

JPX IR Day 2022



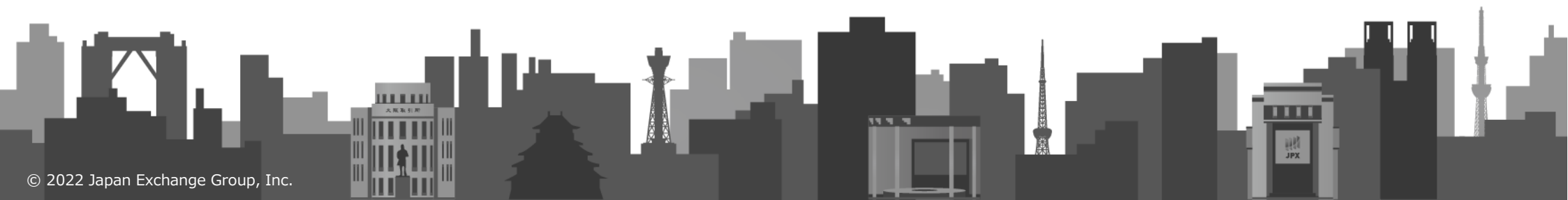
Data and Digital Services

Exchange & beyond

President & CEO, JPX Market Innovation & Research, Inc.

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July 5, 2022



About JPX Market Innovation & Research, Inc.



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In order to achieve our long-term vision under the Medium-Term Management Plan 2024, JPXI will drive forward the Group's data and digital businesses and support the businesses of other Group companies.

"Target 2030": our long-term vision to be achieved by 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)

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.

Focus 1

Facilitating cycle of corporate innovation/growth and asset formation

Focus 2

Achieving market transformation (MX)

Focus 3

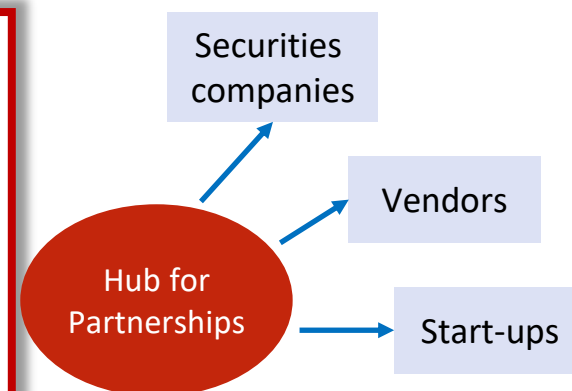
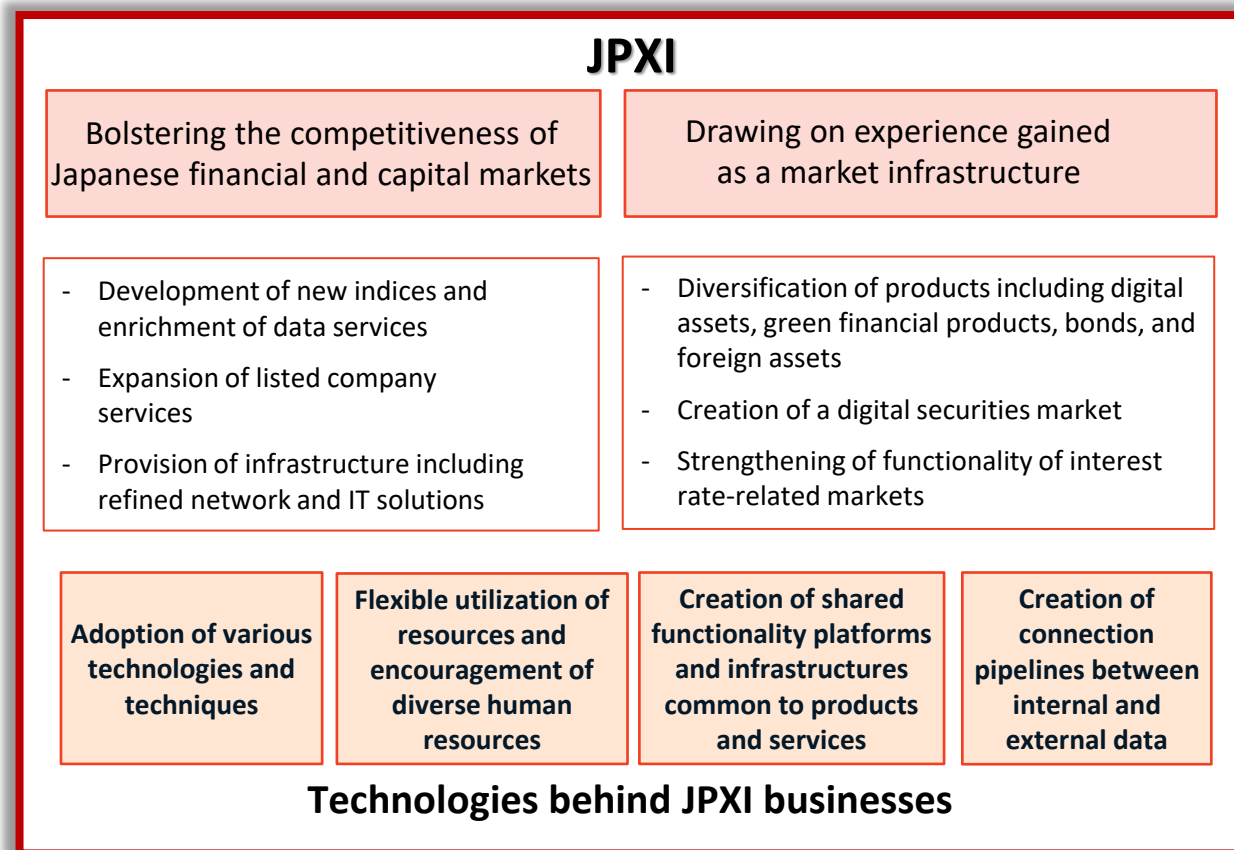
Promoting sustainability that connects society and economy

Actions led by JPXI

- Creation of a digital securities market
- Development of new services utilizing digital technologies
- Strengthening of index business
- Enhancement of investment-related information

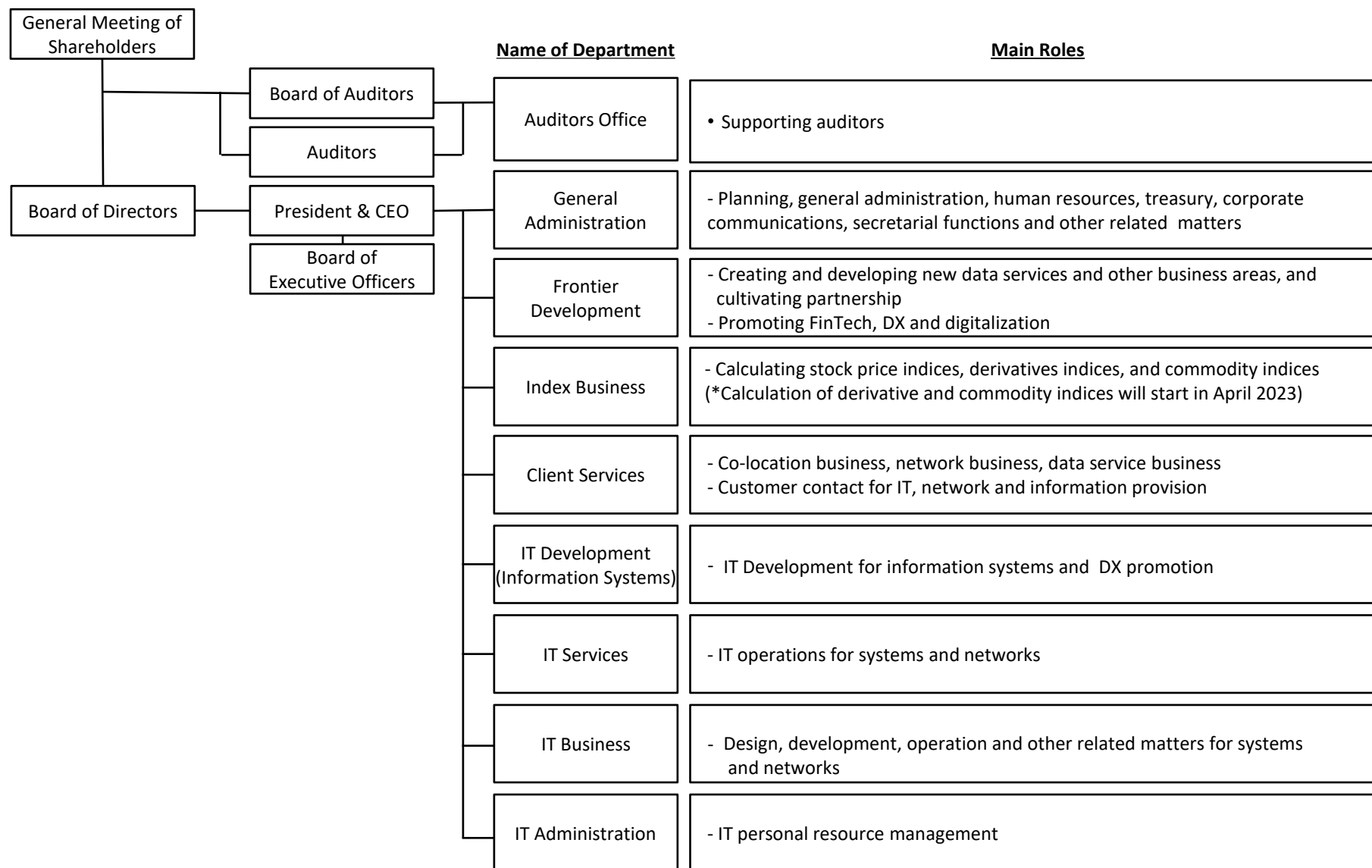
- Sustainability information platform
- Calculation of ESG-related indices

Proactive creation of various market services



Utilize technical capabilities not only for JPXI's business development but also to support the growth of group companies

Organizational Structure of JPXI (as of April 1, 2022)



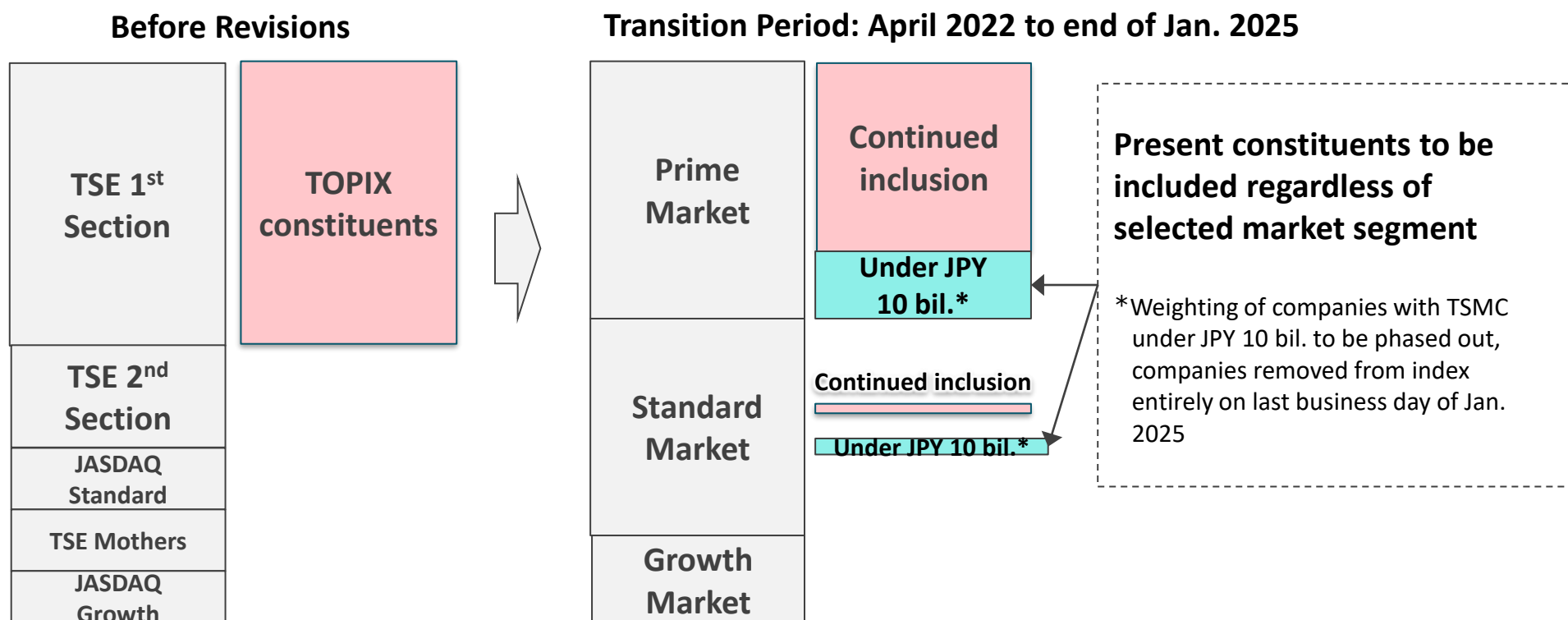
Note 1: Development of core systems such as the trading systems, clearing systems, and market information systems will continue to be carried out by Tokyo Stock Exchange (TSE) and Osaka Exchange (OSE) in the same way as before (no changes).

Note 2: Real-time market information will continue to be provided by TSE and OSE in the same way as before (no changes).

JPXI's Current and Future Initiatives

Status of TOPIX Revisions

- Since TOPIX has a large amount of assets linked to it, in reviewing the index, we are ensuring continuity while focusing more on liquidity and enhancing its functionality as an investment target.
 - ✓ Revision of the definition of free-float shares (so-called strategic shareholdings are designated as non-free float shares and excluded from free-float shares. Reflection of new free-float weight ratios completed at the end of June).
 - ✓ Constituents with a tradable share market capitalization (TSMC) of under JPY 10 billion will have their weighting reduced in stages and will then be removed from the index entirely.
 - ➔ These constituents will be announced on October 7 and their weighting will be reduced in 10 stages from October 2022 to January 2025.
- Since assets linked to TOPIX through ETFs, investment trusts, and pension fund management exceed JPY 73 trillion (as of March 2021), these revisions were subject to an index consultation in December 2020 and are being carefully handled to gain understanding and consent from index users such as asset owners and asset management companies, while keeping TOPIX's credibility as our flagship index.
- The rules for TOPIX constituents applicable from February 2025 will be discussed in the future.



Development of New Indices, etc.

- This year, we launched the "S&P/JPX 500 ESG Score Tilted Index", an index using ESG scores that comprehensively take ESG into account, and the "FTSE JPX Net Zero Japan 500 Index", an index specializing in the environment. We are currently encouraging financial institutions to create financial products, among other initiatives.
- The amount of assets linked to S&P/JPX Carbon Efficient Index, launched in 2018, has grown to JPY 1.9 trillion.
- We will focus on the promotion of those ESG-related indices while continuing to develop new ones in line with demand and current trends.

	S&P/JPX 500 ESG Score Tilted Index	FTSE JPX Net Zero Japan 500	(Ref.) S&P/JPX Carbon Efficient Index
Index provider	S&P Dow Jones Indices, JPXI	FTSE Russell, JPXI	S&P Dow Jones Indices, JPXI
Eligible universe	TOPIX 500	TOPIX 500	TOPIX
Concept	<p>General ESG index</p> <ul style="list-style-type: none"> ✓ The eligible universe is TOPIX 500, with the objective of improving the S&P DJI ESG Score relative to the underlying index based on S&P DJI ESG Scores. ✓ The indices employ 4 weighting scales (tilts) to ESG scores: 0.25, 0.5, 1 and 2. The higher the tilt, the higher the weight given to the ESG score. ✓ The constituent ratio will be tilted in weight according to the score while maintaining the neutrality of GICS® industries and sectors. 	<p>Environmental index</p> <ul style="list-style-type: none"> ✓ The eligible universe is TOPIX 500, with weights of constituents adjusted to achieve each of the targets set for fossil fuel reserves, operational carbon emissions, green revenues, TPI Management Quality, and TPI carbon performance (progress toward international targets, etc. based on the Paris Agreement). ✓ It is eligible for the European Union's Climate Transition Benchmark (CTB) label, aiming to achieve "net zero" in assets under management by 2050. 	<p>Environmental index</p> <ul style="list-style-type: none"> ✓ The eligible universe is TOPIX, with constituents being weighted focusing on disclosure status of environmental information and level of carbon efficiency (carbon to revenue footprint). ✓ Through adopting rules including overweighting companies that have sufficiently disclosed their environmental information and companies with high carbon efficiency (lower levels of carbon emissions per unit of sales), the index aims to encourage efforts for environmental initiatives and the disclosure of environmental information throughout the entire market, and to revitalize the stock market.
Start of calculation	March 28, 2022	April 21, 2022	July 17, 2018
Linked assets	—	—	<ul style="list-style-type: none"> - GPIF: JPY 1,536.5 billion - Pension Fund Association for Local Government Officials: JPY 332.4 billion - ETFs (total of 3): Approx. JPY 35 billion <p>(For ETFs, as of end of June 2022; for others, as of end of Mar. 2021)</p>

Medium-Term Management Plan 2024
Exchange & beyond

Focus 2 Achieving Market Transformation (MX)
Creation of a digital securities market – to be set up by the end of FY2024

(1) Try out new fields through issuance of digital green bond

JPX issued a digitally tracked green bond in June 2022 in close cooperation with Hitachi, Nomura Securities and BOOSTRY (1-year bond, 0.05%, JPY 500 mil.)

The scheme improves transparency for investors by using a digital system to visualize and record, on a blockchain platform, the amount of electricity generated and CO2 reduced by the power generation facilities that the bond invests in. At the same time, for issuers, it will make it easier to obtain data and reduce the burden of compiling.

Through this initiative, JPXI is challenging itself with in-house development of the visualization functions by leveraging its accumulated technological capabilities.

(See next page for details)

(2) Strengthen collaboration with digital securities market players

JPXI joined two consortia working on digital securities and digital currencies, strengthening collaboration with the parties concerned.

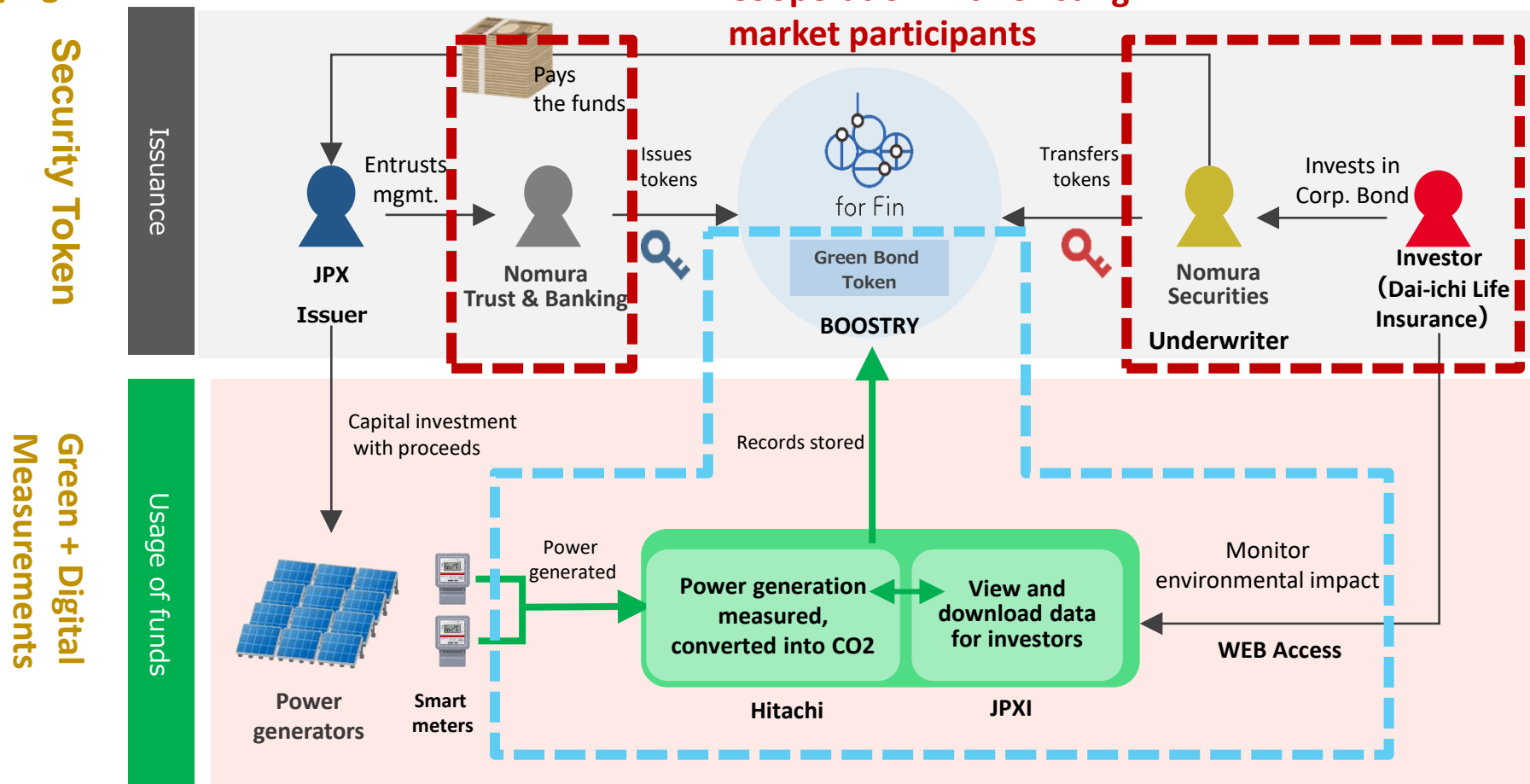
Digital Asset Co-Creation Consortium
Host: Mitsubishi UFJ Trust and Banking
Member companies: Approx. 100

The Digital Currency Forum
Secretariat: DeCurret DCP
Participating companies: Approx. 80

Example of Digital Green Bond

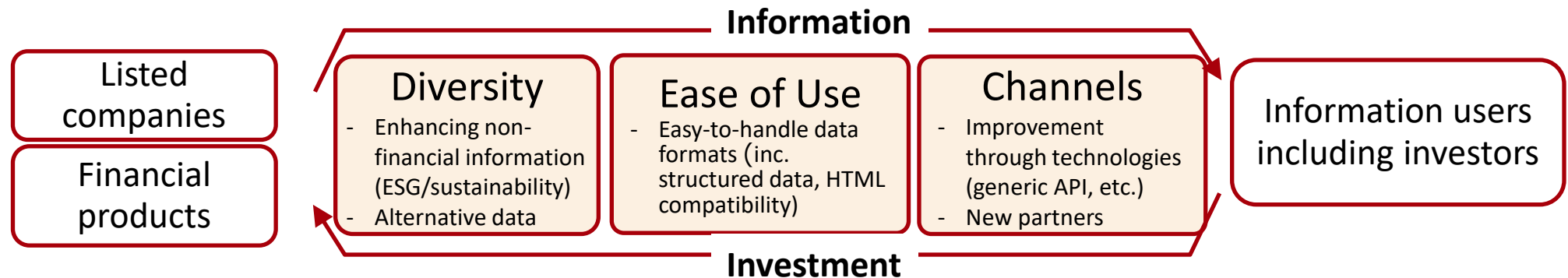
- Solving societal issues → Significance of JPX's commitment to digital securities
- Society-wide issues cannot be solved by JPX alone → Partnerships with JPXI as hub

Trying out new fields



Developed with a combination of JPXI's in-house capabilities and partner technologies

- Smoothing the data flow will solve the issues of investors/companies/financial institutions and lead to further enhancement of the data services business.



1. Improving distributed content and new distribution methods

- New distributed content including alternative data and IR presentation transcripts
- Provision of data that is easy for users to process (data provision via cloud storage and generic API)
- Provision of cleansing and analytical data/services

2. Expansion/enhancement of listed company information services

- Joint Proof of Concept testing for HTML disclosure of earnings reports (*kessan tanshin*) from Dec. 2021
- Expanded/enhanced distribution of listed company information such as timely disclosure etc.

3. Creation of ESG information services

- Gathering ESG information from listed companies in one place
- Cooperation on promoting more ESG information disclosure from listed companies etc.

- JPXI contributes to the JPX Group's overall mission of promoting sustainability from the perspective of data and digital businesses

Contributing to promotion of sustainability throughout society

Support for listed companies

- Establishing CG code, highlighting company activity, etc.
- Publishing Handbook and Anthology to promote ESG disclosure
- Operating ESG information disclosure site (ESG Knowledge Hub)

- **Issuing digital green bond (p10-11)**

Providing related products/services to investors

- **Developing new indices (p9)**
- **Developing and launching ESG bond platform (summer 2022)**

Promoting JPX's own sustainability

Initiatives on ESG issues

- Holding own renewable energy generation facilities and achieving carbon neutrality

ESG information disclosure

- Communicating with various ESG rating agencies (such as MSCI, FTSE, CDP)
- Disclosing in integrated report (JPX Report)

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