We will play our part in building a strong and vibrant society through social and industrial DX to realize a sustainable future.
Message from the President & CEO

A year has passed since NTT Communications, NTT DOCOMO, and NTT COMWARE integrated our enterprise businesses under the new DOCOMO Group and launched our “docomo business” brand. During that time, we witnessed dramatic social transformations, such as increased geopolitical risks, a transition to the new normal in the wake of the COVID-19 pandemic, and soaring energy prices. The world has entered an era of volatility, uncertainty, complexity, and ambiguity (VUCA), in which the future will be uncertain and difficult to predict.

Under these circumstances, NTT Communications defined its vision for a strong and vibrant society in the 2030s, which simultaneously requires inclusiveness, with everyone playing an active role; sustainability, including sustainable growth; and resilience, to go forward safely and securely. To this end, we will develop ways of resolving social issues by leveraging data, and enhance the flexible adaptability and resilience of society and industry by promoting mobile solutions, cloud computing, and other advanced technologies.

We will continue to advance our Re-connect X business vision as a concrete activity and further strengthen the three areas of ICT Transformation to ensure a safe, secure, and flexible connection, our Smart Data Platform to connect data and value, and Smart World to connect society to the future. We will also contribute to realizing a sustainable future by providing more comprehensive ICT solutions that build on our strengths, including 5G and IoT.

In promoting these businesses, we will continue to engage in green transformation (GX) toward achieving carbon neutrality. In addition, we will fulfill our responsibilities to society, such as respecting human rights, promoting diversity and inclusion, and ensuring thorough compliance. We will also work as “Your Value Partner” as set out in our Sustainability Policy for the purpose of “Changing worlds with you.”

We will play our part in building a strong and vibrant society through social and industrial DX to realize a sustainable future.

Toru Maruoka
Representative Member of the Board
President & CEO
NTT Communications Corporation
Challenge of the New DOCOMO Group

DOCOMO announced its new brand slogan, “Changing worlds with you.” to express our aspiration to realize new worlds with ALL you’s. Now that we have welcomed NTT Communications and NTT COMWARE into the Group, we will continue to take on the challenge of bringing a new world into reality as the New DOCOMO Group.

How We Will Take on the Challenge and Realize Our Goals

The challenge of the New DOCOMO Group comprises four pillars and three values for attaining our goals.

- **Challenge of the New DOCOMO Group**
  - Pursue Customer First, Provide new values beyond customer expectations
  - Accelerate pace of DX and leveraging Data in operations, realize better CX and business reform
  - Leveraging service/solution/technology developed and nurtured in Japan, roll out our businesses globally
  - Pursue business and ESG as one, contribute to creating a sustainable society

- **One Step Ahead**
  - Not following; predict and move in advance
  - Keep challenging with positive thinking

- **Openness**
  - Create innovations with customers and partners

- **Trust**
  - Gain a trust from customers/partners by committing words to action, and fair interactions

The New DOCOMO Group

To expand our business domain to encompass mobile, services, and solutions and create a new world as the New DOCOMO Group, we converted NTT Communications and NTT COMWARE into subsidiaries. Unifying management policies and functions of the three companies and more clearly defining their respective roles will streamline the Group’s decision-making process and enable the organization to operate with greater agility and flexibility. We seek to grow the Enterprise Business and Smart Life Business and drive forward the structural reform of the Telecommunications Business to release innovation that will transform society.

Synergy Through Integration

The New DOCOMO Group will generate three significant synergies by integrating the functions of the three companies.
NTT Communications’ Role in “docomo business”

Under the new DOCOMO Group’s enterprise business brand, “docomo business,” NTT Communications’ role is to provide a one-stop shop for services and solutions that support the DX of corporate customers. Not only do we help them to develop their global businesses, but we also support DX in local communities and promote structural reform in society and industry through our new fixed-mobile convergence services, 5G IoT services and solutions, and secure data distribution, based on our Mobile First, Cloud First strategy, toward realizing a Smart World and ultimately creating a sustainable society.
Creating communication methods that open up new possibilities for people and our world

We aim to create a world that maximizes the potential of people, organizations, and societies, giving them the opportunity to shine. In such a world, every person can lead rich and contented lives, cooperating in harmonious freedom. This is why we will keep striving to create innovative, user-friendly communication methods that optimize the flow of information in our society.

As digital transformation (DX) drives advances in digitization, everything will be connected as data. Together with our customers and partners, we will pursue our Re-connect X business vision to ensure that all connections are safe, secure, and flexible.

Re-connect X
(“X” refers to everything)

Smart World
Connect society to the future

Smart Data Platform
Connect data and value

ICT Transformation
Ensure a safe, secure, and flexible connection

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As digital transformation (DX) drives advances in digitization, everything will be connected as data. Together with our customers and partners, we will pursue our Re-connect X business vision to ensure that all connections are safe, secure, and flexible.
The NTT Communications Group aims to realize a sustainable future. As Your Value Partner, we will take initiatives to overcome social challenges and drive the emergence of new value by creating a new way of communication that will open the door to possibilities for people and the world.

Through the realization of a Smart World that connects society to the future, ICT transformation, and the promotion of advanced innovation, we will make efforts to resolve various social challenges, strive to co-create and drive the emergence of new value, and work toward a better future that is resilient, safe, secure, and capable of sustainable development.

Through initiatives to promote the use of ICT, which contributes to reducing environmental impact and thus achieving a decarbonized society and closed-loop economy, we will work toward the realization of a green future where society is carbon neutral, resources are recycled, and biodiversity is preserved.

By respecting human rights, promoting diversity and inclusion, and developing human resources, we will work toward a future where highly diverse people come together and everyone is given respect, inspires one another, and is able to demonstrate their ability in response to society’s needs.

Applying the high standards of our corporate ethics, we will thoroughly implement compliance and risk management, continuously strengthen information security, and enhance value chain partnerships. We will also strive to realize strong governance and the sustainable enhancement of corporate value to maintain public trust while working toward a future where co-creation leads to a sustainable society.

Changing worlds with you.
A Sustainable Future

In October 2021, NTT Communications launched OPEN HUB for Smart World, a business co-creation program to accelerate efforts for realizing a Smart World. This feature looks at our initiatives for co-creating new business concepts with customers and business partners and implementing them in society, using the “catalyst”, “asset”, and “space” provided by OPEN HUB, and thereby taking the initiative to address the diverse issues facing society.

Testing Ground for Concepts and Social Implementation

Under its Re-connect X business vision, based on co-creation with its customers and partners, NTT Communications is working to address social issues through fixed-mobile convergence services and ICT solutions. Living in a period of rapid change limits what any one company can do on its own to address increasingly complex challenges.

We created OPEN HUB for Smart World (OPEN HUB) as a testing ground for generating and implementing new concepts in society to accelerate co-creation and integrate diverse cultures and ideas. Players, who set up new concepts on the stage of OPEN HUB and turn them into businesses, consist of customers and partners as well as over 400 catalysts (as of December 2022). Catalysts are internal and external experts in their respective fields who work together with companies to create and implement new businesses in society by combining their technologies and knowledge. Four main mechanisms drive OPEN HUB. OPEN HUB Base is a community where players who want to co-create businesses gather and disseminate the latest co-creation results and ideas through OPEN HUB Journal. OPEN HUB Park is a workplace equipped with state-of-the-art technology on the 29th floor of our head office, and it operates as the central activity location of OPEN HUB, which is also linked to the various innovation sites of the NTT Group. Business projects born here are developed in accordance with the unique co-creation program OPEN HUB Play, toward ultimately implementing them in society.

We have already launched multiple projects at OPEN HUB and implemented several solutions in society. We are also continuing our efforts to increase the number of catalysts. Co-creation continues to accelerate, bridging the boundaries between companies, both real and virtual.
Flow of Co-creation in OPEN HUB for Smart World

Starting with social issues, a wide variety of players co-create with each other to create new business concepts and implement them in society.

**OPEN HUB Base**
OPEN HUB players gather and co-create in a community, where opportunities are provided for exchanging tips and concerns with experts, pioneers, and peers, who share common visions and ideas in order to elicit feedback.

**OPEN HUB Park**
The co-creation workplace facilitates communication in a hybrid real/remote/virtual space. State-of-the-art ICT infrastructures, such as 5G and IOWN, can be deployed for demonstration tests.

**Co-creation Program**
The original co-creation program creates business concepts. Working with a variety of partners and incorporating the technologies and services of the co-creating players empowers the program to create new businesses and implement them in society.

**Consortium**

**OPEN HUB Play**
Discussions by theme/different industries

**OPEN HUB Journal**
The owned media explores the future of the Smart World. It delivers articles on business trends and advanced case studies as well as invitations to various events as needed, and it plays a role in sparking inspiration in OPEN HUB community.

**Virtual Workplace (Planned)**
Remote collaboration with customers and partners

**Implement in Society**

OPEN HUB for Smart World was launched with the goal of becoming an “open hub” where volunteers from within and outside the Company could come together as NTT Communications attempted to resolve social issues by providing ICT solutions. These days, while almost every company is claiming to resolve social issues through their business, not much remains for any single company to address on its own. Now is the time to collaborate beyond the boundaries separating individual companies. We have strongly promoted remote work since the start of the COVID-19 pandemic to distant places and realize diverse working styles. From the perspective of creativity for resolving social issues, however, I feel it has partly tended to separate individuals. The idea for OPEN HUB, which straddles the real and virtual worlds, was born out of a sense of mission: to resolve this contradiction, we, who are in charge of the communications infrastructure, should provide a place that serves as a hub where people can bring their thoughts together.

We see OPEN HUB as a place for deliberately and strategically created chaos, like a stage play with an unknown ending. The unique players, mainly catalysts, find inspiration in the chaos of the BASE community and strive to create new value by resonating and co-creating on the PARK stage. The JOURNAL can be compared to a billboard illustrating the process of co-creation. The scenario remains forever unfinished, and the ending of the story depends upon the performances of the actors. The chaos in OPEN HUB is a stage set for sparking fascinating results from the dynamic interactions. I envisioned a chain of chemical reactions that would lead to the next inspiration. Moreover, I hope that encounters between people through OPEN HUB will promote personal growth and generate a virtuous circle leading to NTT Communications’ growth as a company and enhancing its dissemination capability.

In August 2022, OPEN HUB for Smart World won the New Office Promotion Award at the 35th Nikkei New Office Awards organized by the Nikkei and the New Office Promotion Association (NOPA).

In recent years, the importance of the office as a location for creating new value has increased due to structural changes such as advancing ICT and diversifying working styles. OPEN HUB Park, the activity site for OPEN HUB for Smart World, was highly commended for being equipped with cutting-edge technology that transcends the real and virtual, as well as for its design as a novel workplace for real/remote/virtual collaboration with partner companies.
AI Solution to Assist the Operations of Complex Chemical Plants

Since 2007, NTT Communications has been collaborating with Yokogawa Solution Service Corporation, which has extensive knowledge of plant sites, to convert chemical plants into Smart Factories. We initially attempted digital twinning of areas that could not be handled by existing automatic control technology by applying machine learning to operating data. Internal movements inside the reactor, however, were so complex that they could not be reproduced using operating data only.

We then adopted another approach for digital twinning the behavior of chemical plant operators. Specifically, we created an AI model through imitation learning using data from past operations under different conditions in processes difficult to control automatically. Demonstration tests comparing the generated AI model with the operator’s operation accuracy confirmed that the content matched with extremely high accuracy, and so in April 2022 the model was commercialized as an “AI plant operation support solution” that realizes AI support for manual operation.

The solution has already attracted inquiries from multiple chemical manufacturers, and some have entered the stage of feasibility testing. NTT Communications will continue to improve this solution in a flexible and agile manner while contributing to the sustainable development of the chemical industry and other Japanese industries.

Social Issue

Handing Down Skills in Chemical Plants

The chemical industry in Japan is shifting from single-product, mass production to high-mix, low-volume production and variable-volume production in response to increasing globalization and environmental concerns. As a result, chemical plants require advanced controls beyond the capabilities of existing automatic control technology and in some cases require manual operation. Japan is shifting to the production of highly sophisticated products while depending on more advanced production technology in the face of fierce international competition. However, difficulties lie ahead in securing operators due to the falling birthrate and aging population, and the transfer of skills in chemical plants has become a critical issue for maintaining the strengths of Japan’s chemical industry.

Our Vision of Society

The AI Plant Operation Support Solution provides the reason for AI predicted values, so operators receiving support can confidently exercise control, and it can also be effective in training young operators. Our urgent goal is that—once sufficient accuracy of the knowledge gained by AI is confirmed—we will apply it to plants with all due haste, which could even lead to its automation. And it will be possible to export this skill, which is Japan's strength, to other countries.

No matter how many improvements are made to the AI Plant Operation Support Solution, as long as some situations continue to depend upon human intervention, the fundamental issues of passing on technology and know-how and securing operators will not be resolved. With this solution, which is a digital twin of human labor, it is difficult to achieve a level of control that exceeds manual operation. We will therefore seek to develop solutions such as those that allow AI to improve plant operation technology on its own in the human-AI dialogue, and will continue to collect, accumulate, and analyze data; connect data and value; and utilize this data for the benefit of society to create Smart Factories.
CASE of Re-connectX

GX/ESG Solutions Change the Behavior of a Company and Consumers for the Realization of a Society where the Environment and People Coexist

Social Issue

Essential for the Entire Society to Take Environmental Action

Extreme weather events, such as torrential rains, are occurring frequently both in Japan and abroad, repeatedly causing natural disasters in various regions, increasing the urgency of tackling global warming. Countries around the world are promoting long-term initiatives to reduce greenhouse gas emissions, and Japan is also calling for a balance between addressing environmental challenges and economic growth to achieve the government’s goal of carbon neutrality by 2050. These problems cannot be solved by the efforts of only some companies; the participation of companies across every industry as well as consumers is absolutely necessary. Companies, organizations, and citizens need to work together to change their values and behavior and take action to resolve vital issues common to all humankind.

Solution

Accelerating the GX of Society by Using ICT to Promote Industrial Solutions and Lifestyle Change

NTT Communications is working to build green ICT infrastructure, which is environmentally sound, in its networks and data centers aligned with the green transformation (GX) of society as a whole, including customers and their customers. For example, in our data centers, we introduced energy saving equipment and are promoting the conversion to electricity derived from renewable energy. We strongly support customers’ GX by, for instance, setting up options that allow customers to select green electricity on request. We are also gradually increasing the number of service locations where the electricity required for SDPF cloud/server operations for customers is 100% renewable energy. In addition, we are introducing functions to predict and visualize the volume of CO2 emissions associated with the use of cloud services.

Our Vision of Society

Building a Circulating Society that Balances Resolving Environmental Issues with a Growing Economy

NTT Communications plans to convert the energy used at all its SDPF cloud/server service locations to renewable energy by the end of fiscal 2023 to achieve carbon neutrality for its internal SDPF cloud/servers. At the same time, we will continue developing GX solutions, such as the Green Program and Green Technology, while introducing new services, including support for business reform using carbon credits to help decarbonize society as a whole, encompassing corporate customers and their customers.

GX/ESG solutions will enhance customer brand value as a company that promotes sustainability, help customers establish sustainability contacts with consumers, and assist them in further improving their performance by strengthening customer loyalty. This will in turn lead to growth as a company, creating a virtuous circle for both addressing environmental issues and achieving economic growth.

For more information on the GX/ESG Solution, see: https://www.ntt.com/business/solutions/gxesg.html (in Japanese only)
ICT Environment Construction and Operation Solutions that Balance Safety and Convenience and Lead to a New Business Style

CASE of Re-connect X

03 Security × DX × Enhanced Corporate Value

Social Issue

Balancing Security and DX

Cyber-attack exploits and unauthorized access are becoming more sophisticated and advanced every year, inflicting increasing damage regardless of the industry or size of the company. These threats are quickly attracting greater attention as social intercourse becomes more remote, and concerns about security in corporate communication environments are growing rapidly. At the same time, the explosion in online traffic, which can lead to a decline in productivity as an additional corporate challenge and radical change in the internal and external ICT environment, has become an urgent issue. Very few companies, however, maintain in-house network and security experts, and a total solution to the problem is required to secure a safe, comfortable communication environment.

Solution

Supporting the Construction of a Safe, Comfortable ICT Environment Both In and Outside the Company

Since fiscal 2020, NTT Communications has been offering a comprehensive security network service that supports the ICT environment from grand design to operation for companies striving to establish a new business style that balances security and convenience.

SASE, the basis of this service, combines network and security architectures into an optimal cloud environment on a zero-trust basis to resolve communication issues that vary from company to company. Integrating and providing a cloud service solution’s eight components related to networking, security, and management helps establish a safe, comfortable ICT environment both inside and outside a company.

The continuous updating of information security measures has become essential, but this is difficult for a single company to implement on its own. NTT Communications has developed the expertise and provided this service to over 150 companies in the two years since its launch. Starting with this solution, we are striving to build an ICT environment that guarantees comparable safety and comfort, both internally and externally.

Our Vision of Society

In the wake of the widespread adoption of remote work, NTT Communications sees the next step as instilling a new workstyle throughout society, combining flexible working styles unrestricted by time and location and hybrid ones that allow people to choose between real and remote options depending on the specific characteristics of their responsibilities. Given the growing expectations for the expanded use of mobile devices such as smartphones and tablets for business, we will establish a new business style leveraging the advantages of remote and office work while developing more secure and convenient services by integrating mobile services. A stronger communication environment also leads to reducing the burden on employees and enhancing their personal lives. We will continue to enhance and promote SASE solutions to realize the NTT Communications Group’s Re-connect X business vision for reconnecting consumers, businesses, and society as a whole. Since ICT is inextricably linked to security, we will strive to address society’s communication challenges to improve personal and social well-being.
Sasaki: Japanese livestock products, such as wagyu-branded beef, are in high demand overseas and have a promising future. We hope that NTT Communications’ ICT solutions will offer an opportunity to promote the appeal of the livestock business to younger generations and help to overcome the future shortage of livestock farmers and industrial veterinarians.

Yamamoto: Hyogo Prefecture’s feeding technology for Tajima cattle, the origin of Japanese black cattle, is part of traditional culture passed down in the region. So it would be ideal if we were able to protect this tradition while making use of ICT equipment to save labor and accumulate feeding data as part of an innovative succession process in line with the times, which will help address the problem of a successor shortage and position the industry in a more attractive light.

Kanehira: While smart livestock farming can save a great deal of labor, it’s people who have to make the final decisions or diagnoses, and I think this is the real value in our work. By helping to disseminate smart and cool livestock farming, I want to give the industry a boost in Japan from the ground up.

Social Issue >> Worker Shortage in the Livestock Industry

As populations decline, the aging of livestock farmers and an insufficient future workforce have raised public concern. Also, as the numbers of cattle, pigs, chickens, and other industrial animals, or livestock, per household rise, passing on skills and securing a workforce remain key challenges. And a shortage of veterinarians who maintain livestock health has also emerged as an important issue. Since farms require a significant amount of land, they are often in hilly or mountainous places far from residential areas, so veterinarians may need hours to get there when needed. With globalization, livestock infectious diseases, such as a foot-and-mouth disease and avian influenza, are increasingly entering Japan. The responsibilities of industrial veterinarians at the outbreak of such a contagious disease extend from euthanasia to burial, and the importance and burden of their role can only increase.

Solution >> Promoting Livestock DX to Improve Efficiency and Productivity

NTT Communications has been developing solutions to realize livestock DX, such as remote medical examination and infection diagnosis, to address the shortage of industrial veterinarians and reduce their workload. In December 2019, we conducted a demonstration of a remote medical examination and infection diagnosis through high-resolution, real-time video transmission and wearable cameras in collaboration with Iwate University, located in one of Japan’s leading livestock farming regions. The demonstration confirmed that technical issues had largely been resolved and that remote diagnosis could significantly reduce the workload of industrial veterinarians. Next, we need to establish rules to implement these solutions.

We are also promoting attempts to leverage smart livestock solutions, such as Mobile Gyuonkei and Farmnote Color, in materials used at agricultural high schools to educate future livestock industry workers. Both products apply AI to collect and analyze information on cattle activity to help manage breeding and prevent calving accidents, significantly reducing the operations and labor of farmers. In addition, students exposed to smart livestock farming can experience the future of the industry. NTT Communications is proactively creating opportunities to interact with schools and local communities through online courses and other means toward revitalizing regions through smart livestock farming.

Our Vision of Society >>

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In May 2021, the NTT Communications Group established the Sustainability Policy by reframing its Fundamental CSR Policy in response to the increasingly worsening climate change situation, trends in Japan and overseas in relation to the SDGs and ESG, and subsequent changes underway in the business environment, as well as trends in cutting-edge technologies that will support a future society.

Under the Sustainability Policy, we will uphold Our Mission and Our Core Beliefs to pursue the Re-connect X business vision as “Your Value Partner,” with the intention of opening up unlimited possibilities for people and the world and consistently serving society to realize a sustainable future. The Sustainability Policy is composed of the four Priority Areas of society, the environment, human resources, and governance. In each, we have a Vision of the Future, and to realize these visions, we have set 12 Sustainability Priority Activities, related main initiatives, targets such as achieving carbon neutrality by 2030 (Scopes 1 and 2), and KPIs. The Sustainability Priority Activities include the promotion of DX to connect society with the future, promotion of innovations that break through limits, promotion of a decarbonized society, development of a closed-loop society, respect for human rights, promotion of diversity and inclusion, enhanced value chain partnerships, and thorough compliance and risk management.

Through efforts to promote these priorities and pursue sustainability management by following the PDCA cycle, we intend to further reinforce the positive impact of our business activities on society across the value chain and minimize negative risk and impact. We will also co-create with various stakeholders, including customers and business partners, and overcome all hurdles. By building on these efforts, we will promote DX, WX, GX, and SX for society as a whole and contribute to achieving the SDGs in order to pursue efforts to realize a sustainable future.

For information about the process of identifying our materiality, refer to “Designation of Sustainability Priority Activities and KPIs” in this report.

For our Sustainability Policy, refer to “Our Vision of Society” in this report.
Our Sustainability Policy and Creating a New Way of Communication

Corporate Message
Connecting into Tomorrow

We will constantly mediate between today and tomorrow to continually create a desirable future while contributing to society today.

Tagline
Go the Distance.

This tagline expresses our commitment to seek out and offer new value by going beyond time and distance and creating innovative and unprecedented communication methods.

There is also an underlying meaning to persevere, alluding to our resolution to surpass the expectations of our customers and society, be true to our core beliefs, and realize our mission with the integrity that we have embraced for a long time.

Supporting the SDGs as the NTT Group

In fiscal 2016, the NTT Group announced its support for the UN’s Sustainable Development Goals (SDGs). As a member of the NTT Group, we also began promoting efforts to contribute to the SDGs in fiscal 2016. We have been training employees to raise awareness of sustainability, and will seek to achieve these goals through business activities, including the Sustainability Priority Activities linked to them.

Our initiatives for creating a new way of communication involve continuously challenging the infinite possibilities that communication has in creating innovative, user-friendly communication methods that optimize the flow of information in our society across every barrier and boundary, serving as a bridge between today and the future, and open up new possibilities for people, our world, and a future that lies beyond our imagination and allows for new wealth for society and the world.

This is the NTT Communications Group’s corporate mission and reason for existence, and it constitutes the core of Our Mission. These initiatives and our basic approach, together with the three Core Beliefs, represent the backbone of the NTT Communications Group’s sustainability and related basic policies and also reflect the aspirations expressed in our Corporate Message and Tagline, shown at right.
Under our Sustainability Policy, we will pursue the unlimited possibilities of ICT and DX toward achieving carbon neutrality by 2030*, contributing to the achievement of the SDGs, and realizing a sustainable future of well-being and full of dreams.

Addressing the worsening climate change situation, as well as other global issues and risks laid out by the SDGs and ESG, has become even more urgent today in order to pass on a sustainable society to the next generation and secure our future. In May 2021, the NTT Communications Group formulated the Sustainability Policy in response to trends in the SDGs and ESG in Japan and overseas and subsequent changes underway in the business environment, as well as trends in cutting-edge technologies that will support a future society. This policy is based on Our Mission and Our Core Beliefs, determined with the participation of all employees. It depends on each of us striving to realize a sustainable future by seizing the initiative to act, inspiring one another, and demonstrating our distinct abilities to meet social expectations through our daily operations, business activities, and business vision. We intend to pursue this policy by focusing on these points.

Our Sustainability Policy is composed of the four Priority Areas of society, the environment, human resources, and governance, and we have determined Our Vision of Society and 12 Sustainability Priority Activities to realize the vision by linking them to the SDGs.

Under precise governance and management, we hope to achieve KPIs for the Priority Activities and develop a wide range of co-creation to further demonstrate the positive impact of the NTT Communications Group’s business operations on society by advancing ICT and DX across the value chain while pursuing efforts to minimize risk and negative impacts. By doing so, we will work toward resolving various social issues, helping achieve the SDGs, and realizing our vision of a future society.

To enhance the foundations supporting these initiatives, we introduced a new system in fiscal 2022 that links executive remuneration to specific sustainability-related KPIs, as well as internal carbon pricing in the procurement sector. We also carried out due diligence on suppliers regarding human rights, labor, the environment, fair trade, ethics, and business continuity and promoted CSV with the participation of all employees. Moreover, in February 2022 we launched the OPEN HUB for Smart World as a place for promoting the co-creation of business concepts and their implementation in society to resolve social issues and open up the future by evolving and deepening our co-creation with a wider range of partners and customers.

We deliver DX solutions and platforms such as the Smart World and Smart Data Platform for X that leverage cutting-edge technologies, as well as our new fixed-mobile convergence services and ICT services such as 5G and IoT. These solutions, platforms, and services may hold the key to resolving complex and diverse issues faced by society today, including climate change, large-scale disasters, the declining birthrate and aging population, infectious diseases, and threats to information and cyberspace security. They could also prove to be essential for promoting DX, GX, WX, and SX across broad areas of society, and for creating value that will support society’s future. We live in a time when all areas of human activity across the world must focus on the SDGs and ESG to advance together toward a better future. The joy of serving society by connecting various areas around the world through our business activities holds significant value for our employees.

Looking ahead, the reorganized NTT Communications Group will, under the docomo business brand, continue to develop and deliver services and platforms that support the next generation and our vision of a future society. We will also provide solutions for social issues that are increasingly complex and diverse and pursue the unlimited possibilities of ICT and DX to change you and the world and usher in the future. Furthermore, we will make a united Group effort under our Sustainability Policy to meet public expectations and demands by practicing CSV and CSR through our unique business activities as an ICT company. We will work with various stakeholders to co-create and drive the emergence of new value in a robust effort to promote the SDGs and ESG and to realize a sustainable future of well-being and full of dreams, which consists of innovative, creative, resilient, safe, secure, eco-friendly, and vigorous local communities that co-exist with nature, and where people respect and inspire each other and allow everyone to shine in their own way and play a valuable role in society.
Sustainability Management

In the NTT Communications Group, the CSR Committee was established as a deliberating body to examine measures to address apparent and potential ESG-related social issues and to promote and manage sustainability activities. Chaired by the executive vice president in charge of CSR, the committee consists of the heads of each organization (executive officers, etc.) and the presidents of each Group company. Under the committee, we have set up the Environmental Protection Subcommittee. The CSR Committee will also collaborate with other committees, including the Compliance Committee, Business Risk Management Committee, Human Rights Committee, and Security Committee. Matters reported to and discussed by the CSR Committee, including information related to social or environmental risk, are shared with the Board of Directors.

The Board of Directors compiles this information and recommendations from the Board of Corporate Auditors and oversees the necessary governance to appropriately promote sustainability activities.

Under this structure and governance by the Board of Directors, the CSR Committee will continue to promote and manage initiatives based on the Sustainability Policy.

To effectively engage in sustainability activities, we designate KPIs that serve as targets for the Priority Activities for each fiscal year. We verify, evaluate, and review the level of achievement regarding each KPI as a reference point when setting the indicators for the next fiscal year. The CSR Committee implements these processes, which include reviewing the KPIs for each fiscal year as well as reconsidering the Sustainability Policy and priority issues. The CSR Committee monitors the status of activities in the four Priority Areas of society, the environment, human resources, and governance and related risks and opportunities in a timely manner and in cooperation with each organization responsible for the main initiatives. We share the evaluation results for initiatives based on the KPIs, related risks and opportunities, the latest social trends, examples of model initiatives by other companies, and external evaluations and follow the PDCA cycle to pursue sustainability management and promote our initiatives for effectively realizing a sustainable future.

For information about the process of identifying our materiality, refer to “Designation of Sustainability Priority Activities and KPIs” in this report.

For information about responding to sustainability risks, refer to “Risk Management” in this report.

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To become a corporate group that creates a sustainable future, the NTT Communications Group identifies its materiality based on the process outlined below to formulate its Sustainability Policy and subsequently revises its Priority Activities. In doing so, we pay due consideration to public demands and expectations for addressing climate change and other issues related to the SDGs and ESG, the NTT Group’s business strategies and initiatives, and various trends in Japan and overseas.

As shown below in the diagram entitled Sustainability Priority Activities Identified, our Priority Activities consist of 12 divided into the four Priority Areas of society, the environment, human resources, and governance. The NTT Communications Group will continue to promote sustainability activities through the PDCA cycle in line with the identified Priority Activities.

Process of Identifying Materiality

**STEP 1**
Examine the Issues
Using international guidelines and initiatives and external evaluation indices as a reference, we examined social issues and identified 36 items. External evaluation indices: DJSI, FTSE, MSCI, EcoVadis, etc. International guidelines: GRI standard, ISO 26000 International initiatives: UNGC, SDGs, etc.

**STEP 2**
Prioritize
Priority Activities adopted up to fiscal 2020 were categorized into items that remained significant and items deemed highly important to the Company’s business. These were then integrated and condensed into 28 items prioritized based on the twin axes of expectations from stakeholders and the magnitude and significance of the economic, environmental, and social impact of business activities for the NTT Communications Group.

**STEP 3**
Designate Priority Activities
Comprehensive consideration was based on Our Mission and business strategies, initiatives of the NTT Group, and various internal and overseas trends. Interviews with relevant departments were held before comprehensively designating 12 items as the new Priority Activities.

**STEP 4**
Designate KPIs
The Main Initiatives and KPIs were considered for each Priority Activity from such perspectives as social trends, contributions to achieving the SDGs, and links with KPIs adopted by the NTT Group through discussions with the relevant departments, and they were designated following confirmation of their validity by the CSR Committee.
We designated the Main Initiatives and KPIs for each Priority Activity and applied a PDCA cycle under the leadership of the responsible departments. The Main Initiatives and KPIs are discussed by the CSR Committee, convened twice a year, and revised as needed to reflect trends related to society, stakeholders, and ESG in Japan and overseas. In addition, we introduced an executive compensation-linked system in fiscal 2022 to reflect the level of achievement for certain KPIs in executive compensation.

### Main Initiatives, KPIs, and Outcome of Activities

We envision a better future characterized by innovation, vitality, resilience, safety and security, in which sustainable development is achieved through value creation.

#### Our Vision of the Future

We envision a better future characterized by innovation, vitality, resilience, safety and security, in which sustainable development is achieved through value creation.

<table>
<thead>
<tr>
<th>Priority Activity</th>
<th>Promotion of DX to connect society with the future</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Promote DX in society and industry</strong></td>
<td><strong>Promote DX in workstyles and lifestyles</strong></td>
</tr>
<tr>
<td><strong>Promote DX in global business</strong></td>
<td><strong>Promote DX in workstyles and lifestyles</strong></td>
</tr>
</tbody>
</table>

#### FY2021

<table>
<thead>
<tr>
<th>Main Initiatives</th>
<th>KPIs</th>
<th>Review</th>
<th>Assessment</th>
<th>Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promote DX in society and industry</td>
<td>Qualitative</td>
<td>Promote Smart World projects based on BBX strategy</td>
<td>35 BBX-related external announcements and 4 service commercial launches as standard components</td>
<td>Continue to promote DX with a view to DX for local areas and SMEs through the launch of the new DOCOMO Business brand</td>
</tr>
<tr>
<td></td>
<td>Quantitative</td>
<td>Number of service projects: 8</td>
<td>Customer base for education sector content platform (Manabi Pocket) exceeded 3 million IDs (March)</td>
<td>Promote enhanced services around the SDPF to support Smart World</td>
</tr>
<tr>
<td>Promote DX in workstyles and lifestyles</td>
<td>Qualitative</td>
<td>Number of service projects: 8</td>
<td>Released the Smart Data Platform for Healthcare applications/standard components to support the use of personal data in the healthcare sector (January, March), etc.</td>
<td>Number of service projects: 11</td>
</tr>
<tr>
<td></td>
<td>Quantitative</td>
<td>Number of service projects: 11</td>
<td>Renewed the menu system of the Smart Data Platform to accelerate DX realization, etc.</td>
<td></td>
</tr>
</tbody>
</table>

#### FY2022

<table>
<thead>
<tr>
<th>Main Initiatives</th>
<th>KPIs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promote DX in society and industry</td>
<td>Qualitative</td>
</tr>
<tr>
<td>Promote DX in workstyles and lifestyles</td>
<td>Quantitative</td>
</tr>
<tr>
<td>Promote DX in global business</td>
<td>Qualitative</td>
</tr>
</tbody>
</table>

Achievement levels based on self-assessment: ○: Achieved △: Partially achieved ×: Unachieved
### Priority Activity | Promotion of innovations that break through limits

<table>
<thead>
<tr>
<th><strong>Generate creative innovations</strong></th>
<th><strong>KPIs</strong></th>
<th><strong>Review</strong></th>
<th><strong>Assessment</strong></th>
<th><strong>Targets</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Qualitative</strong></td>
<td>Promote creative and innovative SmartX projects</td>
<td>Implemented new business development and a demonstration through xTech for a new customer experience</td>
<td>○</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Developed Direct to visualize control system security risks; conducted demonstration tests and started commercial provision of the system in April 2022</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Expanded the business scale of service products from the Innovation Center (e.g., FinTech-related and <strong>Digitwin</strong>)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Launched the commercial provision of the AI Plant Operation Support Solution in April 2022 in collaboration with plant operators</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Promote innovation management</strong></th>
<th><strong>KPIs</strong></th>
<th><strong>Review</strong></th>
<th><strong>Assessment</strong></th>
<th><strong>Targets</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Qualitative</strong></td>
<td>Promote unique innovations in collaboration with internal and external members</td>
<td>Received 54 applications from outside the Company for the 5 themes of the ExTorch Open Innovation Program, and ultimately adopted 7</td>
<td>○</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Received the Incentive Award in the 3rd IP BASE AWARD organized by the Japan Patent Office for our support for start-up IP strategies</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Priority Activity | ICT Transformation

<table>
<thead>
<tr>
<th><strong>Enhance network infrastructures that are resistant against natural disaster, highly reliable, safe, and secure</strong></th>
<th><strong>KPIs</strong></th>
<th><strong>Review</strong></th>
<th><strong>Assessment</strong></th>
<th><strong>Targets</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Qualitative</strong></td>
<td>Assess the vulnerability level of existing routes and incorporate results in an upgraded policy for nationwide DSM (dedicated service handling module) cables</td>
<td></td>
<td>○</td>
<td></td>
</tr>
<tr>
<td><strong>Qualitative</strong></td>
<td>Promptly secure redundancy for critical connections in the event of a disaster</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Qualitative</strong></td>
<td>Construct networks less susceptible to disruptions in the event of a disaster</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Qualitative</strong></td>
<td>Reinforce security of the internal surveillance network</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Completed PoC verification of the existing cable vulnerability assessment system</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Delivered goods for additional paths for critical lines and reviewed the allocation of alternative equipment for in the event of a disaster</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Completed construction of an additional path for triple redundancy to the Kyushu-Okinawa system; signed an agreement for the construction of the Hokkaido-Akita submarine cable system</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Started operating NDR in April 2021</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Enhance network services that are resistant against natural disaster, highly reliable, safe, and secure</strong></th>
<th><strong>KPIs</strong></th>
<th><strong>Review</strong></th>
<th><strong>Assessment</strong></th>
<th><strong>Targets</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Quantitative</strong></td>
<td>New</td>
<td>Percentage of stable services provided: 99.99%</td>
<td>○</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Voice service</td>
<td></td>
<td>Transfer the network infrastructure to DOCOMO and continue</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Corporate network service</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Cloud service</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Achievement levels based on self-assessment: ○: Achieved △: Partially achieved ×: Unachieved

NTT Communications Corporation Sustainability Report 2022
### FY2021

<table>
<thead>
<tr>
<th>Main Initiatives</th>
<th>KPIs</th>
<th>Review</th>
<th>Assessment</th>
<th>Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Provide advanced and robust information and cyber security</strong></td>
<td><strong>Quantitative</strong></td>
<td>Developed security services and added a menu: 5 cases</td>
<td>□</td>
<td>○</td>
</tr>
<tr>
<td><strong>Provide advanced and flexible network services</strong></td>
<td><strong>Quantitative</strong></td>
<td>Launched 3 advanced services including SDPF Edge, an edge computing service</td>
<td>□</td>
<td>○</td>
</tr>
<tr>
<td><strong>Priority Activity</strong></td>
<td><strong>Promotion of corporate citizenship</strong></td>
<td>10 activities (2 last year)</td>
<td>□</td>
<td>○</td>
</tr>
<tr>
<td><strong>Promote social contribution activities that are beneficial to a sustainable future</strong></td>
<td><strong>Quantitative</strong></td>
<td>10 activities (2 last year)</td>
<td>□</td>
<td>○</td>
</tr>
</tbody>
</table>

### FY2022

<table>
<thead>
<tr>
<th>Main Initiatives</th>
<th>KPIs</th>
<th>Review</th>
<th>Assessment</th>
<th>Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Provide advanced and robust information and cyber security</strong></td>
<td><strong>Quantitative</strong></td>
<td>Plan to develop a cyber security service with a view to offering a menu for small and medium-sized enterprises</td>
<td>□</td>
<td>○</td>
</tr>
<tr>
<td><strong>Provide advanced and flexible network services</strong></td>
<td><strong>Quantitative</strong></td>
<td>Work mainly on 5G/IoT</td>
<td>□</td>
<td>○</td>
</tr>
<tr>
<td><strong>Priority Activity</strong></td>
<td><strong>Promotion of corporate citizenship</strong></td>
<td>Promote a wide range of social contribution activities in which many employees can participate</td>
<td>□</td>
<td>○</td>
</tr>
<tr>
<td><strong>Promote social contribution activities that are beneficial to a sustainable future</strong></td>
<td><strong>Quantitative</strong></td>
<td>Participate in activities that contribute to local communities (year-on-year increase)</td>
<td>□</td>
<td>○</td>
</tr>
</tbody>
</table>

Achievement levels based on self-assessment: ○ : Achieved △ : Partially achieved × : Unachieved
## Environment

### Our Vision of the Future

We envision an eco-friendly future characterized by carbon neutrality, closed-loop recycling, and harmonious coexistence with nature based on the preservation of biodiversity.

We intend to become carbon neutral by 2030 (i.e., to essentially achieve zero CO₂ emissions from our own operations) through the following related main initiatives.

<table>
<thead>
<tr>
<th>Priority Activity</th>
<th>Promotion of a decarbonized society</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main Initiatives</strong></td>
<td><strong>KPIs</strong></td>
</tr>
<tr>
<td>Promote the use of green electricity</td>
<td>Quantitative</td>
</tr>
<tr>
<td>Reduce power consumption</td>
<td>Quantitative</td>
</tr>
<tr>
<td>Introduce electric vehicles (EVs)</td>
<td>Quantitative</td>
</tr>
<tr>
<td>Provide services that help reduce CO₂ emissions</td>
<td>Quantitative</td>
</tr>
<tr>
<td>Improve energy efficiency</td>
<td>Quantitative</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Priority Activity</th>
<th>Development of a closed-loop society</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main Initiatives</strong></td>
<td><strong>KPIs</strong></td>
</tr>
<tr>
<td>Thoroughly implement the 3Rs (reduce, recycle, and reuse)</td>
<td>Quantitative</td>
</tr>
<tr>
<td>Promote the recycling of plastics</td>
<td>Quantitative</td>
</tr>
</tbody>
</table>

For more information about the concept of achieving carbon neutrality by 2030, see “Eco Strategy 2030” in this report.

Achievement levels based on self-assessment ○: Achieved △: Partially achieved ×: Unachieved
## Human Resources

### Our Vision of the Future

We envision a future rich in diversity based on mutual respect and enhancement, where everyone can shine in their own way and play a role in society.

## Priority Activity | Development of human resources

<table>
<thead>
<tr>
<th>Main Initiatives</th>
<th>KPIs</th>
<th>FY2021</th>
<th>FY2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disseminate recognition of career management programs and promote their use</td>
<td>Quantitative</td>
<td>Training costs per person: 228,000 yen per year</td>
<td>202,429 yen per year</td>
</tr>
<tr>
<td>Enhance professional human resource development programs and skill improvement training</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Priority Activity | Promotion of diversity and inclusion

<table>
<thead>
<tr>
<th>Main Initiatives</th>
<th>KPIs</th>
<th>FY2021</th>
<th>FY2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promote hiring, development, assignment, and equal opportunities for diverse human resources</td>
<td>Quantitative</td>
<td>Percentage of female employees in managerial positions: 10% in FY2025</td>
<td>8.3%</td>
</tr>
<tr>
<td></td>
<td>Quantitative</td>
<td>Percentage of male employees taking childcare leave: 25% (ref.)</td>
<td>25% in FY2025</td>
</tr>
<tr>
<td></td>
<td>Quantitative</td>
<td>Percentage of male employees taking childcare leave: 25% in FY2025</td>
<td>25%</td>
</tr>
<tr>
<td></td>
<td>Quantitative</td>
<td>Percentage of employees with disabilities: 2.3%</td>
<td>As of June 1, 2022</td>
</tr>
<tr>
<td>Promote hiring, development, assignment, and equal opportunities for diverse human resources</td>
<td>Quantitative</td>
<td>Percentage of female employees in managerial positions: 15% in FY2025</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>Quantitative</td>
<td>Percentage of female employees appointed as new managers: 30%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Quantitative</td>
<td>Percentage of male employees taking childcare leave: 25% (ref.)</td>
<td>25%</td>
</tr>
<tr>
<td></td>
<td>Quantitative</td>
<td>Percentage of male employees taking childcare leave: 25% in FY2025</td>
<td>25%</td>
</tr>
<tr>
<td></td>
<td>Quantitative</td>
<td>Percentage of employees with disabilities: 2.3%</td>
<td></td>
</tr>
</tbody>
</table>
## Main Initiatives KPIs Review Assessment Targets

### Promote work-life balance

<table>
<thead>
<tr>
<th>KPIs</th>
<th>Review</th>
<th>Assessment</th>
<th>Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantitative Employee job satisfaction (higher than in previous year)</td>
<td>Introduced a unified NTT Group engagement survey</td>
<td></td>
<td>Grasp changes over time, mainly based on engagement scores with the NTT Group common PF</td>
</tr>
<tr>
<td>Quantitative Percentage of electronic data coverage: 85%</td>
<td>Percentage of electronic data coverage: 87.5%</td>
<td></td>
<td>Continue efforts to further promote percentages of both electronic data coverage and digitization implemented in common operations as a DX company</td>
</tr>
<tr>
<td>Quantitative Percentage of digitization implemented: 70%</td>
<td>Percentage of digitization implemented: 81.3%</td>
<td></td>
<td>Electronic data coverage: work toward 100%</td>
</tr>
<tr>
<td>Quantitative Percentage of employees working from home: 70%</td>
<td>Over 80%</td>
<td>×</td>
<td>Percentage of digitization implemented: make recommendations based on customer usage situation</td>
</tr>
</tbody>
</table>

### Thoroughly implement occupational safety and health management for employees

<table>
<thead>
<tr>
<th>KPIs</th>
<th>Review</th>
<th>Assessment</th>
<th>Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantitative Percentage of employees receiving special health guidance: 16.5% in FY2021, 14.5% in FY2023</td>
<td>22.0%</td>
<td>△</td>
<td>Carry out healthy challenge programs to improve the exercise habits of employees and reduce the percentage of those receiving special health guidance compared to the previous year</td>
</tr>
<tr>
<td>Quantitative Percentages of special health guidance completed: 43% in FY2021, 55% in FY2023</td>
<td>67.0%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Priority Activity Respect for human rights

<table>
<thead>
<tr>
<th>KPIs</th>
<th>Review</th>
<th>Assessment</th>
<th>Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantitative Attendance of human rights training (higher than in previous fiscal year)</td>
<td>Attendees: 18,155 Attendance rate: 96.3% (87% in previous year)</td>
<td></td>
<td>Aim for 100% attendance of human rights training</td>
</tr>
<tr>
<td>Quantitative Human rights due diligence: more than once a year</td>
<td>0 cases</td>
<td>△</td>
<td></td>
</tr>
<tr>
<td>Quantitative Human rights violations: 0 cases</td>
<td>2 (disciplinary cases)</td>
<td>×</td>
<td></td>
</tr>
</tbody>
</table>
# Governance

## Our Vision of the Future

We envision a future in which the Company is trusted for its lofty ethics and solid governance and develops a sustainable society for the future based on diverse co-creation.

## Priority Activity | Thorough compliance and risk management

<table>
<thead>
<tr>
<th>Main Initiatives</th>
<th>KPIs</th>
<th>Review</th>
<th>Assessment</th>
<th>Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Continuously enhance initiatives on compliance</strong></td>
<td>Qualitative</td>
<td>Implement compliance training and foster awareness of risk management</td>
<td>Training participation: 98.8% (93.1% last year)</td>
<td>Establish a compliance infrastructure with solid integrity and address the following in accordance with the new DOCOMO Group structure</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Corporate ethics questionnaire implemented: 94.1% (93.8% last year)</td>
<td>Promote harmony and mutual understanding among employees</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Implemented other training programs, such as management review training for preventing harassment</td>
<td>Adapt to the new structure and processes</td>
</tr>
<tr>
<td><strong>Continuously upgrade the risk management structure</strong></td>
<td>Qualitative</td>
<td>Promote Companywide risk management</td>
<td>Held Business Risk Management Committee meetings (twice) and subcommittee meetings (12 times)</td>
<td>Designate and focus on COVID-19 (pandemic), information security, and resilience as key risks for FY2022</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Submitted a quarterly report to the Executive Council, introduced initiatives internally, etc.</td>
<td>○</td>
</tr>
</tbody>
</table>

**New:** 
- Share high ethical standards and ensure compliance
  - Serious compliance violations: 0 cases

**New:** 
- Continuously enhance initiatives on compliance as a company that continues to be trusted
  - Participation in Companywide compliance training: 100%

**New:** 
- Corporate culture for maintaining and improving business ethics
  - Percentage of employees reporting that their workplace has an open atmosphere: 97%

**New:** 
- Continuous upgrade the risk management structure
  - Promote Companywide risk management

Achievement levels based on self-assessment
- ○: Achieved
- △: Partially achieved
- ×: Unachieved

NTT Communications Group Sustainability Report 2022
### Priority Activity  |  Enhanced value chain partnerships

#### Collaborate with suppliers to ensure thorough CSR and green procurement

<table>
<thead>
<tr>
<th>KPIs</th>
<th>Review</th>
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<th>Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Quantitative</strong></td>
<td>Response to CSR survey: 100%</td>
<td>Changed to conducting SAQs (self-risk assessment surveys), and strengthened partnerships by developing a scheme to conduct direct dialogue with suppliers.</td>
<td></td>
</tr>
</tbody>
</table>
| **Quantitative** | Checks on procurement status of high-risk suppliers: 100% | ● Held supplier briefings (130 companies) regarding additional environmental requirements for RFP.  
● Held individual meetings with 20 companies to exchange opinions on CO2 reduction, and established the new Supply Chain BCP Guidelines and requested cooperation from suppliers (in July).  
● Started to gradually apply BCP requirements to purchase specifications (in July).  
● Directly with manufacturers affected by the semiconductor shortage, regularly negotiated to continue production. |  | ○ |

#### Enhance stakeholder engagement

<table>
<thead>
<tr>
<th>KPIs</th>
<th>Review</th>
<th>Assessment</th>
<th>Targets</th>
</tr>
</thead>
</table>
| **Qualitative** | Dialogue with stakeholders and response to their requests | ● Conducted a dialogue with experts on CSR procurement and human rights due diligence (in March).  
● Held dialogues with customers, mainly on environmental issues. |  | ○ |

#### Collaborate with suppliers to ensure thorough CSR and green procurement

<table>
<thead>
<tr>
<th>KPIs</th>
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<th>Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Quantitative</strong></td>
<td>Response to SAQs: 100%</td>
<td>Swiftly and appropriately disseminate and implement the Procurement Policies and Guidelines for Sustainability in the Supply Chain in organizing and integrating procurement schemes for DCC integration.</td>
<td></td>
</tr>
<tr>
<td><strong>Quantitative</strong></td>
<td>Checks on the procurement status of high-risk suppliers: 100%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Quantitative</strong></td>
<td>Corrective response to suppliers associated with risk: 100%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Quantitative</strong></td>
<td>New Percentage of direct dialogue with key suppliers conducted: 100%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Enhance stakeholder engagement

<table>
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<th>Assessment</th>
<th>Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Qualitative</strong></td>
<td>Dialogue with stakeholders and response to their requests</td>
<td>Strengthen dialogue with customers on solutions to social issues</td>
<td></td>
</tr>
</tbody>
</table>

Achievement levels based on self-assessment  ○ : Achieved  △ : Partially achieved  × : Unachieved
<table>
<thead>
<tr>
<th>Priority Activity</th>
<th>Continuously strengthening information security</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main Initiatives</strong></td>
<td><strong>KPIs</strong></td>
</tr>
<tr>
<td><strong>Continuously reinforce security management</strong></td>
<td><strong>Quantitative</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Quantitative</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Quantitative</strong></td>
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<tr>
<td></td>
<td><strong>Quantitative</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Quantitative</strong></td>
</tr>
<tr>
<td><strong>Develop security specialists</strong></td>
<td><strong>Quantitative</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Quantitative</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Quantitative</strong></td>
</tr>
<tr>
<td><strong>Appropriately manage personal information</strong></td>
<td><strong>Quantitative</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Quantitative</strong></td>
</tr>
</tbody>
</table>

Achievement levels based on self-assessment: ○: Achieved △: Partially achieved ×: Unachieved
The NTT Communications Group clearly redefines the main issues it must address by gauging the social and environmental impact of its business activities across its value chain, adhering to its new Sustainability Policy and referencing the SDGs. Toward achieving the SDGs and realizing a sustainable future, we will enhance our value chain partnerships as we implement initiatives for addressing the main issues through our business activities by reinforcing the positive impact and minimizing the risks and negative impact on society.

Four Priority Areas
- Society
- Human Resources
- Environment
- Governance

Maximizing Positive Impact
- Enhance stakeholder engagement
- Reinforce collaboration with NTT Group companies
- Hire and educate diverse human resources
- Pursue social contribution activities that leverage the Group’s business characteristics
- Plan business from the perspectives of the customer and social issues
- Generate creative and innovative services
- Strengthen partnerships with suppliers
- Provide DX solutions that address social issues faced by society, local communities, and industries
- Provide DX solutions that help balance work and personal life
- Provide DX solutions that realize global business
- Construct flexible and optimized networks
- Provide services that contribute to reducing CO2 across society
- Provide services that contribute to society through resource recycling
- Design robust, highly reliable and secure ICT services
- Collaborate with suppliers to ensure thorough sustainability and green procurement
- Promote the use of renewable energy
- Eliminate the digital divide by improving convenience and accessibility
- Build highly reliable disaster-resistant networks by bolstering ICT infrastructure
- Construct safe and secure systems for cyber security
- Take action to protect the environment by utilizing ICT equipment with due consideration for biodiversity
- Offer prompt, reliable responses to security risks
- Limit the frequency of incidents
- Thoroughly and effectively manage personal information
- Promote decarbonization in business activities
- Provide services capable of contributing to reducing CO2 across society
- Stringently practice the 3Rs in business operations
- Promote the recycling of plastics
- Respect for human rights
- Thorough compliance
- Thorough risk management
- Continuously reinforce security management
- Develop security specialists
- Promote work-life balance
- Thoroughly implement occupational safety and health and health management for employees

Minimizing Negative Impact
Promoting Sustainability throughout the Entire Group

NTT Communications engages in initiatives Groupwide to address social issues as a member of the NTT Group by adhering to the NTT Group Sustainability Charter, established in November 2021 as a revision to the NTT Group CSR Charter. As part of the revision, the NTT Group set up the Sustainability Committee, chaired by the president, to discuss the basic strategies, status of activities, and information disclosure related to sustainability to promote its initiatives. The NTT Communications Group participates in these discussions as an operating company, and decisions made by the committee are reflected in our own activities.

Furthermore, the NTT Group has been holding NTT Group Sustainability Conferences since fiscal 2013 to understand and promote sustainability activities. The NTT Communications Group has consistently received awards at the conference since fiscal 2016. In fiscal 2021, we proactively shared and reported on initiatives and services beneficial from the perspective of sustainability.

Outside Advice for Management

We believe that we have an important responsibility for conducting business with due consideration to the diverse outlook of our stakeholders. With this in mind, each executive not only participates in dialogues as part of daily business but also actively takes part in internal and external meetings and individual interviews. To incorporate the perspective of sustainability into our business strategies, we believe it is important to exchange opinions with internal and external experts and intellectuals, and we will continue to convene dialogues involving management and outside experts. In fiscal 2021, we invited Yoshinao Kozuma, Emeritus Professor of Sophia University, to take part in a dialogue with three employees, including the CSR Committee Chairperson, on the theme of risk management in the value chain. Ongoing dialogue with experts by department personnel delegated by management to promote the sustainability strategy is shared with management as appropriate by the CSR Committee.

Participation in External Groups

NTT Communications actively participates in external organizations and shares information so that initiatives for addressing social issues can be shared beyond corporate boundaries.

<table>
<thead>
<tr>
<th>Participation in External Organizations (Major Groups Only)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Japan Climate Initiative (JCI)</td>
</tr>
<tr>
<td>• Japan Circular Economy Partnership (J-CEP)</td>
</tr>
<tr>
<td>• Green Purchasing Network (GPN)</td>
</tr>
<tr>
<td>• Okinawa Open Laboratory (Member of the Board)</td>
</tr>
<tr>
<td>• Advanced IT Architect Human Resource Development Council (Member of the Board)</td>
</tr>
<tr>
<td>• Internet Content Safety Association (ICSA) (Member of the Board)</td>
</tr>
<tr>
<td>• Security Promotion Council (SPREAD)</td>
</tr>
</tbody>
</table>

For more information on the NTT Group Sustainability Charter, refer to the following link.

For details on dialogues involving management and outside experts, refer to the following link.
A better future characterized by innovation and abundant vigor, in which sustainable development is achieved through value creation.

As a leading ICT company spearheading DX across society, the NTT Communications Group works to resolve diverse social issues through initiatives, including the realization of a Smart World that connects society and the future, ICT Transformation, and promotion of advanced innovation, with the intention of developing a sustainable future. We will venture beyond our corporate boundaries and continuously take on challenges to co-create and drive the emergence of new value and demonstrate our commitment. Furthermore, as a corporate citizen, we will engage in business activities deeply rooted in the local community to bring about a better future that is resilient, safe, and secure while constantly pursuing opportunities to contribute to society through ICT.

Targeted SDGs

032 Promotion of DX to Connect Society with the Future
035 Promotion of Innovations that Break through Limits
036 ICT Transformation
040 Promotion of Corporate Citizenship

Priority Activities

For further information, please refer to NTT Communications Corporation Sustainability Report 2022.
Our goal is to facilitate DX that will lead customers to create new businesses and bolster their competitiveness and to realize a Smart World through the utilization of ICT. By accumulating a broad array of data and reusing it to improve existing formats and develop and introduce new systems, technologies, and services, we will resolve a number of the issues facing society and create better ICT environments.

We will contribute to addressing social challenges by promoting DX in collaboration among Group companies and with our partners to address the issues faced by clients developing global business, various industries, and society as a whole. The NTT Communications Group will also provide solutions for promoting DX to connect society with the future, such as realizing a world in which every worker can choose an optimal workstyle and demonstrate their talents.

In fiscal 2021, we further expanded the Things Partner® Program, which promotes the spread of IoT, and the number of participating companies consequently increased to 43. We will contribute to realizing a Smart World by creating new areas for applying IoT through this program, which offers one-stop support for everything from consideration of IoT introduction to design, maintenance, and operations. In addition, we enhanced the Smart Data Platform*, which provides a one-stop service for data collection, storage, analysis, and return, to include functions supporting companies that adopt new ways of working in the wake of the COVID-19 pandemic, such as a system that allows remote access to Flexible InterConnect.

Moreover, with the spread of remote and hybrid working arrangements, we will continue supporting measures in response to changes in network usage, such as adding new service options to cope with traffic fluctuations and functions to improve communications quality for online meetings, while also promoting the provision of services that utilize innovative technologies to help address social issues through our business.

We also promoted various DX projects, with our education platform Manabi Pocket achieving over 3 million customer IDs (in March 2022). Furthermore, we have expanded our service menu with a total of 11 items, including the release of Smart Data Platform for Healthcare applications and standard components in January and March 2022, respectively, to support the utilization of personal data in the healthcare field, and the renewal of the menu system for the Smart Data Platform, which accelerates the realization of DX.

* A one-stop service that integrates and organizes corporate data dispersed in the cloud or on premises into a secure environment on a single platform and provides all the functions required for customers’ data-based businesses.

For more information on the Smart Data Platform, see: https://www.ntt.com/business/sdpf/ (in Japanese only)
Promoting DX to Create Value through the Use of IoT

NTT Communications is actively promoting value creation and business co-creation through innovation with customers based on the concept of design and use of IoT. In fiscal 2021, to continue to provide customers with valuable IoT solutions combined with Smart Data Platform services, we made value proposals for their business operation challenges and expanded the capabilities of the Things Partner® Program. As a result of our customer co-creation efforts, in August 2021 we started operating the IoT Solution for Warehouse Condition Monitoring to promote the DX of logistics facilities using IoT. The number of participating companies in the Things Partner® Program increased to 43 as of March 2022 through events and discussions on sector-specific areas for applying IoT online during the coronavirus pandemic.

We have expanded Things Cloud® with streaming functions that can execute real-time, high-performance processing as well as functions that enable closed network connectivity to address IoT security risks.

In fiscal 2021, we launched a new 5G/IoT Task Force to deepen collaboration with networks such as IoT Connect Mobile® and local 5G.

With the release of the IoT Connect Gateway service, combining a closed connectivity feature and a function that reduces the burden of setting up IoT devices for encrypted communications, we have expanded the functionality of IoT Connect Mobile® Type S to support a variety of connectivity options, from mobile networks to a multi-cloud environment, including Things Cloud®.

In January 2022, we launched SDPF Edge, a new managed edge computing service, to respond to the growing number of use cases that require immediate processing and decision-making of huge volumes of data generated by the spread of 5G and IoT. We will accelerate our efforts to help customers promote DX through data utilization.
Providing Services that Enable Secure Access to Internal Systems

The “new normal” social environment, where remote and hybrid work has become common, requires an environment that allows secure access from anywhere to internal business systems and SaaS\(^1\) scattered across on-premises\(^2\) and public clouds\(^3\).

In April 2021, NTT Communications launched Flexible Remote Access, a remote access service that allows employees to connect to these resources from anywhere. The service has since been updated on a quarterly basis with new features, including a broadband menu to handle increased traffic, BCP, and mobile device access. Going forward, we will continue to create an ICT environment that allows customers to access the necessary resources safely and securely from anywhere and according to their needs.

\(^1\) Software as a Service: Software or a software platform that is provided in the cloud and can be used as a service with necessary functions in the required quantities

\(^2\) In-house operation of information systems such as servers

\(^3\) An open form of cloud computing environment that is provided to an unspecified number of companies or individuals

Providing the Benefits of ICT to All

As ICT gains importance as social infrastructure, the bridging of the digital divide, which will allow people all over the world to benefit from its use free of any constraints in the areas in which they live, their age, and economic standards, is being looked at closely as a challenge confronting the entire human race. While collaborating with Group and partner companies and deploying high-quality communications networks across the globe, we continue to build systems that provide highly convenient services at reasonable prices and contribute to the elimination of the digital divide. For example, in IoT we are working to create use cases that contribute to resolving various social issues such as watching over children, preventing crime in public areas, and assisting the elderly and physically challenged with mobility issues.

NTT Communications is promoting universal design\(^*\) to provide products and services easy to use by all customers, regardless of age, gender, or physical abilities. For example, our AI chatbot COTOHA Chat & FAQ\(^*\), which uses a unique semantic search engine to read the intent of questions and provide highly accurate answers, was made compatible with universal design. The ability of the service to provide multilingual customer support with only Japanese FAQs and Japanese-speaking operators has been well received.

\(^*\)Products and services, including functional enhancements, that can be used by the elderly, children, people with disabilities, and foreign visitors to Japan who experience language barriers.

For more information on COTOHA Chat & FAQ\(^*\), see: 
https://www.ntt.com/business/services/application/ai/cotoha-cf.html
(in Japanese only)
Under our mission of “Creating communications methods that open up new possibilities for people and our world,” we aspire to connect the world by providing advanced technologies and services that generate new social value.

We will pursue innovations unshackled by conventional wisdom. To generate creative innovations, we will apply new ideas to establish businesses and engage in new business development such as Smart X and business co-creation with our customers. We will also develop a new framework for generating innovations within the Group through internal reforms and the Open Innovation Program.

In fiscal 2021, we promoted the development and demonstration of additional businesses based on new customer experiences, which led to the provision of several commercial services, including OsecT, which visualizes security risks in control systems, and an AI plant operation support solution developed in collaboration with a plant operator (both launched commercially in April 2022). We also expanded the scale of business for services launched by the Innovation Center, including Fintech-related services and “droppin.”

In addition, we actively promoted innovation management in collaboration with internal and external parties. The ExTorch Open Innovation Program had 54 applicants from outside the Company for five themes, of which seven were selected. We also received the Encouragement Award at the 3rd IP BASE AWARD hosted by the Japan Patent Office for our support of IP strategies for startups. We will continue our efforts to create new added value to bring about change.

For more information on the AI plant, see page 011.
As the IoT society evolves, economic and social damage caused by emergency telecommunication breakdowns is becoming incalculably severe. As we are entrusted with managing networks and vital data associated with the globalization of many companies, we are absolutely required to fulfill our responsibility to maintain network connections at all times.

As a corporate group that provides global telecommunications services by utilizing the network technologies and maintenance systems that underpin advanced ICT societies, we focus on the Three Disaster Policy Fundamentals to put into place a communication environment that allows for the confident use of networks even in the event of a disaster or other emergencies. Through the consistent strengthening of ICT infrastructure equipment to prevent telecommunication breakdowns in the event of emergency, we will maintain the network as vital infrastructure, resolve customer security issues as a security advisor for the “new normal” era, and provide advanced services that integrate Group technologies such as local 5G and edge computing to realize flexible and optimal network environments for our customers.

As an ICT services provider, we are responsible for ensuring the confidentiality, secure retention, and management of information we receive from customers. We believe that fulfilling this responsibility is essential for realizing advanced, safe, secure, and sustainable living environments and economic and social activities.

Furthermore, we are working to provide advanced and robust information and cyber security. We have established a set of security regulations necessary for the NTT Communications Group as a whole to meet public expectations, and we apply them to the ongoing monitoring and operation of the ICT systems and networks entrusted to us by customers to ensure they are robust while enhancing their vulnerability response to unknown threats.

Disaster Policy Fundamentals

1. Improving Network Reliability
   We are working to improve reliability so that partial damage to telecommunications systems does not have a great effect on others.

2. Ensuring Crucial Communications
   We have secured means of communication to allow important communications in a disaster situation.

3. Quickly Restoring Communications Services
   We will restore to service damaged telecommunications equipment as soon as possible.

For more information on the Disaster Policy Fundamentals, see: http://www.ntt.com/about-us/cs/saitai.html (in Japanese only)
In preparation for the opening of a major international sporting event in fiscal 2021, we repeatedly conducted exercises simulating the occurrence of incidents during the large-scale event to confirm the effectiveness of countermeasures and improvements (KAIZEN) we had implemented up until then. These exercises enabled us to support the successful operation of the event problem-free.

In addition, in preparation for a large-scale event in the midst of the COVID-19 pandemic, we improved the information coordination flow and environment to decentralize and coordinate the functions of the headquarters to support event management in remote environments. This helped us to minimize the risk of spreading the pandemic and contribute to the event’s smooth operation. Having achieved all of our initial targets, we will continue to set new targets and take action to achieve them in fiscal 2022.

We also strengthened our security services to combat increasingly sophisticated cyber-attacks, such as emerging threats from the spread of remote work caused by the COVID-19 pandemic as well as persistent, malicious ransomware attacks. In addition, we started offering a new security service that is affordable and easy to introduce, considering the growing number of cyber-attacks affecting not only large but also small and medium-sized enterprises.

We specifically focused on offering services that meet the expectations of our customers for security. These included support for our highly secure and scalable Internet gateway service, Distributed Secure Internet GateWay (DSIGW)*1, expansion of products for EDR log analysis*2, risk scoring to visualize corporate security risks for SMEs, and security education and email training that combines security education and phishing email training. In fiscal 2022, we will continue to strengthen our network security through the promotion of advanced and robust information and cyber security services, and we will expand our service lineup to meet the security needs of all customers, in light of the increasing prevalence of security incidents not only in IT environments but also in OT environments, regardless of the size of the enterprise.

*1 A service that provides UTM security and proxy functions (an intermediary system for accessing the Internet) necessary for secure Internet connections outside the company. It allows the resource size (specifications) to be adjusted on demand based on the customer situation and needs.

*2 Obtaining log information from endpoints (PCs, servers, and other devices) connected to the organization’s network and analyzing them for any suspicious activities or traces of them.

NTT Communications works under the three basic guidelines for disaster prevention measures to maintain mission-critical communications and swiftly restore disrupted communication services.

The torrential rain of August 2021 caused extensive damage in western Japan as well as in other parts of the country, from Kyushu to the Kanto region. The rain damaged the pipelines attached to a bridge, which consequently damaged the backbone relay cable between Nagano and Gifu. Since a portion of the cable was still usable, we temporarily restored it by the next day and built a new relay cable line that largely bypassed the affected pipelines within seven days of the outset of the disaster.

[ Before the disaster (Ninomatazawa Bridge) ]

[ After the disaster (Ninomatazawa Bridge) ]
We work daily to raise awareness about disasters among our employees and those of partner companies so they can rapidly respond to disasters. Specifically, we conduct training that makes use of the Biz Safety Confirmation and Notification service, offered by NTT Communications, and also regular training exercises that simulate large-scale natural disasters.

For more information on disaster response, see: https://www.ntt.com/about-us/cs/saitai.html

We offer highly reliable ICT infrastructure services that will keep customer businesses and operations running uninterrupted even in times of disaster. For example, Nexcenter, a data center service with excellent disaster resistance, and SDPF Cloud/Server service (formerly the Enterprise Cloud service), a cloud service for companies that leverage outstanding technological capabilities as telecommunications carriers, are both connected via high-quality, high-volume networks between bases and therefore provide BCP capabilities that ensure the timely backup of data at remote locations.

Furthermore, DOCOMO IoT Managed Service plans to offer a one-stop solution for multi-carrier redundancy starting in December 2022, and it will help build a robust network for companies that use IoT in their business development.

**Subsea Cable-laying Ship Kizuna with Cutting-edge Features**

Receiving favorable evaluations for the effectiveness of ships used in restoring telecom equipment during disasters, we are examining various ways of using ships not only for NTT Communications but also throughout the NTT Group.

The subsea cable-laying ship Kizuna carries disaster recovery equipment, six 20-foot containers, aerial work platforms, and a mobile base station, which enables the NTT Group to transport emergency supplies and vehicles used for disaster reconstruction. Kizuna supported the rapid restoration of the telecommunications network during recovery work following the Hokkaido Eastern Iburi Earthquake and Typhoon No. 24 by transporting supplies and vehicles to the nearest ports.

Kizuna also has an onboard emergency mobile base station with dynamic positioning functions. This allows it to set up temporary regional telephone services disabled during a disaster. The ship’s upper bridge has enough space for numerous parabolic antennas that keep satellite communications from being impeded.

This design allows for the installation of more telecom equipment during a disaster. In addition, the ship features unique living quarters that can be equipped with lodging and support equipment (including meal provision) for disaster relief workers. It is also equipped with switchboards and water intake ports that enable ship-to-shore energy and water supply.

In fiscal 2021, high-speed maritime broadband service JSATMarine provided by SKY Perfect JSAT was introduced to the Kizuna to make it possible to use the same business and communication tools on land and at sea. Thanks to the significant increase in communication capacity, we can now exchange large files with our clients when conducting cable work and other projects, allowing us to better manage business operations. In addition, program updates for special construction equipment manufactured overseas can now be performed remotely, so technicians from overseas are not required in person.

[Onboard equipment and disaster recovery support on Kizuna]
A security approach based on the premise of not trusting anyone or anything

Servers managed by a malicious third party that issues remote commands to infected terminals

Provision of Advanced and Robust Information and Cyber Security

**Monitoring Enterprise Network Security**
While DX presents business opportunities for companies, it also signifies the start of an era of zero trust* in an ICT environment where business expansion leads to assimilation into the Internet, thereby increasing cyber risks. Under these circumstances, safeguarding business continuity in the face of both foreseeable and unforeseeable risks, as well as risks associated with external attacks or internal foul play, has become a major management concern. We have been addressing cyber threats for about 20 years and have expanded our services by providing security operation services for enterprises through our Security Operation Center (SOC) and globally through the comprehensive security risk management service WideAngle for ten years. Over the course of these periods, experts from all fields of security have protected customer ICT environments from increasingly sophisticated cyber-attacks.

Fiscal 2021 was truly a “zero-trust era,” as remote work became increasingly widespread due to the COVID-19 pandemic. To counter new threats arising from the shift to the cloud, we have expanded our lineup to include the Distributed Secure Internet GateWay (DSIGW), which provides secure Internet access from both office and remote environments, as well as additional products that support EDR analysis. In addition, as cyber-attacks are increasingly targeting small and medium-sized companies, we have launched new services for a wider market, such as risk scoring to easily visualize corporate security risks at low cost and security education and email training that combines security education and phishing email training. We will continue to contribute to our customers’ DX by providing solutions that enable them to safely use data and create new value.

* A security approach based on the premise of not trusting anyone or anything

**Countering Malware, a Growing Social Problem**
In February 2016, NTT Communications became the first internet service provider in Japan to provide free of charge the Malware Unauthorized Communication Blocking Service, which blocks communications to unauthorized access destinations (C&C servers*). Since then, the list of unauthorized access destinations has been constantly updated to provide a safe and secure network.

* Servers managed by a malicious third party that issues remote commands to infected terminals
Guided by our Social Action Principles, the NTT Communications Group promotes activities for realizing a prosperous society by designating six pillars of social contribution: Preservation of the Natural Environment, Social Welfare, Promotion of Education and Culture, Regional Development and Exchange, International Exchange, and Promotion of Sports. Companies are increasingly expected to play a role through their social contribution activities to support the development of diverse communities grouped by region, generation, and so forth. In addition to community development, we intend to actively participate as a corporate citizen by also developing community engagement activities with an understanding of the SDGs as well as ways to achieve their targets. These efforts will have a significant effect on expanding a sustainability mindset throughout the Group and encourage each company to contribute to the creation of a sustainable society as a member of the NTT Communications Group.

We promote social contribution activities that support a sustainable future. In fiscal 2021, we participated in ten community social contribution activities, a significant increase from two in fiscal 2020. Specifically, we participated in a co-creation project involving ICT, sports, and local communities using OriHime and donated 296 tablet computers to the Philippine Department of Education to help start online classes at nine schools. Going forward, we will continue to engage in a wide range of social contribution activities involving more employees, such as biodiversity preservation.

**Priority Activities**

We conduct lean but sustainable activities over the long term.

We engage in cost-effective activities to ensure continuity.

We carefully assess the relative benefit to society of prospective donations.

We contribute to Japan and the international community.

We utilize services developed for information distribution markets as well as employee abilities gained in those markets for the benefit of society.

**Serving Local Communities**

The NTT Communications Group promotes activities to serve local communities by designating six pillars of social contribution: Preservation of the Natural Environment, Social Welfare, Promotion of Education and Culture, Regional Development and Exchange, International Exchange, and Promotion of Sports. In fiscal 2021, 2,172 employees participated in 67 social contribution activities, some of which were canceled or reduced due to concerns about limiting the spread of COVID-19.

**Social Contribution Activities in Fiscal 2021**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Number of Projects</th>
<th>Number of Participants</th>
<th>Activity Expenditure (Yen)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preservation of the Natural Environment</td>
<td>21</td>
<td>586</td>
<td>2,011,550</td>
</tr>
<tr>
<td>Social Welfare</td>
<td>30</td>
<td>357</td>
<td>27,049,094</td>
</tr>
<tr>
<td>Promotion of Education and Culture</td>
<td>11</td>
<td>1,141</td>
<td>10,283,574</td>
</tr>
<tr>
<td>Regional Development and Exchange</td>
<td>5</td>
<td>88</td>
<td>432,200</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>67</strong></td>
<td><strong>2,172</strong></td>
<td><strong>39,776,418</strong></td>
</tr>
</tbody>
</table>

Moreover, players from the Shining Arcs corporate

**Cleanup Activities**

NTT Communications has participated in cleanup campaigns in Tokyo’s Chiyoda Ward since 2008. These were canceled to prevent the spread of COVID-19 but then resumed in November 2021. We will continue our cleanup activities.

Moreover, players from the Shining Arcs corporate...
maintaining operational efficiency and service quality even during the COVID-19 pandemic. In addition, we have been participating in Japan’s Telework Days campaign since 2017. This initiative implements and promotes telework as part of the workstyle reforms being pursued through a collaborative effort by the national government, Tokyo Metropolitan Government, and relevant organizations. In fiscal 2021, we also worked as a supporting organization to provide telework know-how and solutions.

Over the years, we have received numerous awards in and outside of Japan that recognize our contributions to developing women’s careers, rebuilding local communities, and supporting employment. These include the Gold Award in the Best Home/Remote Agent Program category of the Contact Center World Awards 2019.

Going forward, NTT Com CHEO will continue to promote telework that enables different workstyles for diverse human resources by fully applying our accumulated know-how and solutions.

Social Contribution Activities at Group Companies

For some time, we have been encouraging Group companies to develop their own social contribution activities, and as a result each company has been actively doing so. These include environmental conservation activities, donations, and contributions. As a corporate citizen, we will continue to promote low-profile yet meaningful activities that help communities. In terms of our overseas activities, we are working with local education bureaus and NPOs to provide learning opportunities through the power of ICT to children in the Philippines who have been unable to attend school for various reasons. In fiscal 2021, when schools were closed due to the pandemic, we reallocated 296 tablet computers, which were no longer being used in our offices, to nine schools as tools necessary for online classes.

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTT BizLink, Inc.</td>
<td>Live streaming for parents, other relatives, and current students who had not been able to attend their graduation ceremonies due to the COVID-19 pandemic, and live streaming for parents who had not been able to attend the sports day because admission had been limited due to the COVID-19 pandemic</td>
</tr>
<tr>
<td>NTT Com Engineering</td>
<td>Donation of terminals no longer used within the Company to a NPO</td>
</tr>
<tr>
<td>NTT Com Marketing</td>
<td>Selling used books collected from employees and donating the proceeds to support education for girls in developing countries</td>
</tr>
<tr>
<td>NTT Communications Group</td>
<td>Connecting the Company’s rugby players with children with disabilities using the remote-controlled alter ego robot OriHime to provide a new experience of supporting and watching the game</td>
</tr>
<tr>
<td></td>
<td>Participation in the activities of the paddy future support team to plant rice</td>
</tr>
<tr>
<td></td>
<td>Exhibiting a hands-on programming project at the “Children’s Tour Day in Kasumigaseki”</td>
</tr>
<tr>
<td></td>
<td>Holding a sale of sweets made by a workplace staffed by people with disabilities</td>
</tr>
</tbody>
</table>

Providing Nationwide Opportunities to Work from Home

NTT Com CHEO engages in businesses centered on technical support, including that for users of the OCN ISP service; contact centers offering support via telephone, email, chat, and PC remote control; on-site support for setting up ICT devices such as PCs and routers and providing operating instructions; and the operational management of corporate ICT equipment. These businesses actively provide opportunities for people in different regions of Japan to work from home.

Our contact centers and on-site support visits across Japan are staffed by those working from home, from Hokkaido in the north to Okinawa in the south. As part of this drive, we are also pursuing initiatives for developing women’s careers, revitalizing regional communities, and offering new employment opportunities. Since we had already built and operated a platform that enables home-based staff across the country to work and operate remotely during normal times, we were able to continue our business while rugby team have been leading cleanup activities mainly in Urayasu City, Chiba Prefecture, where they are headquartered. Since fiscal 2020, the team has been involved in a variety of activities by joining in the Leads to the Ocean project, a joint initiative between the NPO Umisakura and Nippon Foundation for addressing environmental issues related to the ocean.

In fiscal 2021, we conducted nine activities with the people of Urayasu City. We will continue to work with them to expand these activities.

For some time, we have been encouraging Group companies to develop their own social contribution activities, and as a result each company has been actively doing so. These include environmental conservation activities, donations, and contributions. As a corporate citizen, we will continue to promote low-profile yet meaningful activities that help communities. In terms of our overseas activities, we are working with local education bureaus and NPOs to provide learning opportunities through the power of ICT to children in the Philippines who have been unable to attend school for various reasons. In fiscal 2021, when schools were closed due to the pandemic, we reallocated 296 tablet computers, which were no longer being used in our offices, to nine schools as tools necessary for online classes.
Activities of the Corporate Rugby Team

In July 2022, NTT Sports X, Inc. was launched as a new venture company funded by NTT Communications. The NTT Communications Rugby Club, the Shining Arcs, was subsequently reorganized into the Urayasu D-Rocks. The new venture company will also engage in social contribution activities rooted in the community through rugby to create value from multiple perspectives and to be a presence that gives dreams and aspirations to people.

Youth Development

NTT Communication’s rugby team, the Shining Arcs*, is actively promoting the sound development of youth and engaging with local communities through sports. The team relocated its headquarters to Urayasu City, Chiba Prefecture in April 2018 and has been organizing rugby classes in elementary schools and engaging in other community-oriented initiatives aimed at boosting the health of city residents under a mutual cooperation and support agreement.

As part of these initiatives, we formulated the Urayasu D-Rocks Youth Development Plan to envision the future, develop the youths, and provide a new way of engaging in sports. This plan targets elementary and junior high school students and addresses such issues as visualization of performance using ICT, provision of programs to develop not only athletic expertise but also diverse abilities, support for the performance of female athletes, and provision and maintenance of a playing environment for junior high school students, which has been a concern in the rugby world. Since there are few rugby competitions with rankings for elementary school students, we host the Shining Arcs Cup to boost the level of competitiveness.

Going forward, we will continue our contribution to educate the public on rugby as a sport with cultural value as well as the sound development of the next generation of youth.

*The team was renamed from Shining Arcs to Urayasu D-Rocks in July 2022. Under the new name, the team will continue and expand its social contribution activities.

Participation in the LEADS TO THE OCEAN

NTT Communications has supported LTO (LEADS TO THE OCEAN), a project co-hosted by the NPO Umisakura and Nippon Foundation since 2015, as a first initiative in the Japanese rugby world and is participating with the hope of helping to improve the marine environment through the power of sports.

Urayasu City, home to the NTT Communications rugby team Shining Arcs, has since ancient times enjoyed its abundant marine resources such as seaweed and clams and has evolved through its history with the sea. To protect these resources and pass them on to the future with the rugby spirit of “One

For ALL, ALL for One,” our rugby team will continue to work together with the community to reduce trash from the city and rivers and protect the precious ocean for the future.

In fiscal 2021, we continued to conduct the deleteC and 1TRY × 1TOY activities that provide preschool children with a toy for each try. We also worked on new sustainability activities, such as a local co-creation project using the alter-ego robot OriHime and support for children with disabilities.
Public expectations for environmental protection are growing along with the responsibilities of ICT companies for engaging in these activities. We are pursuing a multifaceted approach focused on the three themes of promoting a decarbonized society; developing a closed-loop society; and co-existing with nature, including the preservation of biodiversity. We therefore established and announced the Environmental Statement and Eco Strategy 2030.

In March 2021, we reviewed the Eco Strategy 2030 to respond to rapidly changing global and social conditions and set specific goals and initiatives for decarbonization. In addition to reducing the environmental impact of our own business activities, we will contribute to reducing the environmental impact of society as a whole while aiming to achieve both solutions to environmental problems and economic development. 

Targeted SDGs

- 044 Basic Philosophy and Vision
- 046 Environmental Management
- 051 Promotion of a Decarbonized Society
- 060 Development of a Closed-loop Society
- 063 Co-existing with Nature
- 067 Prevention of Environmental Pollution
Basic Philosophy and Vision

While closely monitoring global environmental trends, we reviewed the environmental activities of the NTT Communications Group in November 2016 and established the NTT Communications Group Environmental Statement and Eco Strategy 2030, which applies the philosophy to the characteristics of our business. We set initiative goals and implement measures on an ongoing basis.

NTT Communications Group Global Environmental Charter

The NTT Group has established the NTT Group Global Sustainability Charter to promote Groupwide consideration and actions relating to environmental protection from a global perspective. This policy forms the basis for the NTT Communications Group Global Environmental Charter, which is disseminated among employees of the Group as a set of guidelines for the implementation of environmental protection activities.


Environmental Statement and Eco Strategy 2030

While closely monitoring global environmental trends, we reviewed the environmental activities of the NTT Communications Group in November 2016 and established the NTT Communications Group Environmental Statement and Eco Strategy 2030. In March 2021, we revised the Eco Strategy 2030 in response to increasing corporate roles and responsibilities regarding global climate change. Following the revision, we declared our intention to achieve carbon neutrality by fiscal 2030 (net-zero emissions)* based on the NTT Group’s New Environment and Energy Vision, formulated in September 2021.

Working in unison, each and every NTT Communications Group employee around the world will engage in environmental activities to realize a future in which people and the planet remain in harmony by providing technologies and services that pioneer eras.

*Targeted GHG Protocol: Scope 1 (direct emissions of greenhouse gases from our own sources) and Scope 2 (indirect emissions from the use of electricity, heat, and steam supplied by other companies)
Under Eco Strategy 2030, we have set out specific initiatives to help realize the three futures outlined in the Environmental Statement. In fiscal 2020, following the declaration of the NTT Group’s Environment and Energy Vision in May 2020, we also added specific targets for our renewable energy usage rate, reducing CO₂ emissions, and converting our corporate fleet in Japan to EVs as a countermeasure to rapidly changing climate conditions.

To achieve carbon neutrality or net-zero emissions by fiscal 2030 to establish a decarbonized future, we intend to increase the rate of renewable energy use to at least 50% in fiscal 2030, including the amount used by customer equipment at the data centers, while further saving power through the use of advanced technologies. We plan to achieve this goal by, for example, increasing the rate of renewable energy use by the NTT Communications Group to 100%.

<table>
<thead>
<tr>
<th>Three Futures We Are Targeting</th>
<th>Initiative</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Realizing a Decarbonized Future</strong></td>
<td>Rate of renewable energy use in the Company</td>
</tr>
<tr>
<td></td>
<td>Reducing CO₂ emissions from the Company (Scopes 1 and 2)</td>
</tr>
<tr>
<td></td>
<td>Reducing CO₂ emissions from the supply chain (Scope 3)</td>
</tr>
<tr>
<td></td>
<td>Conversion rate of our corporate fleet to EVs in Japan (%)</td>
</tr>
<tr>
<td></td>
<td>Contributing to the reduction of CO₂ emissions across society</td>
</tr>
<tr>
<td></td>
<td>Adapting to climate change</td>
</tr>
<tr>
<td><strong>Implementing Closed-loop Recycling</strong></td>
<td>Landfill waste disposal ratio</td>
</tr>
<tr>
<td><strong>Planning a Future of Natural Harmony</strong></td>
<td>Preservation of ecosystems</td>
</tr>
</tbody>
</table>

*1 Quantitative targets for fiscal 2030
*2 Targeted GHG Protocol: Scope 1 (direct emissions of greenhouse gases from our own sources) and Scope 2 (indirect emissions from the use of electricity, heat, and steam supplied by other companies)
*3 Including the amount used by customer equipment at the data centers
*4 Equivalent to 1.5°C SBT
*5 50% by fiscal 2024 (to begin with)
### Environmental Management

#### Promotion Framework for Reducing Environmental Impact

In order to continuously promote environmental protection initiatives in a Groupwide effort, we have established the Global Environmental Protection Subcommittee within the CSR Committee, headed by the executive vice president in charge of CSR, and also formed working groups for each related issue. The Global Environmental Protection Subcommittee formulates an overall plan that encompasses a wide range of issues, including the reduction of greenhouse gas emissions and waste, shares information on the results of actions taken, and promotes the horizontal deployment of various initiatives.

In fiscal 2020, we reviewed our environmental management structure in line with new targets added to our Eco Vision 2030, which includes the introduction of renewable energy, reduced greenhouse gas or CO₂ emissions, and having EVs account for 100% of our corporate fleet in Japan, and we have established a Groupwide system to promote environmental protection activities and associated initiatives.

In addition, we are proactively managing environmental risks by defining our approach to environmental issues as a key aspect of our business risk management.

We will continue to improve our management systems as necessary to more effectively respond to environmental trends.

---

#### Main Tasks

<table>
<thead>
<tr>
<th>Working Group</th>
<th>Main Tasks</th>
</tr>
</thead>
</table>
| **Greenhouse Gas Reduction WG** | • Plan and implement energy-saving measures at telecommunications, data center, and office buildings  
• Plan for the introduction and performance management of renewable energy  
• Respond to Japanese laws and regulations covering greenhouse gas emissions, etc. |
| **Waste Management WG**      | • Promote initiatives to reduce plastic waste and improve the landfill rate (e-billing, container packaging recycling, etc.) |
| **Dismantling Telecommunications Equipment WG** | • Thoroughly process and manage dismantled telecommunications equipment in line with the law  
• Promote material recycling measures |
| **Construction Waste WG**    | • Encourage appropriate processing and recycling of construction waste  
• Submit government reports relating to asbestos removal and reconstruction |
| **PCB Storage and Disposal WG** | • Formulate plans for the appropriate storage and treatment of PCBs  
• Submit PCB management reports to the government |
| **Green Procurement WG**     | • Promote Groupwide green purchasing and instill it throughout the supply chain (including measures for Scope 3)  
• Introduce and promote internal carbon pricing |
| **Environmental Accounting WG** | • Build an environmental accounting system and provide performance analyses and reports for management |
| **EV Promotion WG**          | • Plan for EV conversion and performance management |
| **Group Company WG**         | • Share and disseminate information on environmental protection activities in the NTT Communications Group |

Note: The status of activities is also shared with the Board of Directors.

For more information on our approach to business risk management, see the “Risk Management” section of the report.

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Environmental Impact of Business Activities

Fiscal 2021 Material Flow

Environmental Impact of Business Activities

INPUT | Business Processes | OUTPUT
--- | --- | ---
**Procurement** | Procurement | Power 117 kt-CO₂
| Items purchased through green procurement (non-office supplies + office supplies) | 0.75 million (green procurement rate of 100%) |
| Procurement systems assessed | 2 companies |

**Telecommunications Facilities (including data centers)** | Telecommunications Facilities (including data centers) | Fuel 4 kt-CO₂
| Power | 0.44 TWh |
| Green power | 0.16 TWh |
| Fuel | 1.49 million ℓ |
| Gas | 0.13 million m³ |
| Heat | 2.10 TJ |

**Offices*** | Offices | General waste generated 472 t
| Power | 0.03 TWh |
| Green power | 3 GWh |
| Heat | 37.30 TJ |
| Water | 0.1 million m³ |
| Paper | 30 t |
| Recycled paper and eco-friendly pulp | 28 t |

**Sales** | Sale | Greenhouse gases (fuel) 0.1 kt-CO₂
| Paper (brochures) | 10 t |
| Invoices | 125 t |
| Fuel (automobile) | 41 kℓ |

**Reuse/Recycle** | Reuse | In-house reuse of dismantled telecommunications equipment 119 units
| Collection of confidential documents | 161 t |

*We separate waste insofar as possible to improve the recycling rate.*

Scope: NTT Communications Corporation and 14 Group companies
For Scope 3, we calculated 10 relevant categories out of 15 target categories by referring to unit emission databases and other materials produced through studies by the Ministry of the Environment and other government ministries and agencies.

### CO₂ Emissions by Scope and Category

<table>
<thead>
<tr>
<th>Category</th>
<th>Composition Ratio (%)</th>
<th>CO₂ Emissions (kt-CO₂)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scope 1 (direct emissions of greenhouse gases from our own sources, such as fuel combustion)*1</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Scope 2 (indirect emissions from the use of electricity, heat, and steam supplied by other companies)</td>
<td>132</td>
<td></td>
</tr>
<tr>
<td>Scope 3 (indirect emissions other than Scopes 1 and 2, such as emissions by others related to our activities)</td>
<td>100, 2,086</td>
<td></td>
</tr>
<tr>
<td>Category 1 (purchased goods and services)*2</td>
<td>36.2, 756</td>
<td></td>
</tr>
<tr>
<td>Category 2 (capital goods)*2</td>
<td>17.3, 361</td>
<td></td>
</tr>
<tr>
<td>Category 3 (fuel and energy activities not included in Scopes 1 or 2)</td>
<td>3.3, 69</td>
<td></td>
</tr>
<tr>
<td>Category 4 (upstream transportation and distribution)</td>
<td>0.4, 8</td>
<td></td>
</tr>
<tr>
<td>Category 5 (waste generated through business activities)</td>
<td>0.0*6, 0.3</td>
<td></td>
</tr>
<tr>
<td>Category 6 (business travel)*2</td>
<td>0.1, 2</td>
<td></td>
</tr>
<tr>
<td>Category 7 (employee commutations)*2</td>
<td>0.0*6, 1</td>
<td></td>
</tr>
<tr>
<td>Category 8 (upstream leased assets)*3</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Category 9 (downstream transportation and distribution)*4</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Category 10 (processing of products sold)*4</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Category 11 (use of products sold)*4</td>
<td>32.2, 671</td>
<td></td>
</tr>
<tr>
<td>Category 12 (disposal of products sold)</td>
<td>0.1, 2</td>
<td></td>
</tr>
<tr>
<td>Category 13 (downstream leased assets)</td>
<td>10.4, 216</td>
<td></td>
</tr>
<tr>
<td>Category 14 (franchise)*7</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Category 15 (investitional)*7</td>
<td>—</td>
<td></td>
</tr>
</tbody>
</table>

*1 Includes CO₂-equivalent emissions of greenhouse gases other than CO₂ (CFC substitutes, etc.)
*2 We revised the calculation method for categories 1, 2, 6, 7, and 11 of Scope 3 to improve accuracy from FY2021 results.
*3 Not included in the calculation (fuel and electricity used by leased assets are calculated under Scope 1 or 2)
*4 Not included in the calculation (mostly outsourced transportation calculated under category 4)
*5 Not included in the calculation (no intermediate product processing in main businesses)
*6 Less than 0.05
*7 Not applicable

### Environmental Accounting in Fiscal 2021

The NTT Communications Group tabulates its environmental conservation costs (categories corresponding to business activities) and the economic benefit derived from its environmental conservation activities (real financial impact) in line with the Environmental Accounting Guidelines 2005, issued by the Ministry of the Environment, and the NTT Group Environmental Accounting Guidelines.

The environmental conservation cost in fiscal 2021 increased by approximately 760 million yen year on year to 2.6 billion yen, consisting of around 970 million yen in investments and about 1.62 billion yen in expenses. This was mainly due to an increase in global environmental conservation costs.

Meanwhile, the economic benefit derived from environmental conservation in fiscal 2021 decreased by approximately 160 million yen year on year to 1.52 billion yen, mainly due to reduced purchase costs resulting from the reuse of dismantled telecommunications equipment.

### Environmental Conservation Costs (Categories Corresponding to Business Activities) (Millions of Yen)

<table>
<thead>
<tr>
<th>Category</th>
<th>Key Measures</th>
<th>Investment FY2020</th>
<th>Investment FY2021</th>
<th>Expenses* FY2020</th>
<th>Expenses* FY2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Business area cost</td>
<td>Pollution prevention costs</td>
<td>862</td>
<td>942</td>
<td>790</td>
<td>1,549</td>
</tr>
<tr>
<td>Breakdown</td>
<td>Oil tank facility for power generator use Management of items using PCBs</td>
<td>289</td>
<td>198</td>
<td>65</td>
<td>93</td>
</tr>
<tr>
<td></td>
<td>Global environmental conservation costs</td>
<td>573</td>
<td>744</td>
<td>180</td>
<td>600</td>
</tr>
<tr>
<td></td>
<td>Measures to reduce CO₂ Emissions resulting from electricity use</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>Resource circulation costs</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>Waste disposal and reuse expense</td>
<td>0</td>
<td>0</td>
<td>545</td>
<td>856</td>
</tr>
<tr>
<td>(2) Upstream/ downstream costs</td>
<td>Measures to recover, recycle, and reuse telecommunications equipment</td>
<td>42</td>
<td>32</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>(3) Administration costs</td>
<td>Environmental conservation management activities</td>
<td>0</td>
<td>0</td>
<td>117</td>
<td>70</td>
</tr>
<tr>
<td>(4) R&amp;D costs</td>
<td>Allocated portion of the NTT Group’s environmental R&amp;D costs</td>
<td>0</td>
<td>0</td>
<td>23</td>
<td>0</td>
</tr>
<tr>
<td>(5) Social activity costs</td>
<td>Costs of supporting volunteer participation</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>(6) Environmental remediation costs</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
</tbody>
</table>

*Scope: NTT Communications Corporation and 14 Group companies

*FY2020 and FY2021 results do not include depreciation.
Economic Benefits Associated with Environmental Conservation Activities (Real Financial Impact) (Millions of Yen)

<table>
<thead>
<tr>
<th>Category</th>
<th>Key Measures</th>
<th>FY2020</th>
<th>FY2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>Revenues from sales (cables, metal scrap, etc.)</td>
<td>315</td>
<td>374</td>
</tr>
<tr>
<td>Cost reduction</td>
<td>Reductions in expenses as a result of measures such as those related to reducing electricity use</td>
<td>490</td>
<td>401</td>
</tr>
<tr>
<td></td>
<td>Reductions in purchase cost as a result of reusing dismantled telecommunications equipment</td>
<td>442</td>
<td>274</td>
</tr>
<tr>
<td></td>
<td>Decrease in postal and paper costs due to increased use of Mypage (online account page)</td>
<td>433</td>
<td>470</td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>1,682</td>
<td>1,521</td>
</tr>
</tbody>
</table>

Period: April 1 to March 31 of each year
Scope: NTT Communications Corporation and 14 Group companies
Tabulation and disclosure:
Figures were tabulated in line with the Ministry of the Environment's Environmental Accounting Guidelines 2005 and the NTT Group Environmental Accounting Guidelines. Expenses include personnel expenses but exclude depreciation.

Environmental Management Initiatives

Promoting Groupwide Environmental Management

Guided by its Global Environmental Charter, the NTT Communications Group shares PDCA and other reports at the Global Environmental Protection Subcommittee, an organization under the CSR Committee. These reports outline details of the various initiatives administered by the nine working groups that drive the Group’s environmental protection efforts. In addition to sharing information and calling for the further development of effective initiatives, we are promoting environmental management on a Groupwide basis.

Compliance with Environmental Legislation and Regulations

The NTT Communications Group is committed to ensuring legal compliance and proper risk management while liaising closely with the other NTT Group companies. All legislation, including environmental laws and regulations aimed at curtailing pollution, emissions standards, and the PRTR Law*, is fully communicated to related departments, and independent guidelines and enhanced compliance education have been established for in-house application. We were not involved in any litigation or legal violations pertaining to environment-related accidents, infringements, fines, or complaints in fiscal 2021.

We will continue our Companywide efforts to prevent pollution and comply with related laws and regulations.

Promoting Green Procurement

ESG management is a pillar of the NTT Group’s medium-term management strategy. The NTT Group Environment and Energy Vision was formulated in May 2020 as part of this strategy, and the NTT Group was approved by the SBT initiative in October of that year. The NTT Group Green Procurement Standards were subsequently established in April 2022 by revising the NTT Group Green Procurement Guidelines to clarify the latest environmental policies and targets of the NTT Group, specific laws and standards that we require suppliers to refer to, and evaluation items for procurement.

In the Green Procurement Standards, NTT Communications clearly specifies factors in our set of criteria applied when selecting suppliers, such as the supplier’s actions toward environmental conservation.

Companies Certified under ISO 14001

<table>
<thead>
<tr>
<th>Companies Certified</th>
<th>Date Certified</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTT Communications Corp*</td>
<td>October 1999</td>
</tr>
<tr>
<td>Procurement Promotion and Strategy, Procurement and Billing Department</td>
<td></td>
</tr>
<tr>
<td>Business Solution, Solution Services Department</td>
<td></td>
</tr>
<tr>
<td>NTTPC Communications, Inc.</td>
<td>November 2003</td>
</tr>
</tbody>
</table>

*Percentage of employees of target organizations to total employees: 20%

*Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof

Acquiring ISO 14001 Certification

Two companies in the NTT Communications Group have acquired ISO 14001 certification as of March 31, 2022. We have contracted outside environmental consultants to perform annual internal audits of the certified companies and departments in order to ensure the appropriate implementation of environmental management and continual improvements that will allow for a steady reduction of the environmental impact of business activities. Regular reviews and renewal examinations are undertaken by an independent certification body as well. Outstanding issues are thus identified, and remedial measures are taken swiftly.

Besides our initiatives centering on reductions of office paper and electricity use and the promotion of waste recycling, we encourage the adoption of measures aimed at creating an environmentally friendly society.

As of March 31, 2022

*Percentage of employees of target organizations to total employees: 20%
and an environmental conservation element of the procured item. The standards also include a request for cooperation from our suppliers in reducing CO₂ emissions and state we will procure preferentially from suppliers taking action to reduce greenhouse gas emissions.

Through our efforts for green procurement (procuring products taking into account their impact on the environment) under the Green Procurement Standards, we will work to improve our environmental protection activities with our suppliers and seek to commit to further social contribution.

<table>
<thead>
<tr>
<th>Status of Green Procurement</th>
<th>(10,000 Units)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FY2017</td>
</tr>
<tr>
<td>Green procurement of goods, excluding office supplies</td>
<td>154</td>
</tr>
<tr>
<td>Green procurement of office supplies</td>
<td>22</td>
</tr>
</tbody>
</table>

**Introducing Internal Carbon Pricing**

Internal carbon pricing (ICP) is a method companies use to assign their own in-house price for carbon use and factor this into their strategies and decision-making process. On September 1, 2022, NTT Communications introduced a new strategy for utilizing this ICP to evaluate prices at the time of product selection. This mechanism allows for a comprehensive evaluation of prices based on the results of converting CO₂ emissions into prices, rather than evaluating prices based on proposal prices alone, as in the past.

**Sharing of Green Procurement Policies**

NTT Communications holds individual briefing meetings with suppliers to mutually share our basic approach and requirements for them with regard to the procurement of environmentally sound parts and products. In July 2021, the NTT Group held a briefing session on promoting green procurement in the NTT Group and another session in February 2022 on building and maintaining a supply chain to realize a sustainable society. We will continue to closely communicate with our suppliers and work together to promote green procurement.

**Environmental Education Initiatives**

We offer all employees environmental education with the intention of raising their awareness of environmental matters. We are also proactive in environmental awareness activities as part of our sustainability efforts, extending the scope of participation to include not only employees but also their family members and our business partners.

In fiscal 2021, we conducted sustainability training targeted for all employees (94.0% of them attended) as well as lectures on the topic of SDGs and business activities to learn about domestic and international social trends such as the SDGs, ESG investment, decarbonization efforts, and global risks.

We are working to raise employee awareness by posting monthly reports on how much electricity and paper is used and how much waste is generated in each office.

In response to the growing urgency of co-existing with nature, we have conducted a range of environmental awareness and educational activities, including cleaning up around our offices and homes in ways that allow employees to easily participate, collecting PET bottle caps for donation, and preserving woodlands by maintaining trees and growing rice and vegetables. In fiscal 2022, we will continue to promote initiatives in which many employees can easily take part.
Promotion of a Decarbonized Society

Our Approach

While the advancement and spread of ICT has helped to bring about an affluent society and convenient lifestyles, the increase in power consumption from ICT-related equipment is placing enormous pressure on the environment. We continue to reduce greenhouse gas emissions, recognizing our responsibility to contribute to addressing environmental problems, including climate change as one of the most pressing issues for realizing a sustainable future. We are also taking various initiatives to reduce CO₂ emissions in our supply chain as a whole. For example, we set “Realizing a Decarbonized Future” as one of the themes for our Environmental Statement to contribute to the realization of a decarbonized society, and we are reducing power consumption and improving the efficiency of our facilities as well as providing services that contribute to decarbonization and care for the environment. To promote a decarbonized society, we will further increase the use of renewable energy, replace our general fleet vehicles with EVs, and reduce CO₂ emissions from our Groupwide business activities toward achieving carbon neutrality by fiscal 2030.

Since electricity consumption accounts for more than 90% of total CO₂ emissions from business activities, we can particularly expect great advantages as a result of saving energy and improving the energy efficiency of telecommunications equipment. We are thus making strong efforts in such respects as leading the industry in introducing cutting-edge technologies. In addition, we will continue to help society as a whole become carbon neutral by providing platforms, solutions, and services that lead to decarbonization.

In fiscal 2021, we continued our efforts to raise power efficiency per data transmission in our telecommunications businesses. Our comprehensive activities to improve power efficiency included adjusting telecommunications facility intake/exhaust directions, using humidity sensors to improve airflow, optimizing the room temperature by controlling air-conditioning, and turning off unused equipment. As a result, power efficiency increased 4.7 fold (compared to fiscal 2013), making steady progress toward achieving the target of a 10-fold increase by fiscal 2030. In addition, when putting our solutions on the market, those assessed as having a certain level of environmental impact reduction benefits are given the NTT Group’s Environmental Solutions Label to make visible their effects. Consequently, our contribution to reducing society’s CO₂ emissions was 19.5 times the volume of our own CO₂ emissions, thereby exceeding our fiscal 2030 target of 10 times. Our introduction rate of renewable energy (including virtually renewable energy by using non-fossil fuel certificates) also increased from 8.4% in fiscal 2020 to about 35% in fiscal 2021.

In fiscal 2022, we will continue these efforts and strengthen services and solutions that contribute to the realization of a decarbonized society. In addition, we will further accelerate the introduction of renewable energy and the transition of our general fleet to EVs to achieve carbon neutrality* by fiscal 2030.

*Targeted GHG Protocol: Scope 1 (direct emissions of greenhouse gases from our own sources) and Scope 2 (indirect emissions from the use of electricity, heat, and steam supplied by other companies)
Reduction of Greenhouse Gases

Fiscal 2021 Result

<table>
<thead>
<tr>
<th>CO2 Emissions</th>
<th>FY2021 Target</th>
<th>FY2021 Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>156 kt-CO2 or lower</td>
<td>139 kt-CO2 (FY2020 result: 195 kt-CO2)</td>
<td></td>
</tr>
</tbody>
</table>

Includes CO2-equivalent emissions of greenhouse gases other than CO2 (CFC substitutes, etc.)

We were able to meet our CO2 emissions target* for fiscal 2021, mainly by introducing renewable energy (including virtually renewable energy by using non-fossil fuel certificates), while further striving to save energy in telecommunications buildings such as data centers and promoting remote work, which resulted in a decrease in power consumption in offices. The CO2 emissions per unit of sales were 0.13 t-CO2 per millions of yen (FY2020 result: 0.18 t-CO2 per millions of yen).

In fiscal 2022, the NTT Communications Group will work together to expand the introduction of renewable energy, continue its ongoing energy-saving activities, and utilize R&D technologies and new measures to reduce CO2 emissions by 20% from the previous fiscal year. Through these efforts, we plan to become carbon neutral by fiscal 2030, with net-zero CO2 emissions generated by our data centers, networks, and other facilities. Furthermore, we intend to continue providing energy-efficient data centers and cloud services to society, having customer servers and their peripheral equipment, including air-conditioning, UPS, and lighting, integrated at our data centers, consequently improving the efficiency of public power consumption.

*CO2 emissions were calculated using emission factors obtained from electric power companies.

[CO2 Emissions from Business Activities]

Scope: NTT Communications Corporation and 14 Group companies

*CO2 emissions were calculated using emission factors obtained from electric power companies.

Other Greenhouse Gas Emissions* (Converted to CO2 Equivalents)

Scope: NTT Communications Corporation and 14 Group companies

*Emissions from Company vehicles, telecommunications buildings (including data centers), and offices

Power Consumption (Scope 2)

Scope: NTT Communications Corporation and 14 Group companies

Promotion of a Decarbonized Society

NTT Communications Corporation Sustainability Report 2022
Expanding the Use of Renewable Energy

Since April 2020, we have been actively introducing and expanding the use of renewable energy, including virtually renewable energy by using non-fossil fuel certificates, and in fiscal 2021 achieved a 100% renewable energy rate in 31 of our 89 telecommunications buildings, including data centers. In fiscal 2022, we will expand the use of renewable energy by greening an additional ten buildings.

Evaluation by National and Local Governments

In fiscal 2021, NTT Communications was evaluated as “S” class, the highest rank, as an outstanding energy-saving business that achieved its targets, under the business operator classification system implemented by the Agency for Natural Resources and Energy based on the Act on Rationalizing Energy Use (Energy Conservation Act).

We also received “S” ratings (Granpark Tower and Shiodome Building) from the Tokyo Metropolitan Government for our global warming countermeasure plans for specified tenant buildings*.

*Specified tenant buildings are those occupied by businesses that use at least 6 million kWh of electricity per year or lease at least 5,000m² of floor space.
Building Cutting-edge Data Centers with Advanced Energy-saving Technologies

Operating data centers requires a constant supply of electric power. As an ICT company, we proactively introduce leading-edge equipment and technologies for reducing the carbon footprint of our data centers.

For example, our relatively new data centers are equipped with improved cooling efficiency and lower power consumption in their air-conditioning systems owing to the use of outside air for cooling IT equipment, precise automatic temperature measurement, and proactive AI-based air-conditioning control based on these measurements. In addition, we have installed an indirect evaporative cooling system for the new data center in Tokyo. This made us the industry's first to use the system, which is expected to reduce the annual energy cost by 60% compared to a conventional system.

In addition to cooling systems, we are working toward decarbonization by introducing a solar power generation system and an automatic motion sensor lighting system. We will accelerate the decarbonization of our data centers by introducing leading-edge equipment and technologies.

Use of Renewable Energy in Data Centers

With the expansion of the digital society, demand for power in data centers is increasing year by year. The issue is that while it is possible to improve the energy consumption efficiency of data centers, it is not possible to eliminate power consumption itself.

In addition to our data centers located in telecommunications buildings that began using renewable energy in fiscal 2020, our new data center established in Tokyo in fiscal 2021 also relies on renewable energy. In fiscal 2022, we began featuring a wide range of renewable energy options to meet customer needs at our five data centers in the Tokyo metropolitan area. This enables our customers to comply with RE100* and other international environmental initiatives as well as to promote their ESG management toward decarbonization.

Going forward, we will expand our efforts to spread the use of renewable energy not only inside the Company but with our customers.

* A global initiative that brings together companies that intend to switch to 100% renewable energy sources for electricity used in their business activities.
Providing CO₂ Emissions Forecasting and Visualization Functions in Our Cloud Service

In our Smart Data Platform Cloud/Server service, which utilizes NTT Communications’ data centers to provide cloud computing services, we have also set a goal of achieving carbon neutrality by introducing renewable energy to all our sites by the end of fiscal 2023. As of June 2022, we had completed the introduction of renewable energy to 50% of our service locations.

In addition, we are the first cloud service provider in Japan to provide simulation to forecast CO₂ emissions (from July 2022) and a dashboard to visualize emissions (from September 2022) free of charge to help customers further reduce their environmental impact.

Ongoing Efforts to Cut Cooling Power Consumption at Telecoms Facilities

In past efforts to reduce power consumed by cooling, we have implemented a range of measures, including SmartDASH® an automated AI system that visualizes temperature zones in server rooms, detects areas that are too cold, and automatically controls air-conditioning, and Aisle Capping, a technique that physically separates the intake (low temperature) and exhaust (high temperature) air from IT equipment by placing sidewalls and ceilings in the aisles between rows of server racks. As a further step, we are moving beyond ICT-driven visualization of both temperature and power consumption to continue our work on more finely tuned air-conditioning power management. This includes calculating PUE (Power Usage Effectiveness*) of each room to improve low-efficiency rooms by implementing thorough airflow improvement, temperature adjustments, and air-conditioning shutdown initiatives. These efforts led to a 15% reduction in power consumed by cooling in fiscal 2021 compared to business-as-usual (BAU**) levels. To address the migration in ICT equipment from old models to highly efficient new ones, we will also seek to cut down on power consumed by ICT and air-conditioning systems through the timely discontinuation of use of the old models.

Introducing Solar Power Generation Systems that Actively Use Renewable Energy

Since 2009, NTT Communications has been engaged in power generation using solar power generation systems at its communications and data centers in Tokyo, and six system units are currently in operation.

Promotion of a Decarbonized Society

| [Overall Amounts of Power Generated by Solar Panels at Data Center] | [Screen image of the Carbon Footprint Dashboard for visualizing CO₂ emissions] | [Screen image of the Carbon Footprint Simulation for forecasting CO₂ emissions] |

*1 Power Usage Effectiveness: (Power consumption of the entire data center)/ (Power consumption of ICT equipment in the data center). An indicator for measuring the energy efficiency of a data center; the closer the number approaches 1, the more efficient the data center.

*2 Business as usual: A situation in which no special measures are taken

NTT Communications Corporation Sustainability Report 2022
In fiscal 2021, although we saw an increase in CO₂ emissions after reviewing the offices to be included in the calculation, we consolidated offices in the Tokyo metropolitan area and adopted a free seating system, assuming that the maximum employee attendance rate would be 30%, as remote work is becoming common practice. We also converted electricity used in offices to renewable energy sources, just as our head office in Otemachi Place achieved zero emissions for all electricity used in September 2021, and as a result, CO₂ emissions remained almost unchanged compared to fiscal 2020.

In fiscal 2022, we expect to see more employees back in the office due to changes in social demands with COVID-19, but we will further reduce electricity consumption in the office and expand the use of renewable energy for electricity consumption, and set a target for reducing CO₂ emissions by at least 5% compared to fiscal 2021.

NTT Communications annually audits the amount of transportation for invoices, sales promotion tools, and office waste. Also, we voluntarily seek ways to streamline transportation such as by reducing the number, volume, and distance required for transport and by otherwise enhancing logistics.

In fiscal 2021, we worked to reduce the amount of paper by expanding web-based applications, digitalizing sales tools, and promoting remote sales. As a result, total transportation volume was 245,000 tkm. In fiscal 2022, we will continue to reduce transportation volume by promoting the use of web-based application systems and digitalization.
Reducing Fuel Use by Company Vehicles

To help solve pollution problems and contribute to the realization of a low-carbon society, we are working to have EVs account for 100% of our corporate fleet by fiscal 2030 under the EV100 initiative declared by the NTT Group in October 2018. We are also reviewing the number of our sales vehicles and steadily promoting eco-driving and other measures to reduce the volume of fuel used by Company vehicles across the entire Group.

In fiscal 2021, we continued our efforts to introduce EVs, replacing 8 vehicles with EVs and scrapping 22 vehicles with the expansion of remote sales. As a result, the number of Company vehicles was 175 (including 40 EVs) at the end of fiscal 2021, compared to 197 (32 EVs) at the end of fiscal 2020.

Gasoline and diesel consumption by Company vehicles in fiscal 2021 totaled 35,000 liters and 6,000 liters, respectively. The combined volume declined by 16,000 liters, or 27.8%, year on year.

Preventing Air Pollution and Promoting Energy Conservation through Electric Propulsion Ships

The subsea cable-laying vessels Kizuna and Subaru utilize an electric propulsion system* that optimizes the number of engines in operation in accordance with the load from the type of the subsea cable being laid and changes in the weather at sea. By controlling the number of engines in operation, we keep down the amount of heavy fuel oil A used while reducing emissions of, for example, CO₂, NOx, and SOx. When in operation, we work to optimize fuel consumption by the most effective operating methods (including optimum route selection that takes into account the ship’s speed, ocean currents, and weather conditions as well as other factors) in order to curtail the amount of CO₂ emitted based on a Ship Energy Efficiency Management Plan (SEEMP). We are also carrying out the partial installation of LED energy-saving lighting for the ships (cable-laying ship Kizuna was fully equipped with LED lighting when it was first built).

Reducing the Carbon Footprint of Society through Our Products and Services

The NTT Group is exploring the idea of an Environmental Labeling System for Solutions for self-certification of environmentally friendly ICT solutions and services. To qualify, ICT solutions and services will have to achieve CO₂ reductions of at least 15%, as assessed through the objective evaluation of environmental impact reduction benefits. The entire NTT Group provides these environmentally friendly services to help reduce the environmental impact of society. Although no service obtained the Environmental Labeling System for Solutions in the NTT Communications Group in fiscal 2021, we have a cumulative total of 10 solutions registered. Looking ahead, we aim to obtain more certifications for the Environmental Labeling System for Solutions.

For more information on EV100, see: https://japan-clp.jp/en

Environmental Labeling System for Solutions

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For more information on the Environmental Labeling System for Solutions, see: https://group.ntt/en/environment/protect/lowcarbon/label/
**Nexcenter, a Data Center that Combines Energy Efficiency and Performance**

NTT Communications’ data center (DC) service, the Nexcenter, offers leading-edge quality, safety, and security, among the highest standards in the industry. The Nexcenter proved to be capable of operating nonstop, 24 hours a day, 365 days a year, with full disaster countermeasures and of reducing CO₂ emissions associated with maintenance, operation, and the use of ICT equipment in a DC by at least 50% per year compared to a conventional DC with the latest cooling system.

**Acquisition of the Eco ICT Logo**

We conducted a self-assessment of our CO₂ reduction measures and submitted an application in accordance with the ICT Ecology Guidelines created by the ICT Ecology Guideline Council* and acquired the eco-ICT Mark.

The council created and published guidelines for appropriate CO₂ reduction measures to be implemented by telecommunications carriers, clearly defining the standards for procuring systems and data center services from the viewpoint of reducing power consumption. These guidelines have been subsequently revised, and the ninth version was published in March 2021. We will continue to participate in this initiative and work to disseminate the guidelines throughout the Group on an ongoing basis.

*Established on June 26, 2009, by five industry organizations: The Telecommunications Carriers Association, the Telecom Services Association, the Japan Internet Providers Association, the Communications and Information Network Association of Japan, and the ASP-SaaS-IoT Cloud Industry Consortium (designated nonprofit organization)

For more information on the Eco ICT Logo, see: https://www.tca.or.jp/press_release/2010/0701_400.html (in Japanese only)

For more information on the self-assessment checklist, see: https://www.ntt.com/about-us/csr/eco/ecoict.html (in Japanese only)
In May 2020, the NTT Group declared its support for the Task Force on Climate-Related Financial Disclosures (TCFD), established by the Financial Stability Board (FSB). Based on TCFD recommendations, the NTT Group adopted and analyzed two scenarios of climate-related risks and opportunities associated with the Group’s operations: a scenario limiting the increase in global average temperature to 1.5°C above pre-industrial levels (1.5°C scenario), and a scenario in which warming will increase by almost 4°C with measures to combat global warming maintained at existing levels (4°C scenario).

The results of this analysis and a summary of the efforts made by the NTT Communications Group, a member of the NTT Group, are provided below.

### Climate Scenario Analysis and Initiatives

The NTT Communications Corporation Sustainability Report 2022

<table>
<thead>
<tr>
<th>Climate Scenario Analysis and Initiatives</th>
<th>1.5°C Scenario</th>
<th>4°C Scenario</th>
<th>Type</th>
<th>Timeframe</th>
<th>Countermeasures Taken by the NTT Group</th>
<th>Initiatives by the NTT Communications Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase in costs for decarbonization and renewable energy charges</td>
<td>Loss ▼</td>
<td>—</td>
<td>Transition risk (policies, regulations)</td>
<td>Long-term</td>
<td>• Initiatives for realizing the IOWN concept</td>
<td>• Promoting the introduction of renewable energy and energy conservation to achieve carbon neutrality by 2030 (Scopes 1 and 2)</td>
</tr>
<tr>
<td>Social criticism related to fewer efforts toward ESG (drop in market share)</td>
<td>▼</td>
<td>Minor</td>
<td>Transition risk (market, criticism)</td>
<td>Long-term</td>
<td>• Proactive disclosure of information on environmental initiatives</td>
<td>• Proactive disclosure and dissemination of information through the official website, sustainability reports, etc.</td>
</tr>
<tr>
<td>Expanding sales of services that help reduce society’s environmental impact</td>
<td>▲▲</td>
<td>▲</td>
<td>Profit (products and services, energy)</td>
<td>Long-term</td>
<td>• Creating new services that contribute to carbon neutrality</td>
<td>• Provision of remote work-related services, development of a recycling platform for recyclable resources, etc.</td>
</tr>
<tr>
<td>Achieve the IOWN concept</td>
<td>▲▲</td>
<td>▲</td>
<td>Opportunity (investment toward R&amp;D)</td>
<td>Long-term</td>
<td>• Acceleration of DX and promotion of the remote world</td>
<td>• Promotion of co-creation to achieve the IOWN concept as part of efforts to promote innovations that break through limits</td>
</tr>
<tr>
<td>Disasters associated with heavy rain and typhoons</td>
<td>—</td>
<td>▼</td>
<td>Physical risk (acute)</td>
<td>Short-term</td>
<td>• Provision of disaster response and disaster prevention training</td>
<td>• Enhancement of disaster-resistant, highly reliable, safe, and secure ICT services (vulnerability assessment and redundancy assurance/ enhancement, etc.)</td>
</tr>
<tr>
<td>Increased air-conditioning costs due to increasing temperatures</td>
<td>—</td>
<td>▼</td>
<td>Physical risk (chronic)</td>
<td>Long-term</td>
<td>• Promoting energy conservation</td>
<td>• Reduction of electricity used for air-conditioning through expansion of SmartDASH® and introduction of HMDC, etc., and promotion of the IOWN concept</td>
</tr>
</tbody>
</table>

For more information on related risk management initiatives, see the “Risk Management” section of the report. P. 099

Notes:
- The degree of impact with the 1.5°C and 4°C scenarios is in FY2030.
- Timeframes refer to the short term (less than 3 years), medium-term (3–6 years), and long-term (6 years or more). The degree of impact is expressed in 3 levels (▲: Low, ▲▲: medium, and ▲▲▲: high).
Our Approach

To contribute to the realization of a recycling-oriented society, the NTT Communications Group promotes the reduction and reuse of waste and improving recycling rates while building business models with low environmental impact. Waste and resource recycling is a rising public concern, and to fulfill our social responsibility, we organized working groups in the three areas of dismantled telecommunications equipment, construction waste, and office waste. In cooperation with other NTT Group companies, we are thoroughly implementing the 3Rs (reduce, reuse, and recycle) and promoting plastic recycling. We are committed to a greener future with the lowest possible landfill rate and most effective use of resources through proper waste management and promotion of reusing and recycling in our business activities.

Main Achievements in Fiscal 2021 and Goals for the Coming Years

In fiscal 2021, the landfill waste from dismantled telecommunications equipment amounted to 15.9 tonnes, construction waste to 388.2 tonnes, and office waste to 8.1 tonnes. The total volume of landfill waste increased by 110.9 tonnes, compared to the previous fiscal year, to 412.2 tonnes, while the total volume of waste generated increased by 6,510 tonnes to 25,966 tonnes due to increased construction work for disposing of concrete blocks, as in fiscal 2020. The landfill rate to total waste was 1.59%, a slight increase from the previous year (1.55%).

Going forward, we will shift to managing the recycling rate from the conventional landfill rate as part of our efforts to create a recycling-oriented society and ensure that the 3Rs are thoroughly implemented in our business activities.

Total Volume and Landfill Rate of Dismantled Telecommunications Equipment

Construction Waste Generation and Landfill Rate

Development of a Closed-loop Society

NTT Communications Corporation Sustainability Report 2022
Building Business Models with Low Environmental Impact

Effectively Using Water Resources

Water resources are indispensable for the survival of all living things, including humans, but the increasing world population and economic development have led to concerns over water shortages and pollution. We are striving to use water resources more effectively by recycling and reusing air-conditioning and cooling water in our data centers and switching to water-saving toilets in our major office buildings. We are also developing a water demand prediction system, as part of a social infrastructure that utilizes ICT, to contribute to addressing social issues related to water resources. The total water resource input (excluding data centers) for fiscal 2021 was 230,000 m³.

Initiatives to Improve the Landfill Rate

We believe that one of our most important obligations as an ICT services provider is to create business models that emphasize recycling. We are therefore carefully selecting waste processors for data centers, telecommunications buildings, and office buildings based on their recycling rates. In selecting waste processors, we seek to ensure proper disposal and improve the recycling rate by screening candidates based on our criteria and consigning work to businesses that meet the qualifications. As a result, the landfill rate of office waste, which was 6.1% in fiscal 2013, has been reduced to 0.8%, as of fiscal 2021.

Promoting the Reuse of Fixed Assets

From the perspective of promoting the efficient operation and reuse of fixed assets across the Company, including small assets and equipment, we are matching organizations that need assets with those that do not. Thanks in part to this effort, in fiscal 2021 we reused 119 items of dismantled equipment and 6,537 units of equipment and packages overall. In fiscal 2022, we will continue to promote the reuse of fixed assets and strive to reduce the amount of waste we generate.

Unfortunately, no optical cable was reused in fiscal 2021.

Thorough Implementation of the 3Rs in Office Buildings

Reduction in Paper Use for Business Purposes

NTT Communications is working to reduce its use of all kinds of paper for business purposes, including that for printing customer billing statements. In fiscal 2007, we established a paper use indicator per full-time employee in order to reduce the use of office paper. Since then, we have been working to raise awareness among employees through various efforts such as curbing the use of paper and increasing the rate of double-sided printing by using printing log data from IC card multifunction printers, and collecting the initiative status data per individual and section and disclosing it to all employees on a monthly basis.

In fiscal 2021, we made significant progress in digitizing paper documents as part of our initiatives to promote remote work and work-life balance, resulting in 610 sheets of paper used per full-time employee (converted to A4-size office paper), a substantial decrease from fiscal 2019 (3,585 sheets).
Response to Plastics Pollution

Concern has been growing around the world over plastic waste, including the pollution of marine environments. NTT Communications upholds the implementation of closed-loop recycling as a CSR Priority and is working on reducing and promoting the recycling of plastic waste.

In fiscal 2021, although the volume of plastic waste generated increased due in part to the disposal of fixtures following office relocations, the rate of plastic recycling improved significantly. We will continue addressing plastic pollution through our business activities.

#### [Volume of Plastic Waste and Office Recycling Rate]

<table>
<thead>
<tr>
<th></th>
<th>FY2019</th>
<th>FY2020</th>
<th>FY2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume (t)</td>
<td>141</td>
<td>48</td>
<td>74</td>
</tr>
<tr>
<td>Recycling Rate (%)</td>
<td>91.6</td>
<td>91.1</td>
<td>98.5</td>
</tr>
</tbody>
</table>

Scope: NTT Communications Corporation and 14 Group companies

Developing a New Recycling Scheme for Subsea Cables

While the typical length of subsea cables laid in Japan’s territorial waters is 20 to 30 km per cable, the cable managed by NTT Communications connecting Kagoshima and Okinawa prefectures is approximately 260 km long, passing through many islands along the way. When the cable went out of service in 2018, approximately 850 tonnes of waste was expected to be generated, raising major issues in terms of environmental impact and disposal costs.

To address these issues, NTT Communications signed an agreement with South Africa’s Mertech Marine, the only company in the world with the technology to recycle subsea cables to the level of raw materials, to develop a new scheme to recycle 99% of subsea cables to reduce both environmental impact and disposal costs. Additionally, the scheme is contributing to creating regional safety nets by actively employing unskilled workers at the recycling plant in South Africa through Mertech Marine, and donating 30% of the profits from this recycling initiative to charitable organizations that support the education of impoverished families in Africa and the Middle East

- High-purity polyethylene used for outer cover can be sold at high price if completely separated and pelletized
- Copper tape separated and pelletized
- Coal tar coating for armor wire completely separated and pelletized
- Outer armor wire properly coiled

Currently, all components other than optic fibers are completely recycled (over 99% of total volume)
As advocated in the SDGs, the UN Decade for Ecosystem Recovery covering 2021 to 2030, and the Post-2020 Global Biodiversity framework with new global goals* which is currently under negotiation, there has been much discussion in recent years about the importance of biodiversity conservation and co-existence with nature, as well as the prevention of global warming, as key environmental issues for the realization of a sustainable society.

We place a high priority on conservation of biodiversity throughout our business operations, from the construction of facilities to their operation and dismantling, in addition to promoting preservation by inspecting the progress of initiatives, identifying problems, and making improvements. Moreover, we are implementing multifaceted environmental initiatives, including participation in local conservation efforts and the dissemination of information.

We have set “Planning a Future of Natural Harmony” as part of our environmental declaration and established the Biodiversity Action Plan. Going forward, we will continue to engage in Groupwide activities that are in line with this plan.

*Goal 14 Life Below Water, Goal 15 Life On Land

### Biodiversity Action Plan

#### 1. Basic Policy
- **Development Centered on Business Activities**
  The Group recognizes that all activity is inextricably linked to the planet and to biodiversity, understands that the scope and impact at home and overseas are related depending on the nature of a business, and promotes initiatives that are recognized as having a preservation effect.
- **Development Centered on Contribution to Society**
  In partnership with its stakeholders, the Group widely promotes initiatives toward the preservation of biodiversity, regardless of their relevance to its business.

#### 2. Action Guidelines
- Implement actions that take into account the preservation of biodiversity in business activities
- Contribute to the preservation of social biodiversity in business activities
- Deepen understanding of biodiversity, promote nature conservation activities together with employees, their families, and the planet

*Environmentally friendly buildings with reduced waste emissions that make use of energy, water, and air-conditioning systems to reduce their consumption of natural resources.*

We engaged in building, maintaining, and repairing facilities in compliance with the Biodiversity Action Plan as well as the concept of the environmentally sound Green Building*, established by the NTT Group in addition to ongoing initiatives that leverage the features of ICT enterprises. We contributed to resolving environmental issues through our businesses, disseminated information, and raised awareness through the provision of ICT solutions for sustainable agriculture for increasing the number of wild ibis, and the provision of the “goo Green Label” on the “goo” web portal (users can participate in donating to environmental groups by setting their browser start page to the “goo Green Label” homepage).

In fiscal 2022, we will continue promoting initiatives by leveraging our capacity to serve society as an ICT enterprise.
Promoting Biodiversity Conservation Initiatives

NTT Communications is committed to biodiversity conservation toward realizing a future of co-existing with nature. It operates biodiversity-friendly facilities and leverages ICT to minimize the impact on ecosystems, based on an understanding of the relationship between biodiversity and our business. We also strive to pass on abundant biodiversity to future generations through actions to protect ecosystems by cable-laying ships and by assessing the potential environmental impact from the construction and dismantling of relay stations, and we collaborate with stakeholders on these activities as well.

Considerations for Building Construction

Biodiversity-conscious Guidelines

When constructing new buildings such as data centers, we strive to understand the historical, social, geographical, and biological environment characteristics of the building site and its surrounding areas in accordance with the NTT Group’s Green Design Guidelines for Buildings, and we reflect that understanding into our designs insofar as possible. Along with these considerations, we ensure that construction is completed with consideration for minimal noise and vibration and with attention to community beautification during the work. Furthermore, our outdoor air-conditioning units and emergency power generators are designed to generate exhaust heat and noise levels that do not adversely affect the community.

Local Landscaping and Greening

We believe biodiversity should be considered in facility design toward contributing to local greenery in our surroundings. At the Tokyo No. 6 Data Center, one of the largest such facilities in Tokyo, we have been working closely with the community to promote greening activities by applying a subsidy from the Tokyo Metropolitan Park Association’s Urban Green Fund. The green spaces at the site have been divided into two zones, spring/summer and autumn/winter, and planted accordingly so that visitors can enjoy flowers there throughout the year. We seek to achieve harmony between the data center and the surrounding environment. For example, we simulated a wind environment around the building and planted evergreen trees in the southwest corner, which is exposed to wind.

Laying Subsea Cables

In constructing its subsea communications cable network, NTT Communications’ fundamental policy is to prevent marine pollution. We are signatories to treaties on the prevention of marine pollution and, in addition to complying with environmental legislation, undertake initiatives that place importance on coexistence with marine organisms and the fisheries industry.

Group company NTT World Engineering Marine Inc., which handles the laying, burying, and maintenance of subsea cables, develops business with a strong awareness of the need to preserve marine environments.

Considerations for the Impact of Laying Subsea Cables

Prior to subsea cable-laying and burying work, we conduct an environmental assessment and cooperate with related government authorities and municipalities in carefully designing cable routes and drawing up construction plans. For example, we duly consider shallow areas for preserving marine environments and generally exclude coral reefs and other inhabited areas when designing cable routes, insofar as possible, or transplanting them outside the cable-laying area. There are also cases in which minesweeping operations are undertaken on the seabed prior to laying or burying the cables. We collect debris from the seabed, including fishing nets, rope, and wire pulled out by the minesweeping operations, and we properly process it as industrial waste after returning to port.
Measures to Preserve Ecosystems Taken on Cable-laying Ships

There are concerns that the marine organisms that infest the ballast water used to maintain the stability of vessels will destroy ecosystems after being discharged into other parts of the ocean as vessels navigate from one area to another. In order to prevent the destruction of ecosystems by ballast water, the subsea cable-laying vessels Kizuna and Subaru are equipped with ballast water treatment equipment, in accordance with the Ballast Water Management Convention* set by the International Maritime Organization (IMO), so that they discharge water that does not contain marine organisms. Furthermore, the ballast water treatment equipment installed on both of our cable-laying vessels is an ultraviolet sterilization system, which does not use chemical substances and thus has low environmental impact. With regard to ship paints, we use those that are in compliance with the AFS Convention (International Convention on the Control of Harmful Anti-fouling Systems on Ships), which regulates the use of anti-fouling paint containing organic tin compounds on the bottom of hulls.

*Adopted by the IMO in 2004, the convention took effect on September 8, 2017, to prevent the movement of marine organisms across habitat boundaries from affecting the marine environment.

Considerations for the Construction and Dismantling of Relay Stations

Wireless relay stations, the backbone of data communication networks, are often in areas rich with nature such as on hills and islands, so we emphasize consideration for biodiversity in their operations.

As of March 31, 2021, 8 of our 42 wireless stations were in national parks or quasi-national parks. We build micro-roads if needed for the patrol and maintenance of these stations while strictly adhering to the law and our own environmental assessment standards. These assessments identify specific concerns associated with construction processes to enable the application of multifaceted approaches for preventing or minimizing impact on the ecosystem.

In addition, when dismantling a wireless station, we strive to restore the environment to its original state by paying careful attention to the presence of rare animals and plants and using local soil for restoration while also consulting local environmental organizations and residents.

Moreover, we have been offering our stations to support wildlife conservation activities. For example, every year since September 2012, the Amami Ornithologists’ Club, an NPO, has convened a meeting for observing the migration of Chinese sparrow hawks on the premises of our wireless relay station in Amami City, Kagoshima Prefecture. Although wireless relay stations are typically off limits, these events are held under the observation of employees in response to a request that identified this area as particularly well suited for monitoring the ecosystem.
Contributing to Ecosystem Conservation Using ICT

Providing ICT Solutions for Sustainable Agriculture and Bringing Back the Crested Ibis

Since April 2022, we have been conducting a demonstration experiment in Niigata Prefecture’s Sado City, a site designated as a Globally Important Agricultural Heritage System, to promote rice farming in rice terraces with reduced or no pesticides and chemical fertilizers by utilizing and verifying aerial drone photography, paddy weeding robots, and ICT-based advanced water management systems.

While Sado City’s population of farmers is rapidly aging, and the use of agricultural chemicals and chemical fertilizers is increasing to improve agricultural productivity, one major challenge has been to preserve the ecosystem and live in harmony with wildlife, including the Japanese crested ibis, designated as a special national treasure in Japan. To address this issue, we have introduced various agricultural ICT solutions applicable to rice terrace regions that will reduce costs and labor while increasing profits, thereby promoting farming with reduced or no agricultural chemicals and chemical fertilizers. By promoting and expanding farming practices that use less agricultural chemicals, we will help attract more wildlife to the rice terraces as well as more people to the region.

Note: This demonstration has been adopted by the Smart Agriculture Production Area Development Demonstration of the National Agriculture and Food Research Organization.

“goo Green Label” Activities

The “goo Green Label” portal is an initiative for donating a portion of the profits generated through the use of the site to organizations engaged in environmental protection and social activities. All users can participate in this initiative simply by changing the top design version of the “goo” web portal to “goo Green Label” and using the search engine. Since its inception in August 2007, donations totaling 59.40 million yen have been made mostly to NPOs engaged in global environmental protection activities.

In fiscal 2021, we donated 610,000 yen to the Nature Conservation Society of Japan, our 23rd contribution from this program. The donation will be used to protect and preserve Japan’s beautiful nature for future generations, such as activities to protect the sea and sandy beaches, and to preserve biodiversity in Satoyama landscapes.

We will strive to maintain the “goo Green Label” as an easy way for more users to contribute to society.
Prevention of Environmental Pollution

Everyday production and consumption generating emissions and waste and increasing environmental pollution has long been a social issue.

We are working to reduce emissions and waste generated from our business activities and properly manage and dispose of hazardous substances to prevent environmental pollution and create a safe and secure social environment. In addition, we are seeking to minimize environmental risks associated with business activities, such as pollution and leaks of hazardous substances, by formulating guidelines for introducing low-emission vehicles, improving equipment and operations, bolstering management, and conducting thorough inventories.

Chemical substances are properly managed by our maintenance departments in accordance with the Waste Management and Public Cleansing Act, the Law Concerning Special Measures Against PCB Waste, and the Electricity Business Act, which include the assigning of managers. While conducting storage inspections on a regular basis, we maintain a robust system to ensure the rapid coordination of information among senior management and the president in the event of an earthquake or other disaster. We always keep abreast of the revisions to laws through training sessions, share information among environmental working groups, and optimize our operations in a timely manner. In addition, we are striving to reduce the environmental impact of our supply chain by, for example, urging suppliers to reduce and thoroughly manage the use of hazardous materials based on our Green Procurement Standards.

We established our policy and set a target for having electric vehicles account for 100% of the corporate fleet by fiscal 2030. In practice, we reviewed the number of sales vehicles owned and promoted eco-driving to reduce the fuel consumption of Company vehicles across the Group.

In fiscal 2021, we continued to introduce EVs, and with the expansion of remote sales activities, we successfully achieved year-on-year reductions in the number of vehicles by 11%, CO₂ emissions from Company vehicles by 44%, and NOx and SOx emissions by 31% and 32%, respectively. We will continue to review the number of vehicles owned and promote the use of EVs.
Initiatives to Address Environmental Pollutants

Preventing Air Pollution

Our business activities produce NOx and SOx emissions, which cause air pollution. Of the total NOx emissions, about half (52%) comes from electric power generation at communications buildings and other facilities, while the remaining half is generated by the use of gasoline and diesel in our operational vehicles. As for SOx, the majority (89%) is emitted during the generation of electricity that we use.

In fiscal 2021, NOx and SOx emissions were 128 tonnes (year-on-year decrease of 17%) and 25 tonnes (year-on-year decrease of 1%), respectively, as a result of a decline in the operation of commercial vehicles. We will continue to review our vehicle fleet numbers and promote the use of EVs toward contributing to the mitigation of global warming and prevention of air pollution.

Controlling Ozone-depleting Substances

We dispose of ozone-depleting substances in an appropriate manner. The volume of specified halons used in our fire extinguishing equipment in fiscal 2021 was approximately 143 tonnes, unchanged from the previous fiscal year.

Meanwhile, the volume of specified chlorofluorocarbons (CFCs) used in our air-conditioning equipment in fiscal 2021 increased by around 5 tonnes from the preceding fiscal year to approximately 258 tonnes.

Addressing Asbestos Concerns

Asbestos remediation for buildings and offices involved the implementation of airborne asbestos surveys of buildings for which asbestos had been spray-applied in order to confirm that levels did not exceed statutory limits, as revised in September 2006. In fiscal 2019, we conducted a survey targeting four buildings and confirmed that airborne emissions were below the statutory limit at all of the buildings subject to legal compliance.

We are currently removing asbestos from one of these buildings where it is possible. Looking ahead, we will continue appropriate measures, such as the removal, containment, or enclosure of asbestos in buildings where it is present, in compliance with manuals issued by the Japan Construction Occupational Safety and Health Association and local authorities.
Storage and Management of PCBs

NTT Communications appropriately manages devices that contain polychlorinated biphenyls (PCBs). Such devices were used in the past as insulators for electrical facilities. As a policy for PCB storage, we have established a set of guidelines prescribing early detoxification treatment as well as methods for ascertaining conditions and management when the use of equipment containing PCBs is to be continued.

Since fiscal 2021, we have been detoxifying equipment found to contain any PCBs based on the PCB inspection survey conducted in fiscal 2020.

### Number of Transformers Stored

<table>
<thead>
<tr>
<th>FY2019</th>
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<th>FY2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>6</td>
<td>0</td>
</tr>
</tbody>
</table>

Scope: NTT Communications Corporation and 14 Group companies

### Number of Capacitors Stored

<table>
<thead>
<tr>
<th>FY2019</th>
<th>FY2020</th>
<th>FY2021</th>
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<td>High-voltage capacitors</td>
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<td>0</td>
</tr>
<tr>
<td>Low-voltage capacitors</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

Scope: NTT Communications Corporation and 14 Group companies

### Number of Electric Ballasts Stored

<table>
<thead>
<tr>
<th>FY2019</th>
<th>FY2020</th>
<th>FY2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>123</td>
<td>363</td>
<td>276</td>
</tr>
</tbody>
</table>

Scope: NTT Communications Corporation and 14 Group companies

#### Chemical Substance Management in Anticipation of Emergencies

Against a backdrop of natural disasters occurring frequently on a global scale, there is a growing public concern over the management systems for environmental pollutants in times of emergency. As an owner and operator of IT infrastructure, we have been thorough in establishing storage and management systems while also bearing in mind the possible occurrence of unlikely events. In the management of PCBs in particular, we have implemented a management system while taking into account factors such as earthquakes, fires, flood controls, lightning protection, puncture resistance, ventilation, and security. By carrying out periodic inspections, we are constantly confirming that such substances are properly managed. Moreover, we maintain a system for quickly confirming the secure storage of chemical substances and reliably ensuring operational readiness in the event of major earthquakes and other disasters in order to prevent damage when one strikes as well as in the occurrence of secondary disasters.

#### Cases of Major Leakage

There were no incidents involving major leakages in the NTT Communications Group in fiscal 2021.

#### Transport, Import, and Export of Toxic Waste

We handle PCBs in accordance with the Act on Special Measures concerning Promotion of Proper Treatment of PCB Wastes and the PCB Waste Collection and Transport Guidelines issued by the Ministry of the Environment.
The source of competitiveness of NTT Communications is the power of its people. Employees drive the operations of the Company as partners who grow with it as they pursue their own happiness and personal development.

Management that draws strength from diversity has recently been gaining attention around the world. In this context, the NTT Communications Group aspires to grow with its employees by implementing advanced initiatives for human resource development to ensure their well-being.

By emphasizing actions for turning diversity into a competitive edge, we have taken on the challenges of multifaceted programs that promote human resource development and workstyle reform as well as the expansion of diverse forms of employment. We want to develop a sustainable society by actively applying the knowledge and skills accumulated in the course of our efforts as our contribution to society.
Our basic policy is to promote human resource development from the perspective of achieving growth for both employees and the business, thereby creating a virtuous cycle of mutual growth. We are particularly preparing for intensified competition following the acceleration of digital transformation (DX), by promoting measures that emphasize the development of personnel capable of driving DX, such as the ODYSSEY open platform for training new employees. We will seek to strengthen sustainable, mutually beneficial relationships with employees by establishing an autonomous learning environment that encourages proactive self-investment by them.

Expected Benefits from the Employee Perspective
Life-long autonomous career development and maintenance and improvement of each employee’s employability

Expected Benefits from the Company’s Perspective
Developing human resources who can keep up with and adapt to changes in the business environment and contribute to the business

Three Concepts
1. Talent
By visualizing the skills of employees and the image of human resources needed in each business field through common indicators (talent profiles and skills), employees can set clear goals for improving their skills, and the Company can efficiently take action with limited resources.

2. Open
By disclosing the skills and past experiences of other individuals, employees can learn from and be inspired by, and also gain opportunities for growth through, collaboration and community building.

3. Active
By using common indicators for assigning work, offering jobs, and recruiting internally, employees are encouraged to grow on their own through self-reflection while gaining opportunities to take on challenges and achieve growth based on their results.
As we believe that the Group’s sustainable growth depends on providing workplaces that increase every employee’s motivation, we support self-driven career development over the lifetime of each of them and for maintaining and improving employability.

Our employee development program, ODYSSEY, sets a Talent Profile that defines who would be able to execute our business strategies in a changing business environment. Employees are supported in their efforts to meet the criteria for the designated levels of skills. We have also enhanced our initiatives for employees seeking to raise their level of expertise under the Career Development Plan (CDP). A skill check is implemented as needed to select the right training from a broad range of options. As we restructure our business strategies and business models to respond to changes in the internal and external environment, we have positioned areas with particularly large human resource gaps as opportunities for enhancement and formulated a plan to strategically fill human resource gaps through training (skill shifting), from a medium- to long-term perspective. Under this plan for developing human resources that require enhancement across the Group, we also expanded measures for developing human resources in specialized areas within Center of Excellence (CoE) organizations.

<table>
<thead>
<tr>
<th>Talent Profiles</th>
<th>Talent Profiles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales consulting</td>
<td>Engineering and project management</td>
</tr>
<tr>
<td>01 Consulting sales specialists</td>
<td>47 Construction management engineers</td>
</tr>
<tr>
<td>02 Inside sales specialists</td>
<td>48 AI researchers</td>
</tr>
<tr>
<td>03 Sales enablers</td>
<td>49 Visual communication engineers</td>
</tr>
<tr>
<td>04 CIO advisors</td>
<td>50 BBX and DX project managers</td>
</tr>
<tr>
<td>05 Customer managers</td>
<td></td>
</tr>
</tbody>
</table>
Main Achievements in Fiscal 2021 and Goals for the Coming Years

(1) Internal On-the-Job Training
Support for employee growth through technical assistance and mentoring
- Strategic projects and operations within divisions
  - Training target: OJT (On-the-Job Training) → Skilled employees
  - Operational support including human resource development
  - CoE organizations
  - Promote human resource development within the division

Practical experience at CoE organizations
- Each organization
  - Core human resources
  - Training target: OJT
  - Operations: OJT
  - Return to former position
  - Assignment to key projects in the division

(2) Support for Human Resource Development by CoE Organizations
Design CoE (design studio KOEL)
- KOEL
- Visioning
- Business development
- Business improvement
- Communication design
- Organizational design
- Human resource development

Data Scientist CoE (Digital Transformation Division)
- Security CoE (Information Security Division, N.F. Laboratories)
  - Training Biz
  - Outsourcing Biz
  - R&D

(3) Support for Human Resource Development by Technical Advisors
Enhancement support
- Engineering skills
- Service development
- Mentoring

Areas of expertise
- Service development
- Mentoring
- Support for human resource development
- Seminars and study groups
- One-on-one, and consultations on ideas in development

Target categories for human resource enhancement
- Incubation and design
- Consulting
- Engineering (agile/software)
- Data application
- Security

For more information on support for human resource development by technical advisors, see:
https://www.ntt.com/shines/posts/b-t_20200625.html
For more information on N.F. Laboratories, see:
https://nflabs.jp/business/
(in Japanese only)
developing our skills through wide-ranging support, from regular study groups to technical assistance for individual projects and support for organizational reform. Each advisor offers superior technical guidance and advice backed by ample knowledge and experience, providing valuable, useful input for employees.

In fiscal 2021, the average training cost was 202,000 yen for an average of 22 hours per employee. Due in part to the expansion of online training options, investment in human resource development has increased by approximately 2.3 times over the previous fiscal year, which was affected by the COVID-19 pandemic, and by about 1.5 times over fiscal 2019, prior to the pandemic. Employee-driven training, however, has been stagnant, accounting for only about 10% of the total, compared to planned training led by organizations and other Company initiatives. In our current era of VUCA (volatility, uncertainty, complexity, and ambiguity), the required technical and professional skills are becoming increasingly diverse, deeper, and shorter-lived amidst intense environmental change. To address these developments and cope with the disruptive change associated with remote workstyles, we believe it is necessary to emphasize more autonomous employee-driven learning and career development than Company-led training and personnel transfers. We plan to further strengthen schemes to support autonomous learning and measures that contribute to open learning among employees.

For more information on external technical advisors, see https://www.ntt.com/shines/posts/b-t_20200625.html (in Japanese only)

For more information on new measures for supporting autonomous learning, see: https://www.ntt.com/shines/posts/p-c_20221107.html (in Japanese only)
Global Human Resource Development Program

NTT Communications has implemented an overseas secondment program to develop globally competitive human resources. The program’s scope was expanded in fiscal 2011 to include younger employees. Under the program, employees are sent overseas for one year to undergo on-the-job training and acquire global communications skills through firsthand experience. Although we temporarily suspended the program in fiscal 2020 due to the pandemic, we resumed accepting applications in fiscal 2021 and dispatched 22 employees overseas. In fiscal 2022, we have begun the process to send 24 new participants.

Internal Job Posting System

We have implemented an internal job posting system to expand the possibility of transfers from the employee’s standpoint and to provide personnel with a wide range of challenging opportunities. The system is extensively used by employees of all ages, with job postings from within the NTT Communications Group and NTT Group.

In parallel with the internal job posting systems of the NTT Group as a whole, we developed JobBoard and FreeAgent within the NTT Communications Group, which are unique recruitment systems based on the employee’s standpoint.

JobBoard is an internal system that allows for employees to voluntarily apply for positions required by the organization (employee-oriented approach), while FreeAgent is an internal scouting system through which employees who apply to the program are offered positions by the organization (organization-oriented approach). We are developing measures based on this two-way approach to offer more employees opportunities to move into the positions of their choice.

In fiscal 2021, approximately 60 employees were assigned to departments of their choice within the NTT Communications Group and NTT Group. We will continue to use the internal job posting system actively in order to facilitate career advancement and revitalize the organization while also creating job postings in specific focus areas associated with achieving our business vision.

Focus Areas for Human Resource Development

- Business for small and medium-sized enterprises
- Global business
- Security-related services
- Upper layer-type services
- New areas including design, data science, and business creation
- Human resources capable of bolstering Group companies toward the maximization of total Group power

Personnel Evaluation

NTT Communications intends to motivate employees to take on new challenges and perform at their highest level. While we value fairness and transparency, we have also implemented promotion and compensation systems based on results and performance. These systems vitally depend on the accurate assessment of the employee’s willingness and courage to engage in rapid transformation with top priority on the customer’s perspective as well as their level of performance against their goals. We therefore pay attention to the execution of tasks and take action to maintain rational processes. For example, we encourage each employee to take ownership of creating their own goals and reviewing progress against these goals, and we also create opportunities for employees to discuss their performance with their superiors at least twice a year. In addition, to increase the fairness of evaluation for employees in managerial positions, we conduct 360-degree feedback, in which their supervisors, colleagues, and subordinates all provide feedback, as well as third-party assessment.
<table>
<thead>
<tr>
<th>Employee Data</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of employees</strong>&lt;sup&gt;1&lt;/sup&gt;</td>
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<tr>
<td>---</td>
</tr>
<tr>
<td>Non-consolidated</td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td>Consolidated</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ratio of basic salary and remuneration per employee by gender&lt;sup&gt;2&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Managerial positions</strong></td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>Base salary</td>
</tr>
<tr>
<td>Total remuneration</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>General positions</strong></th>
<th>Base salary</th>
<th>Total remuneration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base salary</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Total remuneration</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

| Percentage of women in managerial positions (%)<sup>3</sup> | 5.4 | 6.1 | 6.7 | 7.2 | 8.3 |
| Turnover rate (%)<sup>4</sup> | 3.2 | 4.1 | 3.6 | 2.4 | 2.6 |
| **New employees**<sup>5</sup> | 203 (16) | 237 (10) | 203 (7) | 203 (5) | 257 (8) |
| Male | 136 (9) | 163 (7) | 137 (4) | 137 (2) | 176 (4) |
| Female | 67 (7) | 74 (3) | 66 (3) | 66 (3) | 81 (4) |
| Percentage of women (%) | 33.0 | 31.2 | 32.5 | 32.5 | 31.5 |
| **Number of experienced personnel hires** | 19 | 60 | 50 | 76 | 79 |
| Percentage of experienced personnel hires among new hires (%) | 8.6 | 20.2 | 19.8 | 27.2 | 23.5 |
| **Number of rehires**<sup>6</sup> | 45 | 57 | 57 | 47 | 113 |
| Ratio of employees with disabilities (%)<sup>6</sup> |
| Non-consolidated | 2.21 | 2.19 | 2.39 | 2.41 | 2.38 |
| Non-consolidated and domestic Group companies<sup>7</sup> | 2.17 | 2.11 | 2.27 | 2.23 | 2.34 |

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**Maintaining and Improving Motivation**

**Ongoing Employee Satisfaction Surveys**

We have been conducting employee satisfaction surveys since fiscal 2011 and implementing measures to address issues identified in the results to improve employee job satisfaction and productivity. In fiscal 2021, we revised the survey questions to create an employee engagement survey for obtaining quantitative data on employee engagement, expectations toward the Company and workplace, and employee sentiment. We are establishing a cycle in which survey results are fed back to formulate and implement measures that lead to action. The survey also enables us to make comparisons with external benchmarks and understand the factors that contribute to employee engagement. We have disclosed the results on an internal dashboard to create an environment in which survey results can be freely reviewed.

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**Period conducted:** February 2022

**Survey targets:** NTT Communications Group employees, contract workers, etc., in Japan

**Number of respondents:** 14,596 (response rate: 89.5%)
Enhancing Employee Motivation through the New Business Creation Contest (ZERO ONE DRIVE)

To expand its future horizons, the NTT Communications Group actively invites employees to submit ideas for new businesses and services. As part of this, the DigiCom contest for new business creation was launched in 2016 for the development of new ideas for the next pillar of NTT Com’s business. The seventh DigiCom contest was held in 2021. In fiscal 2022, the scope was expanded to include the DOCOMO Group, and the contest was relaunched under the new name of ZERO ONE DRIVE. Planned and managed jointly by NTT DOCOMO, NTT Communications, and NTT COMWARE, the event expanded in scope and attracted participants from across the DOCOMO Group, with 427 ideas submitted and 522 people involved. The top five teams presented their business ideas on Demoday in November 2022. Even after the contest ended, the teams continued to pursue the commercialization of their ideas. Several projects have progressed to the point of conducting demonstration tests with local governments and partner companies, as well as actually providing services to our customers.

ZERO ONE DRIVE personifies the DOCOMO Group’s new action principles of “Ask why,” “Take the first step,” and “Mix it up,” which encourage employees to go beyond the boundaries of their normal duties and create new businesses based on their own ideas. As the scope of participation was expanded to include the entire DOCOMO Group, cross-Company teams were formed, resulting in the creation of a wide variety of ideas. The contest also provides an opportunity to foster the spirit of challenge as a mindset and corporate culture and to discover and develop human resources. We will continue to promote initiatives not only to develop new businesses and services but also to also maintain and enhance employee motivation.

Labor-management Relations

We value active dialogue based upon independent and responsible labor-management relations. Any issues related to employment, working conditions, or other operational management matters are vigorously discussed toward reaching mutual understanding before taking any action toward remediation.
Under our Promotion of Diversity Fundamental Policy, NTT Communications is committed to creating workplaces and implementing hiring activities that allow personnel with diverse backgrounds to work to the best of their ability, regardless of gender, sexual orientation or sexual identity, age, birthplace, nationality, or disability. To stimulate new innovation and respond to diversifying customer needs, as well as to help employees realize their well-being, we are creating a working environment that encourages employees with different personalities and backgrounds to work together with mutual respect and maximize their strengths in their own way.

With the firm belief that promoting diversity is essential for the sustainable development of our business, we are promoting diversity and inclusion through our medium-term vision, which upholds goals such as creating working environments that make it easier for employees to design their life plans; fostering a corporate culture that encourages both men and women to take childcare leave; developing systems that enable employees to work with vigor, regardless of where they work, while boosting motivation and vitality; and thoroughly implementing occupational safety and health as well as employee health management.

To create more satisfying workplaces and help employees improve their “work-in-life” (work as an important part of life), our Work-Life Committee, comprised of management and employee representatives, serves as the core organization continually striving to implement a range of measures for realizing workstyles that are more efficient and productive while also ensuring that duties are carried out in an effective and thorough manner. In October 2020, we abolished core hours (10:00 A.M. to 3:00 P.M.) under the flextime system to ease working hour restrictions. In addition, we revised our remote work system in July 2022 to allow employees to live anywhere in Japan.

Promotion of Diversity Fundamental Policy

- Foster a corporate culture that leverages employee diversity to achieve targets stated in management strategies.
- Create an environment that enables employees to maximize their own individuality by mutually recognizing diverse values and leading the way in realizing employee well-being and addressing social issues.

[ Diversity and Inclusion Initiatives ]

Strengthening the development of global and DX human resources and promoting workstyle reform

- Support for diverse career development (Career Design Office established)
- Promoting the active roles of veteran employees (career design training, interviews)
- Fostering understanding and improving the environment for LGBTQ people
- Promoting employment and active roles of people with disabilities

Promoting workstyle reform, working from home, and diverse workstyles

- Conducting training to promote the participation and advancement of women (leadership and career development) and creating opportunities for diverse, self-directed career development
- System reform and promotion of male employees taking childcare leave
- Sharing information, conducting training, and community building to support returning to work

Support for balancing work and personal life, including childcare, nursing care duties, and fertility treatment

- Promoting workstyle reform, working from home, and diverse workstyles
- System reform and promotion of male employees taking childcare leave

Priority Initiatives Going Forward

- Encouraging male employees to take childcare leaves
- Increasing support for balancing work with family life (childcare, fertility treatment, nursing care, illness)
- Appointing women to managerial positions by taking advantage of diversity, promoting the active roles of women
- Exploring workstyles that allow employees to choose where to work

Principal External Evaluations

D&I foundation building

2008

Phase 1

2011

Phase 2

2011

Phase 3

2013

Further addressing diversity

Realization of employee well-being

Phase 4

2020

2022

2025
In fiscal 2021, we further promoted the Hybrid Workstyle, which is not restricted by the place or time of work, to establish an environment in which diverse personnel can demonstrate their unique talents. We also provided opportunities and fostered a corporate culture to develop diverse managers who succeed in their careers by balancing life and work. As a result of these efforts, the ratio of female managers rose to 8.3% in fiscal 2021, and we achieved our 25% target for the percentage of men taking childcare leave. Going forward, we will promote a variety of efforts, including initiatives and individual follow-ups, to achieve the targets for the percentage of newly appointed female managers as a key indicator of the NTT Group Global Sustainability Charter, and the percentage of men taking maternity leave, a social concern.

In addition, we have focused on reducing the number of workplace accidents as a key measure in pursuing thorough implementation of occupational safety and health. We endeavored to raise awareness of workplace accidents and promoted preventive measures, resulting in one incident, which was the same as in the previous year. Combined with a health checkup rate of 99.9%, we have more or less met our goal for this year. Going forward, we will continue with our efforts to maintain and improve employee health across all our workplaces.

### Our Approach

In principle, transfers and assignments away from family have been eliminated, giving employees greater freedom in terms of where they live.

Looking ahead, we will promote the highly flexible, hybrid workstyle, in which employees autonomously combine face-to-face and remote communication according to the nature of their work and needs of the team.

### [Review of Remote Work System]

<table>
<thead>
<tr>
<th>Definition</th>
<th>Past</th>
<th>July 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work location</td>
<td>Business site</td>
<td>Home</td>
</tr>
<tr>
<td>Procedures for implementing remote work</td>
<td>Required an application by the employee and approval by a supervisor</td>
<td>Does not require application* by the employee</td>
</tr>
</tbody>
</table>

*Application and approval are required when working in a location other than the home.

<table>
<thead>
<tr>
<th>FY2017</th>
<th>FY2018</th>
<th>FY2019</th>
<th>FY2020</th>
<th>FY2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,895</td>
<td>1,904</td>
<td>1,885</td>
<td>1,980</td>
<td>1,956</td>
</tr>
</tbody>
</table>
Employment, Training, and Promotion of Diverse Human Resources

Promoting Women’s Participation and Advancement

In line with the NTT Group’s declaration to double the number of female managers in its organization, the NTT Communications Group supports employees at various stages of their career development and actively recruits female employees to increase opportunities for engaging diverse human resources. In 2016, we received the highest order of certification for Eruboshi from the Minister of Health, Labour and Welfare based on the Act of Promotion of Women’s Participation and Advancement in the Workplace*. Since then, we have continued to provide support for career development that leads to more women in managerial positions and measures for employees facing life events, in accordance with their needs. We have formulated an action plan through fiscal 2025, based on the Act of Promotion of Women’s Participation and Advancement in the Workplace, and achieved a female manager ratio of 8.3% in fiscal 2021 (female executives ratio: 8.7%). This came about as we presented images of diverse managers and their workstyles, implemented leadership training, and offered opportunities for employees to take on new career challenges of their own choice, enabling many employees, regardless of gender, to pursue autonomous career development.

To help employees visualize their career options as managers at an early stage, the senior vice president of Human Resources disseminates information internally and externally, and we present role models in our internal newsletters and on the diversity website and conduct interviews and hearings of pre-leadership level employees by in-house career consultants. Through these measures, we hope to change the mentality of our employees and foster their mindsets. We will continue to promote women’s careers toward our goal of raising the ratio of female managers to 15% by 2025.

*In light of the rapidly decreasing population and anticipated labor shortages, this act was established to promote women’s participation in the workplace. It is intended to create an environment in which women can choose how they work, demonstrate their abilities, and succeed in their professional lives. From April 1, 2022, companies with over 100 employees are obligated to draw up action plans to encourage the active participation of female employees.

As of June 1, 2022, the NTT Communications’ rate of employees with disabilities is 2.38%. We hire new graduates as well as experienced personnel through employment agencies. In addition, we have retention programs to ensure these employees stay with the Company. Employees are positioned and actively contributing in various parts of our organization including sales and engineering.

Alternative Career Designs

NTT Communications offers a variety of employment options to meet the career aspirations of its employees, including those who wish to pursue careers in a wide range of fields and those who wish to make use of their specialized skills. Membership-type employment is a form of employment for those who wish to gain work experience and improve their expertise in a wide range of business fields and job categories, and it is based on a conventional, Japanese-style lifetime employment. On the other hand, job-type employment is for those who wish to focus mainly on increasing their expertise in a specific field and, in principle, their job content stays unchanged (no personnel transfer), and such employees are referred to as specialists at the Company.

We have introduced a continued employment system that allows employees reaching the mandatory retirement age of 60 to continue working, if they wish, until they reach 65. Our employment system is designed to meet the needs of each workstyle, including work arrangements that allow employees to make the most of the skills they have cultivated prior to retirement to achieve the same high level of performance as before, alternative work days,

<table>
<thead>
<tr>
<th>Ratio of Female Managers</th>
</tr>
</thead>
<tbody>
<tr>
<td>( % )</td>
</tr>
<tr>
<td>15 -</td>
</tr>
<tr>
<td>10 -</td>
</tr>
<tr>
<td>5 -</td>
</tr>
<tr>
<td>0 -</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FY2019</th>
<th>FY2020</th>
<th>FY2021</th>
<th>FY2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.7</td>
<td>7.2</td>
<td>8.3</td>
<td>15</td>
</tr>
</tbody>
</table>

Scope: Employees of NTT Communications Corporation including seconded employees

Employing Persons with Disabilities

Under the concept of normalization, when employing persons with disabilities NTT Communications confirms their desires in relation to type of work and working environment so that everyone can make the most of their skills. It also gives due consideration to their suitability in certain roles and when determining their job descriptions.
For more information on NTT Com CHEO’s initiatives on telework, see: https://www.nttcheo.com/corporate/telework/
(in Japanese only)

Home-based Contact Center Operations and Home Visit Support Operations Provide Employment Opportunities for Human Resources Nationwide

Since its establishment in 2002, NTT Com CHEO has pioneered the introduction of a teleworking model in Japan that utilizes home-based staff. It is highly regarded by society as a powerful means for creating new employment opportunities and realizing diverse workstyles.

Under the slogan of “Changing The Way You Work,” the Company continues to promote the dissemination and development of the teleworking model to coexist with society. At the same time, we are developing and expanding across a wide range of businesses beyond technical support by utilizing the human resources and know-how cultivated through our technical support services. Representative ventures include the Contact Center Business, which responds to inquiries about products and services, and the Field Service Business, which dispatches technical staff to perform tasks at designated locations. NTT Com CHEO’s home-based contact center operates at a very high standard in terms of service level and customer satisfaction. It passed the audit for the COPC® Customer Experience Standard certification, an international standard for contact center operations, and became the first work-from-home contact center in the Asia-Pacific region to obtain certification. In addition, as a group of professionals in the call center business, many of its employees have been certified as a COPC CSP Implementation Leader from the perspective of human resource development. The active promotion of DX has made it possible to conduct all processes from hiring to training and business management from home, thereby providing flexible employment opportunities to those unable to work full-time for reasons such as moving, childbirth, childcare, or nursing care. As a result, we were able to make a smooth transition while maintaining operational efficiency and service quality even during the COVID-19 pandemic. As it celebrates the 20th anniversary of its founding in November 2022, NTT Com CHEO sees this year as a milestone for advancing into the future. Moreover, it will continue to contribute to society while further accelerating its founding spirit of “Changing The Way You Work.”

To create an inclusive working environment based on an accurate understanding of those who identify as LGBTQ, we have included these topics in our standard human rights training curriculum, which targets all full-time and temporary employees. We also took part in the RAINBOW CROSSING TOKYO career development forum, which focuses on diversity including LGBTQ concerns, and organized a get-together for those who have declared themselves as allies across the NTT Group.

While face-to-face interaction among employees is decreasing due to the pandemic, we have been developing an environment in which LGBTQ employees can engage in their work with a sense of security, by distributing a virtual background to allies to show their support publicly during remote meetings. We also set up a helpdesk where employees can discuss their sexual orientation, sexual identity, and other related matters. Furthermore, most of our life-event-related benefits, such as special leave, condolence, and congratulation money, are also applied to same-sex partners.

These efforts have been recognized by the nonprofit organization “work with Pride,” which evaluates corporate efforts to foster inclusiveness. In fiscal 2021, we were awarded the Gold rating, the highest in its PRIDE Index, for the fifth consecutive year since receiving the rating for the first time in fiscal 2016.

For more information on NTT Com CHEO's initiatives on telework, see: https://www.nttcheo.com/corporate/telework/
(in Japanese only)

Initiatives for LGBTQ Issues

We are actively raising awareness of LGBTQ and other sexual minorities across our organization and implementing policies to support them.

| Virtual Background Distributed to Allies } | PRIDE Index |

NTT Communications Corporation Sustainability Report 2022
To enable employees to balance work with childcare, nursing care, illness, and other life events, NTT Communications promotes flexible and diverse workstyles that are not restricted by time or location, provides information to employees, and conducts career interviews. We also implement measures to increase understanding of supervisors and team members. We will continue to create a work-in-life environment in which employees can work with vigor.

**Work-In-Life (Work as an Important Part of Life)**

To balance work with fertility treatment, employees must obtain information at an early stage and gain understanding and support in the workplace. To that end, we held a seminar on how to balance work and fertility treatment to provide correct information, and we presented a panel discussion by experienced participants. The seminar not only provided knowledge to those engaged in or considering such treatments but also deepened understanding among those in the workplace and ideal forms of support. Assuming that even more employees will be involved in nursing care in the future, we have conducted seminars on balancing work and nursing care in order to prevent employees from having to take long-term leaves of absence or leave their jobs altogether due to nursing care. We will continue to provide support by disseminating information on our internal website and offering follow-ups through our consultation service to foster a culture in which everyone can continue to work in their own way.

*This act was established to encourage actions to support raising the next generation of children. Its initiatives are not completely led by the government; companies with over 100 employees are obligated to draw up action plans that support employees who are raising young children.*
### Changes in the Number of Employees Who Took Maternity, Childcare, or Nursing-care Leave in Fiscal 2021

<table>
<thead>
<tr>
<th></th>
<th>FY2017</th>
<th>FY2018</th>
<th>FY2019</th>
<th>FY2020</th>
<th>FY2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternity leave (persons)</td>
<td>84</td>
<td>63</td>
<td>55</td>
<td>54</td>
<td>34</td>
</tr>
<tr>
<td>Childcare leave (persons)</td>
<td>89</td>
<td>173</td>
<td>121</td>
<td>98</td>
<td>84</td>
</tr>
<tr>
<td>Female</td>
<td>84</td>
<td>161</td>
<td>111</td>
<td>92</td>
<td>46</td>
</tr>
<tr>
<td>Male</td>
<td>5</td>
<td>12</td>
<td>11</td>
<td>6</td>
<td>38</td>
</tr>
<tr>
<td>Total number of reinstated employees from childcare leave (persons)</td>
<td>64</td>
<td>82</td>
<td>70</td>
<td>77</td>
<td>76</td>
</tr>
<tr>
<td>Female</td>
<td>58</td>
<td>72</td>
<td>61</td>
<td>60</td>
<td>48</td>
</tr>
<tr>
<td>Male</td>
<td>6</td>
<td>10</td>
<td>9</td>
<td>17</td>
<td>28</td>
</tr>
<tr>
<td>Total number of employees who were still with the Company as of 12 months after reinstatement from childcare leave (persons)</td>
<td>64</td>
<td>78</td>
<td>67</td>
<td>74</td>
<td>70*1</td>
</tr>
<tr>
<td>Female</td>
<td>58</td>
<td>68</td>
<td>59</td>
<td>58</td>
<td>54</td>
</tr>
<tr>
<td>Male</td>
<td>6</td>
<td>10</td>
<td>8</td>
<td>16</td>
<td>16</td>
</tr>
</tbody>
</table>

#### Reinstatement rate (%) and retention rate (%) of employees after childcare leave

<table>
<thead>
<tr>
<th></th>
<th>FY2017</th>
<th>FY2018</th>
<th>FY2019</th>
<th>FY2020</th>
<th>FY2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reinstatement rate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>100.0</td>
<td>96.0</td>
<td>96.8</td>
<td>96.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Male</td>
<td>100.0</td>
<td>90.9</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Retention rate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>100.0</td>
<td>94.4</td>
<td>96.7</td>
<td>96.7</td>
<td>90.0*3</td>
</tr>
<tr>
<td>Male</td>
<td>100.0</td>
<td>100.0</td>
<td>88.9</td>
<td>94.1</td>
<td>94.1*3</td>
</tr>
</tbody>
</table>

#### Number of employees using the shorter working hour system for childcare (persons)

|                                |        |        |        |        | 111    |
|                                |        |        |        |        |        |

#### Nursing care leave (persons)

|                                |        |        |        |        |        |
|                                |        |        |        |        |        |

#### Number of employees registered for re-employment** (Number of employees re-employed for reasons related to childcare, transfer, or nursing care)(persons)

|                                |        |        |        |        | 22 (1) |
|                                |        |        |        |        |        |

#### Average number of paid leave days taken (days)

|                                |        |        |        |        |        |
|                                | 17.4   | 17.7   | 16.2   | 14.0   | 16.4   |

#### Average paid leave acquisition rate (%)

|                                |        |        |        |        |        |
|                                | 87     | 89     | 81     | 70     | 82     |

#### Resignation without reinstatement (persons)

|                                |        |        |        |        |        |
|                                |        |        |        |        |        |

---

*1 Number of reinstated employees after childcare leave in fiscal 2020 that were still with the Company 12 months later
*2 Number of reinstated employees in fiscal 2021 ÷ (Number of reinstated employees in fiscal 2021 + Number of employees who resigned without reinstatement from childcare leave in fiscal 2021
*3 Number of employees who were still with the Company as of 12 months after reinstatement from childcare leave in fiscal 2020 ÷ Number of reinstated employees from childcare leave in fiscal 2020
*4 As of March 31 for each fiscal year
Promotion of Workstyle Reform

In line with our principles of taking the initiative in taking actions, mutual enhancement, and meeting the needs of society, NTT Communications has been organizing and promoting workstyle reform focused on three areas: policies and rules, environment and tools, and awareness and culture.

Since the pilot introduction of remote work in 2002, we have promoted reform using ICT and data, as evidenced by the participation of 6,350 employees in Telework Days from 2018 to 2019. As the pandemic started to accelerate in February 2020, we were quick to make the decision to shift to Companywide remote work. From that year to the present, we have maintained a remote work rate of above 80%.

Through our transition to remote work, we have reaffirmed our goal of offering each and every employee the opportunity to choose a workstyle that allows them to fully demonstrate their capabilities and continued our reform to address issues and situations that have newly emerged amidst the accelerating pace of changes.

Policies and Rules

We are working to introduce flexible systems that cater to individual circumstances and operations. These include the abolition of rules limiting eligibility for working from home, which is intended to support balancing work and family needs, and remote working, which allows for a more effective use of time. We also share examples of employees using these and the flextime system.

Through these efforts, we have created an environment in which employees facing a variety of challenges, including childcare and nursing care, can continue to play active roles. As a result, the percentage of employees working shorter hours has declined from 2.4% in fiscal 2019 to 1.7% in fiscal 2020 and 1.3% in fiscal 2021, significantly raising the number of employees returning to full-time work.

We will continue to support our employees facing the difficulty of balancing childcare and work by helping them to make better use of the systems and reduce commuting time through remote work.

Environment and Tools

Although we asked all of our employees to work from home during the pandemic as a general rule, there were still certain situations that required them to come to the office, such as to fill out paper applications and sign contracts. This was an issue that needed to be addressed in order to promote a new way of working. To create a new workstyle tailored to the “new normal,” we reviewed our entire business process, including digitization and moving online. In addition, we rolled out secure computers throughout the Company in addition to thin clients*1 and BYOD*2 that had been introduced to enable speedy startup of computers and realize a working environment using fat terminals that are unaffected by the network environment. Introducing Companywide application software has eliminated the need to install servers for each organization, thereby reducing the workload of the Information Systems Department. About 98% of employees expressed positive opinions about secure computers, and the department has begun to take on new challenges including data utilization. Looking ahead, we will continue to pursue automation and higher efficiency through DX.

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*1 Specialized terminals without storage media that are used in virtual desktop environments
*2 Bring Your Own Device: A policy under which employees are permitted to use their personal mobile devices at work

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Raising Awareness and Corporate Culture

While we have established an environment for remote work, we have taken both top-down and bottom-up approaches, recognizing the necessity of creating a culture and atmosphere where employees do not feel alienated or anxious given the situation where they are unable to easily see how each other is doing.

Executives took the initiative in working from home, such as by holding executive meetings remotely, and top management itself promoted the workstyle reform. In addition, the senior vice president of Human Resources devised an open communication style, such as “5-Minute HR,” a video presentation giving a brief explanation of HR initiatives and the HR system to the entire Company.

In addition, we conducted one-on-one meetings between supervisors and subordinates to ensure there were no inconsistencies in information sharing or communication within the team of employees and make sure they were on the same page. At the same time, we supported employee growth and provided physical and mental health care to foster a sense of trust between the Company and employees.

Furthermore, a Companywide “Thanks” tool has been introduced to foster a culture of appreciation and praise with the aim of revitalizing communication among employees, increasing motivation, building trust, and fostering a sense of unity in the organization through the open sharing of gratitude.

As a result of these efforts, and despite the general tendency to feel alienated and anxious when working in a remote working environment, the percentage of employees who responded positively in the employee engagement survey in fiscal 2021 to questions in the “cooperative structure” and “communication” categories rose to 70%. We will continue our efforts to further implement these initiatives.

Cafeteria Plan

NTT Communications offers various benefits to its employees at different points of their careers, based on their needs and lifestyles. Specifically, we have implemented the Cafeteria Plan system, which allows employees to choose from 18 wide-ranging benefit options that match their respective lifestyles within the limit of points assigned to them in advance. And we provide 23 benefits that can be chosen regardless of points. We offer a wide-ranging lineup that includes a package of general benefits that also apply to employees’ families in areas such as healthcare, childcare, and nursing care, as well as an option that enables employees to choose from four major physical fitness clubs and use the facilities for 500 yen (plus tax) per session.

In the last few years, we have been reviewing the options to focus on health maintenance and promotion, and we offer health activity promotion options through the dHealthcare smartphone application, which can be used freely at any time. We plan to offer more options in future so as to provide a system that overall is even more beneficial to employees.
Encouraging Employees to Take Various Leaves

As part of our work-life balance initiatives, we encourage employees to take their entitled leaves. We strive to establish working environments that support them by raising awareness of entitled leaves and encouraging them to schedule their leaves to coincide with long national holidays. In fiscal 2021, 16.4 paid leave days were used per person, on average.

We are also promoting the use of our Life Plan Leave system, which entitles employees to a certain number of leave days for the purpose of lifecycle-related downtime, nursing of family members, volunteer activities, recurrent training, and childcare.

<table>
<thead>
<tr>
<th>[Support for Employee Leave]</th>
<th>Main Support</th>
</tr>
</thead>
</table>
| **Support for maternity and childcare** | We support employees expecting or raising children to balance work and family life through the following systems and measures.  
• Maternity leave (6 weeks before and 8 weeks after the date of birth)  
• Childcare leave (until the child turns 3)  
• Shorter working hours for childcare (choose from 4, 5, or 6 hours per day until the child reaches the third grade of elementary school)  
• Restrictions on overtime and late-night work  
• Issuance of discount coupons for childcare services |
| **Support for nursing care** | We support employees caring for a family member to balance work and family life through the following systems and measures.  
• Short-term leave system for nursing care  
• Nursing care leave (up to 1 year and 6 months)  
• Shorter working hours for nursing care (choose from 4, 5, or 6 hours per day)  
• Restrictions on overtime and late-night work  
• Issuance of discount coupons for nursing care services |
| **Support for continued employment** | We have established a system that allows employees forced to resign due to their partner’s transfer or to focus on childcare or nursing care to be rehired within 6 years of resignation (3 years for childcare or nursing care reasons) under certain requirements.  
• We have also introduced a continuous employment system that allows those who wish to continue working until the age of 65 (or 70 if necessary) after reaching the mandatory retirement age of 60. |
| **Support for balancing work and family life in case of illness** | Employees are entitled to a certain period of leave when they are injured or become ill.  
• They can also take sick leave after the period of sick leave has elapsed, depending on their condition and based on the approval of their medical doctor (maximum period of sick leave: 3 years). |
| **Support for LGBTQ and other sexual minority employees** | Some of the systems related to life events (special leave, congratulatory and condolence payments, etc.) are available to same-sex partners. |
| **Others** | We offer leave systems to meet a variety of needs, including volunteer activities and recurrent learning.  
• Life plan leave (5 days granted for every 5 years of service, which can be set aside as part of annual leave) |
NTT Communications has a safety and health management system in place at each of its business sites. A health manager, safety manager, and industrial physician are assigned to offices that have 50 or more workers on a regular basis, and a general health and safety supervisor is assigned additionally to offices that have 100 or more workers on a regular basis. At offices with 50 or more workers, we have set up a Health and Safety Committee. The committee strives to achieve a 100% health checkup implementation rate and implements measures to ensure a healthier workplace environment, prevent occupational accidents, and reduce long working hours. In fiscal 2021, our discussions focused on health issues in remote working environments, and we deployed related measures in each building. Also, we are promoting and deploying safety measures aimed at eliminating personal injury accidents so that employees engaged in network facility construction work can perform their duties safely. We hold safety meetings to discuss safety measures on a regular basis, share cautionary points for different situations, and distribute safety video content to improve safety management and safety awareness among construction workers, including those at our suppliers.

| Number of Workplace Accidents (Occupational Accidents) |
|-----|-----|-----|-----|-----|
| FY2017 | FY2018 | FY2019 | FY2020 | FY2021 |
| 4 | 5 | 2 | 1 | 1 |

For staff in their first to third years, we offer one-on-one counseling on an ongoing basis as well as other types of support (555 participants in fiscal 2021). Other measures for further expanding our support include setting up consultation desks, both in and outside the organization, and counseling programs for employees being sent on overseas assignments.

These efforts resulted in our being recognized in March 2022 as an outstanding enterprise under the White 500 Recognition for Excellence in Health and Productivity Management by the Ministry of Economy, Trade and Industry and Nippon Kenko Kaigi. We will continue to implement measures across all Group companies in Japan toward maintaining healthy and comfortable working environments and further strengthening the capability of those providing mental health care at each workplace.

As well as ensuring the safety of our working environments, we are committed to creating places where employees can lead healthy and fulfilling work lives. A number of actions have been implemented to achieve that goal.

Recently we have emphasized certain measures for maintaining physical health. In fiscal 2021, the Com-Walk campaign for all employees, which had been held in autumn until last year, was expanded to two campaigns: one in spring and the other in autumn. In spring we added a campaign to enjoy communication by sharing photos taken while walking (Com-Photo), and in autumn we held a campaign to perform radio calisthenics (Com-Taiso) at the same time every day, as a way for eliminating the lack of opportunities for everyday physical exercise. In addition to providing a program that allows those with lifestyle-related diseases to receive the necessary health guidance via a smartphone app, we have also developed a follow-up program in collaboration with Rizap Group, Inc. to raise employee awareness and improve lifestyle habits. As a result of these efforts, the percentage of employees receiving the health guidance in fiscal 2021 was maintained at 80%, while the completion rate expanded from 40% to nearly 70%. We will continue to encourage employees to receive health checkups to achieve a 100% checkup rate.
We have established several consultation services both in and outside the Company to help employees with various types of mental health issues. Employees seeking advice on mental and physical health can consult with their organization’s physician or public health nurse, while those who wish to seek advice on a wide range of matters, including private issues such as childcare and nursing care, can contact the Mental Condition Support Desk, staffed by clinical psychologists and other specialists.

In addition, we conduct group analysis of the results of the annual stress check for each workplace and hold three-way discussions among labor (union), management (Company), and health (health management center) on issues and future measures that can be applied to improve the workplace.

In fiscal 2021, we conducted the mental keeper training course for 131 employees (total number of certified employees: 3,332) to further enhance line care in the workplace. We also conducted team management training for 144 supervisors of employees with mental illnesses. Participants learned how to provide support by involving team members in creating a support system and environment. They also learned how to prevent the recurrence of mental and physical illnesses. In addition, we organized self-care seminars for 324 employees who had undergone changes in their working conditions, such as personnel transfers, which are considered to have high potential risk for mental health problems. At the same time, we conducted a pulse survey every month to ensure that we are not missing any signs of changes in employees even in a remote working environment and to facilitate smooth communication between superiors and subordinates, leading to appropriate line care and other support.

### Measures for Mental Health

<table>
<thead>
<tr>
<th>Types of Consultation Services</th>
<th>Work-related concerns, communication issues with superiors, colleagues, etc.</th>
<th>Personal issues, health problems, marriage, childbirth, childcare, education, second career, nursing care, etc.</th>
<th>Human rights and harassment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line care: Supervisors (senior managers and directors), trainers, and organizational managers</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Care by health staff</td>
<td>○</td>
<td>○</td>
<td>—</td>
</tr>
<tr>
<td>Mental Condition Support Desk (EAP)</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Face-to-face counseling by professional counselors</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>M3PSP* (AskDoctors option)</td>
<td>—</td>
<td>○</td>
<td>—</td>
</tr>
<tr>
<td>Human Rights Office</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Harassment Hotline</td>
<td>—</td>
<td>—</td>
<td>○</td>
</tr>
</tbody>
</table>

*A service providing medical information to employees using AskDoctors, one of the largest physician consultation sites in Japan*
To enrich corporate culture founded on respect for human rights, NTT Communications has been promoting human rights education by establishing a Basic Policy on Human Rights Education.

Given the broad recognition of the importance of addressing human rights risks that arise across the value chain, companies have recently been subject to growing public demand for establishing human rights protection frameworks that are closely aligned with the nature of each business and addressing diverse human rights risks. NTT Communications has been working to ensure respect for human rights by establishing the Rules for Preventing Harassment under its Basic Policy. In addition to providing training for all full-time and temporary employees, we have set up contact points for reporting human rights issues and are conducting human rights due diligence. We intend to establish a corporate constitution that does not tolerate any form of discrimination and to create bright and vibrant workplaces by pursuing such proactive human rights education activities.

We are proactively promoting human rights awareness activities by increasing the rate of participation in human rights training and conducting human rights due diligence. In fiscal 2021, we were able to increase attendance in human rights training from the previous year to 18,155 (participation rate: 96.3%), and we will continue our efforts in fiscal 2022 toward the goal of raising participation to 100%. For new employees of NTT Communications, we conducted startup training and other programs to provide opportunities for staff to think for themselves about topics such as preventing all forms of discrimination and harassment, business and human rights, the SDGs, and LGBTQ issues.

In addition to our various training programs, we invite entries on human rights and compliance slogans as an opportunity for each employee to consider the importance of human rights. In fiscal 2021, we received 6,544 entries from 3,562 people, comprising full-time and temporary employees at all Group companies, and their family members.

On the other hand, we were unable to meet our goal of zero cases of human rights violations. Looking ahead, we will continue strengthening our initiatives for raising human rights awareness.

The NTT Group recognizes that respect for human rights is an important corporate social responsibility and strives to correctly understand and acknowledge the laws and regulations of each country and region and their cultures, religions, and values. We aim to realize a safe, secure, and prosperous, sustainable society by fulfilling this responsibility. To that end, we have established the new NTT Group Human Rights Policy by incorporating our existing Human Rights Charter into the NTT Group Global Sustainability Charter.

Under the policy, we respect the Universal Declaration of Human Rights and other internationally recognized human rights in all our corporate activities. We strive to ensure that we are not directly or indirectly involved in discrimination or other human rights violations. In the unlikely event of any negative impact on human rights, we take appropriate action.

When negative impacts on human rights by business partners are directly related to the NTT Group’s relationships, products or services, the NTT Group requires these partners to respect human rights and not violate them. To fulfill this responsibility, we respect all stakeholders’ human rights. We review and improve business operations and other aspects as necessary from the perspective of respecting human rights and reflect this in our business activities to establish a corporate structure that respects human rights.
NTT Communications has been promoting human rights education by establishing its own Basic Policy on Human Rights Education in accordance with the principles of the NTT Group Policy so as to create a rich corporate culture founded on respect for human rights and resolve human rights issues.

<table>
<thead>
<tr>
<th>Human Rights Education Promotion Committee:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consists of the chairperson (senior executive vice president), heads of each unit, and presidents of each Group company. Formulates basic policies, action plans, and measures for initiatives pursued by the NTT Communications Group and reports on activities.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Human Rights Education Promotion Executive Committee:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsible for executing the actions determined by the Human Rights Education Promotion Committee</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Human Rights Education Department:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serves as the secretariat for the Human Rights Education Promotion Committee and Human Rights Education Promotion Executive Committee, responsible for the Groupwide deployment of initiatives. Also submits an agenda and reports on key human rights issues to the Executive Council.</td>
</tr>
</tbody>
</table>

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**Corporate Constitution that Respects Human Rights**

Placing the utmost importance on human rights, we seek to establish a corporate constitution that does not tolerate any form of discrimination and is intended to establish bright and vibrant workplaces.

Specifically, we set up the Human Rights Education Promotion Committee, which reports on human rights enlightenment activities and considers measures for promoting human rights education. We have also implemented measures for preventing workplace harassment based on the Rules for Preventing Harassment, established in May 2020 and in accordance with the NTT Communications Group’s Basic Policy on Human Rights Education.

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**For more information on the NTT Group Human Rights Policy, see:**

Human Rights Due Diligence

In accordance with the United Nations Guiding Principles on Business and Human Rights, we will use the human rights due diligence process to identify, prevent, mitigate, and correct human rights issues on a global scale, and strive to raise awareness of human rights and improve human rights management throughout the Group. In addition, due diligence will be conducted throughout the entire value chain, and we require that our suppliers make an effort to comply with the separately established NTT Group Guidelines for Sustainability in Supply Chain. Direct dialogue will be the basis of our efforts, especially with important suppliers.

Measures for Raising Human Rights Awareness

Human Rights Education Training

Companies have recently been subject to growing public demand for establishing human rights protection frameworks closely aligned with the nature of each business.

A diverse array of full-time and temporary employees participates in NTT Communications’ business operations. Accordingly, we promote respect for human rights with due consideration for diversity. Every year, we organize Human Rights Education Training sessions for all full-time and temporary employees of the NTT Communications Group with the aim of preventing all forms of discrimination by fostering a heightened sense of awareness in each and every employee. In fiscal 2021, we sought to develop a broad understanding of harassment, the diverse nature of human rights, and the relationship between corporate activity and human rights. We also seek to raise awareness and deepen understanding of human rights among employees and others by encouraging them to frequently study the NTT Group Global Human Rights Policy established in November 2021 and the NTT Communications Group’s Basic Policy on Human Rights Education, and by widely disseminating information on our multiple contact points for consultation.

During these training sessions, we assess the level of understanding and also conduct surveys on potential human rights issues in the workplace, the nature of such issues, and the use of contact points for consultation, and we also gather comments. The results are reported to the Human Rights Education Promotion Committee and are used to consider, implement, and evaluate our efforts to promote human rights education.

<table>
<thead>
<tr>
<th>Overview of Human Rights Education Training in Fiscal 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major topics</td>
</tr>
<tr>
<td>Business and Human Rights</td>
</tr>
<tr>
<td>• Definition of human rights</td>
</tr>
<tr>
<td>• UN Guiding Principles on Business and Human Rights</td>
</tr>
<tr>
<td>• Global developments on human rights due diligence</td>
</tr>
<tr>
<td>• Japan’s National Action Plan on Business and Human Rights</td>
</tr>
<tr>
<td>Diverse Nature of Human Rights</td>
</tr>
<tr>
<td>• Regulatory processes related to the workplace</td>
</tr>
<tr>
<td>• Harassment in the workplace</td>
</tr>
<tr>
<td>• Examples of internal consultation cases</td>
</tr>
<tr>
<td>• Discrimination</td>
</tr>
<tr>
<td>• Persons with disabilities</td>
</tr>
<tr>
<td>• LGBTQ and other sexual minorities</td>
</tr>
<tr>
<td>Basic Policy on Human Rights Education</td>
</tr>
<tr>
<td>• NTT Group’s Human Rights Policy</td>
</tr>
<tr>
<td>• NTT Communications Group’s Basic Policy on Human Rights Education</td>
</tr>
<tr>
<td>Target</td>
</tr>
<tr>
<td>Full-time and temporary employees of the NTT Communications Group</td>
</tr>
<tr>
<td>Attendance</td>
</tr>
<tr>
<td>18,155</td>
</tr>
</tbody>
</table>

Human Rights Education Initiatives and Training Programs

For new employees of NTT Communications, we conducted startup training with the aim of creating worker-friendly environments, based on the content of our annual All-Employee Human Rights Education Training sessions. The program covered topics such as preventing all forms of discrimination and harassment and the relationship between business and human rights and the SDGs, and it provides an opportunity for employees to consider LGBTQ issues. In fiscal 2021, 259 employees participated in this training.

In addition to our various training programs, we invite entries on human rights and compliance slogans as an opportunity for each employee to consider the importance of this public concern. In fiscal 2021, we received 6,544 entries from 3,562 people, comprising full-time and temporary employees at all Group companies. The best slogans were chosen by online voting across the Group. The grand prize and special prize from the chairperson of the Human Rights Education Promotion Committee were presented, and the results announced, on the Group portal site.
Examples of Best Slogans for FY2021

<table>
<thead>
<tr>
<th>Human Rights Category</th>
<th>Compliance Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grand Prize</td>
<td>Grand Prize</td>
</tr>
<tr>
<td>Teleworking connects our hearts</td>
<td>Beware of assumptions; mistakes arise from habit rather than from unfamiliarity</td>
</tr>
<tr>
<td>through gratitude</td>
<td></td>
</tr>
<tr>
<td>Special prize from the chairperson of</td>
<td>Special Prize from the chairperson of the</td>
</tr>
<tr>
<td>the Human Rights Education Promotion</td>
<td>Compliance Committee</td>
</tr>
<tr>
<td>Committee</td>
<td></td>
</tr>
<tr>
<td>Sustainable communities and society</td>
<td>If something seems strange, don’t leave it, report it</td>
</tr>
<tr>
<td>are created by a heartfelt sympathy</td>
<td></td>
</tr>
<tr>
<td>for the children of tomorrow</td>
<td></td>
</tr>
</tbody>
</table>

Looking ahead, we will continue to engage in various educational measures and foster respect for diversity and acceptance of differences toward creating brighter, more vibrant workplaces.

Contact Points for Human Rights Issues

NTT Communications has set up internal and external contact points for all full-time and temporary employees as well as the staff of business partners to consult on issues and concerns related to human rights and harassment. The Human Rights Education Department and counseling system for workplace issues serve as internal contact points, and we provide external contact points through a law firm and the Consultation Hotline. The contact points are absolutely committed to confidentiality and protecting the rights of individuals who seek consultation.

These contact points appropriately respond for the purpose of resolving issues and alleviating concerns while taking due care to protect the privacy of individuals seeking consultation and the interests of the whistleblower. In particular, the external contact points offer consultation with counsellors at specialized institutions outside the Company.
Society expects companies to fulfill a wide range of responsibilities, from providing new value through products and services to maintaining a corporate culture of integrity and fairness. We will always place compliance at the foundation of our operations as a trusted corporate group.

To achieve sustainable corporate growth and continuously contribute to realizing a sustainable future, we are committed to practicing efficient governance and solid compliance across the Group. In particular, as advances in the remote world have heightened the importance of ensuring information security as a social concern, we have been actively preventing problems and providing countermeasures. We will remain faithful to our corporate mission, core beliefs, and policies in order to ensure each and every employee takes action with a sense of responsibility and strive to establish corporate governance and compliance systems throughout the Group to construct an efficient, legally compliant, and ethical management foundation.

Up to the present and into the future, we will endeavor to realize solid governance and enhance corporate value as we continue to advance as a company that has earned the public’s trust.
Under the NTT Group Corporate Ethics Policy, NTT Communications will not only adhere to laws and ordinances but will also engage in its daily operations with high ethical standards as a corporate group that retains the trust of all stakeholders, including customers, business partners, shareholders, and society as a whole. We have been developing our compliance promotion framework in accordance with our Global Compliance Regulations, through measures such as establishing a Compliance Committee and assigning compliance promotion leaders and staff to each unit and Group company. At the same time, we consistently promote compliance management across the NTT Communications Group by disseminating top management messages, educating and training employees, and operating points of contact for internal reporting.

We also prepare against various business risks, including large-scale disasters, by establishing systems and mechanisms that enable us to effectively respond to risks in our business operations. This is done under the leadership of the Business Risk Management Committee and involves annually reviewing and revising risk identification, response policies, and countermeasures. In addition to improving Groupwide risk sensitivity and handling the risks that have materialized, these activities are intended to build a system for addressing environmental and social risks in the future through a concerted Group effort.

As part of our ongoing compliance efforts, we are fostering awareness of risk management and conducting compliance training, with attendance rising to 98.9% in fiscal 2021 from 93.1% in fiscal 2020, while the implementation rate for the corporate ethics survey rose to 94.1% from 83.8% in fiscal 2020. We also conducted training for reviewing management to prevent harassment. We will continue to work on establishing a compliance foundation with integrity to promote harmony and mutual understanding among employees and adapt to the new structure and processes.

In addition, we are striving Companywide to continuously enhance our risk management system. In fiscal 2021, the Business Risk Management Committee met twice and Business Risk Management Subcommittee meetings were held 12 times. We have also designated the COVID-19 pandemic, information security, and resilience as material risks that require a focused effort.

Our mission expresses the purpose of our business while also reflecting our stance of generating innovative businesses to realize a world in which the inherent strengths and qualities of individuals, organizations, and societies are demonstrated to maximum effect. Our core beliefs embody the values that all of us should uphold in meeting our mission, with the underlying intention of creating value that exceeds society’s expectations by exercising individual initiative. These represent the cornerstone for management and individual employees as all of us think and act at our own initiative to accomplish our mission of creating innovative and unprecedented communication methods and new value for the future.

We can advance toward achieving our goals by sharing and broadly establishing our mission and core beliefs, which are the result of a united effort drawing upon repeated discussions by employees, the president, and members of management. At times,
we may become uncertain about the decisions and actions that meet the needs of stakeholders in our relationship with them. Whenever this concern arises, we will reflect on our proper course of action as a company serving society by returning to business activities based on our mission and core beliefs. Through these actions, we will strive to become a trusted company that satisfies the needs of customers and society.

In addition, the NTT Communications Group is upholding its new medium-term business vision of Re-connect X to fulfill its corporate mission in the “new normal” society that has been forced to undergo rapid change due to the spread of the COVID-19 pandemic.

As a general variable, “X” can signify anything. Together with our customers and partners, we will strive to help bring about a sustainable future by safely and securely connecting and re-connecting everything, and by collecting, storing and analyzing data, and providing feedback.

We believe that maintaining our business activities based on our mission, core beliefs, and business vision in a lawful, fair, and ethical manner contributes to meeting the SDG 10 “Reduced Inequalities” and SDG 16 “Peace, Justice and Strong Institutions.”

For more information on our mission, core beliefs, and business vision, see: https://www.ntt.com/about-us/we-are-innovative/vision.html?link_id=ostp_mdd_about

(in Japanese only)

For more information on Re-connect X, see: https://www.ntt.com/en/about-us/re-connectx.html
Appointing Directors

Directors are appointed with the expectation that they will utilize their extensive knowledge and insight in their respective fields.

<table>
<thead>
<tr>
<th>Composition of Board Directors and Auditors (as of December 1, 2022)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Directors</th>
<th>Name</th>
<th>Main Responsibilities and Roles</th>
</tr>
</thead>
<tbody>
<tr>
<td>President and CEO Representative Member of the Board of the Company</td>
<td>Toru Maruoka</td>
<td></td>
</tr>
<tr>
<td>Senior Executive Vice President Representative Member of the Board of the Company</td>
<td>Hidemune Sugahara</td>
<td></td>
</tr>
<tr>
<td>Senior Executive Vice President Representative Member of the Board of the Company</td>
<td>Keigo Kajimura</td>
<td></td>
</tr>
<tr>
<td>Senior Vice President Member of the Board</td>
<td>Hisashi Fujishima</td>
<td></td>
</tr>
<tr>
<td>Member of the Board</td>
<td>Masaaki Shintaku, Sadaaki Yokouchi, Minako Tsumenaga</td>
<td></td>
</tr>
<tr>
<td>Audit &amp; Supervisory Board Members</td>
<td>Kazuhiko Aramoto, Saku Shikamoto, Shuji Ota</td>
<td></td>
</tr>
</tbody>
</table>

Thorough Compliance

Compliance Promotion Framework

The NTT Communications Group acts in accordance with the NTT Group Corporate Ethics Policy, established by Nippon Telegraph and Telephone Corporation and applied throughout the NTT Group. To address compliance issues in Japan and overseas that have become increasingly complex in nature, NTT Communications will not only adhere to laws and ordinances but will also engage in its daily operations with high ethical standards as a corporate group that retains the trust of all stakeholders, including customers, business partners, shareholders, and society as a whole.

Specifically, we have established the relevant rules centered on the Global Compliance Regulations that serve as the standard compliance policy for the NTT Communications Group. We also promote compliance under a framework led by the Compliance Committee, which is by a senior executive vice president and supervises compliance promotion leaders and staff assigned to each unit and Group company. Under this framework, we consistently promote compliance management across the NTT Communications Group by disseminating top management messages on compliance, training employees, operating points of contact for internal reporting, and conducting internal audits to confirm and improve the ongoing initiatives at each Group company.

The Compliance Committee consists of compliance promotion leaders (heads of each unit) of NTT Communications and presidents of each Group company and meets regularly every six months to provide a forum for sharing the status of reporting at internal points of contact and holding discussions on measures for establishing corporate ethics. The committee reports on the content of its discussions for each fiscal year to the Executive Council and Board of Directors of NTT Communications.
Looking ahead, even as we respond to regulatory changes in Japan and overseas and the evolving business environment, management and all Group employees will engage in ethical business practices and seek to strengthen the Group’s compliance system worldwide.

For more information on the NTT Group Corporate Ethics Policy, see: https://group.ntt/en/csr/governance/compliance.html

For more information on our procurement activities, see: https://www.ntt.com/en/about-us/procurement.html

Awareness-raising Programs and Training for Thorough Compliance

To ensure thorough legal compliance and fair business activities, companies are required to implement ongoing awareness and training programs for employees and directors. The NTT Communications Group is actively pursuing internal awareness-raising activities through various programs including compliance training, and by conducting employee awareness surveys on corporate ethics, inviting entries for compliance slogans, and regularly providing information via the internal website.

Every year, we provide compliance training for all employees and directors. In fiscal 2021, we covered basic themes related to legal compliance in Japan and overseas, such as anti-monopoly laws and the prevention of bribery, including overseas cases, and insider trading. We also organized additional training on specific themes such as the appropriate handling of customer information and confidential internal information, from the standpoint of information security, and establishment of discipline premised on new workstyles such as remote work. Attendance for the NTT Communications Group as a whole was 98.8%.

We are continuing training in fiscal 2022 on themes that address changes in social and economic conditions, such as management of personal information, key considerations for conducting remote work, prevention of harassment, and sincere dealings with stakeholders. By enhancing content and increasing attendance, we are working to strengthen compliance management across the Group.

We also believe it is important to establish integrity as the key to raising awareness of compliance and realizing compliance management. In fiscal 2021, we conducted training on integrity for all employees and compliance promotion staff in each organization and focused on establishing integrity at both the personal and organizational levels.

In light of the increasing importance of supply chain compliance, including enforcing legal compliance among subcontractors, we include a clause seeking compliance with guidelines such as the NTT Communications Corporation Guidelines for Sustainability in Supply Chain in our subcontracting agreements as part of an ongoing effort to ensure compliance across our operations, including the supply chain.

For more information on our procurement activities, see: https://www.ntt.com/en/about-us/procurement.html

Initiatives for Preventing Corruption

To ensure compliance with the prevailing laws and regulations in Japan and overseas on preventing corruption, including bribery and bid-rigging, NTT Communications adheres to the Anti-Bribery Handbook compiled by its parent company Nippon Telegraph and Telephone Corporation, as well as its own internal rules, to prevent corruption.

We have stipulated detailed rules against bribery as well as prevention guidelines under the Global Compliance Regulations to clearly demonstrate we have proper measures in place to combat this concern, and we are determined to stringently address specific acts of bribery such as facilitation payments. As part of our Groupwide effort to prevent corruption, we follow procedures in various countries with regard to prior approval in cases where providing benefits to public officials are tolerated under law and examine the eligibility of agents and consultants hired to execute our operations. We also include prevention of corruption as a topic in our compliance training in an ongoing effort to raise awareness.

In August 2021, we established rules on entertaining outside the Company under the Global Compliance Regulations and began applying them to practical situations to ensure that employees of NTT Communications Group companies will engage in highly ethical conduct when entertaining outside stakeholders, including public officials. Through these rules, we seek to ensure fairness in operating our business and earn shareholder trust.

Appropriate Advertising

Telecommunication services such as the Internet and smartphones have become indispensable...
For more information on the external contact point for the NTT Group Corporate Ethics Helpline, see: https://group.ntt/en/csr/governance/pdf/Help-Line.pdf

The total figure does not add up because a single report may include several incidents.

Accompanying the rapid progress in technology, AI has spread through incorporation into products and service functions, while concrete applications of AI are being promoted in various areas. On the other hand, ethical concerns over AI-based evaluation and prejudice, such as the potential for discrimination and prejudice, have also materialized. In view of our pursuit of businesses such as Smart World and B2B2X, we formulated the NTT Communications Group Basic Policy on AI in April 2021 with the objective of ensuring the sound and reliable use of AI founded on an understanding of its possibilities and inherent risks, and we began applying the policy to manage service development and other processes.

For more information on the NTT Communications Group Basic Policy on AI, see: https://www.ntt.com/about-us/cs/principle.html (in Japanese only)

Consultation Hotline

The NTT Group has established a common external contact point for consultation and reporting operated by a law firm for all Group companies. The NTT Communications Group has also set up its own hotline for reporting and consulting on compliance issues and a contact point for consulting on human rights issues. We are fostering an open corporate culture by creating an environment that encourages employees to seek consultation and by swiftly and appropriately responding to their concerns and reports.

In fiscal 2021, a total of 52* incidents related to the NTT Communications Group (30 related to harassment, 27 to dissatisfaction in the workplace, 2 to labor, and 7 others based on a broad categorization) were reported through the channels described above. The Compliance Office responded appropriately to the reports after investigating the facts and implemented the necessary actions to prevent recurrence.

The contact points are being operated in accordance with internal rules such as the Global Compliance Regulations, which stipulate the ability to submit reports anonymously, the necessary measures that will be implemented to ensure that whistleblowers are not treated unfairly as a result of filing a report, and that those involved in an investigation will be bound by confidentiality with regard to information contained in the report.

Following the enforcement of Japan’s revised Whistleblower Protection Act in June 2022, we have been reviewing and improving our internal rules and regulations to make the hotline even more accessible for reporting and consultation.

*The total figure does not add up because a single report may include several incidents.

Risk Management

Business Risk Management

The basic elements of risk management are defined in the Risk Management Rules we established to achieve sustainable corporate growth by anticipating and preventing the occurrence of potential risks that exist in and around our business and by minimizing any loss in the event they materialize. As a system and...
Since the Great East Japan Earthquake, we have seen growing public interest in crisis management for times of emergency, such as large-scale natural disasters. With a renewed awareness of our mission as a company responsible for maintaining social infrastructure through communication, we have strengthened our management structure to accelerate our response to contingencies and have sought to instill that awareness in all departments by ensuring strict adherence to manuals and organizing drills. In the event that a material risk occurs, we will set up a Disaster (Accident)/Risk Response Headquarters, headed by the president or senior executive president, as needed in order to provide the structure for gathering accurate information and making effective decisions. Thereafter the Disaster Response Headquarters will take the lead in addressing the situation on the ground.

In July 2021, we established the Supply Chain BCP Guidelines to strengthen business continuity across the entire supply chain. We are working to ensure stable procurement with the cooperation of our suppliers.

Since fiscal 2013, we have laid out an operational plan to prepare against a pandemic in compliance with the Act on Special Measures for Preparedness and Response against Pandemic Influenza and New Infectious Diseases, and we are currently formulating a related concrete business continuity plan.

In response to the COVID-19 pandemic, we have taken the following measures.

- Set up a Disaster Response Headquarters headed by the president
- Established our operational policy based on guidelines published by the Telecommunications Carriers Association and other entities
- In line with our responsibilities as a designated public institution, we sought to secure telecommunications through operations such as monitoring networks, repairing equipment, and opening communication lines. We also sought to protect people’s lives and health by taking appropriate actions against infection.

Furthermore, to comply with Japan’s Disaster Countermeasures Basic Act and Act on Measures for Protecting Japanese Nationals in Armed Attack and Other Situations, we have established and publicly disclosed our Operational Plan for Disaster Prevention and Operational Plan for the Protection of Japanese Nationals in order to fulfill our responsibility as a designated public institution.

For more information on NTT Communications’ initiatives against disaster, see:
https://www.ntt.com/about-us/cs/saitai.html
(in Japanese only)
Internal Controls

In accordance with the new Companies Act, enacted in May 2006 and revised in May 2015, we have drawn up basic policies for establishing a system of internal controls for the entire NTT Group. Concurrently, as a member of the NTT Communications Group, the Board of Directors resolved to implement the measures necessary for the system. We are also working to reinforce and upgrade internal controls over financial reporting in line with the requirements of the Financial Instruments and Exchange Act, enacted in June 2006.

Basic Approach for Maintaining an Internal Control System

1. In maintaining a system of internal controls for complying with laws and regulations, managing any risk from losses and carrying out proper and efficient business operations, NTT Communications takes a variety of measures to prevent and minimize loss.

2. NTT Communications has established the Legal and Internal Audit Department to maintain and assess effectiveness with regard to operational status of the above system of internal controls. As a monitoring organization, the department is responsible for regular audits and special audits of high-risk areas common to the NTT Group, in keeping with the standardized auditing criteria of NTT. The necessary improvements are made following assessments of system effectiveness.

3. NTT Communications will cooperate with NTT DOCOMO, INC. and take appropriate measures to ensure the reliability of its system of internal controls for financial reporting under Japan’s Financial Instruments and Exchange Law.

4. The president is responsible for ensuring the development and implementation of the system of internal controls.

5. We will take all necessary steps to comply with NTT DOCOMO, INC.’s Basic Policies Concerning the Maintenance of Internal Control Systems.

Internal Audits

At NTT Communications, Internal Auditing plans to achieve its goal of implementing audits that benefit management by taking the lead in conducting internal audits of internal organizations and Group companies, with an emphasis on business risks. Through the audits, we seek to reduce and prevent the manifestation of management risks while also proposing operational improvements to enhance the corporate value of the entire NTT Communications Group.

In fiscal 2021, we further developed risk-based auditing and addressed emerging risks in a timely manner by reevaluating and reidentifying risks in the middle of the fiscal year to add audit items and adopt an agile internal auditing method. In the area of continuous risk monitoring based on CAAT, we created and analyzed new risk scenarios in response to changes in various systems in order to realize new workstyles based on remote work. We are also visualizing the skill map and skill areas to be strengthened for the purpose of continuously educating internal auditors and encouraging individual auditors to improve their skills. Seven of them have recently obtained qualification from the Institute of Internal Auditors – Japan as certified internal auditors.

In fiscal 2022, we will review the development and operational aspects of internal controls across the NTT Communications Group with an emphasis on the impact of the business integration with NTT Docomo. Furthermore, with regard to risks that cannot be detected by conventional risk scenario-based auditing, we will pursue data analysis-based auditing methods that can detect risks based on abnormal values and trends through big data analysis, thereby contributing to further strengthening internal controls for the NTT Communications Group as a whole.

*1 Agile auditing is a method that places greater focus on risk and by which audits are conducted within a short period so that advice and reporting can be provided on a near-real-time basis.
*2 Computer-assisted audit techniques is an auditing method centered on big data analysis.
Enhanced Value Chain Partnerships

We will manage the entire supply chain with high ethical standards by promoting and strengthening the sustainability of NTT Communications Group suppliers to ensure a reliable procurement system for our customers. To that end, we established NTT Communications Corporation Guidelines for Sustainability in Supply Chain and focus on developing mutual understanding and relationships of trust with our suppliers. At the same time, we are developing a procurement system based on the concept of sustainable procurement, which extends beyond environmental issues, with thorough consideration of humanitarian and social issues as well. We will strive to enhance our partnerships to properly understand and address the impact of our business activities on the value chain and engage in a dialogue with our stakeholders to meet the various requests and expectations from society, toward operating business on the trust of our stakeholders.

With the basic ideas of the previous Guidelines for CSR in Supply Chain, the new guidelines clarify the positioning of our requests to suppliers (code of conduct). The guidelines as a whole now require stronger cooperation, such as requesting primary suppliers to take responsibility for seeking compliance from upstream suppliers, establishing management systems to comply with each guideline, and taking actions such as suspending business with suppliers who do not correct violations. The content of each specific item has also been enhanced.

### Procurement Policies

1. NTT will strive to provide competitive opportunities with fairness to both domestic and foreign suppliers, and to build mutual trust and understanding.
2. NTT will conduct economically rational procurement of competitive goods and services that meet its business needs, deciding suppliers based on quality, price, delivery times and stable supply in a comprehensive manner.
3. NTT will contribute to realizing a sustainable society by doing procurement with an emphasis on human rights, the environment, safety, and other critical issues, in compliance with laws and social norms.

In order to realize the sustainable procurement concept, we will thoroughly promote the procurement of products with minimal impact on the environment by conducting product assessments with the cooperation of suppliers. Also, we will encourage the worldwide adoption of supply chains that do not engage in the trade of conflict minerals or in any way intensify social and humanitarian problems. Under this concept, we continue to have suppliers complete sustainable procurement promotion surveys, which began in fiscal 2016, and also strive to identify the related risks. Moreover, we are focused on more clearly stating our accountability to companies with consideration for NTT Communications as a supplier.

We have been providing supplier information to EcoVadis*, an international sustainability rating organization. In fiscal 2022, we will continue to build on the supplier surveys while simultaneously taking steps to promote the exchange of opinions with suppliers and increase information disclosure.

Furthermore, we are engaged in multifaceted activities with a primary focus on continuous customer satisfaction surveys as our main measure for continuously improving customer satisfaction. In fiscal 2020, we revised the methodology of our voice of customer (VOC) survey. The process enabled us to respond to survey results by identifying priority issues from the customer perspective and quickly improving these issues, which we continued to do in fiscal 2021.

In our customer satisfaction survey on our services, we standardized the wording of the questions, which enabled us to conduct a trend analysis across all our services and identify issues that could not be discovered in a standalone survey covering a single service. This led to the implementation of measures related to the business portal*.

In fiscal 2022, we intend to improve our sales activities and service development by conducting surveys to understand customer expectations for “docomo business,” the corporate business brand of the new DOCOMO Group, and what customers who are engaged in rebuilding local communities require from ICT providers.

Collaboration with Suppliers

Dissemination of Sustainable and Green Procurement

Promoting Sustainable Procurement

We have formulated the NTT Communications Corporation Guidelines for Sustainability in Supply Chain, which encourage procurement policies for respecting human rights and protecting the environment, ensure the quality and safety of products and services, and recognize the overall needs of society. When selecting and entering into agreements with new business partners, we have designated our own sustainability compliance items, in addition to credit screening criteria, which include confirming corporate initiatives on human rights and labor issues. When we determine that a company has failed to meet our criteria and thus represents a risk, we do not trade with them.

To promote sustainable procurement, we conduct a survey that targets suppliers designated by Nippon Telegraph and Telephone Corporation (NTT) from among 140 major suppliers to the NTT Group, to confirm the management status of the Guidelines for Sustainability in Supply Chain. After the compiled results are analyzed, we consider means of improvement for dealing with high risk concerns. In fiscal 2021, we received responses from all 15 companies and found no high-risk issues. We also engaged in dialogue with five suppliers that are particularly key in terms of large transaction volume and other aspects. Starting in fiscal 2022, we will...
begin incorporating EcoVadis surveys and evaluations into our questionnaire surveys to conduct higher quality evaluations. Looking ahead, we will continue to work with our suppliers to promote sustainable procurement.

For more information on green procurement, see: Contributions to the Global Environment.

For more information on human rights efforts in the value chain, see: Governance.


Begin incorporating EcoVadis surveys and evaluations into our questionnaire surveys to conduct higher quality evaluations. Looking ahead, we will continue to work with our suppliers to promote sustainable procurement.

Developing Procurement Professionals

In maintaining sound Group management, we uphold our Sustainability Policy to thoroughly establish and enhance our sustainability through efforts that also involve suppliers. We encourage our employees to obtain the Certified Procurement Professional (CPP) qualification, designated by the Japan Management Association, so they can have specialized knowledge in purchasing and procurement. As of fiscal 2021, a total of 74 employees have been certified (Grade A: 30, Grade B: 44), including those transferred in fiscal 2021 and excluding those certified while working in other organizations. Looking ahead, we will continue nurturing human resources in each area to practice sustainable and responsible procurement.

The Procurement and Billing Department has also acquired ISO 14001 certification and engages in environmental protection. Every fiscal year, employees responsible for activities as core members are required to participate in ISO 14001 internal auditor training, and four employees took part in fiscal 2021. Along with this training, we provided video training in fiscal 2022 on the outline of ISO 14001 and our environmental protection activities as an organization so that all employees in the department can actively participate in protecting the environment.

UK Modern Slavery Act Statement

The NTT Communications Group had been disclosing its statement on slave labor and human trafficking in accordance with the UK Modern Slavery Act 2015. Due to the closure of our London branch on March 31, 2021, the Group is no longer subject to the disclosure of statements under this act. However, we will continue to build honest and sustainable relationships with a wide range of suppliers in Japan and overseas, procure quality services and products in an economical and timely manner, cooperate with suppliers to prevent slave labor and human trafficking, and continue to promote and strengthen our activities based on the Guiding Principles on Business and Human Rights.

For more information on human rights efforts in the value chain, see: Governance.

Disclosure of Supply Chain through EcoVadis

Rising public expectations for sustainability activities that also encompass the supply chain have increased the importance of companies knowing the status of their suppliers’ sustainability activities and disclosing that information to clients. Since fiscal 2016, we have registered supply chain information with EcoVadis. We have also been proactively disclosing information to our clients and to companies considering doing business with us. We received a Silver rating in 2022 as a result. Our stance on the environment in particular was highly evaluated for setting quantitative targets for multiple related issues. We will continue to work to improve our sustainability performance in the areas of the environment, fair labor and human rights, ethics, and sustainable procurement.

Environmental Protection Activities as a Procurement Organization

The procurement promotion and strategy sections of the Procurement and Billing Department engage in environmental protection by appropriately operating their environmental management system, which has been ISO 14001 certified since October 1999. The efforts are called “EP Activities” and undertaken throughout the department by setting and managing environmental targets as KPIs in line with business operations and by soliciting and selecting activities from all members to reach beyond specific staff and ensure everyone in the department is actively involved. In fiscal 2022, the scope of certification was expanded to include the Billing Service section.
which is responsible for billing and collection of Companywide charges, to create an environmentally sound society in a shared effort by the entire Procurement and Billing Department.

For more information, see: Acquiring ISO 14001 Certification.

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Enhance Stakeholder Engagement

Our Approach to Stakeholder Engagement

Our stakeholder relationships are extremely important for the NTT Communications Group in maintaining sustainable business operations. As part of our efforts to disclose information on sustainability, we have categorized our stakeholder engagement from the perspectives of required information, information that should be shared, and communication media. In addition to this report, we will engage with our stakeholders through our website, various events, and surveys.

[ NTT Communications Stakeholders ]

[ Dialogue with Stakeholders and Major Topics ]

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Opportunities for Engagement</th>
<th>Main Purposes</th>
</tr>
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<tbody>
<tr>
<td>Customers</td>
<td>• Voice of customer (VOC) survey, CS surveys</td>
<td>• Improve the quality of products and services</td>
</tr>
<tr>
<td></td>
<td>• Exchange of opinions at the docomo business Forum</td>
<td>• Explore new products and services</td>
</tr>
<tr>
<td></td>
<td>• Exchange of opinions based on daily interaction with customers</td>
<td>• Continuously enhance customer service</td>
</tr>
<tr>
<td>Business Partners</td>
<td>• Supplier due diligence</td>
<td>• Improve the quality of products and services</td>
</tr>
<tr>
<td></td>
<td>• Surveys, daily exchange of opinions</td>
<td>• Explore new products and services</td>
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<tr>
<td></td>
<td></td>
<td>• Ensure fair business practices</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Ensure sustainable procurement and respect for human rights</td>
</tr>
<tr>
<td>Society at Large</td>
<td>• Dialogue with stakeholders</td>
<td>• Contribute to the development of a sustainable society</td>
</tr>
<tr>
<td></td>
<td>• Exchange of opinions with NPOs, NGOs</td>
<td>• Participate in social contribution and community activities</td>
</tr>
<tr>
<td></td>
<td>• Social contribution activities</td>
<td>• Seek harmony with local communities</td>
</tr>
<tr>
<td></td>
<td>• Environmental protection activities</td>
<td>• Fulfill responsibility as a corporate citizen</td>
</tr>
<tr>
<td>Employees</td>
<td>• Comments from executives during dialogue meetings and lectures</td>
<td>• Broadly establish the corporate vision and philosophy</td>
</tr>
<tr>
<td></td>
<td>• e-learning programs and questionnaires</td>
<td>• Broadly establish the Sustainability Policy</td>
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<tr>
<td></td>
<td>• Feedback collected through the corporate website and helpline</td>
<td>• Create customer value and seek self-development</td>
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<tr>
<td></td>
<td>• KAIZEN Support Line</td>
<td>• Realize value in work</td>
</tr>
<tr>
<td></td>
<td>• Employee satisfaction surveys</td>
<td></td>
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<tr>
<td>Third-party Rating Organizations</td>
<td>• Participation in surveys conducted by research institutions in Japan and overseas</td>
<td>Report on the status of various initiatives for social issues, human resources, the environment, and corporate governance</td>
</tr>
<tr>
<td></td>
<td>• Publication of the Sustainability Report and information disclosure via the corporate website</td>
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</table>
Ongoing Customer Satisfaction Surveys

In order to remain the service provider of choice for customers around the world, daily contact with customers cannot be limited to sales personnel. All employees consider customer interaction as a top priority and make every effort to increase customer satisfaction through innovative services and daily improvement efforts. One such initiative is the annual VOC survey on customer satisfaction. We take the comments seriously and are working diligently to make improvements.

In fiscal 2021, we conducted the VOC survey to understand customer trends and challenges in addressing social issues through the use of ICT (including carbon neutrality, flexible and hybrid workstyles, and protecting personal information), in addition to the level of overall satisfaction with NTT Communications as well as its business and sales activities. We also received responses from many small and medium enterprise customers (several hundred more than the actual results in fiscal 2020), which enabled us to accurately grasp business strategies and trends across a wide range of customer segments.

Looking ahead, we will continue to pay close attention to what our customers have to say as we strive to make permanent improvements to ensure their satisfaction.

Guidelines for Diverse Business Activities

Society has entrusted us with diverse responsibilities to fulfill through our operations, from developing products and services that address social issues to protecting the environment and fostering a corporate culture that respects fairness and diversity. We encourage strict adherence to various guidelines in our corporate activities in order to continue fulfilling our social mission in each of the Priority Areas defined under our Sustainability Policy.

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<tr>
<th>Sustainability Priority Areas and Priority Activities</th>
<th>Policies and Guidelines</th>
<th>Page in Report</th>
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<td>Society</td>
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<td>Promotion of DX to connect society with the future</td>
<td>Our Mission</td>
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<tr>
<td>Promotion of innovations that break through limits</td>
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<td>ICT transformation</td>
<td>NTT Communications Three Disaster Policy Fundamentals</td>
<td>036</td>
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<td>Promotion of corporate citizenship</td>
<td>Social Action Principles</td>
<td>040</td>
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<tr>
<td>Environment</td>
<td></td>
<td></td>
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<tr>
<td>Promotion of a decarbonized society</td>
<td>Global Environmental Charter</td>
<td>044</td>
</tr>
<tr>
<td>Development of a closed-loop society</td>
<td>Environmental Statement</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Eco Strategy 2030</td>
<td>045</td>
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<td></td>
<td>Biodiversity Action Plan</td>
<td>063</td>
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<td>Human Resources</td>
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<tr>
<td>Development of human resources</td>
<td>Talent Profile of Ideal Employees</td>
<td>071</td>
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<td>Promotion of diversity and inclusion</td>
<td>Promotion of Diversity Fundamental Policy</td>
<td>078</td>
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<tr>
<td>Respect for human rights</td>
<td>Basic Policy on Human Rights Education</td>
<td>089</td>
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<tr>
<td>Governance</td>
<td></td>
<td></td>
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<tr>
<td>Thorough compliance and risk management</td>
<td>Basic Approach for Maintaining an Internal Control System</td>
<td>094</td>
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<tr>
<td>Enhanced value chain partnerships</td>
<td>NTT Communications Corporation Guidelines for Sustainability in Supply Chain</td>
<td>101</td>
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<tr>
<td>Continuously strengthening information security</td>
<td>NTT Communications Security Declaration</td>
<td>106</td>
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</table>
To address information security issues that are growing in sophistication and severity due to social trends such as advances in the remote world, we will continuously strengthen security governance and our cyber security measures. We are conducting information security audits and implementing cyber security measures in accordance with the ISO/IEC 27001 international standard for information security management systems to reinforce its governance across the Group. As ICT professionals, we will also focus on establishing environments that prevent the occurrence of personal information leakage by developing human resources capable of maintaining a seamless framework across information and operational technologies.

We are continuously strengthening our information security, including reinforcing our ongoing security management and appropriately managing personal information. In fiscal 2021, we achieved our goal of zero serious incidents, and we will continue to strengthen our efforts to maintain this level of success. From the viewpoint of security enhancement, we worked on establishing a zero-trust network by completing the introduction of Endpoint Detection and Response (EDR) into all NTT Communications Group companies by the end of June 2021 and began deploying multilayer defense solutions such as NDR and UEBA. Furthermore, we held a Security Committee meeting to strengthen and implement security governance. In fiscal 2022, we will link our IT/OT asset management system with our network asset management system.

In fiscal 2021, there were no serious personal information leaks. To ensure proper management of personal information, we revised our internal regulations in fiscal 2021 in light of the revision of Japan’s Personal Information Protection Law. Going forward, we will continue to explore the creation of an effective mechanism to ensure proper disposal and management of confidential information.

The NTT Communications Security Declaration has been our basic policy for conducting business based on our belief that adhering to strict security management standards will lead to improving security and delivering benefit to our customers.

NTT Communications Security Declaration
At NTT Communications, we believe that our most important mission is to provide our customers with services which they can use with the assurance that their critical information is being protected and to contribute to improving the security of our customers. We view security as the single most important issue to be addressed in providing services, and we pledge to work together with our customers to provide the best in security for their needs. To achieve this end, we do our utmost to ensure security throughout all aspects of the value chain, from the development of technologies and services to the construction and operation of systems.

As ICT professionals, all of us at NTT Communications are committed to improving our capabilities to respond to security issues.

Three Resolutions
1. We regard security as our top priority in providing services to our customers, and we will do our utmost to enhance their security.
2. As an ICT solution partner entrusted with our customers’ vital information, we will work with them at all times to ensure their security.
3. Business partners and contract employees are also important supporting members of NTT Communications. We will therefore collectively strive to ensure our own security.
We protect customer personal information in compliance with the relevant laws and regulations as well as guidelines published by the Ministry of Internal Affairs and Communications, operating under an effective system of information management to stringently implement our Customer Information Protection Rules, which define the basic elements of protecting customer information and personal data. When subcontracting the handling of customer personal information, we select subcontractors that meet the required standards.

We have been operating since 2002 under the ISMS certification*1, which is primarily for our corporate sales and maintenance divisions, and since 2004 under the PrivacyMark certification*2. In response to the revised Personal Information Protection Law that came into effect in April 2022, we have revised our internal regulations to strengthen our operations, including lifecycle management of customer information. With regard to raising employee awareness, we are taking actions such as conducting annual training sessions for all directors, employees, and partner employees.

With regard to GDPR, we had been operating under the EU Customer Personal Information Management Guidelines, which stipulate the handling of personal information in the EU. We have also reviewed the terms and conditions of our contracts with business partners following the release of the revised standard contractual clauses by the European Commission, which apply to the transferred personal data from within the EU to outside the region. In addition, in fiscal 2022, we took the opportunity of becoming a member of the new DOCOMO Group to introduce the Privacy Impact Assessment System (PIA System) to ensure appropriate use of personal data based on the Behavioral Principles of the NTT DOCOMO Personal Data Charter, and we implemented and started operating a pre-assessment function to give full consideration to customer privacy.

We continue to protect our customers’ information and personal data so they can use our services without concern.

*1 A screening and certification system for assessing whether an information security management system conforms to JIS Q 27001 (ISO/IEC 27001) standards.
*2 A registered trademark granted for use by companies that have been certified by the Japan Information Processing Development Corporation as having established a system for appropriately protecting personal information in compliance with Japanese Industrial Standard JIS Q 15001 requirements for personal information management systems.

For more information on our policy concerning the handling of personal information, see: https://www.ntt.com/en/about-us/hp/privacy.html

For more information on the NTT DOCOMO Personal Data Charter, see: https://www.docomo.ne.jp/english/utility/personal_data/charter/

We have consistently pursued our initiatives by positioning “Continuously strengthening information security” as a key item in the Priority Area of “Governance” under our Sustainability Policy and by designating it as a main initiative. These encompass a wide range of activities such as strengthening the reliability of our information handling processes, obtaining and maintaining ISMS certification, and conducting security surveys. We proactively provide training for employees in order to raise workplace awareness as a critical responsibility for an ICT enterprise.

In fiscal 2021, we bolstered our training program for each area of operations and improved safety by indicating the specific security measures that should be taken into consideration. As an entity working to sustain a safe and secure networked society, NTT Communications will accelerate the pace of its ongoing initiatives, including those at Group companies.

<table>
<thead>
<tr>
<th>[Information Security Training Attendance]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of Training</td>
</tr>
<tr>
<td>Information security training (total)</td>
</tr>
<tr>
<td>Companywide security training and assessment of understanding</td>
</tr>
<tr>
<td>Training for managers and leaders in charge of implementing security management</td>
</tr>
</tbody>
</table>
We set common targets on information security management for our operations in Japan and overseas, based on the requirements of ISO/IEC 27001. Specifically, we implement the following measures under the leadership of the chief information security officer (CISO): formulate rules and standards and educate all employees to raise their awareness, draw up and implement Companywide information security policies, monitor compliance with information security regulations and take any necessary corrective action, and ensure a unified response to information security incidents.

In fiscal 2021, we shifted CSIRT operations to remote work in advance under the impact of the pandemic, and we also expanded its scope in terms of maintenance and service infrastructure networks to bolster the security measures of the NTT Communications Group as a whole by developing a seamless framework across information and operational technologies. In response to the security incident we experienced in 2020, involving unauthorized access to the SSL-VPN, we continued to take action to prevent a recurrence, which included moving up a vulnerability assessment to an earlier stage of development, documenting management based on the level of confidentiality, reviewing the remote access environment, introducing User and Entity Behavior Analytics, and identifying vulnerabilities by a Red Team (ethical hackers). We achieved the objectives of our plan for developing advanced security specialists by jointly operating a remote training program with N.F. Laboratories, Inc.

As of March 2022, eight companies in Japan have obtained external ISMS certification for their information security management systems.

Eight companies that primarily handle personal information entrusted by customers have obtained PrivacyMark accreditation in recognition of their systems for protecting personal information.
Independent Assurance Statement

Mr. Toru Maruoka
Representative Member of the Board, President & CEO
NTT Communications Corporation

1. Purpose
We, Sustainability Accounting Co., Ltd., have been engaged by NTT Communications Corporation (“the Company”) to provide limited assurance on the Company’s performance indicators during the fiscal year 2021 reported in NTT Communications Corporation Sustainability Report 2022, which indicate 8.3% for the percentage of women in managerial positions (as of March 31, 2022), 8.7% for female executives ratio (as of March 31, 2022), 67.8% for the percentage of male employees taking leave for childcare (Non-consolidated), 2.34% for the ratio of employees with disabilities (as of June 1, 2022), CO₂ emissions: 7 [kt-CO₂] for Scope1, 132 [kt-CO₂] for Scope2 and 2,086 [kt-CO₂] for Scope3 (Category 1,2,3,4,5,6,7,11,12,13), 0.17 [TWh] for the rate of renewable energy introduced, 26 [kt] for the total waste generated and 230 [thousand m³] for the total water resource input excluding data centers (collectively, “the Performance Indicators”). The purpose of this process is to express our conclusion on whether the Performance Indicators were calculated in accordance with the Company’s standards. The Company’s management is responsible for calculating the Performance Indicators. Our responsibility is to independently carry out a limited assurance engagement and to express our assurance conclusion.

2. Procedures Performed
We conducted our assurance engagement in accordance with International Standard on Assurance Engagement 3000 (ISAE 3000) and International Standard on Assurance Engagement 3410 (ISAE 3410). The key procedures we carried out included:

- Interviewing the Company’s responsible personnel to understand the Company’s standards
- Reviewing the Company’s standards
- Performing cross-checks on a sample basis and performing a recalculation to determine whether the Performance Indicators were calculated in accordance with the Company’s standards.

3. Conclusion
Based on the procedures performed, nothing has come to our attention that causes us to believe that the Performance Indicators have not been calculated in all material respects in accordance with the Company’s standards.

We have no conflict of interest relationships with the Company.

Takashi Fukushima
Representative Director, Sustainability Accounting Co., Ltd.
Corporate Information

Corporate Overview (as of March 31, 2022)

<table>
<thead>
<tr>
<th>Company Name</th>
<th>NTT Communications Corporation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headquarters</td>
<td>Otemachi Place West Tower 2-3-1 Otemachi, Chiyoda-ku, Tokyo 100-8019, Japan</td>
</tr>
<tr>
<td>Date Established</td>
<td>July 1, 1999</td>
</tr>
<tr>
<td>Paid-in Capital</td>
<td>230.9 billion yen</td>
</tr>
<tr>
<td>Operating Revenues*1 (IFRS)</td>
<td>1,047.6 billion yen</td>
</tr>
<tr>
<td>Operating Income*1 (IFRS)</td>
<td>135.1 billion yen</td>
</tr>
<tr>
<td>Number of Employees</td>
<td>9,000 (NTT Communications Group: 16,850)*2</td>
</tr>
<tr>
<td>Business</td>
<td>Long-distance telecommunications operations in Japan, international telecommunications business, solutions business, and related business</td>
</tr>
</tbody>
</table>

*1 Results for FY2021
*2 As of July 2022

Group Companies (as of December 1, 2022)

- NTT Com Engineering Corporation
- NTT Com Online Marketing Solutions Corporation
- NTT Com CHEO Corporation
- NTT Com DD Corporation
- NTT Smart Trade Inc.
- NTT PC Communications, Inc.
- NTT World Engineering Marine Corporation
- DOCOMO Business Solutions, Inc.
- N. F. Laboratories, Inc.
- NTT BizLink, Inc.
- codeTakt Inc.
- DOCOMO gacco, Inc.
- Phone ApplinC.
- NTT Com Asia Limited
- NTT Communications China Co., Ltd.
- Shanghai NTT Telecommunications Engineering Co., Ltd.
- Mobile Innovation Co., Ltd.

International Recognition

- Certified "Silver" in the CSR audit conducted by EcoVadis, based in France.
- Received eight awards, including the Overall Grand Prize in the Smart Data Platform Cloud/Server Category and the COTGHA Chat & FAQ® Multilingual Category, in the 15th ASPIC IoT AI Cloud Awards 2021, held in November 2021.

Business Domains

Centered on our service infrastructure comprising the cloud, network, and data centers, we harness ICT related to our proprietary AI, applications, and security to deliver the best cutting-edge solutions and services that correspond with our customers’ businesses and the changing times.

At the same time, we are driving DX at NTT Communications and realizing our Re-connect X business vision toward creating a sustainable society.

[ NTT Communication Business Domains ]
Editorial Policy

About this Edition

As the expectations and requirements of stakeholders become increasingly diverse and complex, NTT Communications consistently pursues initiatives for sustainability. With this in mind, we will introduce readers of this edition to a series of our future visions, illustrated with concrete examples, that are at the core of our stance to continuously provide solutions for social problems.

We present the future direction of NTT Communications and examples of solutions addressing social issues based on our Re-connect X medium-term business vision in the first half of the report, followed by the results of our priority activities in fiscal 2021.

◆ Scope of the Report
This report covers the activities of NTT Communications Corporation and its Group companies*, unless otherwise indicated.


◆ Period Covered
Fiscal 2021: April 1, 2021 to March 31, 2022
(Also contains information on activities conducted before or after this timeframe)

◆ Issue Date Information
This report: December 2022
Previous report: December 2021 (Next report scheduled for December 2023)

◆ Reference Guidelines
Environmental Reporting Guidelines 2018, Ministry of the Environment
Environmental Accounting Guidelines 2005, Ministry of the Environment
ISO 26000:2010 Guidelines on Social Responsibility

◆ Inquiries
CSR and Environmental Protection, Human Resources, NTT Communications Corporation

◆ Registered Trademark
Re-connect X is a registered trademark of NTT Communications Corporation in Japan

Reporting Media

Sustainability Website

We provide information on the NTT Communications Group’s sustainability activities.

The site serves as a platform for information about sustainability while also supplementing the Sustainability Report. Information is periodically updated.

Sustainability website

Sustainability Report

Published annually since fiscal 2003 as a tool for conveying and developing a systematic understanding of the NTT Communications Group’s approach to sustainability.

Download the Sustainability Report and view previous reports at: