn Peetathawatchai)**

President



## Independent Auditor's Report

### To the members of The Stock Exchange of Thailand and The Stock Exchange of Thailand

#### Opinion

I have audited the accompanying consolidated financial statements of The Stock Exchange of Thailand and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at 31 December 2022, and the related consolidated statements of comprehensive revenues and expenses, changes in fund balances and cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies, and have also audited the separate financial statements of The Stock Exchange of Thailand (SET) for the same period.

In my opinion, the financial statements referred to above present fairly, in all material respects, the financial position of The Stock Exchange of Thailand and its subsidiaries and of The Stock Exchange of Thailand as at 31 December 2022, their financial performance and cash flows for the year then ended in accordance with Thai Financial Reporting Standards.

#### Basis for Opinion

I conducted my audit in accordance with Thai Standards on Auditing. My responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of my report. I am independent of the Group in accordance with the *Code of Ethics for Professional Accountants including Independence Standards* issued by the Federation of Accounting Professions (Code of Ethics for Professional Accountants) that are relevant to my audit of the financial statements, and I have fulfilled my other ethical responsibilities in accordance with the Code of Ethics of Professional Accountants. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

#### Emphasis of Matter

I draw attention to Note 33 to the consolidated financial statements, which describes the recording of income tax with respect to the remittance of contribution to CMDF. My opinion is not modified in respect of this matter.

#### Key Audit Matters

Key audit matters are those matters that, in my professional judgement, were of most significance in my audit of the financial statements of the current period. These matters were addressed in the context of my audit of the financial statements as a whole, and in forming my opinion thereon,

and I do not provide a separate opinion on these matters.

I have fulfilled the responsibilities described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of my report, including in relation to these matters. Accordingly, my audit included the performance of procedures designed to respond to my assessment of the risks of material misstatement of the financial statements. The results of my audit procedures, including the procedures performed to address the matters below, provide the basis for my audit opinion on the accompanying financial statements as a whole.

Key audit matters and how audit procedures respond for each matter are described below.

#### Revenue recognition - trading fees

As disclosed in Note 4 and Note 26 to the consolidated financial statements, the principal source of revenue of SET is trading fees, presenting it as "Operating revenues", under statement of comprehensive revenues and expenses. The revenue is subject to terms and conditions used in setting variable fees based on trading volume, and SET uses information technology to gather trading volume data and to calculate trading fees. I therefore focused on the audit of the gathering and processing of securities trading data by information technology systems as well as the accuracy and completeness of the trading volume data used in the revenue calculation.

The key audit procedures were as follows:

- Gained an understanding of operations and internal control procedures related to the recognition of revenue from trading fees.
- Assessed and tested, on a sampling basis, the internal controls relevant to recognition of trading fees revenue, including IT general controls, application controls and other related internal controls.
- Applied a sampling method to select agreements and test the revenue calculation to ensure that the trading fee revenue recognised was correct, consistent with the conditions of the relevant agreement and in accordance with Thai Financial Reporting Standards.
- On a sampling basis, examined supporting documents for trading fee revenue transactions occurring during the year and near the end of the reporting period.



- Performed analytical procedures on the relationship of the accounting transactions to the trading fees and performing analytical procedures on disaggregated data to detect possible irregularities in transactions throughout the reporting period.
- Reviewed credit notes that SET issued during and after the reporting period.

## Other Information

Management is responsible for the other information. The other information comprise the information included in annual report of the Group, but does not include the financial statements and my auditor's report thereon.

My opinion on the financial statements does not cover the other information and I do not express any form of assurance conclusion thereon.

In connection with my audit of the financial statements, my responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or my knowledge obtained in the audit or otherwise appears to be materially misstated.

When I read the annual report of the Group, if I conclude that there is a material misstatement therein, I am required to communicate the matter to those charged with governance of correction of the misstatement.

## Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with Thai Financial Reporting Standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

## Auditor's Responsibilities for the Audit of the Financial Statements

My objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Thai Standards on Auditing will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Thai Standards on Auditing, I exercise professional judgement and maintain professional skepticism throughout the audit. I also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. I am responsible for the direction, supervision and performance of the group audit. I remain solely responsible for my audit opinion.

I communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

I also provide those charged with governance with a statement that I have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on my independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, I determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. I describe these matters in my auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, I determine that a matter should not be communicated in my report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

I am responsible for the audit resulting in this independent auditor's report.



(Sumana Punpongsanon)

Certified Public Accountant (Thailand) No. 5872

EY Office Limited

Bangkok: 22 February 2023

## Financial Statements and Notes to Financial Statements

### The Stock Exchange of Thailand and its subsidiaries

#### Statements of financial position

As at 31 December 2022

(Unit: Thousand Baht)

		Consolidated financial statements		Separate financial statements	
	Note	2022	2021	2022	2021
Assets					
Current assets					
Cash and cash equivalents	7	5,620,910	9,016,927	4,437,428	6,499,135
Cash at banks for financial benefits payable		84,202	83,578	-	-
Assets for margin deposits and benefits	17	18,457,840	19,775,717	-	-
Other current financial assets	8	7,680,044	5,601,530	5,890,573	3,511,715
Trade and other receivables	9	649,459	690,405	483,674	514,816
Derivative assets		111,774	7,311	111,774	7,311
Other current assets	10	85,325	44,878	79,546	40,764
Total current assets		32,689,554	35,220,346	11,002,995	10,573,741
Non-current assets					
Other non-current financial assets	11	7,630,170	6,264,029	5,155,902	6,259,029
Investments in subsidiaries	12	-	-	2,282,700	1,832,700
Investments in associates and joint venture	13	1,029,327	1,017,057	789,984	790,047
Assets for clearing system protection and benefits	18	2,279,066	2,049,124	150,740	150,613
Securities Investor Protection Fund	25	850,440	856,836	850,440	856,836
Derivatives Investor Protection Fund	25	114,722	112,871	-	-
Long-term loans to subsidiaries	6	-	-	6,140,679	5,690,834
Reserve Fund for clearing and settlement	19	5,709,780	5,702,029	-	-
Property, plant and equipment	14	4,066,652	4,228,078	4,066,364	4,227,746
Right-of-use assets	15	24,658	27,261	24,658	27,261
Intangible assets	16	1,115,682	799,339	1,110,882	794,550
Deferred tax assets	33	183,497	146,107	176,081	143,332
Other non-current assets	20	612,919	457,893	581,318	425,940
Total non-current assets		23,616,913	21,660,624	21,329,748	21,198,888
Total assets		56,306,467	56,880,970	32,332,743	31,772,629

The accompanying notes are an integral part of the financial statements.

## The Stock Exchange of Thailand and its subsidiaries

### Statements of financial position (continued)

#### As at 31 December 2022

(Unit: Thousand Baht)

		Consolidated financial statements		Separate financial statements	
	Note	2022	2021	2022	2021
Liabilities and fund balances					
Current liabilities					
Margin deposits and benefits payable	17	18,458,480	19,784,276	-	-
Trade and other payables	21	2,211,697	2,999,293	1,924,144	1,997,931
Derivative liabilities		-	29,840	-	29,840
Current portion of lease liabilities	15	10,963	14,256	10,963	14,256
Fees received in advance		171,625	300,367	142,813	270,317
Income tax payable		137,443	121,560	-	-
Short-term loans from subsidiary	6	-	-	1,931,485	1,810,985
Other current liabilities	22	202,499	248,651	116,720	148,038
Total current liabilities		21,192,707	23,498,243	4,126,125	4,271,367
Non-current liabilities					
Lease liabilities, net of current portion	15	14,340	14,680	14,340	14,680
Assets for clearing system protection and benefits payable	18	2,128,313	1,898,511	-	-
Contributions and benefits to Securities Investor Protection Fund	25	341,358	344,488	341,358	344,488
Contributions and benefits to Derivatives Investor Protection Fund	25	56,095	55,438	-	-
Deferred tax liabilities	33	1,582	-	-	-
Provision for long-term employee benefits	23	740,155	731,444	740,155	731,444
Provision for tax liabilities	33	952,000	952,000	952,000	952,000
Other non-current liabilities		15,438	17,261	15,438	17,261
Total non-current liabilities		4,249,281	4,013,822	2,063,291	2,059,873
Total liabilities		25,441,988	27,512,065	6,189,416	6,331,240
Fund balances					
Funds	24	30,864,478	29,368,904	26,143,327	25,441,389
Non-controlling interests		1	1	-	-
Total fund balances		30,864,479	29,368,905	26,143,327	25,441,389
Total liabilities and fund balances		56,306,467	56,880,970	32,332,743	31,772,629

The accompanying notes are an integral part of the financial statements.



## The Stock Exchange of Thailand and its subsidiaries

### Statement of comprehensive revenues and expenses

#### For the year ended 31 December 2022

(Unit: Thousand Baht)

		Consolidated financial statements		Separate financial statements	
	Note	2022	2021	2022	2021
Revenues and expenses:					
Revenues					
Operating revenues	26	7,554,326	7,734,730	3,456,128	3,809,064
Other income	28	196,566	180,107	1,977,441	1,978,798
Total revenues		7,750,892	7,914,837	5,433,569	5,787,862
Expenses					
Employee expenses	29	2,161,851	2,146,278	2,161,851	2,146,278
Directors' remuneration		32,763	32,352	28,997	28,211
Direct service expenses		607,749	522,668	716	-
Building and office expenses		211,869	184,483	210,504	183,848
Technology expenses		337,029	271,125	336,208	270,959
Marketing expenses		167,237	134,331	156,613	107,151
Educational activity expenses		48,429	37,933	48,429	37,933
SEC Fees	30	746,053	910,368	740,094	904,672
Depreciation and amortisation	14, 15, 16	536,141	519,922	534,986	518,791
Other expenses	31	284,687	276,150	276,594	268,276
Total expenses		5,133,808	5,035,610	4,494,992	4,466,119
Operating revenues over expenses		2,617,084	2,879,227	938,577	1,321,743
Non-operating revenues					
Investment revenue (loss), net	27	(364,846)	369,419	218,352	1,075,682
Income (expenses) derived from Securities Investor Protection Fund, net	25.2	(4,316)	9,417	(4,316)	9,417
Income derived from Derivatives Investor Protection Fund, net	25.2	569	514	-	-
Share of profit of investments in associates and joint venture, net of tax	13	33,137	35,590	-	-
Revenues over expenses before contribution to the Capital Market Development Fund					
Contribution to the Capital Market Development Fund	32	(538,903)	(582,978)	(538,903)	(582,978)
Revenues over expenses before income tax					
Income tax revenues (expenses)	33	(336,462)	(1,114,558)	11,200	(808,668)
Revenues over expenses for the years					

The accompanying notes are an integral part of the financial statements.

## The Stock Exchange of Thailand and its subsidiaries

### Statement of comprehensive revenues and expenses (continued)

#### For the year ended 31 December 2022

(Unit: Thousand Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2022	2021	2022	2021
<b>Other comprehensive revenues:</b>					
<i>Other comprehensive revenues to be reclassified to revenues or expenses in subsequent periods</i>					
Gain on change in value of investments designated at fair value through other comprehensive revenues, net of tax		12,283	-	-	-
Other comprehensive revenues to be reclassified to revenues or expenses in subsequent period, net of tax		12,283	-	-	-
<i>Other comprehensive revenues not to be reclassified to revenues or expenses in subsequent periods</i>					
Actuarial gain, net of tax	23	77,028	65,095	77,028	65,095
Other comprehensive revenues not to be reclassified to revenues or expenses in subsequent periods, net of tax		77,028	65,095	77,028	65,095
<b>Other comprehensive revenues for the years</b>		<b>89,311</b>	<b>65,095</b>	<b>77,028</b>	<b>65,095</b>
<b>Total comprehensive revenues over expenses for the years</b>		<b>1,495,574</b>	<b>1,661,726</b>	<b>701,938</b>	<b>1,080,291</b>
<b>Revenues over expenses attributable to:</b>					
Owners of the parent		1,406,263	1,596,631	624,910	1,015,196
Non-controlling interests of the subsidiaries		-	-	-	-
		<b>1,406,263</b>	<b>1,596,631</b>		
<b>Total comprehensive revenues over expenses for the year attributable to:</b>					
Owners of the parent		1,495,574	1,661,726	701,938	1,080,291
Non-controlling interests of the subsidiaries		-	-	-	-
		<b>1,495,574</b>	<b>1,661,726</b>		

The accompanying notes are an integral part of the financial statements.

## The Stock Exchange of Thailand and its subsidiaries

### Statement of changes in fund balances

### For the year ended 31 December 2022

(Unit: Thousand Baht)

Consolidated financial statements					
	Fund balances	Other components of fund balance	Total of fund balance	Non- controlling interests	Total fund balances
<b>Balance as at 1 January 2021</b>	27,707,178	-	27,707,178	1	27,707,179
Other comprehensive revenues for the year (Note 24)	65,095	-	65,095	-	65,095
Revenues over expenses (Note 24)	1,596,631	-	1,596,631	-	1,596,631
<b>Balance as at 31 December 2021</b>	29,368,904	-	29,368,904	1	29,368,905
<b>Balance as at 1 January 2022</b>	29,368,904	-	29,368,904	1	29,368,905
Other comprehensive revenues for the year (Note 24)	77,028	12,283	89,311	-	89,311
Revenues over expenses (Note 24)	1,406,263	-	1,406,263	-	1,406,263
<b>Balance as at 31 December 2022</b>	30,852,195	12,283	30,864,478	1	30,864,479

(Unit: Thousand Baht)

Separate financial statements			
	Fund balances	Other components of fund balance	Total fund balances
<b>Balance as at 1 January 2021</b>	24,361,098	-	24,361,098
Other comprehensive revenues for the year (Note 24)	65,095	-	65,095
Revenues over expenses (Note 24)	1,015,196	-	1,015,196
<b>Balance as at 31 December 2021</b>	25,441,389	-	25,441,389
<b>Balance as at 1 January 2022</b>	25,441,389	-	25,441,389
Other comprehensive revenues for the year (Note 24)	77,028	-	77,028
Revenues over expenses (Note 24)	624,910	-	624,910
<b>Balance as at 31 December 2022</b>	26,143,327	-	26,143,327

The accompanying notes are an integral part of the financial statements.

## The Stock Exchange of Thailand and its subsidiaries

### Cash flow statement

#### For the year ended 31 December 2022

(Unit: Thousand Baht)

		Consolidated financial statements		Separate financial statements	
	Note	2022	2021	2022	2021
Cash flows from operating activities					
Revenues over expenses before income tax		1,742,725	2,711,189	613,710	1,823,864
Adjustments to reconcile revenue over expense before tax to net cash provided by (paid from) operating activities:					
Depreciation and amortisation	14, 15, 16	536,141	519,922	534,986	518,791
Investment loss (revenue), net		189,621	(592,072)	(283,581)	(1,141,219)
Expense (income) from Securities Investor Protection Fund, net	24	4,316	(9,417)	4,316	(9,417)
Income derived from Derivatives Investor Protection Fund, net	24	(569)	(514)	-	-
Employee benefits obligation expenses	23	69,655	73,919	69,655	73,919
Loss from disposal and write-off of assets		378	394	378	394
Expected credit loss (reversal)		(2,985)	9,286	3,412	1,545
Impairment loss of investment in joint venture		63	14	63	14
Share of profit from investments in associates and joint venture, net of tax	13, 24	(33,137)	(35,590)	-	-
Finance cost	15	1,376	1,507	1,376	1,507
Revenue over expense from operating activities before changes in operating assets and liabilities		2,507,584	2,678,638	944,315	1,269,398
Operating assets (increase) decrease					
Assets for margin deposits and benefits		1,325,796	544,885	-	-
Trade and other receivables		34,991	562,500	27,588	100,575
Other current assets		(40,447)	15,176	(38,782)	15,924
Assets for clearing system protection and benefits		(229,942)	167,861	(127)	110
Securities Investor Protection Fund		6,777	(16,560)	6,777	(16,560)
Derivatives Investor Protection Fund		(2,062)	(1,332)	-	-
Other non-current assets		2,313	(7,535)	2,512	(7,525)

The accompanying notes are an integral part of the financial statements.



## The Stock Exchange of Thailand and its subsidiaries

### Cash flow statement (continued)

For the year ended 31 December 2022

(Unit: Thousand Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2022	2021	2022	2021
Operating liabilities increase (decrease)					
Margin deposits and benefits payables		(1,325,796)	(544,885)	-	-
Trade and other payables		(767,760)	520,206	(53,961)	289,841
Fees received in advance		(128,742)	(45,797)	(127,504)	(48,435)
Other current liabilities		(46,152)	79,393	(31,318)	40,633
Assets for clearing system protection and benefits payable		229,802	(168,361)	-	-
Contributions and benefits to Securities Investor Protection Fund		(3,130)	6,815	(3,130)	6,815
Contributions and benefits to Derivative Investor Protection Fund		657	560	-	-
Other non-current liabilities		(1,823)	7,095	(1,823)	7,095
Employee benefits paid	23	(28,976)	(7,282)	(28,976)	(7,282)
Cash flows from operating activities		1,533,090	3,791,377	695,571	1,650,589
Corporate income tax paid		(496,498)	(494,163)	(157,874)	(175,814)
<b>Net cash flows from operating activities</b>		<b>1,036,592</b>	<b>3,297,214</b>	<b>537,697</b>	<b>1,474,775</b>
<b>Cash flows from investing activities</b>					
Payment for long-term loans to a subsidiary	6	-	-	(449,845)	-
Cash received from investment		325,605	253,481	167,456	207,650
Purchase of other current financial assets		(7,404,350)	(3,295,945)	(5,807,180)	(2,716,681)
Proceeds from disposals of other current financial assets		5,361,910	2,249,838	3,505,338	1,754,446
Cash paid investments in subsidiary		-	-	(450,000)	(6,000)
Purchase of other non-current financial assets		(7,116,182)	(1,957,998)	(4,646,913)	(1,957,998)
Proceeds from disposals of other non-current financial assets		5,347,399	912,157	5,347,399	912,157
Cash receipt from foreign currency forward contracts		38,413	9,329	38,413	9,329
Cash paid from foreign currency forward contracts		(332,225)	(257,650)	(332,225)	(257,650)
Cash receipt (paid) from reserve fund for clearing and settlement, net		(7,751)	102,036	-	-

The accompanying notes are an integral part of the financial statements.

## The Stock Exchange of Thailand and its subsidiaries

### Cash flow statement (continued)

#### For the year ended 31 December 2022

(Unit: Thousand Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2022	2021	2022	2021
Purchase of property, plant and equipment		(208,187)	(102,643)	(208,187)	(102,643)
Proceeds from disposals of property, plant and equipment		3,049	1,084	3,049	1,084
Purchase of intangible assets		(469,113)	(325,779)	(467,984)	(322,351)
Benefits received (paid) from Securities Investor Protection Fund		(4,697)	9,746	(4,697)	9,746
Benefits received from Derivatives Investor Protection Fund		780	772	-	-
Dividend received		55,619	81,445	618,840	617,627
<b>Net cash flows used in investing activities</b>		<b>(4,409,730)</b>	<b>(2,320,127)</b>	<b>(2,686,536)</b>	<b>(1,851,284)</b>
<b>Cash flows from financing activities</b>					
Cash receipt from short-term loan from subsidiaries	6	-	-	250,000	513,500
Repayment of short-term loan from subsidiaries	6	-	-	(129,500)	(1,048,937)
Cash paid for lease liabilities	15	(16,236)	(15,820)	(16,236)	(15,820)
Interest paid		-	-	(11,115)	(11,149)
<b>Net cash flows from (used in) financing activities</b>		<b>(16,236)</b>	<b>(15,820)</b>	<b>93,149</b>	<b>(562,406)</b>
Allowance for expected credit loss of cash and cash equivalents		1,068	366	1,070	366
Net foreign exchange difference		(7,087)	50,721	(7,087)	50,721
<b>Net increase (decrease) in cash and cash equivalents</b>		<b>(3,395,393)</b>	<b>1,012,354</b>	<b>(2,061,707)</b>	<b>(887,828)</b>
Cash and cash equivalents at beginning of year		9,100,505	8,088,151	6,499,135	7,386,963
<b>Cash and cash equivalents at end of year</b>		<b>5,705,112</b>	<b>9,100,505</b>	<b>4,437,428</b>	<b>6,499,135</b>
<b>Supplementary for cash flows information</b>					
Cash and cash equivalents are as follows:					
Cash and cash equivalents	7	5,620,910	9,016,927	4,437,428	6,499,135
Cash at banks for financial benefits payable		84,202	83,578	-	-
		<b>5,705,112</b>	<b>9,100,505</b>	<b>4,437,428</b>	<b>6,499,135</b>

The accompanying notes are an integral part of the financial statements.

## The Stock Exchange of Thailand and its subsidiaries

### Cash flow statement (continued)

For the year ended 31 December 2022

(Unit: Thousand Baht)

		Consolidated financial statements		Separate financial statements	
	Note	2022	2021	2022	2021
Non-cash transactions:					
Loss on investment designed at fair value through other comprehensive income		12,283	-	-	-
Other payables from purchase of assets		34,815	31,463	34,815	31,452
Transfer property, plant and equipment to intangible assets	14, 16	2,788	-	2,788	-
Increase in right-of-use assets and lease liabilities	15	11,402	16,028	11,402	16,028
Decrease in short-term loans from subsidiaries by offsetting dividend income	6	-	-	-	70,000
Increase in shares capital and disposal investment by shares swap		-	-	-	114,000

The accompanying notes are an integral part of the financial statements.

## **The Stock Exchange of Thailand and its subsidiaries**

### **Notes to consolidated financial statements**

#### **For the year ended 31 December 2022**

##### **1. General information**

The Stock Exchange of Thailand (SET) is a juristic entity incorporated in Thailand under the Securities Exchange of Thailand Act B.E. 2517. The principal business activities of SET are serving as the market or the centre for trading of securities and providing related services without the objective of distribution of profit to members. SET commenced its trading of securities on 30 April 1975 and operates under the framework of the Securities Exchange of Thailand Act B.E. 2535. Its registered office is located at No. 93, Floor 17<sup>th</sup>, Ratchadapisek Road, Kwaeng Din Daeng, Khet Din Daeng, Bangkok.

The principal activities of SET and its subsidiaries are summarised as follows:

- 1) Securities markets comprise the operation of securities listing, trading system, clearing and settlement, depository, including market surveillance and supervision of listed companies and member companies.
- 2) Derivatives markets comprise the operation of trading and clearing of futures contracts and financial securities, providing other services related to futures trading transactions.
- 3) Technology services comprise the operation of internet trading platform for securities and derivatives, information services and other member services.
- 4) Securities registrar services
- 5) Other services comprise fund services and payment services provider.

##### **2. Basis of preparation**

- 2.1 The financial statements have been prepared in accordance with Thai Financial Reporting Standards enunciated under the Accounting Professions Act B.E. 2547 and their presentation has been made in compliance with the stipulations under the Accounting Act B.E. 2543.

The financial statements in Thai language are the official statutory financial statements of SET. The financial statements in English language have been translated from the Thai language financial statements.

The financial statements have been prepared on a historical cost basis except where otherwise disclosed in the accounting policies.



## 2.2 Basis of consolidation

- a) The consolidated financial statements include the financial statements of The Stock Exchange of Thailand (“SET”) and the following subsidiary companies (“the subsidiaries”) (collectively as “the Group”):

Company's name	Nature of business	Country of incorporation	Percentage of shareholding	
			2022	2021
			(%)	(%)
<u>Direct subsidiaries</u>				
Thailand Securities Depository Co., Ltd.	Securities depository and registrar services	Thailand	100.00	100.00
Thai Trust Fund Management Co., Ltd.	Mutual fund management	Thailand	100.00	100.00
Thai NVDR Co., Ltd.	Investment management in Non-Voting Depository Receipts	Thailand	100.00	100.00
Thailand Futures Exchange Public Company Limited	Derivatives exchange	Thailand	100.00	100.00
Thailand Clearing House Co., Ltd.	Clearing house and related back-office services for securities and derivatives contracts	Thailand	100.00	100.00
SET Venture Holding Co., Ltd.	Holding company	Thailand	100.00	100.00

Company's name	Nature of business	Country of incorporation	Percentage of shareholding	
			2022	2021
			(%)	(%)
<u>Indirect subsidiaries</u>				
Finnet Innovation Network Co., Ltd.	Rendering payment service for the capital market	Thailand	100.00	100.00
Live Fin Corp Co., Ltd.	Provider of electronic network system for investment	Thailand	100.00	100.00
Digital Access Platform Co., Ltd.	Providing electronic networking service and/or supporting system to support electronic and digital transactions	Thailand	100.00	100.00
Thai Digital Assets Exchange Co., Ltd.*	Trading center for digital assets and providing infrastructure or related systems to support digital assets trading	Thailand	100.00	100.00
SETTRADE.COM Co., Ltd.	Computer system services	Thailand	100.00	100.00
<u>Associates</u>				
Clearing Fund	Fund	Thailand	6.08	6.79
TSFC Securities Public Company Limited	Securities financing services and securities borrowing and lending	Thailand	40.70	40.70
<u>Joint venture</u>				
Family Know-how Co., Ltd. (The dissolution was registered on 26 December 2018)	Media business specialising in financial and investment information	Thailand	50.00	50.00

\* On 12 September 2022, the SET Board of Governors meeting passed a resolution approving the increase in the registered capital of Thai Digital Asset Exchange Co., Ltd. from Baht 50 million to Baht 150 million (the initial payment for share subscription of 50% of the shares, amounting to Baht 50 million) by issuing new ordinary shares to offer to SET Venture Holding Co., Ltd. The new shares were registered with the Ministry of Commerce on 6 October 2022.

Details of SET's associates and joint venture as at 31 December 2022 and 2021 are as follows:

1) Associates

1.1) Clearing Fund

The Clearing Fund operates under the Regulations of the Clearing Fund (No.1) B.E. 2541, which require that a one-time payment of Baht 100 million be made as an initial contribution by SET. The ownership interest percentage will be reduced based on further contributions made by other members of the Clearing Fund in the future. SET has no control over the Clearing Fund's operations, but has influences in policy and operation. Therefore, the investment in the Clearing Fund is classified as investment in an associate.

1.2) TSFC Securities Public Company Limited (TSFC)

TSFC Securities Public Company Limited has been established to provide liquidity for securities companies and to support to the further development of securities market. SET has appointed 5 representatives to be member of the 11 member Board of Directors of TSFC. The Board of Directors will participate in the decision-making on monetary policies and operations of the company. Therefore, the investment in TSFC is classified as investment in an associate.

TSFC Securities Public Company Limited is a public company and its stock is not traded in the market price.

2) Joint venture

2.1) Family Know-how Co., Ltd.

Family Know-how Co., Ltd. is a media company that broadcasts information about economics and investment for the benefits of investor. SET has performed joint arrangement with a company which have rights to the net assets of the arrangement. Therefore, the investment in Family Know-how Co., Ltd. is classified as investment in joint venture.

Family Know-how Co., Ltd. is a private limited company and its stock is not traded in the market price.

A Company has registered the dissolution with the Ministry of Commerce on 26 December 2018, and is currently in the process of liquidation.

- b) SET is deemed to have control over an investee or subsidiaries if it has rights, or is exposed, to variable returns from its involvement with the investee, and it has the ability to direct the activities that affect the amount of its returns.

- c) Subsidiaries are fully consolidated, being the date on which SET obtains control, and continue to be consolidated until the date when such control ceases.
  - d) The financial statements of the subsidiaries are prepared using the same significant accounting policies as SET.
  - e) Material balances and transactions between the Group have been eliminated from the consolidated financial statements.
  - f) Non-controlling interests represent the portion of revenues and expenses and net assets of the subsidiaries that are not held by SET and are presented separately in the consolidated comprehensive revenues and expenses and within fund balance in the consolidated statement of financial position.
- 2.3 The separate financial statements present investments in subsidiaries, joint venture and associates under the cost method.

### **3. New financial reporting standards**

#### **3.1 Financial reporting standards that became effective in the current year**

During the year, the Group has adopted the revised and new financial reporting standards and interpretations which are effective for fiscal years beginning on or after 1 January 2022. These financial reporting standards were aimed at alignment with the corresponding International Financial Reporting Standards with most of the changes directed towards clarifying accounting treatment and providing accounting guidance for users of the standards.

The adoption of these financial reporting standards does not have any significant impact on the Group's financial statements.

#### **3.2 Financial reporting standards that will become effective for fiscal years beginning on or after 1 January 2023**

The Federation of Accounting Professions issued a number of revised financial reporting standards, which are effective for fiscal years beginning on or after 1 January 2023. These financial reporting standards were aimed at alignment with the corresponding International Financial Reporting Standards with most of the changes directed towards clarifying accounting treatment, providing temporary reliefs or temporary exemptions for users of the standards.

The management of the Group believes that adoption of these amendments will not have any significant impact on the Group's financial statements.



## 4. Significant accounting policies

### 4.1 Revenue and expense recognition

#### Fees income

Trading fees, initial securities registrar fees, initial listing fees, clearing and settlement fees, member services fees, initial of information service fees, depository fees, initial customisation and IT support fees, initial membership fees, initial fund service fees and Digital Gateway service fees are recognised as revenue when the entity has fulfilled the obligations.

Annual securities registrar fees, annual listing fees, member service fees and Digital Gateway service fees by overtime, annual membership fee, fund service fees, payment service fees and Digital Gateway service fees by overtime are recognised revenue based on the obligations that must be completed throughout the period.

The recognised revenue which is not yet due per the contracts has been presented as accrued income under the caption of other receivables in the statement of financial position. The amounts recognised as other receivables are reclassified to trade receivables when the entity's right to consideration is unconditional.

An amount of consideration that the entity has received or to receive but the obligation to transfer goods or services to a customer is not completed is presented under the caption of fee received in advance in the statement of financial position. Fee received in advance from customers are recognised as revenue when the entity has fulfilled the obligations.

#### Interest income

Interest income is calculated using the effective interest method and recognised on an accrual basis. The effective interest rate is applied to the gross carrying amount of a financial asset, unless the financial assets subsequently become credit-impaired when it is applied to the net carrying amount of the financial asset (net of the expected credit loss allowance).

#### Dividends

Dividends are recognised when the right to receive the dividends is established.

#### Other income

Other income is recognised when the right to receive cash is established.

#### Expense

Expense is recognised in the statement of comprehensive revenues and expenses on an accrual basis.

**Finance cost**

Interest expense from financial liabilities at amortised cost is calculated using the effective interest method and recognised on an accrual basis.

**4.2 Cash and cash equivalents**

Cash and cash equivalents consist of cash in hand and at banks and all highly liquid investments with an original maturity of three months or less and not subject to withdrawal restrictions.

**4.3 Investments in subsidiaries, associates and joint venture**

Investments in subsidiaries, associates and joint venture are accounted for in the separate financial statements using the cost method.

Investments in associates and joint venture are accounted for in the consolidated financial statements using the equity method.

**4.4 Property, plant and equipment/Depreciation**

Land is stated at cost. Buildings and equipment are stated at cost less accumulated depreciation and allowance for loss on impairment of assets (if any).

Depreciation of plant and equipment is calculated by reference to their costs, on the straight-line basis over the following estimated useful lives:

Buildings	10 - 50 years
Building improvements	5 - 30 years
Fixtures and office equipment	5 - 20 years
Motor vehicles	5 years

Depreciation is included in determining income.

No depreciation is provided on land and assets under installation.

An item of property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss arising on disposal of an asset is included in revenues over (under) expenses when the asset is derecognised.

#### 4.5 Intangible assets

Intangible assets are initially recognised at cost. Following the initial recognition, the intangible assets are carried at cost less any accumulated amortisation and any accumulated impairment losses (if any).

Intangible assets with finite lives are amortised on the straight-line basis over the economic useful life and tested for impairment whenever there is an indication that the intangible asset may be impaired. The amortisation period and the amortisation method of such intangible assets are reviewed at least at each financial year end. The amortisation expense is charged to revenues over (under) expenses.

A summary of the intangible assets with finite useful lives is as follows:

	<u>Useful lives</u>
Computer software	3 - 10 years
Licences and other intangible assets	10 years

Costs associated with developing or maintaining computer software are recognised as expenses as incurred in the statement of comprehensive revenues and expenses. Costs that are directly associated with identifiable and unique software products controlled by the Group and have probable economic benefits exceeding the cost beyond one year are recognised as intangible assets. Direct costs include the purchase price and an appropriate portion of relevant overheads to allow such asset to be ready for its intended use. Expenditure which is incurred to enhance or extend the performance of computer software beyond its original specifications is recognised as an intangible asset.

The management determines the estimated useful lives of intangible assets of the Group. The management will review the amortisation charge when useful lives differ from the previous estimations or it will write-off obsolete assets or assets which have been sold or unused.

#### 4.6 Leases

At inception of contract, the Group assesses whether a contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

##### The Group as a lessee

The Group applied a single recognition and measurement approach for all leases, except for short-term leases and leases of low-value assets at the commencement date of the lease (i.e. the date the underlying asset is available for use), the Group recognises right-of-use assets representing the right to use underlying assets and lease liabilities based on lease payments.

***Right-of-use assets***

Right-of-use assets are measured at cost, less accumulated depreciation, any accumulated impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities initially recognised, initial direct costs incurred, and lease payments made at or before the commencement date of the lease less any lease incentives received.

Depreciation of right-of-use assets are calculated by reference to their costs, on the straight-line basis over the shorter of their estimated useful lives and the lease term.

Motor vehicles	4 - 5 years
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If ownership of the leased asset is transferred to the Group at the end of the lease term or the cost reflects the exercise of a purchase option, depreciation is calculated using the estimated useful life of the asset.

***Lease liabilities***

Lease liabilities are measured at the present value of the lease payments to be made over the lease term. The lease payments include fixed payments less any lease incentives receivable, variable lease payments that depend on an index or a rate, and amounts expected to be payable under residual value guarantees. Moreover, the lease payments include the exercise price of a purchase option reasonably certain to be exercised by the Group and payments of penalties for terminating the lease, if the lease term reflects the Group exercising an option to terminate. Variable lease payments that do not depend on an index or a rate are recognised as expenses in the period in which the event or condition that triggers the payment occurs.

The Group discounts the present value of the lease payments by the interest rate implicit in the lease or the Group's incremental borrowing rate. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is remeasured if there is a change in the lease term, a change in the lease payments or a change in the assessment of an option to purchase the underlying asset.

***Short-term leases and leases of low-value assets***

A lease that has a lease term less than or equal to 12 months from commencement date or a lease of low-value assets is recognised as expenses on a straight-line basis over the lease term.



#### 4.7 Related party transactions

Related parties comprise individuals or enterprises that control, or are controlled by, SET, whether directly or indirectly, or which are under common control with SET.

They also include associates, and individuals or enterprises which directly or indirectly own a voting interest in SET that gives them significant influence over SET, key management personnel, directors, and officers with authority in the planning and direction of SET's operations.

#### 4.8 Foreign currencies

The consolidated and separate financial statements are presented in Baht, which is also the SET's functional currency.

Transactions in foreign currencies are translated into Baht at the exchange rate ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are translated into Baht at the exchange rate ruling at the end of reporting period.

Gains and losses on exchange are included in determining income.

#### 4.9 Impairment of non-financial assets

At the end of each reporting period, the Group performs impairment reviews in respect of the property, plant and equipment, right-of-use assets and other intangible assets whenever events or changes in circumstances indicate that an asset may be impaired. An impairment loss is recognised when the recoverable amount of an asset, which is the higher of the asset's fair value less costs to sell and its value in use, is less than the carrying amount.

An impairment loss is recognised in revenues over (under) expenses. However, in the cases where property, plant and equipment were previously revalued and the revaluation was taken to fund balances, a part of such impairment is recognised in fund balances up to the amount of the previous revaluation.

In the assessment of asset impairment, if there is any indication that previously recognised impairment losses may no longer exist or may have decreased, the Group estimates the asset's recoverable amount. A previously recognised impairment loss is reversed only if there has been a change in the assumptions used to determine the asset's recoverable amount since the last impairment loss was recognised. The increased carrying amount of the asset attributable to a reversal of an impairment loss shall not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset in prior years. Such reversal is recognised in revenues over (under) expenses unless the asset is carried at a revalued amount, in which case the reversal, which exceeds the carrying amount that would have been determined, is treated as a revaluation increase.

#### 4.10 Employee benefits

##### **Short-term employee benefits**

Salaries, wages, bonuses, contributions to the social security fund and the right to the accumulated annual leave are recognised as expenses when incurred.

##### **Post-employment benefits and other long-term employee benefits**

###### ***Defined contribution plans***

The Group and its employees have jointly established a provident fund. The fund is monthly contributed by employees and by the Group. The fund's assets are held in a separate trust fund and the Group's contributions are recognised as expenses when incurred.

###### ***Defined benefit plans and other long-term employee benefits***

The Group has obligations in respect of the severance payments it must make to employees upon retirement under labor law and other employee benefit plans. The Group treats these severance payment obligations as a defined benefit plan. In addition, the Group provides other long-term employee benefit plan, namely long service awards.

The obligation under the defined benefit plan and other long-term employee benefit plans is determined by a professionally qualified independent actuary based on actuarial techniques, using the projected unit credit method.

Actuarial gains and losses arising from defined benefit plans are recognised immediately in other comprehensive revenues (expenses).

Actuarial gains and losses arising from other long-term benefits are recognised immediately in revenues over (under) expenses.

##### **Termination benefits**

Termination benefits are payable when employment is terminated by the Group before the normal retirement date, or whenever an employee accepts voluntary redundancy in exchange for these benefits. The Group recognises termination benefits when it is demonstrably committed to either: terminating the employment of current employees according to a detailed formal plan without possibility of withdrawal.

Providing termination benefits as a result of an offer made to encourage voluntary redundancy. Benefits falling due more than 12 months after the end of the reporting period are discounted to their present value.

#### 4.11 Provisions

Provisions are recognised when the Group has a present obligation as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

Where there are a number of similar obligations, the likelihood that an outflow will be required in settlement is determined by considering the class of obligations as a whole. A provision is recognised even if the likelihood of an outflow with respect to any one item included in the same class of obligations may be small.

Provisions are measured at the present value of the expenditures expected to be required to settle the obligation using a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the obligation. The increase in the provision due to passage of time is recognised as interest expense.

#### 4.12 Income tax

Income tax expense represents the sum of corporate income tax currently payable and deferred tax. Tax is recognised in revenues over (under) expenses, except to the extent that it relates to items recognised in other comprehensive revenues (expenses) or directly in fund balance. In this case the tax is also recognised in other comprehensive revenues (expenses) or directly in fund balance, respectively.

##### Current tax

Current income tax is provided in the accounts at the amount expected to be paid to the taxation authorities, based on taxable profits determined in accordance with tax legislation.

##### Deferred tax

Deferred income tax is provided on temporary differences between the tax bases of assets and liabilities and their carrying amounts at the end of each reporting period, using the tax rates enacted at the end of the reporting period.

The Group recognises deferred tax liabilities for all taxable temporary differences while it recognises deferred tax assets for all deductible temporary differences and tax losses carried forward to the extent that it is probable that future taxable profit will be available against which such deductible temporary differences and tax losses carried forward can be utilised.

At each reporting date, the Group reviews and reduces the carrying amount of deferred tax assets to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilised.

The Group records deferred tax directly to fund balances if the tax relates to items that are recorded directly to fund balances.

#### 4.13 Financial instruments

The Group initially measures financial assets at its fair value plus, in the case of financial assets that are not measured at fair value through profit or loss, transaction costs. However, trade receivables, that do not contain a significant financing component. The Group are measured at the transaction price as disclosed in the accounting policy relating to revenue recognition.

##### **Classification and measurement of financial assets**

Financial assets are classified, at initial recognition, as to be subsequently measured at amortised cost, fair value through other comprehensive income ("FVOCI"), or fair value through profit or loss ("FVTPL"). The classification of financial assets at initial recognition is driven by the Group's business model for managing the financial assets and the contractual cash flows characteristics of the financial assets.

##### ***Financial assets at amortised cost***

The Group measures financial assets at amortised cost if the financial asset is held in order to collect contractual cash flows and the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Financial assets at amortised cost are subsequently measured using the effective interest rate ("EIR") method and are subject to impairment. Gains and losses are recognised in revenues over (under) expenses when the asset is derecognised, modified or impaired.

##### ***Financial assets at FVOCI (debt instruments)***

The Group measures financial assets at FVOCI if the financial asset is held to collect contractual cash flows and to sell the financial asset and the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Interest income, foreign exchange revaluation and impairment losses or reversals are recognised in revenues over (under) expenses and computed in the same manner as for financial assets measured at amortised cost. The remaining fair value changes are recognised in other comprehensive revenues (expenses). Upon derecognition, the cumulative fair value change recognised in other comprehensive revenues (expenses) is recycled to revenues over (under) expenses.



***Financial assets designated at FVOCI (equity instruments)***

Upon initial recognition, the Group can elect to irrevocably classify its equity investments which are not held for trading as equity instruments designated at FVOCI. The classification is determined on an instrument-by-instrument basis.

Gains and losses recognised in other comprehensive revenues (expenses) on these financial assets are never recycled to revenues over (under) expenses.

Dividends are recognised as other income in revenues over (under) expenses, except when the dividends clearly represent a recovery of part of the cost of the financial asset, in which case, the gains are recognised in other comprehensive revenues (expenses).

Equity instruments designated at FVOCI are not subject to impairment assessment.

***Financial assets at FVTPL***

Financial assets measured at FVTPL are carried in the statement of financial position at fair value with net changes in fair value recognised in revenues over (under) expenses.

These financial assets include derivatives, security investments held for trading, equity investments which the Group has not irrevocably elected to classify at FVOCI and financial assets with cash flows that are not solely payments of principal and interest.

Dividends on listed equity investments are recognised as other income in revenues over (under) expenses.

**Classification and measurement of financial liabilities**

Except for derivative liabilities, at initial recognition the Group's financial liabilities are recognised at fair value net of transaction costs and classified as liabilities to be subsequently measured at amortised cost using the EIR method. Gains and losses are recognised in revenues over (under) expenses when the liabilities are derecognised as well as through the EIR amortisation revenues over (under) expenses. In determining amortised cost, the Group takes into account any fees or costs that are an integral part of the EIR. The EIR amortisation is included in finance costs in revenues over (under) expenses.

**Derecognition of financial instruments**

A financial asset is primarily derecognised when the rights to receive cash flows from the asset have expired or have been transferred and either the Group has transferred substantially all the risks and rewards of the asset, or the Group has transferred control of the asset.

A financial liability is derecognised when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognised in revenues over (under) expenses.

### **Impairment of financial assets**

The Group recognises an allowance for expected credit losses ("ECLs") for all debt instruments not held at FVTPL. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive, discounted at an approximation of the original effective interest rate.

For credit exposures for which there has not been a significant increase in credit risk since initial recognition, ECLs are provided for credit losses that result from default events that are possible within the next 12-months (a 12-month ECL). For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure (a lifetime ECL).

The Group considers a significant increase in credit risk to have occurred when contractual payments are more than 30 days past due and considers a financial asset as credit impaired or default when contractual payment are more than 90 days past due. However, in certain cases, the Group may consider a financial asset to have significant increase in credit risk and to be in default taking into account other internal or external data information, such as credit rating of issuer.

For trade receivables, the Group applies a simplified approach in calculating ECLs. Therefore, the Group does not track changes in credit risk, but instead recognises a loss allowance based on lifetime ECLs at each reporting date. It is based on its historical credit loss experience and adjusted for forward-looking factors specific to the debtors and the economic environment.

ECLs are calculated based on its historical credit loss experience and adjusted for forward-looking factor specific to the debtors and the economic environment.

A financial asset is written off when there is no reasonable expectation of recovering the contractual cash flows.

### **Offsetting of financial instruments**

Financial assets and financial liabilities are offset, and the net amount is reported in the statement of financial position if there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis, to realise the assets and settle the liabilities simultaneously.

#### 4.14 Derivatives

The Group uses derivatives, such as forward currency contracts to hedge its foreign currency risks.

Derivatives are initially recognised at fair value on the date on which a derivative contract is entered into and are subsequently remeasured at fair value. The subsequent changes are recognised in revenues over (under) expenses. Derivatives are carried as financial assets when the fair value is positive and as financial liabilities when the fair value is negative.

Derivatives are presented as non-current assets or non-current liabilities if the remaining maturity of the instrument is more than 12 months and it is not due to be realised or settled within 12 months. Other derivatives are presented as current assets or current liabilities.

#### 4.15 Fair value measurement

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between buyer and seller (market participants) at the measurement date. The Group applies a quoted market price in an active market to measure their assets and liabilities that are required to be measured at fair value by relevant financial reporting standards. Except in case of no active market of an identical asset or liability or when a quoted market price is not available, the Group measures fair value using valuation technique that are appropriate in the circumstances and maximises the use of relevant observable inputs related to assets and liabilities that are required to be measured at fair value.

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorised within the fair value hierarchy into three levels based on categorise of input to be used in fair value measurement as follows:

Level 1 - Use of quoted market prices in an active market for such assets or liabilities

Level 2 - Use of other observable inputs for such assets or liabilities, whether directly or indirectly

Level 3 - Use of unobservable inputs such as estimates of future cash flows

At the end of each reporting period, the Group determines whether transfers have occurred between levels within the fair value hierarchy for assets and liabilities held at the end of the reporting period that are measured at fair value on a recurring basis.

## 5. Significant accounting judgements and estimates

The preparation of financial statements in conformity with financial reporting standards requires management to make subjective judgements and estimates regarding matters that are inherently uncertain. These judgements and estimates affect reported amounts and disclosures; and actual results could differ from these estimates. Significant judgements and estimates are as follows:

### **Allowance for expected credit losses of trade receivables**

In determining an allowance for expected credit losses of trade receivables, the management needs to make judgement and estimates based upon, among other things, past collection history, aging profile of outstanding debts and the forecast economic condition for groupings of various customer segments with similar credit risks. The Group's historical credit loss experience and forecast economic conditions may also not be representative of whether a customer will actually default in the future.

### **Deferred tax assets**

Deferred tax assets are recognised for deductible temporary differences and unused tax losses to the extent that it is probable that taxable profit will be available against which the temporary differences and losses can be utilised. Significant management judgement is required to determine the amount of deferred tax assets that can be recognised, based upon the likely timing and level of estimate future taxable profits.

### **Post-employment benefits under defined benefit plans and other long-term employee benefits**

The obligation under the defined benefit plan and other long-term employee benefit plans is determined based on actuarial techniques. Such determination is made based on various assumptions, including discount rate, future salary increase rate, mortality rate and staff turnover rate.

### **Litigation and uncertainty of liabilities that may arise from taxation**

The Group has contingent and/or contingent liabilities from litigation and uncertainty of liability that may arise from taxation in which tax authorities will accept the Group's taxation methods. The management uses judgment to evaluate any such transaction, including reasonable estimating the expected damage. Changing in factors underlying management's assessment and unanticipated circumstances could cause actual results to differ materially from these estimates.



## 6. Related party transactions

The relationships between SET and its subsidiaries, associates and joint venture are summarised as described in Notes 12 and 13 to the consolidated financial statements.

During the years, the Group had significant business transactions with persons or related parties. Such transactions, arose in the ordinary course of business and were concluded on commercial terms and bases agreed upon between the Group and those persons or related parties which can be summarised as follows:

(Unit: Thousand Baht)

	Consolidated		Separate		
	financial statements		financial statements		Transfer pricing policy
	2022	2021	2022	2021	
<u>Transactions with subsidiary companies</u>					
(Eliminated from the consolidated financial statements)					
Service income	-	-	1,930,332	1,953,772	Cost plus margin
Interest income	-	-	80,611	74,049	The interest rate is based on the Thai Overnight Repurchase Rate plus 0.43% per annum (2021: Net return of private funds plus 0.47 - 1.16% per annum of principal balance)
Dividend income	-	-	563,222	606,182	As declared
Service fees expenses	-	-	35,812	14,764	Cost plus margin
Interest expenses	-	-	11,116	11,149	The interest rate on the loan is based on the floating market interest rate which is referred to the higher interest rate for one-year government bond or one-year fixed deposit on average of 4 banks for corporate credit line of Baht 10 million
<u>Transactions with associates</u>					
Service income	1,680	1,680	-	-	Cost plus margin
Dividend income	-	-	20,805	13,870	As declared

(Unit: Thousand Baht)

	Consolidated		Separate		
	financial statements		financial statements		Transfer pricing policy
	2022	2021	2022	2021	
<u>Transactions with related companies</u>					
Service income	34,281	29,482	17,069	17,294	Cost plus margin
<u>Contribution to the Capital Market</u>					
Development Fund	538,903	582,978	538,903	582,978	Not less than 90% of the revenue after deduction of expense, tax and reserve. The consolidated financial statements of SET shall be used to calculate the contribution amount.

As at 31 December 2022 and 2021, the balances of the accounts between the Group and those related companies are as follows:

	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
<u>Transactions with subsidiary companies</u>				
(Eliminated from the consolidated financial statements)				
Trade and other receivables (Note 9)	-	-	249,285	247,992
Assets for clearing system protection and benefits (Note 18)	-	-	150,740	150,613
Trade and other payables (Note 21)	-	-	3,372	4,776
Fees received in advance	-	-	2,555	2,585
<u>Transactions with associates</u>				
Trade and other receivables (Note 9)	140	140	-	-
<u>Transactions with related companies</u>				
Trade and other receivables (Note 9)	5,874	6,204	3,291	2,235
Trade and other payables (Note 21)	538,903	582,978	538,903	582,978

Loans to related parties and loan from related parties

As at 31 December 2022 and 2021, the balances of loans between the Group and those related companies and the movement in loans are as follows:

(Unit: Thousand Baht)

Loans to / Loan from	Related by	Separate financial statements			
		Balance as at 31 December 2021	Increase during the year	Decrease during the year	Balance as at 31 December 2022
Loans to	Subsidiary	5,690,834	449,845	-	6,140,679
Total		5,690,834	449,845	-	6,140,679
Loans from	Subsidiary	1,810,985	250,000	(129,500)	1,931,485
Total		1,810,985	250,000	(129,500)	1,931,485

As at 31 December 2022, SET granted subsidiary a loan of Baht 5,690.8 million to use as a reserve fund to enhance the competitiveness and support the future business expansion. The rate of return on loan is referred to Thai Overnight Repurchase Rate (THOR) plus 0.43% per annum, using Compounded THOR method referring 2 years tenor (Tenor 1.24% and THB Onshore OIS Swap 0.81%) due for repayment within 1 February of every year (2021: Baht 5,690.8 million with the rate of return on loan is referred to the net return of a private fund plus 0.47% - 1.16% per annum of principle balance), with an expected yield for 2022 - 2023.

In addition, during the year 2022 it granted a loan of Baht 449.8 million to a subsidiary for capital support to align with the digital asset business strategy. The interest rate is based on the average MLR of 4 banks announced daily, and the loan is to be repaid within 5 years (2021: Nil).

The Group has a policy of centralising the investments and managed by SET in order to maximise its efficiency and overall returns. The parent will borrow from its subsidiaries in the form of one-year promissory notes. The interest rate on the loan is based on the floating market interest rate which is referred to the higher interest rate for one-year government bond or one-year fixed deposit on average of 4 banks for corporate credit line of up to Baht 10 million (interest rate may be revised as appropriate).

Directors and management's benefits

During the years ended 31 December 2022 and 2021, the Group had employee benefit expenses payable to their directors and management as below.

			(Unit: Thousand Baht)	
	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
Directors	32,763	32,352	28,997	28,211
Management (Note 29)	287,081	271,194	287,081	271,194
Total benefits	319,844	303,546	316,078	299,405

			(Unit: Thousand Baht)	
	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
Short-term employee benefits	295,403	279,098	291,637	274,957
Post-employment benefits	23,993	23,985	23,993	23,985
Other long-term benefits	448	463	448	463
Total benefits	319,844	303,546	316,078	299,405

**7. Cash and cash equivalents**

			(Unit: Thousand Baht)	
	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
Cash	304	304	301	301
Bank deposits	5,621,232	9,018,317	4,437,751	6,500,528
Less: Allowance for expected credit loss	(626)	(1,694)	(624)	(1,694)
Total	5,620,910	9,016,927	4,437,428	6,499,135

As at 31 December 2022, bank deposits in saving accounts carried interests between 0.05% - 0.80% per annum (2021: between 0.05% - 0.63% per annum).



## 8. Other current financial assets

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
<b>Investment managed by SET and subsidiaries</b>				
<u>Debt instruments measured at amortised cost</u>				
Fixed deposit maturities within 1 year	901,420	200,000	901,420	200,000
Government bond maturities within 1 year	181,295	109,968	181,295	109,968
Total	1,082,715	309,968	1,082,715	309,968
Less: Allowance for expected credit loss	(50)	(34)	(50)	(34)
Total debt instruments measured at amortised cost, net	1,082,665	309,934	1,082,665	309,934
<u>Financial assets measured at FVTPL</u>				
Government bond	2,727,644	1,238,646	2,327,927	684,467
Total financial assets measured at FVTPL	2,727,644	1,238,646	2,327,927	684,467
Total investment managed by SET and subsidiaries	3,810,309	1,548,580	3,410,592	994,401
<b>Investment managed by private funds</b>				
<u>Debt instruments measured at amortised cost</u>				
Saving deposit	1,775	3,095	1,652	906
Current deposit	407	-	407	-
Total debt instruments measured at amortised cost	2,182	3,095	2,059	906
<u>Financial assets measured at FVTPL</u>				
Government bond	2,813,721	2,972,175	1,776,226	1,438,728
Bills of exchange	-	29,878	-	29,878
Debentures	1,053,832	1,047,802	701,696	1,047,802
Total financial assets measured at FVTPL	3,867,553	4,049,855	2,477,922	2,516,408
Total investment managed by private funds	3,869,735	4,052,950	2,479,981	2,517,314
Total other current financial assets, net	7,680,044	5,601,530	5,890,573	3,511,715

## 9. Trade and other receivables

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2022	2021	2022	2021
<u>Trade receivables - related parties</u> (Note 6)				
Aged on the basis of due dates				
Not yet due	3,787	3,969	1,204	-
Total trade receivables - related parties, net	3,787	3,969	1,204	-
<u>Trade receivables - unrelated parties</u>				
Aged on the basis of due dates				
Not yet due	50,248	89,396	7,709	35,523
Past due				
Up to 3 months	16,746	10,175	15,469	8,180
3 - 6 months	4,632	646	3,941	105
Over 6 months	22,487	20,406	11,285	10,574
Total	94,113	120,623	38,404	54,382
Less: Allowance for expected credit losses	(27,119)	(21,053)	(15,226)	(10,679)
Total trade receivables - unrelated parties, net	66,994	99,570	23,178	43,703
Total trade receivable, net	70,781	103,539	24,382	43,703
<u>Other receivables</u>				
Cash at bank for clearing collateral	8,312	4,470	-	-
Accrued income - related parties (Note 6)	2,227	2,375	168,032	178,730
Accrued income - unrelated parties	364,626	421,109	110,456	161,799
Cash at banks for dividend accounts of investors	100,783	96,991	-	-
Prepaid expenses - related parties (Note 6)	-	-	8,530	-
Prepaid expenses - unrelated parties	82,813	43,246	82,673	43,126
Accrued interest receivable - related parties (Note 6)	-	-	74,810	71,497
Accrued interest receivable - unrelated parties	14,299	14,187	9,334	11,654
Others	5,618	4,488	5,457	4,307
Total other receivables	578,678	586,866	459,292	471,113
Trade and other receivables, net	649,459	690,405	483,674	514,816

Set out below is the movement in the allowance for expected credit losses of trade receivables.

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
Beginning balance	21,053	16,891	10,679	8,568
Allowance for expected credit losses	6,066	4,162	4,547	2,111
Ending balance	27,119	21,053	15,226	10,679

In 2022, the Group extended the period of the measures to assist listed companies affected by COVID-19 situation from 2020 and 2021 by providing discounts on annual registrar fees to all listed company and providing additional special discounts for listed companies participating in activities to support working in electronic form with the Group.

#### 10. Other current assets

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
Loans to employees	39,366	26,697	39,366	26,697
Future margin deposit	17,347	2	17,347	2
Pending input tax	17,510	8,754	17,376	8,320
Inventory - publication	2,358	2,627	2,358	2,627
Value added tax receivable	5,641	3,680	-	-
Others	3,103	3,118	3,099	3,118
Total	85,325	44,878	79,546	40,764

**11. Other non-current financial assets**

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
<b>Investments managed by SET and subsidiaries</b>				
<u>Debt instruments measured at amortised cost</u>				
Cash at banks under a Memorandum of Understanding	512,153	512,153	512,153	512,153
Government bond maturities after 1 year	-	184,088	-	184,088
Debenture maturities after 1 year	200,000	200,000	200,000	200,000
Total	712,153	896,241	712,153	896,241
Less: Allowance for expected credit loss	(39)	(120)	(39)	(120)
Total debt instruments measured at amortised cost, net	712,114	896,121	712,114	896,121
<u>Financial assets designated at FVOCI</u>				
Non-listed ordinary shares	910,876	54,336	49,336	49,336
Total financial assets designated at FVOCI	910,876	54,336	49,336	49,336
<u>Financial assets measured at FVTPL</u>				
Mutual fund	4,394,451	5,313,572	4,394,452	5,313,572
Total financial assets measured at FVTPL	4,394,451	5,313,572	4,394,452	5,313,572
Total investments managed by SET and subsidiaries	6,017,441	6,264,029	5,155,902	6,259,029
<b>Investments managed by private funds</b>				
<u>Debt instruments measured at amortised cost</u>				
Bank deposits	3	-	-	-
Total debt instruments measured at amortised cost	3	-	-	-
<u>Financial assets measured at FVOCI</u>				
Government bond	1,612,726	-	-	-
Total financial assets measured at FVOCI	1,612,726	-	-	-
Total investments managed by private funds	1,612,729	-	-	-
Total other non-current financial asset, net	7,630,170	6,264,029	5,155,902	6,259,029



## 12. Investments in subsidiaries

Details of investments in subsidiaries as presented in separate financial statements

Company's name	Paid-up capital		Shareholding percentage		Cost		(Unit: Thousand Baht) Dividend received during the years	
	2022	2021	2022	2021	2022	2021	2022	2021
			(%)	(%)				
Thailand Securities Depository Co., Ltd.	200,000	200,000	100.00	100.00	200,000	200,000	309,956	233,426
Thai Trust Fund Management Co., Ltd.	100,000	100,000	100.00	100.00	100,000	100,000	71	13
Thai NVDR Co., Ltd.	10,000	10,000	100.00	100.00	10,000	10,000	895	1,332
SETTRADE.COM Co., Ltd.	-	-	-	-	-	-	-	80,000
Thailand Futures Exchange Public Company Limited	500,000	500,000	100.00	100.00	500,000	500,000	146,850	168,075
Thailand Clearing House Co., Ltd.	600,000	600,000	100.00	100.00	602,700	602,700	105,450	123,336
SET Venture Holding Co., Ltd.	870,000	420,000	100.00	100.00	870,000	420,000	-	-
Total					2,282,700	1,832,700	563,222	606,182

### SET Venture Holding Company Limited

The SET Board of Governors meeting No. 3/2022 held on 23 February 2022 resolved to approve the increase in the registered capital of SET Venture Holding Company Limited, a subsidiary, from 42,000,000 ordinary shares at a par value of Baht 10 each to 82,000,000 ordinary shares at a par value of Baht 10 each. On 18 April 2022, the SET paid for 40,000,000 shares of Baht 10 per share, totaling Baht 400,000,000. The subsidiary registered the capital increase with the Ministry of Commerce on 19 April 2022.

The SET Board of Governors meeting No. 12/2022 held on 21 September 2022 resolved to approve the increase in the registered capital of the subsidiary, from 82,000,000 ordinary shares at a par value of Baht 10 each to 102,000,000 ordinary shares at a par value of Baht 10 each. On 5 October 2022, the SET paid for 20,000,000 shares of Baht 2.5 per share, totaling Baht 50,000,000. The subsidiary registered the capital increase with the Ministry of Commerce on 6 October 2022.

### 13. Investments in associates and joint venture

The amounts recognised in the statement of financial position as at 31 December 2022 and 2021 are as follows:

	(Unit: Thousand Baht)			
	Consolidated financial statements		Separate financial statements	
	Equity Method		Cost Method	
	2022	2021	2022	2021
Associates	1,009,619	997,223	779,717	779,717
Joint venture	19,708	19,834	10,267	10,330
Total	1,029,327	1,017,057	789,984	790,047

The amounts recognised in the statement of comprehensive revenues and expenses are share of revenues over (under) expenses of investments in associates and joint venture, net of tax for the years ended 31 December 2022 and 2021 are as follows:

	(Unit: Thousand Baht)			
	Consolidated financial statements		Separate financial statements	
	Equity Method		Cost Method	
	2022	2021	2022	2021
Associates	33,200	35,597	-	-
Joint venture	(63)	(7)	-	-
Total	33,137	35,590	-	-

#### 13.1 Investments in associates

##### 13.1.1 Details of associates

Investments in associates represent investments in entities are controlled by SET and other companies. Details of these investments are as follows:

Associates	(Unit: Thousand Baht)					
	Consolidated financial statements				Carrying amounts based on equity method	
	Shareholding percentage		Cost			
	2022	2021	2022	2021	2022	2021
	(%)	(%)				
Clearing Fund	6.08	6.79	100,000	100,000	209,713	209,303
TSFC Securities Public Company Limited	40.70	40.70	679,717	679,717	799,906	787,920
Total			779,717	779,717	1,009,619	997,223

(Unit: Thousand Baht)

Associates	Separate financial statements					
	Shareholding percentage		Cost		Carrying amounts based on cost method, net	
	2022	2021	2022	2021	2022	2021
	(%)	(%)				
Clearing Fund	6.08	6.79	100,000	100,000	100,000	100,000
TSFC Securities Public Company Limited	40.70	40.70	679,717	679,717	679,717	679,717
Total			779,717	779,717	779,717	779,717

### 13.1.2 Share of profit of investments and dividend received

During the years, SET recognised its share of profit of investments in associate companies in the consolidated financial statements and dividend income in the separate financial statements as follows:

Associates	Consolidated financial statements		Separate financial statements	
	Share of profit from investments in associates during the years		Dividend received during the years	
	2022	2021	2022	2021
Clearing Fund	410	110	-	-
TSFC Securities Public Company Limited	32,790	35,487	20,805	13,870
Total	33,200	35,597	20,805	13,870

## 13.2 Investments in joint venture

### 13.2.1 Details of investments in joint venture

Investments in joint venture represent investments in entities which are jointly controlled by SET and other companies. Details of these investments are as follows:

(Unit: Thousand Baht)

Joint venture	Consolidated financial statements					
	Shareholding percentage		Cost		Carrying amounts based on equity method	
	2022	2021	2022	2021	2022	2021
	(%)	(%)				
Family Know-how Co., Ltd.*	50.00	50.00	40,500	40,500	19,708	19,834
Total			40,500	40,500	19,708	19,834

(Unit: Thousand Baht)

Joint venture	Separate financial statements							
	Shareholding percentage		Cost		Allowance for impairment of investments		Carrying amounts based on cost method, net	
	2022	2021	2022	2021	2022	2021	2022	2021
	(%)	(%)						
Family Know-how Co., Ltd.*	50.00	50.00	40,500	40,500	(30,233)	(30,170)	10,267	10,330
Total			40,500	40,500	(30,233)	(30,170)	10,267	10,330

\* At the Extraordinary Shareholder's meeting No. 1/2018 held on 14 December 2018, the shareholders resolved to dissolve the company. The dissolution was registered with the Ministry of Commerce on 26 December 2018 which is currently in the process of liquidation.

### 13.2.2 Share of loss of investments and dividend received

During the years, SET recognised its share of loss of investments in joint venture in the consolidated financial statements and dividend income in the separate financial statements as follows:

(Unit: Thousand Baht)

Joint venture	Consolidated financial statements	
	Share of loss from investments in joint venture during the years	
	2022	2021
Family Know-how Co., Ltd.	(63)	(7)
Total	(63)	(7)

During the years 2022 and 2021, SET has no dividend received from joint venture.



#### 14. Property, plant and equipment

Movements of property, plant and equipment for the years ended 31 December 2022 and 2021 are summarised below.

(Unit: Thousand Baht)

	Consolidated financial statements					Total
	Land and land improvement	Buildings and building improvement	Furniture, fixtures and office equipment	Motor vehicles	Assets under installation	
<b>Cost</b>						
1 January 2021	1,014,097	4,074,843	1,454,252	388	9,403	6,552,983
Additions	-	5,819	73,530	1,070	18,578	98,997
Disposals/writes-off	-	(706)	(196)	(1,070)	-	(1,972)
Transfers	-	2,588	1,541	-	(4,129)	-
31 December 2021	1,014,097	4,082,544	1,529,127	388	23,852	6,650,008
Additions	-	2,274	174,740	-	29,490	206,504
Disposals/writes-off	-	(66)	(8,385)	-	-	(8,451)
Transfers	-	15,728	26,211	-	(44,727)	(2,788)
31 December 2022	1,014,097	4,100,480	1,721,693	388	8,615	6,845,273
<b>Accumulated depreciation</b>						
1 January 2021	-	1,282,294	784,772	368	-	2,067,434
Depreciation for the year	-	203,031	151,938	20	-	354,989
Depreciation on disposals/ writes-off	-	(388)	(105)	-	-	(493)
31 December 2021	-	1,484,937	936,605	388	-	2,421,930
Depreciation for the year	-	204,527	160,171	-	-	364,698
Depreciation on disposals/ writes-off	-	(28)	(7,979)	-	-	(8,007)
31 December 2022	-	1,689,436	1,088,797	388	-	2,778,621
<b>Net book value</b>						
31 December 2021	1,014,097	2,597,607	592,522	-	23,852	4,228,078
31 December 2022	1,014,097	2,411,044	632,896	-	8,615	4,066,652
<b>Depreciation for the years</b>						
2021						354,989
2022						364,698

(Unit: Thousand Baht)

Separated financial statements						
	Land and land improvement	Buildings and building improvement	Furniture, fixtures and office equipment	Motor vehicles	Assets under installation	Total
<b>Cost</b>						
1 January 2021	1,014,097	4,074,845	1,450,517	388	9,403	6,549,250
Additions	-	5,819	73,530	1,070	18,578	98,997
Disposals/writes-off	-	(706)	(195)	(1,070)	-	(1,971)
Transfers	-	2,588	1,541	-	(4,129)	-
31 December 2021	1,014,097	4,082,546	1,525,393	388	23,852	6,646,276
Additions	-	2,274	174,740	-	29,490	206,504
Disposals/writes-off	-	(66)	(8,385)	-	-	(8,451)
Transfers	-	15,728	26,211	-	(44,727)	(2,788)
31 December 2022	1,014,097	4,100,482	1,717,959	388	8,615	6,841,541
<b>Accumulated depreciation</b>						
1 January 2021	-	1,282,296	781,414	368	-	2,064,078
Depreciation for the year	-	203,031	151,894	20	-	354,945
Depreciation on disposals/ writes-off	-	(388)	(105)	-	-	(493)
31 December 2021	-	1,484,939	933,203	388	-	2,418,530
Depreciation for the year	-	204,527	160,125	-	-	364,652
Depreciation on disposals/ writes-off	-	(28)	(7,979)	-	-	(8,007)
31 December 2022	-	1,689,438	1,085,351	388	-	2,775,177
<b>Net book value</b>						
31 December 2021	1,014,097	2,597,607	592,190	-	23,852	4,227,746
31 December 2022	1,014,097	2,411,044	632,608	-	8,615	4,066,364
<b>Depreciation for the years</b>						
2021						354,945
2022						364,652

As at 31 December 2022, certain items of plant and equipment were fully depreciated but are still in use. The gross carrying amount before deducting accumulated depreciation of those assets amounted to approximately Baht 564.47 million (2021: Baht 363.68 million) (SET: Baht 563.75 million 2021: Baht 360.55 million).

## 15. Leases

### 15.1 The Group as a lessee

The Group has lease contracts for various items to use in its operations. Leases generally have lease terms between 4 - 5 years.

#### a) Right-of-use assets

Movement of right-of-use assets for the year ended 31 December 2022 and 2021 are summarised below:

	(Unit: Thousand Baht) Consolidated and Separate financial statements Motor vehicles
1 January 2021	25,313
Additions	16,028
Depreciation for the year	(14,080)
31 December 2021	27,261
Additions	11,402
Depreciation for the year	(13,830)
Adjustments	(175)
31 December 2022	24,658

#### b) Lease liabilities

	(Unit: Thousand Baht) Consolidated and Separate financial statements	
	2022	2021
Lease payments	27,291	31,007
Less: Deferred interest expenses	(1,988)	(2,071)
Total	25,303	28,936
Less: Portion due within one year	(10,963)	(14,256)
Lease liabilities - net of current portion	14,340	14,680

A maturity analysis of lease payments is disclosed in Note 37.2 to the consolidated financial statements under the liquidity risk.

**c) Expenses relating to leases that are recognised in revenues over (under) expenses**

(Unit: Thousand Baht)

Consolidated and Separate  
financial statements

	2022	2021
Depreciation expense of right-of-use assets	13,830	14,080
Interest expenses on lease liabilities	1,376	1,507
Expenses relating to leases of low-value assets	9,102	10,514

**d) Others**

The Group had total cash outflows for leases for the year ended 31 December 2022 of Baht 25.34 million (2021: Baht 26.33 million) (SET: Baht 25.34 million 2021: Baht 26.33 million), including the cash outflow related to short-term lease, leases of low-value assets and variable lease payments that do not depend on an index or a rate.

**16. Intangible assets**

The net book value of intangible assets as at 31 December 2022 and 2021 is presented below.

(Unit: Thousand Baht)

	Consolidated financial statements				Separate financial statements			
	Licences and other Computer software				Licences and other Computer software			
	intangible assets	Working in process	Total		intangible assets	Working in process	Total	
As at 31 December 2022								
Cost	2,495,308	7,973	498,495	3,001,776	2,411,691	3,655	498,495	2,913,841
Less: Accumulated amortisation	(1,882,496)	(3,598)	-	(1,886,094)	(1,800,981)	(1,978)	-	(1,802,959)
Net book value	612,812	4,375	498,495	1,115,682	610,710	1,677	498,495	1,110,882
As at 31 December 2021								
Cost	2,138,927	7,647	381,246	2,527,820	2,056,411	3,348	381,246	2,441,005
Less: Accumulated amortisation	(1,725,359)	(3,122)	-	(1,728,481)	(1,644,611)	(1,844)	-	(1,646,455)
Net book value	413,568	4,525	381,246	799,339	411,800	1,504	381,246	794,550



A reconciliation of the net book value of intangible assets for the years 2022 and 2021 is presented below.

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
Net book value at beginning of years	799,339	660,225	794,550	657,788
Additions	471,168	289,967	472,048	286,528
Transfer	2,788	-	2,788	-
Amortisations	(157,613)	(150,853)	(156,504)	(149,766)
Net book value at end of years	1,115,682	799,339	1,110,882	794,550

#### 17. Assets for margin deposits and benefits

Thailand Clearing House Co., Ltd. ("TCH") is the clearing house for derivatives market. Members of TCH who have outstanding positions are obliged to place the required margin deposits as a guarantee according to the rate or amount called by TCH. TCH may invest the margin proceeds according to specified terms and conditions. The benefits, after deducting management fees, shall be distributed to members at the announced rates and procedures.

As at 31 December 2022 and 2021, the details of investments for which margin deposits were placed by members consist of:

	(Unit: Thousand Baht)	
	Consolidated	
	financial statements	
	2022	2021
Saving and fixed deposit accounts	9,404,849	12,649,631
Saving accounts in foreign currency	1,929,217	3,442,236
Debt instruments measured at amortised cost	6,976,749	3,579,603
Securities collateral	130,927	95,608
Accrued benefits	16,738	17,198
Total investments for which margin deposits	18,458,480	19,784,276
Less: Allowance for expected credit loss	(640)	(8,559)
Total investments for which margin deposits, net	18,457,840	19,775,717

As at 31 December 2022, saving accounts in foreign currency of USD 56.10 million (2021: USD 103.54 million) was translated into Thai Baht using the average transfer buying rate announced by the Bank of Thailand at the end of the accounting period.

The Group presented margin deposits placed by members separately in the account “Assets for margin deposits and benefits” in current assets in the statement of financial position and presented liabilities in the account “Margin deposits and benefits payable” in current liabilities in the statement of financial position.

## **18. Assets for clearing system protection and benefits**

The assets for clearing system protection are established to secure the clearing system of Thailand Clearing House Co., Ltd. (TCH) against any damage caused by defaults by members or other incidents.

Assets for clearing system protection comprise of 2 categories as follow:

### **18.1 Securities Deposit**

Members of TCH are required to place a Securities Deposit according to the announcement made by TCH (the current Securities Deposit for members, who are allowed to clear all types of derivatives, is not less than Baht 5 million and for only one type of derivatives is not less than Baht 4 million).

### **18.2 Clearing fund contributions comprising contributions from:**

- 1) SET amounting to Baht 100 million
- 2) Members of TCH
  - Initial contributions according to the announced rates (currently the initial contribution members, who are allowed to clear all types of derivatives, are not less than Baht 6 million and for only one type of derivatives is not less than Baht 1 million).
  - Monthly contributions at a value of not less than Baht 1,000.

TCH manages the assets for clearing system protection and there are benefits incurred thereon, if such benefits are derived from the assets for clearing system protection of members, TCH shall return them to members after deduction of a management fees in accordance with the procedures and within the period prescribed by TCH.

In the event that members defaults in clearing on damage is caused by act of members in connection with clearing. TCH shall have the power to use assets for the clearing system protection in the following order:

- 1) Security deposit of the member who is in default or causes damage to the clearing system of TCH, as the case maybe;
- 2) Contribution to the Clearing Fund by the member who is in default or causes damage to the clearing of TCH;
- 3) Contributions to the Clearing Fund by SET in accordance with the amount prescribed by TCH as the first part;
- 4) Assets contributed to the Clearing Fund in the part of other Clearing Fund members who are not in default or who do not cause the damage to the clearing system of TCH, as the case maybe;
- 5) The remaining amount of the contributions to the Clearing Fund by SET after deducting the first part of the contributions to the Clearing Fund by SET;
- 6) Additional contribution according to the proportion made to the Clearing Fund by respective members
- 7) SET Reserve Fund

The use of the assets under 4) and 6) shall be in proportion with the assets contributed by the Clearing Fund members to the Clearing Fund.

The use of contributions to the Clearing Fund under 3) in accordance with the proportion prescribed by TCH, TCH may notify the change of the proportion in the use of such contributions as appropriate.

A member who is in default or causes damage to the clearing of TCH has the duty to return the assets for the clearing system protection or other assets which TCH has used according to the regulation.

In the case that the Clearing Fund has been used, TCH may charge interest for the use of such fund at the maximum rate permitted by the law on interests on loans of financial institutions, as from the date of the use of such fund until the date of the return thereof unless other interest rate is prescribed by TCH.

When the defaulting member or the member who causes damage to the clearing of TCH, has reimbursed the assets for the Clearing System Protection which are equal to the used amount of the assets together with the interest incurred thereon to TCH, the assets shall be allocated as per the order below:

- 1) SET Reserve Fund
- 2) Additional contribution according to the proportion made to the Clearing Fund by respective members
- 3) The remaining amount of the contributions to the Clearing Fund by SET after deducting the first part of the contributions to the Clearing Fund by SET;
- 4) Assets contributed to the Clearing Fund in the part of other Clearing Fund Members who are not in default or who do not cause the damage to the Clearing System of TCH, as the case maybe;
- 5) Contributions to the Clearing Fund by SET in accordance with the amount prescribed by TCH as the first part;
- 6) Contribution to the Clearing Fund by the member who is in default or causes damage to the Clearing of TCH as the case maybe;
- 7) Security Deposit of the member who is in default or causes damage to the Clearing System of TCH

The allocation for the return of the assets under 2) and 4) shall be in proportion with that such assets are used pursuant.

When TCH has a resolution to terminate the membership of any members, TCH shall return the assets which such members has provided for the Clearing of TCH, including the remaining benefits therefore after deduction of debts as well as damages and penalty that the member owes to TCH, within the period prescribed by TCH.

The Group has shown the assets to which members have joined as security assets in accordance with the rules specified as a separate item in the account. "Assets for margin deposits and benefits" under non-current assets and have shown the same amount of liabilities in the account "Margin deposits and benefits payable" under non-current liabilities in the statement of financial position.



As at 31 December 2022 and 2021, assets for clearing system protection and benefits consist of:

(Unit: Thousand Baht)

	Consolidated financial statements					
	Securities Deposit and benefits		Clearing fund and benefits		Total	
	2022	2021	2022	2021	2022	2021
Investments managed by private fund						
Saving accounts	22,826	10,977	16,253	2,437	39,079	13,414
Investments measured fair value						
through profit or loss	-	329,046	-	1,690,355	-	2,019,401
Investments measured fair value						
through others comprehensive						
revenues	327,475	-	1,892,305	-	2,219,780	-
Total	350,301	340,023	1,908,558	1,692,792	2,258,859	2,032,815
Accrued interest receivable	216	222	1,251	1,122	1,467	1,344
Other assets	38	39	18,703	14,926	18,741	14,965
Total investments managed by						
private fund	350,555	340,284	1,928,512	1,708,840	2,279,067	2,049,124
Less: Allowance for expected credit loss	(1)	-	-	-	(1)	-
Total assets for clearing system						
protection and benefits, net	350,554	340,284	1,928,512	1,708,840	2,279,066	2,049,124

(Unit: Thousand Baht)

	Separate financial statements	
	Clearing fund and benefits	
	2022	2021
Contributions	100,000	100,000
Accumulated benefits	50,740	50,613
Total assets for clearing system protection and benefits, net	150,740	150,613

### Investments managed by TCH

On 5 May 2021, the meeting of the investment committee of TCH approved the management of the Securities Deposit and benefits to combine the investments managed by TCH and the investments by the private fund as well as transfer the investments managed by TCH to private fund to manage under the same investment portfolio.

### Investments managed by private fund

As at 31 December 2022 and 2021, investments in private fund are managed by 1 asset management company.

The investments policy of private fund is reference to the TCH's regulations in relation to deposits with financial institution and TCH's investment policies. For the year ended 31 December 2022, the investment in private fund have return rates of 0.98% per annum (2021: between 0.19% and 0.20% per annum).

As at 31 December 2022 and 2021, assets for clearing system protection and benefits payable consist of:

(Unit: Thousand Baht)

	Consolidated financial statements					
	Securities Deposit and benefits*		Clearing fund and benefits		Total	
	2022	2021	2022	2021	2022	2021
Contributions	346,844	339,912	1,609,291	1,392,540	1,956,135	1,732,452
Accumulated benefits	3,799	372	168,379	165,687	172,178	166,059
Total assets for clearing system protection and benefits payable	350,643	340,284	1,777,670	1,558,227	2,128,313	1,898,511

\*Due repayment the accumulated benefits to members every 6 months.

### 19. Reserve fund for clearing and settlement

Reserve Fund for clearing and settlement from SET established as a source of funds for clearing house to compensate for any damage that may result from default or damages that may be caused by the actions of members in the business relating to the settlement and delivery of securities of the clearing house.

On 14 January 2015 and 27 April 2016, SET's Board of Governors approved an appropriation of reserve fund for clearing and settlement for compliance with the standard of clearing house set by the Overseas Securities Regulator and for enhance competitiveness and support future business expansion. SET will reserve fund for clearing and settlement in the approximately Baht 5,690.00 million by 2020. As at 31 December 2022, the reserve fund for clearing and settlement was Baht 5,709.78 million (2021: Baht 5,702.03 million).

As at 31 December 2022 and 2021, reserve fund for clearing and settlement consist of:

	(Unit: Thousand Baht)	
	Consolidated	
	financial statements	
	2022	2021
<b>Investments managed by private fund</b>		
Saving accounts	9	3,408
Debt instruments measured at fair value through profit or loss	-	5,688,931
Debt instruments measured at fair value through other comprehensive revenues	5,699,401	-
Total	5,699,410	5,692,339
Accrued interest income	5,142	5,156
Other assets	5,228	4,534
Total investments managed by private fund	5,709,780	5,702,029

As at 31 December 2022 and 2021 investments in private fund are managed by 2 asset management companies.

The investment policy of private fund is reference to the TCH's regulations in relation to deposits with financial institution and company's investment policies. For the year ended 31 December 2022, the investments in private fund have return rates of 1.04% per annum (2021: between 0.17% and 0.18% per annum).

## 20. Other non-current asset

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
Withholding tax receivable	605,395	447,873	573,804	415,930
Deposit	2,495	2,495	2,485	2,485
Others	5,029	7,525	5,029	7,525
Total	612,919	457,893	581,318	425,940

**21. Trade and other payables**

	Consolidated financial statements		(Unit: Thousand Baht) Separate financial statements	
			2022	2021
	2022	2021		
Trade payables - related parties (Note 6)	-	-	90	-
Trade payables - unrelated parties	57,741	827,963	56,465	113,410
Accrued expenses - related parties (Note 6)	538,903	582,978	542,185	587,754
Accrued expenses - unrelated parties	1,296,602	1,319,187	1,242,952	1,259,213
Clearing collateral payable	8,284	4,436	-	-
Dividend payable from registrar services to investors	100,735	96,991	-	-
Financial benefits payable	91,172	83,578	-	-
Other payable from purchase of investments	67,731	-	67,731	-
Others	50,529	84,160	14,721	37,554
Total trade and other payables	<u>2,211,697</u>	<u>2,999,293</u>	<u>1,924,144</u>	<u>1,997,931</u>

**22. Other current liabilities**

	Consolidated financial statements		(Unit: Thousand Baht) Separate financial statements	
			2022	2021
	2022	2021		
Withholding tax payable	80,461	92,987	15,397	11,888
Other retention payables	41,641	39,573	32,649	31,180
Provision for employee benefits from accumulated annual leave	36,356	68,892	36,356	68,892
Value added tax payable	28,413	30,571	19,589	23,690
Ngoen-Thong-khong-Mee-Kha Fund	11,576	11,576	11,576	11,576
Others	4,052	5,052	1,153	812
Total other current liabilities	<u>202,499</u>	<u>248,651</u>	<u>116,720</u>	<u>148,038</u>



**23. Provision for long-term employee benefits**

Provision for long-term employee benefits, which represents compensation payable to employees after they retire, was as follows:

(Unit: Thousand Baht)		
Consolidated and Separate financial statements		
	2022	2021
<b>Provision for long-term employee benefits</b>		
<b>at beginning of years</b>	731,444	751,187
Included in revenues over expenses:		
Current service cost	49,067	52,252
Interest cost	14,706	10,045
Past service cost and gains or losses on settlement	5,882	11,622
Included in other comprehensive revenues (expenses):		
Actuarial (gain) loss arising from		
Demographic assumptions changes	-	886
Financial assumptions changes	(55,157)	(73,768)
Experience adjustments	-	7,787
Benefits paid during the years	(5,787)	(5,378)
Portion due within one years	-	(23,189)
<b>Provision for long-term employee benefits</b>		
<b>at end of years</b>	<u>740,155</u>	<u>731,444</u>

Expenses recognised in the statements of comprehensive revenues and expenses for the year ended 31 December 2022 and 2021 as below:

(Unit: Thousand Baht)		
Consolidated and Separate financial statements		
	2022	2021
Current service cost	49,067	52,252
Interest cost	14,706	10,045
Past service cost	-	11,792
Actuarial (gain) loss	5,882	(170)
Expenses recognised in the statements of comprehensive revenues and expenses	<u>69,655</u>	<u>73,919</u>

The Group expects to pay Baht 19.16 million of long-term employee benefits during the next year (2021: Baht 10.10 million) (SET: Baht 19.16 million 2021: Baht 10.10 million).

As at 31 December 2022, the weighted average duration of the liabilities for long-term employee benefit is 15 years (2021: 16 years) (SET: 15 years 2021: 16 years).

Significant actuarial assumptions are summarised below:

	Consolidated and Separate financial statements	
	2022	2021
Discount rate	1.39% - 5.19%	0.52% - 3.48%
Salary increase rate	5.00% - 11.00%	5.00% - 11.00%
Turnover rate	0.00% - 12.00%	0.00% - 12.00%
Pre-retirement mortality rate	Adjust 3% of TMO2017	Adjust 3% of TMO2017
Retirement age	60 years old	60 years old

The result of sensitivity analysis for significant assumptions that affect the present value of the long-term employee benefit obligation as at 31 December 2022 and 2021 are summarised below:

(Unit: Thousand Baht)

	Consolidated and Separate financial statements					
	Change in assumption		Increase in assumption		Decrease in assumption	
	2022	2021	2022	2021	2022	2021
Discount rate	0.5%	0.5%	(33,842)	(38,989)	36,474	42,181
Salary increase rate	1%	1%	80,310	81,018	(70,258)	(70,756)
Turnover rate	20%	20%	(20,543)	(22,414)	21,759	23,776

## 24. Fund balances

The statement of change in fund balances for the years ended 31 December 2022 and 2021 presented as part of the consolidated and separate financial statements as follows:

(Unit: Thousand Baht)

		Consolidated financial statements							
		Fund balances							
		Securities Clearing Reserve Fund	Derivatives Clearing Reserve Fund	Indemnity Fund	Staff Welfare Fund	Securities Investor Protection Fund	Derivatives Investor Protection Fund	General Fund	Total
Note									
<b>Balance as at</b>									
<b>1 January 2021</b>		3,440,000	2,250,000	100,000	115,258	502,931	56,919	21,242,070	27,707,178
Other comprehensive									
revenues (expenses),									
net of tax		25.2	-	-	-	-	-	65,095	65,095
Revenues over expenses		25.2	-	-	778	9,417	514	1,585,922	1,596,631
<b>Balance as at</b>									
<b>31 December 2021</b>		<u>3,440,000</u>	<u>2,250,000</u>	<u>100,000</u>	<u>116,036</u>	<u>512,348</u>	<u>57,433</u>	<u>22,893,087</u>	<u>29,368,904</u>
<b>Balance as at</b>									
<b>1 January 2022</b>		3,440,000	2,250,000	100,000	116,036	512,348	57,433	22,893,087	29,368,904
Other comprehensive									
revenues (expenses),									
net of tax		25.2	-	-	-	-	-	89,311	89,311
Contributions from									
additional fees		25.1	-	-	-	1,050	625	(1,675)	-
Revenues over (under)									
expenses		25.2	-	-	(259)	(4,316)	569	1,410,269	1,406,263
<b>Balance as at</b>									
<b>31 December 2022</b>		<u>3,440,000</u>	<u>2,250,000</u>	<u>100,000</u>	<u>115,777</u>	<u>509,082</u>	<u>58,627</u>	<u>24,390,992</u>	<u>30,864,478</u>

(Unit: Thousand Baht)

## Separate financial statements

Fund balances							
Note	Securities Clearing Reserve Fund	Derivatives Clearing Reserve Fund	Indemnity Fund	Staff Welfare Fund	Securities Investor Protection Fund	General Fund	Total
<b>Balance as at</b>							
<b>1 January 2021</b>	3,440,000	2,250,000	100,000	115,258	502,931	17,952,909	24,361,098
Other comprehensive							
revenues (expenses),							
net of tax	25.2	-	-	-	-	65,095	65,095
Revenues over expenses	25.2	-	-	778	9,417	1,005,001	1,015,196
<b>Balance as at</b>							
<b>31 December 2021</b>	<u>3,440,000</u>	<u>2,250,000</u>	<u>100,000</u>	<u>116,036</u>	<u>512,348</u>	<u>19,023,005</u>	<u>25,441,389</u>
<b>Balance as at</b>							
<b>1 January 2022</b>	3,440,000	2,250,000	100,000	116,036	512,348	19,023,005	25,441,389
Other comprehensive							
revenues (expenses),							
net of tax	25.2	-	-	-	-	77,028	77,028
Contributions from							
additional fee	25.1	-	-	-	1,050	(1,050)	-
Revenues over (under)							
expenses	25.2	-	-	(259)	(4,316)	629,485	624,910
<b>Balance as at</b>							
<b>31 December 2022</b>	<u>3,440,000</u>	<u>2,250,000</u>	<u>100,000</u>	<u>115,777</u>	<u>509,082</u>	<u>19,728,468</u>	<u>26,143,327</u>



**Details of fund balances are as follows:****24.1 Securities Clearing Reserve Fund**

In 1997 and 2013, the Board of Governors of SET approved an appropriation of general funds of Baht 2,000 million and Baht 500 million, respectively, totalling Baht 2,500 million to the Securities Clearing Reserve Fund, which is operated by a subsidiary of SET, in order to resolve liquidity risk in the event of default on clearing and settlement from securities trading on SET.

In 2015, the Board of Governors of SET approved an appropriation of general funds to the Securities Clearing Reserve Fund from 2015 - 2019, totalling Baht 2,640 million, starting from 2015 of Baht 1,840 million and in the following years of Baht 200 million per year.

In 2018, the Board of Governors of SET approved an appropriation of the Securities Clearing Reserve Fund to Derivatives Clearing Reserve Fund of Baht 700 million, in order for the clearing house to have sufficient funds in both markets.

In 2020, the Board of Governors of SET approved an appropriation of the Securities Clearing Reserve Fund to Derivatives Clearing Reserve Fund of Baht 1,000 million, in order for the clearing house to have sufficient funds in both markets.

**24.2 Derivatives Clearing Reserve Fund**

In 2004, the Board of Governors of SET approved an appropriation of general funds of Baht 300 million to the Derivatives Clearing Reserve Fund in order to assure contingent losses from the clearing system of futures contracts at Thailand Clearing House Co., Ltd.

In 2018, Derivatives Clearing Reserve Fund has been allocated from Securities Clearing Reserve Fund of Baht 700 million according to the resolution of the Board of Governors of SET, in order for the clearing house to have sufficient funds in both markets.

In 2020, Derivatives Clearing Reserve Fund has been allocated from Securities Clearing Reserve Fund of Baht 1,000 million and from general fund of Baht 250 million according to the resolution of the Board of Governors of SET, in order for the clearing house to have sufficient funds in both markets.

**24.3 Indemnity Fund**

In 1993 and 2002, the Board of Governors of SET approved appropriations of general funds totalling Baht 100 million to the Indemnity Fund in order to assist and assure the Board of Governors of SET and those appointed assignees on matters requiring consideration and decisions which may affect or cause damages to other parties.

#### 24.4 Staff Welfare Fund

In 1997 and 2004, the Board of Governors of SET approved appropriations of general funds was Baht 75 million to the Staff Welfare Fund. All benefits earned from this fund are retained in the fund.

#### 24.5 Securities Investor Protection Fund

In 2004, the Board of Governors of SET approved an appropriation of Baht 300 million from broker seat admission fees as an initial fund for the establishment of the Securities Investor Protection Fund (SIPF).

The SIPF was formally established under SIPF regulations on 1 October 2004. The objective of the fund is to protect and build investor confidence in trading listed securities on SET through the members of the SIPF. As at 31 December 2022, there were 33 SIPF members from securities companies (2021: 33 SIPF members).

The assets of SIPF consist of:

- 1) the initial fund from SET of Baht 300 million;
- 2) the cumulative membership entrance fees and monthly fees collected from the members;
- 3) the future benefits generated from investments in the SIPF; and
- 4) the additional fees collected from members in case members' operation shown implicit of their unintentional operated in securities business.

SIPF will protect the investors' assets which are in the custody of the securities brokers who are members of the SIPF. In the event that the members of the SIPF fail to return the assets to investors, each investor shall be compensated by the SIPF for the related damages at the actual cost, but not exceeding Baht 1 million per SIPF member, in the following cases:

- 1) if any SIPF member is in receivership under the Bankruptcy Act or
- 2) if there are disputes concerning the purchase or sale of securities listed on SET between investors and any SIPF member, and the arbitrator's award is that the SIPF member shall return the assets to investors, but the SIPF member violates the award.

The protection will not include any losses from securities trading regardless of who makes the investment decision.

If the number of assets of the SIPF is not sufficient for compensation to investors as mentioned above, the investors will receive from the SIPF for assets in accordance with the proportion of damage sustained by each investor (Pro rata based).

When the Board of Governors of SET resolves to approve granting protection to any investor, SET will use the SIPF to provide protection to such investor, which shall be in the following sequence:

- 1) the SIPF with respect to the part paid by that SIPF's member who caused damage to the investors;
- 2) the SIPF with respect to the yields or benefits;
- 3) the SIPF with respect to the part paid by other member; and
- 4) the SIPF with respect to the part paid by SET

Upon SET's use of SIPF to provide protection to investors in accordance with the rules prescribed, SET shall exercise the right to demand the return of the assets which have been paid to the investors and damages from the SIPF's member in accordance with the right transferred by the investors.

SET shall allocate the assets or money to SIPF which are returned from members who caused damage to the investors in the following sequence:

- 1) the SIPF with respect to the part belonging to SET;
- 2) the SIPF with respect to the part belonging to other members;
- 3) the SIPF with respect to the yield or benefits; and
- 4) the SIPF with respect to the part belonging to SIPF's members who caused damage to the investors

#### 24.6 Derivatives Investor Protection Fund

In 2012 the board of directors of Thailand Futures Exchange Public Company Limited ("TFEX"), a subsidiary, has a resolution to establish the Derivatives Investor Protection Fund ("DIPF") and approved an appropriation of Baht 50 million as an initial fund.

The DIPF was established on 15 November 2012. The objective of the DIPF is to provide protection for derivatives contracts investors in accordance with the rules prescribed by TFEX. Investors need to be protected must become customers of DIPF members and is a Thai natural person, a juristic person incorporated in Thailand who is not an institutional investor under the Derivatives Act B.E. 2546. As at 31 December 2022, there were 37 DIPF members from security companies (2021: 37 DIPF members).

Assets of the DIPF consist of TFEX initial capital, admission fees and contributions collected from members of the DIPF, and yields or benefits obtained from the proceeds and assets of the DIPF after the deduction of expenses for the operation of the DIPF. At the time of its establishment, the DIPF will have assets worth no less than Baht 100 million, which consists of initial capital of Baht 50 million from TFEX and admission fees and contributions from DIPF

members in the rest to make the total of Baht 100 million. TFEX may collect additional sums of money as it deems necessary and appropriate.

DIPF will protect the investors' assets which are in the custody of the securities brokers who are members of the DIPF. In the event that the members of the DIPF fail to return the assets to investors, each investor shall be compensated by the DIPF for the related damages at the actual cost, but not exceeding Baht 1 million per DIPF member, in the following cases:

- 1) if any DIPF member is in receivership under the Bankruptcy Act or
- 2) if there are disputes concerning the purchase or sale of securities listed on SET between investors and any DIPF member, and the arbitrator's award is that the DIPF member shall return the assets to investors, but the DIPF member violates the award.

The protection will not include any losses from derivatives trading regardless of who makes the investment decision.

If the number of assets of the DIPF is not sufficient for compensation to investors as mentioned above, the investors will receive from the DIPF for assets in accordance with the proportion of damage sustained by each investor (Pro rata based).

When the Board resolves to approve granting protection to any investor. TFEX will use the DIPF to provide protection to such investor, which shall be in the following sequence:

- 1) the DIPF with respect to the part paid by that DIPF's member who caused damage to the investors;
- 2) the DIPF with respect to the yields or benefits;
- 3) the DIPF with respect to the part paid by other member; and
- 4) the DIPF with respect to the part paid by TFEX

Upon TFEX's use of DIPF to provide protection to investors in accordance with the rules prescribed, DIPF's member who caused damage to investors has the duty to return assets to TFEX. TFEX shall exercise the right to demand the return of the assets which have been paid to the investors and damages from the DIPF's member in accordance with the right transferred by the investors.

TFEX shall allocate the funds which are returned in whole or in part to the DIPF in the following sequence:

- 1) the DIPF with respect to the part belonging to TFEX;
- 2) the DIPF with respect to the part belonging to other members;
- 3) the DIPF with respect to the yield or benefits; and



- 4) the DIPF with respect to the part belonging to DIPF's members who caused damage to the investors

## 25. Financial position and results of fund operations

### 25.1 Financial position of fund

The SIPF's financial statements included as part of the consolidated and separate's financial statements are as follows:

		(Unit: Thousand Baht)	
		Consolidated and Separate financial statements	
		As at 31 December	
		2022	2021
<b>Assets</b>			
Current assets			
Cash deposits		105,343	163,656
Other current financial assets		289,202	357,964
Accrued interest receivable		3,036	2,802
Other current assets		1,363	1,110
Total current assets		398,944	525,532
Non-current assets			
Other non-current financial assets		451,496	331,304
Total non-current assets		451,496	331,304
<b>Total assets</b>		<b>850,440</b>	<b>856,836</b>
<b>Liabilities and fund balances</b>			
Liabilities of members portion			
Contributions from members		229,742	229,390
Benefits on contributions from members		111,616	115,098
Total liabilities of members portion		341,358	344,488
Fund balances			
Initial fund		300,000	300,000
Contributions from additional fees		1,050	-
Benefits on contribution from SET		208,032	212,348
Total fund balances		509,082	512,348
<b>Total liabilities and fund balances</b>		<b>850,440</b>	<b>856,836</b>

The DIPF's financial statement included as part of the consolidated financial statements are as follows:

	(Unit: Thousand Baht)	
	Consolidated financial statements	
	As at 31 December	
	2022	2021
<b>Assets</b>		
Current assets		
Cash deposits	13,198	34,928
Other current financial assets	46,642	70,597
Contributions from members	9	7
Accrued interest receivable	236	220
Total current assets	60,085	105,752
Non-current assets		
Other non-current financial assets	54,637	7,119
Total non-current assets	54,637	7,119
<b>Total assets</b>	<b>114,722</b>	<b>112,871</b>
<b>Liabilities and fund balances</b>		
Current liabilities		
Income tax payable	268	249
Other current liabilities	2	1
Total current liabilities	270	250
Non-current liabilities		
Contributions from members	51,426	51,335
Benefits on contributions from members	4,399	3,853
Total non-current liabilities	55,825	55,188
Total liabilities	56,095	55,438
Fund balances		
Initial fund	50,000	50,000
Contributions from additional fee	625	-
Benefits on contributions from TFEX	8,002	7,433
Total fund balances	58,627	57,433
<b>Total liabilities and fund balances</b>	<b>114,722</b>	<b>112,871</b>

## 25.2 Results of fund operations

Details of the results of fund operations which are included as part of the consolidated and separate statement of comprehensive revenues and expenses are as follows:

(Unit: Thousand Baht)

	Consolidated financial statements				
	Staff	Securities	Derivatives	General Fund	Total
	Welfare	Investor	Investor		
	Fund	Protection Fund (SET's portion)	Protection Fund (TFEX's portion)		
<b>For the year ended 31 December 2022</b>					
<b>Revenues</b>					
Operating revenues	-	-	-	7,554,326	7,554,326
Investment income (loss), net	(259)	(4,316)	569	(364,587)	(368,593)
Other income	-	-	-	196,566	196,566
Share of profit of investment in associates and joint venture, net of tax	-	-	-	33,137	33,137
<b>Total revenues</b>	<b>(259)</b>	<b>(4,316)</b>	<b>569</b>	<b>7,419,442</b>	<b>7,415,436</b>
<b>Expenses</b>					
Operating expenses	-	-	-	5,133,808	5,133,808
Contribution to the Capital Market Development Fund	-	-	-	538,903	538,903
Income tax expenses	-	-	-	336,462	336,462
<b>Total expenses</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>6,009,173</b>	<b>6,009,173</b>
<b>Revenues over (under) expenses</b>	<b>(259)</b>	<b>(4,316)</b>	<b>569</b>	<b>1,410,269</b>	<b>1,406,263</b>
<b>Other comprehensive revenues:</b>					
Other comprehensive revenues to be reclassified to revenues or expenses in subsequent periods					
Unrealised gain on investments	-	-	-	12,283	12,283
Other comprehensive revenues not to be reclassified to revenues or expenses in subsequent periods					
Actuarial gain	-	-	-	77,028	77,028
<b>Other comprehensive revenues for the year</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>89,311</b>	<b>89,311</b>
<b>Total comprehensive revenues over (under) expenses for the year</b>	<b>(259)</b>	<b>(4,316)</b>	<b>569</b>	<b>1,499,580</b>	<b>1,495,574</b>
<b>Total comprehensive revenues over (under) expenses for the year attributable to:</b>					
Owners of the parents	(259)	(4,316)	569	1,499,580	1,495,574
Non - controlling interests	-	-	-	-	-
	<b>(259)</b>	<b>(4,316)</b>	<b>569</b>	<b>1,499,580</b>	<b>1,495,574</b>

(Unit: Thousand Baht)

	Consolidated financial statements				
	Staff	Securities	Derivatives		
	Welfare	Investor	Investor		
	Fund	Protection Fund	Protection Fund	General Fund	Total
	(SET's portion)	(TFEX's portion)			
<b>For the year ended 31 December 2021</b>					
<b>Revenues</b>					
Operating revenues	-	-	-	7,734,730	7,734,730
Investment income, net	778	9,510	700	368,641	379,629
Other income	-	-	-	180,107	180,107
Share of profit of investment in associates and joint venture, net of tax	-	-	-	35,590	35,590
<b>Total revenues</b>	<b>778</b>	<b>9,510</b>	<b>700</b>	<b>8,319,068</b>	<b>8,330,056</b>
<b>Expenses</b>					
Operating expenses	-	93	51	5,035,610	5,035,754
Contribution to the Capital Market Development Fund	-	-	-	582,978	582,978
Income tax expenses	-	-	135	1,114,558	1,114,693
<b>Total expenses</b>	<b>-</b>	<b>93</b>	<b>186</b>	<b>6,733,146</b>	<b>6,733,425</b>
<b>Revenues over expenses</b>	<b>778</b>	<b>9,417</b>	<b>514</b>	<b>1,585,922</b>	<b>1,596,631</b>
<b>Other comprehensive revenues:</b>					
Other comprehensive revenues not to be reclassified to revenues or expenses in subsequent periods					
Actuarial gain	-	-	-	65,095	65,095
<b>Other comprehensive revenues for the year</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>65,095</b>	<b>65,095</b>
<b>Total comprehensive revenues over expenses for the year</b>	<b>778</b>	<b>9,417</b>	<b>514</b>	<b>1,651,017</b>	<b>1,661,726</b>
<b>Total comprehensive revenues over expenses for the year attributable to:</b>					
Owners of the parents	778	9,417	514	1,651,017	1,661,726
Non - controlling interests	-	-	-	-	-
	778	9,417	514	1,651,017	1,661,726



(Unit: Thousand Baht)

	Separate financial statements			
	Staff	Securities Investor		
	Welfare	Protection Fund		
	Fund	(SET's portion)	General Fund	Total
<b>For the year ended 31 December 2022</b>				
<b>Revenues</b>				
Operating revenues	-	-	3,456,128	3,456,128
Investment income (loss), net	(259)	(4,316)	218,611	214,036
Other income	-	-	1,977,441	1,977,441
<b>Total revenues</b>	<b>(259)</b>	<b>(4,316)</b>	<b>5,652,180</b>	<b>5,647,605</b>
<b>Expenses</b>				
Operating expenses	-	-	4,494,992	4,494,992
Contribution to the Capital Market Development Fund	-	-	538,903	538,903
Income tax expenses	-	-	(11,200)	(11,200)
<b>Total expenses</b>	<b>-</b>	<b>-</b>	<b>5,022,695</b>	<b>5,022,695</b>
<b>Revenues over (under) expenses</b>	<b>(259)</b>	<b>(4,316)</b>	<b>629,485</b>	<b>624,910</b>
<b>Other comprehensive revenues:</b>				
Other comprehensive revenues not to be reclassified to revenues or expenses in subsequent periods				
Actuarial gain	-	-	77,028	77,028
<b>Other comprehensive revenues for the year</b>	<b>-</b>	<b>-</b>	<b>77,028</b>	<b>77,028</b>
<b>Total comprehensive revenues over (under) expenses for the year</b>	<b>(259)</b>	<b>(4,316)</b>	<b>706,513</b>	<b>701,938</b>
<b>Total comprehensive revenues over (under) expenses for the year attributable to:</b>				
Owners of the parents	(259)	(4,316)	706,513	701,938
Non - controlling interests	-	-	-	-
	(259)	(4,316)	706,513	701,938

(Unit: Thousand Baht)

	Separate financial statements			
	Securities		General Fund	Total
	Staff	Investor		
	Welfare	Protection Fund		
	Fund	(SET's portion)		
<b>For the year ended 31 December 2021</b>				
<b>Revenues</b>				
Operating revenues	-	-	3,809,064	3,809,064
Investment income, net	778	9,510	1,074,904	1,085,192
Other income	-	-	1,978,798	1,978,798
<b>Total revenues</b>	<b>778</b>	<b>9,510</b>	<b>6,862,766</b>	<b>6,873,054</b>
<b>Expenses</b>				
Operating expenses	-	93	4,466,119	4,466,212
Contribution to the Capital Market Development Fund	-	-	582,978	582,978
Income tax expenses	-	-	808,668	808,668
<b>Total expenses</b>	<b>-</b>	<b>93</b>	<b>5,857,765</b>	<b>5,857,858</b>
<b>Revenues over expenses</b>	<b>778</b>	<b>9,417</b>	<b>1,005,001</b>	<b>1,015,196</b>
<b>Other comprehensive revenues:</b>				
Other comprehensive revenues not to be reclassified to revenues or expenses in subsequent periods				
Actuarial gain	-	-	65,095	65,095
<b>Other comprehensive revenues for the year</b>	<b>-</b>	<b>-</b>	<b>65,095</b>	<b>65,095</b>
<b>Total comprehensive revenues over expenses for the year</b>	<b>778</b>	<b>9,417</b>	<b>1,070,096</b>	<b>1,080,291</b>
<b>Total comprehensive revenues over expenses for the year attributable to:</b>				
Owners of the parents	778	9,417	1,070,096	1,080,291
Non - controlling interests	-	-	-	-
	<b>778</b>	<b>9,417</b>	<b>1,070,096</b>	<b>1,080,291</b>

## 26. Operating revenues

Operating revenues for the years ended 31 December 2022 and 2021 consist of:

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
<b>Service type:</b>				
Trading fees	2,567,057	2,908,609	1,849,629	2,261,670
Securities registrar fees	1,595,198	1,458,444	-	-
Clearing & settlement fees	800,087	835,006	-	-
Listing fees	667,709	696,307	667,709	696,307
Member services fees	477,091	507,172	-	-
Customisation and IT support fees	489,094	410,753	516,285	437,613
Information service fees	430,904	423,781	399,105	390,074
Depository fees	402,096	379,287	-	-
Membership fees	63,990	63,860	23,400	23,400
Fund services fees	37,683	31,678	-	-
Digital gateway service fees	13,045	6,899	-	-
Payment service fees	10,372	12,934	-	-
Total operating revenues	<u>7,554,326</u>	<u>7,734,730</u>	<u>3,456,128</u>	<u>3,809,064</u>
<b>Timing of revenue recognition</b>				
At a point in time				
Trading fees	2,567,057	2,908,609	1,849,629	2,261,670
Securities registrar fees	1,001,285	895,287	-	-
Clearing & settlement fees	800,087	835,006	-	-
Listing fees	31,499	272,151	31,499	272,151
Member services fees	459,586	490,192	-	-
Customisation and IT support fees	57,837	50,323	71,828	63,983
Information service fees	430,904	423,781	399,105	390,074
Depository fees	402,096	379,287	-	-
Fund services fees	10,303	8,879	-	-
Digital gateway service fees	9,417	4,574	-	-
Payment service fees	9,188	12,182	-	-
Total	<u>5,779,259</u>	<u>6,280,271</u>	<u>2,352,061</u>	<u>2,987,878</u>

(Unit: Thousand Baht)				
	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
Overtime				
Securities registrar fees	593,913	563,157	-	-
Listing fees	636,210	424,156	636,210	424,156
Member services fee	17,505	16,980	-	-
Customisation and IT support fees	431,257	360,430	444,457	373,630
Membership fees	63,990	63,860	23,400	23,400
Fund services fees	27,380	22,799	-	-
Digital Gateway service fees	3,628	2,325	-	-
Payment service fees	1,184	752	-	-
Total	1,775,067	1,454,459	1,104,067	821,186
Total operating revenues	7,554,326	7,734,730	3,456,128	3,809,064

## 27. Investment revenue (loss) - net

(Unit: Thousand Baht)				
	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
Interest income	325,717	249,320	168,449	141,717
Less: Interest expenses				
Short-term borrowings from subsidiaries (Note 6)	-	-	(11,115)	(11,149)
Assets for clearing system protection - members' portion	(119,280)	(102,648)	-	-
Interest income, net	206,437	146,672	157,334	130,568
Dividend income from				
Mutual funds	29,744	63,039	29,744	63,039
Subsidiaries (Note 12)	-	-	563,222	606,182
Associates (Note 13)	-	-	20,805	13,870
Other entities	5,070	4,536	5,070	4,536
Realised gain (loss) from investments	(393,025)	42,957	(310,429)	57,953

(Unit: Thousand Baht)

	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
Realised loss on forward contracts	(16,166)	-	(16,166)	-
Realised loss on foreign exchange rate	(22,514)	(74,014)	(29,209)	(74,014)
Realised loss on foreign exchange rate from forward contracts	(277,646)	(248,321)	(277,646)	(248,321)
Realised gain on exchange rate from foreign investments	450,841	44,914	450,841	44,914
Unrealised gain (loss) from investments	(164,027)	128,109	(183,736)	209,739
Unrealised gain (loss) on exchange rate from foreign investments	(319,274)	280,612	(319,274)	280,612
Unrealised gain (loss) on foreign exchange rate from forward contracts	133,814	(64,669)	133,814	(64,669)
Unrealised gain (loss) on foreign exchange rate	(7,087)	50,721	(7,087)	50,721
Allowance for expected credit loss	8,987	(5,137)	1,070	552
Total investment revenue (loss) - net	(364,846)	369,419	218,352	1,075,682

**28. Other income**

(Unit: Thousand Baht)

	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
Revenues from fees and management funds	47,724	48,749	693	387
Service income from related parties	36,061	31,166	1,916,381	1,940,052
Educational activities income	28,548	16,802	28,548	16,802
Fines	13,810	7,742	7,555	2,887
Revenues from membership transfer	10,000	-	10,000	-
Rental & utilities revenues	9,846	9,101	9,846	9,101
Revenues from securities borrowing and lending	1,387	3,489	-	-
Other income	49,190	63,058	4,418	9,569
Total other income	196,566	180,107	1,977,441	1,978,798



## 29. Employee expenses

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
<b>Management</b>				
Salaries and other benefits	272,397	257,447	272,397	257,447
Contributions to provident fund	14,684	13,747	14,684	13,747
Total	287,081	271,194	287,081	271,194
<b>Other employees</b>				
Salaries and other benefits	1,785,720	1,791,147	1,785,720	1,791,147
Contributions to provident fund	89,050	83,937	89,050	83,937
Total	1,874,770	1,875,084	1,874,770	1,875,084
Total employee expenses	2,161,851	2,146,278	2,161,851	2,146,278

The defined contribution plans comprise provident funds established by the Group for its employees. Contributions are made monthly by the employees at rates between 3.00% to 15.00% of their basic salaries and by the Group at the rate of 10.00% of the employees' basic salaries. The provident funds are registered with the Ministry of Finance as juristic entities and are managed by a licensed Fund Manager.

## 30. SEC fees

The Securities and Exchange Act B.E. 2535 requires SET to pay to the SEC at a rate as determined by the Board of the SEC.

The Board of the SEC has approved to charge SET for the year 2020 - 2022 (for the period of 3 years) at the rate of 0.002% of trading value of each year.

On 14 December 2020, the Board of the SEC also required Thailand Future Exchange Public Company Limited (subsidiary) to pay the fee of derivatives trading exchange since 2021 onward. The rates is between 0.010% - 0.035% of number of trading contracts in the market, with a minimum fee of Baht 2 million but not exceeding Baht 15 million per annum.

**31. Other expenses**

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
Fees and compensation expenses	148,023	103,046	144,448	99,194
Donation and CSR expenses	61,349	112,158	61,349	112,158
Capital market development expenses	33,231	30,259	33,231	30,259
Travelling and vehicle expenses	9,595	2,784	9,383	2,767
Insurance premiums	6,821	6,196	6,821	6,196
Institution membership fees	6,375	5,121	4,394	3,655
Meeting expenses	2,369	785	2,300	785
Entertainment expenses	2,189	3,080	2,176	3,067
Other expenses	14,735	12,721	12,492	10,195
Total other expenses	284,687	276,150	276,594	268,276

**32. Contribution to the Capital Market Development Fund**

The Securities and Exchange Act (No. 6) B.E. 2562, announced on 16 April 2019, requires that SET proceed as follows:

- 1) Transfer the money or any other assets in the amount of Baht 5,700 million to the Capital Market Development Fund ("CMDF"). SET's Board of the Governors and CMDF's Committee shall jointly determine the amount or value, type and nature of the money or assets to be transferred.
- 2) Provide the money to CMDF within 150 days from the end of the calendar year at the rate not less than 90% of the revenue after deduction of expenses, taxes and reserves. In this regard, the consolidated financial statements of SET shall be used to calculate the contribution amount. The provision of reserves shall be in accordance with the type and amount prescribed by the Board of Governors of SET.

SET transferred money in the amount of Baht 5,700 million to the CMDF on 4 July 2019 and recognised as expenses in consolidated and separate financial statements for the year 2019.

SET recorded an annual contribution amount of Baht 538.90 million as an expense in the consolidated and separate financial statements for the year ended 31 December 2022 (2021: Baht 582.98 million). Details of an annual contribution amount are as follows:

## Reserves

At the meeting of the Board of Governors of the Stock Exchange of Thailand held on 31 October 2020 and 18 November 2020, the Board approved the type and principle of reserves as prescribed by The Securities and Exchange Act (No. 6) B.E. 2562. On 22 February 2023 the Board of Governors approved reserve for 2022 of Baht 1,346 million (2021: Approved reserves of Baht 1,532 million). Details are as follows:

Type of reserve	Reserve allocation principles to ensure adequacy of funding sources	Reserve amount (Thousand Baht)	
		2022	2021
1. Reserves set aside according to law or criteria in business operation specified, including reserve amount to accommodate special situations	1.1 Legal reserve	10,549	17,608
	1.2 Reserves according to business operation such as EMIR (European Market Infrastructure Regulation), PFMI (Principles for Financial Market Infrastructures) to meet an increase (decrease) of business operation during the year	(113,390)	25,660
	1.3 Reserves allocated for specific funds such as approval of additional capital in specific funds during the year, benefit sharing of Securities Investor Protection Fund, Derivatives Investor Protection Fund, Clearing Fund or other similar funds	4,800	12,814
	1.4 Reserves allocated for accommodating operations risks and emergency measures	514,000	467,000
2. Reserves set aside to accommodate the fluctuation of investments	According to unrealised gain/(loss) during the year	(356,574)	394,773
3. Reserves set aside for investment in business or fixed assets	According to the investment amount in business and fixed assets approved by the Board of Governors	1,287,000	614,000
Total reserves		1,346,385	1,531,855

Annual contribution calculated as follows:

(Unit: Thousand Baht)

	Consolidated and Separate financial statements	
	2022	2021
Revenues over expenses before contribution to CMDf (presented in the statement of comprehensive revenues and expenses)	2,281,628	3,294,167
Less: Income tax expenses	(336,462)	(1,114,558)
Revenue after deduction of expenses, before reserves	1,945,166	2,179,609
Less: Reserves	(1,346,385)	(1,531,855)
Revenue after deduction of expenses, taxes and reserves	598,781	647,754
Annual contribution amount at rate 90%	538,903	582,978

Accumulated contribution to CMDf according to the financial statements as of 31 December 2022 and 2021 can be presented as follows:

(Unit: Thousand Baht)

	Consolidated and Separate financial statements	
	2022	2021
Accumulated contribution at beginning of years	6,644,619	6,061,641
Annual contribution amount	538,903	582,978
Total accumulated contribution expenses	7,183,522	6,644,619

### 33. Income tax

Income tax expenses (revenues) for the years ended 31 December 2022 and 2021 are made up as follows:

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
<b>Current income tax:</b>				
Current income tax charge	355,057	323,756	-	-
Corporate income tax related to remittance to CMDF	-	952,000	-	952,000
<b>Deferred tax:</b>				
Relating to origination and reversal of temporary differences	(18,595)	(161,198)	(11,200)	(143,332)
<b>Income tax expenses (revenues) reported in revenues over expenses</b>	<b>336,462</b>	<b>1,114,558</b>	<b>(11,200)</b>	<b>808,668</b>

The amounts of income tax relating to each component of other comprehensive revenues (expenses) for the years ended 31 December 2022 and 2021 are as follows:

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
Deferred tax on gain from the change in value of financial assets measured at FVOCI	(4,336)	-	-	-
Deferred tax on actuarial gains and losses	21,549	-	21,549	-
	<b>17,213</b>	<b>-</b>	<b>21,549</b>	<b>-</b>



The reconciliation between revenues over expenses and income tax expenses (revenues) as follows:

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
Revenues over expenses before income tax	1,742,725	2,711,189	613,710	1,823,864
Applicable tax rate	20%	20%	20%	20%
Accounting revenues over expenses before income tax multiplied by income tax rate	348,545	542,238	122,742	364,773
Corporate income tax related to remittance to CMDF of previous years	-	604,935	-	604,935
Cumulative loss carried forward from the previous years	(127,434)	(761)	(126,123)	-
Reversal of previous deferred tax asset	-	(216,059)	-	(216,059)
Assessed income under Revenue Code	4,827	7,618	2,885	2,102
Income not subject to tax	(121,942)	(126,187)	(118,314)	(126,187)
Additional expense deductions allows	(2,987)	(7,578)	(2,987)	(7,578)
Non-deductible expenses	116,991	186,161	110,597	186,682
Eliminated transaction between related party, net of tax	118,576	124,294	-	-
Revenues over expenses - Securities/Derivatives Investor Protection Fund, net of tax	(114)	(103)	-	-
Income tax expenses (revenues) reported in revenues over expenses	336,462	1,114,558	(11,200)	808,668

The components of deferred tax assets and deferred tax liabilities are as follows:

(Unit: Thousand Baht)

	Statements of financial position			
	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
Deferred tax assets - net	183,497	146,107	176,081	143,332
Deferred tax liabilities - net	(1,582)	-	-	-
Deferred tax - net	181,915	146,107	176,081	143,332
<b>Deferred tax assets</b>				
Allowance for expected credit losses	11,570	10,601	9,235	8,539
Unrealised loss on financial asset	7,415	4,736	-	1,873
Accumulated amortisation - computer software	29,996	36,661	29,996	36,661
Provision for short-term employee benefits	-	13,778	-	13,778
Provision for long-term employee benefits	137,990	145,954	137,990	145,954
Total	186,971	211,730	177,221	206,805
<b>Deferred tax liabilities</b>				
Unrealised gain on financial asset	(5,056)	(65,623)	(1,140)	(63,473)
Total	(5,056)	(65,623)	(1,140)	(63,473)
Net	181,915	146,107	176,081	143,332

As at 31 December 2022, the Group has deductible temporary differences and unused tax losses totaling Baht 1,524 million (2021: Baht 2,072 million) (SET: Baht 1,503 million 2021: Baht 2,069 million), on which deferred tax assets have not been recognised as the Group believes future taxable profits may not be sufficient to allow utilisation of the temporary differences and unused tax losses.

As at 31 December 2022, the Group has unused tax losses amounted to Baht 1,460 million will gradually expire within 2027 (2021: Baht 2,072 million will gradually expire within 2026) (SET: Baht 1,439 million will gradually expire within 2024; 2021: Baht 2,069 million will gradually expire within 2024).

### **Corporate income tax related to remittance contributed to Capital Market Development Fund (“CMDF”)**

In accordance with Section 40 of the Securities and Exchange Act (No. 6) B.E. 2562 dated 16 April 2019 (Securities Act), SET is required to contribute Baht 5,700 million to the CMDF in the year the Act came into force. The remittance contributed was recognised as part of revenues under expenses in 2019 and as tax expenditures for corporate income tax calculation of 2019.

In addition, under Section 182/1 of the Securities Act, SET is required to contribute the remittances to CMDF, after the contribution of the remittance to the fund under Section 40 as mentioned above at the rate of not less than 90% of income after deduction of expenses, taxes, and reserves for the year 2020 - 2022 and recognised as tax expense in the calculation of income tax for the year 2020 - 2022.

In the year 2019, SET submitted a tax inquiry to the Revenue Department with respect to the tax practice of remittances to CMDF. Subsequently, on 15 December 2021, SET received a letter responding to the aforementioned inquiry from the Large Business Tax Administration Office, Revenue Department, stating that the amount of Baht 5,700 million contributed by SET to CMDF and the remittances to CMDF as mentioned above cannot be considered as tax expenditures. On 5 January 2022, SET submitted request to the Revenue Department to reconsider the response of the Large Business Tax Administration Division. SET provided further clarification and justification to support the assertion that the tax practice of remittances to CMDF was in accordance with the relevant tax laws and required by the Securities Act. Therefore, such remittance contribution to CMDF and annual remittances made in accordance the Securities Act can be treated as deductible expenses for the calculation of SET's corporate income tax.

In addition, based on the opinion of an external tax advisor, SET has sufficient grounds to require a reconsideration of the response from the Large Business Tax Administration Division. Furthermore, both the external tax advisor and SET's management believe that the amount of Baht 5,700 million contributed by SET to CMDF and the remittances to CMDF as mentioned above should not be considered as non-deductible expense for calculation of SET's corporate income tax, as was indicated in the response from the Large Business Tax Administration Office.

Previously, SET has provided additional clarification and taken all necessary actions to provide information, facts and relevant laws to the Revenue Department and other relevant authorities in order to obtain a new conclusion that is consistent with the current context that SET is an organisation established under a specific law and in accordance with the relevant legal practices for contributing such remittances to CMDF.

Given that such issues are complex and involve the interpretation and practice of specific laws, and that, during the year 2022, SET did not receive any additional letters or clarifications from the Revenue Department, SET's management, internal legal advisors and external tax advisors have been monitoring progress and engaging in negotiations with relevant organisations to resolve such issues. Therefore, SET's management exercises judgment in compliance with the Interpretation of Thai Financial Reporting Standard No. 23, Uncertainty over Income Tax Treatments, and determines that the estimation relating to the contribution of remittances to CMDF as at 31 December 2022 amounting to Baht 952 million, as also presented in the financial statements for the year 2021, is sufficient.

### 34. Segment information

Operating segment information is reported in a manner consistent with the internal reports that are regularly reviewed by the chief operating decision maker in order to make decisions about the allocation of resources to the segment and assess its performance.

For management purposes, the Group is organised into business units based on its products and services and have five reportable segments as follows:

- Securities Markets which include securities trading, clearing and settlement, listing, depository and membership fees
- Derivatives Markets which include trading and clearing of future contracts and membership fees
- Technology Services which include member services, information services and technology support
- Registrar Services which include securities registrar
- Capital Market Development and others which include capital market education improving financial and investment capabilities, promoting sustainable development of capital market industry and conducting of capital market research, payment service provider, rental income and other miscellaneous income.

No operating segments have been aggregated to form the above reportable operating segments.

The chief operating decision maker monitors the operating results of the business units separately for the purpose of making decisions about resource allocation and assessing performance. Segment performance is measured based on operating revenues and expenses and total assets and on a basis consistent with that used to measure operating revenues and expenses and total assets in the financial statements.

The basis of accounting for any transactions between reportable segments is consistent with that for third party transactions.

Financial information presented in respect of the Group's business segments in the consolidated financial statements as at 31 December 2022 and 2021 and for the years ended 31 December 2022 and 2021 are as follows:

(Unit: Thousand Baht)

	Consolidated financial statement						
	Capital Market						Total
	Securities Markets	Derivatives Markets	Technology Services	Registrar Services	Development and others	Elimination	
<b>For the year ended 31 December 2022</b>							
Revenues from operation	3,474,435	1,153,473	1,397,089	1,595,198	130,697	-	7,750,892
Revenues from inter-segment	1,033,388	479,294	42,252	535,512	72,349	(2,162,795)	-
Total revenues	4,507,823	1,632,767	1,439,341	2,130,710	203,046	(2,162,795)	7,750,892
<b>Segment revenues over (under)</b>							
<b>expenses</b>	1,642,977	555,786	585,229	533,125	(700,033)	-	2,617,084
Investment revenue, net							(364,846)
Share of loss of investments in joint venture, net of tax							(63)
Share of profit of investments in associates, net of tax							33,200
<b>Revenues over expenses in operations</b>							2,285,375
<b>Non-operating revenues (expenses)</b>							
Income derived from Securities Investor Protection Fund, net							(4,316)
Income derived from Derivatives Investor Protection Fund, net							569
Contributions to the Capital Market Development Fund							(538,903)
<b>Revenues over expenses before income tax expenses</b>							1,742,725
Income tax expenses							(336,462)
<b>Revenues over expenses</b>							1,406,263
<b>As at 31 December 2022</b>							
Segment assets	3,913,025	35,023,481	1,792,777	1,208,035	1,372,537	(6,118,913)	37,190,942
Other assets	-	-	-	-	24,243,555	(5,128,030)	19,115,525
<b>Total assets</b>	3,913,025	35,023,481	1,792,777	1,208,035	25,616,092	(11,246,943)	56,306,467
Segment liabilities	2,313,132	26,622,104	530,509	803,279	3,666,579	(8,493,615)	25,411,988
Other liabilities	-	-	-	-	2,381,330	(2,381,330)	-
<b>Total liabilities</b>	2,313,132	26,622,104	530,509	803,279	6,047,909	(10,874,945)	25,411,988



(Unit: Thousand Baht)

## Consolidated financial statement

	Securities Markets	Derivatives Markets	Technology Services	Registrar Services	Capital Market Development and others	Elimination	Total
<b>For the year ended 31 December 2021</b>							
Revenues from operation	3,950,494	1,050,063	1,341,707	1,458,444	114,129	-	7,914,837
Revenues from inter-segment	1,025,718	489,023	36,288	555,909	51,476	(2,158,414)	-
Total revenues	4,976,212	1,539,086	1,377,995	2,014,353	169,605	(2,158,414)	7,914,837
<b>Segment revenues over (under) expenses</b>	2,214,222	412,189	599,294	483,738	(830,176)	-	2,879,227
Investment revenue, net							369,419
Share of loss of investments in joint venture, net of tax							(7)
Share of profit of investments in associates, net of tax							35,597
<b>Revenues over expenses in operations</b>							3,284,236
<b>Non-operating revenues (expenses)</b>							
Income derived from Securities Investor Protection Fund, net							9,417
Income derived from Derivatives Investor Protection Fund, net							514
Contributions to the Capital Market Development Fund							(582,978)
<b>Revenues over expenses before income tax expenses</b>							2,711,189
Income tax expenses							(1,114,558)
<b>Revenues over expenses</b>							1,596,631
<b>As at 31 December 2021</b>							
Segment assets	4,007,610	34,405,362	1,385,814	1,219,126	1,237,845	(6,111,617)	36,144,140
Other assets	-	-	-	-	24,794,515	(4,057,685)	20,736,830
<b>Total assets</b>	4,007,610	34,405,362	1,385,814	1,219,126	26,032,360	(10,169,302)	56,880,970
Segment liabilities	3,108,316	27,924,126	491,181	825,743	3,085,301	(7,922,602)	27,512,065
Other liabilities	-	-	-	-	1,810,985	(1,810,985)	-
<b>Total liabilities</b>	3,108,316	27,924,126	491,181	825,743	4,896,286	(9,733,587)	27,512,065

Reconciliation of reportable segment assets/liabilities as at 31 December 2022 and 2021 were as follows:

	(Unit: Thousand Baht)	
	Consolidated financial statements	
	2022	2021
<b>Assets</b>		
Assets for reportable segments	37,190,942	36,144,140
Unallocated amounts:		
- Cash and investments	17,049,187	18,667,638
- Investments in related parties	1,029,327	1,017,057
- Accrued interest receivables	14,299	14,187
- Land and work in process	1,022,712	1,037,948
Total assets	<u>56,306,467</u>	<u>56,880,970</u>
<b>Liabilities</b>		
Liabilities for reportable segments	<u>25,441,988</u>	<u>27,512,065</u>
Total liabilities	<u>25,441,988</u>	<u>27,512,065</u>

#### Geographic information

The Group operates in Thailand only. As a result, all the revenues and assets as reflected in these financial statements pertain exclusively to this geographical reportable segment.

#### Major customers

For the year 2022 and 2021, the Group has no major customer with revenue of 10% or more of an entity's revenues.

### 35. Commitments and contingent liabilities

#### 35.1 Capital commitments

As at 31 December 2022, the Group had capital commitments of approximately Baht 302.26 million (2021: Baht 261.93 million), relating to the acquisition of technology equipment, computer software and system development (SET: Baht 302.26 million 2021: Baht 261.93 million).

### 35.2 Lease commitments

As at 31 December 2022 and 2021, the Group has future short-term lease payments and leases of low-value assets required under these non-cancellable operating lease agreements that have not yet commenced as follows:

(Unit: Thousand Baht)		
Consolidated and Separate financial statements		
	2022	2021
Within 1 year	5,722	5,142
Over 1 and up to 5 years	2,163	5,407
Total	7,885	10,549

### 35.3 Service commitments

As at 31 December 2022 and 2021, the Group has service commitments as follows:

(Unit: Thousand Baht)		
Consolidated and Separate financial statements		
	2022	2021
Within 1 year	373,559	212,111
Over 1 and up to 5 years	390,815	129,223
Total	764,374	341,334

### 35.4 Guarantees

As at 31 December 2022 and 2021, SET has letters of guarantee issued by banks totaling Baht 5.13 million in respect of electricity usage in the ordinary course of business from which management anticipates that no material liabilities will arise.

### 35.5 Other commitments

The Stock Exchange of Thailand (SET) has issued a certificate of support to the bank about overdraft limit given to Thailand Clearing House Co., Ltd. (TCH) which is a subsidiary in the amount of Baht 2,990 million (2021: Baht 2,900 million) for support to clearing equity instruments and futures contracts. Under the terms of the certificate of support, SET is required to maintain its shareholding at 99.99% of the registered share capital in TCH, and required to support TCH's operation.

## 35.6 Contingent liabilities

### Subsidiary

- 1) On 22 January 2019, a subsidiary received a claim statement regarding recourse for the damages incurred from a case regarding the wrongful acts of the asset recall and compensation for the forgery of the share certificates. The subsidiary was claimed for damages totaling Baht 76.23 million.

On 4 December 2019, the Civil Court ordered the subsidiary to pay the amount of Baht 62.55 million with an interest rate of 7.5% per annum, and to pay a legal fee of Baht 400,000. On 23 February 2021, the Appeal Court upheld the judgment of the Civil Court. However, the subsidiary filed a petition for an appeal and filed an appeal with the Supreme Court. On 19 April 2022, the petition was accepted under consideration by the Supreme Court. As at 31 December 2022, the case was still under consideration by the Supreme Court. The outcome of the case has not been finalised. Therefore, the subsidiary did not record a provision for damages arising from the above mentioned case in the financial statements.

The Group has purchased insurance policy covering professional liability (Financial Institutional Professional Indemnity Insurance) which has fully covered the liability for this case.

- 2) On 11 December 2019, a subsidiary received a claim statement demanding the registration to change the name of shareholders or to pay the price of shares in the amount of Baht 495 million. On 26 January 2021, the case was dismissed by the Civil Court and on 19 April 2022, the Appeal Court adjudicated the subsidiary to proceed the registration of shares transfer to the plaintiffs. However, the joint-defendants filed the appeal to the Supreme Court and as of 31 December 2022, the case was still under consideration by the Supreme Court, as the uncertainty of the case. Therefore, the subsidiary did not record a provision for damages arising from the above mentioned case in the financial statements.

### 36. Fair value hierarchy

As at 31 December 2022 and 2021, the Group had the assets and liabilities that were measured at fair value or for which fair value was disclosed using different levels of inputs as follows:

(Unit: Million Baht)

	Consolidated financial statement			
	As at 31 December 2022			
	Level 1	Level 2	Level 3	Total
<b>Assets measured at fair value</b>				
Financial assets measured at FVTPL				
Mutual Fund	301	4,258	-	4,559
Government bonds	-	13,460	-	13,460
Debentures	-	1,054	-	1,054
Financial assets measured at FVOCI				
Ordinary shares	-	-	911	911
Derivatives				
Foreign currency forward contracts	-	112	-	112
<b>Assets for which fair value are disclosed</b>				
Financial assets measured at amortised cost				
Fixed deposits	-	4,220	-	4,220
Government bonds	-	7,612	-	7,612
Debentures	-	219	-	219



(Unit: Million Baht)

## Consolidated financial statement

As at 31 December 2021

	Level 1	Level 2	Level 3	Total
<b>Assets measured at fair value</b>				
Financial assets measured at FVTPL				
Mutual Fund	361	5,199	-	5,560
Government bonds	-	11,919	-	11,919
Debentures	-	1,048	-	1,048
Bills of exchange	-	30	-	30
Financial assets measured at FVOCI				
Ordinary shares	-	-	54	54
Derivatives				
Foreign currency forward contracts	-	7	-	7
<b>Liabilities measured at fair value</b>				
Derivatives				
Foreign currency forward contracts	-	30	-	30
<b>Assets for which fair value are disclosed</b>				
Financial assets measured at amortised cost				
Fixed deposits	-	3,878	-	3,878
Government bonds	-	4,108	-	4,108
Debentures	-	225	-	225

(Unit: Million Baht)

## Separate financial statement

As at 31 December 2022

	Level 1	Level 2	Level 3	Total
<b>Assets measured at fair value</b>				
Financial assets measured at FVTPL				
Mutual Fund	301	4,258	-	4,559
Government bonds	-	4,104	-	4,104
Debentures	-	702	-	702
Financial assets measured at FVOCI				
Ordinary shares	-	-	49	49
Derivatives				
Foreign currency forward contracts	-	112	-	112
<b>Assets for which fair value are disclosed</b>				
Financial assets measured at amortised cost				
Fixed deposits	-	1,498	-	1,498
Government bonds	-	578	-	578
Debentures	-	217	-	217

(Unit: Million Baht)

## Separate financial statement

As at 31 December 2021

	Level 1	Level 2	Level 3	Total
<b>Assets measured at fair value</b>				
Financial assets measured at FVTPL				
Mutual Fund	361	5,199	-	5,560
Government bonds	-	2,123	-	2,123
Debentures	-	1,048	-	1,048
Bills of exchange	-	30	-	30
Financial assets measured at FVOCI				
Ordinary shares	-	-	49	49
Derivatives				
Foreign currency forward contracts	-	7	-	7
<b>Liabilities measured at fair value</b>				
Derivatives				
Foreign currency forward contracts	-	30	-	30
<b>Assets for which fair value are disclosed</b>				
Financial assets measured at amortised cost				
Fixed deposits	-	916	-	916
Government bonds	-	494	-	494
Debentures	-	223	-	223

## 37. Financial instruments

### 37.1 Derivatives

	(Unit: Million Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
<b>Derivative assets</b>				
Derivative assets not designated as hedging instrument				
Foreign exchange forward contracts	112	7	112	7
<b>Total derivative assets</b>	<b>112</b>	<b>7</b>	<b>112</b>	<b>7</b>
<b>Derivative liabilities</b>				
Derivatives liabilities not designated as hedging instruments				
Foreign exchange forward contracts	-	30	-	30
<b>Total derivative liabilities</b>	<b>-</b>	<b>30</b>	<b>-</b>	<b>30</b>

#### Derivatives not designated as hedging instruments

The Group uses foreign exchange forward contracts to manage some of its transaction exposures. The contracts are entered into for periods consistent with foreign currency exposure of the underlying transactions, generally from 3 to 7 months.

### 37.2 Financial risk management objectives and policies

The Group's financial instruments principally comprise cash and cash equivalents, cash at banks for financial benefits payable, assets for margin deposits and benefits, other current financial assets, trade and other receivables, derivative assets/liabilities, other non-current financial assets, assets for clearing system protection and benefits, securities investor protection fund, derivatives investor protection fund, reserve fund for clearing and settlement, margin deposits and benefits payable, trade and other payables, assets for clearing system protection and benefits payable, contributions and benefits to securities investor protection fund, contributions and benefits to derivatives investor protection fund and lease liabilities. The financial risks associated with these financial instruments and how they are managed is described below.

**Credit risk**

The Group has no significant concentrations of credit risk. The Group has appropriate policies in place to ensure that the Group provides services to customers who have appropriate credit history.

***Trade receivables***

The Group manages the risk by adopting appropriate credit control policies and procedures and therefore does not expect to incur material financial losses. Outstanding trade receivables are regularly monitored.

An impairment analysis is performed at each reporting date to measure expected credit losses. The provision rates are based on days past due. The calculation reflects the probability reasonable and supportable information that is available at the reporting date about past events, current conditions and forecasts of future economic conditions.

The Group manages the credit risk relating to investments by determining the minimum credit rating and the proportion of investment to the issuer. The investment framework has been approved by the Investment Committee, which imposed a limit to reduce the concentration risk and default risk of counterparties.

**Market risk**

There are two types of market risk comprising foreign currency risk and interest rate risk. The Group enters into a variety of forward contracts to mitigate the risk of rising interest rates and foreign currency rates.

***Foreign currency risk***

The Group has no significant exposure to foreign currency risk relates due to its accounts receivable and accounts payable are mainly made in Thai Baht, except for foreign investments in some foreign currencies. However, the Group has appropriately applied forward exchange contracts to hedge foreign exchange risk of such investments.



As at 31 December 2022 and 2021, the Group has financial assets and liabilities in foreign currency as follows:

Consolidated financial statements						
Currency	Financial assets		Financial liabilities		Average foreign currency	
	2022	2021	2022	2021	2022	2021
	(Million)	(Million)	(Million)	(Million)	(Baht per Foreign Currency)	
US Dollar	64	108	136	197	34.56	33.42

Separate financial statements						
Currency	Financial assets		Financial liabilities		Average foreign currency	
	2022	2021	2022	2021	2022	2021
	(Million)	(Million)	(Million)	(Million)	(Baht per Foreign Currency)	
US Dollar	8	4	80	94	34.56	33.42

### **Interest rate risk**

The Group's exposure to interest rate risk relates primarily to long-term loan and short-term loan. Most of the Group's financial assets and liabilities floating interest rates or fixed interest rates which are close to the market rate.

Interest rate risk arises from the volatility of interest rates in the market which may affect the Group's investments in debt securities and operating results and cash flow. The Group has establishment investment policy by stipulating the remaining of the instruments in order to limit interest rate risk. The Group does not have interest rate derivative in order to manage fluctuation of the interest rate.

As at 31 December 2022 and 2021, significant financial assets and liabilities classified by type of interest rate are summarised in the table below, with those financial assets and liabilities that carry fixed interest rates further classified based on the maturity date, or the repricing date (if this occurs before the maturity date).

(Unit: Million Baht)

Consolidated financial statement							
2022							
Fixed interest rates				Floating interest rate	Non- interest bearing	Total	Effective interest rate  (% per annum)
Within 1 year	1-5 years	Over 5 years					
<u>Financial assets</u>							
Cash and cash equivalents	-	-	-	5,581	40	5,621	0.05 - 0.80
Cash at banks for financial benefits payables	50	-	-	34	-	84	0.10 - 0.65
Assets for margin deposits and benefits	6,754	2,901	-	8,655	148	18,458	0.05 - 2.35
Other current financial assets	4,128	2,885	665	2	-	7,680	0.05 - 3.25
Trade and other receivables	61	-	-	28	504	593	0.05 - 1.10
Derivative assets	-	-	-	-	112	112	-
Other non-current financial assets	702	1,079	32	-	5,817	7,630	0.55 - 2.06
Assets for clearing system protection and benefits	471	1,749	-	39	20	2,279	0.05 - 2.16
Securities Investor Protection Fund	289	116	171	105	169	850	0.05 - 3.38
Derivatives Investor Protection Fund	47	55	-	13	-	115	0.05 - 3.38
Reserve fund for clearing and settlement	2,480	3,108	112	-	10	5,710	0.55 - 2.06
	14,982	11,893	980	14,457	6,820	49,132	
<u>Financial liabilities</u>							
Margin deposits and benefit payables	-	-	-	-	18,458	18,458	-
Trade and other payables	-	-	-	-	2,212	2,212	-
Assets for clearing system protection and benefits payable	-	-	-	-	2,128	2,128	-
Contributions and benefits to Securities Investor Protection Fund	-	-	-	-	341	341	-
Contributions and benefits to Derivatives Investor Protection Fund	-	-	-	-	56	56	-
Other current liabilities	-	-	-	-	57	57	-
Lease liabilities	11	14	-	-	-	25	5.28 - 5.56
	11	14	-	-	23,252	23,277	

(Unit: Million Baht)

Consolidated financial statement							
2021							
Fixed interest rates							Effective
Within 1 year	1-5 years	Over 5 years	Floating interest rate	Non- interest bearing	Total		interest rate
							(% per annum)
<u>Financial assets</u>							
Cash and cash equivalents	-	-	-	8,300	718	9,018	0.05 - 0.63
Cash at banks for financial benefits							
payables	50	-	-	34	-	84	0.10 - 0.65
Assets for margin deposits and benefits	5,648	834	-	13,189	113	19,784	0.05 - 2.06
Other current financial assets	1,783	3,218	598	3	-	5,602	0.05 - 3.70
Trade and other receivables	61	-	-	21	586	668	0.05 - 0.90
Derivative assets	-	-	-	-	7	7	-
Other non-current financial assets	-	384	-	-	5,880	6,264	2.04 - 3.38
Assets for clearing system protection							
and benefits	812	1,207	-	13	17	2,049	0.13 - 0.84
Securities Investor Protection Fund	358	29	55	162	253	857	0.05 - 3.38
Derivatives Investor Protection Fund	71	7	-	35	-	113	0.05 - 3.38
Reserve fund for clearing and settlement	2,117	3,533	39	3	10	5,702	0.13 - 1.89
	10,900	9,212	692	21,760	7,584	50,148	
<u>Financial liabilities</u>							
Margin deposits and benefits payables	-	-	-	-	19,784	19,784	-
Trade and other payables	-	-	-	-	2,999	2,999	-
Derivative liabilities	-	-	-	-	30	30	-
Assets for clearing system protection							
and benefits payable	-	-	-	-	1,899	1,899	-
Contributions and benefits to							
Securities Investor Protection Fund	-	-	-	-	344	344	-
Contributions and benefits to							
Derivatives Investor Protection Fund	-	-	-	-	55	55	-
Other current liabilities	-	-	-	-	56	56	-
Lease liabilities	14	15	-	-	-	29	5.28 - 5.33
	14	15	-	-	25,167	25,196	

(Unit: Million Baht)

Separate financial statement							
2022							
Fixed interest rates							Effective interest rate  (% per annum)
Within 1 year	1-5 years	Over 5 years	Floating interest rate	Non- interest bearing	Total		
<u>Financial assets</u>							
Cash and cash equivalent	-	-	-	4,424	13	4,437	0.05 - 0.80
Other current financial assets	3,287	1,779	822	2	-	5,890	0.05 - 3.21
Trade and other receivables	-	-	-	-	407	407	-
Derivative assets	-	-	-	-	112	112	-
Other non-current financial assets	-	200	-	-	4,956	5,156	3.38
Assets for clearing system							
protection and benefit	-	-	-	-	151	151	-
Securities Investor Protection Fund	289	116	171	105	169	850	0.05 - 3.38
Long-term loans to a subsidiary	-	-	-	6,141	-	6,141	Note 6
	3,576	2,095	993	10,672	5,808	23,144	
<u>Financial liabilities</u>							
Trade and other payables	-	-	-	-	1,924	1,924	-
Short-term from subsidiaries	1,931	-	-	-	-	1,931	0.44 - 1.45
Contributions and benefits to							
Securities Investor Protection Fund	-	-	-	-	341	341	-
Other current liabilities	-	-	-	-	45	45	-
Lease liabilities	11	14	-	-	-	25	5.28 - 5.56
	1,942	14	-	-	2,310	4,266	

(Unit: Million Baht)

	Separate financial statement						Effective interest rate  (% per annum)
	2021						
	Fixed interest rates			Floating interest rate	Non- interest bearing	Total	
	Within 1 year	1-5 years	Over 5 years				
<u>Financial assets</u>							
Cash and cash equivalents	-	-	-	5,786	715	6,501	0.05 - 0.63
Other current financial assets	959	1,971	581	1	-	3,512	0.05 - 3.70
Trade and other receivables	-	-	-	-	482	482	-
Derivative assets	-	-	-	-	7	7	-
Other non-current financial assets	-	384	-	-	5,875	6,259	2.04 - 3.38
Assets for clearing system							
protection and benefit	-	-	-	-	151	151	-
Securities Investor Protection Fund	358	29	55	162	253	857	0.05 - 3.38
Long-term loans to a subsidiary	-	-	-	5,691	-	5,691	Note 6
	1,317	2,384	636	11,640	7,483	23,460	

(Unit: Million Baht)

	Separate financial statement						Effective interest rate  (% per annum)
	2021						
	Fixed interest rates					Total	
	Within 1 year	1-5 years	Over 5 years	Floating interest rate	Non- interest bearing		
<u>Financial liabilities</u>							
Trade and other payables	-	-	-	-	1,998	1,998	-
Derivative liabilities	-	-	-	-	30	30	-
Short-term from subsidiaries	1,811	-	-	-	-	1,811	0.38 - 0.99
Contributions and benefits to							
Securities Investor Protection Fund	-	-	-	-	344	344	-
Other current liabilities	-	-	-	-	43	43	-
Lease liabilities	14	15	-	-	-	29	5.28 - 5.33
	1,825	15	-	-	2,415	4,255	

### Liquidity risk

The Group has no significant exposure to liquidity risk as the Group has sufficient cash to support its operations. The Group aims on maintaining flexibility of funding by using internal capital of the Group.

The table below summarises the maturity profile of the Group's non-derivative financial liabilities and derivative financial instruments as at 31 December 2022 and 2021 based on contractual undiscounted cash flows:

(Unit: Million Baht)

	Consolidated financial statement					
	2022					
	On demand	Less than 1 year	1 to 5 years	> 5 years	No maturity	Total
<b>Non-derivatives</b>						
Margin deposits and benefits payables	18,458	-	-	-	-	18,458
Trade and other payables	-	2,212	-	-	-	2,212
Assets for clearing system protection and benefits payable	-	-	-	-	2,128	2,128
Contributions and benefits to						
Securities Investor Protection Fund	-	-	-	-	341	341
Contributions and benefits to						
Derivatives Investor Protection Fund	-	-	-	-	56	56
Other current liabilities	-	57	-	-	-	57
Lease liabilities	-	11	16	-	-	27
<b>Total non-derivatives</b>	<u>18,458</u>	<u>2,280</u>	<u>16</u>	<u>-</u>	<u>2,525</u>	<u>23,279</u>



(Unit: Million Baht)

Consolidated financial statement						
2021						
	On demand	Less than 1 year	1 to 5 years	> 5 years	No maturity	Total
<b>Non-derivatives</b>						
Margin deposits and benefits payables	19,784	-	-	-	-	19,784
Trade and other payables	-	2,999	-	-	-	2,999
Assets for clearing system protection and benefits payables	-	-	-	-	1,899	1,899
Contributions and benefits to Securities Investor Protection Fund	-	-	-	-	344	344
Contributions and benefits to Derivatives Investor Protection Fund	-	-	-	-	55	55
Other current liabilities	-	56	-	-	-	56
Lease liabilities	-	15	16	-	-	31
<b>Total non-derivatives</b>	<b>19,784</b>	<b>3,070</b>	<b>16</b>	<b>-</b>	<b>2,298</b>	<b>25,168</b>
<b>Derivatives</b>						
Foreign exchange forward contracts	-	30	-	-	-	30
<b>Total derivatives</b>	<b>-</b>	<b>30</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>30</b>

(Unit: Million Baht)

Separate financial statement						
2022						
	On demand	Less than 1 year	1 to 5 years	> 5 years	No maturity	Total
<b>Non-derivatives</b>						
Trade and other payables	-	1,924	-	-	-	1,924
Short-term borrowings from subsidiaries	-	1,945	-	-	-	1,945
Other current liabilities	-	45	-	-	-	45
Contributions and benefits to Securities Investor Protection Fund	-	-	-	-	341	341
Lease liabilities	-	11	16	-	-	27
<b>Total non-derivatives</b>	<b>-</b>	<b>3,925</b>	<b>16</b>	<b>-</b>	<b>341</b>	<b>4,282</b>

(Unit: Million Baht)

Separate financial statement						
2021						
	On demand	Less than 1 year	1 to 5 years	> 5 years	No maturity	Total
<b>Non-derivatives</b>						
Trade and other payables	-	1,998	-	-	-	1,998
Short-term borrowings from subsidiaries	-	2,333	-	-	-	2,333
Other current liabilities	-	43	-	-	-	43
Contributions and benefits to						
Securities Investor Protection Fund	-	-	-	-	344	344
Lease liabilities	-	15	16	-	-	31
<b>Total non-derivatives</b>	-	4,389	16	-	344	4,749
<b>Derivatives</b>						
Foreign exchange forward contracts	-	30	-	-	-	30
<b>Total derivatives</b>	-	30	-	-	-	30

### 37.3 Fair values of financial instruments

Since the majority of the Group's financial instruments are short-term in nature or carrying interest at rates close to the market interest rates, their fair value is not expected to be materially different from the amounts presented in the statement of financial position.

The carrying amount and fair value of financial assets that are not measured as at 31 December 2022 and 2021 as follows:

(Unit: Million baht)

Consolidated financial statements				
2022		2021		
Carrying Amount	Fair Value	Carrying Amount	Fair Value	
<b>Financial assets</b>				
Investments measured at amortised cost				
Government bonds and debentures	7,824	7,831	4,300	4,333
Fixed deposits	4,305	4,220	3,908	3,878

(Unit: Million baht)

	Separate financial statements			
	2022		2021	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value
<b>Financial assets</b>				
Investments measured at amortised cost				
Government bond and debentures	786	795	698	717
Fixed deposit	1,585	1,498	950	916

The methods and assumptions used by the Group estimating the fair value of financial instruments are as follows:

- a) Financial assets and liabilities which have short-term maturities including cash and cash equivalents, cash at banks for financial benefits payable, cash at banks as shown in assets for margin deposits and benefits, assets for clearing system protection and benefits and reserve fund for clearing and settlement, cash at banks and other current financial assets as shown in securities investor protection fund, derivatives investor protection fund, trade and other receivables, other current financial assets, trade and other payables and margin deposits and benefits payable are presented at their approximate fair value based on the carrying amounts in the statement of financial position.
- b) Debt instruments as shown in other current financial assets, other non-current financial assets, assets for margin deposits and benefits, assets for clearing system protection and benefits, securities investor protection fund, derivatives investor protection fund and reserve fund for clearing and settlement are presented at fair value or calculated by using the rate of return announced by Thai Bond Market Association or other markets.
- c) Equity investments presented under other current financial assets, other non-current financial assets, assets for margin deposits and benefits, assets for clearing system protection and benefits, securities investor protection fund, derivatives investor protection fund and reserve fund for clearing and settlement are presented at fair value or referred generally accepted valuation model in case no market value is available.
- d) Derivatives are presented at fair value calculated by discounted cash flow and of valuation models. Value estimations use data that is observable in related markets such as spot rate, foreign currency forward rate, yield curve of interest rate. The Group considers the effect of credit risk of the counterparty on the estimation of fair value of derivatives.

- e) Contributions and benefits to securities investor protection fund are presented at fair value based on the estimated value close to the carrying amounts in the statement of financial position.
- f) Contributions and benefits to derivatives investor protection fund are presented at fair value based on the estimated value close to the carrying amounts in the statement of financial position.

During the current year, there were no transfers within the fair value hierarchy.

### **38. Capital management**

The primary objective of the Group's capital management is to ensure that it has appropriate capital structure in order to support its business and maximise fund value. As at 31 December 2022, the Group's debt-to-fund ratio was 0.82:1 (2021: 0.94:1) and SET's was 0.24:1 (2021: 0.25:1).

### **39. Approval of financial statements**

These financial statements were authorised for issue by the Stock Exchange's Board of Governors on 22 February 2023.









The Stock Exchange of Thailand is committed to environmental stewardship by using recycled pulp and printing process to help lower greenhouse gas emission equivalent 3,308 kgCO<sub>2</sub>eq



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