The Evolution of ESG Investment, Realization of Society 5.0, and Achievement of SDGs

—Promotion of Investment in Problem-Solving Innovation



EXECUTIVE SUMMARY

"Society 5.0 is a sustainable, human-centered society in which the physical and cyber worlds are highly integrated by digital transformation, no one is left behind, and everyone works together to create safe and comfortable lives and new growth opportunities."

(From the analysis results of this report)

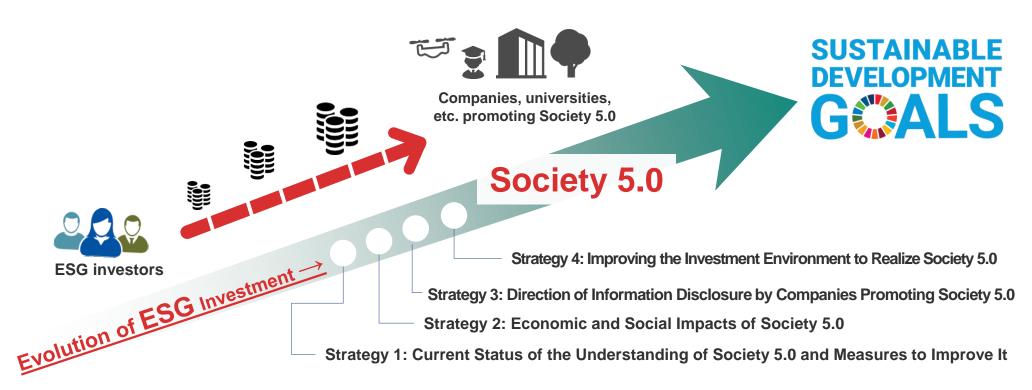
Background

- We are facing a time of great change, as exemplified by the development of digital transformation (DX), an increasing sense of crisis regarding global environmental issues, changes in the socioeconomic structure, and shifts in people's mindsets.
- To seize these major changes as an opportunity to achieve medium- to long-term economic growth and build a sustainable, human-centered society, the realization of "Society 5.0 for SDGs"—Japan's national strategy—holds the key.
- Therefore, joint research on Society 5.0 for SDGs was conducted by Keidanren; the University of Tokyo, which represents Japan's diverse knowledge; and the GPIF, which is Japan's leading investor.
- Based on this report, the three parties will make efforts to disseminate information globally and take concrete actions toward the realization of Society 5.0 for SDGs, which is the driving force for economic growth and problem-solving in Japan and the world.

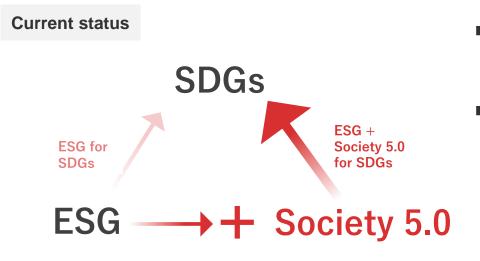
Purpose and Overview

Research 4 strategies to "evolve ESG investment* and achieve Society 5.0"

* promotion of investment in problem-solving innovation



- In order to achieve "Society 5.0 for SDGs," it is essential that medium- to long-term stable funding be channeled to a variety of players which promote problem-solving innovation, including companies and universities, and that the innovation ecosystem itself evolves autonomously.
- Therefore, we identify the current trend in ESG investment that is expanding globally, and evolve ESG investment (accelerate investment in problem-solving innovation) for the realization of Society 5.0 and the swift and reliable achievement of SDGs. To that end, we examine 4 strategies.



A questionnaire survey of companies and investors shows that Society 5.0 is less recognized than ESG or SDGs.

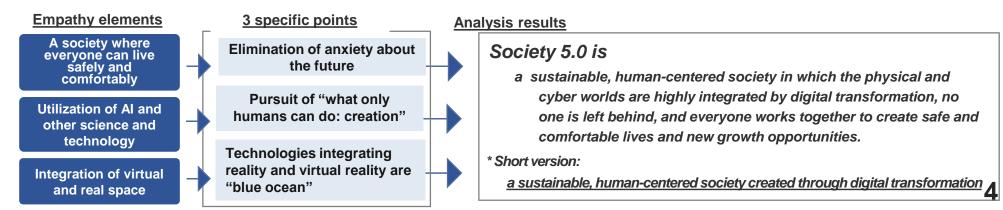
 $(\rightarrow$ See "Reference" on page 13)

- On the other hand, when Society 5.0 is incorporated into ESG investment, investors perceive that it will
 - (1) give higher returns
 - (2) solve broader issues,
 - (3) increase various types of corporate value
 - (4) promote forward-looking, constructive dialogue between companies and investors on management.

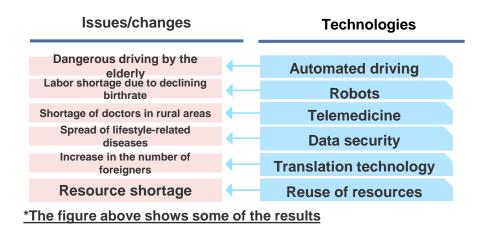
Improving understanding of Society 5.0 is critical to the evolution of ESG investment. Therefore, 4 concrete measures are presented to improve understanding.

Concrete measure (1): Identifying more comprehensible phrases

Improving the understanding of Society 5.0 requires a short, more comprehensible explanation and wording that call for empathy. The results obtained from the questionnaire survey and natural language analysis are as follows.



Concrete measure (2): Priority issues and technologies expected to be resolved in Society 5.0



- Show concrete examples of Society 5.0, and, in order to improve understanding, search for issues expected to be solved in Society 5.0 and technologies expected to be implemented in society.
- As part of this effort, we conducted a questionnaire survey on companies and investors regarding issues expected to be solved in Society 5.0, technologies expected to be implemented in society in the future, and the like.

Concrete measure (3): Tools to improve understanding of Society 5.0

Create a PR video about Society 5.0, establish a Society 5.0 platform ("Theater 5.0, https://www.theater5-0.com/").

Concrete measure (4): Approach to influential institutions

Business and economic organizations

- B20 (economic organizations of 20 major developed countries)
- WEF (World Economic Forum)
- WBCSD (World Business Council for Sustainable Development)
- Economic organizations around the world, including the International Criminal Court (ICC)

Investors

- Investor initiatives such as Principles for Responsible Investment (PRI) and Task Force on Climate-related Financial Disclosures (TCFD)
- World Benchmark Alliance, GRI, and ESG rating agencies

Universities and research institutions

 Universities and research institutes in Japan and overseas, such as the Brookings Institution, as well as international initiatives in the academic world including Future Earth

Governments and international organizations

 Governments, ministries, and international organizations such as the UN, UNDP, the World Bank, and IUCN

In addition, young people, future generations, etc.

Summary

Show the economic and social impacts of Society 5.0 and why they are realized, as well as the estimation results

Reasons why social and economic impacts are generated in Society 5.0

production input

- Substitution of markets through new products and services
 Enabling approach to potential demand impacts
 Cost reduction by drastic reduction of
 Solving individual limitations and resolving social issues
 Solve all challenges simultaneously and optimally
 - Inclusive growth
 - Respect for various ethical standards

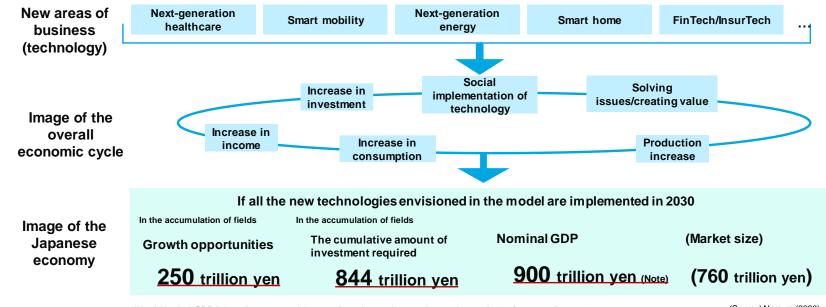
Economic impacts of realizing Society 5.0 (by category: quantitative analysis)

Acceleration of economic transactions

Industrial sector (excerpt)	Growth opportunities (2030)	(Market size (2030))
Next-generation healthcare	36.2	(95.1)
Digitization of manufacturing	28.5	(108.0)
Smart mobility	21.3	(64.4)
Smart living	18.9	(46.0)
Next-generation energy	19.3	(37.4)
FinTech/InsurTech	14.5	(35.1)
Cybersecurity	4.4	(15.9)
Smart agriculture	7.0	(15.1)
Digital entertainment	2.8	(6.8)

(Source: Estimation results by Koji Nomura, Project Leader, the 21st Century Public Policy Institute and Professor, Keio University, from (Nomura (2020))

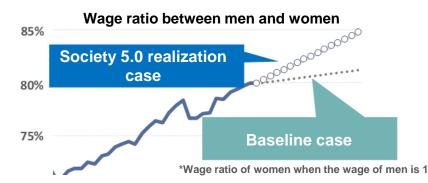
Economic impacts of realizing Society 5.0 (macro: quantitative analysis)



(Note) Nominal GDP is based on 2015 and does not factor in actual economic growth rates for the four years from 2016 to 2019 (Reference: Sakakibara vision (2015): Nominal GDP of 833 trillion yen, average growth rate of +4.0% in 2030)

(Source) Nomura (2020)

Economic impacts of realizing Society 5.0 (quantitative analysis)



Environment (society where people can coexist in harmony with nature)

• Realize significant improvement in energy efficiency through the introduction of next-generation energy technologies

Society (society in which everyone can demonstrate diverse talents)

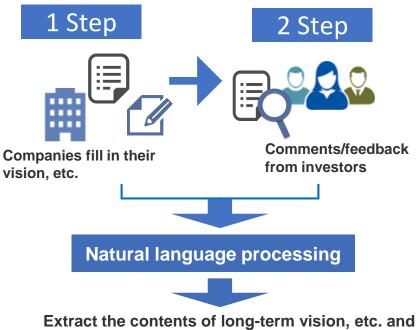
- Narrow wage gap between men and women
- Increase the number of employed people aged 65 or older by 1 million

(Source: Estimation results by Koji Nomura, Project Leader, the 21st Century Public Policy Institute and Professor, Keio University, from (Nomura (2020))

Summary

- Disclosure of information that facilitates constructive dialogue between companies and investors is essential to expand investments in companies working with Society 5.0.
- Therefore, conduct natural language processing of "future" financial information such as long-term visions (disclosures that promise the company's future growth) and investors' comments/feedback on it, and analyze the content and expression method of long-term visions and the like required by investors.

Analytical method



Extract the contents of long-term vision, etc. and expression methods required by investors.

- 1. Companies fill in their long-term vision, etc.
- 2. Comments/feedback from randomly selected investors on company responses
- 3. Conduct natural language processing of the content of (1.) and (2.) Extract the contents of long-term vision, etc. and expression methods required by investors.

Strategy 3: Direction of Information Disclosure by Companies Promoting Society 5.0 (2)

Society 5.0 keywords that investors focus on

For future growth of companies, investors are focusing on

Investors pay attention to the following 8 trends



Demographic change	Safe and smart life by utilizing technology	Climate change and disaster prevention	Concentration in large cities	
Extension of healthy life expectancy	Formation of a recycling- based society	Diversification of working styles	Diversification of culture	

3 elements of the long-term vision of companies that investors expect to grow in the future

Business development based on people

Aim to develop business based on people to bring new value to people by anticipating and utilizing future technologies



Clarify global issues, set specific targets, etc., and aim to resolve them



Creation of new markets

Capitalize on the strengths of existing businesses, capture diverse needs, and aim to create new markets

Key points about how to make information disclosure that investors value

Understanding trends

- Reference to trends occurring in the industry
- Complete understanding and presentation of the priorities
- Unique perspective based on own business

Viewpoint that promises "growth potential"

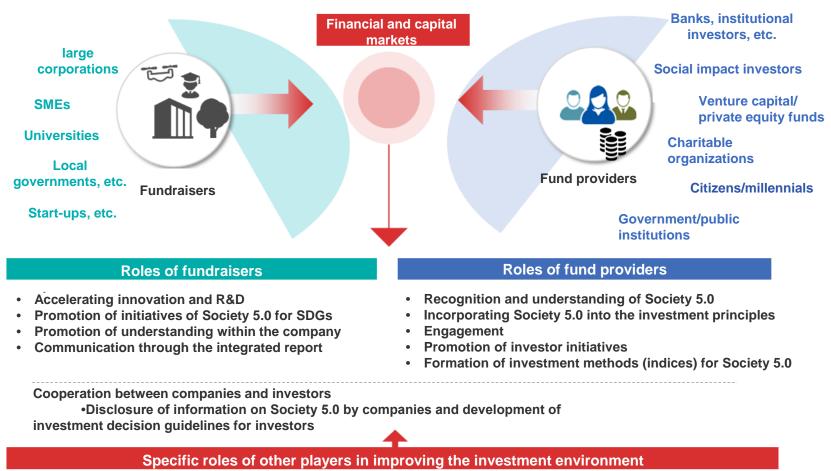
- Clarification of the company's role in the future society
- Implementation of specific initiatives
- Explanation of unique advantages

Viewpoint that promises "sustainability"

- Clarification of goals and relationships with SDGs
- Implementation of specific initiatives
- Explanation of compatibility with own business growth

Strategy 4: Improving the Investment Environment to Realize Society 5.0 (1)

Specific examples of the roles of each player in improving the investment environment for the realization of Society 5.0 are as follows:



Government

- Establishment of the Society 5.0 Realization Conference
- Creation of incentive mechanisms and award systems for companies promoting Society 5.0
- Identifying Society 5.0 for SDGs/Green Budget and issuing government bonds

Universities, research and rating agencies

• Research on methods of measuring and evaluating the actual social impacts of products, services, projects, technologies, etc. related to Society 5.0, etc.

Concrete examples for the promotion of investment in universities and startups

[University]

[Start-ups]

- Identification of technologies that will contribute to Society 5.0, expansion of the provision of information on such technologies, formation of a joint vision between companies and universities (further promotion of industry-academia joint research), etc.
- understanding Promotion social of of significance of start-ups, establishment of CVC, of Dejima-like establishment organization (Dejima was a Dutch trading post in Nagasaki and was the only trading point for the West in the Edo period). expansion matching of opportunities with overseas VC. etc.

Challenges on facilitating startup investment raised by investors

Challenges for start-ups

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- Limited number of promising start-ups that can do business on a global scale compared to the U.S.
- Lack of information dissemination in English

Challenges for investors

• Investors' short-term orientation, lack of experience, asset owners' preference for listed stocks, and low needs

Other challenges

• Japanese society is indifferent to heresy and risk-taking.

Concrete examples for the investment methods (formation of indices) for Society 5.0

Index utilizing megatrends Index utilizing megatrends Identifv Integrated operation of DX Identify specific issues **Identify** multiple companies that arise in each trend, trends index and ESG index engaging in such Integrate and the businesses, to capture as all of them businesses and Establishment of a problemtechnologies, etc. that opportunities in technologies in will solve them Society 5.0 solving fund all trends.

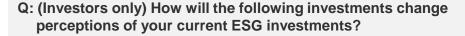
Conclusion: The Action Plan of Keidanren, the University of Tokyo, and the GPIF

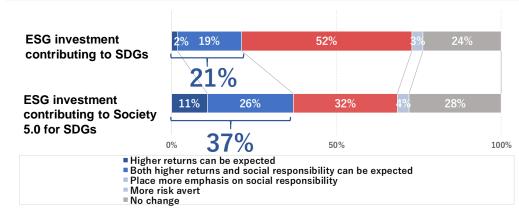
Party responsible	Action plan
Actions to be implemented by all parties	• Improving recognition and understanding of Society 5.0 (publicizing Society 5.0 at home and abroad, promoting incorporation of Society 5.0 into the stewardship principles for companies and investors at home and abroad)
Keidanren Policy & Action	 Encouraging companies and initiatives to achieve Society 5.0 Promoting the action plan for corporate transformation as outlined in Keidanren's recommendations on Society 5.0 and the Charter of Corporate Behavior Further promoting initiatives to solve problems through innovation (e.g., "Challenge Zero" Initiative) Promoting matching of ESG investors with companies promoting Society 5.0 Promoting initiatives for the evolution of the venture ecosystem Fostering investment through corporate pension and promoting stewardship activities to realize Society 5.0 Promoting development and dissemination of financial products (investment trust, etc.) related to Society 5.0 Further consideration to realize Society 5.0 Presenting the industrial structure of Society 5.0 and the action plan for corporate transformation through the Digital Transformation (DX) Conference Engaging with various stakeholders including the government to realize Society 5.0 through each committee
東京大学 THE UNIVERSITY OF TOKYO	 Conducting research on the desirable socioeconomic system that supports Society 5.0 and the strategy to steer the current system in that direction, including research on global commons in both physical and cyberspace Cultivating talented people to lead Society 5.0 as knowledge professionals and knowledge entrepreneurs Accelerating efforts to create industry-academia collaboration, including the creation of a venture ecosystem model centered on universities, in cooperation with relevant institutions Developing institutional and framework research and investment methods to encourage investment in companies and other entities that will lead the realization of Society 5.0 for SDGs, including research on optimal ways of assessing
GPIF	 social impact The GPIF will consider the following initiatives in light of the view that sustainable growth of the investment portfolio and the market as a whole is necessary for a greater long-term investment return on invested assets in the management of reserve funds. Consideration of incorporating Society 5.0 and SDGs into its Investment Principles and the like Encouraging information disclosure on Society 5.0 with a view to promoting ESG investment Collaborating with various stakeholders, including fund managers, to evolve ESG investment Promoting constructive engagement and conducting research on appropriate evaluation methods to connect ESG to Society 5.0 Conducting ongoing research into the long-term performance of companies that will lead the realization of Society 5.0 Leveraging ESG investors' insights to develop and spread Society 5.0-related financial products

Responses were received from 102 out of 408 companies of the Keidanren Committee on Financial and Capital Markets, Committee on Responsible Business Conduct & SDGs Promotion, and the Committee on Startups, and from 117 investors out of 34 fund managers of the GPIF (Japanese: 66%, American: 23%, European: 9%; sales departments: 39%, operations departments: 32%).

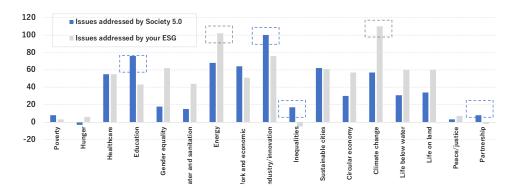
Q: Do you know about each of Society 5.0/ESG/SDGs?

		I know about its content.	I know about its content to some extent.	I have heard the word, but I don't know its content.	l don't know at all.
	Companies	<u>47%</u>	29%	15%	10%
Society 5.0	Investors	<u>30%</u>	22%	21%	28%
-	General public	<u>3%</u>	13%	27%	57%
ESG	Companies	70%	23%	4%	4%
	Investors	95%	5%	0%	0%
	Companies	75%	21%	2%	2%
SDGs	Investors	79%	20%	0%	1%
	General public	12%	26%	25%	37%





Q: (Investors only) Issues that have high affinity with Society 5.0/ESG







Theater 5.0

