Mission for JPX Group

Our long-term vision to be achieved by 2030

Target 2030

Contribute to sustainable societal and economic development by evolving into a global, comprehensive finance and information platform* which provides solutions for a wide range of societal issues, centered on the ability to raise and circulate capital

*Named “G-HUB” (Heighten market integrity, Unlock opportunity, Benefit society)

Corporate Philosophy

Contributing to realizing an affluent society through sustainable market development

Our mission is to contribute to the realization of an affluent society by promoting sustainable development of the market. Committed to our public nature and credibility, we build highly convenient, efficient, and transparent market foundations, and provide creative and attractive services. Our efforts help us attract the support and confidence of investors and market users and reap the rewards in the form of profits.

*“Named “G-HUB” (Heighten market integrity, Unlock opportunity, Benefit society)
Contributing to realizing an affluent society by promoting sustainable development of the market lies at the heart of JPX Group’s corporate philosophy. We believe that our efforts to realize this corporate philosophy will enable us to both create sustainable value and fulfill our social responsibility.

The JPX Report has been published since the foundation of JPX in 2013. Currently, the report is prepared as an integrated report designed to convey the overall image of JPX Group’s value creation by providing an explanation to a broad range of stakeholders both inside and outside the Group on the strategies for realizing our corporate philosophy and co-creation with stakeholders while tying that together with important financial and non-financial information.

JPX Group has reorganized its future vision into the long-term vision "Target 2030,” and formulated the Medium-Term Management Plan 2024 for the three years commencing from FY2022.

In JPX Report 2022, after presenting an overview of our value creation process and business model newly organized for the whole JPX Group including the newly established JPX Market Innovation & Research, Inc. (JPXI), we introduce the aspirations and strategies of management for achieving our long-term vision and expectations of each Group company, including JPXI, along with specific initiatives. Furthermore, based on the idea that JPX Group’s corporate philosophy can also lead to the realization of the society aspired to under the Sustainable Development Goals (SDGs), we introduce our co-creative efforts with various stakeholders aimed at the realization of this philosophy, along with specific initiatives.

Scope of Report
Japan Exchange Group, Inc. and JPX Group companies

Editorial Policy
Period covered: April 1, 2021 to March 31, 2022
(This report may sometimes mention activities and data relating to FY2020 or earlier, or FY2022.)

Accounting Standards
Unless otherwise stated, the presentation of financial data follows the International Financial Reporting Standards (IFRS).

Disclaimer
This report is prepared solely for the purpose of providing information regarding Japan Exchange Group, Inc., and does not constitute an offering or a solicitation of securities whether inside or outside Japan. Our securities have not been and will not be registered under the United States Securities Act of 1933, as amended (the “Securities Act”), and may not be offered or sold in the United States absent registration or an applicable exemption from registration requirements.

This report contains forward-looking statements. These statements are based on the information currently available to us as of the date of this report and our assumptions about uncertainties that may affect future results. There is no guarantee that such statements and assumptions will be realized in the future and may differ significantly from actual results. In addition, matters concerning the future outlook including business strategy reflect our understanding at the date of this publication and contain certain risks and uncertainties. As a result, future outlooks and actual results do not always match. We disclaim any obligation to update any of the forward-looking statements contained in these materials to reflect future actual events or developments.
As an infrastructure operator that supports Japan’s financial and capital markets, JPX Group recognizes the importance of actively contributing to building a sustainable society and believes that this also serves as a source of its corporate value. Based on this concept, JPX Group endorses the following initiatives:


Information disclosure in line with the Sustainability Accounting Standards Board (SASB) Standards
In 1878, soon after the Meiji Restoration, Shibusawa Eiichi, who is known as the “father of Japanese capitalism,” established Tokyo Stock Exchange, and Godai Tomoatsu, a businessman who was instrumental in the economic development of Osaka, established Osaka Stock Exchange.

Since their establishment, the Tokyo and Osaka exchanges have consistently served as the driving force behind the Japanese economy, responding to the needs of the times for over 140 years.

Japan Exchange Group, Inc. (JPX) is a financial instruments exchange holding company group that was established through the merger between Tokyo Stock Exchange Group and Osaka Securities Exchange on January 1, 2013.

Since its establishment, JPX has engaged in initiatives to expand its business fields to create a Comprehensive Exchange while working to realize post-merger synergies and transform its management structure.

JPX established JPX Market Innovation & Research, Inc. (JPXI) in 2021, and will continue to strengthen the traditional function of the exchange, stable market operations, while also proactively taking on challenges in new fields without being overly bound by this framework.

History of Value Creation

https://www.jpx.co.jp/english/corporate/about-jpx/history/index.html

2013

JPX is formed through the merger between TSE Group and OSE

2014

1st Medium-Term Management Plan

Achievement of JPY 8.5 billion reduction in operating expenses through post-merger synergies

2016

2nd Medium-Term Management Plan

Progress is made toward transitioning to a management structure that does not overly rely on the condition of the Japanese stock market

2018

Expansion of OTC clearing business through clearing house merger

Japan Securities Clearing Corporation (JSCC) and Japan Government Bond Clearing Corporation (JGBCC) merged in 2014. As a result, the clearing operations related to over-the-counter trading for Japanese government bonds which had been carried out by JGBCC were taken over by JSCC, and JSCC became a clearing house that handles a wide range of yen interest rate instruments in addition to clearing operations for Japanese government bond futures trading and interest rate swap trading.
From 2022

Exchange & beyond

Strengthening the traditional function of the exchange and actively taking on challenges in new areas

JPX has incorporated its intention to actively undertake challenges in new areas into the slogan of “Exchange & beyond” in the Medium-Term Management Plan 2024. JPIXI is responsible for fulfilling this important role. Without being excessively constrained by the traditional “exchange market” framework, JPIXI will foster a new company culture while aiming for flexible and agile business development through initiatives including M&As and leveraging highly skilled personnel, and will advance the diversification of businesses and sophistication of services by strengthening digital and network-related businesses that utilize data and technology.

2021

Establishment of JPIXI

JPIXI was newly established in 2021 as a non-exchange-operating subsidiary with the aim of pursuing the creation of market services that lead to enhanced functionality and efficiency across the market. JPIXI started its operations in April 2022, integrating JPX Group’s data and digital operations.

2019

TOCOM acquired as a subsidiary

JPX merged with Tokyo Commodity Exchange (TOCOM) to create a Comprehensive Exchange that enables one-stop trading for a wide range of instruments from financial instruments to commodities.

2020

Launch of Comprehensive Exchange

Futures and options on precious metals, rubber, and agricultural commodities which were listed on TOCOM were transferred to Osaka Exchange (OSE). In conjunction with this, JSCC and Japan Commodity Clearing House Co., Ltd. (JCCH) completed their merger and the Comprehensive Exchange commenced full operations.
Value Creation Process

JPX Group is working to expand the base of market participants and realize sustainable market growth through continuously providing a robust financial market infrastructure and diverse products and services.

By continuously providing society with vibrant financial markets, we support the development of the economy and society as a whole and contribute to realizing an affluent society.

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**Social capital**
- Strong network of market stakeholders built up over the years
  - Trading participants
  - Listed companies
  - Global investors, exchanges, regulatory authorities
- Highly reliable market operations
- Abundant household financial assets of over JPY 2 quadrillion

**Instrumental capital**
- Trading, clearing, and information systems, and the network that links these together
  - arrowhead: cash equity trading system
  - J-GATE: derivatives trading system
  - arrownet: highly reliable network for linking each system with market users
- Backup systems for providing stable market infrastructure

**Human capital**
- Employees who think freely and creatively from a broad perspective
  - 1,193 employees

**Intellectual capital**
- Expertise for exchange operations
  - Design and operation of listing rules, trading rules, and other rules
  - International regulation compliant index operations, market information distribution
  - Self-regulation

**Financial capital**
- Stable financial base
  - Total equity attributable to owners of the parent company: JPY 287.7 billion
  - Dividend payout ratio of 60%, special dividend of JPY 15 per share paid in FY2021

**Natural capital**
- JPX Group Environmental Policy
- Support for TCFD

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**Long-term vision**

Our long-term vision to be achieved by 2030

"Target 2030"

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**JPX Group business model**

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**Foundations for value creation**

**Corporate Governance**

**Risk Management**

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Footnotes:
- Figures as of the end of FY2021.
- *Calculated by deducting “default compensation reserve funds” from “total equity attributable to owners of the parent company” in the Consolidated Statement of Financial Position.
**OUTCOME**

**Value creation**

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**Social capital** (realizing an affluent society)
- Promoting corporate value enhancement
  - Launch of new market segments
  - Market capitalization of TSE
    Approx. JPY 730 trillion
  - Financing functionality for listed companies
    - Financing by listed companies and REITs
      (FY2021) Approx. JPY 2.2 trillion
    - IPOs on TSE 133
    - IPOs in Japan for companies located outside of Tokyo 45
  - Enhanced governance among Japanese companies
    - Listed companies appointing at least one-third independent directors (Prime) 92.1%
      (Aggregated based on corporate governance reports as of July 14, 2022)

**Instrumental capital**
- Improving convenience and resilience as a market infrastructure
  - Capital expenditures
    Approx. JPY 15.3 billion

**Human capital**
- Promoting diversity and work style reforms
  - Ratio of women in managerial positions 8.1%
  - Ratio of employees returning to work after maternity leave 100%
  - Ratio of annual paid leave taken 60.7%
  - Employees’ average years of service 17.4 years
  - Ratio of childcare leave taken
    Male 57.6% / Female 100%
    (As of April 1, 2022)

**Intellectual capital**
- Responding to technology and innovation
  - J PX Working Papers 5

**Financial capital**
- Total return ratio 116.1%
- ROE 15.7%
- Operating profit margin 54.2%
- Total Shareholder Return (TSR) 165.1%
  (JPX-Nikkei Index 400 (total return index) 145.8%)

**Natural capital**
- Working to achieve carbon neutrality by FY2024
  - Aiming for carbon neutrality in securities market operations (our value chain) by 2030

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Medium-Term Management Plan 2024

**Exchange & beyond**

Co-creation with stakeholders

- Listed Companies
- Investors
- Information Vendors
- International Organizations
- Academic and Research Organizations
- Employees
- Shareholders
- Initiatives for the Environment
- Local Communities
- Government and Securities-related Organizations

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Internal Control Systems and Compliance

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Unless otherwise noted, numeric and other data is as of March 31, 2022.
JPX Group Business Model

In addition to TSE, which handles the cash equity market, and OSE and TOCOM, which handle derivatives markets, JPX Group also includes a self-regulatory subsidiary which carries out the examination and supervision processes needed to maintain market quality. Our comprehensive services also include clearing and settlement functions.

JPX Market Innovation & Research, Inc. (JPXI), which integrates JPX Group’s index, data, and digital businesses and unifies provision of various market-related services, started operations in April 2022.

![JPX Group Business Model Diagram]

**Tokyo Stock Exchange**
- **Cash Equity Market**
  - 1st Section**: 2,176 companies
  - 2nd Section**: 475 companies
  - Mothers**: 432 companies
  - JASDAQ Standard**: 652 companies
  - JASDAQ Growth**: 34 companies
- **AVG. daily trading volume for cash equities**: JPY 3,760 billion

**Osaka Exchange/Tokyo Commodity Exchange**
- **Derivatives Markets**
  - Index Futures
  - Index Options
  - JGB Futures
  - Options on JGB Futures
  - Securities Options
- **AVG. daily trading volume for financial derivatives**: 335 million contracts

**Japan Exchange Regulation**
- Listing examination
- Market surveillance and compliance
- Listed company compliance
- Trading participants examination and inspection
As consideration for the services it provides, JPX Group receives various types of fees from market users, namely securities companies and other trading participants, information vendors, and listed companies.

Specifically, our sources of income are mainly comprised of revenue from trading services, revenue from clearing services, revenue from information services, and revenue from listing services.

*Data is either as of March 31, 2021 or represents an average for FY2021.*

**In April 2022, the market segments were restructured into three new market segments: Prime Market, Standard Market, and Growth Market.**
J PX Group's Three Unique Points

The markets established by JPX Group provide companies with financing opportunities, investors with asset management opportunities, and society as a whole with price discovery functions. By fulfilling these social roles, the Group has received the support and trust of market users in Japan and overseas and has grown as a company.

1. An exchange group that plays a central role in cash equities and derivatives in Japan

Currently, JPX Group companies operate three markets. Tokyo Stock Exchange (TSE) handles approximately 83% of the trading value for cash equities traded in Japan, and from a global perspective, Osaka Exchange (OSE) handles approximately 78% of the Nikkei 225 Futures trading volume worldwide.

As the core market for cash equities and derivatives in Japan, JPX Group provides vibrant financial markets to users around the globe, based on stable business foundations that have steadily grown together with the Japanese economy.

Core market for cash equities and derivatives in Japan

- **Domestic share of cash equity trading**
  - Tokyo Stock Exchange: 83.2%
  - PTS: 8.4%
  - OTC: 8.4%

- **Global share of Nikkei 225 Futures trading**
  - Osaka Exchange: 77.5%
  - Singapore Exchange: 13.1%
  - CME Group: 9.4%

Sources: TSE, SBI Japannext, Chi-X Japan, and JSDA statistics

Steady growth with the development of the Japanese economy

- **TSE 1st Section**
  - Average daily trading value (JPY tril.)

- **Derivatives markets**
  - Average daily trading volume (JPY mil.)

Source: Statistics from each exchange
A high global standing

The market capitalization of companies listed on TSE was approximately USD 6.5 trillion as of December 31, 2021, ranking number five among exchanges around the world. In addition, JPX Group was ranked 19th in the world in 2021 for derivatives, with a trading volume of approximately 330 million contracts for the year. In all aspects of its current business areas, JPX Group has been working with a view to strengthen its global competitiveness and improve the appeal of Japanese markets. In line with this, under the Medium-Term Management Plan 2024 which began in FY2022, the Group aims to continue as a key market on an international level and will strive to further elevate its global standing.

Highly reliable and convenient market infrastructure with IT as the source of competitiveness

Many of JPX Group’s businesses are made possible through the use of IT systems. To provide stable market functions, the Group is strengthening and advancing initiatives for developing and operating highly reliable systems based on thorough quality control. Moreover, the Group is working to utilize fintech and new digital technologies for its goal of evolving into a global, comprehensive finance and information platform.
Today, with the world on the brink of great change, the external environment surrounding JPX Group is also changing with dizzying speed.

While strengthening the stable market operations that are the traditional function of the exchange, we will simultaneously forge ahead into new fields without being overly bound by the existing framework, and it is this intention that we have incorporated into the slogan of “Exchange & beyond.”

We will endeavor daily to achieve “Target 2030,” our newly reaffirmed long-term vision for the future.
Our contribution to a sustainable society and economy. Ready for the first stage.

Introduction
Of late, global affairs have been characterized by ongoing turmoil, which has also had a significant impact on financial markets. In particular, fiscal stimuli and monetary easing conducted on a large scale by the major nations during the expansionary phase of COVID-19 resulted in stock market indices in various countries hitting record highs. In Japan, TOPIX recorded a new high in September 2021 for the first time since the bursting of the 1980s bubble approximately 30 years ago. However, the subsequent economic recovery from COVID-19 in Europe and the US, and soaring prices for energy and food following the invasion of Ukraine by Russia have led to rising concerns about inflation, and the central banks of various countries are beginning to shift towards tighter stances. The impact of these developments on Japan has been seen in the acceleration of yen depreciation caused by the disparity between interest rates in Japan and the US, and stock-market fluctuations caused by inflation in the US and the trend towards higher interest rates. While these events have arguably led to greater uncertainty for the global economy, I believe that it is precisely during periods of global volatility that JPX Group must focus on stable market operations and take on the new opportunities that arise from changes in the environment.

Four Core Strategies

1. Pursue "the shape of the market" toward the next generation
   Raise global competitiveness while working on enhancing the appeal of the Japanese market in the pursuit of "the shape of the market" toward the next generation.

2. Invigorate and develop the comprehensive exchange
   Invigorate the Japanese derivatives market and evolve it into a leading global derivatives market, while swiftly generating synergies from the product transfer and clearing house integration.

3. Diversify and propel data services into the next generation
   Explore our new business model as an exchange by creating highly convenient data services emerging from an open and innovative framework.

4. Develop a foundation to support the future of our business and the society
   Keep our markets robust as a market infrastructure by means such as developing and managing reliable IT systems and enforcing appropriate self-regulations. Strengthen cyber security measures and improve preparedness for the risk of natural disasters.

Review of 3rd Medium-Term Management Plan
Looking back at the 3rd Medium-Term Management Plan, following the system failure that occurred in October 2020, we developed a framework to enable trading to be resumed quickly and smoothly. In addition, we reviewed the market structure and revised Japan’s Corporate Governance Code, and the new market segments came into effect on April 4, 2022. In the area of derivatives, the business combination with Tokyo Commodity Exchange and the product transfer and clearing house integration that came into effect in July 2020 enabled the creation of a Comprehensive Exchange. As well as making enhancements in the area of data and information, we strengthened our BCP structure such as by developing the Kansai backup center, provided support for the disclosure of ESG information, and took other steps to steadily execute the four core strategies set out in the 3rd Medium-Term Management Plan, aided by the cooperation of those involved in the market.

In quantitative terms, we achieved the financial targets set at the time the plan was created (operating income of JPY 130.0 billion, net income of JPY 50.0 billion, and ROE of at least 15%) in FY2020.
Medium-Term Management Plan 2024

As we turn our eyes to the external environment in reflecting on our vision for JPX Group over the medium to long term, it is clear not only that we must address the global shift towards decarbonized societies, but also that there are many issues that require attention both in Japan and overseas, and that the world is on the brink of tremendous change. The new medium-term plan that begins in FY2022 should not be thought of as an extension of the 1st to 3rd Medium-Term Management Plans that preceded it. Instead, we have rethought our approach to changes in the external environment, considered our aspirations for the Group up to the year 2030, and set these out in the form of a long-term vision, called "Target 2030." We have therefore positioned the three years beginning in FY2022 as the first stage in our preparations for achieving the Target 2030 long-term vision by 2030.

In order to build a foundation for achieving this long-term vision, while strengthening the stable market operations that are the traditional function of the exchange, we will simultaneously forge ahead into new fields without being overly bound by the existing framework, and it is this intention that we have incorporated into the slogan of "Exchange & beyond." Going forward, we will actively seek to take on challenges in new areas, and the newly established JPX Market Innovation & Research, Inc. (JPXI) is the organization that has been tasked with this important role. In the new Medium-Term Management Plan, JPX Group, which includes JPXI, has summarized its priority initiatives for contributing to improving the attractiveness of Japanese financial and capital markets as a whole, and enhancing their global competitiveness, into three "Focus" areas. By pivoting on the priority initiatives set out in the three specific Focus areas, the whole company will work as one in preparation for achieving JPX Group’s Target 2030 vision.

Aiming for Carbon Neutrality in Securities Market Operations (Our Value Chain)

Looking at the long term, we have set a long-term ESG target in addition to the "Target 2030" vision. This is to aim for carbon neutrality in securities market operations (our value chain) by 2030. As a market operator, JPX Group has contributed to the promotion of sustainability in the Japanese market by supporting the disclosure of ESG-related information by listed companies and providing ESG-related products to investors. As a business corporation, JPX Group itself is promoting environmental management based on its Environmental

Basic Policy of the Medium-Term Management Plan 2024

Exchange & beyond

To contribute to improving the attractiveness of the Japanese financial and capital markets as a whole and enhance their global competitiveness, we will prioritize initiatives in three specific “Focus” areas.
Vision. We have drawn up a Green Strategy to further develop and accelerate our environmental management in FY2022, which marks the start of the new Medium-Term Management Plan, and beyond. Under this Green Strategy, in addition to promoting sustainability in ways that utilize market mechanisms, JPX Group itself will seek to achieve carbon neutrality by FY2024, which is the final year of this Medium-Term Management Plan, by owning its own renewable power generation facilities, and will pursue further cooperation with market participants on similar initiatives. We also aim to achieve carbon neutrality in relation to securities market operations (our value chain) by 2030, and have thus set ambitious targets for both the medium term and the long term. As the main market operator in Japan, we will continue to actively engage with environmental issues going forward.

Human Resources Strategy
JPX Group regards human resources as one of the most important management resources in its efforts to achieve sustainable enhancements in corporate value, and in addition to implementing improvements to various systems, it is moving forward with a range of initiatives to promote diversity and work style reforms. For example, we are introducing and expanding systems that help employees to balance work with childcare or adult caregiving, that promote female empowerment, and that enable flexible work styles such as flextime and telework. At the same time, by actively pursuing initiatives for maintaining and improving the mental and physical health of our staff, we are creating an environment that allows each and every employee to use their abilities to the fullest extent. We are also devoting resources to attracting and developing highly specialized personnel, such as those needed for digital transformation (DX) and those with a global mindset and skills. In terms of development, we will use the founding of JPXI as a catalyst for setting up a new Digital Solutions (DS) course to develop human resources in the digital network field specifically, and by implementing initiatives to increase opportunities for staff to gain operational experience overseas, we will work to develop human resources that will drive the global business. As we go forward, while promoting initiatives to enhance productivity and creativity, we will focus on attracting and developing the personnel necessary for our management strategy, thus improving employee engagement and helping to build a robust organizational foundation that will contribute to sustainable enhancements in corporate value.

Co-creation with Employees P.55

Message to Our Investors and Other Stakeholders
We will continue to strive to achieve the understanding and cooperation of those involved in the market including various domestic and overseas investors, listed companies, and securities companies, as well as of regulators and the general public as we contribute to Japan’s economic revitalization through sustainable development of the market, in our role as a provider of core infrastructure that underpins Japan’s financial and capital markets. We deeply appreciate your continued support and ask that you walk alongside us on our journey forward.
IT Vision and Policies

Given the ever-changing business environment surrounding JPX Group, it is essential that on top of providing stable and highly reliable market functions, we respond to significant internal and external changes in the environment with a sense of urgency in order to continue maintaining and enhancing our competitiveness as an enterprise. Therefore, for initiatives under the two categories of "Areas needing steady progress" and "Areas needing swift responses" in JPX Group’s IT Master Plan, with our new organizational structure including JPX Market Innovation & Research (JPXi), we aim to move forward in an integrated manner from the perspective of system services. To achieve this goal, in addition to continuing our efforts to further increase fault tolerance and resilience based on a multi-faceted approach, such as by constructing remotely located backup systems at the secondary data center in the Kansai region, we will flexibly and proactively take on the challenge of providing new services by expanding system services and utilizing information resources. To further accelerate these initiatives, we are focusing on cultivating human resources who have both digital and business skills and those who have specific areas of digital expertise.

IT as a Source and Driver of Competitiveness

Areas needing swift responses
- Adapting to drastic changes in the external environment
- Providing a variety of services and improving their sophistication
- Optimally utilizing rapidly evolving technology
- Searching for technologies to support the diversification of businesses
- Assessing technologies and giving feedback under clear objectives

Areas needing steady progress
- Steadily pushing forward with existing projects
- Increasing convenience, reliability and resilience as a market infrastructure
- Carrying out market operations through integrated business and IT teams
- Forming a clear view of aspects requiring a change

Unified promotion

Changes in IT environment
- Changes in finance business
- Digitalized society
- Learning from system failures
- Segmentation of technologies and services
- Data diversification

New organizational structure

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<th>OSE</th>
<th>TSE</th>
<th>TOCOM</th>
<th>JPXi</th>
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Strengthening ongoing initiatives
- Address diversified work styles
- Assess new technologies
- Strengthen resilience
- Concept market
- Strengthen BCP
- Overall system design

- Try internal production
- Satellite services
- Diversification of foundations
- Develop human resources
- Try scrum frameworks
- New data businesses
A new-look JPX Group with a competitive edge through IT, providing reliable market operations and reform for the future.

The Need for Greater Stability and Reliability

To provide stable and reliable market functions, for the cash equity trading system and other systems, on top of its established commitment to "Never Stop," JPX Group has worked to improve "resilience" to further ensure that recovery measures are prompt and appropriate. As part of these efforts, we have started development of arrowhead 4.0, the next generation cash equity trading system, as the final stage in the Action Program for Strengthening the Functions of the Cash Equity Market. While we will continue our ongoing initiatives for ensuring system quality and providing reliable services, in order to further improve resilience, we are considering the utilization of some cloud-based functions and other measures rather than just building an on-premises system as has been done in the past. In addition, in order to mitigate various business continuity risks that could affect systems, not only system failures, we will strengthen our remote backup structure from a system standpoint, including construction of the new secondary data center in the Kansai region. Furthermore, given that countermeasures for cyber-attack risks have become increasingly important recently, we will implement various measures on an ongoing basis such as further strengthening resilience through real-time detection of threats, security diagnostics conducted by external expert organizations, and other steps. Going forward, JPX Group will review the way its system services should operate with a long-term view, and strive to operate the market so that participants can use it with confidence.

Supporting Business from the Perspective of IT

JPX Group is currently aiming to create and develop new markets and services without being bound by the framework of the traditional "exchange," and IT will play an indispensable role in achieving this. With this in mind, the Group has proceeded to build structures for digital transformation (DX), including the establishment of DigiMa Lab., a center of advanced research and development, in April 2021 to promote the introduction of digital technology and IT system reforms. We also established JPXI in April 2022 as a strategic subsidiary to integrate the data and digital-related businesses of the Group. At the same time, our IT departments will utilize the knowledge they have accumulated thus far to work to introduce cloud computing and other new technology, and to construct data-lake and analysis platforms that create links both within and outside the Group. Through such initiatives, we will offer a variety of options for our business and accelerate the creation of new businesses and innovative changes. In addition, in order to support these initiatives, we will work as an organization to strengthen our human resources who support JPX Group systems through utilizing and developing highly skilled personnel.

While continuing to steadily provide functionality as a societal infrastructure, JPX Group will accelerate its digital transformation so that it is able to respond to changes in digital technology and the business environment encompassing the Group as well as strive to further improve resilience. Through these initiatives, we will work to increase the value provided to all stakeholders, including investors, listed companies, and others involved in the market.
Looking Back at FY2021

During FY2021, the average daily trading value of cash equities hit a record high of JPY 3.76 trillion against the backdrop of a change in Prime Minister in Japan and heightened geopolitical tensions globally, while the COVID-19 pandemic continued to dominate as in the previous year. In addition, JPX recorded higher revenues from information services as a result of increased revenue from market data usage fees and index licensing fees. Accordingly, company-wide operating revenue climbed 1.6% year on year to JPY 135.4 billion.

On the other hand, operating expenses increased, particularly in the area of system related costs, by 3.0% year on year to JPY 63.2 billion.

Adding to this, gains from companies accounted for under the equity method decreased, and as a result, operating income fell 1.5% year on year to JPY 73.4 billion and net income (attributable to owners of the parent company) fell 2.8% year on year to JPY 49.9 billion.

JPX’s Capital Policy

It is extremely important that JPX maintains a strong financial base to ensure that it can always stably operate our markets in a manner that is highly satisfactory to users, without being overly affected by local and global economic conditions, financial policies, geopolitical risks, and other trends. We steadily implemented the core strategies of the 3rd Medium-Term Management Plan, such as the creation of a Comprehensive Exchange and the diversification of data services, achieving our financial targets (operating revenue of JPY 130.0 billion, net income of JPY 50.0 billion, and ROE of at least 15%) for the second consecutive fiscal year.

In the new Medium-Term Management Plan, we aim to increase revenue while implementing various measures to establish the infrastructure of the “global, comprehensive finance and information platform.” At the same time, we will continue to focus on capital efficiency as part of our management strategy, maintaining a level of ROE that sufficiently exceeds the cost of capital, regardless of market conditions, into the future. Moreover, looking to implement corporate strategies focused on enhancing shareholder value and improving capital efficiency, JPX has adopted medium- to long-term incentive schemes for remuneration for directors and executive officers, using the indicators of consolidated ROE and total shareholder return (TSR).

Shareholder Return Policy

As part of its fundamental shareholder return policy, JPX has announced a dividend payout ratio target of approximately 60%, and continues to aim for this as a general rule.

When the company was first established, JPX targeted a dividend payout ratio of around 40%. In FY2015, however, having secured a certain financial base, we raised the target for the payout ratio to around 60%.

JPX will consider the additional return of profits to shareholders after comprehensively considering such
Support the sustainable development and evolution of the market by making constant investment while keeping a balance between shareholder returns and financial resilience for stable market operations.

Previously, JPX acquired approximately JPY 20 billion of its own shares for the first time between July 2016 and May 2017 (FY2016: approximately JPY 12.5 billion; FY2017: approximately JPY 7.5 billion). In addition to the ordinary dividend accounting for 60% of net income, the company also paid a commemorative dividend of JPY 10 per share (worth JPY 5.3 billion in total) in FY2017, a special dividend of JPY 15 per share (JPY 8 billion) in FY2018, and a special dividend of JPY 10 per share (JPY 5.3 billion) in FY2020. Moreover, in FY2021, JPX acquired approximately JPY 20.0 billion of its own shares and paid a special dividend of JPY 15 per share (worth JPY 7.9 billion in total). Through such initiatives, JPX has continued to flexibly and actively deliver shareholder returns in line with its shareholder return policy.

Proactive Engagement with Shareholders and Investors to Enhance Corporate Value

I interact with many stakeholders, from shareholders and institutional and retail investors to analysts and others. During FY2021, in addition to holding online earnings and business briefings as well as briefings for retail investors in response to the expanding impact of COVID-19, as in the previous fiscal year, I also used online platforms to actively engage in the exchange of ideas with domestic and overseas investors in regard to JPX Group’s management and financial strategies. Currently, factors such as heightened geopolitical risks, the global rise in commodity prices and interest rate trends are causing continued uncertainty over the business environment. Under these circumstances, I feel it is my mission as CFO to ensure financial soundness in order to carry out stable market operation while pushing forward the policies and initiatives of the Medium-Term Management Plan 2024 and promoting the reform of JPX Group to achieve the long-term vision set forth in Target 2030. To achieve these goals, I will listen sincerely to the suggestions from our stakeholders and give even greater priority to constructive dialogue so that we may further improve the quality of our management.
Long-term Vision

In this era of global upheaval, JPX Group has reassessed how it looks at the external environment, which is changing at a dizzying pace, and formulated the long-term vision "Target 2030" as an image of what it aims to be by 2030.

The Group is positioning the three years beginning from FY2022 as the first stage of progress toward this long-term vision.

In the Medium-Term Management Plan 2024, which covers the three years from FY2022, we have adopted the slogan "Exchange & beyond," embodying our determination to strengthen stable market operations, i.e., the traditional function of the exchange, while also advancing in new fields without being overly bound by this framework. We will press ahead with various projects that contribute to improving the attractiveness of Japanese financial and capital markets as a whole and enhance their global competitiveness.

Major themes in the external environment looking ahead to 2030

**Worldwide**
- Shift to a decarbonized society
- Population growth pushing the limits of supply and demand of food and resources
- Deepening fourth industrial revolution (AI/big data/IoT, etc.)

**Asia**
- Population growth
- Economic growth → Possibility that the center of the global economy shifts to Asia

**Japan**
- Progression of super-aging society
- Dwindling working-age population
- Mounting social security expenses
- Deteriorating social infrastructure
Medium-Term Management Plan 2024

JPX Group has developed a three-year plan to start from FY2022 as the first stage of progress towards Target 2030.

We will utilize new frameworks including JPX Market Innovation & Research to take proactive action on building the foundations of the global, comprehensive finance and information platform "G-HUB."

Exchange & beyond

To contribute to improving the attractiveness of the Japanese financial and capital markets as a whole and enhance their global competitiveness, we will prioritize initiatives in three specific "Focus" areas.

Our long-term vision to be achieved by 2030

Target 2030

Contribute to sustainable societal and economic development by evolving into a global, comprehensive finance and information platform which provides solutions for a wide range of societal issues, centered on the ability to raise and circulate capital

*Named “G-HUB” (Heighten market integrity, Unlock opportunity, Benefit society)

Environmental Vision

Japan Exchange Group will maintain and further develop the capital market into one that can coexist with the environment, by creating a clear action plan on environmental issues and making ongoing efforts to reduce our environmental footprint

Aim for carbon neutrality in securities market operations (our value chain) by 2030
Medium-Term Management Plan 2024

To contribute to improving the attractiveness of the Japanese financial and capital markets as a whole and enhance their global competitiveness, we will prioritize initiatives in three specific "Focus" areas.

Facilitating cycle of corporate innovation/growth and asset formation

In our role as a core infrastructure supporting fundraising by companies and asset formation by the public, as well as supporting innovation and growth at companies, we will develop the primary and secondary markets so that the profits stemming from companies’ efforts generate asset formation among the general public, leading back to further innovation and growth at companies.

Develop an environment that supports sustainable growth at companies

- Enhancement of financing functionality for growth companies
- Promotion of corporate value improvement at listed companies
- Establishment of IPO ecosystem that contributes to revitalizing regional economies
- Provision of trading opportunities for after delisting etc.

Develop products and rules to contribute to asset formation

- Expansion of the ETF market
  - Target: 30% increase in average daily trading value and net assets held in ETFs, etc. in FY2024
- Revisions to trading rules to allow smooth execution
- Development of an environment enabling secure and easy investment while considering investor protection
- Promotion of listings of cross-border companies, mainly from Asia
  - Target: 20 listings of cross-border companies in the three years of the plan
- Provision of comprehensive financial education including life planning, and strengthening of collaborative activities with industry players etc.

Further improve convenience and resilience as a market infrastructure

- Ongoing improvement of systems and their operation, and system replacements
  - Target: Replacement of cash equity trading system in the second half of FY2024 and extension of trading hours at the time of replacement
- Strengthening of BCP function to ensure stable market operations etc.

*In comparison with FY2021. Average daily trading value excluding leveraged/inverse products. Net assets excluding BOJ purchases
Financial targets, capital expenditures, and capital policy

Financial targets for the final fiscal year
- Operating revenue: JPY 147.0 bil.
- Net income: JPY 53.0 bil.
- ROE: At least 15%

Capital expenditures
- Total amount over three years: Approx. JPY 50.0 bil.

Capital policy
- Return to shareholders: Dividend payout ratio of approx. 60%
- Support the sustainable development and evolution of the market by making constant investment while keeping a balance between shareholder returns and financial resilience for stable market operations.
- Irrespective of market conditions, maintain ROE of 10% exceeding capital cost over the medium to long term.

Achieving market transformation (MX)
In order to serve as a hub for circulating capital in the Asia Pacific region while keeping focused on changes in the interest rate environment, we aim to enable optimal allocation of risk/return across society by ensuring systems for raising and managing funds function smoothly and sufficiently, not only for stocks but for other products as well.
In addition, to reduce the costs of raising and managing funds, we will advance digitization in all corners and enhance information usage.

Strengthen functionality of interest rate-related markets
- Revitalization of JGB-linked derivatives
- Promotion of professional-oriented bond market etc.

Invigorate the derivatives market
- Listing of small lot products linked to index futures and options
- Improvement of convenience for retail investors
- Expansion of flow from global investors
- Launch of holiday trading etc.

Advance digitization and enhance information usage
- Creation of a digital securities market
  - Target: Creation of a market and start of trading of new products by the end of FY2024
- Development of new services utilizing digital technologies for internal and external use
  - Target: Three services in the three years of the plan
- Strengthening of index businesses and enhancement of investment-related information etc.
  - Target: 200 new clients for information services and 12 cases of creating new information services or updating existing information services and rules in the three years of the plan
Focus 3

Promoting sustainability that connects society and economy

We will assist the creation of a sustainable society by utilizing market mechanisms to provide solutions for a wide range of societal issues, through the provision of an environment where sustainability-related information, products, and services are easily accessible to all.

Strengthen dissemination of sustainability-related information

- Creation and enhancement of information platform
  - **Target**: Launch of information platform for publicly offered ESG bonds in FY2022
- Support for sustainability information disclosure from issuers
- Participation in international debate and standard-setting on sustainable finance etc.

Calculate ESG indices and list related ETFs/futures

- Calculation of ESG-related indices, listing of related futures etc.
  - **Target**: Launch of new ESG index and listing of related futures in FY2022

Vitalize the energy market, advance the creation of an emissions trading market

- Increase in trading of electricity/LNG futures
  - **Target**: Expand trading volume on electricity futures fivefold by FY2024*
  - **Target**: Permanent listing of LNG futures by FY2024
- Contribution to the creation of a Japanese carbon credit market etc.
  *In comparison with FY2021.

Our actions so far

Advancement of the creation of an emissions trading market

JPX has set "Promoting Sustainability that Connects Society and Economy" as one of its key focus areas in the Medium-Term Management Plan 2024, and one of the planned actions under this is "contribution to the creation of a carbon credit market."

TSE won the bidding for "FY2021 Supplemental Carbon Neutral Top League Development Project (Technical Demonstration Project for Carbon Credit Market)" commissioned by the Ministry of Economy, Trade and Industry ("METI"), and will commence trial trading in the carbon credit market in September this year, starting with J-Credits. TSE will move forward with testing the carbon credit market system design as a unique contribution that it can make as an exchange to the realization of a low-carbon society.
Creation of information platform for ESG bonds aimed at promoting sustainable finance

In line with recent discussion and debate regarding sustainable finance, JPX established the "Sustainable Finance Platform Development Working Group" in October 2021 to consider the practical issues around the creation of an information platform that collects a wide range of information on green bonds and similar products. The Working Group published its First Report in January 2022.

Based on this Report, in July 2022, we launched the ESG Bond Information Platform and began operating it in cooperation with consenting partners, mostly securities companies. Through this platform, we will leverage market mechanisms to their maximum potential through choosing data points that are useful for all market stakeholders and efficiently collecting this information, and promote sound market growth as a sustainable finance market hub. At the same time, we will continue to consider further improvements to the platform and enhancements to the functions for disseminating information.

Released a practical guidance document through joint research with QUICK Corp.

In March 2022, JPX and QUICK Corp. published "JPX-QUICK Anthology of ESG Issues" (currently available only in Japanese) as the product of joint research, and JPX is conducting promotional activities including a jointly-held seminar with QUICK Corp. in July.

This anthology presents information on key ESG issues including an introduction to each issue, its significance, and the current situation surrounding it, with Japanese listed companies in mind. A particular focus is given to assisting companies in developing their own initiatives; links are provided to detailed background information and other related information so that companies can respond appropriately in this field, which is rapidly expanding internationally. While demand for enhanced disclosure of non-financial information grows, it is our hope that this anthology will assist companies responding to this demand in understanding the details of ESG issues correctly and improving their responses to and disclosure of these issues.

Going forward, we aim to establish an environment that provides easy access to sustainability-related information through continuing to work on activities that contribute to smooth information disclosure.

JPX-QUICK Anthology of ESG Issues —Supporting information disclosure— (only in Japanese)
Approach to Creating New Value

JPX Group's Value Creation Strategies

The entire JPX Group, including subsidiaries and affiliates, engages in business related to the establishment and operation of financial instruments exchange markets and commodity markets so that market users can trade securities with confidence at all times. The markets established by the Group provide listed companies with financing opportunities, investors with asset management opportunities, and society as a whole with price discovery functions.

By further enhancing these functions and responding to changes in the global environment, the Group is working to realize its newly established long-term vision “Target 2030: Contribute to sustainable societal and economic development by evolving into a global, comprehensive finance and information platform which provides solutions for a wide range of societal issues, centered on the ability to raise and circulate capital.”
JPX Group operates Japan’s leading stock market and it serves as a core infrastructure that supports Japan’s capital market. Stock markets simultaneously provide the corporate sector with opportunities to raise equity financing and provide investors with investment opportunities. In so doing, they serve key roles in optimizing the distribution of funds for society as a whole and ensuring smooth circulation of funds while supporting the sustainable development of the economy and society. Tokyo Stock Exchange has launched new market segments effective from April 4, 2022. Under the Medium-Term Management Plan 2024, the market restructuring is to serve as a starting point for initiatives to further accelerate listed company efforts to improve corporate value and make sure the fruits of these efforts can be put into subsequent innovation and growth. These initiatives include enhancing financing functionality for growth companies and establishing an IPO ecosystem that contributes to revitalizing regional economies.

Realizing an affluent society by building a sustainable and strong economic and social infrastructure as well as by contributing to future asset formation by individuals as a result of achieving greater corporate value

Ensuring fair and smooth price formation in the markets through effective trading supervision

Improving market convenience and reliability through various measures to enhance market functions

Perceived Strengths

- Listing of many companies representing the Japanese economy and providing funding opportunities to leading start-up companies
- One of the world’s largest markets, with a diverse investor base that includes retail investors as well as Japanese and overseas institutional investors
- Trust from and cooperation with market participants built over time
- Safe and reliable cash equity trading system

Perceived Risks

- Diminishing trading volume, decreasing supply of investment funds, and stagnating economic activity among listed companies and start-ups associated with a deteriorating market environment due to factors such as economic downturns in Japan and abroad
- Risk of no progress in enhancing quality of capital markets
- Reduced liquidity on the exchange due to a higher share of off-exchange trading

In our role as a core infrastructure supporting fundraising by companies and asset formation by the public, as well as supporting innovation and growth at companies, we will develop the primary and secondary markets so that the profits stemming from companies’ efforts generate asset formation among the general public, leading back to further innovation and growth at companies.
Special Feature
Restructuring the TSE Market

Yamaji Hiromi
Director & Representative Executive Officer, Group COO,
Japan Exchange Group, Inc.
President & CEO, Tokyo Stock Exchange, Inc.

Launch of New Market Segments and Changes in the Stock Market

Objectives in Restructuring the TSE Market

Effective from April 4, 2022, Tokyo Stock Exchange (TSE) has been restructured into three new market segments consisting of the Prime Market, Standard Market, and Growth Market.

The restructuring of the market has been carried out in part with the aim of prompting sustainable growth and medium- to long-term improvement of corporate value among listed companies, and also with the aim of providing an attractive market that enlists strong support from a diverse base of investors at home and abroad.

The April 4 date on which the restructuring took effect merely serves as the starting line on the path toward achieving such ambitious goals. We believe that companies will not achieve sustainable growth and medium- to long-term improvement of corporate value overnight. Instead, they will need to engage in persistent and steady efforts to such ends after the restructuring takes effect.

Changes Occurring in the Stock Market

In this sense, whereas we have only just started on the long road toward greater corporate value, definite changes are beginning to emerge with respect to the stock market.

For instance, the Prime Market is actively engaging in initiatives to encourage greater board independence, English-language disclosure, and disclosure based on the Task Force on Climate-related Financial Disclosures (TCFD) recommendations, in fitting with its concept of attracting a wider range of Japanese and overseas institutional investors. It is also taking steps to have companies improve liquidity in part by unwinding cross-shareholdings and arranging secondary offerings.

In the Standard Market, the revised version of Japan’s Corporate Governance Code has been fully applied and disclosures regarding sustainability and diversity are progressing.

In the Growth Market, all listed companies have disclosed business plans for achieving high growth
potential, and we hope that disclosure of progress against these plans going forward will lead to higher evaluations from investors assessing each company’s initiatives.

Meanwhile, companies that do not meet the Continued Listing Criteria at this point in time have drawn up plans for meeting such criteria and the respective companies are in the process of implementing specific initiatives to achieve new growth strategies.

**Increasing Corporate Value of Listed Companies**

TSE seeks to appropriately encourage such changes among the respective companies by carefully and painstakingly following up on whether the three new market segments are appropriately enabling listed companies to achieve greater corporate value and whether they are appealing to investors. Established after the transition to the new market structure, the "Council of Experts Concerning the Follow-up of Market Restructuring" is currently tapping into various forms of feedback regarding the progress of initiatives of listed companies from experts and others involved in the market, based on which it will consider, on an ongoing basis, additional matters that should be addressed in order to make the market restructuring more effective.

TSE seeks to contribute to the realization of an affluent society by facilitating sustainable growth of the Japanese economy and ensuring that benefits of growth are appropriately distributed. To this end, it will support efforts of listed companies to increase their corporate value over the medium- to long-term while providing an attractive market that enlists strong support from many investors in Japan and overseas.

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**Three new market segments launched on April 4, 2022:**

**Prime, Standard, and Growth**

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<thead>
<tr>
<th>Old market segments</th>
<th>Prime Market</th>
<th>Current market segments</th>
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</thead>
<tbody>
<tr>
<td>First Section</td>
<td>For companies which center their business on constructive dialogue with global investors</td>
<td></td>
</tr>
<tr>
<td>Second Section</td>
<td><strong>Standard Market</strong> For companies with sufficient liquidity and governance levels to be investment instruments</td>
<td></td>
</tr>
<tr>
<td>Mothers</td>
<td><strong>Growth Market</strong> For companies with high growth potential</td>
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<td>JASDAQ</td>
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<td>Standard</td>
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<td>Growth</td>
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Resolving Social Issues — Creating Social Value

Major Stakeholders

- Domestic and overseas investors, commercials (business corporations), securities companies, banks, commodity futures business operators
- Providing tools for hedging against price fluctuation risks in various assets (securities, interest rates, commodities)
- Providing instruments for direct investment into the entire market and price indicators
- Providing price discovery functions for various assets

Perceived Strengths

- Reliability as a market operator and a client base built up over time as both a traditional securities exchange and a pioneering derivatives exchange
- A Comprehensive Exchange that handles a wide range of financial and commodity derivatives under the Financial Instruments and Exchange Act
- Handling of a wide range of securities-linked derivatives centered on Japanese stocks, headlined by Nikkei 225 Futures

Perceived Risks

- Risk of inability to provide liquidity expected by businesses ("commercials") which need to use hedging functions, due to a decrease in the number of trading participants who engage in the brokerage of customer orders and delivery of commodities
- Risk of reduced liquidity due to competition with overseas exchanges and alternative markets handling similar products

To provide efficient and effective asset management opportunities and price fluctuation risk hedging opportunities as a hub for circulating capital in the Asia-Pacific region, we will contribute to further improving the global presence of Japan’s markets by boldly working to develop the Japanese derivatives market through the pursuit of convenience, reflecting feedback from market participants in Japan and overseas.

Osaka Exchange, Inc.

Tokyo Commodity Exchange, Inc.

Iwanaga Moriyuki
Director and Executive Officer
Japan Exchange Group, Inc.
President & CEO
Osaka Exchange, Inc.
Representative Director & Chair, Chairperson of the Board
Tokyo Commodity Exchange, Inc.

Major Stakeholders

- Providing tools for hedging against price fluctuation risks in energy-related products and highly transparent price indicators
- Providing tools for investment in Japan’s energy sector

Perceived Strengths

- Trust from and cooperation with market participants built up over time

Perceived Risks

- Risk of inability to provide liquidity expected by business corporations trading in the market ("commercials") which need to use hedging functions, due to a decrease in the number of trading participants who engage in the brokerage of customer orders and delivery of commodities
- Risk of reduced liquidity due to competition with overseas exchanges and alternative markets handling similar products

We will contribute to the development of Japanese and Asian industry by providing a derivatives market for multiple energy products and establishing a domestic market that is highly convenient for those that actually use it in our role as a “comprehensive energy market” that is consistent with the industrial policies promoted by the government.
Osaka Exchange (OSE) and Tokyo Commodity Exchange (TOCOM) operate the JPX Group derivatives markets as a “Comprehensive Exchange” that handles equity-linked, stock price index-linked, government bond-linked, and commodity-linked derivatives on a single platform.

OSE operates a derivatives market covering a wide range of physical assets ranging from financial assets to commodities pursuant to the Financial Instruments and Exchange Act of Japan. Leading products include stock price index-linked derivatives such as Nikkei 225 Futures (large and mini) and Options and TOPIX Futures, bond-linked derivatives such as 10-year Japanese Government Bond (JGB) Futures, and commodity derivatives such as Gold Futures and Platinum Futures. These products are widely used by market participants in Japan and overseas as an instrument to hedge against the risk of price fluctuations in physical assets or as an instrument to invest directly in the market as a whole. They support Japan’s securities and financial markets, which are some of the world’s leading capital markets. To further expand the Japanese market’s international presence and strengthen its competitiveness, OSE will reflect the views of market participants in Japan and overseas in its efforts to ensure greater liquidity by attracting further trading flows, design highly convenient rule frameworks, and strengthen resiliency in system construction.

On the other hand, TOCOM operates a commodity market closely related to Japan’s energy policy under the Commodity Derivatives Transaction Act. The exchange now offers commodity derivatives linked to the full range of major energy sources with the addition of LNG futures in April 2022, in conjunction with crude oil futures, petroleum-related futures, and electricity futures. We will ceaselessly pursue the realization of a fair and highly convenient “comprehensive energy market” to contribute to the sustainable development of Japanese companies and the nation’s economy.

Through both exchanges, we will boldly work to expand the Japanese derivatives market. This will involve adding new assets aligned with the times, such as those involving ESG, and developing systems for existing products having grasped changes in economic conditions and industry in Japan and worldwide, as well as providing more trading opportunities by offering holiday trading.

The importance of consistently securing low-cost energy has once again come into focus in the 2020s, amid a supply crunch and soaring prices with respect to electricity, LNG and other sources of energy. At times like these, futures markets serve an important role as an industrial infrastructure for hedging against price fluctuation risks.

Listed in April 2022, LNG futures are very significant in terms of enabling price formation during business hours in Asia where demand is strong for LNG. As such, we hope that Japan will come to serve as a hub market for LNG risk hedging going forward.

In addition, with respect to our electricity futures launched as a trial listing in September 2019, the number of market participants increased significantly from 13 companies initially to more than 140 companies, and the listing status of those futures was changed to permanent listing before the end of the three-year trial listing period. We feel confident that the electricity futures market will achieve further growth in Japan, which ranks fourth worldwide in terms of electricity consumption.

Going forward, we will contribute to the development of Japan’s economy as a comprehensive energy market that provides substantial convenience to market participants, by further developing the market in a manner that aligns with energy policy.

Seeking to Develop a Comprehensive Energy Market

Ishizaki Takashi
Executive Officer
Japan Exchange Group, Inc.
Representative Director, President
Tokyo Commodity Exchange, Inc.
JPX Market Innovation & Research, Inc. (JPXI) began operations on April 1, 2022, having been established with the aim of integrating the index, data, and digital operations of the respective JPX Group companies in pursuit of creating services that lead to strengthened functionality and better efficiency in the markets as a whole. Centered on its index, data, and digital services, JPXI engages in initiatives that contribute to enhancing the competitive strengths of Japan’s financial and capital markets, while also playing a key role in creating the global, comprehensive finance and information platform “G-HUB” as set out under Target 2030.

JPXI’s current operations, specifically calculating and disseminating indices, furnishing various forms of data, and providing infrastructure such as network and information systems, can be considered as the foundation of the reliability of JPX Group’s overall market operations. As such, we will continue solidly operating these services given that they serve as key businesses that account for a substantial portion of our revenues. On top of this, however, we will boldly take on new challenges to create new value, including enhancing index and data services to answer new societal demand around ESG, for example, and entering a new field of business in creating a digital securities market. We will also contribute to bolstering the competitive strengths and status of the markets overall by creating an environment that enables domestic and overseas funds to flow more readily into Japanese financial and capital markets. This will involve upgrading frameworks and services that facilitate dissemination of information and corporate value improvement among listed companies, and promoting diversification of products such as with digital assets, green financial products, bonds, and foreign assets.

As we engage in various initiatives toward attaining our long-term vision for 2030, we will aim to achieve highly flexible and agile business development while exploring a wide range of opportunities for partnerships with various market stakeholders.

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**Resolving Social Issues – Creating Social Value**

- Contributing to more widespread ESG-related indices and by strengthening functions for disseminating ESG information
- Contributing to market digitalization and enhanced information usage by creating a digital securities market, developing new services leveraging digital technologies, and enhancing investment-related information

**Major Stakeholders**

- Investors, listed companies, securities companies, asset management companies, financial institutions, information vendors, start-ups

**Perceived Risks**

- Intensifying international competition in the data business field
- Decline in the number of service users due to diminishing appeal of Japan’s financial and capital markets

**Perceived Strengths**

- A strong client base centered on TOPIX and a highly fair, transparent, and neutral index management system
- Ability to develop market services built on foundations and know-how cultivated as a market infrastructure
- Extensive track record of using AI, blockchain, cloud and other digital technologies and cooperating with external partners

By consolidating JPX Group’s index, data and digital-related services, as an organization that serves a central role in JPX Group’s strategic business development, we will contribute to bolstering the competitive strengths and status of Japan’s financial and capital markets while actively creating diverse market services that address new demand.

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**Growing Strategy**

**Creating Value**

JPX Market Innovation & Research, Inc. (JPXI) began operations on April 1, 2022, having been established with the aim of integrating the index, data, and digital operations of the respective JPX Group companies in pursuit of creating services that lead to strengthened functionality and better efficiency in the markets as a whole. Centered on its index, data, and digital services, JPXI engages in initiatives that contribute to enhancing the competitive strengths of Japan’s financial and capital markets, while also playing a key role in creating the global, comprehensive finance and information platform “G-HUB” as set out under Target 2030.

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**Miyahara Koichiro**

Executive Officer
Japan Exchange Group, Inc.
President & CEO
JPX Market Innovation & Research, Inc.
Achieving JPX Group’s "Target 2030" involves evolving into a "global, comprehensive finance and information platform which provides solutions for a wide range of societal issues, centered on the ability to raise and circulate capital" and "contributing to sustainable societal and economic development." One key field that cannot be ignored when working towards these goals is ESG.

Although ESG is something that must be worked on by the Group as a whole, some initiatives being led mainly by JPX Market Innovation & Research are calculating ESG-related indices and strengthening functions for disseminating ESG information. With respect to indices, JPXI launched the S&P/JPX 500 ESG Score Tilted Index Series jointly with S&P Dow Jones Indices in March 2022. These indices form a composite ESG index series whereby weightings of constituents are adjusted to align with S&P DJI ESG scores, while maintaining the balance across business sectors. JPXI also launched the FTSE JPX Net Zero Japan Index Series jointly with FTSE Russell in April 2022. This environment-specific series of indices aligns with the aim of achieving net zero carbon emissions in assets under management by 2050. This involves adjusting constituent weightings such that each portfolio achieves a 7% annual reduction in carbon emissions and fossil fuel reserves, upon having achieved 30% reductions compared with the respective base index.

When it comes to strengthening functions for disseminating information, JPXI seeks to help investors and other market stakeholders in terms of reducing costs of collecting information, ensuring transparency, and making accurate and swift decisions. To such ends, we launched an information platform for publicly offered ESG bonds in July 2022 and have otherwise been considering options in terms of setting up a platform for collection and centralized handling of ESG information released by listed companies.

In addition, the Digitally Tracked Green Bond issued by JPX in June 2022 uses a system provided by JPX Market Innovation & Research which utilizes digital technologies to enable investors to track positive environmental impact. A Digitally Tracked Green Bond is a bond which aims to enable greater transparency and more efficient data collection by enlisting blockchain and other digital technologies to address matters such as a lack of transparency of data needed for green investment and the complexity of gathering such data, which are issues recognized by both issuers and investors of green bonds. Through this scheme, JPX aims to contribute to carbon neutrality in society as a whole by providing a highly convenient product that can be used by many issuers and investors.

JRX Market Innovation & Research's Growth Strategy

Toward the Creation of the Global, Comprehensive Finance and Information Platform "G-HUB"

―Initiatives in ESG―

IR meetings can be held efficiently as holders of the bond can be identified utilizing the scheme.

JPX | Nomura Trust and Banking | Issuers | Issues tokens | Pays the funds | Entrusts management | Nomura Securities | Transfers token rights | Invests in corporate bonds | Investors

Usage of funds

Power generation facilities | Smart meters | Power generation measured, converted into CO2 reduction | View and download data for investors | Automatic collection of data on the amount of power generation and CO2 reduction by smart meters enables more efficient data collection and better accuracy and transparency of information disclosure. It enables management of the data as linked to a bond. The data can also be used for the preparation of annual reports.

The day-to-day data is recorded with security tokens thereby preventing data manipulation by the issuer.

The environmental impacts of the invested funds can constantly be monitored. As the data rules are standardized, it is easy to compare investment targets.
Japan Exchange Regulation (JPX-R) is a corporate body that is established under Japan Exchange Group (JPX) to specialize in self-regulatory operations of financial instruments exchanges under the Financial Instruments and Exchange Act of Japan. It is entrusted by the market operators Tokyo Stock Exchange (TSE) and Osaka Exchange (OSE) to take on self-regulatory operations that include: listing examinations to review eligibility of prospective listed companies; listed company compliance to check listed company information disclosure and corporate conduct; inspections and examinations to ensure reliable operations of securities companies and other trading participants; and market surveillance to monitor the market for unfair trading. The mission of JPX-R is that of conducting effective self-regulation to ensure that the exchanges fully perform their functions, thereby ensuring and enhancing credibility with respect to markets, while also giving rise to market fairness and transparency.

Ever since establishment of the self-regulatory organization in 2007, JPX-R has consistently operated based on the notion of adhering to this mission and maintaining its independence as self-regulatory organization. Meanwhile, the market environment is undergoing transformation on a daily basis. The transition to the new market segments in April 2022 entailed conducting a review on the ideal form of self-regulation aligned with characteristics of the respective markets and otherwise making arrangements to ensure smooth and effective self-regulatory operations under the new market segments. Moreover, when JPX Group transitioned to the Comprehensive Exchange, as trading participants of commodity futures and other ex-Tokyo Commodity Exchange (TOCOM) products were given a year’s transition period for obtaining OSE trading qualifications, JPX-R endeavored to ensure consistency of quality between these ex-TOCOM trading participants and existing OSE trading participants through monitoring and inspection/examination, particularly of business execution structures. Going forward, JPX-R aims to better engage in self-regulatory operations that gain the confidence of market users by effectively addressing changes in the market environment in a manner that involves working closely with market operators as well as government authorities and related organizations in Japan and abroad.

In order to ensure and enhance credibility with respect to markets, as well as market fairness and transparency, we aim to better engage in self-regulatory operations that instill trust in market users by closely cooperating with government authorities and relevant organizations in Japan and abroad, and also by appropriately addressing environmental changes.

Japan Exchange Regulation
The mission of an exchange is to provide a high degree of liquidity by building efficient and reliable markets that ensure convenience of use and fairness, thereby enabling efficient fund distribution based on market mechanisms through sophisticated price discovery functions. Accomplishing this mission calls for providing markets where various investors are able to trade with peace of mind, so that prices reflect diverse investment decisions made by an extensive range of investors, including retail investors. As such, the self-regulatory operations performed by Japan Exchange Regulation (JPX-R) involve controlling the quality of exchange markets to ensure fairness and reliability, and form the foundations of JPX Group’s function as a market operator.

The task of adequately performing such self-regulatory operations requires a high degree of autonomy with a focus on the public interest and investor safeguards, along with an organizational structure for engaging in management and operations from a fair and neutral position. It also calls for swift and effective responses to various market events as well as substantial expertise in terms of familiarity with market functions and characteristics.

As a means of simultaneously meeting these demands, JPX has opted for an organizational structure in which a self-regulatory organization that specializes in self-regulatory operations is established as a separate corporate body within the same group as the exchanges. The aim of this structure is that JPX-R can demonstrate substantial expertise situated in close proximity to the markets, while also achieving highly effective operational execution from a position of neutrality independent from the exchanges, having established an independent governance structure where outside governors constitute the majority of the Board of Governors, which is the highest decision-making body when it comes to operational execution of self-regulatory organizations. In overseas markets, market regulation can be overseen by government authorities or others depending on a market’s development history, legal system, and business practices. Whereas JPX-R has a unique organizational structure and framework for operational execution from the perspective of global standards, we believe its configuration is exceptionally suited to maintaining substantial expertise while simultaneously aligning with demands for efficiency and convenience of market operations as well as demands for ensuring fair and reliable capital markets. JPX-R aspires to continue meeting the expectations of investors through appropriately addressing changes in the market and regulatory environments and continuing to carry out highly effective self-regulatory operations.
Japan Securities Clearing Corporation

Resolving Social Issues
- Creating Social Value

- Contributing to sustainable development of the market economy by providing abundant liquidity for diverse markets, whether on exchange or over the counter, and a foundation for smooth price formation through improved settlement efficiency and ensuring trading safety

Major Stakeholders

- Clearing participants (securities companies, banks, commodity futures business operators, etc.), investors

- Improving the efficiency of the settlement process through centralized clearing of various trades

- Guaranteeing the settlement of trades and ensuring the safety of trading through high-level risk management

Perceived Strengths

- Providing centralized clearing services for various trades

- High-level risk management with an awareness of global standards

- Highly convenient clearing services through close communications with domestic and international clearing participants

Perceived Risks

- Risk of inability to complete an appropriate default settlement of a clearing participant, which has a significant impact on other clearing participants and in turn the entire market, due to inadequate or inappropriate operation of risk management systems

- Risk of difficulty continuing operations as the social infrastructure that supports the market economy due to events such as system failures and natural disasters

Utilizing our track record and competitiveness as the leading clearing house in Japan, we provide an environment where clearing participants, and therefore investors, can trade safely and securely, by offering more efficient, safe clearing services and related services for more diverse markets

Shizuka Masaki
Director and Executive Officer
Japan Exchange Group, Inc.
President & CEO
Japan Securities Clearing Corporation

Growth Strategy
Creating Value

By providing clearing services to the market, Japan Securities Clearing Corporation (JSCC) plays the key role of improving settlement efficiency while ensuring the safety of trading.

To continue creating value, JSCC believes that it is important to realize even greater settlement efficiency by providing clearing services to a larger number of diverse markets, while also contributing to abundant liquidity and smooth price formation in these markets by ensuring the safety of trading through continuous improvements to high-level risk management based on the best practices of clearing houses around the world. For example, when an exchange introduces a new product or new rule framework, JSCC can make a contribution by providing appropriate clearing services.

In addition, as a social infrastructure that provides services to diverse markets, strengthening the structures that enable business continuity in emergency situations has an even more important meaning with respect to JSCC’s value creation when considering future expansion of services.

Furthermore, while the use of distributed ledger technology (DLT) and other new technologies in the financial industry has been increasing in recent years, the use of new technologies in existing operations and the development of new services that apply new technologies are also important to JSCC, not only for existing fields of business but also when looking ahead to entering other related fields. This will lead to value creation in the future.

In this way, JSCC will continue striving to use its track record and competitiveness as the leading clearing house in Japan to further enhance and improve its services so that it can meet the expectations of clearing participants and a broad range of investors.
Responding to Market Fluctuations due to the Situation in Ukraine

JSCC guarantees the settlement of trades by clearing participants on exchange and over the counter. However, to prepare for a situation where a clearing participant goes bankrupt, JSCC requires clearing participants to deposit margin as collateral to cover losses pertaining to the bankruptcy.

This margin system is extremely important in appropriately managing settlement risk, and JSCC verifies the adequacy of the margin amounts daily in light of market conditions and various other factors.

From late February 2022, however, the situation in Ukraine has led to sudden market fluctuations, mainly in gold, crude oil and other commodities.

In response, JSCC conducted several extraordinary reviews of the margin requirements within a short time in early March of the same year, and appropriately covered the risk by raising the margin amounts to suitable levels as needed in accordance with the market fluctuations.

In addition, we continuously monitored clearing participants in response to the rising geopolitical risks and conducted appropriate risk management for the sudden volatility, such as by performing checks whenever necessary to determine any concerns regarding the sound financial health of clearing participants.

Going forward, JSCC will continue to conduct appropriate risk management in consideration of market trends and other factors, and remain focused on always ensuring the safety of trading.

"Clearing House of the Year" Award Winner

JSCC continually strives to make further improvements to risk management, and together with expanding its clearing business into the commodity derivatives field through the 2020 merger with Japan Commodity Clearing House, has enhanced its risk management and loss compensation rules for listed derivatives clearing services. These initiatives by JSCC have received high praise internationally, and in recognition of its achievements in improving derivatives clearing services through innovative initiatives, JSCC received the "Clearing House of the Year" award in the "Asia Risk Awards 2021" sponsored by Asia Risk magazine.

Ensuring the safety of trading is essential for improving settlement efficiency and for the development of markets, and JSCC will work to fulfill its role as a clearing house through its ongoing initiatives for improving the level of risk management based on an awareness of global standards.
At the UN Sustainable Development Summit in 2015, 17 Sustainable Development Goals (SDGs)—international goals related to the economy, society, and environment—were adopted as a step towards realizing a society that is sustainable, diverse, and inclusive.

JPX Group’s corporate philosophy is to contribute to the realization of an affluent society by promoting the sustainable growth of the market and, by extension, realizing the society envisioned in the SDGs. Under this corporate philosophy and as a member of society, JPX Group will continue to regularly hold dialogues with a wide range of stakeholders, including listed companies, trading participants such as securities companies, investors, and other related organizations, and aim to contribute to the realization of an affluent society.

**Human Rights Policy (Reference)**
JPX Group has created a Human Rights Policy which applies to all Group officers and employees. In addition, the Group expects all business partners to support and respect the Policy and will work with them on human rights issues.

JPX Group Human Rights Policy
Co-creation with Stakeholders

- Trading Participants (P.42)
- Investors (P.44)
- Information Vendors (P.47)
- International Organizations (P.48)
- Academic and Research Organizations (P.49)
- Local Communities (P.50)
- Government and Securities-related Organizations

Creating Value at JPX Group

Messages from the Management

Strategies for Creating Value

Sustainability Foundations for Value Creation

Financial and Corporate Data
Approach: In order to achieve JPX Group’s goal of realizing a sustainable society and economic development, it is essential that along with promoting medium- to long-term corporate value improvement at listed companies that support society and the economy, we foster start-ups that will lead new industries. JPX Group is working to support listed companies in their efforts to increase corporate value, and ensure the smooth supply of growth funding to start-ups, by building a highly convenient, efficient, and transparent market foundation.

In April 2022, the three new market segments of the Tokyo Stock Exchange began operations. Within JPX Group, we had been studying the possibility of the market restructuring since 2018. Finally, after four years, trading on the new market has commenced. On the other hand, to realize the objectives of this restructuring, which are to support medium- to long-term improvement of the corporate value of listed companies and provide an attractive market for both domestic and foreign investors, it should be noted that what is more important than developing the system prior to the transition is to properly support the efforts of listed companies after the transition. JPX Group will follow up to ensure that these efforts make steady progress and help listed companies achieve sustainable growth.

In addition, in recent years there has been much discussion in various quarters about the creation and fostering of start-ups that will lead new industries. JPX Group is working to support the growth of attractive start-ups, by building a highly convenient, efficient, and transparent market foundation.

Market Restructuring and CG Code Revision

To support sustainable growth and medium- to long-term corporate value improvement at listed companies, in April 2022, the cash equity market was restructured into three new market segments, the Prime Market, Standard Market, and Growth Market, with listing requirements tailored to each market concept. In tandem with this, in June 2021, we also revised Japan’s Corporate Governance Code. We will continue to follow up on these initiatives to enhance their effectiveness.

Market Restructuring

<table>
<thead>
<tr>
<th>Before</th>
<th>After (from April 4, 2022)</th>
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<tbody>
<tr>
<td>First Section</td>
<td>Prime Market</td>
</tr>
<tr>
<td>Standard Market</td>
<td>For companies which center their business on constructive dialogue with global investors</td>
</tr>
<tr>
<td>Growth Market</td>
<td>Standard Market</td>
</tr>
<tr>
<td>Mothers</td>
<td>For companies with sufficient liquidity and governance levels to be investment instruments</td>
</tr>
<tr>
<td>Prime Market</td>
<td>For companies with high growth potential</td>
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</table>

Enhancement of Financing Functionality for Growth Companies

We have established the Growth Market as a market for start-ups with high growth potential and are creating an environment that facilitates financing for the realization of growth. Most recently, in order to diversify the ways in which financing is channeled to growth companies, we are also working to further enhance the convenience of the existing IPO structure and considering initiatives such as alternative listing methods.

Comments from Staff on the Ground

Isogai Shuhei
Manager, Listing Department
Tokyo Stock Exchange, Inc.
ETFs are useful products for both retail investors and institutional investors from the standpoints of portfolio diversification at a low cost, high transparency, and the flexibility to buy and sell them. In relation to ETFs, TSE provides "CONNEQTOR," an RFQ platform (a system in which institutional investors, primarily, send out a request for quotes for a particular ETF at a particular quantity, etc. that they wish to trade to multiple market makers at once in order to facilitate trading) in order to improve the liquidity of ETFs in the auction sessions through measures such as market making schemes and facilitate the smooth execution of large-scale transactions that are difficult to execute in auction sessions.

CONNEQTOR adopts a development approach of improving functions in an agile manner so that it can respond flexibly to users’ needs and changes in the market environment. CONNEQTOR has released new functions almost every month since the service was launched in February 2021 to improve usability. This has enabled faster, better-priced ETF trades.

In order to provide a highly convenient trading environment for ETFs going forward, we will continue to improve our rules and systems while placing importance on communication with market stakeholders.
Investors

Approach

In order to achieve "Facilitating cycle of corporate innovation/growth and asset formation," a core strategy in the Medium-Term Management Plan 2024, it is important that the fruits of corporate growth lead to asset formation by citizens, and that this links to the next cycle of innovation and growth. By providing comprehensive financial and economic education, including life planning, JPX Group seeks to generate social value by resolving the challenge of improving financial literacy among citizens, and to enhance economic value over the medium to long term by expanding the investor base.

Initiatives

Role of Financial and Economic Education

In Japan, the amount of household financial assets continues to increase year by year, totaling more than JPY 2.0 quadrillion, the highest ever level. However, these assets are still not being fully utilized. Statistics on the composition of Japanese household financial assets indicate that cash and deposits account for a high proportion, approximately 54% of the total, while stocks and other investments account for only approximately 15%.

Faced with problems of a shrinking workforce and the limits of its social security system, the major task at hand for Japan is figuring out how to use its assets as efficiently as possible to generate economic growth for the next generation. In line with the government’s stated objective of “Promoting the shift from savings to investment,” JPX Group believes it can help to address these issues by raising the financial and economic literacy of individual members of society and by pushing for a shift to asset formation.

Launch of JPX Manebu Lab

In view of the importance of financial and economic education, JPX Group has been providing a variety of educational programs to provide support for the promotion of asset formation by individuals that is tailored to a range of different needs. Recently, we are seeing the introduction of NISAs and other preferential taxation systems, rising awareness of SDGs and ESG investment, and the addition of asset formation as a subject in home economics lessons at high schools. Given this background, the interest being shown in financial literacy by society has reached unprecedented levels. In the era of 100-year lifespans, it is becoming increasingly important for stable asset formation that each and every citizen obtains accurate information about finance and life planning, and that they themselves make independent judgments about such issues.

With an awareness of these issues in mind, JPX Group established the JPX Manebu Lab in April 2022 to develop comprehensive financial and economic education for a wide age range. (“Manebu” is a play on two words: the English ‘money’ and the Japanese word “manabu” meaning ‘to learn.’) In order to be able to provide a comprehensive assortment of accurate financial information that contributes to financial and life planning by individuals, we will continue to strengthen and improve our educational content going forward.

Key Areas to Strengthen/Improve

- Provide comprehensive financial and economic education to assist life planning
- Strengthen financial education in schools
- Strengthen financial education in the workplace
- Promote activities that incorporate external knowledge and views

<table>
<thead>
<tr>
<th>April 2022 onwards</th>
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<tbody>
<tr>
<td>JPX Manebu Lab</td>
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<tr>
<td>New parent brand</td>
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<tr>
<td>“JPX Manebu Lab”</td>
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<tr>
<td>Activity reports</td>
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<tr>
<td>External Insights/opinions</td>
</tr>
<tr>
<td>One-stop portal</td>
</tr>
<tr>
<td>Acquisition (provision) of accurate financial information in one place</td>
</tr>
<tr>
<td>Individuals</td>
</tr>
<tr>
<td>For working adults</td>
</tr>
<tr>
<td>Online/face-to-face seminars (life planning, equity, derivatives)</td>
</tr>
<tr>
<td>Workplace seminars/training</td>
</tr>
<tr>
<td>Online articles on asset formation</td>
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<tr>
<td>For students</td>
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<td>Elementray to high school</td>
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<td>University</td>
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<td>Seminar Manebu</td>
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<td>Workplace Manebu</td>
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<td>TSE Manebu</td>
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<td>School Manebu</td>
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<td>Campus Manebu</td>
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</table>
Seminar Manebu

Through seminars, events, radio and other media, Seminar Manebu provides interested adults, irrespective of generation, with unbiased knowledge and information regarding finance and the economy that is considered necessary for asset formation and asset management. This includes explanations about stocks, ETFs, REITs, derivatives and other financial products. We also plan programs that combine investment with a variety of other genres so as to convey the appeal of investing to people who have hitherto been uninterested in the economy and investments.

To commemorate the launch of JPX Manebu Lab, in June 2022 we held a symposium on the topic of finance and economics open to all ages, from elementary school children to retirees.

Workplace Manebu

To provide employees of listed companies and other organizations with opportunities to learn more about securities markets and asset formation as part of in-house training and study sessions, we provide a "Workplace Manebu" service whereby JPX Group staff well-versed in financial and capital markets can be deployed to give fair and impartial lectures.

The lectures cover mainly familiar asset formation themes such as life planning, defined contribution pension plans, and NISA schemes, while being flexibly tailored to the needs of the audience. These sessions are intended to provide a catalyst for attendees to build assets in a way best suited to their needs by enhancing their financial literacy and increasing their interest in asset management.

TSE Manebu

TSE Manebu is a website where we publish information daily to promote asset formation by retail investors. The purpose of this website is to help as many people as possible on their way to growing their assets by providing information about the importance of asset formation through long-term, diversified investment, including everyday money-related topics that will be easy to grasp even for those who have no investment experience.

The website provides a wide range of articles that can be easily understood by all, including explanatory videos, infographics that explain things in an easy-to-understand visual form, and content about post-retirement finance in preparation for a 100-year life. The site also provides search functions for ETFs, instructions on how to use ETFs, and many other items of ETF-related information.

School Manebu

JPX Group has been putting effort into financial and economic education for students for some time, but with the introduction of asset formation as a subject in high-school home economics lessons in April 2022 following revisions to the official guidelines for school teaching, we expect basic knowledge of finance and the economy among students to be further enhanced. With more attention being paid to financial and economic education for students, the Group has not only provided educational programs targeting students but also offered seminars to teachers, with the aim of raising the standard of financial literacy for Japanese society as a whole.
Outreach to Schools (Elementary through High School)

Although our daily lives are closely related to the economy and stock companies, there are far fewer opportunities to learn about these topics in school in Japan than overseas. To address this situation, JPX Group sends staff to schools to speak during home economics, politics & economics, or civics classes. They give lectures on how stock companies work and mix in some role-play and skits to help students familiarize themselves with financial and economic concepts.

Economics Lectures for Parents and Children (Elementary and Junior High School Students)

JPX Group holds many events, mostly during summer vacation, for students from elementary and high school to junior high school and their parent/guardians, to familiarize them with financial and economic concepts while touring the Tokyo Stock Exchange and Osaka Exchange facilities.

JPX Entrepreneur Experience Program (Junior High and High Schools)

This is an educational program that aims to develop students’ life skills, such as the ability to learn and think on their own, by giving them the experience of setting up and running a business from zero as an “entrepreneur.” These are carried out in cooperation with schools and local communities as part of JPX Group’s activities to support enhanced financial literacy. Since FY2020 the programs have been held primarily online.

Economics Lectures for School Teachers

JPX Group provides seminars for junior high and high school teachers mainly during summer vacation, aiming at equipping teachers with economic knowledge and concepts that will aid them in their teaching. The Group also sends staff to speak at training and study sessions for teachers.

Campus Manebu

Due to the reduction in the age of majority in April 2022, it has become possible to open a securities account at the age of 18 without obtaining parental permission. While this is an opportunity for university students to become familiar with investing and asset formation, it also becomes more important that they acquire accurate information about investing and become financially literate. JPX Group is also putting effort into financial and economic education for university students.

Lectures for University Students

Based on the requests of universities nationwide, JPX Group holds courses intended to substantially deepen the understanding of finance, economics, securities markets and derivatives markets among those university students who will soon be shouldering responsibility for the Japanese economy. We also introduce the facilities at TSE (TSE Arrows) and OSE via online lectures so that students can learn while feeling a connection with the exchange.

To help nurture the next generation of leaders, the Group holds sponsored courses and joint courses at a number of universities. The courses cover the latest developments in law, economics, management and accounting related to the securities market, along with the roles expected of listed companies.
Creating Value at JPX Group

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Highlighting Company Activity (with Ministry of Economy, Trade and Industry)
Together with the Ministry of Economy, Trade and Industry (METI), TSE selects and announces listed companies from among each sector that are engaged in superior efforts in regard to specific themes. This initiative serves as a means of generating interest among retail investors and providing them with an opportunity to consider stock investments.

Financial literacy among the Japanese is said to be low in comparison to that of citizens of other countries, and has become a social issue. For many years JPX Group has engaged with this social issue through the provision of financial and economic education to all generations. In recent years, however, we have seen unprecedented changes take place among those without experience in investment. Triggered by the finding by a government agency in 2019 that the average retirement-age Japanese couple is short of JPY 20 million in funds needed for their old age, which became a huge talking-point, people have become aware of the importance of asset formation in the era of 100-year lifespans, and the number of individual investors has been increasing. Particularly among younger people, the resistance to investment that existed in the past is disappearing due to the combination of information being disseminated via social media and changes in the environment that have, for example, made it easy to trade through a smartphone.

In order to convert the mighty wave of asset formation that has at last come into being into something more sustainable, the Financial Literacy Support Department has launched "JPX Manebu Lab" as a new, unified brand for financial and economic education, and is working to strengthen and improve such activities. Today, with SDGs and ESG investment attracting attention, we argue strongly that investment makes a meaningful contribution to society through enabling corporate activities, and through it we seek to resolve the social issue of improving financial literacy among the population.

Other Cooperative Initiatives
Project for Disseminating Knowledge about Securities (Joint Project among Organizations Involved in the Securities Industry)
The goal of the Project for Disseminating Knowledge about Securities, which was set up as a joint effort by organizations involved in the securities industry, is to disseminate information and educate people about securities consistently, over the long term, and from a fair and unbiased perspective. Activities are wide-ranging and include providing schools with educational materials for financial and economic education and holding lectures and seminars for adults.

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Visits to JPX Group Facilities
To give everyone a better first-hand understanding of exchanges, JPX Group opens its facilities at the Tokyo Stock Exchange and the Osaka Exchange to a wide variety of visitors, from elementary schools to universities and the general public. Along with tours of the facilities, we also provide lectures on finance and economics tailored to the needs of our many visitors.
Enhancing Markets and Promoting DX through Cooperation with Information Vendors

Primarily through JPX Market Innovation & Research, we are actively cooperating with a variety of skilled and knowledgeable information vendors. For example, we are examining mechanisms to enhance the convenience of the timely disclosure system for listed companies in order to reduce the cost to investors of analyzing information. In addition, we aim to enhance the market and improve the operational efficiency of market players by discussing initiatives that can leverage the informational resources of JPX Group to contribute to mitigating the operational burden of IR for listed companies and reducing the cost of listing.

Coordination for Enhanced Non-financial Information

In response to rising demand from both domestic and overseas investors for non-financial data, such as management policy and sustainability information, JPX Group is working with SCRIPTS Asia Inc. to provide a service for converting speeches by listed companies regarding such information at investor briefings or other events into text and disseminating it. We believe this service will help reduce the cost to investors of gathering information, including that of the non-financial kind, as well as reducing the information gap between overseas and domestic investors.

Summary of Event Minutes Recording Services Provided by SCRIPTS Asia

<table>
<thead>
<tr>
<th>Events for investors, etc.</th>
<th>Content creation</th>
<th>Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earnings briefings, general shareholders meetings, ESG presentations, and other events held by contracted partner companies</td>
<td>Presentation materials, Audio recording, Event survey</td>
<td>Transcription, Translation, Q&amp;A</td>
</tr>
</tbody>
</table>

Information related to listed company share prices, earnings announcements, and various corporate actions is essential to the functioning of price formation in the market. JPX Group is the primary source for, and distributes, such market information, but a significant contribution to the maintenance and development of the market is made by information vendors that distribute supplementary information, or information that has been processed and edited for additional convenience. We believe that building cooperative relationships with information vendors, which possess skills and know-how that JPX Group does not have, is an indispensable part of improving the competitiveness of the market.

In recent years, ESG information and alternative data have also become increasingly important to investors. For such new information, which is different from existing market information, we aim to create new value by utilizing the information through the combination of the knowledge of information vendors in a range of fields and the market infrastructure experience that JPX Group has accumulated over the years.

Bolstering the competitiveness of financial and capital markets through the dissemination of market information

Comments from Staff on the Ground

Saito Yuya
Manager, Frontier Development Department
JPX Market Innovation & Research, Inc.
International Organizations

Contributing to International Organizations

World Federation of Exchanges (WFE)

WFE is the global industry group composed of members from exchanges and clearing houses around the world, and is engaged in making policy recommendations and conducting surveys and research about capital markets. It also collects and provides statistical data. Key themes that WFE is focusing on include heightening resilience for stable market operations, and the role exchanges have in ESG initiatives aimed at creating sustainable societies. JPX Group participates actively in these activities as a member of the WFE Board of Directors.

Asian and Oceanian Stock Exchanges Federation (AOSEF)

AOSEF is a regional federation of 17 exchanges for the Asia-Oceania region. AOSEF aims to facilitate information sharing among member exchanges. JPX Group serves as the secretariat for AOSEF, promoting research initiatives while also leading the Working Committee and General Assembly. Starting in 2021, AOSEF has been seeking to further invigorate its activities through new initiatives such as offering members an online venue for discussions and holding webinars.

Approach

At JPX Group, through activities with international organizations, we gather information and express views about trends in international regulations. At the same time, we collaborate with overseas exchanges to strengthen our business foundations in other countries. By providing technological assistance for the development of overseas capital markets, primarily in Asia, with the aim of helping to achieve a sustainable society and economic growth, we seek to create business synergies over the long term while fulfilling our social responsibilities as a corporation.

Trainees from Overseas Exchanges (Commissioned by JICA)

Commissioned by the Japan International Cooperation Agency (JICA), JPX Group accepts trainees from exchanges and related organizations of various countries and provides them with training programs based on the developmental status of each exchange, thereby contributing to the development of their securities markets. Recently, the impact of COVID-19 has made it impossible for overseas trainees to visit Japan, so we have continued training through the use of online lectures and other means.

Sustainable Stock Exchanges (SSE) Initiative

SSE is an initiative for stock exchanges that was established by United Nations agencies to create guidelines and guidance for the purpose of promoting sustainable investment. JPX Group has joined the SSE Initiative and actively participates in its activities.

JPX Group has established bases throughout the major financial centers of the world, and engages in ongoing dialogue with local investors, securities companies, and regulatory authorities. Through these communications with overseas stakeholders, we are again left with the feeling that, from the viewpoint of overseas investors, the Japanese market is no more than one asset formation choice among many.

On this point, it is a fact that the growth potential of individual issues listed on the Tokyo Stock Exchange, and the appeal of listed products such as ETFs and REITs is difficult to see from overseas, due to language and other problems. If we simply wait, it may inevitably lead to foreign investors passing the Japanese market by.

In addition to the proactive dissemination of information by listed companies, as a kind of leader for the Japanese market as a whole, JPX Group itself collates opinions, requests, and issues from various stakeholders and works to address each of them in cooperation with domestic stakeholders. We believe this leads to better visibility for the Japanese market, and is an important role for JPX Group as the market operator.

JPX Report 2022
48
In order to contribute to sustainable societal and economic development, JPX Group works with external researchers to study and conduct research on the various environments and legal systems surrounding the markets, as well as related changes. The results of these studies and research are used when considering what measures the Group should take and are broadly disseminated to society, including market stakeholders such as securities companies and investors.

**JPX Working Papers**

With a view to enhancing its competitiveness, JPX Group compiles surveys and research on the market environment carried out by its executives and employees or external researchers as JPX Working Papers. As part of these efforts, the Group publishes information such as the results of surveys relating to securities markets and analyses using artificial market simulations.

<table>
<thead>
<tr>
<th>Date of publication</th>
<th>Title</th>
</tr>
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<tbody>
<tr>
<td>March 9, 2022</td>
<td>Analysis of Short Side Market Inefficiencies Using Artificial Market Model</td>
</tr>
<tr>
<td>September 16, 2021</td>
<td>Investigation into effectiveness of maker-taker fees in stock markets using artificial market</td>
</tr>
<tr>
<td>June 28, 2021</td>
<td>Expansion of the Heterogeneous Autoregressive Model with Tokyo Stock Exchange Co-Location Dataset</td>
</tr>
<tr>
<td>June 24, 2021</td>
<td>On the evaluation of intraday market quality in the limit-order book markets: A collaborative filtering approach</td>
</tr>
<tr>
<td>June 7, 2021</td>
<td>Issues around the Fragmentation in the U.S. Equities Market</td>
</tr>
</tbody>
</table>

**Joint Research with The University of Tokyo**

JPX Group is working with the research team under Professor Izumi Kiyoshi of the Department of Systems Innovation, School of Engineering at The University of Tokyo to conduct joint research related to technologies and system design for the stable and efficient operation of financial instruments exchange markets. We are moving forward with research such as the use of artificial market simulations to virtually create conditions that cannot be observed in the actual market. The results of this research are published, where appropriate, as JPX Working Papers.

**JPX Study Group on the Financial Instruments and Exchange Act**

JPX Group is holding a study group on Japan’s Financial Instruments and Exchange Act to provide a platform for research on various legal issues related to the financial instruments market and will make the results widely available in Japan and abroad.

This study group is composed of more than 20 up-and-coming researchers, who generally meet once a month to present reports and hold discussions. Along with posting of the minutes and reports of this study group on the Group website, the reports are periodically compiled into booklets that are distributed to researchers and organizations concerned.

**Study Group on the Financial Instruments and Exchange Act (only in Japanese)**

https://www.jpx.co.jp/corporate/research-study/research-group/index.html

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I responded to an internal recruitment program for a “Chief Researcher,” who would be able to conduct academic surveys and research as part of their duties. I conduct research on the fundamentals relating to the financial markets because I want to help create better market rule frameworks. The overall topic is that of the relationship between financial market liquidity and utility to investors. When the exchange takes steps to attract new investors and increase the number of orders, this has a positive effect, enhancing market depth and making it easier for investors to trade at favorable prices. From the perspective of existing investors, on the other hand, this can result in an increase in competing orders, which could be interpreted as a negative effect. I use mathematics to objectively analyze both positive and negative effects, and research what trading system would be desirable from the viewpoint of enhancing the utility to investors.

Over the past several years, I have worked together with the University of Tokyo to author JPX Working Papers, submit international research papers, and to give presentations at academic conferences. Going forward, as a stock exchange employee I will continue to dedicate myself to research that incorporates the opinions of other industry participants, so as to provide output that bridges the gap to practical implementation.
Local Communities

Initiatives

Humanitarian Aid

JPX Group has formulated the "JPX Group Human Rights Policy" and works to ensure human rights are respected. In March 2022, based on the spirit behind the formulation of this policy, the Group decided to donate JPY 100 million to the UNHCR, the UN Refugee Agency, with the aim of providing humanitarian aid to the people who have suffered tremendous loss following the deterioration of the situation in Ukraine and to people who have evacuated to neighboring regions. Moreover, in April 2020, as a way of supporting measures to combat COVID-19, we donated JPY 100 million to the National Center for Global Health and Medicine to play our part in supporting the various healthcare workers risking their own wellbeing, day and night, on the front lines of healthcare.

Going forward, the Group will continue to do what it can to contribute to various problems related to human rights, including non-corporate activities, and such initiatives include both efforts to solve and support such problems.

Contributing to Local Communities

In addition to taking steps to raise environmental awareness among its employees through activities such as forest preservation and community cleanup programs, JPX Group participates in events to give back to local communities that provide it with invaluable support. The TSE Listing Forest in Yuzuchou, Akita Prefecture (approximately 7.3 hectares) was first established 18 years ago. Forest preservation activities have been continually carried out in the hope that the exchange will grow and prosper along with the planted trees. In conjunction with this, the Group also provides financial and economic education by presenting classes at elementary, junior high and high schools in the local Yashima region, which cooperate with these forest preservation activities.

In the Corporate Communications Department, to which I belong, we are actively involved in community-based activities focused on Kabuto-cho in Tokyo and Kitahama in Osaka, where JPX Group’s offices are located. Every year, in Tokyo, the Group cooperates in the “Chuo City Marugoto Museum,” an event that likens all of Tokyo’s Chuo City to a museum. In Osaka, we participate annually in "Open House Osaka," an initiative to create and advertise new charm through the currently existing "living architecture," in the view of making the city a giant museum. Also, as part of activities that contribute to local communities and culture, the Group is a special sponsor of the Osaka International Festival, where Osaka’s 4 professional orchestras perform, and cooperates in regional beautification activities through participation in cleanup events. I personally have taken part in the cleanup activities around the Site of Dojima Rice Exchange, which is said to be the birthplace of derivatives.

Promoting communication with local communities through public relations activities

Ichida Yasue
Manager, Corporate Communications Department
Japan Exchange Group, Inc.

Approach
As a good corporate citizen, JPX Group will work to make broad contributions to society by independently and proactively conducting corporate activities that aim to maintain and develop an affluent and healthy society. Additionally, we will encourage and actively support each and every officer and employee to take the initiative in carrying out activities that contribute to society.
Approach  JPX Group engages in business activities with its sights set on a sustainable economy where economic development and environmental conservation go hand in hand, underpinned by its Environmental Vision and Environmental Policy. Specifically, given the urgent need to address climate change, the Group aims to contribute to Japan’s carbon neutrality goal by focusing on promoting sustainability utilizing market mechanisms, along with setting targets for achieving carbon neutrality across the Group and working towards these. In addition, having declared its support for the Task Force on Climate-related Financial Disclosures (TCFD), the Group strives to spread and promote the use of TCFD and disclose information in alignment with the TCFD Recommendations.

Environmental Information

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**Our Targets to Achieve Carbon Neutrality**

- **Autumn FY2021**
  - TSE Building electricity switched to an RE100-compliant contract (completed)

- **End of FY2024**
  - Energy consumed by JPX Group to be 100% renewable using self-generated energy
  - Carbon neutrality achieved (Scope 1, 2)

**Aim for carbon neutrality in securities market operations (our value chain) by 2030**

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**Our Targets and Initiatives to Achieve Carbon Neutrality**

**Switching Electricity Contracts**

From October 1, 2021, JPX Group put measures in place to cut CO₂ emissions at the Tokyo Stock Exchange Building and Osaka Securities Exchange Building, including switching electricity contracts. We expect that these measures will cut the Group’s greenhouse gas emissions by approximately 27% annually.

**Transition to Consumption of Renewable Energy Using Self-generated Energy**

As well as using electricity derived from renewable energy, the Group also generates its own renewable energy.

The Group has acquired facilities such as solar power generation facilities that co-exist with agriculture on farmland and biomass power generation facilities that use discarded cooking oil for fuel, using proceeds from the green bond issued in June 2022. We are looking to contribute to a decarbonized and circular economy by utilizing mainly idle or discarded farmland for power generation and generating renewable energy using secondary resources (recycled fuel).

Solar power generation facilities that co-exist with commercial farming in Ibaraki Prefecture commenced operation in August 2022.

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Addressing Climate Change-related Risks and Opportunities Utilizing the TCFD Recommendations

JPX Group declared its support for the TCFD in October 2018, recognizing that climate change may have an impact on the sustainable growth of the Group in terms of both risks and opportunities. The Group seeks to achieve greater resiliency and sustainable growth by disclosing information in line with the TCFD Recommendations and using those recommendations as guidelines when addressing climate change-related risks and opportunities.

Governance
Recognizing that addressing climate change is an important management issue, JPX Group has established a Sustainability Committee, with the Group CEO serving as Chair and the Group COO as Vice-Chair. The committee has analyzed how related issues affect business operations and is proceeding to address these. The Group has also established a system for adequately reporting basic policies and important matters associated with climate change to the Board of Directors, which in turn provides oversight of those basic policies and important matters as appropriate. In addition, the Group has designated sustainability-related risks including those involving climate change as a “significant risk” with respect to company-wide risk management, meaning that climate-related information is also reported to the Board of Directors from a risk management perspective, on a quarterly basis.

Moreover, the Group has appointed an executive officer in charge of sustainability, under whom the Sustainability Department spearheads efforts in analyzing and monitoring the effects of climate change so that risks to and opportunities for the Group’s businesses relating to climate change can be identified and appropriately addressed.

Strategy
JPX Group has considered the possible risks and opportunities brought on by climate change and their effects on operations, strategy, and financial planning. It is accordingly implementing measures to reduce risk and increase corporate value, and has summarized these initiatives as its Green Strategy in the Medium-Term Management Plan 2024.

In addition, since addressing climate change is a long-term issue with high levels of uncertainty, the Group is in the process of conducting a scenario analysis referencing the TCFD Technical Supplement in order to consider strategic resilience. Thus far, we have broadly identified possible risks and opportunities brought on by climate change as shown on the following page, based on assumptions regarding short-term (until 2025), medium-term (until 2030) and long-term (until 2050) time frames. Using these risks and opportunities as a base, the Group will now refer to externally-created scenarios to carry out a business impact assessment based on worldviews that assume temperature increases of 1.5 and 4 degrees Celsius, and review its strategy and responses, while working to improve the sophistication of related information disclosure.

*We plan to reference, among others, RCP 2.6, RCP 4.5, and RCP 8.5 of the Intergovernmental Panel on Climate Change (IPCC), along with the Sustainable Development Scenario (SDS), the Stated Policies Scenario (STEPS), and the Net Zero Emissions by 2050 Scenario (NZE) created by the International Energy Agency (IEA).

Risk Management
JPX Group has established a Risk Policy Committee chaired by an outside director, and a Risk Management Committee chaired by the Group CEO, in order to address the various risks faced by the Group. In line with the Group’s Risk Management Policy, these committees are responsible for identifying risks as well as developing and implementing preventative measures, and also form a system which ensures a swift and appropriate response in the case that risks do or are likely to materialize.

Under the Risk Management Policy, the Group identifies and classifies the risks faced by the company, each of which is managed by the department with jurisdiction. Information on assessments of these operations and issues to be addressed are periodically brought before the Risk Policy Committee (semiannually) and Risk Management Committee (quarterly) and reported in each case to the Board of Directors.

The Risk Policy Committee has identified sustainability related risks, including climate change, as a significant risk under “business environment and business strategy risk.” These risks are managed by the Sustainability Department.

Please refer to page 71 for further details on JPX Group’s risk management systems.
### Possible Risks and Opportunities Brought on by Climate Change and Related Actions

<table>
<thead>
<tr>
<th>Classification</th>
<th>Possible risks and opportunities</th>
<th>Related actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical risk</td>
<td><strong>Chronic</strong>&lt;br&gt;A scenario of suspended operations or damage to facilities caused by intensifying natural disasters could prompt a downturn in short-term earnings along with alienation of investors over the medium to long term.</td>
<td><strong>JPX Group</strong> can become subject to diminishing business opportunities and rising financing costs if confidence in and evaluation of the Group and the Japanese market overall decline due to the perception that initiatives to address climate change are insufficient in terms of the Group’s market operations and commitment, or in terms of management policies of Japanese companies.</td>
</tr>
<tr>
<td>Physical risk</td>
<td><strong>Acute</strong>&lt;br&gt;Business operations of JPX Group’s exchanges could become subject to disruption if changes in long-term weather patterns prompt an increase in instances of suspended operations and related response measures.</td>
<td><strong>JPX Group</strong> could become subject to diminishing business opportunities and rising financing costs if confidence in and evaluation of the Group and the Japanese market overall decline due to the perception that initiatives to address climate change are insufficient in terms of the Group’s market operations and commitment, or in terms of management policies of Japanese companies.</td>
</tr>
<tr>
<td>Policy and legal</td>
<td><strong>Products handled by the Group, markets operated by the Group, and its own business operations would likely be affected as laws and regulations became more stringent regarding ESG information disclosure practices and relevant products and services.</strong> For instance, the Group’s earnings could be affected if there were products that could not comply with more stringent laws and regulations or if market users moved away from the market having become weary of more stringent regulations.</td>
<td><strong>The Group</strong> endeavors to strengthen ties with regulatory authorities and other relevant parties in order to address changes in laws and regulations in a timely and appropriate manner. The Group has further placed focus on identifying global trends by utilizing the World Federation of Exchanges (WFE) and the Sustainable Stock Exchanges (SSE) Initiative, international forums for cooperation between exchanges. Through resources such as the JPX ESG Knowledge Hub, the Group also makes efforts to promote understanding about and reduce the burden of ESG information disclosure among listed companies.</td>
</tr>
<tr>
<td>Financial risk</td>
<td><strong>Technological</strong>&lt;br&gt;Transition risk&lt;br&gt;&lt;br&gt;For facilities related to our IT systems, which serve as the infrastructure for JPX Group’s business, we utilize the latest technologies to achieve high performance and high quality, and contribute to higher efficiency and lower emissions. Even if additional costs are incurred, the Group believes that these efforts will lead to lower running costs over the short term and facilitate the transition to a decarbonized economy over the medium to long term, thereby contributing to improved corporate value.</td>
<td><strong>In order to provide products and services aligned with the needs of market users, the Group has been working closely with related parties to identify these needs and develop products and services. Having established JPX Market Innovation &amp; Research, Inc. (JPXI) in April 2022, the Group intends to further expand its range of ESG-related services. Under Japan’s Corporate Governance Code, listed companies are asked to actively engage in initiatives that involve addressing sustainability issues and disclose information in a manner that increases corporate value.</strong></td>
</tr>
<tr>
<td>Market</td>
<td>Earnings could be affected by a decrease in demand for products and services provided by JPX Group if investors increase their standards and climate change-related initiatives or information disclosure practices by companies and products listed on markets operated by the Group are deemed inadequate.</td>
<td><strong>For facilities related to our IT systems, which serve as the infrastructure for JPX Group’s business, we utilize the latest technologies to achieve high performance and high quality, and contribute to higher efficiency and lower emissions.</strong> Even if additional costs are incurred, the Group believes that these efforts will lead to lower running costs over the short term and facilitate the transition to a decarbonized economy over the medium to long term, thereby contributing to improved corporate value.</td>
</tr>
</tbody>
</table>

*Transition risk refers to risk that arises from changes in government policies, legal affairs, technological innovation, market preferences and other such developments that occur in conjunction with transition to a low-carbon economy.*

**Physical risk refers to risk involving direct damage to assets caused by natural disasters and other such events attributable to climate change.*
Metrics and Targets
In preparation for more stringent policies and regulations regarding greenhouse gas emission reductions, JPX Group has reviewed its approach to procuring electricity, which is the primary factor in its emissions. This move aims to eliminate Scope 2 emissions by switching 100% of electricity consumed throughout the Group to renewable energy by FY2024, and to achieve carbon neutrality (Scopes 1 and 2) across Group companies in the same time frame. The Group began calculating other CO2 emissions (Scope 3) in FY2020. In this respect, the Group will appropriately manage emissions throughout the value chain while taking the steps required to reduce greenhouse gas emissions. Also, in its Medium-Term Management Plan 2024, the Group set "aim for carbon neutrality in securities market operations by 2030" as a long-term ESG target.

With these targets in mind, for Scope 2, the Group has been switching electricity contracts for several facilities to RE100-compliant or other renewable energy contracts in stages since autumn 2021, and plans to start generating its own renewable energy through holding its own energy generation facilities in FY2022. Meanwhile, a majority of the Group’s Scope 1 emissions are attributable to its consumption of city gas and gasoline, and the Group intends to offset these emissions using J-Credits and similar methods.

The capital goods that account for the majority of Scope 3 emissions are connected to the development of the software that supports the Group’s IT infrastructure. The Group aims to gradually reduce these emissions through emissions management while maintaining the investment required for stable market operations.

### JPX Group CO₂ Emissions* (t-CO₂)

<table>
<thead>
<tr>
<th></th>
<th>FY2018</th>
<th>FY2019</th>
<th>FY2020</th>
<th>FY2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scope 1 (direct CO₂ emissions)**</td>
<td>682</td>
<td>738</td>
<td>688</td>
<td>774</td>
</tr>
<tr>
<td>Scope 2 (indirect CO₂ emissions)**</td>
<td>13,817</td>
<td>13,708</td>
<td>13,500</td>
<td>11,751</td>
</tr>
<tr>
<td>From offices</td>
<td>3,681</td>
<td>4,082</td>
<td>3,821</td>
<td>2,110</td>
</tr>
<tr>
<td>From data centers, etc.</td>
<td>10,136</td>
<td>9,626</td>
<td>9,678</td>
<td>9,641</td>
</tr>
<tr>
<td>Total (Scopes 1 and 2)</td>
<td>14,499</td>
<td>14,446</td>
<td>14,188</td>
<td>12,525</td>
</tr>
<tr>
<td>Total emissions per FTE****</td>
<td>12.3</td>
<td>11.2</td>
<td>10.7</td>
<td>9.5</td>
</tr>
<tr>
<td>Electricity usage (kWh)</td>
<td>28,583,670</td>
<td>29,487,151</td>
<td>30,504,689</td>
<td>31,088,510</td>
</tr>
<tr>
<td>From offices (kWh)</td>
<td>6,642,660</td>
<td>6,718,468</td>
<td>6,128,439</td>
<td>6,328,614</td>
</tr>
<tr>
<td>From data centers, etc. (kWh)</td>
<td>21,941,010</td>
<td>22,768,683</td>
<td>24,376,250</td>
<td>24,725,836</td>
</tr>
</tbody>
</table>

### Other Related CO₂ Emissions† (Scope 3) (t-CO₂)

<table>
<thead>
<tr>
<th></th>
<th>FY2020</th>
<th>FY2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital goods</td>
<td>18,531</td>
<td>37,530</td>
</tr>
<tr>
<td>Fuel and energy-related activity</td>
<td>2,236</td>
<td>2,294</td>
</tr>
<tr>
<td>Acquired goods and services</td>
<td>2,052</td>
<td>2,269</td>
</tr>
<tr>
<td>Business travel</td>
<td>1,136</td>
<td>1,250</td>
</tr>
<tr>
<td>Employee commuting</td>
<td>471</td>
<td>483</td>
</tr>
<tr>
<td>Downstream leased assets</td>
<td>210</td>
<td>163</td>
</tr>
</tbody>
</table>

*The TCFD Recommendations encourage disclosure of GHG emissions. Because JPX Group’s GHG emissions primarily consist of carbon dioxide, only carbon dioxide emissions have been disclosed.
**CO₂ emissions from city gas used by the TSE Building and gasoline used by company vehicles are estimated based on the Act on Promotion of Global Warming Countermeasures.
***CO₂ emissions for each electric utility are calculated under the "Greenhouse Gas Emissions Estimation, Reporting, and Disclosure Rules" based on this Act.
****Full-Time Equivalent. Does not include full-time operations support staff and employees on secondment.
†Although JPX Group has calculated the emissions for all 15 categories of Scope 3, the emissions for the other categories are 0 as these categories have little connection to the Group’s business.
Human Resource Development

Attracting and Developing the Personnel Necessary for Our Management Strategy

In preparation for achieving the Target 2030 long-term vision by 2030, we are focusing on attracting and developing the personnel needed for digital transformation (DX), as well as those with a global mindset and skills.

For the first step, using the establishment of JPX Market Innovation & Research as an opportunity to strengthen the digital and network-related fields that utilize data and technology while further improving convenience and resilience as a market infrastructure, we will establish a new digital solutions (DS) course for human resource development specifically in the digital network field, which includes the development of trading systems. We have begun hiring new graduates for this course from the 2023 cohort.

In addition, with the aim of strengthening the foundations of our global business, we will further increase our focus on initiatives such as graduate school study abroad programs and dispatching trainees to overseas companies, thus increasing the number of employees with overseas experience and promoting the development of human resources that will drive the global business.

Supporting Career-building for Employees

In order to enable each and every employee to use their abilities to the fullest extent, JPX Group has created a working environment where employees can actively pursue specialized knowledge on their own initiative, take in the latest information, and develop a broad perspective and free and creative thinking. Specifically, by providing a variety of opportunities to accumulate business experience as well as enhancing OJT and other training programs, we aim to develop employees' talents and discover new areas of aptitude, thereby nurturing the kinds of staff capable of conducting appropriate market operations.

To support employees in self-directed career-building, JPX Group has set up Skills Development Training, providing programs enabling employees to study a topic of their own choosing based on skills that need improvement or areas of interest, with an annual subsidy of up to JPY 300,000 per employee. Many employees have taken courses such as foreign languages and those related to IT qualifications.

The Group also actively operates programs where employees take postgraduate courses in Japan and overseas and are seconded to other companies as trainees. Opportunities to accumulate experience outside the company are provided to employees regardless of their background.

Human Resource Development and Training Programs

Promoting Diversity

To ensure that a diverse staff is able to contribute to JPX Group regardless of their gender, nationality, age, or other characteristics, we have set up a Diversity Promotion Group under the Human Resources Department.

Promoting Women’s Participation and Advancement in the Workplace

We believe that support from the company is particularly important for female employees. In addition to establishing systems and programs to create a comfortable environment for working
Creating Value at JPX Group

Pandemic. Since then, COVID-19 has prevented infection in the workplace, and steps we have taken include thorough measures to work with confidence. To this end, by fostering an environment in which employees can work with confidence in order to prolong the pandemic we believe became widespread, and with the prolongation of the pandemic we believe has steadily increased. As of April 2022, we had 41 female managers accounting for 8.1%, meaning that we achieved our goal of 8% or more female managers by April 2022.

Flexible Work Styles

We have been developing systems (flextime and telework) to enable flexible work styles so that employees with diverse values can continue to actively participate in the company's work. JPX Group is facilitating flexible work styles by introducing systems for different types of long-term leave to enable employees to participate in ways that are tailored to their life plans and career plans, such as Leave to Accompany Spouse and Professional Development Leave, as well as by setting up a program for reemploying those who have resigned.

Employee Health and Safety

Stamping out Harassment

JPX Group prohibits unfair discrimination based on gender, rank, maternity or paternity, and other individual attributes or circumstances in its corporate behavior rules, and ensures that all employees are fully aware of this rule. By establishing internal and external points of contact for harassment and creating an environment where employees can comfortably discuss or report harassment, we are working to identify and solve issues at an early stage, and to ensure a rewarding workplace free from all types of discrimination and harassment.

JPX Health Management Declaration

JPX Group has made a JPX Health Management Declaration to help employees and their families maintain and improve their health. The Group is making efforts to understand the health of all of its employees and to aid in early detection of diseases and abnormalities, such as by subsidizing the costs of testing for early cancer diagnosis. We have also made both internal and external helplines available to ensure that employees can work while maintaining both their physical and mental wellbeing. We also provide information on preventing mental illness.

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Messages from JPX Group's Female Employees

Did you have any concerns about balancing your career and raising children?

Across the company, there are many senior employees who have experienced pregnancy and childbirth, so I did not feel too anxious about my physical condition or career. Since I was returning to work in the department and position I originally had, it was easier to grasp the image of how my career would unfold after coming back, so I did not feel overly concerned.

Did you have any anxiety when returning to work?

Because a pre-return to work meeting had been set up, I was able to discuss my childcare circumstances and see if my vision of my career and work style after childcare leave was aligned with my boss’s. This facilitated my smooth return to work. When I met with my boss in the meeting, I felt that he conveyed not only his understanding of my wishes but also the current circumstances of the department and the specific roles that I would be expected to play within this, which increased my motivation on returning.

About the working environment at JPX Group

JPX Group has a system in place to support female employees during pregnancy and after returning to work, and I believe that this has created an atmosphere in which we can easily utilize the support system, making it easier for us to strike a balance between work and private life. Also, when we think about support for female employees we tend to focus on women during pregnancy and the first few years after returning to work (and actually I myself am still at that stage), but you could argue that we need to take a long-term view of balancing work with other aspects of life. In that sense, I think I am very fortunate to be in an environment where all employees can use flextime and telework systems that make work easier, not just specific categories of people like those in maternity and post-maternity, or female employees.

Did you have any anxiety during your pregnancy?

After I consulted them about my pregnancy, a person in charge from the Human Resources Department immediately set up a one-on-one meeting for me. I was relieved to know that the system would allow me to continue working while giving priority to my physical condition.

About the working environment at JPX Group

Over a little more than a decade, JPX Group has established, reviewed, and improved various systems to support childcare. The number of female employees balancing childcare and work has increased. The Group is also aware of the ratio of male employees taking childcare leave, and my own boss has also taken paternity leave. I feel that the company is fostering an environment in which we are able to work sustainably while respecting each other in light of the circumstances of individual employees, not just regarding childcare but also other situations such as nursing care.

Details on diversity, employee advancement, and work-style reforms
### HR-related Data

<table>
<thead>
<tr>
<th></th>
<th>FY2018</th>
<th>FY2019</th>
<th>FY2020</th>
<th>FY2021</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No. of employees</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All</td>
<td>1,110</td>
<td>1,208</td>
<td>1,197</td>
<td>1,193</td>
</tr>
<tr>
<td>Male</td>
<td>805 (72.6%)</td>
<td>875 (72.4%)</td>
<td>859 (71.8%)</td>
<td>843 (70.7%)</td>
</tr>
<tr>
<td>Female</td>
<td>305 (27.4%)</td>
<td>333 (27.6%)</td>
<td>338 (28.2%)</td>
<td>350 (29.3%)</td>
</tr>
<tr>
<td>Non-Japanese</td>
<td>16 (1.4%)</td>
<td>16 (1.3%)</td>
<td>19 (1.6%)</td>
<td>18 (1.5%)</td>
</tr>
<tr>
<td>Mid-career hires</td>
<td>246 (22.2%)</td>
<td>331 (27.4%)</td>
<td>336 (28.1%)</td>
<td>393 (32.9%)</td>
</tr>
<tr>
<td><strong>No. of hires</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New graduates</td>
<td>26</td>
<td>26</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Female</td>
<td>12</td>
<td>12</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Non-Japanese</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Mid-career hires</td>
<td>7</td>
<td>15</td>
<td>14</td>
<td>18</td>
</tr>
<tr>
<td>Female</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Non-Japanese</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Average years of service</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All</td>
<td>17.3</td>
<td>17.0</td>
<td>17.4</td>
<td>17.4</td>
</tr>
<tr>
<td>Male</td>
<td>16.1</td>
<td>16.4</td>
<td>16.9</td>
<td>16.9</td>
</tr>
<tr>
<td>Female</td>
<td>19.9</td>
<td>18.4</td>
<td>18.7</td>
<td>18.6</td>
</tr>
<tr>
<td><strong>Women in managerial positions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total managers</td>
<td>345</td>
<td>388</td>
<td>422</td>
<td>436</td>
</tr>
<tr>
<td>Female managers</td>
<td>19 (5.5%)</td>
<td>24 (6.1%)</td>
<td>29 (6.9%)</td>
<td>34 (7.8%)</td>
</tr>
<tr>
<td><strong>No. of male employees taking parental leave (statutory and company schemes)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>35</td>
<td>24</td>
<td>23</td>
<td>19</td>
</tr>
<tr>
<td><strong>Ratio of male employees taking parental leave (statutory and company schemes)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>77.5%</td>
<td>55.8%</td>
<td>79.3%</td>
<td>57.6%</td>
</tr>
<tr>
<td><strong>Ratio of female employees taking maternity leave</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Ratio of female employees returning to work after maternity leave</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td><strong>No. of users of reemployment system</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td><strong>Average overtime worked</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23 hours and 7 minutes</td>
<td>71.8%</td>
<td>72.0%</td>
<td>60.0%</td>
<td>60.7%</td>
</tr>
<tr>
<td>23 hours and 52 minutes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27 hours and 35 minutes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28 hours and 15 minutes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Notes:
1. The number of persons working at JPX Group excludes persons such as those temporarily assigned by the Group to outside entities and those dispatched to the Group from temporary staffing agencies. It does include, however, persons temporarily assigned by outside entities to the Group and persons on maternity/childdcare leave.
2. “Ratio of male employees taking parental leave (statutory and company schemes)” is calculated by dividing the number of male employees who took statutory or company leave by the number of male employees who had a spouse give birth multiplied by 100.
3. All the above figures are as of the respective ends of fiscal year. Figures as of April 1, 2022 are as follows.

### As of April 1, 2022

<table>
<thead>
<tr>
<th></th>
<th>No. of employees</th>
<th>Management positions (department/section managers)</th>
<th>Department/section directors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>1,223</td>
<td>507</td>
<td>43</td>
</tr>
<tr>
<td>Female</td>
<td>360 (29.4%)</td>
<td>41 (8.1%)</td>
<td>4 (9.3%)</td>
</tr>
<tr>
<td>Non-Japanese</td>
<td>17 (1.4%)</td>
<td>4 (0.8%)</td>
<td>1 (2.3%)</td>
</tr>
<tr>
<td>Mid-career hires</td>
<td>398 (32.5%)</td>
<td>184 (36.3%)</td>
<td>7 (16.3%)</td>
</tr>
</tbody>
</table>
Shareholders

Initiatives

**Engagement with Institutional Investors and Analysts/IR Meetings and Conferences**

JPX engages with domestic and overseas institutional investors and analysts through, for example, individual meetings conducted by the management. In FY2021, following on from the previous fiscal year, JPX held all the meetings online, including IR conferences in Japan and abroad, due to the spread of COVID-19. We are striving to increase opportunities for dialogue while ensuring safety. Feedback obtained through such meetings and other dialogue is presented periodically to management and internal departments, which then helps shape management decisions of JPX Group.

**Engagement with Institutional Investors and Analysts/Earnings and Business Briefings**

In FY2021, JPX held two earnings briefings and a business briefing session (JPX IR Day 2021) to provide opportunities for dialogue between investors and executives of the JPX Group companies. Video and audio recordings of the briefings are made available in Japanese and English on the day or soon after as a part of our commitment to providing domestic and overseas investors with information in a timely manner.

**Engagement with Retail Investors**

We held a total of three online JPX outreach events for retail investors. JPX also actively provides information to retail investors on its IR website. For example, in addition to providing content that offers an easy-to-understand overview of JPX, we deliver documents, videos, and other content on IR events in a timely manner.

In its Medium-Term Management Plan 2024 announced in March 2022, JPX Group has set forth a plan to "contribute to sustainable societal and economic development" as part of the long-term vision, Target 2030. We believe that it is essential to have ongoing dialogue with shareholders and investors in order to push forward the improvement of our corporate value as a listed company and contribute to a sustainable society.

Our aim is to have a high-quality, virtuous cycle of dialogue, gained through a deep understanding of the respective opinions and aspirations of JPX and its shareholders and investors.

Furthermore, through having our management actively engage in IR activities, we work to enhance our IR activities and to secure and strengthen a long-term relationship of trust with all shareholders and investors.

We sometimes receive harsh criticism of JPX in the course of our dialogues, but even so, with the intent of making sure that as many shareholders or investors as possible support JPX over the long term, we do our utmost to have meaningful dialogues with our shareholders and investors based on persistent ingenuity.

**Approach**

JPX is focusing on promoting two-way communication with its shareholders and investors and building relationships of trust based on mutual understanding. JPX actively provides investors with the corporate information necessary for their investment decisions and shares views obtained from shareholders and investors with senior management, thereby further enhancing corporate value.

**Comments from Staff on the Ground**

Takahashi Hiroyuki
Manager, Corporate Communications Department
Japan Exchange Group, Inc.

Increasing corporate value through meaningful dialogue with shareholders and investors
Deepening shareholders’ understanding of JPX

Comments from Staff on the Ground

Mori Shohei
Manager, General Administration Department
Japan Exchange Group, Inc.

JPX considers the AGM as an opportunity for constructive dialogue to deepen all shareholders’ understanding of JPX. While working to expand the published information and promoting the use of more images and charts so that notices of general shareholders meetings will be easier to understand, we are aiming to enhance dialogue by making efforts to announce and send out such notices in a timely manner so that they can be seen by shareholders as soon as possible.

For the AGM held in June 2022, we strongly recommended, as we had done last year, that shareholders send in their votes by mail or via the Internet as a measure to prevent the spread of COVID-19, and we appreciate their cooperation. In addition, this AGM was streamed live on the Internet so that shareholders who could not attend in person could view the proceedings of the meeting. Going forward, we will continue our efforts to enhance dialogue with our shareholders in order to deepen their understanding of JPX Group.
Corporate Governance

JPX Group is committed to developing its corporate governance system appropriately to fulfill its social mission as a core infrastructure of the Japanese market.

Fundamental Views

In order to implement management in line with its corporate philosophy (page 2), JPX Group is aware of the importance of having its stakeholders understand its corporate philosophy and corporate activities. Therefore, JPX Group has established fundamental views on corporate governance from the following four perspectives. Based on these fundamental views, JPX Group is committed to developing its corporate governance system appropriately based on each principle in Japan’s Corporate Governance Code.

1. Corporate Philosophy and Social Mission

JPX Group operates markets which are public assets and its social mission is to pursue sustainable development of its markets.

2. Market Operations

JPX Group operates markets with the view that garnering support for and fostering confidence in the markets it establishes are in the common interest of all market users including investors, and that maintaining and enhancing such support and confidence will build the foundations for sustainable development of its markets.

3. Enhanced Corporate Value

In pursuing sustainable development of its markets, JPX Group must continue to accommodate the diverse needs of shareholders and other stakeholders, and through these JPX Group will enhance its corporate value over the medium to long term.

4. Effective Corporate Governance

JPX Group strives to constantly improve its corporate governance system to facilitate more effective and properly functioning systems, so as to support the sustainable development of its markets.

Corporate Governance System

JPX clearly segregates the management oversight and supervision functions from the business execution functions, and adopts the structure of a Company with Three Committees to strengthen oversight and supervision functions and raise the transparency of management.

Corporate Governance Organizational Chart
Composition of the Board of Directors

The JPX Board of Directors is comprised of 14 members, including two women. To strengthen the board’s functions, namely increasing the transparency and accountability of management and supervising the appropriateness of business execution, the composition of the board includes nine independent directors, constituting a board majority, and an independent director who is not involved in business execution as chairperson.

The breakdown of the nine independent directors is as follows: three top executives, one legal professional, one certified public accountant, and four academics or former government officials. Each of them has considerable experience and insight in his/her respective field and contributes to a structure that allows for multi-faceted external perspectives to be readily incorporated into the management of JPX.

Nomination, Compensation, and Audit Committees

As required by law, JPX has a Nomination Committee and a Compensation Committee for the purpose of ensuring transparency and objectivity in the appointment/removal and compensation of directors and executive officers. Outside directors are in the majority for both of these committees. The appointment and removal of directors and executive officers are thoroughly deliberated and determined by the Nomination Committee and put forth for approval at general shareholders meetings, and the compensation of directors and executive officers is determined by the Compensation Committee. JPX also has an Audit Committee, as required by law, to perform the audit function. This committee is made up of five directors (including one full-time Audit Committee member), of which four, including a certified public accountant, are outside directors. Additionally, there is an Audit Committee Office to assist the committee members in the performance of their duties.

Status of Activities of the Board of Directors

| Time Board of Directors spent on discussions | 1,455 minutes |
| Number of items approved by the Board of Directors | 32 |

Risk Policy Committee

JPX has a Risk Policy Committee with the aim of further improving its corporate governance by bringing an outside perspective to risk management. The committee consists mainly of outside directors. For further information on JPX’s risk management systems, including information on the details of activities of the Risk Policy Committee, please refer to “Risk Management” on page 71.

Independent Directors Committee

JPX has an Independent Directors Committee as a corporate organ composed exclusively of part-time independent directors to allow them to exchange information and form consensus among themselves. The committee helps independent directors to better perform management oversight and facilitates active discussion at Board of Directors meetings.

Independent Directors Committee

Objectives

For part-time independent directors to exchange information and form consensus (The chairperson of the board, the Group CEO, and other members of management may participate upon the request of the committee.)

Frequency of meetings

In principle, at least twice a year (The committee chairperson convenes meetings as needed.)

Committee chairperson

The committee chairperson convenes meetings and presides over them. When the committee deems it necessary for ensuring smooth communication, the committee chairperson may report the details of discussions at committee meetings to the chairperson of the board, the Group CEO, and other members of management.

Evaluating the Effectiveness of the Board of Directors

At JPX, the Board of Directors analyzes and assesses its own effectiveness based on surveys completed by and interviews with all board members. The Independent Directors Committee is tasked to conduct the evaluation to increase the objectivity and transparency of the evaluation process.

For information on the evaluation process, an overview of evaluation results and other related matters, please refer to JPX’s Corporate Governance Report.

Corporate Governance Report

https://www.jpx.co.jp/english/corporate/governance/policy/
Training for Outside Directors

Each of the JPX outside directors has sufficient knowledge in regard to management and corporate governance thanks to their expert knowledge and experience. With the help of these outside directors, JPX has deepened their understanding of JPX Group’s business. JPX holds lectures and observation sessions based on rulebooks and other resources, discussion workshops where they can keep up to date on knowledge and information regarding the exchange business, and events to exchange views with external experts on subjects such as the global financial landscape, risk management, and fintech.

Director and Executive Officer Compensation and Factors for Determining Compensation

Based on the below 1) Basic policy of compensation for directors and executive officers, compensation is comprised of a. basic salary, b. yearly incentive (bonus), and c. medium- to long-term incentive (stock compensation and monetary compensation). Note that compensation awarded to directors who do not concurrently serve as executive officers is limited to a. basic salary.

1) Basic policy of compensation for directors and executive officers
In order to contribute to the sustainable growth of JPX and the improvement of corporate value over the medium- to long-term, compensation for directors and executive officers shall be determined in accordance with the following policy:

- It should be appropriate for the duties and responsibilities of the directors, executive officers, etc.
- It should motivate the achievement of the long-term vision and management plan
- It should maintain enough competitiveness to secure the human resources necessary to steadily implement JPX Group’s corporate philosophy
- In view of our responsibility as a part of social infrastructure, it should be appropriate in light of social conditions, and ensure objectivity and transparency of decision-making procedures, etc.

The details of each type of compensation are as follows.

a. Basic salary
The basic salary is determined in accordance with each executive’s position and duties as consideration for their day-to-day execution of duties and participation in management, and with reference to the level of executive compensation at other companies, based on research by external expert organizations and other sources.

b. Yearly incentive (bonus)
The yearly incentive (bonus) is awarded to executive officers in proportion to net income (for the purposes of this section, “net income” refers to net income attributable to owners of the parent company as indicated in the consolidated statement of income). Net income is used as the metric as it is the source of investment aimed at increasing corporate value as well as the capital used in the payment of dividends to shareholders. It is also because it is appropriate to base a yearly incentive (bonus) awarded every fiscal year on the net income reported in that fiscal year. Also, to evaluate the performance of each executive officer in each fiscal year, a bonus is awarded based on evaluation of that officer’s individual performance.

The yearly incentive (bonus) will not be awarded if net income is less than JPY 10 billion for a fiscal year.

c. Medium- to long-term incentive (stock compensation and monetary compensation)
The medium- to long-term incentive (stock compensation) is paid to executive officers with the aim of aligning the interests of executives closer to those of shareholders, providing motivation for corporate value enhancement over the medium to long term, and strengthening the link between performance and compensation. JPX stock compensation utilizes a share delivery trust framework and is comprised of a fixed amount and a performance-linked amount.

For the fixed amount, executives are issued points every fiscal year in accordance with their position, etc., and are awarded shares corresponding to these points three years later.

For the performance-linked amount, all executives are given performance-linked base points each fiscal year. Three years later, shares are awarded corresponding to the final tally of performance-linked points, which is calculated by multiplying the performance-linked base points with a coefficient based on the degree of achievement of certain performance conditions. The above-mentioned coefficient is set within a 0–150% range, based on the following conditions: (i) JPX Group’s consolidated ROE exactly three years from the issuance date of the performance-linked base points and (ii) a comparative assessment of Total Shareholder Return (TSR) and the performance of the JPX-Nikkei Index 400 (total return index) for the three-year period from the end of the fiscal year before the performance-linked base points were issued. Consolidated ROE is used as an indicator from the perspective of improving capital efficiency, while TSR is used from the perspective of improving value for shareholders.

In accordance with JPX’s rules for executive officers, in principle, shares in JPX acquired through stock compensation, etc. may not be sold until one year has elapsed from the time of departure.
from JPX. Furthermore, based on the share delivery regulations, in the event of any misconduct on the part of the officer to whom the stock compensation is granted, delivery of shares, etc. not yet delivered shall be canceled, and in the case where delivery has been made, a request for the return of the amount equivalent to the delivery may be made to the officer.

Conditions tied to the performance-linked portion of the medium- to long-term incentive (stock compensation)

| Comparison of Total Shareholder Return and the performance of the JPX-Nikkei Index 400 (total return index) | Consolidated ROE |
| --- | --- | --- |
| Outperformed  | Less than 10% | 10% or more, less than 14% | 14% or more |
| Performance coefficient  | Performance coefficient  | Performance coefficient  |
| 50%  | 100% | 150% |
| Underperformed | Performance coefficient  | Performance coefficient  | Performance coefficient  |
| 0%  | 50% | 100% |

The Stock Compensation System

1st year 2nd year 3rd year 4th year 5th year 6th year
The medium- to long-term incentive (monetary compensation) is awarded to executive officers in line with the performance of consolidated ROE and sustainability measures set out in the Medium-Term Management Plan 2024.

This incentive is awarded on the condition that consolidated ROE is 10% or above for every fiscal year covered within the Medium-Term Management Plan (three years), and will be maximized if either consolidated ROE for the last fiscal year of the Plan or the average consolidated ROE over the three years of the Plan is 15% or higher. The amount of incentive for each executive officer will be decided based on the consolidated ROE figure and their respective positions.

In addition, in conjunction with the start of the new Medium-Term Management Plan in FY2022, in order to underline JPX Group’s commitment to sustainability measures, JPX has decided to reflect the degree of achievement of sustainability measures in this incentive.

Specifically, with respect to the sustainability measures specified in the Medium-Term Management Plan 2024 (promoting sustainability using market mechanisms, achieving carbon neutrality as a corporation, achieving carbon neutrality in securities market operations by 2030, etc.), if the plan has been achieved by the end of the Medium-Term Management Plan 2024, the final incentive amount will be calculated by multiplying the incentive amount calculated based on the degree of achievement of the consolidated ROE above by a factor of 2 for the Group CEO and 1.5 for the other executive officers.

JPX is a Company with Three Committees. It has established a statutory Compensation Committee for the purpose of ensuring transparency and objectivity concerning compensation paid to directors and executive officers. The Compensation Committee is made up of a majority of independent directors and chaired by an independent director. Based on laws and regulations, the Compensation Committee has the authority to establish the policy concerning decisions on the details of compensation for each director and executive officer and the authority to decide the details of compensation for each director and executive officer based on said policy. For FY2021, the Compensation Committee decided the details of the compensation for each director and executive officer after appropriate discussion based on the above policy determined by the Compensation Committee. JPX Group considers the compensation to be in line with the above policy.

2) Composition of Executive Officers’ Compensation
Compensation for executive officers consists of basic salary, yearly incentive (bonus) and medium- to long-term incentive.

In conjunction with the start of its new Medium-Term Management Plan in FY2022, JPX Group has decided to revise the composition ratio of the compensation of executive officers, with the goals of sharing more profit with shareholders than in the past and promoting medium- to long-term improvement of JPX Group’s corporate value. As a result, assuming the profit level of FY2021 and assuming the performance-linked factor of the stock compensation to be 100%, the compensation composition ratio for JPX’s executive officers is expected to be as follows:

<table>
<thead>
<tr>
<th>Composition of Executive Officers’ Compensation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Salary</td>
</tr>
<tr>
<td>CEO</td>
</tr>
<tr>
<td>Executive Officers Excluding CEO</td>
</tr>
</tbody>
</table>
## Total Compensation Paid to Directors and Executive Officers

<table>
<thead>
<tr>
<th>Director/Executive Classification</th>
<th>Total Compensation (JPY million)</th>
<th>Total Compensation by Category (JPY million)</th>
<th>Number of Eligible Directors and Executive Officers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Basic Salary Yearly Incentive Medium- to Long-term Incentive</td>
<td>monetary Compensation Stock Compensation</td>
</tr>
<tr>
<td>Directors (Excluding outside directors)</td>
<td>28</td>
<td>28</td>
<td>—</td>
</tr>
<tr>
<td>Executive officers</td>
<td>528</td>
<td>200</td>
<td>157</td>
</tr>
<tr>
<td>Outside directors</td>
<td>164</td>
<td>164</td>
<td>—</td>
</tr>
</tbody>
</table>

### Notes

1. JPX does not pay director compensation to directors who concurrently serve as executive officers.

2. Of the executive officers, those who also serve as representative directors of Tokyo Stock Exchange, Inc., Osaka Exchange, Inc., Tokyo Commodity Exchange, Inc., and Japan Securities Clearing Corporation are not included in the number of eligible executive officers because they are not paid compensation as executive officers.

3. The above table includes one outside director who retired at the conclusion of the annual general shareholders meeting held on June 16, 2021.

4. Bonuses are paid at an amount, etc. that is in correlation with JPX Group’s net income for the year under review, and are not paid if net income fails to reach JPY 10.0 billion. Net income for the year under review was JPY 49,955 million.

5. Concerning the indicators used for the performance-linked portion of stock compensation, there is a two-tier target for consolidated ROE of 10% or more and 14% or more, and the performance-linked coefficient changes depending on the level of achievement. Concerning Total Shareholder Return (TSR), the target is for TSR to outperform the growth rate of the JPX-Nikkei Index 400 (total return index). The amount of the aforementioned stock compensation is the amount among the stock compensation for the period from FY2018 to FY2021 that is recorded as an expense in this fiscal year. Of that, the indicators for stock compensation granted in FY2018 were as follows: consolidated ROE was 16.6%, and the three-year TSR of JPX’s shares outperformed the growth rate of the JPX-Nikkei Index 400 (total return index) over the same period. Accordingly, the highest possible performance conditions were achieved.

6. With respect to monetary compensation related to the degree of achievement of the Medium-Term Management Plan, during the period of the Medium-Term Management Plan (three years), the consolidated ROE for each fiscal year must be at least 10% to be eligible for the payment, and if either the consolidated ROE for the final year of the Medium-Term Management Plan or the average consolidated ROE during the period of the Medium-Term Management Plan (three years) reaches 15% or more, the maximum amount will be paid. Since the consolidated ROE was 15.7% in FY2021, the maximum payment amount was reached.

7. The bonus, the performance-linked portion of the stock compensation, and the monetary compensation related to the degree of achievement of the Medium-Term Management Plan fall under “performance-linked compensation, etc.” provided for by the Regulations for Enforcement of the Companies Act, and stock compensation falls under “non-monetary compensation, etc.” provided for by the same Act.
Significant Concurrent Position: President & CEO, Japan Securities Clearing Corporation
No. of JPX shares held: 35,724 shares
Shizuka Masaki
Director and Executive Officer
It has been deemed that Mr. Shizuka Masaki can be expected to perform his role in a way in which his experience and knowledge in managing and overseeing the overall business and operations of Japan Securities Clearing Corporation, a core subsidiary of JPX engaging in clearing of listed products, etc., are reflected in the management of JPX.

Endo Nobuhiro
Independent Director
No. of JPX shares held: 126,726 shares
Kiyota Akira
Director and Representative Executive Officer, Group CEO
It has been deemed that Mr. Kiyota Akira can be expected to perform his role in a way in which his abundant experience and keen insight in finance gained from leading JPX Group as Director and Representative Executive Officer, Group CEO are reflected in the management of JPX.

Kohda Main
Independent Director
It has been deemed that Ms. Kohda Main can be expected to perform her role in a way in which her capacity to identify with JPX’s corporate philosophy and social mission, as well as her creativity and perception as a novelist, her keen insight in finance, and her experience in serving as a university professor and a member of government advisory councils, are reflected in the management of JPX.

Kobayashi Eizo
Independent Director
It has been deemed that Mr. Kobayashi Eizo can be expected to perform his role in a way in which his capacity to identify with JPX’s corporate philosophy and social mission, as well as his abundant experience and keen insight in corporate management, are reflected in the management of JPX.

Mori Kimitaka
Independent Director
It has been deemed that Mr. Mori Kimitaka can be expected to perform his role in a way in which his capacity to identify with JPX’s corporate philosophy and social mission, as well as his keen insight in financial accounting from the standpoint of an accounting professional, are reflected in the management of JPX.

Yoneda Tsuyoshi
Independent Director
It has been deemed that Mr. Yoneda Tsuyoshi can be expected to perform his role in a way in which his capacity to identify with JPX’s corporate philosophy and social mission, as well as his abundant experience and keen insight in law enforcement, are reflected in the management of JPX.

Biographies of Directors
https://www.jpx.co.jp/english/corporate/about-jpx/officer/00-01.html
It has been deemed that Mr. Yamaji Hiromi can be expected to perform his role in a way in which his abundant experience and keen insight in securities markets acquired through working at a securities company, and his experience and knowledge gained from leading the Group as JPX Director and Representative Executive Officer, are reflected in the management of JPX.

Significant Concurrent Positions: President & CEO, Tokyo Stock Exchange, Inc.

No. of JPX shares held: 34,649 shares

Ota Hiroko
Independent Director

It has been deemed that Ms. Ota Hiroko can be expected to perform her role in a way in which her capacity to identify with JPX’s corporate philosophy and social mission, as well as her abundant experience in government agencies and keen insight in the economy and financial policy, are reflected in the management of JPX.

Significant Concurrent Position: President & CEO, Tokyo Stock Exchange, Inc.

No. of JPX shares held: 6,000 shares

Suzuki Yasushi
Director

It has been deemed that Mr. Suzuki Yasushi’s abundant knowledge and experience regarding the exchange business in general, gained through working at a financial instruments exchange, can be expected to benefit the monitoring and supervision of the execution of business at JPX.

Significant Concurrent Position: Attorney-at-Law/Partner, Mori Hamada & Matsumoto

No. of JPX shares held: 800 shares

Takeno Yasuzo
Independent Director

It has been deemed that Mr. Takeno Yasuzo can be expected to perform his role in a way in which his capacity to identify with JPX’s corporate philosophy and social mission, as well as his keen insight in corporate law from his expert perspective as legal professional, are reflected in the management of JPX.

Significant Concurrent Position: Attorney-at-Law/Partner, Mori Hamada & Matsumoto

No. of JPX shares held: 800 shares

Areas of Expertise of Directors and Attendance at Board and Committee Meetings

Time Board of Directors spent on discussions: 1,455 minutes
Number of items approved by the Board of Directors: 32

<table>
<thead>
<tr>
<th>Name</th>
<th>Corporate management</th>
<th>Finance</th>
<th>Financial audit</th>
<th>Legal affairs/ Risk management</th>
<th>Research/ Government Agencies</th>
<th>Technology</th>
<th>Board of Directors</th>
<th>Committees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tsuda Hiroki</td>
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<td>Kiyota Akira</td>
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<td>Yamaji Hiromi</td>
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Committee chairperson: ● Committee member

Creating Value at JPX Group
Messages from the Management
Strategies for Creating Value
Sustainability
Financial and Corporate Data

JPX Report 2022
68
Making every effort to achieve our ambitious Medium-Term Management Plan 2024

Since its establishment in 2013, JPX Group has devised and implemented three medium-term management plans, each lasting three years. During this period, Japan’s Corporate Governance Code was formulated and JPX acquired Tokyo Commodity Exchange as a subsidiary, launching the Comprehensive Exchange. In addition, reforms aimed at propelling JPX Group forward were implemented such as the transition of TSE to the new market segments and the establishment of JPX Market Innovation & Research.

Recently, JPX Group announced its Medium-Term Management Plan 2024, which lasts through FY2024. This medium-term management plan was discussed fervently and at length by the Board of Directors. The opinions expressed by the directors to the executives as the plan was formulated were sometimes uncompromising. However, I am impressed by the medium-term management plan that was devised as it is an ambitious plan designed to expedite sustainable growth at JPX by further enhancing its role as a market infrastructure and boosting its corporate value as a listed company in these times of rapid change.

In my opinion, the first noteworthy aspect of the plan is the establishment of the long-term vision “Target 2030” (which adopts a medium- to long-term approach, aiming for completion in 2030) and the long-term ESG target. The goal of the long-term vision is to contribute to sustainable societal and economic development by providing solutions devised by JPX Group for a wide range of societal issues.

The second aspect worthy of note is the designation of Medium-Term Management Plan 2024 as the first stage of progress toward the long-term vision. The plan sets out concrete initiatives JPX Group will implement utilizing new frameworks including JPX Market Innovation & Research to build the foundations of a global, comprehensive finance and information platform. These initiatives prioritize action in three specific “Focus” areas to contribute to improving the attractiveness of the Japanese financial and capital markets as a whole amid global competition among markets.

The third noteworthy aspect is that the plan clearly sets out the investment policies regarding capital expenditures, human resources, and R&D necessary to implement these initiatives.

I am convinced that such measures described in the new medium-term management plan will earn plaudits from many stakeholders. The important thing, however, is to reliably implement the plan. That is the duty with which the directors are charged. I myself intend to work closely with the executives and do my utmost to ensure the goals of this medium-term management plan are achieved.
Supporting medium- to long-term corporate value improvement through appropriate risk management based on discussions from various perspectives

In recent years, advancing globalization and technological development have brought enormous societal and economic benefits. At the same time, however, the risks associated with business activities have become both more diverse and more serious. For example, the impacts of local events now spread rapidly around the world, and vulnerabilities resulting from the shift to computerized systems and digital networking are proliferating from year to year. It has therefore become imperative for companies to manage risk better. And better risk management is a particularly important issue for JPX Group, which operates and oversees the financial instrument and commodity markets that serve as key infrastructure underpinning the Japanese economy.

In 2017, JPX Group set up its Risk Policy Committee. The committee deliberates on risks requiring prioritized management and fundamental risk management policies, and draws up recommendations in the form of a Comprehensive Risk Management Statement, which it submits to the Board of Directors each year. It comprises five members, including three outside directors, the Group CEO, and a senior executive officer, and is chaired by one of the outside directors. When deliberating on emerging risks, the committee enlists the participation of numerous younger employees, and sometimes the outside directors discuss such risks with the younger employees during committee meetings. Thus, JPX Group combines the outside directors’ diverse insights with internal specialist and practical knowledge and the younger employees’ original take on issues to enable discussion from various perspectives. In this way, the company seeks to refine and enhance its risk awareness and fundamental risk management policies.

Nonetheless, however much a company may strive to manage and prevent risk, it is impossible to ensure that no risk ever materializes. JPX Group places importance on being resilient enough to return to normal promptly once a risk has materialized. During the ordinary course of business, the Group works on establishing the capacity to deal with an emergency through such means as securing the necessary personnel and collaborating with related parties. In addition, depending on the severity and extent of the impact of a risk that has materialized, the Risk Policy Committee may recommend the Board of Directors to set up an investigation committee comprising independent directors.

As JPX Group implements its Medium-Term Management Plan 2024, it will continue to manage risk appropriately, endeavoring to improve its corporate value over the medium to long term.

Yoneda Tsuyoshi
Chairperson of the Risk Policy Committee
In its approach to risk management, JPX Group recognizes the importance of maintaining sound and stable business operations to fulfill its public role as a market operator and continue raising corporate value.

Risk Management Systems

JPX Group faces numerous risks in the course of its operations, including risks associated with system glitches, legal matters, compensation in the event of clearing participant defaults, and administrative errors. The Group has established a Risk Policy Committee, chaired by an outside director, and a Risk Management Committee, chaired by the Group CEO, to address risk. In line with the Group’s Risk Management Policy, these committees are responsible for identifying risks as well as developing and implementing measures to prevent such risks. The Group also has a system in place to ensure a swift and appropriate response when risks do or are likely to materialize.

The Risk Policy Committee consists of at least five members, the majority of whom are outside directors. As a rule, the committee is chaired by an outside director.

The Risk Management Committee is composed of core members and project members who oversee the risks of specific projects. The Group CEO (who serves as chairperson), the executive officer overseeing the General Administration Department, and the director of the department make up the core members, while the chairperson of the committee assigns project members to specific cases as they arise.

The Risk Management Policy serves to prevent risks by indicating and classifying the risks JPX Group faces. Departments or sections are assigned to handle the classified risks, and information on the assessments of operations and issues to be addressed are periodically brought before the Risk Policy Committee and Risk Management Committee.

Each fiscal year, the Risk Policy Committee identifies the significant risks requiring priority action for the Group and establishes basic policies for responses to each significant risk. The results of this process are submitted to the Board of Directors as recommendations in the form of a Comprehensive Risk Management Statement. JPX Group works to reduce the possibility of realization of the risks based on the Comprehensive Risk Management Statement and responds flexibly to risks that materialize.

When a major issue occurs, the Risk Management Committee gains an overall grasp of the situation and orchestrates a concerted response by giving directions for dealing with the issues as quickly as possible. The system calls for all necessary information to be reported to management promptly and without fail.

Risk Management System

Each department or section implements its own risk management. Based on the classification of items that are subject to regular reporting and those that must be reported immediately, reports are submitted to the division responsible for handling the specific type(s) of risk.
Risk Classification

<table>
<thead>
<tr>
<th>Types of Risk</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business environment and business strategy risk</td>
<td>Economic fluctuations, legal and regulatory matters, demographic changes, technological innovation, investor trends, public opinion, and failed business choices</td>
</tr>
<tr>
<td>Accidents and disaster risk</td>
<td>Major earthquakes, typhoons, tsunami, epidemics, terrorism, failure/stoppage of social infrastructure, fires, and accidents</td>
</tr>
<tr>
<td>System risk</td>
<td>Inadequate hardware capacity and application errors</td>
</tr>
<tr>
<td>Legal risk</td>
<td>Violations of laws and regulations in the course of business, business partner’s failure to perform on contracts, and the possibilities of having a relationship with anti-social forces</td>
</tr>
<tr>
<td>Financial risk</td>
<td>Undermined reliability of financial reporting, lack of funds, and loss or damage to assets, including deposits</td>
</tr>
<tr>
<td>Human risk</td>
<td>Personnel shortage, industrial accidents, and occupational hazards</td>
</tr>
<tr>
<td>Information security risk</td>
<td>Information leakage, unauthorized access, and computer viruses</td>
</tr>
<tr>
<td>Operational risk</td>
<td>Mistakes in operational procedures and misjudgments</td>
</tr>
<tr>
<td>Risk of associated companies</td>
<td>Emergence of risk in group companies</td>
</tr>
<tr>
<td>Reputational risk</td>
<td>Decline in public reputation due to acts and statements by employees and/or third parties</td>
</tr>
<tr>
<td>Credit risk and liquidity risk arising from obligation assumption business</td>
<td>Emergence of losses due to default, etc. by clearing participants</td>
</tr>
<tr>
<td>Other risks</td>
<td>Risks other than those mentioned above</td>
</tr>
</tbody>
</table>

Significant Risks

Each fiscal year, we identify the significant risks that could affect the Group. We control the possibility of the materialization of these risks by implementing necessary preventive measures. We also implement measures to ensure that we are able to respond flexibly in the event that risks materialize.

JPX Group approaches risk management on two levels. First, all group companies work to identify risks in the internal environment. Second, there is wide-ranging discussion involving the management team about potential risk factors in the external environment, including geopolitical risk. Based on the results of these discussions, we then examine significant risks. Many risks are detected at the discussion stage. We examine these in detail to identify the risks that require the greatest attention in each fiscal year, on the basis of the potential impact on the Group if the risk materializes and the frequency with which such risks are likely to arise. We then take preventive measures targeting specific significant risks.

Major Significant Risks

<table>
<thead>
<tr>
<th>Types of Risk</th>
<th>Risk Phenomena</th>
<th>Responses to Risk Phenomena</th>
</tr>
</thead>
<tbody>
<tr>
<td>System risk</td>
<td>System failures</td>
<td>Implementing standardized development methods and adequate operational tests, maintaining thorough quality control pertaining to development and operations, implementing regular drills for system failure, implementing recurrence prevention measures in response to system failure (improving resilience)</td>
</tr>
<tr>
<td>Business continuity risks</td>
<td>Occurrence of natural disaster that causes tremendous damage, occurrence of terrorist attack</td>
<td>Building of eastern and western backup capabilities (for both business operations and systems), implementing regular drills (for disaster and terrorism responses), reviewing contingency plans, etc.</td>
</tr>
<tr>
<td>Information security risk</td>
<td>Cyberattacks</td>
<td>Implementing regular information security diagnostics by external vendors, holding e-learning courses</td>
</tr>
<tr>
<td>Operational risk</td>
<td>Administrative error in business operations related to market operations (system operations, etc.), listing services or clearing services</td>
<td>Implementing regular operation drills, continuous review of operational manuals and processes (including promotion of automation), inspections of operational methods premised on telework, etc.</td>
</tr>
<tr>
<td>Credit risk and liquidity risk arising from obligation assumption business</td>
<td>Default, etc. by clearing participants</td>
<td>Ensuring adequacy of margin and other sources of funds, daily monitoring of clearing participants and regular holding of drills in case of participant bankruptcy</td>
</tr>
<tr>
<td>Business environment and business strategy risk</td>
<td>Changes in operating environment, impact on market from changes in regulations or rules due to laws, etc.</td>
<td>Performing regular monitoring of progress of business strategies and changes in the business environment, etc., and reviewing priority strategies corresponding to proper budgetary operation and changes in the operating environment, reviewing market rules and structures in fitting with discussion and debate among market stakeholders, etc. (strengthening of market functions, provision of fair and highly convenient trading services, etc.), inadequate promotion of sustainability</td>
</tr>
</tbody>
</table>
In recent years, with faster systems and the growing prevalence of co-location services, there has been an increase in the number of orders processed by JPX Group trading systems. In view of these changes, the Group is monitoring market trends and system usage and working to manage overall system capacity across the corporate group by utilizing projections to prepare for and prevent any system capacity issues that may arise.

Capacity management is not conducted by IT departments alone, but also by the Capacity Management Committee chaired by the CIO. The cross-divisional committee is made up of executive officers and departments involved in market operations.

Geared toward realizing even better systems, the committee monitors, analyzes, and assesses system operation conditions, works on improvements for current systems, and provides feedback on the design and development of next-generation systems. The committee employs the PDCA cycle in its activities, while reporting to management periodically and on an as-needed basis to make swift and appropriate decisions on priority or emergency issues related to system capacity.

As JPX Group holds responsibility for key financial market infrastructure, it views cybersecurity as a significant management risk, and accordingly actively advances cybersecurity measures, as well as implementing a variety of measures to provide safe and secure services to investors and other market users.

As an example, we have built a multi-layered security system that detects and blocks any and all cyberattacks against the Group, including unauthorized access to the website and targeted emails. We have also built systems to look for vulnerabilities in JPX Group security and improve our countermeasures to these threats. These include conducting regular diagnostic checks, as well as constructing a 24-hour monitoring and response system, centered around the in-house Computer Security Incident Response Team (CSIRT).

In addition, we are working to strengthen our corporate group’s capabilities in cybersecurity through the creation of cybersecurity manuals and procedures, as well as response drills held multiple times a year for a range of scenarios. At the same time, to raise awareness of cybersecurity among employees, we are providing education through regular e-learning courses and training to combat targeted email attacks.

We are also committed to working in a timely and appropriate manner with public institutions such as the Financial Services Agency, the National center of Incident readiness and Strategy for Cybersecurity, the Tokyo Metropolitan Police Department’s association for responses to cyberterrorism, and the Information-technology Promotion Agency, Japan. At the same time, we have created a system to keep track of and share information on the latest trends in cybersecurity-based threats, which includes sharing in-depth information with the Nippon CSIRT Association and security companies.

As cyberattacks are becoming increasingly sophisticated and precise with each passing year, we will formulate cybersecurity response plans, conduct regular checks of our security measures and revise and reinforce them whenever necessary.
Business Continuity in Emergencies

JPX Group’s core responsibility as a market operator within the social infrastructure is to provide reliable markets for market users to trade with confidence. Therefore, even when major risks do materialize, such as in the form of natural disasters or terrorist acts, the Group must be prepared to answer the call of society and continue operations. To be ready for such situations, we established our Business Continuity Plan (BCP) to define our response to materialized risks. The basic concept of the BCP is to continue operations as far as possible even in times of

Procedures for Restoring Trading Operations based on BCP after Disaster Occurs

System for Responding when BCP is Implemented

When the primary center is affected by a disaster, switch-over occurs, and it is possible to continue operations at the secondary center.
Business Continuity Plan

JPX Group is implementing the following measures to ensure business continuity as a means of fulfilling its responsibilities as a market operator to the best of its ability and of ensuring that impact from COVID-19 does not affect the stable operation of its markets. This is in addition to various measures to prevent further spread of COVID-19 in line with guidelines such as the Japanese government’s Basic Policies for Prevention and Control of the Novel Coronavirus.

The Group will continue to monitor the spread of COVID-19, maintain a business continuity system and respond flexibly in response to changes in government policy, etc.

Emergency. If suspension is unavoidable, then the affected operations should be resumed as soon as possible. For instance, even if a serious incident, such as a major earthquake, occurs and operations are suspended, in principle, JPX Group aims to resume clearing operations in about two hours and trading operations within 24 hours to prevent the loss of a trading day to the greatest extent possible.

To achieve said targets, in addition to its primary data center where operations normally take place, the Group also maintains a secondary (backup) center, which is located in a different area to avoid having both centers be simultaneously affected. If the primary center is affected by a disaster and cannot continue operations, operations are switched over to trading and other core systems in the backup center to allow trading to resume as quickly as possible. In a bid to help further enhance the reliability of the Japanese market, we are constructing a new secondary (backup) center away from Tokyo in the Kansai region, where in the case of a disaster such as a major large-scale earthquake in the Tokyo Metropolitan area, there would be little or no fear of damage to societal infrastructure causing a shortage of essential services such as electricity.

Backup systems are being built for each system over a staggered completion schedule from FY2021 to the latter half of FY2024.

Furthermore, in preparation for a large-scale earthquake and other wide-area disasters, the core telecommunications network, arrownet, is designed as an optical ring network that surrounds the Tokyo Metropolitan area. Even if a part of the network is severed by a disaster, transmissions will be re-routed immediately, ensuring that connections are maintained. The BCP also defines the response policy for each type of identified risk, as well as detailed plans for establishing the BCP emergency headquarters and securing personnel and communication methods. JPX Group reviews its BCP at least once a year and revises it accordingly in light of changes in the environment.

COVID-19 Response

JPX Group is implementing the following measures to ensure business continuity as a means of fulfilling its responsibilities as a market operator to the best of its ability and of ensuring that impact from COVID-19 does not affect the stable operation of its markets. This is in addition to various measures to prevent further spread of COVID-19 in line with guidelines such as the Japanese government’s Basic Policies for Prevention and Control of the Novel Coronavirus.

The Group will continue to monitor the spread of COVID-19, maintain a business continuity system and respond flexibly in response to changes in government policy, etc.

- Established a BCP Emergency Headquarters headed by the Group CEO, in line with JPX Group’s BCP
- Scrutinized the nature of business for each department; implemented and encouraged working from home for employees whose duties do not require physical attendance at the office
- For employees whose duties require physical attendance at the office, actively implemented staggered working hours using the flextime system
- Developed and implemented a multi-channel operational structure for employees whose duties require physical attendance at the office, by dividing them into several teams that work at physically different locations, in principle rotating between the office and home but also using nearby backup facilities, etc.
Internal Control Systems and Compliance

Besides maintaining well designed business operating systems for stable and appropriate execution of business, all officers and employees observe laws and regulations and demonstrate a strong sense of ethics in the performance of their daily tasks.

Internal Control Systems

JPX Group has a Basic Policy on Establishment of Internal Control System and develops internal control systems based on this policy. To ensure the proper operation of business processes throughout the Group, we create systems for ensuring compliance with laws and regulations, safeguarding and managing information, managing risk of loss, ensuring efficient operations, and for internal controls. To ensure that these systems are functioning properly, the Internal Auditing Office, an independent unit that reports directly to the Group CEO and COO, periodically confirms and assesses the status of internal controls.

Compliance Program

JPX Group has a Charter of Corporate Behavior in place as a set of standards for ethics and morals, which clearly states the expected corporate behavior. In order to ensure the effectiveness of internal controls, the Group continues to increase awareness of compliance among management and employees by continually renewing internal systems, as well as through education and training.

Charter of Corporate Behavior

The Charter of Corporate Behavior serves to make clear JPX Group’s social responsibilities as an open and transparent corporation positioned in harmony with society. The Charter states the basic policies for corporate behavior in terms of ethics and morals. It also clearly indicates the Group’s investor-centric stance and reflects our commitment to being an open company.

Activities for Continued Awareness

JPX Group engages in a number of activities to maintain awareness of compliance issues. These include cross-divisional meetings among all staff in charge of compliance matters, distributing compliance handbooks, communicating knowledge on compliance through the intranet, and holding e-learning courses.

Organizational System

The Group CEO assumes responsibility for compliance and oversees all compliance-related matters. The Group CEO is assisted by the officer responsible for compliance and the Compliance Secretariat. The Group has a Compliance Hotline in place to provide a channel for reporting information and making inquiries regarding clear or suspected violations of laws and internal rules, including against the Charter of Corporate Behavior. When certain behavior involving Group officers or employees is suspected to be in violation of compliance, the hotline makes it possible to detect such acts promptly from an incoming call and introduce measures and frameworks to address them.
Financial Highlights

### Operating Revenue

**JPY 135.4 billion**  
(+1.6% year on year)

<table>
<thead>
<tr>
<th>(FY)</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
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<tr>
<td>JPY billion</td>
<td>120.7</td>
<td>121.1</td>
<td>123.6</td>
<td>133.3</td>
<td>135.4</td>
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</table>

### Operating Expenses

**JPY 63.2 billion**  
(+3.0% year on year)

<table>
<thead>
<tr>
<th>(FY)</th>
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<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
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<tr>
<td>JPY billion</td>
<td>50.9</td>
<td>54.1</td>
<td>58.5</td>
<td>61.3</td>
<td>63.2</td>
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### Net Income (attributable to owners of the parent company)

**JPY 49.9 billion**  
(–2.8% year on year)

<table>
<thead>
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<th>(FY)</th>
<th>2017</th>
<th>2018</th>
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<th>2021</th>
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<td>JPY billion</td>
<td>50.4</td>
<td>49.0</td>
<td>47.6</td>
<td>51.3</td>
<td>49.9</td>
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### Dividends, etc.

**Dividends**  
**Total return ratio**  
**JPY 72**  
**116.2%**

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<tr>
<th>(FY)</th>
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<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
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<td>JPY (billions)</td>
<td>85.9</td>
<td>76.4</td>
<td>60.7</td>
<td>70.8</td>
<td>72.0</td>
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</tbody>
</table>

### ROE

**15.7%**  
(–0.9% year on year)

<table>
<thead>
<tr>
<th>(FY)</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
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<tr>
<td>(%)</td>
<td>19.0</td>
<td>17.6</td>
<td>16.3</td>
<td>16.6</td>
<td>15.7</td>
</tr>
</tbody>
</table>

### Total Shareholder Return (TSR)

**TSR 165.1%**  
**Comparison index:**  
**JPX-Nikkei Index 400 (total return index) 145.8%**

<table>
<thead>
<tr>
<th>(FY)</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>(%)</td>
<td>128.5</td>
<td>133.1</td>
<td>132.3</td>
<td>180.1</td>
<td>165.1</td>
</tr>
</tbody>
</table>
Non-Financial Highlights

Ratio of Women in Managerial Positions
8.1% (+0.3% year on year)

Employees’ Average Years of Service
Male 16.9 Years
Female 18.6 Years

Ratio of Annual Paid Leave Taken
60.7% (+0.7% year on year)

Ratio of Outside Directors
64.0% (+0.0% year on year)
Review of Operations and Financial Condition

**Financial Highlights of FY2021 (IFRS)**

<table>
<thead>
<tr>
<th></th>
<th>FY2017</th>
<th>FY2018</th>
<th>FY2019</th>
<th>FY2020</th>
<th>FY2021</th>
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<tbody>
<tr>
<td>Operating Revenue</td>
<td>120,711</td>
<td>121,134</td>
<td>123,688</td>
<td>133,343</td>
<td>135,432</td>
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<tr>
<td>Operating Expenses</td>
<td>50,902</td>
<td>54,111</td>
<td>58,532</td>
<td>61,394</td>
<td>63,220</td>
</tr>
<tr>
<td>Operating Income</td>
<td>71,791</td>
<td>69,535</td>
<td>68,533</td>
<td>74,565</td>
<td>73,473</td>
</tr>
<tr>
<td>Net Income Attributable to Owners of the Parent Company</td>
<td>50,484</td>
<td>49,057</td>
<td>47,609</td>
<td>51,389</td>
<td>49,955</td>
</tr>
<tr>
<td>EBITDA</td>
<td>82,505</td>
<td>82,568</td>
<td>85,683</td>
<td>91,594</td>
<td>91,025</td>
</tr>
<tr>
<td>Dividends per Share (JPY)</td>
<td>67.0</td>
<td>70.0</td>
<td>54.0</td>
<td>68.0</td>
<td>72.0</td>
</tr>
<tr>
<td>ROE</td>
<td>19.0%</td>
<td>17.6%</td>
<td>16.3%</td>
<td>16.6%</td>
<td>15.7%</td>
</tr>
</tbody>
</table>

*The dividend figures for FY2017, FY2018, FY2020, and FY2021 include a commemorative dividend of JPY 10 per share, a special dividend of JPY 15 per share, a special dividend of JPY 10 per share, and a special dividend of JPY 15 per share, respectively.

**Average Daily Trading Value/Volume of Main Products**

<table>
<thead>
<tr>
<th></th>
<th>FY2017</th>
<th>FY2018</th>
<th>FY2019</th>
<th>FY2020</th>
<th>FY2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash Equities (trading value)</td>
<td>JPY 3.45 trillion</td>
<td>JPY 3.31 trillion</td>
<td>JPY 3.08 trillion</td>
<td>JPY 3.48 trillion</td>
<td>JPY 3.76 trillion</td>
</tr>
<tr>
<td>TOPIX Futures (large)</td>
<td>105,000 contracts</td>
<td>104,000 contracts</td>
<td>121,000 contracts</td>
<td>102,000 contracts</td>
<td>96,000 contracts</td>
</tr>
<tr>
<td>Nikkei 225 Futures (large)</td>
<td>102,000 contracts</td>
<td>100,000 contracts</td>
<td>110,000 contracts</td>
<td>92,000 contracts</td>
<td>76,000 contracts</td>
</tr>
<tr>
<td>Nikkei 225 Futures (min)</td>
<td>985,000 contracts</td>
<td>1,051,000 contracts</td>
<td>1,228,000 contracts</td>
<td>1,076,000 contracts</td>
<td>989,000 contracts</td>
</tr>
<tr>
<td>Nikkei 225 Options**</td>
<td>JPY 27.0 billion</td>
<td>JPY 23.0 billion</td>
<td>JPY 26.8 billion</td>
<td>JPY 26.5 billion</td>
<td>JPY 23.6 billion</td>
</tr>
<tr>
<td>10-year JGB Futures</td>
<td>36,000 contracts</td>
<td>42,000 contracts</td>
<td>40,000 contracts</td>
<td>29,000 contracts</td>
<td>33,000 contracts</td>
</tr>
</tbody>
</table>

*Average daily trading value of common stocks on TSE 1st/2nd Sections, Mothers, JASDAQ, TOKYO PRO Market, and ETFs/ETNs, REITs, etc. in auction and off-auction trading.
**Excludes weekly options.


<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Of which, TSE 1st Section (domestic stock auction trading)</td>
<td>5.0</td>
<td>4.0</td>
<td>3.0</td>
<td>2.0</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial derivatives</td>
<td>50</td>
<td>40</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>Commodity derivatives</td>
<td>50</td>
<td>40</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>Nikkei 225 VI (average)</td>
<td>50</td>
<td>40</td>
<td>30</td>
<td>20</td>
</tr>
</tbody>
</table>

(Nikkei 225 VI)
Adoption of IFRS

JPX Group has adopted the International Financial Reporting Standards (IFRS) to facilitate comparisons of financial results of the Group with those of other exchanges located overseas and to increase investor convenience.

Overview of Operating Results for FY2021

In FY2021, JPX Group recorded operating revenue of JPY 135,432 million (up 1.6% year on year) and operating expenses were JPY 63,220 million (up 3.0% year on year). As a result, the Group recorded operating income of JPY 73,473 million (down 1.5% year on year) and income before income tax of JPY 73,429 million (down 1.7% year on year).

In addition, net income attributable to owners of the parent company after income tax was JPY 49,955 million (down 2.8% year on year).

Operating Revenue

### Breakdown of Changes in Operating Revenue

<table>
<thead>
<tr>
<th></th>
<th>FY2020</th>
<th>FY2021</th>
<th>Change (FY)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trading Services Revenue</td>
<td>51,766</td>
<td>53,196</td>
<td>+25 (0.49%)</td>
</tr>
<tr>
<td>Trading Fees</td>
<td>42,430</td>
<td>43,298</td>
<td>+868 (2.04%)</td>
</tr>
<tr>
<td>Cash Equities</td>
<td>30,652</td>
<td>31,563</td>
<td>+910 (2.98%)</td>
</tr>
<tr>
<td>Financial Derivatives</td>
<td>11,777</td>
<td>10,393</td>
<td>(884) (7.53%)</td>
</tr>
<tr>
<td>TOPX Futures</td>
<td>2,106</td>
<td>1,933</td>
<td>(173) (8.28%)</td>
</tr>
<tr>
<td>Nikkei 225 Futures</td>
<td>4,691</td>
<td>4,380</td>
<td>(311) (6.65%)</td>
</tr>
<tr>
<td>Nikkei 225 Options**</td>
<td>3,149</td>
<td>2,555</td>
<td>(594) (18.92%)</td>
</tr>
<tr>
<td>10-year JGB Futures</td>
<td>1,672</td>
<td>1,353</td>
<td>(319) (19.13%)</td>
</tr>
<tr>
<td>Others</td>
<td>157</td>
<td>200</td>
<td>+43 (27.13%)</td>
</tr>
<tr>
<td>Commodity Derivatives</td>
<td>—</td>
<td>201</td>
<td>+201 (N/A)</td>
</tr>
<tr>
<td>Basic Fees</td>
<td>1,043</td>
<td>1,018</td>
<td>(25) (2.41%)</td>
</tr>
<tr>
<td>Access Fees</td>
<td>4,851</td>
<td>5,141</td>
<td>+290 (5.93%)</td>
</tr>
<tr>
<td>Trading System Facilities Usage Fees</td>
<td>3,341</td>
<td>3,544</td>
<td>+203 (6.08%)</td>
</tr>
<tr>
<td>Others</td>
<td>98</td>
<td>108</td>
<td>+10 (10.26%)</td>
</tr>
<tr>
<td>Clearing Services Revenue</td>
<td>23,473</td>
<td>27,945</td>
<td>+4,472 (18.79%)</td>
</tr>
<tr>
<td>Listing Services Revenue</td>
<td>14,547</td>
<td>16,660</td>
<td>+2,113 (14.40%)</td>
</tr>
<tr>
<td>Initial/Additional Listing Fees</td>
<td>5,002</td>
<td>5,630</td>
<td>+628 (12.53%)</td>
</tr>
<tr>
<td>Annual Listing Fees</td>
<td>9,544</td>
<td>11,029</td>
<td>+1,485 (15.54%)</td>
</tr>
<tr>
<td>Information Services Revenue</td>
<td>19,878</td>
<td>24,128</td>
<td>+4,250 (21.37%)</td>
</tr>
<tr>
<td>Others</td>
<td>11,045</td>
<td>11,443</td>
<td>+402 (3.64%)</td>
</tr>
<tr>
<td>Total</td>
<td>120,711</td>
<td>135,432</td>
<td>+14,721 (12.22%)</td>
</tr>
</tbody>
</table>

*Figures indicate percentage of Trading Fees.
**Excludes weekly options.
1. Trading services revenue
Trading services revenue consists of "Trading Fees" based on the value of securities traded and the volume of financial and commodity derivatives traded, "Basic Fees" based on the trading participant's type of trading qualification, "Access Fees" based on the number of orders, "Trading System Facilities Usage Fees" based on the types of trading system facilities used, and other similar fees.
For the fiscal year ended March 31, 2022, trading services revenue maintained the same level year on year at JPY 53,196 million.

2. Clearing services revenue
Clearing services revenue is comprised of mainly clearing fees related to the financial instruments obligation assumption business carried out by Japan Securities Clearing Corporation.
For the fiscal year ended March 31, 2022, clearing services revenue maintained the same level year on year at JPY 27,945 million.

3. Listing services revenue
Listing services revenue is comprised of "Initial/Additional Listing Fees" that are received based on the issue amount when a company initially lists or when a listed company issues additional shares, and "Annual Listing Fees" which are made up of fees received from listed companies based on their market capitalization and other similar fees.
For the fiscal year ended March 31, 2022, listing services revenue decreased 5.5% year on year to JPY 15,736 million, due mainly to a decrease in revenue from initial and additional listing fees.

4. Information services revenue
Information services revenue consists of market information fees, which are comprised of revenue related to the provision of market information to information vendors, etc., as well as revenue related to the index business, and revenue related to the provision of corporate action information and other information.
For the fiscal year ended March 31, 2022, JPX Group recorded information services revenue of JPY 27,175 million (up 12.6% year on year) due mainly to an increase in revenue from market information fees.

5. Other operating revenue
Other operating revenue includes the following items: usage fees for arrownet, which connects trading, market information, and other systems to trading participants and other users; usage fees related to co-location services that allow trading participants, information vendors, and other users to install devices in the system center for the purpose of improving trade execution efficiency by shortening order transmission time, etc.; and revenue from system development and operations.
For the fiscal year ended March 31, 2022, JPX Group recorded other operating revenue of JPY 11,378 million (down 0.6% year on year).

Operating Revenue in FY2021

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trading services revenue (JPY mil.)</td>
<td>51,766</td>
<td>48,660</td>
<td>48,899</td>
<td>53,171</td>
<td>53,196</td>
</tr>
<tr>
<td>Clearing services revenue (JPY mil.)</td>
<td>23,473</td>
<td>24,788</td>
<td>26,327</td>
<td>27,939</td>
<td>27,945</td>
</tr>
<tr>
<td>Listing services revenue (JPY mil.)</td>
<td>14,547</td>
<td>14,026</td>
<td>14,322</td>
<td>16,660</td>
<td>15,736</td>
</tr>
<tr>
<td>Information services revenue (JPY mil.)</td>
<td>19,878</td>
<td>21,029</td>
<td>21,977</td>
<td>24,128</td>
<td>27,175</td>
</tr>
<tr>
<td>Other operating revenue (JPY mil.)</td>
<td>11,045</td>
<td>12,630</td>
<td>12,371</td>
<td>11,443</td>
<td>11,378</td>
</tr>
</tbody>
</table>

(JPY mil): Japanese Yen million
(FY): Fiscal Year
Operating Expenses

During the fiscal year ended March 31, 2022, personnel expenses increased to JPY 19,048 million (down 1.1% year on year).

System maintenance and operation expenses include expenses related to maintenance and management/operation of various systems including the cash equities and derivatives trading systems.

System maintenance and operation expenses increased to JPY 14,984 million (up 10.8% year on year).

Depreciation and amortization increased to JPY 17,493 million (up 4.4% year on year).

Other operating expenses decreased to JPY 11,693 million (down 1.3% year on year).

---

Basic Policy for Allocation of Profit

JPX Group adopts a dividend policy with a target payout ratio of approximately 60% tied to business performance while giving due consideration to the importance of internal reserves for the following purposes:

- Maintaining sound financial health as a financial instruments exchange group;
- Preparing for risks as a clearing house; and
- Enabling the corporate group to pursue investment opportunities to raise the competitiveness of its markets as they arise.

In line with this policy, the dividend for FY2022 is expected to be JPY 52 per share (JPY 26 per share at the end of the second quarter). (As of July 2022)
### Consolidated Statement of Financial Position

<table>
<thead>
<tr>
<th>Assets</th>
<th>As of March 31, 2021</th>
<th>As of March 31, 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>108,209</td>
<td>93,354</td>
</tr>
<tr>
<td>Trade and other receivables</td>
<td>14,036</td>
<td>15,305</td>
</tr>
<tr>
<td><strong>Clearing business financial assets</strong></td>
<td>53,649,780</td>
<td>64,368,444</td>
</tr>
<tr>
<td><strong>Specified assets for deposits from clearing participants</strong></td>
<td>5,996,143</td>
<td>6,679,236</td>
</tr>
<tr>
<td><strong>Specified assets for legal guarantee funds</strong></td>
<td>673</td>
<td>637</td>
</tr>
<tr>
<td>Income tax receivables</td>
<td>5,286</td>
<td>2,022</td>
</tr>
<tr>
<td>Other financial assets</td>
<td>116,800</td>
<td>118,000</td>
</tr>
<tr>
<td>Other current assets</td>
<td>2,033</td>
<td>2,910</td>
</tr>
<tr>
<td><strong>Total current assets</strong></td>
<td>59,893,862</td>
<td>71,279,910</td>
</tr>
<tr>
<td><strong>Non-current assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property and equipment</td>
<td>10,697</td>
<td>13,029</td>
</tr>
<tr>
<td>Goodwill</td>
<td>67,374</td>
<td>67,374</td>
</tr>
<tr>
<td>Intangible assets</td>
<td>35,977</td>
<td>37,734</td>
</tr>
<tr>
<td>Retirement benefit assets</td>
<td>8,204</td>
<td>9,035</td>
</tr>
<tr>
<td>Investments accounted for using the equity method</td>
<td>16,736</td>
<td>17,650</td>
</tr>
<tr>
<td><strong>Specified assets for default compensation reserve funds</strong></td>
<td>27,948</td>
<td>27,948</td>
</tr>
<tr>
<td>Other financial assets</td>
<td>5,309</td>
<td>2,418</td>
</tr>
<tr>
<td>Other non-current assets</td>
<td>6,181</td>
<td>6,030</td>
</tr>
<tr>
<td>Deferred tax assets</td>
<td>3,385</td>
<td>2,303</td>
</tr>
<tr>
<td><strong>Total non-current assets</strong></td>
<td>181,815</td>
<td>183,524</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td>60,075,678</td>
<td>71,463,434</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liabilities</th>
<th>As of March 31, 2021</th>
<th>As of March 31, 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current liabilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade and other payables</td>
<td>4,132</td>
<td>4,813</td>
</tr>
<tr>
<td>Bonds and loans payable</td>
<td>32,500</td>
<td>32,500</td>
</tr>
<tr>
<td><strong>Clearing business financial liabilities</strong></td>
<td>53,649,780</td>
<td>64,368,444</td>
</tr>
<tr>
<td><strong>Deposits from clearing participants</strong></td>
<td>5,996,143</td>
<td>6,679,236</td>
</tr>
<tr>
<td><strong>Legal guarantee funds</strong></td>
<td>673</td>
<td>637</td>
</tr>
<tr>
<td>Income tax payables</td>
<td>15,038</td>
<td>3,800</td>
</tr>
<tr>
<td>Other current liabilities</td>
<td>8,746</td>
<td>10,003</td>
</tr>
<tr>
<td><strong>Total current liabilities</strong></td>
<td>59,715,175</td>
<td>71,108,167</td>
</tr>
<tr>
<td><strong>Non-current liabilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bonds and loans payable</td>
<td>19,960</td>
<td>19,967</td>
</tr>
<tr>
<td>Retirement benefit liabilities</td>
<td>9,018</td>
<td>8,985</td>
</tr>
<tr>
<td><strong>Other non-current liabilities</strong></td>
<td>841</td>
<td>101</td>
</tr>
<tr>
<td><strong>Deferred tax liabilities</strong></td>
<td>418</td>
<td>101</td>
</tr>
<tr>
<td><strong>Total non-current liabilities</strong></td>
<td>31,732</td>
<td>31,415</td>
</tr>
<tr>
<td><strong>Total liabilities</strong></td>
<td>59,746,908</td>
<td>71,139,582</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Equity</th>
<th>As of March 31, 2021</th>
<th>As of March 31, 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share capital</td>
<td>11,500</td>
<td>11,500</td>
</tr>
<tr>
<td>Capital surplus</td>
<td>35,716</td>
<td>35,716</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>271,006</td>
<td>266,776</td>
</tr>
<tr>
<td><strong>Total equity</strong></td>
<td>328,769</td>
<td>323,852</td>
</tr>
<tr>
<td><strong>Total liabilities and equity</strong></td>
<td>60,075,678</td>
<td>71,463,434</td>
</tr>
</tbody>
</table>
### Consolidated Statement of Income

<table>
<thead>
<tr>
<th></th>
<th>Fiscal year ended March 31, 2021</th>
<th>Fiscal year ended March 31, 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenue</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating revenue</td>
<td>133,343</td>
<td>135,432</td>
</tr>
<tr>
<td>Other revenue</td>
<td>359</td>
<td>205</td>
</tr>
<tr>
<td><strong>Total revenue</strong></td>
<td>133,702</td>
<td>135,637</td>
</tr>
<tr>
<td><strong>Expenses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating expenses</td>
<td>61,394</td>
<td>63,220</td>
</tr>
<tr>
<td>Other expenses</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td><strong>Total expenses</strong></td>
<td>61,399</td>
<td>63,232</td>
</tr>
<tr>
<td>Share of income of investments accounted for using the equity method</td>
<td>2,263</td>
<td>1,067</td>
</tr>
<tr>
<td><strong>Operating income</strong></td>
<td>74,565</td>
<td>73,473</td>
</tr>
<tr>
<td>Financial income</td>
<td>266</td>
<td>58</td>
</tr>
<tr>
<td>Financial expenses</td>
<td>99</td>
<td>103</td>
</tr>
<tr>
<td>Income before income tax</td>
<td>74,732</td>
<td>73,429</td>
</tr>
<tr>
<td>Income tax expense</td>
<td>22,714</td>
<td>22,598</td>
</tr>
<tr>
<td><strong>Net income</strong></td>
<td>52,017</td>
<td>50,830</td>
</tr>
<tr>
<td><strong>Net income attributable to</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Owners of the parent company</td>
<td>51,389</td>
<td>49,965</td>
</tr>
<tr>
<td>Non-controlling interests</td>
<td>628</td>
<td>874</td>
</tr>
<tr>
<td><strong>Net income</strong></td>
<td>52,017</td>
<td>50,830</td>
</tr>
<tr>
<td><strong>Earnings per share</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic (JPY)</td>
<td>96.00</td>
<td>94.35</td>
</tr>
<tr>
<td>Diluted (JPY)</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

### Consolidated Statement of Cash Flows

<table>
<thead>
<tr>
<th></th>
<th>Fiscal year ended March 31, 2021</th>
<th>Fiscal year ended March 31, 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash flows from operating activities</td>
<td>71,750</td>
<td>58,191</td>
</tr>
<tr>
<td>Cash flows from investing activities</td>
<td>(1,513)</td>
<td>(13,299)</td>
</tr>
<tr>
<td>Cash flows from financing activities</td>
<td>(33,932)</td>
<td>(59,747)</td>
</tr>
<tr>
<td>Net increase (decrease) in cash and cash equivalents</td>
<td>36,305</td>
<td>(14,855)</td>
</tr>
<tr>
<td>Cash and cash equivalents at the beginning of the year</td>
<td>71,883</td>
<td>108,209</td>
</tr>
<tr>
<td>Effect of changes in exchange rate on cash and cash equivalents</td>
<td>19</td>
<td>0</td>
</tr>
<tr>
<td>Cash and cash equivalents at the end of the year</td>
<td>108,209</td>
<td>93,354</td>
</tr>
</tbody>
</table>
Economic Data/Market Data

Stock Market Performance

- Nikkei 225 (left axis) ■ TSE 1st Section average daily trading value (ADTV) (right axis)

Note: The highest and lowest prices of the Nikkei 225 are based on closing prices.

Derivatives Trading Volume and Ratio of Night Session Trading

■ Monthly trading volume (left axis) ■ Ratio of night session trading (right axis)

- Jul. 2011 Night session launched (until 3:00 JST the next day)
- Oct. 2008 Trading hours extended (until 20:00 JST)
- Jul. 2010 Trading hours extended (until 23:30 JST)
- Sep. 2007 Evening session launched (until 19:30 JST)
- Jul. 2006 Nikkei 225 mini launched

Note: Total trading volume for all financial derivatives

Japan Exchange Group, Inc.
ADTV between Japan postal reform snap election and global financial crisis

ADTV in FY2021
JPY 3.2 tril. (Apr. 2021–Mar. 2022)

Post-crisis bottom
JPY 7,054
(Mar. 10, 2009)

Jul. 2016
Trading hours extended
(until 5:30 JST the next day)
Corporate Data (as of June 16, 2022)

**Corporate Information**

- **Company Name**: Japan Exchange Group, Inc.
- **Number of Directors**: 14 directors, 12 executive officers
- **Location of Head Office**: Head Office 2-1 Nihombashi-kabuto-cho, Chuo-ku, Tokyo 103-8224, Japan Osaka Head Office 8-16, Kitahama 1-chome, Chuo-ku, Osaka 541-0041, Japan
- **Foundation**: January 1, 2013
- **Amount of Capital**: JPY 11.5 billion
- **Number of Employees (as of April 1, 2022)**: 1,223 (consolidated)
  - Japan Exchange Group, Inc.: 207
  - Tokyo Stock Exchange, Inc.: 312
  - Osaka Exchange, Inc.: 151
  - Tokyo Commodity Exchange, Inc.: 9
  - JPX Market Innovation & Research, Inc.: 251
  - Japan Exchange Regulation: 194
  - Japan Securities Clearing Corporation: 99
- **Business Description**: Management and administration of a financial instruments exchange holding company group, and other ancillary businesses

**Stock Information**

- **Stock Code**: 8697
- **Listed Market**: Tokyo Stock Exchange Prime Market
- **Business Year**: April 1 to March 31
- **Annual General Shareholders Meeting**: June
- **Record Date**: March 31 for Annual General Shareholders Meeting and for Year-end dividend and September 30 for interim dividend

**Number of Shares per Share Unit**

- **Total number of shares authorized to be issued**: 2,180,000,000 shares
- **Total number of shares issued**: 528,578,441 shares

**Number of Shareholders (as of March 31, 2022)**

- **63,638**

**JPX’s Shareholders (as of March 31, 2022)**

**Distribution of Shareholders**

- Individuals and Others: 3.32%
- Foreign Corporations, etc.: 40.29%
- Other Corporations in Japan: 5.44%
- Financial Institutions: 32.12%
- Financial Instruments Business Operators: 20.84%
- Total number of shares issued: 528,578,441 shares

**Major Shareholders**

<table>
<thead>
<tr>
<th>No. of Shares Held</th>
<th>Shareholding Ratio (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The Master Trust Bank of Japan, Ltd. (Trust Account)</td>
<td>96,235,200</td>
</tr>
<tr>
<td>2. Custody Bank of Japan, Ltd. (Trust Account)</td>
<td>27,519,700</td>
</tr>
<tr>
<td>3. NORTHERN TRUST CO. (AVFC) SUB A/C NON TREATY</td>
<td>16,271,155</td>
</tr>
<tr>
<td>4. SMBC Nikko Securities Inc.</td>
<td>13,469,900</td>
</tr>
<tr>
<td>5. THE BANK OF NEW YORK 134104</td>
<td>11,269,700</td>
</tr>
<tr>
<td>6. STATE STREET BANK WEST CLIENT – TREATY 505234</td>
<td>9,149,336</td>
</tr>
<tr>
<td>7. MUFG Bank, Ltd.</td>
<td>7,557,000</td>
</tr>
<tr>
<td>8. JP MORGAN CHASE BANK 385781</td>
<td>6,896,386</td>
</tr>
<tr>
<td>9. Tachibana Securities Co., Ltd.</td>
<td>6,887,900</td>
</tr>
<tr>
<td>10. Okachi Securities Co., Ltd.</td>
<td>6,500,000</td>
</tr>
</tbody>
</table>

**Website**

**About JPX**

(Japanese) https://www.jpx.co.jp/
(English) https://www.jpx.co.jp/english/

**Investor Relations**

(Japanese) https://www.jpx.co.jp/corporate/investor-relations/
(English) https://www.jpx.co.jp/english/corporate/investor-relations/

**About the JPX Group Logo**

The logo expresses our aspirations toward dynamic and international growth in our ambition to become Asia’s No. 1 market. The four rising bars represent the four Cs of our creed: adopting a “Customer First” approach of prioritizing customer needs, pursuing “Creativity” in innovative solutions, building “Credibility” and public confidence, and achieving “Competency” by harnessing employee potential.