Dream up the future. That’s the Nomura Research Institute Group Corporate Philosophy.

In our desire to create a positive future by thoroughly considering the possibilities facing society in this era of rapid change where predictions cannot easily be made, we hope to contribute to society by creating new value.

The NRI Group will continue our endeavors in meeting never-ending challenges as a “company creating future society.”

Icons on pages that introduce NRI Group efforts

Of the 17 Sustainable Development Goals (SDGs)*, these icons indicate goals that correspond to NRI Group initiatives described in this document.

* SDGs: Shared global goals defined by the United Nations for 2016 to 2030 in order to resolve global issues. Achieving this goal requires participation and cooperation from the national governments of UN member nations, local governments, corporations, NPOs, NGOs, and individual citizens.
# Sustainability Book 2021  Table of Contents

<table>
<thead>
<tr>
<th>Page</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Message from the President</td>
</tr>
<tr>
<td>4</td>
<td>Sustainability Management</td>
</tr>
<tr>
<td>8</td>
<td>Feature No.1 Proposals regarding Coronavirus Infection (COVID-19) measures. As the NRI Group, we continue to disseminate information on measures against COVID-19 from various perspectives</td>
</tr>
<tr>
<td>14</td>
<td>Feature No.2 Dream Up the Future Forum 2020. COVID-19 and Socioeconomic Paradigm Shifts</td>
</tr>
<tr>
<td>20</td>
<td>Supporting the Sustainable Growth of Companies</td>
</tr>
<tr>
<td>22</td>
<td>Meeting the New Insurance Needs of Consumers</td>
</tr>
<tr>
<td>24</td>
<td>Supporting the Development of the SDGs Bond Market</td>
</tr>
<tr>
<td>26</td>
<td>Realizing a New Way of Finance in the Capital Market</td>
</tr>
<tr>
<td>28</td>
<td>Contributing to the Promotion of Digital Government</td>
</tr>
<tr>
<td>30</td>
<td>Innovating Your Business with AI</td>
</tr>
<tr>
<td>32</td>
<td>Contributing to Social Infrastructure Maintenance Through the Realization of DX</td>
</tr>
<tr>
<td>Co-creation of a thriving future society</td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>Co-creation of a safe and secure society. Utilizing Big Data to Discover Issues in the Field of Disaster Prevention</td>
</tr>
<tr>
<td>36</td>
<td>Contributing to the Sound Development of the Financial Instruments Market</td>
</tr>
<tr>
<td>38</td>
<td>Creating a Safe and Secure Information System Environment</td>
</tr>
<tr>
<td>40</td>
<td>Activities to Spread &quot;Value Co-Creation&quot;</td>
</tr>
<tr>
<td>44</td>
<td>ESG Topics</td>
</tr>
<tr>
<td>52</td>
<td>Initiatives that NRI participates</td>
</tr>
<tr>
<td>54</td>
<td>Sustainability topics: By the numbers</td>
</tr>
<tr>
<td>56</td>
<td>Recognition</td>
</tr>
<tr>
<td>61</td>
<td>NRI group companies in Japan</td>
</tr>
<tr>
<td>62</td>
<td>Global network</td>
</tr>
<tr>
<td>64</td>
<td>Notice of Issuance of NRI Sustainability-Linked Bonds</td>
</tr>
<tr>
<td>65</td>
<td>Editorial Policy</td>
</tr>
</tbody>
</table>
Message from the President

Since Nomura Research Institute (NRI) was established, we have continued our businesses of policy recommendations always ahead of the times, corporate strategy proposals, and the development and operation of information systems, etc. We believe for NRI to keep growing, it is necessary for us to contribute to society through these businesses and continue to be indispensable for the world. In order to do so, we need to work to prevent and deter many social issues that are occurring on a global scale, such as climate change and human rights problems, and further focus on businesses that help solve them.

We believe that we can widely contribute to society by demonstrating NRI’s ability to consistently provide everything from consulting to IT services in order to solve increasingly complex social issues.

The spread of the new coronavirus that struck the world created great social unrest and had a great impact on the economy. People's behavior has changed from physical to non-contact, and online activities such as electronic commerce (EC) and non-face-to-face sales have progressed. It is believed that
these activities will be maintained even after the end of the COVID-19 pandemic, and that the accumulation and analysis of customer data will generate new services and marketing methods.

As a result, many companies are expected to provide dynamic business transformation rather than an extension of their existing business models. Leading companies are already accelerating DX (digital transformation) efforts with their eye on a post-corona world. There are various situations, with some companies focusing on speed and pushing ahead with top-down business model transformation with DX, while others are trying to step into DX in parallel with breaking away from legacy practices. NRI aims to realize such DX for customers and industries and build a better society by leveraging the power of consulting and IT services.

We believe that the momentum for solving social issues with DX will increase further in the future. Companies around the world are increasingly positioning initiatives for sustainability, including decarbonization, as the basis of their management strategy.

Prior to such movements, NRI has been working hand-in-hand with various stakeholders, including business partners, to take on the challenge of transforming the social paradigm through DX. This aims to be a DX of society itself, and is also in line with the NRI Group’s corporate philosophy of "discerning new social paradigms and assuming the role of implementing them."

By promoting businesses that lead to the resolution of issues in future society, we hope to contribute to the creation of a sustainable future society, and thereby fulfill our social responsibility. We will also strive to sincerely listen to the opinions of various stakeholders inside and outside Japan, and will govern our own behavior accordingly.
Sustainability Management

Sustainability Management of the NRI Group and Our Goal

Our corporate philosophy of "Dream up the future" indicates our stance of opening up the future through innovation and contributing to the resolution of social problems.

In fact, since the establishment of NRI in 1965, we have been contributing to the creation of a safe, secure, convenient, and prosperous society by solving social issues together with our clients via

NRI Group Sustainability Management and Future Vision

Sustained growth of the NRI Group

Realize a Sustainable Future

Corporate philosophy “Dream Up the Future”

NRI Group Sustainability Management

Share the Next Values!

[Vision 2022 Numerical Targets]

Consolidated operating profit (JPY billion) 100
Consolidated operating profit margin 14% or higher
Overseas sales (JPY billion) 100
ROE 14%*

*Continuously aiming for higher capital efficiency

Solving social issues through value co-creation (CSV')

Co-create a thriving future society by driving new value
Co-create an ideal society by effectively utilizing its resources
Co-create a safe and secure society by advancing its infrastructure

Key issues for sustainable growth

Creation of a future low environmental impact society
Compliance with laws, regulations and risk management to increase trust from society

Provision of opportunities for all kinds of professionals to take on challenge
Provision of NRI quality to support safe and secure information society
our core business of consulting and services such as IT solutions. We hope that the NRI Group itself can continue to grow by contributing to the creation of a sustainable society by solving social issues. This is the basic concept of sustainability management of the NRI Group. The sustainability management of the NRI Group is based on the financial targets defined in our Medium-Term Management Plan 2022 and the other two non-financial goals linked with our growth strategy, which are "solving social issues through value co-creation" and "key issues for sustainable growth."

### Co-create Social Value with our Customers to Realize a Sustainable Future

<table>
<thead>
<tr>
<th>NRI Group’s 3 Social Values</th>
<th>Key NRI Group Initiatives</th>
</tr>
</thead>
</table>
| **Co-create a thriving future society by driving new value.** | • Business Model Transformation  
  • DX consulting & analytics  
  • D2C, DX for financial services  
  • Cross-sector cooperation, new market entry support  
  • Policy proposals for society & systems, information & knowledge sharing to promote global discussion & action in all sectors |
| **Co-create an ideal society by effectively utilizing its resources.** | • Business Process Transformation  
  • Strategy/Operations/System Consulting  
  • Resource Optimization with ASP  
  • "STAR", "BESTWAY" and other proprietary business platform solutions |
| **Co-create a safe and secure society by advancing its infrastructure.** | • IT Infrastructure Transformation  
  • Cybersecurity business  
  • Cloud & Data Center managed services  
  • Stable Service Operation  
  • Disaster Prevention & Reduction Policy & Disaster Recovery Support |

* Acronym for “Creating Shared Value,” Achieving both social value and economic value.

### Resolution of Social Issues via Value Co-Creation (Efforts for CSV)

The concept of CSV*, which has been gaining attention in recent years, is already embedded in the NRI Group’s philosophy of "Dream up the future," and the NRI Group has been promoting corporate management that creates value that can be shared with society. The NRI Group broadly categorizes the social value it creates into the NRI Group’s 3 Social Values.(Left table)
The various initiatives of the NRI Group, including activities for a post-corona world, have created these three social values.

In addition, in order to establish value co-creation throughout the NRI Group, we are developing a program to select and develop value co-creation leaders from various departments who will drive activities to spread value co-creation within the company.

Key Issues for Sustainable Growth

In promoting growth strategies and "solving social issues through value co-creation," the foundation is addressing "key issues for sustainable growth."

With reference to international standards and guidelines, opinions of experts, etc., we identify issues that should be considered when thinking about sustainable growth, and identify high-priority items from the perspectives of management and external stakeholders. These are summarized as four "key issues for sustainable growth." (Table below)

<table>
<thead>
<tr>
<th>Materiality for sustainable growth</th>
<th>Issue</th>
</tr>
</thead>
</table>
| Reduction of environmental impact for preserving global environment | • Response on climate change  
• Responsibility and conservation to the environment  
• Sustainable energy consumption  
• Environment-conscious supply chain |
| Provision of opportunities for all kinds of professionals to take on challenge | • Human resource diversity  
• Customers interaction  
• Respect on human rights  
• Dialogue with civil society  
• Healthy employment and labor-management relationship |
| Compliance with laws, regulations and risk management to increase trust from society | • Enhancement of corporate governance  
• Action against corrupt practices abroad  
• Risk management  
• Appropriate information disclosure to the customers |
| Management of the information systems that form social infrastructure | • Management of information security and system  
• Access to information society |
From the three perspectives of environment (E), society (S), and governance (G), we are promoting ESG activities to curb negative impacts in response to “key issues for sustainable growth.” This aims at the transformation of society itself. (Table below)

Today, various changes throughout the world are required for the realization of a sustainable society. The NRI Group aims to solve social issues through co-creation with various partners by gaining insight into the ideal society and taking on the challenge of social transformation.

### Taking Up the Challenge of DX3.0 to Transform Society Itself

The NRI Group has promoted DX1.0, which realizes process transformation and infrastructure transformation, and DX2.0, which realizes business model transformation. These aim to transform client companies and industries. Now, the NRI Group will take on the challenge of DX3.0, which will transform the paradigm of society through DX.

<table>
<thead>
<tr>
<th>NRI Group’s Digital Business Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Social transformation</strong></td>
</tr>
<tr>
<td><strong>DX2.0</strong></td>
</tr>
<tr>
<td><strong>DX1.0</strong></td>
</tr>
<tr>
<td><strong>Client / industry transformation</strong></td>
</tr>
</tbody>
</table>

#### Solving social issues through co-creation with various partners
- Regional revitalization via digitalization and entrepreneurial assistance
- Low carbon transformation and resource saving via digital solutions

#### Establishing unprecedented digital services
- Creation of new cross-industry platforms
- Creation of new client business models and ecosystems

**Digital front office**
- Digitalize actions for end users
  - D2C*, CRM, digital marketing

**Digital back office**
- Digitalize actions within client companies
  - SCM reforms, AI/RPA, business platforms

**Enhance infrastructure such as cloud/security infrastructure**
- Cloud migration assistance, managed services, cybersecurity business

*D2C stands for Direct to Consumer, or direct sales through e-commerce, etc.*
Proposals regarding Coronavirus Infection (COVID-19) measures

As the NRI Group, we continue to disseminate information on measures against COVID-19 from various perspectives

The threat of COVID-19 has made a big difference in our lives and business environment. NRI regards the dissemination of information on measures against COVID-19 as the mission of think tanks, and started issuing "Proposals regarding Coronavirus Infection (COVID-19) measures" from the beginning of the spread of infections. In addition, we investigate and analyze the actual living conditions under the COVID-19 pandemic, the usage of support measures, and the DX of society and industry in a post-coroa world, and then widely disseminate the results to society. Of course, we are also helping with measures to prevent infections in our clients' business environments.

The NRI Group will continue to respond to COVID-19 from various perspectives and through various methods in order to meet the needs of society.
Information dissemination from the NRI Group

Including "Proposals regarding Coronavirus Infection (COVID-19) measures," we frequently publish a wide range of information in newspapers, magazines, on our website, and other media.

In response to the spread of COVID-19, the Japanese government issued a state of emergency in seven prefectures: Tokyo, Kanagawa, Saitama, Chiba, Osaka, Hyogo, and Fukuoka, on April 7, 2020, and the target was expanded sequentially nationwide. Prior to that, NRI began disseminating proposals from various perspectives as "Proposals regarding Coronavirus Infection (COVID-19) measures."

So far, 54 proposals have been made, and the content of the proposals is wide-ranging, including public (policy), consumer, management, industry, and global perspectives.

In addition to being disseminated through the NRI website, the information was also picked up by the media, and many articles on the content of the proposals as well as interview articles and contributions by President Konomoto were published.

In addition, information is also disseminated through videos, and the NRI Dream Up the Future Center picks up various themes related to COVID-19, and provides explanations and opinions from experts.
Measures against COVID-19

Example of information dissemination

Our investigation and analysis of consumers' sense of anxiety about using railways was featured by many media outlets.

Among our "Proposals regarding Coronavirus Infection (COVID-19) measures," the one featured most frequently in the media was the 51st proposal published on September 16, 2020 titled "Awareness of Railway Use during the COVID-19 Pandemic and the Potential for Business Focusing on 'Local Neighborhoods.'"

NRI conducted a survey* of people aged 20 to 69 nationwide to understand the reasons for their anxiety toward using railways (other than bullet trains) and their intentions to use them in the future. As a result, it became clear that more than 80% of users feel anxiety onboard trains, that they want to avoid bad manners, coming face-to-face, and crowding, that if they feel anxious about infection in the future, their intention to use railways and buses would be halved. In response to this, we proposed the need to create and revitalize businesses, including non-transportation businesses, at railway companies.

*Outline of "Survey on Railway Use Under the Spread of COVID-19 Infections" (Senior System Consultant, Noriko Sano)
  • Survey method: Internet survey
  • Subject: Men and women aged 20 to 69 nationwide
  • Number of valid responses: 2,074 people
  • Implementation period: September 4 to 5, 2020

Degree of congestion that makes you avoid boarding the train (N=1,916)

Transportation method you want to use in the future (N = 2,074)
Example of information dissemination ②
Dissemination of survey results through news releases and other media

Report on the actual situation of "virtual unemployment" and "isolation from support" that are rapidly increasing due to the COVID-19 pandemic

We conducted a survey of 64,943 part-time workers nationwide, of which 6,232 have decreased shifts due to the impact of COVID-19*, and ascertained the actual situation of leave and the usage status of support measures. As a result of the survey, it was estimated that 1,031 million women and 434,000 men are virtually unemployed (shifts decreased by more than 50% and have not received leave allowances).

In addition, about 50% of these virtually unemployed people responded that they were unaware they could receive a leave allowance even if the shift was reduced, or of “The support fund and allowance for the leave forced to be taken under the COVID-19 outbreak.”
This result was covered by many media outlets and received attention from the Japanese government.

* Outline of "Survey on the Actual Situation of Part-time Workers"
(Shinichiro Umeya, Director, Institutional Strategy Laboratory, Kana Takeda, Senior Consultant, Dream Up the Future Center)
• Survey method: Internet survey
• Subject: Part-time workers aged 20-59 nationwide
• Number of valid responses: 64,943, of which 6,232 have decreased shifts due to the impact of COVID-19
• Implementation period: February 8-12, 2021

Example of information dissemination ③
NRI Voice Program for Audio Distribution
Illustrating the issues of industry, society, management and the direction of digital utilization

NRI Voice is a program for audio distribution in which experts belonging to the NRI Group delve into topics and deliver various business tips in a series of themes for each field of specialty.
As for topics related to COVID-19, we are delivering an audio program of a four-part series entitled "Post-Corona: How will Japan's industry, society, and management change?"

NRI Voice can be heard on the NRI website and is also distributed via podcast.

Audio distribution
"Post-Corona: How will Japan's Industry, Society, and Management Change? Episode 1: The Current Status of With / Post-Corona" (Kotaro Kuwadu, Director and Research Director, Dream Up the Future Center)
Measures against COVID-19

Example of measures with clients to prevent COVID-19 infections

Development and implementation of a Scan Cart that enables non-face-to-face shopping in a short time

York-Benimaru Co., Ltd. (Headquarters: Koriyama City, Fukushima Prefecture), a supermarket chain, has introduced a Scan Cart that allows you to scan product barcodes while shopping. NRI cooperated with the development and started a demonstration experiment at the Katahira store in Koriyama city in August 2019. Since then, the number of stores that have introduced the Scan Cart has steadily increased. If you set your own bag in the cart, you can shorten the shopping time without having to put items in your bag again after payment at the cash register.

Non-face-to-face and short-time shopping is popular because it helps prevent the spread of COVID-19. It also saves on labor at the cash register and provides a new style of shopping experience.

[Shopping procedure]
Customers proceed with shopping while scanning the barcode of the product by themselves. Finally, customers scan the QR code on the cart screen at the Scan Cart dedicated cash register, and then pay for all the products at once.

The Scan Cart is equipped with a tablet terminal attached to a scanner, and a weight sensor. This equipment scans products when they are placed in the basket.
Example of measures with clients to prevent COVID-19 infections②

Reproducing a university campus in the "scrum gate" virtual space
Aiming to revitalize communication

Due to the COVID-19 pandemic, university students have been restricted from attending campus for long periods of time. NRI Netcom Co., Ltd. has been working with students from the Department of Intelligent Media Engineering, Faculty of Advanced Engineering, Chiba Institute of Technology to embody the problems of student life under the COVID-19 pandemic and seek out ideas to solve them. One of the solutions is "scrum gate." This recreates a university campus in a virtual space, allowing students attending the same university to communicate with each other. A distinctive function is the "bubble" in which students formulate original projects according to their individuality and interests, and people who are interested gather there to communicate.

In the future, we are considering supporting student life from various angles by conducting interactive activities online at any time and place, such as job hunting support and inter-university activities. Even after COVID-19 ends, we will continue to develop this technology so that it can be used as a next-generation communication tool that enriches campus life.

Discussion with students
Dream Up the Future Forum 2020
COVID-19 and Socioeconomic Paradigm Shifts

The world is in unprecedented danger due to COVID-19, and our lives changed significantly in 2020. Dream Up the Future Forum 2020 was held at a physical/online hybrid venue under the theme of "COVID-19 and Socioeconomic Paradigm Shifts."

The forum analyzed the impact of the rapid advancement of digitalization on our lives, work, and values, and offered recommendations related to the possibilities for business in the post-corona era and the importance of digital social capital development. The forum also examined the social and economic possibilities of the post-corona era, drawing on special lectures and dialogues from invited experts.
[Keynote Address]

Developing Digital Social Capital for the Post-Corona Era

Shingo Konomoto, Chairman and President & CEO, Member of the Board, Nomura Research Institute

A review of global quarterly GDP shows substantial and near-universal damage in both advanced and emerging economies as a result of the coronavirus pandemic. Many observers believe that the effects of the coronavirus pandemic will continue to be felt for some time, with some predictions anticipating weaker economic recovery in Japan than in Europe and the United States.

Paradigm Shift Created By the COVID-19 Crisis

The coronavirus pandemic has brought economic activity to a standstill, while simultaneously creating two paradigm shifts toward “temporal freedom” and “spatial freedom.”

Telework has sharply reduced the time spent on commuting and transit, and has drastically increased the ‘disposable time’ available to individuals. According to NRI’s calculations, telework could free up as much as 3.73 million hours of commuting time per day in Japan as a whole, and this increase in disposable time could lead to 2.2 trillion yen per year in additional consumption.

In addition, the effects of the spatial freedom created by the drive toward online (non-face-to-face) interactions as a result of the dramatic behavior modifications of refraining from traveling can be seen, for example, in the increase in online store sales and the expanding ability of entertainment businesses to attract customers.

Productivity Innovation through Telework

A survey conducted by NRI found the number of employees with telework experience to be approximately 30% for Japan as a whole, and roughly half in the case of major Japanese corporations with 1,000 or more employees. (NRI "International Comparison Survey on Living Conditions With COVID-19" July 2020)

Telework not only makes effective use of time, but also has benefits such as reduced anxiety about infection and a lower physical burden.
Many people have discovered monetary value in telework as well. When asked, "Are you willing to accept a lower income if you can choose/continue to work at home", approximately 25% of respondents, particularly those in their childrearing years, responded that they were, and the average amount indicated was 12,758 yen/month. (NRI "Survey On Changes in Working and Lifestyles Through the Use of Telecommuting" July 2020) This is equivalent to roughly half of the 25,369 yen/month in non-statutory benefits paid per employee by Japanese corporations.

It is often noted that telework leads to declining productivity, but verification tests within NRI found that the impact of telework-related productivity declines was limited, and that improved work-life balance was actually connected to improved productivity. In order to improve telework, it is important to exercise ingenuity at the micro level to prevent communication breakdowns, and search for new ways of working that combine telework with occasional commuting to the office.

New Business Models for the Post-Corona Era — The Rise of Category-Specific D2C Business

In the U.S., online businesses have expanded swiftly due to the "spatial freedom" of online work, and many D2C (Direct to Customer) brands have come on the scene. In the D2C business, a company promotes their brand story on their own website, creates a customer community online, and expands business. Attention is being paid to "Shopify," a platform that supports this kind of D2C business and is growing rapidly by supporting EC business for consumer goods. It provides all-in-one digital marketing, payment, inventory management and delivery, and is used by 1 million websites in 175 countries around the world, with a total distribution amount of 20 trillion yen. With the appearance of such platformers, various category-specific D2C businesses specialized for apparel, food, and other categories are rapidly emerging. Dense cultures and communities are formed by presenting the ‘value of experiences that only happen here’, and business models that excite new demand by gradually incorporating such value will become the new dominant trends of the post-corona era.
What is Important for the Development of Digital Social Capital?

In Japan, the government is expected to promote digital policies robustly, but the current uptake of “My Number” national identification cards stands at only 24.69 million (as of September 2020), less than the targeted penetration rate of 30% (approx. 40 million). It is certain that if the barriers to digital ID implementation for citizens are not overcome, the digitalization of national and local government activities will not move forward.

Progress management based on KPIs is also important for the development of digital social capital. In the latest values released for the DCI (digital capability index) digital economic/social performance indicator proposed by NRI in 2019, results showed that the biggest gap between Tokyo and other prefectures was in the area of IT-related “human capital”. To raise the floor for digital human capital in regional areas, staff dispatching and the like from central government agencies and corporations in metropolitan areas will become essential policies.

So, to what kind of new society structure can we connect the COVID-19 pandemic?

In retrospect, the industrial social capital model that was dominant until the end of the 20th century centered on infrastructure investments aimed at reducing temporal distance; these investments, in combination with mass-produced technologies from corporations, drove quantitative economic expansion. By contrast, the aim of 21st-century digital social capital is to transcend the limits of time and space. This new paradigm emphasizes “lifestyle abundance”, in which people engage in economic and social activity without being constrained by time and space, while maintaining and enhancing their state of physical, emotional, and social satisfaction (well-being).

What’s important for Japan today is to create big ideas about how we will direct the new society brought about by the coronavirus pandemic toward the future.

![Diagram of industrial and digital social capital](image-url)
The various social changes caused by the coronavirus crisis point the way to a ‘new normal’ for the post-corona era. The key to understanding this transformation is the behavioral changes that are already occurring. When people order meals online, or hold meetings and classes online, those behaviors can become deep-rooted life activities that will remain normal even after the coronavirus crisis. This digital new normal can be seen in a number of business sectors, including retail, restaurants and bars, tourism, healthcare, and education. Keywords that define new normal include "digital," "adaptability," "resilience," and "diversification." Person-to-person interactions mediated by digital space will be an essential aspect of the digital age. Companies will be required to adapt to unforeseen economic conditions and new business environments, and investment in strengthening resilience will increase. The movement to reconstruct business models and the need to pursue business diversification will intensify.

With the progress of digitalization, the world is much more equal than ever, now that much of consumption and experiences are provided digitally. We need to redefine the measure of inequality and develop metrics for a world where digital channels are mainstream. Also, we have spent no time at all on system design for the digital world. As the transition of spaces of human interaction into the digital realm accelerates, it is necessary to redesign the structure of the digital world and begin consciously designing the digital world we want to live in.

[Arun Sundararajan]
Professor at NYU Stern School of Business. Specializes in corporate, government, and social transformation through digital technology. Published the book "The Sharing Economy" and contributes to major media outlets such as the New York Times. A member of World Economic Forum’s Global Future Councils on Technology, Values and Policy and the New Economic Agenda. After graduating from the Indian Institute of Technology, obtained a Masters in Management Science and a PhD in Business Administration from the University of Rochester.
[Special dialog]

Japan Representative to the World Economic Forum
Makiko Eda

Nomura Research Institute Chairman and President & CEO
Shingo Konomoto

Business Requires a Perspective Stressing Long-Term Value, and Flexible and New Approaches to Work

Eda: In The Great Reset, a recent book on the post-corona world by World Economic Forum* founder Dr. Klaus Schwab, it was suggested that the global crisis of the coronavirus pandemic should be treated as a precious opportunity to rethink and reset our world, and to create a richer and brighter future.

Konomoto: ESG and SDGs are currently major managerial issues for Japanese companies, but I think we must strengthen the approach of starting by sketching out an image of an ideal society, and then backcasting from that image and debating what you can achieve. It is necessary to integrate a lot of different stimuli from a more global perspective.

Eda: I agree. To move global-scale challenges in a positive overall direction, the role of corporations must include the perspective of long-term value as well as short-term profits. Managers around the world are actively debating how to seize the reins of this transition; I would like to see Japanese companies make their voices heard as well.

Konomoto: What do you think needs to be done to ensure that this new approach to work, in which Japan has integrated telework, takes hold?

Eda: Our community may not be viable unless women and men share housework, education, and care, and work flexibly by incorporating remote work. Managers need to consider the happiness of employees and their families, and make decisions in the direction of further growth of the company, rather than make decisions based on peer pressure from other companies doing the same thing.

* World Economic Forum: Nonprofit international organization founded in 1971, in which government, private-sector, and civil leaders (international organizations, academic organizations, NGOs, etc.) gather to try to solve global challenges on the basis of an Agenda (action plan).

[Makiko Eda]
Co-creation of a thriving future society

Supporting the Sustainable Growth of Companies

Providing Purpose Consulting that redefines the significance of the existence of companies and organizations in society

With the progress of globalization, the major trend of sustainability management, and the increasing uncertainty in the business environment, the "centripetal force" that unites the organization for effective execution of strategy is increasing in importance. By providing an environment in which the company/organization and every employee reconsiders, redefines, shares, and resonates with “the meaning of existence in society” (purpose), the company can gain great power toward the realization of its strategy.

By promoting management and business based on a common purpose that stakeholders inside and outside the company can also sympathize and resonate with, and communicating with them, companies will also gain the trust and sympathy of their stakeholders. From the employees' point of view, effects can also be expected such as increasing the centripetal force of the organization and making it easier to feel the meaning and pride in working. As a result, it will become possible to accelerate the execution of strategies.

NRI will support our clients through Purpose Consulting, which redefines the meaning of the existence of companies and organizations and instills common values.
Co-creation of a thriving future society

Meeting the New Insurance Needs of Consumers

Release of a completely online business package "InsDirect / MP" for mini insurance with diversifying needs

A small-amount & short-term insurance system was introduced through the revision of the Insurance Business Act. Along with this, small-amount & short-term insurance (mini-insurance) has been developed that provides only the necessary amount at the necessary timing for limited risks that were not covered by conventional insurance and mutual aid, such as medical insurance that can be taken out even if you have a chronic disease, and compensation / warranty extension service for electrical appliances. Also non-insurance companies such as retailers and platformers* are increasingly entering the market as mini-insurance providers.

In addition to these companies, NRI released InsDirect / MP, a mini-insurance business system package for the existing insurance industry, in September 2020. This package streamlines system deployment and reduces verification work when investigating the impact of system modifications. Therefore, it is possible to flexibly formulate and modify product strategies and sales strategies while checking the needs of policyholders.

NRI will continue to work on the digital transformation of the insurance industry to meet the new insurance needs of consumers and increase their peace of mind in daily life.

* Companies that provide IT services to companies and individuals on a large scale.
Co-creation of a thriving future society

Supporting the Development of the SDGs Bond Market

Commenced provision of NOMURA-BPI SDGs which are useful for evaluation and analysis of SDGs bonds.

Recognition of the United Nations Sustainable Development Goals (SDGs) has been increasing. Along with this, green bonds issued for the purpose of raising funds for solving environmental problems including for global warming countermeasures and renewable energy, social bonds for the purpose of addressing social issues, and sustainability bonds which have the characteristics of both (hereinafter collectively referred to as "SDGs bonds") are attracting attention internationally.

Therefore, Nomura Securities Co., Ltd. and NRI jointly developed the NOMURA-BPI* SDGs index that shows the trends in the secondary market of SDGs bonds issued in Japan, and started publicly disclosing the index in November 2019. This will help investors evaluate and analyze individual SDGs bonds and is expected to revitalize the SDGs bond market.

NRI will continue to contribute to the sustainable development of the economy and society, and will promote efforts to achieve the SDGs.

* An investment return index developed in 1986 to show trends in the entire secondary market for publicly offered fixed-rate bonds issued in Japan, and widely used by many investors, including pension managers. NOMURA-BPI SDGs is one of its sub-indexes.
クーポンを使う

カフェテリアポイント

保存数 100

クーポンを使う

使う数を入力して下さい。

使う数

100

使う
Co-creation of a thriving future society

Realizing a New Way of Finance in the Capital Market

Issued Digital Asset Bonds and Digital Bonds as Japan's first corporate bonds utilizing blockchain technology

In March 2020, NRI was the first Japanese company to issue Digital Asset Bonds and Digital Bonds, which are corporate bonds that utilize blockchain technology. BOOSTRY Co., Ltd., which provided the technology, is a joint venture established by Nomura Holdings, Inc. and NRI, and provides the system for the ibet blockchain platform.

Digital Asset Bonds are issued via self-recruitment to directly solicit investors, and NRI recruited investors through a smartphone app connected to ibet. Instead of interest, digital assets (points that can be used at cafe stores in this case) are awarded. This is a new financing method that does not involve financial institutions for sales and interest payments. Digital Bonds are issued by Nomura Securities Co., Ltd. by underwriting securities to solicit investors. Both corporate bonds enable the issuer to continuously and immediately identify the corporate creditors, which is difficult with conventional corporate bonds. These corporate bonds also simplify the administrative burden and realize new connections between issuers and investors.

The NRI Group will realize a new way of finance by providing society with a new foundation to support the activities of business corporations.
Co-creation of an ideal future society

Contributing to the Promotion of Digital Government

Promoting efforts toward the realization of digital government by creating usage scenarios for My Number

NRI is actively working toward the realization of a digital society and digital government that utilizes the My Number Card, which is a new social infrastructure.

In FY2020, the number of users of the e-NINSHO* identity verification service using the My Number Card expanded, and the number of companies using this service / number of applications is the largest in the private sector.

We also contributed to the digitization of year-end adjustments and income tax returns for life insurance premium deduction certificates, mortgage balance certificates, and annual transaction reports through the Mynaportal. In FY2021, we will double the number of organizations issuing these certificates and other documents, and strive to expand the scope of use to also include earthquake insurance premium deduction certificates, hometown tax payments, and more.

NRI will contribute to promoting the utilization and improving convenience of the My Number Card by continuing to create usage scenarios.

* An identity verification service for public personal authentication by using the My Number Card
Co-creation of an ideal future society

Innovating Your Business with AI

Contributing to improving the quality and productivity of call centers, which are the "face of the company" in the DX era

Many goods and services are being sold online, reaffirming the importance of call centers as a point of contact for customers. However, it is not easy to hire and train human resources who have knowledge of products and services, ability to respond to inquiries, and IT skills to operate terminals, and there is an urgent need to improve the quality and efficiency of operations.

Sumitomo Mitsui Trust TA Solution Co., Ltd.* implemented NRI's AI-equipped TRAINA system as a solution to these issues. AI analyzes the text-converted call voice, and by using a function to automatically display the necessary materials, and a function to summarize sentences and support the creation of response records, the quality and productivity of operator response and work was improved. In addition, when one of the two call centers became inoperable because of a power outage due to an earthquake, and operation was switched exclusively to the remaining center, the system enabled the service to continue without significant impairment of the response rate. The system has achieved good results like this and has the secondary effect of increasing the resilience of the business to crisis situations such as disasters.

NRI will continue to contribute to solving the problems of call centers, which are the "face of the company" in the DX era.

* Sumitomo Mitsui Trust Group manages call centers related to the securities agency business.
Inspection vehicle that takes photos and measurements while running at a maximum speed of 80km/h without restricting traffic (Provided by Mitsui E&S Machinery Co., Ltd.)
Co-creation of an ideal future society

Contributing to Social Infrastructure Maintenance Through the Realization of DX

Joint development of an AI automatic analysis system for road crack inspection work together with our customers

In recent years, while the need for surveys and inspections of aging roads, tunnels, and other social infrastructure has increased, the shortage of engineers has become more serious, and therefore operational efficiency is required. NRI and Mitsui E&S Machinery Co., Ltd. have jointly developed a system that AI automatically samples and analyzes cavities under the road surface, cracks on the road surface and the concrete surface of tunnel lining, etc. from non-destructive inspection imaging such as the "Tunnel Lining Surface Photography System"*. Currently the two companies are preparing for the start of operation for this system.

The introduction of AI will reduce the workload of data analysis, streamline inspection work, level out analysis fluctuations due to differences in the subjectivity and skills of engineers, and improve inspection accuracy. This will save 70% of the time required for cavity analysis and 90% of the time for sampling cracks on the road surface. As AI learning advances, it is expected that the accuracy and quality of inspections will improve further.

In the future, it is expected that diagnosis using AI will become the standard for inspection work of roads and tunnels in regions all over Japan.

Through the realization of DX, NRI will contribute to the transformation of social infrastructure conservation activities.

* A system jointly developed by Mitsui E & S Machinery Co., Ltd. and Tonox Co., Ltd.
Co-creation of a safe and secure society

Utilizing Big Data to Discover Issues in the Field of Disaster Prevention

Analyzing evacuation activity when a typhoon hits from population migration analysis and making recommendations for disaster prevention and mitigation

In Japan, where flood damage caused by heavy rains occurs almost every year, it is thought that sudden and local flood damage will continue to occur frequently. As such, the formulation and improvement of disaster prevention plans is an urgent issue. It is necessary to understand the current status of evacuation activity in order to make a plan to encourage residents to evacuate appropriately.

KDDI CORPORATION and NRI used big data on the mobile phone location information of licensed users to visualize and analyze what people did when a typhoon hit. As a result, at the time of the typhoon, although self-restraint actions such as not going out and staying at home were properly performed, it was suggested that there was a tendency for not starting evacuation activity when the evacuation advisory was issued, and being at home until just before flood warning information was issued. As a future issue, NRI has suggested that it is necessary to conduct activities to raise awareness about evacuation to places that could more easily serve as evacuation destinations, such as parents' homes.

NRI will continue to make proposals that can be utilized in countermeasures, taking into account the needs of local governments and other organizations.
AI for Financial Integrity on eXchange
Co-creation of a safe and secure society

Contributing to the Sound Development of the Financial Instruments Market

Utilizing AI to enhance and streamline the market surveillance operations of securities companies

Securities companies are obliged to carry out market surveillance to monitor transactions by investors and alert customers if there is a suspicion of unfair transactions. In recent years, unfair trading such as market manipulation has become complicated and sophisticated by using multiple securities companies, and it is difficult to discover with just the transaction data held by the securities company alone.

Daiko Shoken Business (DSB Co., Ltd.) of the NRI Group has commenced market surveillance operations using AIFIX®, which is an AI-based unfair trade detection algorithm developed by DSB Information Systems Corporation Co., Ltd. AIFIX was developed based on industry-academia collaborative research with the Matsuo Laboratory led by Professor Yutaka Matsuo of the University of Tokyo. By incorporating sensing / detection logic into the current market surveillance process, market surveillance operations have been greatly streamlined. In addition to the recommended cases of the Securities and Exchange Surveillance Commission, it is possible to sense and detect with high accuracy the cases for attention through securities companies' marketing surveillance. You can also get clues to discover buying and selling suspected of market manipulation across securities companies.

The NRI Group will support the streamlining of market surveillance operations of securities companies and the realization of deep trading examinations, and will contribute to the sound development of the financial instruments market.
Co-creation of a safe and secure society

Creating a Safe and Secure Information System Environment

Strengthening the security of telework and multi-cloud environments and supporting the realization of "Zero Trust" for companies and organizations

With the spread of telework and cloud services, the locations where information assets are placed are diversifying, and the digitalization of businesses is progressing. The traditional security model is to protect the internal and external boundaries, assuming that the information assets are inside the boundaries. However, as countermeasures are becoming insufficient with this model, an increasing number of companies and government agencies are considering applying the concept and framework of "Zero Trust."

"Zero Trust" is a new concept of security that does not distinguish between the inside and outside of a network. Under this concept, all information assets that should be protected and the systems that access them are verified without trusting any of them.

NRI and NRI SecureTechnologies Co., Ltd. are providing comprehensive support for organizations aiming to apply zero trust to information systems, from current status evaluation to overall design and implementing solutions.

The NRI Group will contribute to the realization of a safe and secure information system environment and society by providing various services and products that support the realization of zero trust at companies and organizations.
Activities to Spread "Value Co-Creation"

NRI is promoting the realization of value co-creation toward contributing to solving social issues, which has not changed since its founding.

We report on the activities to spread value co-creation that each NRI Group employee is carrying out, which involves thinking about the existence value of NRI and what "value co-creation" is, finding out the role that they should play, and putting it into practice.

The sentiment behind "Value Co-Creation"

Realize value co-creation for contributing to solving social issues

With its mission of "discerning the future society and assume the role of implementing it" and its philosophy of "building customer trust and prospering together with customers," NRI has been working to co-create a sustainable future toward solving social issues since its founding in 1965. This is the origin of our attitude toward work.

In our Medium-Term Management Plan 2022, we announced that we have newly defined the NRI Group's 3 Social Values and will pursue NRI Group’s value co-creation in order to realize sustainable growth of the NRI Group.

<table>
<thead>
<tr>
<th>NRI Group’s 3 Social Values</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Co-create a thriving</strong></td>
</tr>
<tr>
<td><strong>future society</strong></td>
</tr>
<tr>
<td>Strive to create a future of continuous new value generation that leads to an abundant and safe society where all benefit.</td>
</tr>
<tr>
<td><strong>Co-create an ideal</strong></td>
</tr>
<tr>
<td><strong>society</strong></td>
</tr>
<tr>
<td>Strive to build a more livable society for all people by efficiently utilizing society’s main resources of manpower, goods, capital and intellectual property to develop dynamic, strong industry.</td>
</tr>
<tr>
<td><strong>Co-create a safe</strong></td>
</tr>
<tr>
<td><strong>and secure society</strong></td>
</tr>
<tr>
<td>Strive to build a society safe and secure from accidents and disasters by strengthening cybersecurity for information systems and other core social infrastructure.</td>
</tr>
</tbody>
</table>
Creating a space to think about "Value Co-Creation"

Connecting through value co-creation

In order for the NRI Group to grow sustainably, it is necessary to engage in businesses that help solve many social issues that are occurring on a global scale and to continue to be indispensable for the world. The Value Co-Creation Promotion Committee plays a central role in creating spaces for various activities such as Value Co-Creation Leader Network Activities, Value Co-Creation Day, and Value Co-Creation Activities Tomo no Kai. NRI Group executives and employees deepen their thinking about NRI Group’s value co-creation and hold dialogs.

Value Co-Creation Leader Network Activities

In order to spread "solving social issues through value co-creation" as NRI’s DNA within the company, we appoint Value Co-Creation Leaders from among the young to mid-career leaders who will lead the future of NRI and value co-creation, and expand the way of thinking and activities regarding value co-creation. The goal of this activity is to incorporate value co-creation into our business activities, to remind each employee of the connection between current business and society, and to change behavior toward new challenges. Value Co-Creation Leaders take the initiative in taking on various challenges in order to foster their own perspectives on solving issues for creating social value. In addition, we share our awareness and thoughts gleaned through our activities through dialogue.
Internal award system for evaluating efforts for value co-creation

The NRI Dream up the Future Awards

The NRI Group presents the Dream up the Future Awards to employees and teams who have made efforts to contribute to the sustainable growth of the NRI Group via the resolution of social issues and co-creation with our clients.

This section provides a report on the Dream up the Future awards for FY2020.

**Value Co-Creation Award**
(newly established in FY2019)

Awarding employees and teams that create one of three types of social value unique to NRI (co-creation of an energetic future society, co-creation of an optimal society, and co-creation of a safe and secure society) via collaboration with our clients or other departments

**Special Recognition**

Awarding employees and teams that contribute to the resolution of social issues and activities suitable for a company creating future society, which do not correspond to the value co-creation award

**Dream up the Future Award 2020 Value Co-Creation Award**

Efforts from consulting to development for the spread of My Number

"My Number Business Union" Team

[Reason for award] Through the development of e-BANGO, which safely stores and manages important information regarding My Number, and e-NINSHO, which helps broadly realize personal authentication in the internet society, the team promoted efforts to encourage the spread of My Number, and in the My Number Point business, the team provided support for outsourced business such as setting up reservation and application terminals.

These efforts were praised for being an "all-NRI" value co-creation activity that includes consulting, systems, and security, and as a co-creation activity for the future society that contributes to the realization of digital government and the spread of My Number.
Dream up the Future Award 2020 Value Co-Creation Award

Development and provision of rights exchange platform utilizing blockchain technology
"Digital Asset Development Business" Team

[Reason for award] The team established a joint venture with Nomura Securities Co., Ltd. to develop a platform for exchanging rights (such as securities) utilizing blockchain technology. Through the development of technology and the provision of a new foundation for the maturity of society, we helped realize a new way of finance. We were among the first to come up with a mechanism that would work for practical use, and expanded our activities not only to Nomura Securities Co., Ltd. but also to other companies. Japan’s first digital bond was issued in March 2020, and it was featured by many media outlets and had a great impact on the Japanese financial market.

Project overview:
- November 2019: Established a joint venture company with Nomura Securities
- Developed the ibet platform for exchanging interests in securities, etc. using blockchain technology
- Created Japan’s first financial product utilizing various blockchains

Dream up the Future Award 2020 Value Special Award

Dissemination of more than 60 COVID-19-related reports by mobilizing the collective knowledge of experts
"Proposals regarding Coronavirus Infection (COVID-19) measures" Team

[Reason for award] The team quickly responded to public opinion seeking credible information by helping to disseminate 67 reports that looked at the impact of the new coronavirus and the future of the world. The proposals received a lot of feedback from domestic and foreign media, and greatly contributed to the improvement of the name recognition of NRI as a company that makes proposals to society.

Dream up the Future Award 2020 Value Special Award

Introduction of various digital solutions to prevent COVID-19 infections
"COVID-19 Countermeasure Solution Development" Team

[Reason for award] The team developed and introduced a digital COVID-19 countermeasure solution that can be deployed at companies. An infection control application was installed all at once on smartphones across the company, and a secure and comfortable telework environment was realized through the introduction of "aslead Remote."
This contributed to the improvement and maintenance of productivity in response to COVID-19 and provided a safe and secure working environment.
ESG Topics

ESG is an acronym for the three terms Environment, Social, and Governance, which are the three aspects that a company should emphasize in aiming for sustainable growth.

For companies, properly responding to the issues faced in each aspect is thought to be the driving force for the growth of a healthy company, which in turn enhances the sustainability of society as a whole.

Here, we report on ESG activities undertaken by the NRI Group, as well as social contribution activities and sustainability activities conducted by group employees.

Environmental Topics

The NRI Group cites "reduction of environmental impact for preserving global environment" as one of the materialities (important issues) in sustainability management.

In addition to expanding the "joint-use service" business, we have promoted activities to reduce greenhouse gas emissions for society as a whole, such as system migration to data centers with excellent environmental performance and relocation of major offices such as the head office to energy-efficient buildings.

NRI Group Greenhouse Gas Emissions Results and Targets (Scope1 + 2)

<table>
<thead>
<tr>
<th>Year</th>
<th>Greenhouse gas (Scope 1 + 2) emissions</th>
<th>Result</th>
<th>Planned</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>120</td>
<td>49% reduction</td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>80</td>
<td>72% reduction</td>
<td></td>
</tr>
<tr>
<td>2030</td>
<td>40</td>
<td>100% reduction</td>
<td></td>
</tr>
<tr>
<td>2040</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2050 (FY)</td>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Environmental targets

In FY2018, we obtained SBT certification from the Science Based Targets initiative (SBTi), an international environmental initiative, with a 2°C target that keeps global temperature rise to 2°C compared to before the Industrial Revolution. In response to the growing sense of crisis about global climate change, the target was revised from 2°C to 1.5°C in FY2020, and was certified by SBTi as a reduction target based on scientific evidence.

#### Initiatives for the TCFD Final Report

Since the NRI Group has a large number of clients in the financial industry, we expressed support for the TCFD Final Report* at an early stage for a business company other than a financial institution in July 2018. Regarding the response to TCFD, discussions are held by the Sustainability Promotion Committee together with experts from the Consulting Business Headquarters, and progress is announced at ESG briefing sessions.

In FY2020, we calculated the financial impact of the Asset Management Solutions Business Headquarters and the Consulting Business Headquarters, which are profit making divisions.

* TCFD (Task Force on Climate-related Financial Information Disclosures) recommended in June 2017 that companies should disclose corporate climate change-related information from the four aspects of governance, strategy, risk management, indicators and targets.*

#### Financial impact for Asset Management Solution Business = change in sales

<table>
<thead>
<tr>
<th>Less than 2°C scenario</th>
<th>(%)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adoption of carbon tax</td>
<td>-2.0</td>
<td></td>
</tr>
<tr>
<td>Enhanced disclosures</td>
<td>-1.0</td>
<td></td>
</tr>
<tr>
<td>Increased interest in ESG investments</td>
<td>-1.0</td>
<td></td>
</tr>
<tr>
<td>Intensification of natural disasters</td>
<td>-1.0</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>0.0</strong></td>
</tr>
</tbody>
</table>

In a 2°C or lower scenario, positive impact on sales is relatively larger, but in a 3-4°C scenario, negative impact on sales is larger.

<table>
<thead>
<tr>
<th>3.4°C scenario</th>
<th>(%)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adoption of carbon tax</td>
<td>-0.5</td>
<td></td>
</tr>
<tr>
<td>Enhanced disclosures</td>
<td>-0.5</td>
<td></td>
</tr>
<tr>
<td>Increased interest in ESG investments</td>
<td>-0.5</td>
<td></td>
</tr>
<tr>
<td>Intensification of natural disasters</td>
<td>-1.5</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>-2.0</strong></td>
</tr>
</tbody>
</table>
Publication of NRI's First Human Rights Report

In order to contribute to the creation of a sustainable society, we are promoting efforts to respect human rights based on the idea that it is necessary to understand the impact of business on human rights and to carry out corporate activities that are conscious of respect for human rights. In March 2020, we published our Human Rights Report that summarizes NRI's efforts to respect human rights. This report refers to the United Nations Guiding Principles on Business and Human Rights, a comprehensive guideline for businesses to report on human rights issues in accordance with their responsibility to respect human rights.

Development of a COVID-19 Infection Control App that Utilizes AI While Considering Privacy Protection

We developed the "Anti Coronavirus" anti-COVID-19 app exclusively for NRI Group employees. With this app, you can visualize the behavior history of the last 14 days in case of infection, receive alerts for infection prevention, and check internal rules regarding COVID-19. During development, in addition to user convenience, we considered safety and security assurance, data and privacy protection based on the NRI Group AI Ethics Guidelines. Data and notifications are saved locally on smartphones, and saved data is also automatically deleted in two weeks. We will continue to make efforts to utilize AI in accordance with the AI ethics guidelines while considering the impact of AI.
Corporate Governance Topics

Diversity & Inclusion Promotion Activities

Diversity & inclusion is regarded as the conversion of each employee's various strengths and individuality into the strengths of the organization. Accordingly, we are engaged in activities to promote diversity & inclusion such as provision of seminars for managers, career development support training for women, and e-learning for understanding sexual minorities.

As one of these activities, a joint workshop was held by NRI Mirai Co., Ltd., a special subsidiary to which employees with disabilities belong, and NRI's Financial Solutions Business Headquarters. Through the work of co-creation by employees of both companies, we experienced how to perceive the individuality of ourselves and the other person, and how to interact with one another.

Introduction of a Clawback System

We introduced a system (clawback system) that allows the company to request the refund of all or part of the bonuses paid within the past three years if the figures in the financial statements that are the basis for calculating the bonuses are corrected.

In addition, the stock-based compensation system with a transfer term stipulates a clause (Malus clause) that allows the acquisition of all of the granted shares free of charge if the grantee commits an act of misconduct.

NRI Group Procurement Policy And Revision of the NRI Group Business Code of Conduct

In order to strengthen responsible procurement (sustainable procurement) that takes human rights, environment, and safety and health into consideration, we revised the terms and expressions in the NRI Group Procurement Policy and NRI Group Employees' Code of Business Conduct, and newly established the NRI Group Business Partner Code of Conduct.
Dialog

ESG Briefing Session
In February 2021, we held an ESG briefing session for the media, institutional investors, and ratings agencies, with 106 people from 68 companies participating. We explained NRI’s sustainability management and highlighted the activities of the Value Co-creation Promotion Committee and ESG activities.

Sustainability Dialog with Partners
In January 2021, we held a sustainability dialog with 53 partner companies that make up the supply chain of our business. We shared awareness of problems such as climate change and other issues, and confirmed that we will work together to achieve new environmental goals.

Dialog with Experts
The fourth dialog with overseas experts was held in October 2020, and we exchanged opinions mainly on "company evaluation from the perspective of SDGs" and "how human rights initiatives should be disclosed" with the international NGO World Benchmarking Alliance, which is promoting the Sustainable Development Goals (SDGs). This year, it was implemented online in order to prevent COVID-19 infections.
Employee Education

ESG Education for Employees
In order to raise awareness among each and every employee, we are focusing on ESG education, such as creating a site that summarizes ESG information for employees and implementing e-learning. As one of those efforts, we created an educational video about ESG. The video explains the basics of ESG and its importance, and explains the environment, human rights issues, and the global ESG investment situation. This was jointly developed with Simpleshow Japan Co., Ltd., which is a video planning and production company, and is sold by Simpleshow as an educational ESG video for companies.

Social Contribution Activities

Support for Cultural Arts
As a gold sponsor, we co-sponsored the "Yokohama Triennale AFTERGLOW - Catching Fragments of Light" event held from July 2020. In addition, we have developed an appreciation support app for the Yokohama Museum of Art exhibition "Trialogue." This app was developed with the concept of wanting to improve your viewing experience by having parents and children think about the answers to the questions from the displayed characters. In addition, we are planning events where you can pick up the perspectives and ideas you need in your business through cultural arts.
Social Contribution Activities

Career Education Programs
We provide educational programs for elementary school students, junior high school students, and high school students, with the hope that younger generations will be able to choose their own future careers and professions and become adults who can demonstrate their abilities in society. Specifically, there is an "IT strategy experience program" where you can learn about the role that information systems play in society in a game format, and a "consulting experience program" where you can experience logical thinking and the process of solving familiar themes as issues with your team, and other programs as well.

NRI Student Essay Contest
Since 2006, we have set a theme every year for students who will lead future society, as we want to give them an opportunity to think about the future of Japan and the world.
In FY2020, 1,925 compositions were collected from high school and university students under the theme of "Sustainable Future Forecast - Toward the Construction of an Ideal Society."
In order to prevent COVID-19 infections, the final examination meeting was held online, where the authors of the papers remaining in the final examination gave presentations.
Sustainability Promotion Activities by NRI Group Employees

Implementation of food loss measures at a convenience store in the office
The convenience store on the 3rd floor of the Yokohama Nomura Building, where the NRI Group office is located, is operated by NRI Retail Next Co., Ltd. The goal of this store is to be the most eco-friendly convenience store in Japan. Using AI to verify the improvement of ordering accuracy, and initiatives using the LINE® messaging app to reduce food loss, has led to a reduction in the amount of food wasted.

Reusable bottle activity in the office
NRI Workplace Service Co., Ltd. promotes "My Bottle" (reusable bottle) activities as an eco-friendly activity that can be started at close hand. Instead of purchasing PET bottled beverages every day, we are expanding the circle of activities by using bottles and mugs and raising awareness of the situation internally.

Offering Japan Airlines (JAL) in-flight meals at the cafe in the office
At Japan Airlines Co., Ltd., the number of flights decreased due to the impact of COVID-19, and as a result, the use of in-flight meals was significantly lower than expected. In order to effectively utilize the discarded in-flight meals and reduce food loss, we added side dishes to the main dishes of the in-flight meals at the cafe and provided them at the cafe in the building where the NRI Group office is located. Both of the two menus we prepared were sold out in about 10 minutes from the commencement of sales.
NRI actively participates in sustainability-related initiatives. We declare our commitment to the principles and goals advocated by the initiatives, and strive toward transformation in our management and business activities. In fiscal 2019 we signed Business Ambition for 1.5°C.

**UNGC (United Nations Global Compact)**

The UN Global Compact is a voluntary initiative in which businesses and organizations operate as upstanding members of society and help create global frameworks for achieving sustainable growth by exercising creative, responsible leadership.

**WBCSD (World Business Council for Sustainable Development)**

The WBCSD was founded in 1995 to promote international interest and action pertaining to environmental conservation and economic development. Its purpose is to make sustainable development recommendations that come from the business world.

**JCI (Japan Climate Initiative)**

This network bolsters communication and exchange of opinions between various companies, local governments, groups, NGOs, and other non-national government entities that are actively working to counteract climate change.

**COOL CHOICE**

Based on the Paris Agreement, this is an initiative promoted by the Ministry of the Environment to achieve the goal of reducing greenhouse gas emissions by 26% in FY2030 compared to FY2013.

*An initiative is a group or the activities of parties that come together to tackle common problems or issues.*
RE100 (Renewable Electricity 100%)
This environmental initiative was established to reduce the environmental impact arising from business activities. Its goal is to meet 100% of power needs for business activities with renewable energy.

TCFD (Task Force on Climate-related Financial Disclosures)
NRI endorses the TCFD Final Report, established by the Financial Stability Board, an international organization for the stabilization of the global economy.

Science Based Targets initiative (SBTi)
This initiative seeks to have companies set reduction targets that are consistent with scientific knowledge in order to keep the average global temperature increase below 2°C.

Business Ambition for 1.5°C
A joint letter by the United Nations Global Compact (UNGC), Science Based Targets initiative (SBTi), and We Mean Business that requests corporations to set a target of limiting the future rise in temperature to 1.5 degrees Celsius.
Sustainability topics: By the numbers

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Nomura Research Institute, Ltd.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consolidated sales</td>
<td>550.4 billion yen (Fiscal 2020)</td>
</tr>
<tr>
<td>Market capitalization</td>
<td>2.0892 trillion yen</td>
</tr>
<tr>
<td>Number of employees (consolidated)</td>
<td>13,430</td>
</tr>
</tbody>
</table>

**Greenhouse gas emissions**

49% Reduction
Results from fiscal 2020 (compared to fiscal 2013)

 Targets for fiscal 2030
72% Reduction

**Number of employees at overseas offices**

3,518

**Ratio of employees at overseas offices**

26.2%

**Coverage ratio of environmental management system**

94%
(Based on FY2020 greenhouse gas emissions)

NRI concurrently implements ISO 14001 and our unique NRI-EMS

*Unless otherwise noted, the numerical values listed here are all current as of March 31, 2021.
Number and ratio of female managers
239  8.3%  
(as of April 1, 2021)
NRI has formulated an action plan based on the Act on Promotion of Women’s Participation and Advancement in the Workplace. Our target is to increase the ratio of female employees serving as managers to at least 8.5% by the end of fiscal 2022.

Ratio of annual paid leave taken
64.1%  
(Fiscal 2020)
Each office continues to implement independent measures for promoting the work-life balance of each and every employee.

Ratio of employees returning to work after taking childcare leave  
(Total for both men and women)
99.4%  
(Fiscal 2020)
273 employees took childcare leave, 208 of these employees were men.

Social contribution activity expenses
780 million yen  
(FY2020)
NRI selects public enterprises that match its goal of social contribution by contributing to the public interest and the interest of the general public.
Expenses for social contribution activities include the provision of money, the provision of goods, the opening of facilities, the activities of employees, and the research and development expenses for the creation of the future society and regional development.
ESG investments around the world totaled approximately US$ 30.6 trillion in 2018. NRI is a component of the major ESG stock indexes.

**Recognition — Inclusion in ESG stock indexes**

**Dow Jones Sustainability World Index**
**Dow Jones Sustainability Asia Pacific Index**
Adopted by the World Index from 2018 and the Asia Pacific Index from 2016.

**Sustainalytics**
The Netherlands-based Sustainalytics selects companies that are particularly successful in ESG. NRI has been selected as a Top-Rated ESG Company in the Software & Services industry since 2021.

**MSCI ESG Leaders Indexes***
The name of these indexes was changed from "Global Sustainability Indexes." NRI has been selected for the index for 5 consecutive years since 2016.

**FTSE 4 Good Developed Index**
NRI has been selected for 15 consecutive years since 2006.
NRI has been a constituent of all four domestic stock indexes that the Government Pension Investment Fund (GPIF) selects since the fund originally began selecting them.

MCSI Japan ESG Select Leaders Index*
Selected for 4 consecutive years since July 2017.

MSCI Japan Empowering Women Index (WIN)*
Selected for 4 consecutive years since July 2017.

FTSE Blossom Japan Index
Selected for 4 consecutive years since July 2017.

S&P/JPX Carbon Efficient Index
Adopted for the third consecutive year from September 2018.

* THE INCLUSION OF Nomura Research Institute, Ltd IN ANY MSCI INDEX, AND THE USE OF MSCI LOGOS, TRADEMARKS, SERVICE MARKS OR INDEX NAMES HEREIN, DO NOT CONSTITUTE A SPONSORSHIP, ENDORSEMENT OR PROMOTION OF Nomura Research Institute, Ltd BY MSCI OR ANY OF ITS AFFILIATES. THE MSCI INDEXES ARE THE EXCLUSIVE PROPERTY OF MSCI. MSCI AND THE MSCI INDEX NAMES AND LogOS ARE TRADEMARKS OR SERVICE MARKS OF MSCI OR ITS AFFILIATES.
Certified by CDP as a Climate Change A List Company for the second consecutive year

NRI has been certified by CDP* as the highest rated Climate Change A List company for the second consecutive year since 2020 in recognition of its climate change strategy, response, and information disclosure.

*A not-for-profit charity that runs the global disclosure system for investors, companies, cities, states and regions to manage their environmental impacts

Selected for inclusion in the CDP Supplier Engagement Leaderboard for the second consecutive year

NRI was selected by CDP for the second consecutive year in recognition of its efforts to reduce greenhouse gas emissions and climate change risk throughout the supply chain.

Selected as a Silver Class company at S&P Global’s Sustainability Award 2021

NRI was selected as a Silver Class Company in the Sustainability Award 2021 by S&P Global, a U.S. ESG investment research and evaluation organization. In 2020, NRI was selected as a Bronze Class company.

Ranked 5th in the ROESG Rankings (2020 Edition)

We ranked 5th in the 2nd ROESG Ranking (2020 Edition) published by Nihon Keizai Shimbun and QUICK Corp ESG Research Center. Advocated and researched by Specially Appointed Professor Kunio Ito of Hitotsubashi University, ROESG judges the investment value from the perspective of both ROE (return on equity), which indicates the profitability of a company, and ESG, which indicates the sociality of a company. The ROESG ranking is created by multiplying the ROE of listed companies by an ESG evaluation score.
First place in the Best For-Profit Think Tank category of the Global Go To Think Tank Index Report

NRI was selected for the first time as No. 1 in the Best For-Profit Think Tanks category ranking in the 2019 Global Go To Think Tank Index Report announced by the Think Tanks and Civil Societies Program of the Lauder Institute at the U.S. University of Pennsylvania. The report evaluates the essential functions of a think tank, including social impact, quality of management leadership, quality of professionals, number of publications, quality of policy proposals and number of outputs such as ideas that contribute to society.

Received Awards for Excellence in Corporate Disclosure in two categories

We received 2020 Awards for Excellence in Corporate Disclosure in the IT Service / Software category for the 12th time and the fourth consecutive year, and for the first time in the Disclosure to Individual Investors category. The Awards for Excellence in Corporate Disclosure are selected annually by industry by securities analysts, who evaluate the aspects of a company’s disclosure activities such as the quality, quantity, and timing of disclosure.

NRI SecureTechnologies Co., Ltd.’s CryptoBin won second prize under the support operations field in the ASP/SaaS category of the ASPIC IoT/AI/Cloud Award 2020.

Secure file transfer/sharing service CryptoBin was awarded second prize under the support operations field in the ASP/SaaS category of the 14th ASPIC IoT / AI / Cloud Award 2020 sponsored by the ASP-SaaS-AI-IoT Cloud Industry Association (ASPIC).

Winner of the Best New Post-Trade Solution Award at the FTF News Technology Innovation Awards 2020 in the United States

NRI received the Best New Post-Trade Solution Award at the FTF News Technology Innovation Awards 2020 in the United States.

The FTF Award is an award that recognizes financial technology companies that have made great achievements in the financial industry, such as providing solutions.
Recognition
—Accreditations by the central government

Highest level (Level 3) Eruboshi Certification
In January 2017, NRI was designated by the Minister of Health, Labour and Welfare as a company that showed excellence in initiatives based on the Act on Promotion of Women's Participation and Advancement in the Workplace.

Kurumin certification
Since 2007, NRI has been continually recognized by the Minister of Health, Labour and Welfare as a childcare supporting company that has met certain criteria by achieving planned goals based on the Act on Advancement of Measures to Support Raising Next-Generation Children.

Health and Productivity Management Organization (White 500)
Public-private collaborative organization Nippon Kenko Kaigi recognized NRI for the 5 consecutive year since February 2017 as an outstanding enterprise engaging in efforts for health and productivity management.

Platinum Kurumin Certification
In 2018 NRI received this certification as a company among those recognized with the Kurumin Mark which has implemented and is using systems for balancing childcare with work to a considerable degree and is engaged in high-level efforts.

Nadeshiko Brand
The Ministry of Economy, Trade and Industry and the Tokyo Stock Exchange select listed companies with outstanding performance promoting women's success in the workplace. NRI has been selected for five consecutive years since 2017.
NRI group companies in Japan

As of March 2021

Nomura Research Institute, Ltd.
Chairman and President & CEO,
Representative Director, Member of the Board
Shingo Konomoto
www.nri.com/en

Tokyo Head Office / Headquarters
Otemachi Financial City Grand Cube,
1-9-2 Otemachi, Chiyoda-ku, Tokyo
100-0004, Japan
TEL.+81-3-5533-2111

Kiba Center
Tower N, 1-5-15 Kiba,
Koto-ku, Tokyo 135-0042, Japan

Yokohama Center
Yokohama Nomura Building,
4-4-1 Minato Mirai, Nishi-ku,
Yokohama,220-0012, Japan

Osaka Center
Nakanoshima Festival Tower West,
3-2-4 Nakanoshima, Kita-ku,
Osaka 530-0005, Japan

NRI Netcom, Ltd.
Web Business Systems and Web Branding Strategies
www.nri-net.com

NRI SecureTechnologies, Ltd.
Information Security Solutions
www.nri-secure.com

NRI Workplace Services, Ltd.
Workplace-related Services for NRI Group Companies

NRI Data i Tech, Ltd.
IT Infrastructure Development and Operations Support
www.n-itech.com

NRI Social Information System Services, Ltd.
Supporting Community and Work Activities for Seniors
www.nri-social.co.jp

NRI Process Innovation, Ltd.
Business Process Outsourcing Services
www.nri-pi.com/en

NRI System Techno, Ltd.
Planning, Development, and Operations for Ajinomoto Group Information Systems
www.nri-st.co.jp/en

UBsecure, Inc.
Diagnostic service and consulting service related to information security
www.ubsecure.jp/en

DSB Co., Ltd.
Middle and Back-office Services for Securities and Financial Institutions
www.daiko-sb.co.jp

NRI Mirai, Ltd.
Office Service to NRI Group Companies by People with Disabilities and Fixed Point Investigation of People with Disabilities
www.nri-mirai.com

Zhiming Software Japan, Ltd.
Outsourcing Software Development Services and Technical Support Services
www.zhimingsoft.jp

Brierley+Partners Japan, Inc.
Loyalty Marketing
www.brierley.com

NRI Retail Next, Ltd.
Research and Practices for Proof of Concept in Retail IT Solution Field

NRI Digital, Ltd.
Digital Business Consulting Service, Digital IT Solution Service, and Digital Analytic Service
www.nri-digital.jp

NDIAS, Ltd.
Cyber Security Business Centered on Security Diagnosis of In-vehicle Electronic Products
ndias.jp/en

Financial Digital Solutions, Ltd.
Development of Financial Digital Solutions
www.financial-ds.jp

Nippon Securities Technology Co., Ltd.
Total Solutions for Finance and Securities
www.nstec.jp/english
Notice of Issuance of NRI Sustainability-Linked Bonds

Following the issuance of Green Bonds*1 for the first time as a domestic operating company in September 2016, NRI has issued NRI Sustainability-Linked Bonds*2 as NRI ESG initiatives. We have adopted a system in which investors support and support the achievement of NRI's greenhouse gas reduction target for FY2030 (announced on February 24, 2021).

Based on the corporate philosophy of “Dream up the future,” NRI is not only striving to diversify financing methods and improve the stability of financing through the NRI Sustainability-Linked Bond, but also to contribute to the creation of a sustainable future society by creating new value together with various stakeholders in response to social issues including environmental issues.

The NRI Sustainability-Linked Bond was awarded the Innovative Debt Deal of the Year in the corporate bond category at DEALWATCH AWARDS 2020 presented by DealWatch of Refinitiv Japan K.K.

With the aim of contributing to the development and expansion of the Japanese-related capital market, this award takes into consideration factors including appropriate pricing in the primary market, price formation after the transition to the secondary market, contribution to the development of the capital market, and ingenuity. This is the third time NRI has received an award.

<table>
<thead>
<tr>
<th>Name</th>
<th>NRI Sustainability-Linked Bonds (Nomura Research Institute, Ltd. Eighth Series Unsecured Straight Corporate Bonds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of issue</td>
<td>March 26, 2021</td>
</tr>
<tr>
<td>Issue amount</td>
<td>5 billion yen</td>
</tr>
</tbody>
</table>
| SPTs                                                                 | ① By FY2030, reduce NRI Group's greenhouse gas emission volume by 72%(compared to FY2013, Scope1 + 2)  
  ② By FY2030, achieve 70% renewable energy use rate at the NRI's data centers |

*1 Green bond: Bonds issued in order to procure the funding required to solve environmental problems, including global warming.

*2 Sustainability-Linked Bond: Bonds with terms that change depending on whether sustainability/ESG targets specified in advance can be realized. Issuers of Sustainability-Linked Bonds commit to improving outcomes related to future sustainability within a time frame specified in advance. These bonds are based on future performance that is evaluated by key performance indicators (KPIs) and sustainability performance targets (SPTs) specified by the issuer in advance, and the terms of such bonds will change depending on whether SPTs are realized.
Editorial Policy

Nomura Research Institute has published a sustainability report since FY 2005 to give our stakeholders an understanding of the NRI Group’s initiatives for sustainability (including corporate social responsibility). The report also aims to facilitate internal and external communication and to raise the level of our initiatives.

Starting in fiscal 2017, information on sustainability activities and results is available in this Sustainability Book, through information disclosed on the Internet, and through our Integrated Report.

We have tried to ensure that the Sustainability Book contains articles of interest to our stakeholders along with the information that the NRI Group wants to convey, and to present it in an interesting and easy-to-read format. On the Internet, we disclose information throughout the year. In addition to our ESG Data Book, the disclosed information also includes sustainability initiatives conducted by the NRI Group for sustainable growth of society.

Integrated Report

ESG Databook

Organizations covered in this report
This report focuses on NRI’s activities, but also covers some activities of the entire NRI Group and Group Companies.

Period covered by this report
This report primarily covers fiscal 2020 (April 1, 2020 to March 31, 2021), but also addresses some events from the past, some activities after April 1, 2021, and certain plans for future activities.

Trademarks
All proper names, including names of companies and products, found in the Sustainability Book 2021 are trademarks or registered trademarks of the respective companies.

Disclaimer
The Sustainability Book 2021 contains not only past and present facts about the NRI Group, but also plans and forecasts based on information acquired as of the date of publication. Depending on changes in various conditions, there is the possibility that the results and events of these future business activities may differ from the plans and schedules listed herein.

The names of organizations, names of executive positions, etc., listed herein are current as of the time of the activities or reporting.

Inquiries about the Sustainability Book
Nomura Research Institute, Ltd.
Sustainability & Responsibility Group
E-mail: sustainability@nri.co.jp
Otemachi Financial City Grand Cube
1-9-2 Otemachi, Chiyoda-ku, Tokyo 100-0004, Japan
These elephant statues are charity art that are displayed at the entrance of our Yokohama Center (Yokohama Nomura Building). These works of art are sold at charity events held in various locations by an organization called Elephant Parade®. The proceeds of the event are used to protect the Asian Elephant, an endangered species. NRI participates in this event and was the first Japanese corporation to purchase one of the works of art.

[Regarding the cover photo]

The Perito Moreno Glacier, located within the Los Glaciares National Park in the Patagonia region of Argentina. Right now, global warming is causing problems that have a serious impact on the environment and the ecosystem. One of these effects is the melting of glaciers, which causes a chain of various problems, such as rising sea levels, flood damage, and habitat reduction for rare flora and fauna.