

NTT Communications Corporation



Sustainability Report

2023





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**Toru Maruoka**

Representative Member of the Board
President & CEO
NTT Communications Corporation

We will co-create with our customers by providing the three “X” values to contribute to the creation of a sustainable society.

Under the DOCOMO Group’s “docomo business” brand, NTT Communications provides a one-stop shop for total solutions to customers nationwide by combining its fixed-network, cloud, and data center services with DOCOMO’s 5G IoT and COMWARE’s software development capabilities.

We are committed to providing the three values of digital transformation (DX), green transformation (GX), and customer experience (CX) to realize a “strong, vibrant, and sustainable society.”

We will implement initiatives in eight areas for creating a Smart World, a future in which solutions to social issues are realized through the use of digital technology. We will also improve productivity through IoT solutions, use robots and drones to address regional issues and local development, and create business models by utilizing data. Through these efforts, we will promote DX in society and industry.

To realize a decarbonized society through GX, we will provide services that support carbon neutrality, such as achieving ultra-low power consumption using IOWN® technology and providing the green ICT platform Green Nexcenter™. We will also advance our own GX initiatives.

Executing these initiatives will depend upon improving CX, which provides customers with new experiences and services that they continue to choose. We will realize a comfortable customer experience by providing next-generation ICT solutions, such as docomo business RINK™, an integrated network service that enhances the resilience of the ICT environment for all points of contact with customers.

To realize a new society, we would like to promote co-creation initiatives with our customers and partners, such as building sustainable business models that both reduce environmental impact and increase the profits. Based on its mission of “creating communication methods that open up new possibilities for people and our world,” the DOCOMO Group will work as one to contribute to creating a sustainable society for the purpose of “changing worlds with you.”



DOCOMO Group's Mid-Term Initiatives

DOCOMO announced in October 2021 the challenge of the New DOCOMO Group and its medium-term strategies and management targets as the New DOCOMO Group Medium-Term Strategies.

Challenge of the New DOCOMO Group

NTT Communications, together with NTT COMWARE, joined the DOCOMO Group 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

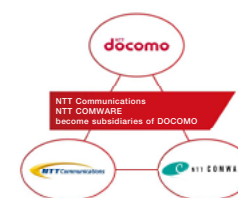
Trust

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

The New DOCOMO Group

NTT Communications along with NTT COMWARE joined the DOCOMO Group to expand its business domain to encompass mobile, services, and solutions and create a new world as the New DOCOMO Group. 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.

As the New DOCOMO Group, we are expanding
our business domain to encompass mobile, services,
and solutions and create a new world



Integration of the three companies

Clear business responsibilities

Structural reform of the
Telecommunications Business
and expansion of the Enterprise/
Smart Life Businesses

Synergy Through Integration

The New DOCOMO Group
will generate three significant
synergies by integrating
the functions of the three
companies.

Synergy Through Integration

Expansion of enterprise business

Integrate all enterprise business under
the New DOCOMO Group and support all corporate customers
through one stop service—contribute toward DX of society and industry

More competitive network

Fixed-mobile convergence brings higher quality and
economical network to provide inexpensive, easy-to-use
services and accelerate evolution toward 5G/6G

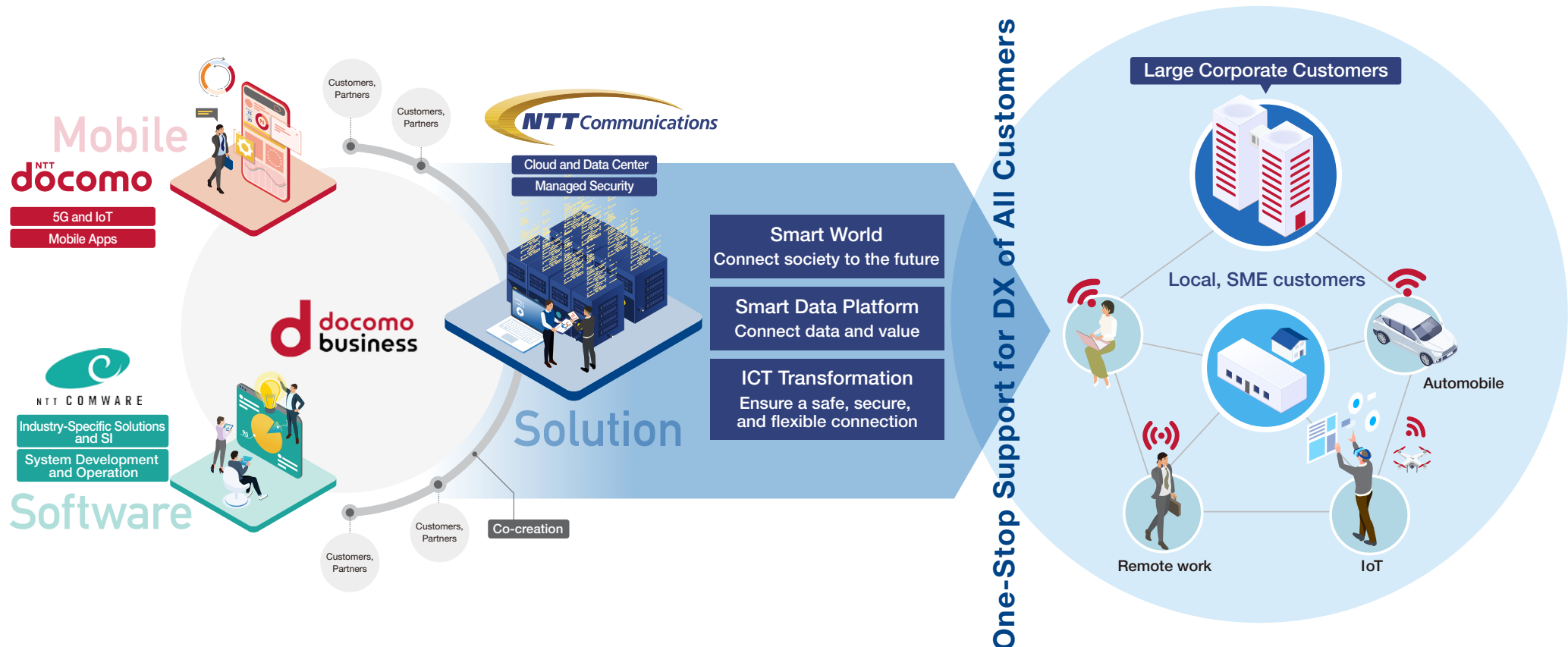
Strengthening the power of service creation and development while promoting DX

Integrate the R&D of DOCOMO, services of NTT Communications and
software capability of NTT COMWARE, leading to quick response
through the creation of innovative services, and accelerating DX of
the New DOCOMO Group



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.





Our Mission

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.

Our Core Beliefs

Take the Initiative
Inspire Each Other
Respond to Society's Needs

Re-connect X

("X" refers to everything)

Smart World

Connect society to the future

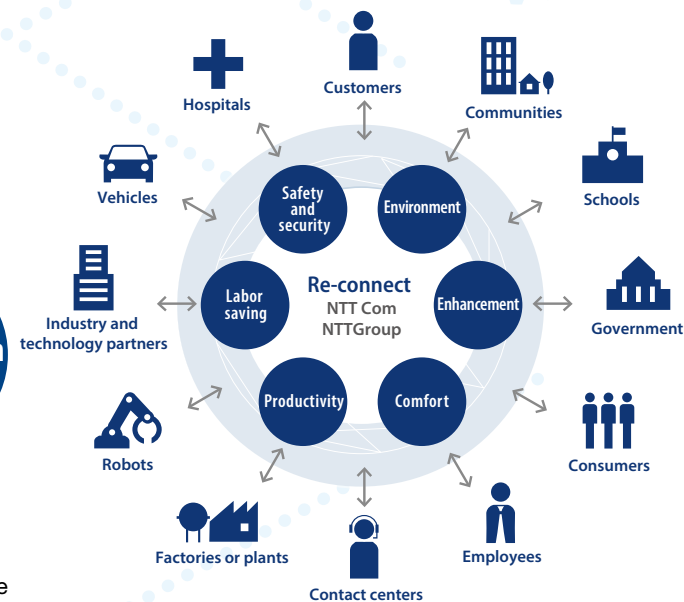
Smart Data Platform

Connect data and value

ICT Transformation

Ensure a safe, secure, and flexible connection

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.



Overcoming social challenges through our business

P.011



Sustainability Policy

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.



Society



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.



Environment



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.



Human Resources



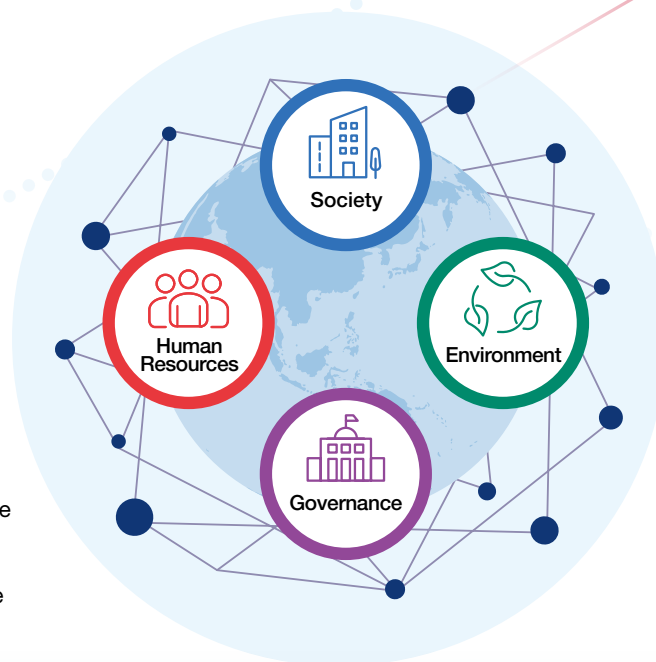
By respecting human rights, promoting diversity and inclusion, and developing human resources, we will work toward a future where highly diverse people come together and everyone is given respect, inspires one another, and is able to demonstrate their ability in response to society's needs.



Governance



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.



Feature

Data Center Services Supporting DX in Society and Contributing to Carbon Neutrality

NTT Communications supports the ICT infrastructure of society and helps companies promote DX by providing Nexcenter, a safe, secure, and high-quality data center service. This feature looks at the data center services of today and tomorrow as an indispensable infrastructure for the digital age that continues to smartly operate and manage increasingly sophisticated and complex ICT environments.

Data Centers Have Become an Indispensable Infrastructure of Society

A data center is a facility dedicated to the installation and operation of servers and network equipment. Customers use these facilities to store and utilize data more safely than by owning and operating their own servers with the advantage of ensuring strong security. NTT Communications has been in the data center business since the 2000s, operating in more than 70 locations in Japan.

Nexcenter is a co-location service that boasts a high level of business continuity through redundant power distribution, a cooling system, and communication facilities in a robust building equipped with seismic isolation, earthquake resistance, and fire protection equipment, in a location with low risk of natural disasters such as earthquakes and floods. The service allows for central management of admission and other applications, requests for remote hands service, confirmation of contracted racks, and inquiries from a web-based customer portal.

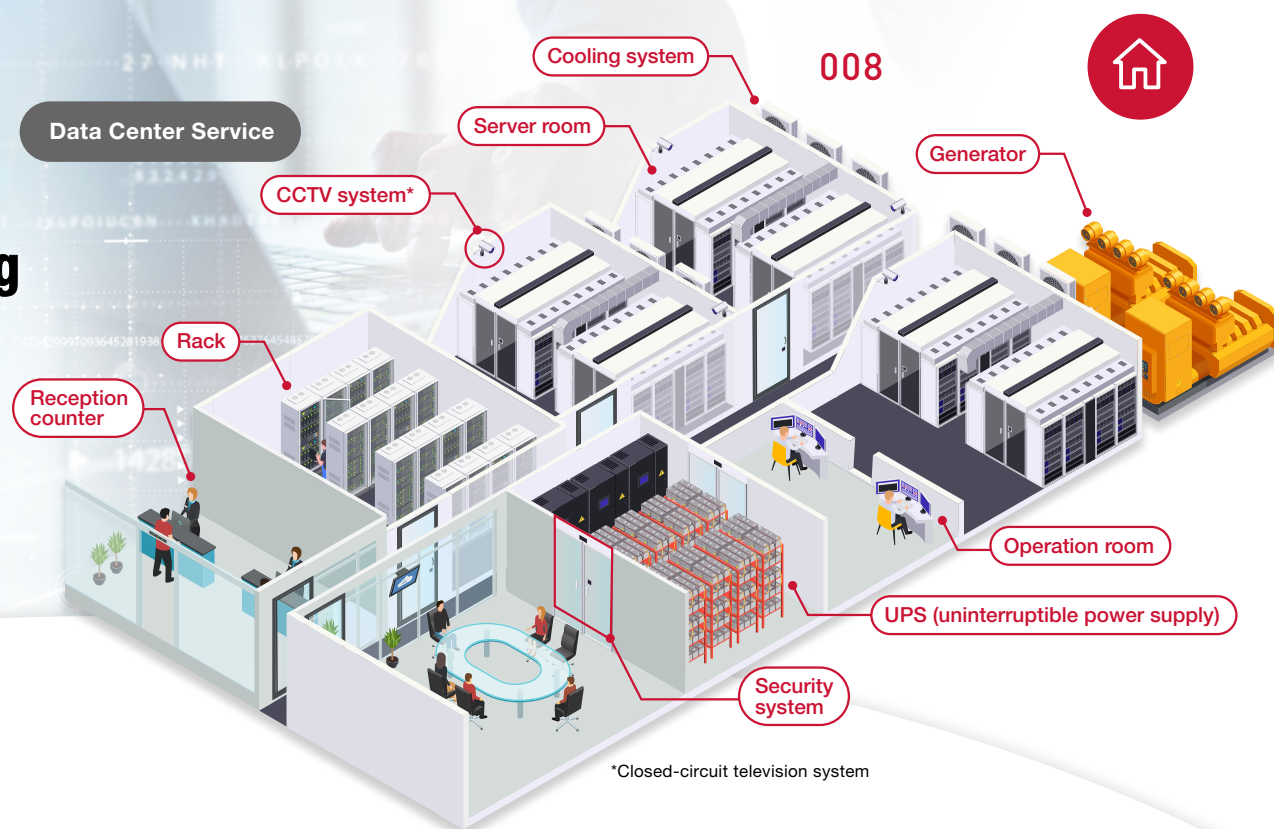
It is operated under a thorough security system by staff members with expertise in ICT management to oversee a customer's system infrastructure.

Nexcenter also features low-latency, high-capacity communications and seamless connection with multiple cloud services, allowing for flexible and rapid system expansion. Additionally, it has the advantage of ensuring stable electricity at low cost using energy-efficient equipment.

In recent years, the demand for data centers has expanded in response to the rapid increase in data processing and communication volume. This demand is recognized as an irreversible trend. The use of the latest technologies such as AI, IoT, VR, 5G, and cloud will generate vast amounts of data on networks, which means a significant increase in power usage and the need for even greater processing capacity for data centers. Power consumption in these facilities is estimated to account for 1 to 2% of the

world's total power consumption and is expected to increase 15 to 20 times by 2040, compared to 2022, based on current technology, taking into account the explosive growth expected due to generative AI and other technologies. The rising power consumption in data centers as carbon neutrality targets are being set worldwide is intensifying the urgency of energy conservation in data centers.

Under these circumstances, the NTT Communications Group has set the goal of achieving carbon neutrality by fiscal 2030 (Scopes 1 and 2) and has been working to reduce its environmental impact by promoting energy conservation through the design and construction of state-of-the-art data centers that draw upon its accumulated expertise and introduce advanced technologies. We will continue to pursue technological innovation and enhance our services to contribute to carbon neutrality for all of society.



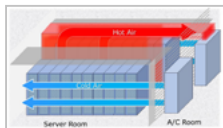


Social Issues Facing Data Centers and NTT Communications Solutions

01 SOLUTION Promoting the Implementation and Development of More Efficient Cooling Facilities

Cooling facilities use approximately 20 to 30% of the enormous amount of power consumed by data centers. In response to the rise of generative AI and GPU clouds, systems have become more powerful, and the rapid increase in the volume of data processing has consumed a vast quantity of power, making equipment cooling and heat removal a challenge for data centers in which ultra-high heat generating equipment is concentrated. NTT Communications is responding to the increased heat generated in customer equipment by adopting liquid cooling systems as well as conventional air cooling systems. It has also significantly reduced power consumption through designs that utilize cutting-edge technologies, such as real-time control of optimal cooling using rack-mounted sensors and an AI engine.

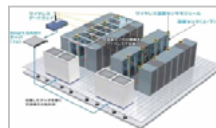
Cooling Wall System



Up to
10%
less power

Cool air is blown directly into the room from an air conditioner installed behind the wall. The complete separation of airflow from the hot air exhausted from racks has improved air conditioning efficiency.

Smart DASH



Approx.
30%
less energy than
conventional
systems

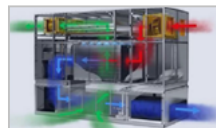
Real-time control of air conditioning by rack-mounted sensors and an AI engine has minimized power waste and reduced air conditioning power consumption by up to 30%.

Solar Power Generation Panels



Large panels are installed on the roof and walls of the data center building to generate electricity in-house. The electricity generated has been used for lighting within the building and air conditioning in offices.

Indirect Evaporative Cooling System



Approx.
60%
less energy than
conventional
systems

The ultra-efficient air conditioning system switches between three optimal cooling modes depending on outside air conditions, significantly reducing air conditioning power consumption.

02 SOLUTION Promoting Green Nexcenter™, a Next-Generation Data Center

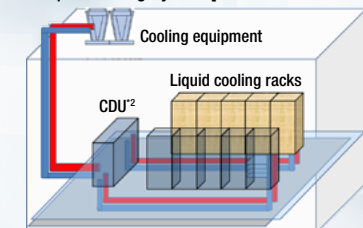
In Japan, data centers built during the “IT bubble” of the 2000s are aging and becoming obsolete. Data center power consumption and heat generation has been rising more than ever before due to such advances as generative AI and GPU clouds. The use of data centers is accelerating, requiring equipment that can cool high heat generating equipment with less power, and data centers with older equipment are struggling to respond. NTT Communications is therefore promoting a project that renovates data centers while utilizing as many facilities as possible, such as introducing the latest energy-saving technology with liquid cooling systems. It will also develop Green Nexcenter™, a next-generation service to meet the growing demand for high power, high heat generating servers in new data centers.

Green Nexcenter™ is Japan's first state-of-the-art data center service that combines zero carbon emissions through renewable energy sources and an ultra energy-saving co-location service for high heat generating servers using liquid cooling systems. This service is designed from the ground up to accommodate these servers, such as generative AI and GPU servers, and uses a liquid cooling system, which is more efficient than the conventional air cooling, to achieve excellent power usage efficiency of pPUE*1 1.15. The data center will also contribute to decarbonization by using renewable energy for electricity. Yokohama 1 Data Center is scheduled to open in fiscal 2024 as an initial product to quickly meet the needs of the Tokyo metropolitan area by renovating some areas of the existing data center. In the Kansai region as well, the renovation of existing data centers is being considered to transform them into Green Nexcenter™. Since locations suitable for data centers are limited in disaster-prone Japan, using existing locations and buildings presents a significant advantage, and demand for these renovated data centers is expected to continue well into the future. Furthermore, a new Keihanna Data Center (provisional name) that supports the liquid cooling system as standard will open in fiscal 2025. We also plan to develop a data center equipped with IOWN®, a cutting-edge optical transmission technology for ultra-high speed and ultra-low power consumption with minimal fluctuation.

[Features of Green Nexcenter™]

- 01 Japan's first data center (co-location) service that supports liquid cooling systems
- 02 Compatible with high heat generating servers such as generative AI and GPU servers
- 03 Reduces power consumption by approximately 30% (excellent pPUE power usage efficiency)
- 04 Available in rack units as before
- 05 Renewable energy available upon request

[Liquid Cooling System]



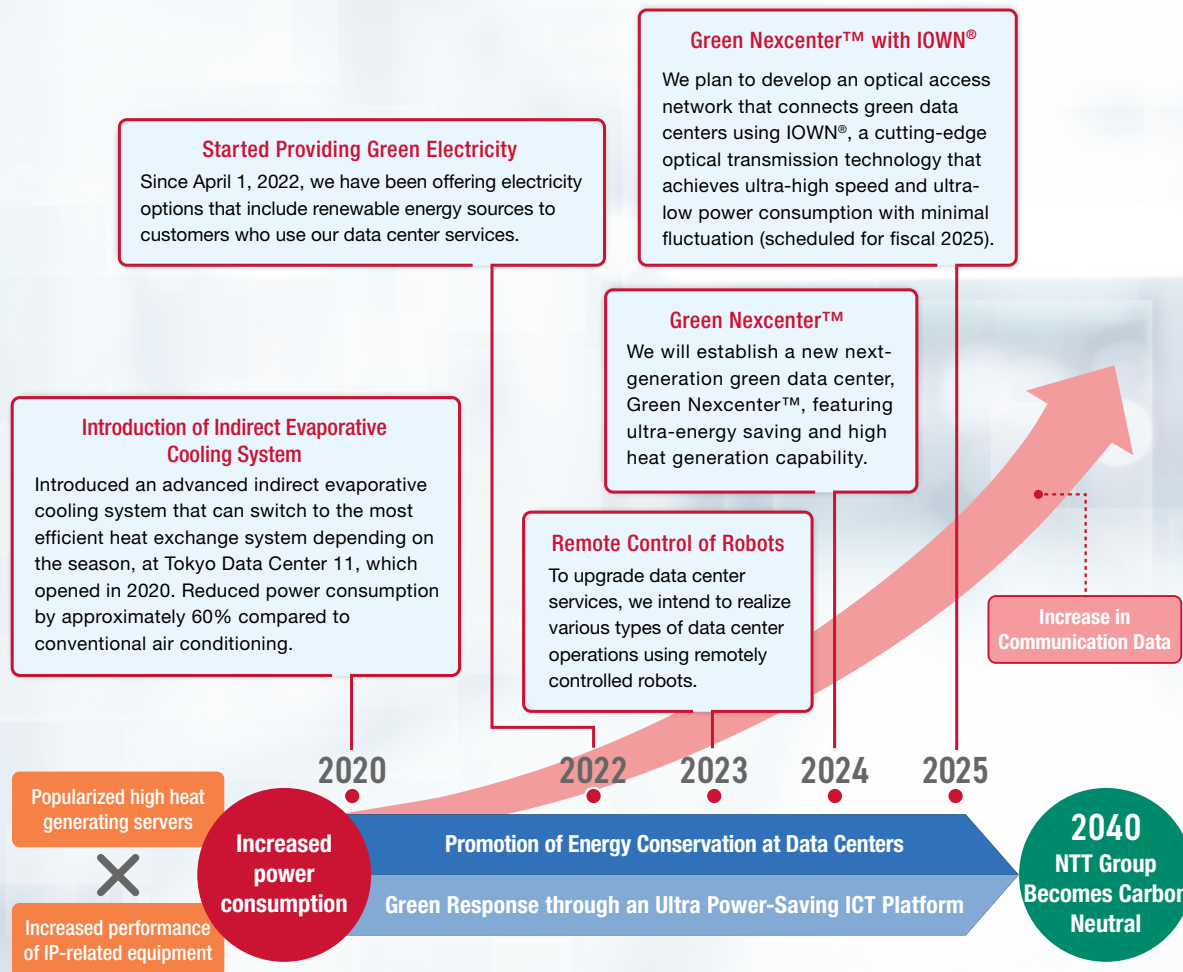
*1 Partial PUE (Power Usage Effectiveness). Indicates the efficiency of power in specific areas such as modules and rooms.

*2 Coolant distribution unit



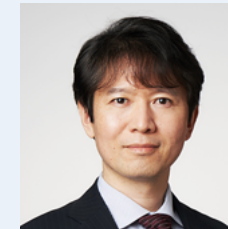
03 SOLUTION Contributing to Carbon Neutrality through Green Data Centers

NTT Communications is committed to generating environmental value by providing GX solutions, including green data centers, to enable customers and society as a whole to achieve carbon neutrality.



Voice

Responding to Social Transformation with Advanced Data Center Services



Vice President / DataCenter Product Owner Cloud & Network Services Platform Service Division

Osamu Matsubayashi

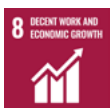
It is no exaggeration that the emergence of generative AI will revolutionize daily work styles, business, and IT infrastructure. Going forward, there is a growing possibility that the number of data centers consuming massive amounts of electricity due to generative AI and GPU clouds will rapidly increase and that high heat generating servers will become commonplace. In addition, with the recent emergence of social pressures from surging electricity costs due mainly to geopolitical risks, the increasing frequency of catastrophic disasters associated with global warming, and the growing corporate appetite for ESG investment will further drive momentum toward energy conservation and the realization of a decarbonized society while intensifying the urgency of achieving these goals. For example, on-premise* will need to simultaneously conserve energy and accommodate high heat generating servers, which is likely to increase the cost burden. Until now, NTT Communications has played a role in supporting ICT infrastructure by providing the Nexcenter data center service. However, it can be said that we are now entering a transitional period in which the nature of data centers will dramatically change in light of social transformation. Starting in fiscal 2024, we plan to launch a series of Green Nexcenter™ as next-generation data centers that utilize renewable energy with ultra-power efficiency for handling high heat generation to resolve these concerns. We believe that for companies and other customers, the use of NTT Communications' data centers is directly linked to generating environmental value to assist in promoting ESG management toward decarbonization. The data center service represents a major core business for the NTT Group to achieve carbon neutrality by fiscal 2040, and we will vigorously promote the provision of vital infrastructure that supports the development and sustainability of society as a whole.

*In-house operation of servers and other information systems

CASE of **ReconnectX[®]**

01

Node-AI

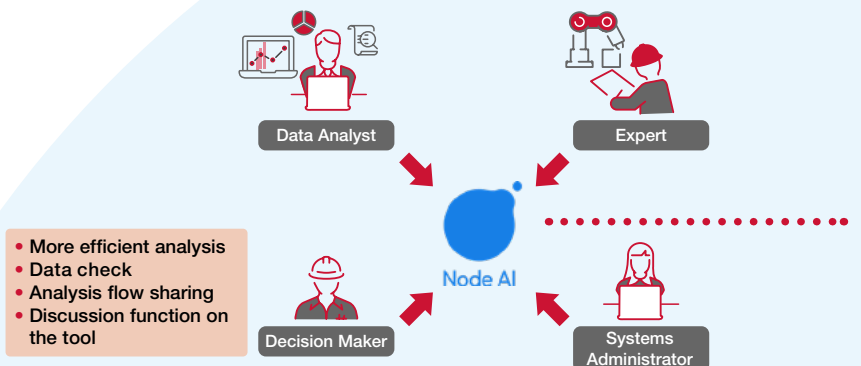
Data
AnalysisProblem-
SolvingAccelerated Problem-
Solving through Social
Implementation of Node AI

Social Issue

AI Projects Face Many Challenges

With the accelerating deployment of AI across society, concerns over transparency and risk management are driving the need for the implementation of responsible AI, which is expected to be used in diverse fields, from marketing and business efficiency improvement to the handing down of technologies as well as predictive analysis. Its deployment, however, requires specialized knowledge and skills, and AI projects involving numerous stakeholders tend to be complex and complicated. Moreover, there is a long way to go before we can turn the finished AI model into a system and verify the results and risks, while training and securing AI human resources are also challenges. A lot of hurdles must therefore be overcome before AI can be widely implemented to solve social problems.

[Creating AI Models with Node AI]



Solution

Solution for Streamlining AI Projects

Node AI is a no-code AI development tool developed by NTT Communications to streamline AI projects through collaboration. It allows the user to design an analytic flow by freely connecting cards on a browser and to easily create and execute a series of pipelines from pre-processing time-series data to learning and evaluating AI models.

Since AI analysis using Node AI is specialized for time-series data and can be useful for prediction, anomaly detection, causal analysis, and factor analysis, it is expected to be applied across a variety of industries and business fields. Project members will be able to access all information from a data analysis at any time, and the tool also facilitates discussions and the creation of reports. By visualizing the basis for AI decisions using patented technology, members can also freely discuss the process as needed and without creating a so-called “black box.” As a result, communication costs will be reduced while improving the overall efficiency of an AI project. AI models developed using Node AI can be easily linked through APIs with our proprietary tools, and models can be retrained with the provision of additional data.

While Node AI is essentially a development tool designed for the user, it also provides hands-on technical and usage support by data scientists as needed. We plan to implement an AI assistant as Node AI becomes increasingly user-friendly. Additionally, we will be able to quickly develop, apply, and continuously improve AI models through Node AI.

011



Using AI to design an analytic flow



Our Vision of Society

Toward a Future Where
Everyone Uses AI

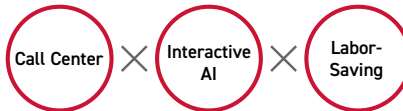
Myriad companies have recently been exploring the use of AI to solve various problems but have had limited success due to a shortage of AI human resources and expertise, which has been frustrating for me as an AI researcher. Under the circumstances, we decided to develop Node AI, with the hope of realizing a world where the users can take advantage of AI to solve those different problems. Until now, NTT Communications has been providing AI solutions by acting as an analyst to address issues faced by customers. For AI to become more accessible in society, tools such as Node AI will be required as a means of enabling anyone to create AI models with minimal preparation. We will continue to refine Node AI as a solution, including support for developing human resources skilled in AI to assist in addressing all sorts of social concerns.



Keisuke Kiritoshi
Product Manager
Technology, Innovation Center

CASE of **ReconnectX[®]**

02



Call Center Response Using Interactive AI

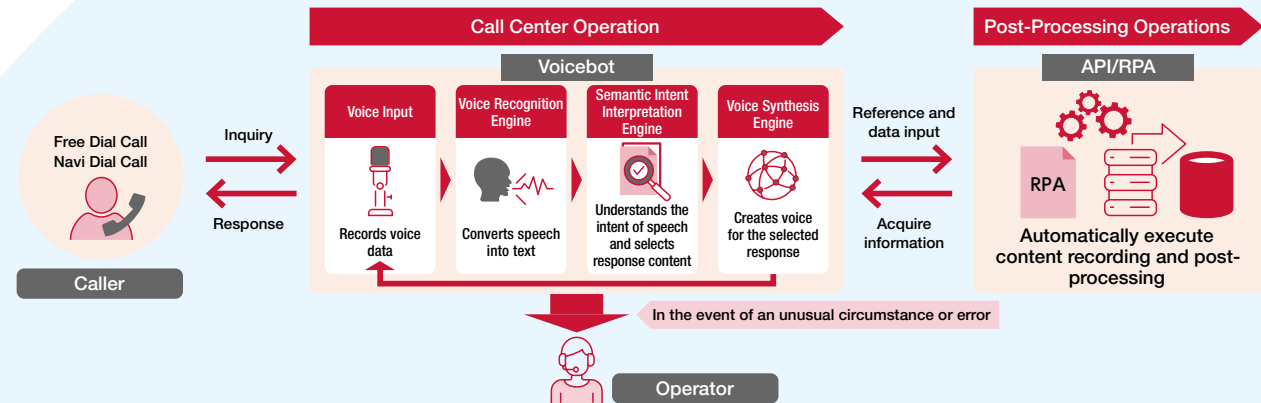


Social Issue

Difficulty in Training and Securing Human Resources

Call centers that serve as the face of a company at the front line of customer service have recently been suffering from a chronically tight availability of operators and staffing shortage. Call center operations generally require several months of training, as there is much to learn about the products and the services offered. Due to the difficulty in securing and training human resources, there are cases where operators are assigned to do work without having received sufficient training in that area. In addition, call volume varies between busy and off-peak hours, which complicates the assignment of appropriate personnel. Poor call-handling can lead to lower customer satisfaction and lost opportunities, making it an issue that companies must address as soon as possible.

[Overview of COTOHA Voice DX[®] Premium]



Solution

Voicebot for Optimizing Call Center Operations

NTT Communications has been developing COTOHA Voice DX[®] Premium, a voicebot solution that uses AI to handle telephone calls at call centers and company contact points since 2019. The solution, an AI-enabled automated voice response system that handles everything from answering calls to subsequent processing, is capable of automated response 24 hours a day, 365 days a year, thus preventing opportunity loss while reducing work hours of personnel, by automating the entire process from receiving inquiries to writing them into the system. The number of channels can be flexibly changed according to variations in seasonal and peak hour demand, preventing customers from feeling uncomfortable or anxious when calls are disconnected. Call center operations can be optimized by utilizing the voicebot for routine tasks and operations with a high volume of incoming calls and allocating vacant operator capacity to tasks that require more advanced responses. The solution has already been implemented in a wide range of industries and operations, including finance, infrastructure, telecommunications, and retail. When it is introduced, we not only combine and provide the best AI engine for each project of the company or organization as a solution but also conduct thorough preparations such as a proof of concept before implementation. Even after introduction, it is possible to individually repeat AI learning and tuning for greater accuracy and come closer to the optimal solution.

Our Vision of Society

Solutions that Can Be Used in Various Fields and Situations

Compared to text-based chatbots and web forms, the voicebot has the advantage of being more easily accepted by customers who prefer to be answered by phone, because the voicebot responds with a natural sounding voice through a speech synthesis engine. Voice recognition accuracy will further improve and is expected to increase customer satisfaction as well as the operational efficiency of call centers by offering responses that are even smoother and more accurate. Going forward, we are looking into adding new services, such as identifying individuals using voiceprint identification technology, and we believe that the value of the voicebot as a solution will continue to grow. As voicebots have only recently been introduced worldwide, lots of people likely have yet to use one. We will develop voicebots as a solution that can be used in a wider variety of fields and situations to establish them as an indispensable, familiar presence around the globe.



Takeshi Yoshioka
Senior Manager
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Platform Service Division



Kyosuke Mochida
Manager
First Business
Solutions
Business Solution
Division

CASE of **ReconnectX[®]**

03

Labor-Saving

Smart Farming

Biodiversity

Striving for Sustainable Terraced Paddy Field Farming that Is Friendly to Both People and Animals



Social Issue

Shortage of Rice Farmers in Japan

In mountainous Japan, rice cultivation in terraced rice fields on sloping terrain has been handed down from generation to generation. The shortage of rice farmers has long been a social concern due to the declining birthrate and aging population, and this trend has become more pronounced in mountainous regions and islands where it is difficult to secure large areas of farmland. For example, Sado City in Niigata Prefecture has been promoting rice cultivation with reduced use of pesticides in order to coexist with the Japanese crested ibis, a special natural treasure, and was recognized as Japan's first Globally Important Agricultural Heritage Systems (GIAHS) in 2011. However, the impact of the farmer shortage is steadily creeping into this beautiful remote island, and the city is trying to find a way forward by introducing smart agriculture using robots, AI, IoT, and other technologies.

[The Path to Resolving the Issues of Rice Terrace Farming]

Paddy Weeding Robot

Equipped with image recognition AI and remote monitoring functions, this robot is particularly effective in the labor-intensive work of weeding paddy fields.

Advanced Water Management System

By linking the Tamon[®] automatic water valve device with the MIHARAS[®] IoT sensor, water supply status can be remotely monitored, which is expected to automate and save labor in water management.

Drone

Drones are used for aerial photography and surveying terraced rice fields to create 3D models of the fields. Analysis of the data enables prior determination of the optimal machine to be selected, such as a radio-controlled mower that can even travel along slopes and therefore significantly reduce labor.

Solution

Agricultural ICT Solutions Shared in the Community

NTT Communications is participating in the World Agricultural Heritage and Toki no Shima (Sado) Smart Agriculture Consortium, which is focused on establishing a sustainable farming method for terraced rice fields that is friendly to both people and living creatures in Sado City, Niigata Prefecture. Ensuring that Sado can remain a habitat-friendly environment for crested ibises will require pesticide-reduced, pesticide-free, and chemical-free cultivation in the terraced rice fields that are shape the original landscape of the island. Sado has strived to build a local brand and increase profits by, for example, establishing a program called Creating a Township Where People Can Live with Crested Ibises for certifying safe and tasty Sado rice. Maintaining agricultural practices that do not rely on pesticides in the terraced rice paddies spread out on mountain slopes requires a level of manual labor that is too heavy for elderly people, such as managing rice banks and cutting grass. As part of the above consortium, NTT Communications participated in a pilot project to introduce agricultural ICT solutions such as drones, paddy field weeding robots, and advanced water management systems to terraced rice fields. The two-year project has been underway in cooperation with government agencies and local agricultural corporations since fiscal 2022 and has been selected as part of the FY2022 Smart Agriculture Production Area Model Demonstration by the Ministry of Agriculture, Forestry and Fisheries. Its purpose is to determine the value of agricultural ICT solutions that significantly contribute to automation and labor-saving in agricultural work while exploring the possibility of sharing the cost and benefits of these new interventions with the local community. We are also examining business models that take into account environmental conservation and yield maintenance, as well as the improvement of the sales price of rice by certifying pesticide-free and chemical-free cultivation. We will continue to our research, development, and practice of smart agriculture, starting with Sado Island, to address the issues of terraced rice field farmers nationwide.



Certification mark for Creating a Township Where People Can Live with Crested Ibises

Our Vision of Society

Working with Local Communities to Revitalize Japanese Agriculture

[Usui] We will help revitalize agriculture by involving students and other next-generation leaders, deepening our engagement in Sado and other regions and working with local communities to refine our agricultural ICT solutions.

[Yumoto] Given the remaining technical issues with ICT solutions such as weeding robots, we will continue our efforts to help solve local problems by mobilizing the cooperation and wisdom of numerous people.

[Hatano] We believe that smart agriculture can create new value to address the aging of farmers and the shortage of successors. We will therefore accumulate and analyze data to expand the possibilities of agricultural businesses.



Mitsuru Usui
Senior Manager
Niigata Branch,
DOCOMO Business
Solutions, Inc.



Yuki Yumoto
Manager
Assistant Section Chief
Niigata Branch,
DOCOMO Business
Solutions, Inc.



Shunsuke Hatano
Niigata Branch,
DOCOMO Business
Solutions, Inc.

CASE of **ReconnectX**

04



Building an Inter-Company Data Linkage Platform that Contributes to Sustainability

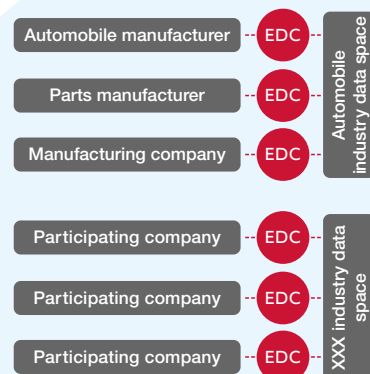


Social Issue

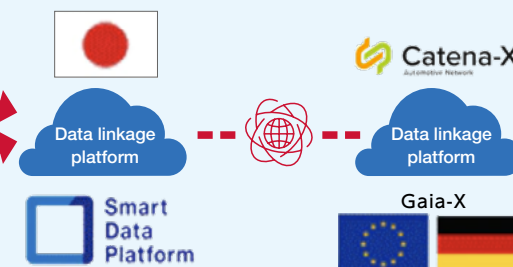
Digital Transformation of the International Community to Achieve the SDGs for Social Issues

Concerns over the monopolistic operation of personal and corporate data by giant IT companies led to the launch of the Gaia-X concept in Europe in 2019 as a data linkage platform and public infrastructure. As a first step, the Catena-X data exchange network between automotive companies began operating in the fall of 2023. This alliance focuses on the safe and fair inter-company data linkage of environmental data based on European standards, to reduce CO₂ emissions throughout the value chain and the circular economy in response to the global trend toward decarbonization. On the other hand, companies in Japan have insufficient mechanisms for aggregating data such as carbon footprints by product, and the legal system and data platform also lag behind, which may reduce international competitiveness and the corporate value of those companies from the perspective of ESG management.

[Connection to Various Data Spaces in the EU]



014



Solution

Supporting the Introduction and Use of a Data Linkage Platform between Companies

In light of the companies in Japan, mainly European subsidiaries, that are forced to take immediate action to disclose product-specific carbon footprint data and resource recycling data in compliance with new laws and regulations, NTT Communications has begun working with partner companies to establish a solution that supports the use of data linkage platforms such as Catena-X. We will provide total support, from preliminary consulting to actual connection and operation, including the generation of highly reliable data and the connection of internal systems with data linkage platforms, with specifications tailored for each company. To interconnect with Catena-X, it is essential to support EDC, software for authenticating and controlling communications between companies, and a standard data model. NTT Communications provides a platform that combines EDC with data management and security functions, and it supports the setup and operation of the platform to establish an environment for the safe and secure exchange of data with business partners using data space. The rules, standards, and methods of Gaia-X and Catena-X will be taken over by a new project, Manufacturing-X, which encompasses the entire manufacturing industry and may emerge as the new data communication standard in various industries. So that Japanese companies can easily, safely, and inexpensively take advantage of the latest communication technology, NTT Communications will promote the development of authentication and data linkage platforms in Japan that protect data sovereignty as a prerequisite for exchanging secure data between companies. Starting with the Catena-X, it will promote inter-company data sharing that helps to achieve the SDGs and its use throughout the international community while also developing next-generation network solutions for achieving carbon neutral society and addressing various social concerns.

Our Vision of Society

Looking toward Decarbonization and Resource Recycling

[Sakaino] In achieving decarbonization and resource recycling, it's necessary to accurately grasp the volumes of CO₂ and waste emitted from economic activities, disclose and share that information based on common global rules, and encourage reductions. To those ends, we join efforts that mobilize the power of industry, government, academia, and the public across the boundaries between companies and national borders, and we contribute to the diffusion of a digital communications infrastructure that enables the reliable and safe use of data.

[Kato] First, we will apply our initiatives related to Catena-X, which focus on environmental issues, as a foothold for demonstrating the value of globally connecting diverse business groups and industries and working together to protect the Earth.

[Niizuma] Going forward, it will be necessary not only to follow the lead of Europe but also to build a collaborative platform in Japan based on a concept similar to Catena-X. We will create an environment in which data infrastructure can be utilized from a comprehensive perspective, helping to bring happiness to a lot of people.



Akira Sakaino
Director
Innovation Center



Akihisa Kato
Manager
Smart Industry
Smart World Business
Business Solution Division



Hideaki Niizuma
Manager
Smart Industry
Smart World Business
Business Solution Division

CASE of **ReconnectX**

05

Submarine
CableData
CommunicationSafety and
Security

Submarine Cables Connecting the World to the Future

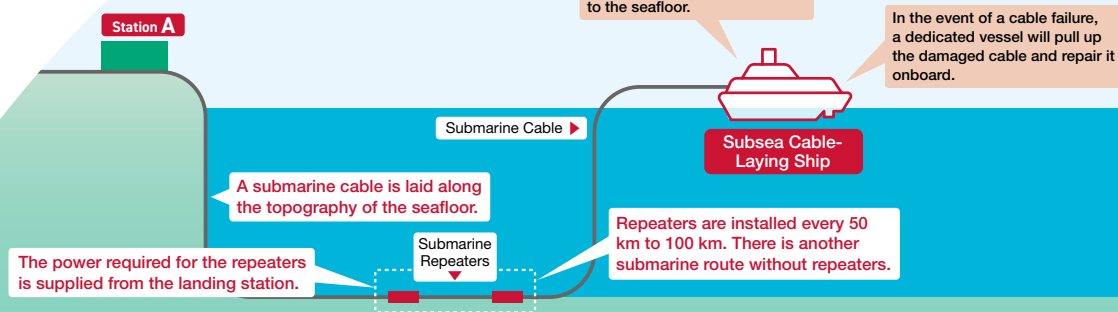


Social Issue

Growing Importance as a Communications Infrastructure

Submarine cables bundling optical fibers are responsible for 99% of international data communications such as the Internet and international telephone calls. Submarine cables can provide high-capacity, high-speed communications far exceeding satellite communications and now stretch across the world's oceans, with a total length of approximately 1.4 million km. The demand for data communications will clearly continue to increase worldwide, and plans are underway to strengthen submarine cables and lay new cables to meet demand. On the other hand, broken submarine cables can disrupt data communications, so managing the maintenance of existing cables is becoming increasingly important from the perspective of economic security, such as ensuring communications in the event of an emergency.

[Submarine Cable Laying Method]



Solution

Promoting the Submarine Cable Business that Continues to Connect the World

NTT World Engineering Marine Corporation is a marine engineering company responsible for the installation and maintenance of submarine cables. Since its establishment in 1998, the company has installed 9,000 km of domestic submarine cables and nearly 30,000 km of international submarine cables, and it is responsible for the maintenance of all submarine cables owned by the NTT Group.

With the recent rapid increase in data communications worldwide, demand for new submarine cable installation and maintenance, including repair work, has been rising as well. NTT World Engineering Marine operates four dedicated vessels such as for cable-laying and is engaged in a wide range of businesses, from design and marine surveys to cable laying and burial, repair work, and disaster response. Currently, it is mainly engaged in laying cables between the mainland and remote islands in Japan as well as the remote islands of the Philippines. The installation of new cables in areas is an important social issue, not only in terms of closing the information gap but also for the preparation for large-scale disasters.

Maintenance management of submarine cables is a key task for supporting infrastructure indispensable to society. Although the service life of cables is approximately 25 years, regular inspections are essential in sensitive areas because the cables can be replaced due to deterioration over time or damaged by fishing nets or ship anchors, in addition to damage from typhoons and other factors.

Even as Wi-Fi, 5G, and eventually next-generation wireless communications arise, the role of cables running along the ocean floor will remain constant, playing an unsung role in the world's data communications. NTT World Engineering Marine will continue to connect the world through submarine cables to contribute to building a sustainable society.

Our Vision of Society

Passing on Technology that Supports Data Communications to the Next Generation

Our submarine cable business is unique even within the NTT Group and can be viewed as a highly specialized venture. The main activities take place in the ocean, and unique knowledge and expertise are required to promote business, such as setting landing sites for submarine cables, designing installation routes based on an understanding of the seafloor topography, and negotiating installation and maintenance with fishing industry associations. In recent years, the social and economic importance of the submarine cable business has become even greater, although concerns have emerged over securing and training human resources and passing on the technology. We will widely promote the social significance and value of the submarine cable business, which connects the world and supports industrial development, as well as the satisfaction of our work. We will also support safe and secure communication infrastructure while looking to the future with a sense of mission and pride.



Taishi Marushima

General Manager
Corporate Planning Department
NTT World Engineering Marine Corporation
(NTT WE MARINE)



Evolving to Be a Corporate Group to Create a Sustainable Future

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.

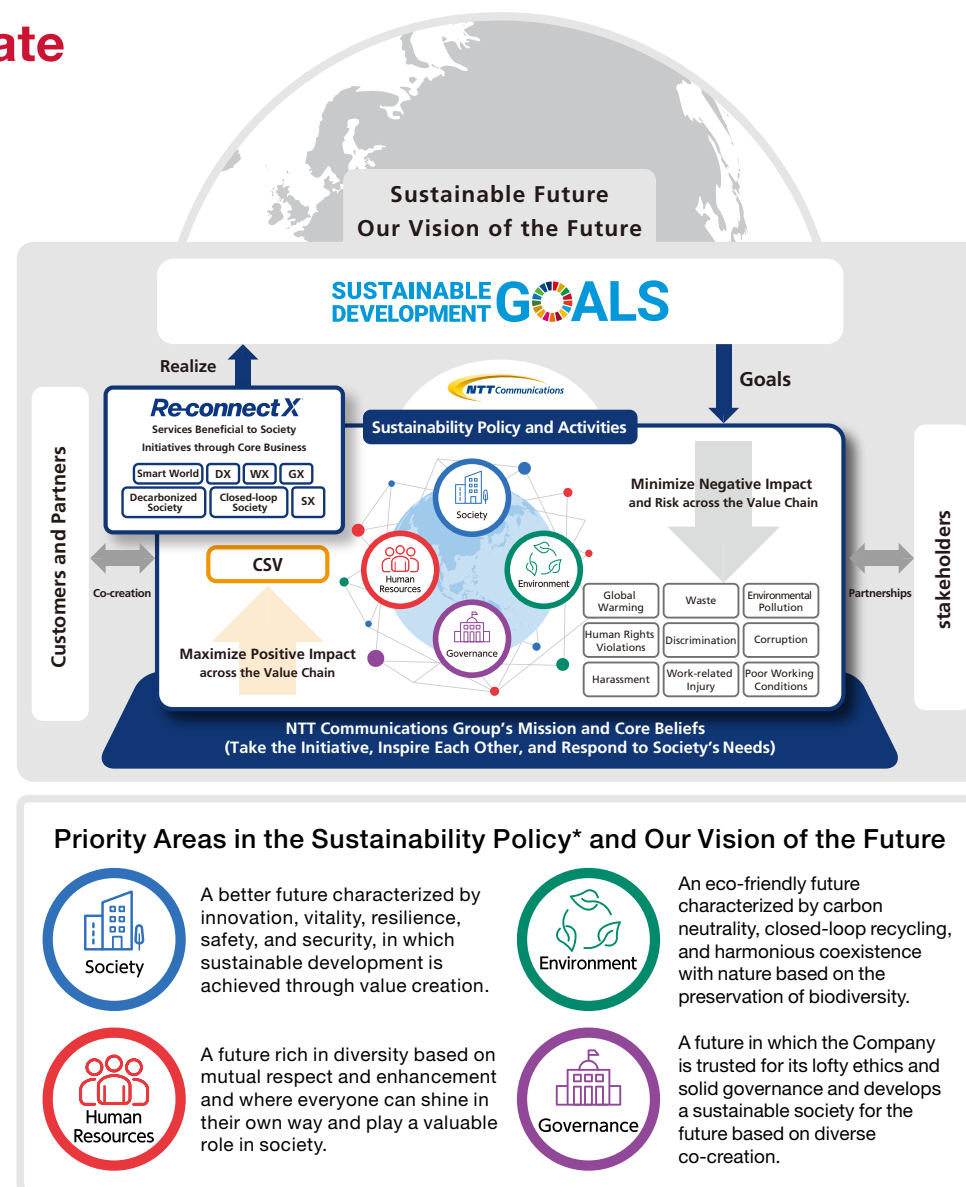
Under the Sustainability Policy, we will uphold Our Mission and Our Core Beliefs to pursue the Re-connect X business vision as “Your Value Partner,” with the intention of opening up unlimited possibilities for people and the world and consistently serving society to realize a sustainable future. The 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, while co-creating with various stakeholders including customers and business partners, we will work strategically and appropriately to create business and growth opportunities and reduce risks. We intend to further reinforce the positive impact of our business activities on society across the value chain and minimize negative risk and impact. By building on these efforts, we will overcome all hurdles and promote DX, WX*, GX, and SX for society as a whole to sustainably increase corporate value and contribute to achieving the SDGs in our efforts to realize a sustainable future.

* Workstyle transformation

P021 For information about the process of identifying our materiality, refer to “Process of Identifying Materiality and Setting Main Initiatives, KPIs, and Targets” in this report.

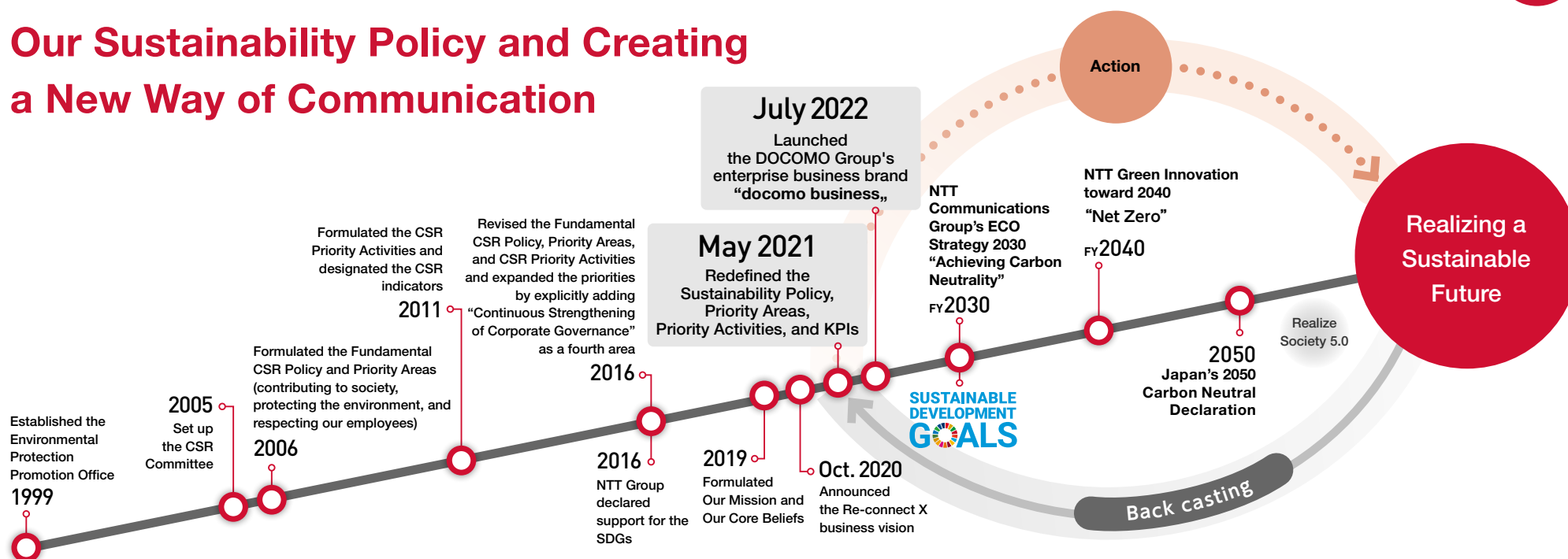
P006 For our Sustainability Policy, refer to “Our Vision of Society” in this report.



*Priority areas in the Sustainability Policy, formulated in May 2021.



Our Sustainability Policy and Creating a New Way of Communication



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.

We will continue to challenge the infinite potential of communication that will be further expanded through the reorganization with NTT DOCOMO and NTT COMWARE and open up a rich and sustainable future beyond our imagination.

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

SUSTAINABLE DEVELOPMENT GOALS

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.





Tomohiro Ando
Executive Vice President



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. The NTT Communications Group has formulated its Sustainability Policy in response to these circumstances and will open up the future by promoting its Business Vision based on its mission and core beliefs. We are working to achieve a series of Priority Activities and KPIs in each of the four Priority Areas of Environment (E), Society (S), Governance (G), and Human Resources, with the goal of “The Future We Aim for.” With a broad range of collaboration and co-creation, as well as appropriate management and governance based on the PDCA cycle, we will further demonstrate positive effects and minimize negative impacts on society that are associated with our business activities throughout the entire value chain. We are striving through the combined impact of these efforts to continuously enhance our corporate value as Your Value Partner while opening up possibilities for people and the world; promoting DX, GX, WX, and SX for society as a whole; contributing to achieving the SDGs; and ultimately creating a sustainable future. In addition, our Sustainability Policy is based on our mission and core beliefs, created with the participation of all employees and the basis of our efforts to work toward the future we aim for. We are all exercising great care in starting at our own initiative, growing together, uniquely advancing our careers, and responding to society through our business vision, daily operations, and other activities.

In this context, we further enhanced opportunities and environments conducive to employees’ autonomous career

Under our Sustainability Policy, we will pursue the unlimited possibilities of ICT and DX toward achieving carbon neutrality by 2030*¹, contributing to the achievement of the SDGs, achieving net zero*² by 2040, and realizing a sustainable future of well-being and full of dreams.

development and growth to improve our human resource base as the foundation of these initiatives in 2023. In addition, we established the new Human Resources Strategy Committee to strengthen our mid- to long-term human resource strategy and expanded the application of the compensation-linked system for evaluating sustainability, including the employee engagement rate, to all managerial positions. With regard to the urgent issue of climate change, we increased our use of renewable energy for electricity, which accounts for more than 95% of our total energy use (Scopes 1 and 2), to approximately 50% (48.6%) and achieved 100% renewable energy use (Scope 2) for cloud services. Furthermore, we are taking action to achieve net zero emissions by 2040, including Scopes 1, 2, and 3, and working toward the construction of a green and ultra-energy-efficient DC with zero carbon emissions and the high heat generation required for developing generative AI and other technologies in support of the next-generation society. We are also pursuing the co-creation of ICT/DX services and solutions that contribute to nature positivity in line with the new Biodiversity Framework (adopted in December 2022) as well as the enhancement of supply chain resilience and governance of overseas subsidiaries in light of geopolitical risks, including economic security, which are of growing concern worldwide.

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 5G and IoT, and zero-trust, resilient, one-stop, next-generation mobile-fixed/closed network convergence integrated ICT services. 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, and threats to information and cyberspace security. They could also prove to be essential 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, while appropriately identifying and responding to medium- and long-term risks and opportunities, the 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 make a united Group effort under our Sustainability Policy to resolve social issues that are increasingly complex and diverse to change you and the world and usher in the future. To meet public expectations and demands, we will practice 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.

*¹ 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)

*² May 2023, initiatives including Scope 3 (indirect emissions other than Scopes 1 and 2) based on the NTT Group’s new Medium-Term Management Strategy



Sustainability Management

Sustainability Promotion Structure and Governance, Risk Management, Strategy, Indicators, and Targets

Sustainability Promotion Structure

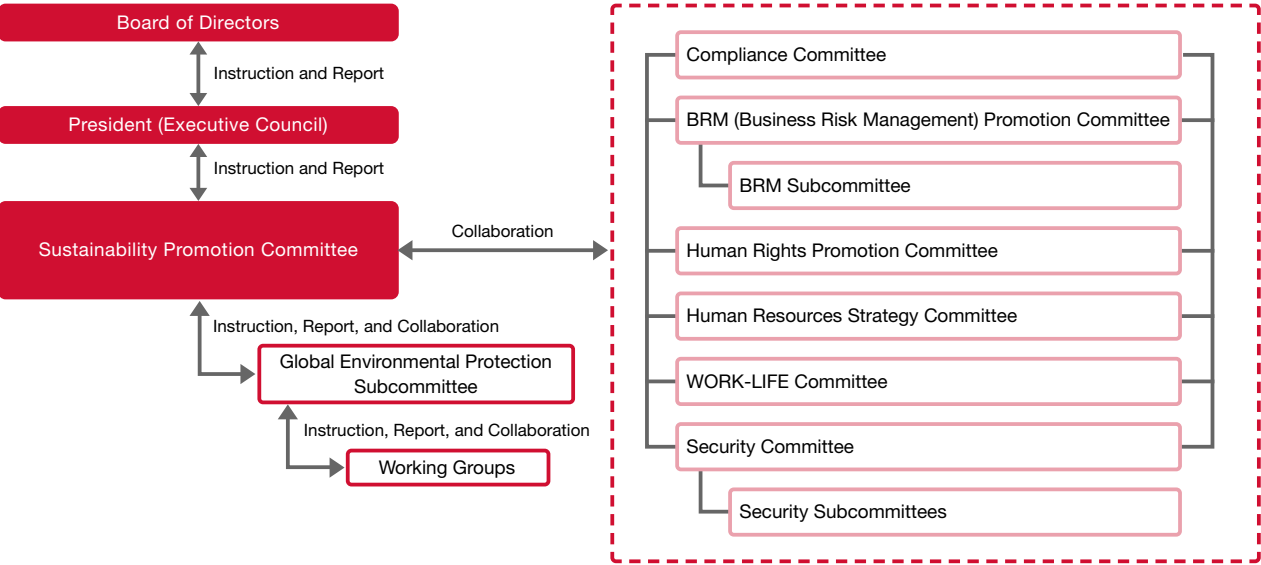
In the NTT Communications Group, the Sustainability Promotion Committee was established as a deliberating body to examine measures to address apparent and potential ESG-related social issues and to comprehensively, strategically, and precisely promote and manage sustainability activities. Chaired by 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. In addition, individual committees discuss key topics related to sustainability activities. In order to take appropriate actions in cooperation with these committees, we have established a system for promoting sustainability throughout the Group by sharing information and collaborating Groupwide.

Governance

Under this sustainability promotion structure, matters reported and discussed by each committee are shared with the Board of Directors. After deliberation, the board makes final decisions for addressing issues and determining management strategies and business plans. In addition to the above role, the board complies with recommendations from the Board of Corporate Auditors and oversees the necessary governance to strategically and appropriately promote sustainability activities while linking sustainability evaluation to executive compensation.

[Sustainability Promotion Structure]



Sustainability Promotion Committee Members and Secretariat

Chairperson: Executive vice president in charge of CSR

Members: Heads of each organization and presidents of NTT Communications Group companies

Secretariat: Sustainability Office*

*The Sustainability Office also promotes the environmental activities of the NTT Communications Group. It serves as the secretariat of the Global Environmental Protection Subcommittee and is also responsible for promoting activities of the DOCOMO Group and company collaboration, including the identification and consideration of risks and opportunities based on the TCFD and TNFD.



Risk Management

We have established the Risk Management Rules, which stipulate the basic elements of risk management to help 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. We are implementing the necessary actions through the lead organizations for Priority Activities. As a system and mechanism for effectively addressing major risks that may affect our business management, we set up the Business Risk Management Committee, chaired by the senior executive president, to construct and implement a PDCA cycle for risk management.

With regard to sustainability-related opportunities, the organizations in charge of the relevant Priority Activities are partnering with related organizations on initiatives based on the PDCA cycle by considering Main Initiatives and KPIs for evaluating their status, such as promoting CSV in response to business opportunities for creating value that will help address social issues and create a sustainable society while also taking into account internal and external, medium- to long-term trends and business visions in their respective fields of responsibility.

We will comprehensively and appropriately promote the sustainability activities of the NTT Communications Group, based on the implementation of proactive initiatives and management of social issues, risks, and business opportunities by each responsible organization. Under the promotion system and governance described above, the Sustainability Promotion Committee comprehensively adjusts and finalizes the Main Initiatives,

KPIs, and Targets each fiscal year, in light of the latest domestic and international trends in ESG and our medium-term management strategy and policy. The level of achievement is verified, evaluated, summarized, and reflected in the formulation of the next year's Main Initiatives and KPIs. In addition to these annual reviews of Main Initiatives and KPIs, the Sustainability Promotion Committee also reviews the Sustainability Policy and priority issues.

For details of the Sustainability Promotion Committee's process for identifying materiality and setting Main Initiatives, KPIs, and Targets for each identified materiality, refer to "Process of Identifying Materiality and Setting Main Initiatives, KPIs, and Targets" on the next page.

As shown in the "Identified Sustainability Priority Activities" on the next page, the current Priority Activities consist of 12 items in the four Priority Areas of society, the environment, human resources, and governance.

Strategy

The NTT Communications Group has established the Main Initiatives to address current and potential social issues and their associated risks and business opportunities, for each of the four Priority Areas of society, the environment, human resources, and governance. To address those initiatives in line with the Sustainability Policy, we will (1) enhance value chain partnerships, stakeholder engagement, and human capital, (2) extensively collaborate and co-create with our customers, partners, and various other stakeholders, and (3) further demonstrate the positive effects and minimize the negative

impacts and risks on society associated with our business activities throughout the entire value chain. Through the combined impact of these efforts, we will seek to sustainably enhance our corporate value and strategically and precisely take action to realize a sustainable future.

There are 27 Main Initiatives in fiscal 2023.



For details on the Main Initiatives for fiscal 2023, refer to the tables in "KPIs, Targets, and Outcome of Activities" in this report.

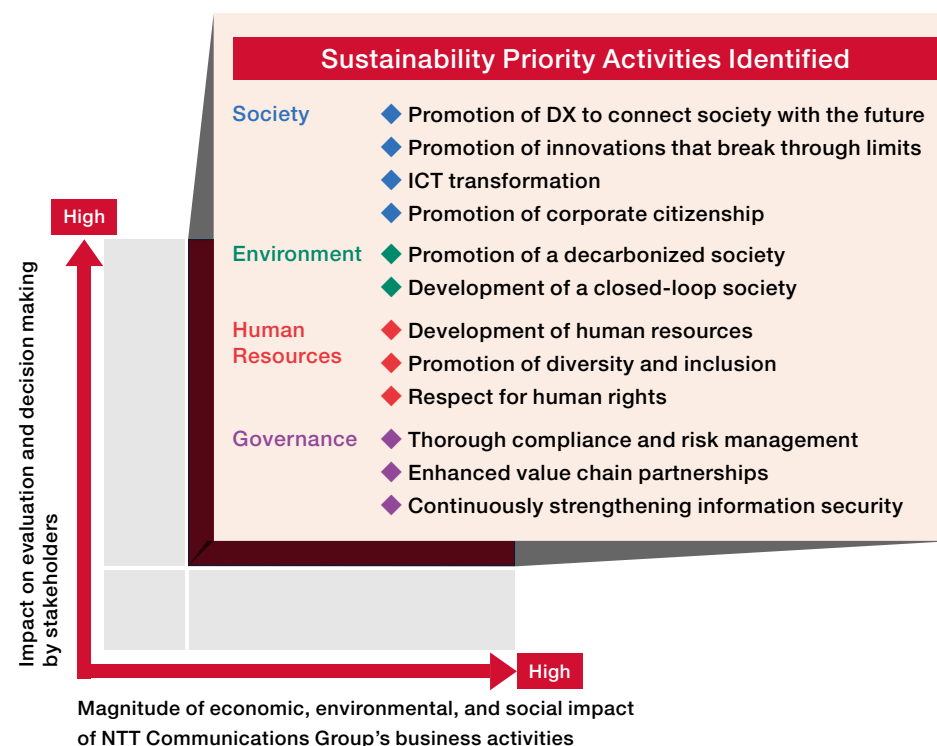
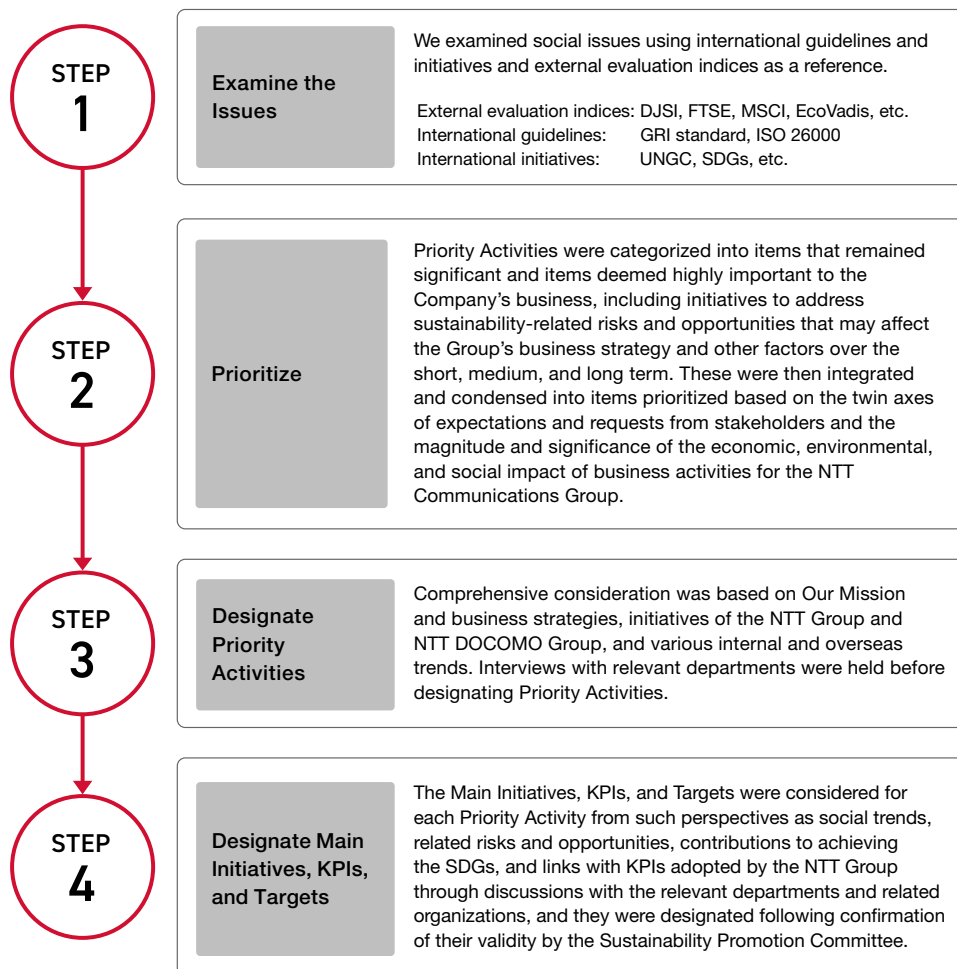


For more information on initiatives throughout the value chain, refer to "Initiatives for Realizing a Sustainable Future through the NTT Communications Group Value Chain" in this report.

While pursuing activities based on the above strategy (Main Initiatives and their approaches), we will continue to accurately develop comprehensive sustainability management through timely understanding and Companywide sharing of the status of activities, KPI-based evaluations, related risks and opportunities, the latest domestic and international ESG trends, representative initiatives by other companies, and external evaluations, with the organizations in charge of the Main Initiatives, while implementing the PDCA cycle.



Process of Identifying and Setting Materiality and Setting Main Initiatives, KPIs, and Targets





KPIs, Targets, and Outcome of Activities

The following tables show the Priority Areas (society, the environment, human resources, and governance) of the Sustainability Policy, the main initiatives, key performance indicators (KPIs) and targets for fiscal 2022 for the Priority Activities, and the outcome of these activities (review, assessment, and targets) as well as the main initiatives, KPIs, and targets for fiscal 2023.



Society

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.



FY2022

Main Initiatives	KPIs	Review	Assessment	Targets
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Priority Activity | Promotion of DX to connect society with the future

Promote DX in society and industry	Qualitative Promote Smart World projects based on BBX strategy* Quantitative Number of service projects: 8	Qualitative 44 BBX-related external announcements Quantitative Number of service projects: 8 Launched various services to help customers promote DX, including SDPF cloud services/servers CO ₂ emissions forecasting and visualization functions, and the COTOHA 1on1 Assistant, which uses AI to help improve supervisors' one-on-one skills	○	● Further promote Smart World through BBX strategy by leveraging DOCOMO Group synergies
Promote DX in workstyles and lifestyles				
Promote DX in global business	Qualitative Develop global DX solutions	Established a Custom Experience Center (CEC) in Thailand to develop business activities	○	Develop business activities at the CEC in Thailand and also continue to develop global solutions through NTT Com China's new security operation center

FY2023

Main Initiatives	KPIs
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Promote DX in society and industry	Qualitative Promote Smart World projects based on BBX strategy Qualitative New Promote the realization of sustainable local communities by promoting DX
Promote DX in workstyles and lifestyles	Quantitative Number of service projects: 5
Promote DX in global business	Qualitative Develop global DX solutions

*Promote B2B2X (B2B2B/B2B2C, etc.) business through co-creation

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



FY2022

Main Initiatives	KPIs	Review	Assessment	Targets
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Priority Activity | Promotion of innovations that break through limits

Generate creative innovations	Qualitative Promote creative and innovative SmartX projects	Implemented new business development and a demonstration through xTech for a new customer experience <ul style="list-style-type: none"> Currently conducting value creation/demonstration for new businesses from a medium- to long-term perspective, such as a remotely operated robot business (Telepresence), space-related business (SpaceTech), and wind data business Developed OsecT to visualize control system security risks, conducted demonstration tests and started commercial provision of WideAngle professional service OsecT in April 2022, and currently conducting technology and business PoC with multiple companies to develop B2B2X services 		<ul style="list-style-type: none"> Continue to promote the development of new businesses Provide monitoring functions for OsecT that are suitable for use in the factory environment of small- and medium-sized Japanese manufacturers (started offering in July 2023)
Promote innovation management	Qualitative Promote unique innovations in collaboration with internal and external members	<ul style="list-style-type: none"> The ExTorch Open Innovation Program connects startup companies with various departments within the Company and is carrying out activities to create new businesses through co-creation In commercially providing the AI plant operation support solution, we made available the AI development support tool Node-AI and the JIT algorithm system that optimizes AI in response to environmental changes, to promote the creation of a data utilization business using the B2B2X model 		<ul style="list-style-type: none"> Starting in FY2023, the new business creation contest will be called "docomo STARTUP" and the entire DOCOMO Group will work together to promote it Continue to promote the creation of the data utilization business using the B2B2X model

Priority Activity | ICT transformation

Enhance network infrastructures that are resistant against natural disaster, highly reliable, safe, and secure	Quantitative Stable service provision rate: 99.99% <ul style="list-style-type: none"> Voice service Corporate network service Cloud service 	<ul style="list-style-type: none"> Stable service provision rate: 99.99% achieved (average of 3 services) 		<ul style="list-style-type: none"> Strengthen service quality and systems to provide highly reliable, safe, and secure services
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FY2023

Main Initiatives	KPIs
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Generate creative innovations	Qualitative Promote creative and innovative SmartX projects
Promote innovation management	Qualitative Promote unique innovations in collaboration with internal and external members

Enhance network infrastructures that are resistant against natural disaster, highly reliable, safe, and secure	Quantitative Stable service provision rate: 99.99% <ul style="list-style-type: none"> Voice service Corporate network service Cloud service
--	--

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



FY2022

Main Initiatives	KPIs	Review	Assessment	Targets
Provide advanced and robust information and cyber security	Quantitative Develop security services and add the menu: 3 services	<ul style="list-style-type: none"> ● Managed CSPM ● Reliable Mobile Security for Business ● Managed SOAR and other services Number of services: 7	○	<ul style="list-style-type: none"> ● Develop services, taking into account the creation of a menu for small and medium-sized businesses ● Plan to focus on the X Managed Platform service
Provide managed services to help customers have a safe and secure transformation	Quantitative Develop managed services to support the sustainable development of a safe and secure ICT society and add to the menu: 2 services	Number of new options: 2 Created basic and optional functions required for managed services by incorporating customer needs based on actual projects, and added to the menu <ul style="list-style-type: none"> ● Cloud (AWS/ECL2.0) added to the menu ● Global Delivery added to the menu 	○	<ul style="list-style-type: none"> ● Promote the development of new functions unique to the carrier, such as data accumulation, analysis, simple security diagnosis, traffic prediction, and detection
Provide advanced and flexible network services	Quantitative Number of services: 2	Number of services: 2 <ul style="list-style-type: none"> ● Active Multi-access SIM* ● Enhanced the functions of IoT Connect Gateway 	○	Expand value-added functions to promote the development of customer IoT systems/services

FY2023

Main Initiatives	KPIs
Provide advanced and robust information and cyber security	Quantitative Develop advanced, robust security services and add to the menu: 3 services
Provide managed services to help customers have a safe and secure transformation	Quantitative Develop managed services to support the sustainable development of a safe and secure ICT society and add to the menu: 2 services
Provide advanced and flexible network services	Quantitative Reinforce Number of service projects: 4

Priority Activity | Promotion of corporate citizenship

Promote social contribution activities that are beneficial to a sustainable future	Quantitative Number of times participated in local community contribution activities (year-on-year increase)	10 cases (last fiscal year: 10 cases) Also supporting NPOs through pro bono activities in FY2022	○	In addition to the frequency of participation, we plan to create an environment where more employees can easily participate in social contribution and volunteer activities to increase overall participation
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Promote social contribution activities that are beneficial to a sustainable future	Quantitative New Expand opportunities for participating in community service activities
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*NTT Communications' proprietary technology (patent pending) has enabled the development of a new SIM for the IoT that can autonomously detect communication failures and switch to a backup carrier using only one SIM.

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 fiscal 2030 (i.e., to essentially achieve zero greenhouse gas emissions from the NTT Communications Group's operations) through the following related main initiatives.

FY2022				
Main Initiatives	KPIs	Review	Assessment	Targets
Priority Activity Promotion of a decarbonized society				
Promote the use of green electricity	Quantitative Percentage of internal renewable energy use (offset by non-fossil certificate included): 50% or more in FY2030	49% of the electricity (GHG protocol: Scope 2) associated with business activities was provided by renewable energy	○	<ul style="list-style-type: none"> ● Systematically introduce renewable energy and steadily implement measures to help reduce greenhouse gas emissions, including the active introduction of the latest power-saving technologies and the introduction of internal carbon pricing ● Actively promote the shift to EVs and review the number of vehicles owned and how they are used to reduce GHG emissions from Company vehicles
Reduce power consumption	Quantitative Reduce GHG emissions: -50% in FY2030 compared to FY2018	-46% (compared to FY2018)	○	
Introduce electric vehicles (EVs)	Quantitative Percentage of EVs in fleet: 50% by FY2024, 100% by FY2030	35%	○	
Provide services that help reduce GHG emissions	Quantitative Contribute to reducing GHG emissions across society: reduce by more than 10 times the emissions of the NTT Communications Group in FY2030	17.1 times	○	
Improve energy efficiency	Quantitative Power efficiency in our telecommunications business: improved by at least 10 times in FY2030 compared to FY2013	4.3 times	○	

Priority Activity | Development of a closed-loop society

Thoroughly implement the 3Rs (reduce, recycle, and reuse)	Quantitative Reinforce Waste recycling ratio: at least 98.2% in FY2022 and at least 99% in FY2030	98.1%	△	Review the disposal targets and methods to improve the recycling rate
Promote the recycling of plastics				

FY2023	
Main Initiatives	KPIs
Reduce greenhouse gas emissions:	Quantitative Become carbon neutral (by FY2030) *GHG Protocol: targeted at Scopes 1 and 2 Quantitative GHG emissions in FY2023 (Scopes 1 and 2): 11.7 ten thousand tons-CO ₂ e
Introduce electric vehicles (EVs)	Quantitative Percentage of EVs in fleet: 50%* by FY2024, 100% by FY2030 *The interim target achievement year was revised due to the acceptance of new Company vehicles as part of the reorganization with the NTT DOCOMO Group (at that time) in July 2022
Provide services that help reduce GHG emissions	Quantitative New Promote the co-creation of services that help reduce GHG emissions in FY2023: 2 cases
Improve energy efficiency	Quantitative Power efficiency in our telecommunications business: improvement of at least 10 times in FY2030 compared to FY2013

Thoroughly implement the 3Rs	Quantitative Waste recycling ratio: at least 98.2% in FY2023 and at least 99% in FY2030
Promote the recycling of plastics	



See "Eco Strategy 2030" in this report for our approach to achieving carbon neutrality for Scopes 1 and 2 by fiscal 2030 and net zero emissions across Scopes 1, 2, and 3 by 2040.

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.



FY2022

Main Initiatives	KPIs	Review	Assessment	Targets
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Priority Activity | Development of human resources

Strengthen measures that help employees promote their autonomous learning behavior and open learning among them	Quantitative Training costs per person: 228,000 yen per year	205,000 yen	△	<ul style="list-style-type: none"> Classify the skill improvement support scheme into the DOCOMO Group's common measures and those specific to the corporate segment, continue to provide training required by the corporate segment, and strengthen the DX Human Resources 100 Measures and study session actions for branch offices and branches Review systems for personnel and human resources development and integrate and strengthen support measures that encourage skill development and qualification acquisition based on expertise as common efforts for the DOCOMO Group

Priority Activity | Promotion of diversity and inclusion

Promote hiring, development, assignment, and equal opportunities for diverse human resources	Quantitative Percentage of female employees in managerial positions: 15% in FY2025	Percentage of female employees appointed as new managers: 30.2%	○	<ul style="list-style-type: none"> Implement additional activities to promote the active participation of women in collaboration with the DOCOMO Group Provide career support through mentoring Promote internal and external diver exchanges including cross-industrial exchange meetings Foster awareness among young employees
	Quantitative Percentage of female employees appointed as new managers: 30%			
	Quantitative Percentage of male employees taking childcare leave: 100%	Percentage of male employees taking childcare leave: 132.8% *Denominator: Number of employees whose partner gave birth during the fiscal year Numerator: Parental leave + LP leave for employees with children under 6 years old	○	<ul style="list-style-type: none"> Disseminate information on the "Ikupapa Leave" (male childcare leave) initiative and raise awareness among young employees during training sessions Disseminate information on male employees who have taken childcare leave Provide support for interviews by supervisors regarding childcare leave

FY2023

Main Initiatives	KPIs
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Promote measures that enable employees to learn and grow autonomously to realize their careers (a growth cycle in which employees and the business grow together)	Quantitative Training costs per person: 220,000 yen per year
	Quantitative New DX manpower: 100% by the end of FY2030

Promote hiring, development, assignment, and equal opportunities for diverse human resources	Quantitative Percentage of female employees in managerial positions: 15% in FY2025
	Quantitative Percentage of female employees appointed as new managers: 30%
	Quantitative Percentage of male employees taking childcare leave: 100%

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



FY2022

Main Initiatives	KPIs	Review	Assessment	Targets
Promote hiring, development, assignment, and equal opportunities for diverse human resources	Quantitative Percentage of employees with disabilities: 2.3%	2.38% *As of June 1, 2022	○	Integrate employment/support for retention of employees within the DOCOMO Group in preparation for the new legally mandated employment rate (2.5% from FY2024)
	—	—	—	—
Promote work-life balance	Quantitative Engagement score (positive percentage of engagement categories) year-on-year increase	NTT Communications Group: 61% NTT Communications on a non-consolidated basis: 63%	△	Promote career autonomy and organizational development based on our HRM strategy to address the priority issues of strategy penetration, corporate culture/climate, diversity/CSR, career, and compensation/performance management
	Quantitative Percentage of digital signature use: 80% Percentage of e-contracts: 50%	<ul style="list-style-type: none"> ● Digitized common operations: 87.5% ● Digital signature: 55% ● e-contracts: 22% ● Established electronic awareness 	△	Complete more than a certain role in creating a system for supporting new workstyles (digitizing analog processes that rely on paper)
	Quantitative Percentage of remote work implemented: 70%	Over 70%	○	Promote a balance between office and remote work (hybrid work) that incorporates face-to-face communication

FY2023

Main Initiatives	KPIs
Promote hiring, development, assignment, and equal opportunities for diverse human resources	Quantitative Percentage of employees with disabilities: 2.3%
	Quantitative New Hire external personnel: 30%
Promote work-life balance	Quantitative Improve the engagement score compared to the previous year (mid-term target: 65%)
	—
	Quantitative Percentage of remote work implemented Remote standard organizations: 60% Office-based organizations: 40% *Work from outside the home such as satellite offices will also be included.

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



FY2022

Main Initiatives	KPIs	Review	Assessment	Targets
Thoroughly implement occupational safety and health and health management for employees	Quantitative Percentages of employees receiving special health guidance: 18.8% in FY2022, 14.5% in FY2023	20.5%	×	To ensure that each employee remains healthy, we set targets for both physical and mental health, implement various initiatives, and discuss these at the Wellness Promotion Committee with mutual cooperation between labor and management
	Quantitative Percentages of special health guidance completed: 70% in FY2022, 75% in FY2023	31.7%	×	

FY2023

Main Initiatives	KPIs
Thoroughly implement occupational safety and health and health management for employees	Quantitative New Work-related accidents: 0

Priority Activity | Respect for human rights

Proactively promote activities for human rights education	Quantitative Attendance of human rights training: 100%	NTT Communications Group: 96.1% NTT Communications Corporation: 97.1%	△	Increase participation in various human rights-related face-to-face events and training, with a focus on strengthening human rights training and implementing internal human rights due diligence
	Quantitative Human rights due diligence: more than once a year	Once Assessments conducted by external organizations for projects in areas with high country risk	○	
	Quantitative Human rights violations: 0 cases	1 case	△	

Proactively promote activities for human rights education	Quantitative Attendance of human rights training: 100%	
	Quantitative Human rights due diligence: more than once a year	
	Quantitative Human rights violations: 0 cases	

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



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.



FY2022

Main Initiatives	KPIs	Review	Assessment	Targets
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Priority Activity | Thorough compliance and risk management

Share high ethical standards and ensure compliance	Quantitative Serious compliance violations: 0 cases	0 cases	○	Establish a compliance infrastructure with solid integrity and address the following
Continuously enhance initiatives on compliance as a company that continues to be trusted	Quantitative Participation in Companywide compliance training: 100%	99.1%	△	<ul style="list-style-type: none"> ● Appropriately comply with relevant laws and regulations ● Continuously strengthen Groupwide cooperation to establish a foundation of corporate ethics ● Foster an open and transparent corporate culture ● Foster a new workstyle of integrity based on hybrid work
Corporate culture for maintaining and improving business ethics	Quantitative Percentage of employees reporting that their workplace has an open atmosphere: 97%	Average process response rate for related questions: 95.8%	△	
Continuously upgrade the risk management structure	Qualitative Promote Companywide risk management	<ul style="list-style-type: none"> ● Held Business Risk Management Committee meetings (twice) and subcommittee meetings (12 times) ● Submitted a quarterly report to the Executive Council (4 times) 	○	Designate and focus on geopolitical risk, information security, and corporate governance as key risks for FY2023

FY2023

Main Initiatives	KPIs
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Share high ethical standards and ensure compliance	Quantitative Serious compliance violations: 0 cases
Corporate culture for maintaining and improving business ethics	Quantitative Percentage of employees reporting that their workplace has an open atmosphere: 97%
Continuously upgrade the risk management structure	Qualitative Promote Companywide risk management

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



FY2022

Main Initiatives	KPIs	Review	Assessment	Targets
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Priority Activity | Enhanced value chain partnerships

Collaborate with suppliers to ensure thorough CSR and green procurement	Quantitative Response to SAQs (self-risk assessment surveys): 100%	Response: 100% Changed to conducting SAQs and strengthened partnerships by developing a scheme to conduct direct dialogue with suppliers	○	<ul style="list-style-type: none"> Striving for global standard supplier management, promote the dissemination of the Procurement Policy and Supply Chain Sustainability Promotion Guidelines, deepen mutual understanding through direct dialogue and briefing sessions, and work together with suppliers to promote initiatives The NTT Group plans to expand Scope 3 of "NTT Green Innovation toward 2040," and we therefore will promote understanding and the efforts of our business partners to reduce greenhouse gas emissions
	Quantitative Checks on procurement status of high-risk suppliers: 100%	100% implemented in all cases below <ul style="list-style-type: none"> Direct dialogue with key suppliers to confirm the status of their sustainability initiatives: 5 companies 	○	
	Quantitative Corrective response to suppliers associated with risk: 100%	<ul style="list-style-type: none"> Held individual meetings with 16 companies to exchange opinions on CO₂ reduction Briefing sessions for major suppliers in conjunction with the start of EcoVadis evaluations: approx. 120 companies 	○	
	Quantitative Percentage of direct dialogue with key suppliers conducted: 100%	<ul style="list-style-type: none"> Directly with manufacturers affected by the semiconductor shortage, regularly negotiated to continue production 	○	
Enhance stakeholder engagement	Qualitative Dialogue with stakeholders and response to their requests	<ul style="list-style-type: none"> Conducted dialogue with experts on the promotion of corporate citizenship, using pro bono activities as a subject (in March) Conducted dialogue with customers on sustainability in general through SAQ and by other means. 	○	Strengthen dialogue with all stakeholders, not just customers, on solutions to social issues

Priority Activity | Continuously strengthening information security

Continuously reinforce security management	Quantitative Number of serious security incidents: 0	<ul style="list-style-type: none"> Number of serious security incidents: 0 Completed introduction of EDR and NDR as measures against unauthorized access Held Security Committee meetings (4 times) to strengthen security governance Conducted an information security survey targeting seven NTT Communications organizations and two NTT Communications Group companies 	○	Work to improve IT governance by automating/improving efficiency/advancement of security operations and unifying IT/OT asset management
	Qualitative Conduct system audits and information security audits, implement security measures, and enhance the management structure			

FY2023

Main Initiatives	KPIs
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Collaborate with suppliers to ensure thorough sustainability and green procurement	Quantitative Percentage of direct dialogue with key suppliers conducted: 100%
Enhance stakeholder engagement	Qualitative Dialogue with stakeholders and response to their requests

Continuously reinforce security management	Quantitative Number of serious incidents involving external cyber attacks: 0 Qualitative Conduct system audits and information security audits, implement security measures, and enhance the management structure
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Achievement levels based on self-assessment ○: Achieved △: Partially achieved ×: Unachieved

FY2022					FY2023	
Main Initiatives	KPIs	Review	Assessment	Targets	Main Initiatives	KPIs
Appropriately manage personal information	<div>Quantitative</div> <div>Serious incidents of personal information leakage: 0 cases</div>	<div>Serious incidents of personal information leakage: 0 cases</div> <div>● Organized and integrated personal information-related regulations to unify and clarify the management organization for personal information and simplify content from the user's perspective</div> <div>● Introduced the Privacy Impact Assessment (PIA) system to facilitate appropriate use of data</div>	<div></div> <div>○</div> <div></div>	<div>Further establish effective lifecycle management through the centralized understanding of personal information by placing personal information control ledgers online, appropriately deleting personal information scattered in shared folders, and continuously monitoring management status within the Company</div>	<div></div> <div>—</div> <div></div>	<div></div> <div>—</div> <div></div>

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

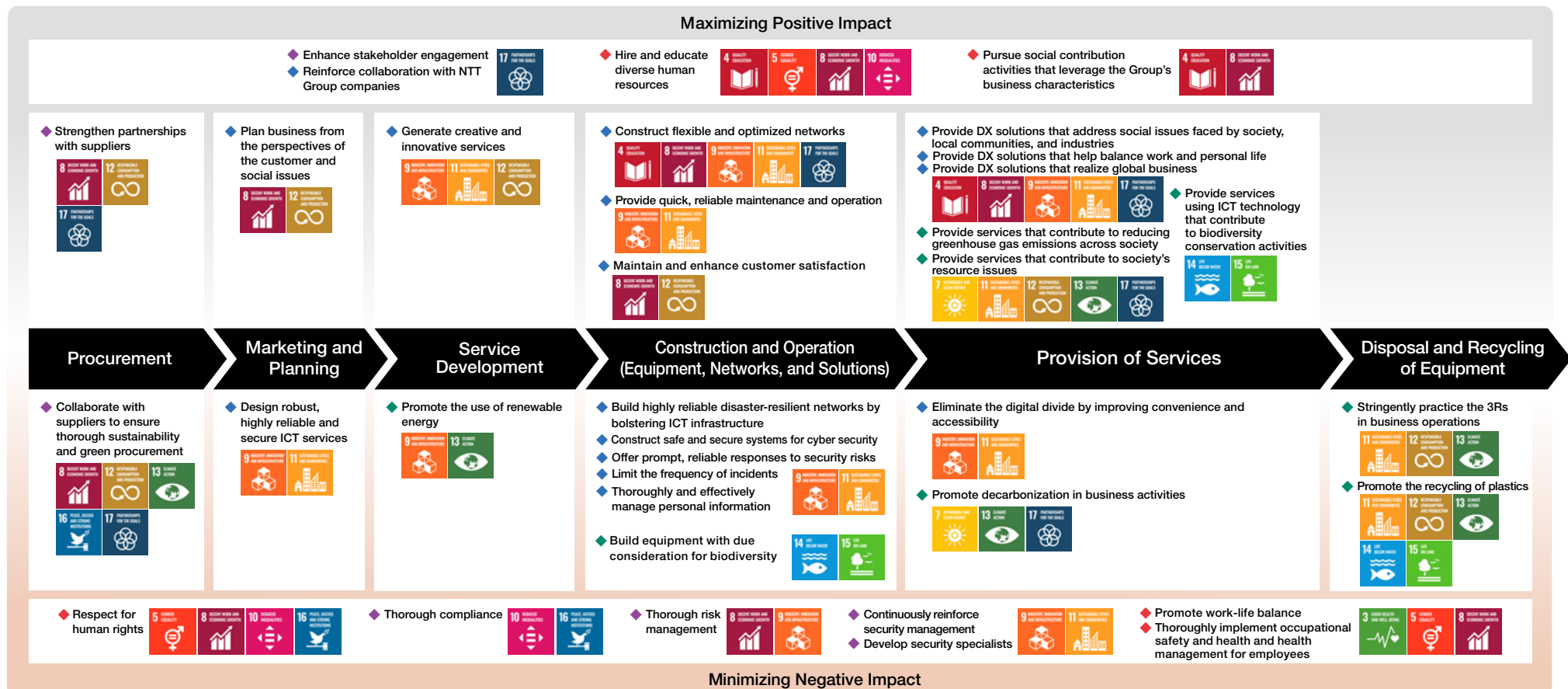


Initiatives for Realizing a Sustainable Future through the NTT Communications Group Value Chain

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 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





Relationship with the NTT Group

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 2022, we proactively shared and reported on initiatives and services beneficial from the perspective of sustainability.



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

<https://group.ntt/en/newsrelease/2021/11/10/211110d.html>

[NTT Group Sustainability Conference]



Relationship with External Entities

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.

Participation in External Organizations (Major Groups Only)

- Japan Climate Initiative (JCI)
- Japan Circular Economy Partnership (J-CEP)
- Green Purchasing Network (GPN)
- Okinawa Open Laboratory (Member of the Board)
- Advanced IT Architect Human Resource Development Council (Member of the Board)
- Internet Content Safety Association (ICSA) (Member of the Board)
- Security Promotion Council (SPREAD)

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 2022, we invited Ikuma Saga, Representative Director of Service Grant, a certified NPO with a proven track record in pro bono activities in partnership with companies, to take part in a dialogue with four employees, including the CSR Committee chairperson, on the theme of promoting corporate citizenship for each employee. Ongoing dialogue with experts by department personnel delegated by management to promote the sustainability strategy is shared with management as appropriate by the Sustainability Committee.



For details on dialogues involving management and outside experts, refer to the following link.

https://www.ntt.com/en/about-us/csr/dialog/dialog_2022.html



Society

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



Priority Activities

- ▶ 035 Promotion of DX to Connect Society with the Future
- ▶ 039 Promotion of Innovations that Break through Limits
- ▶ 041 ICT Transformation
- ▶ 045 Promotion of Corporate Citizenship





Priority Activities

Promotion of DX to Connect Society with the Future

Our Approach

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.

Main Achievements in Fiscal 2022 and Goals for the Coming Years

In fiscal 2022, we started offering new services that make use of networks, AI, 5G, IoT, and other technologies by leveraging the internal synergies of the NTT DOCOMO Group.

Drawing upon the CO₂ emissions forecasting and visualization features of our Smart Data Platform (SDPF) cloud server, we help customers forecast their CO₂ emissions based on their resource needs and other factors and review the results in a dashboard that displays their carbon footprint. Alkano, our no-code data analytics platform service, has been designed so that anyone, from beginners to data science experts and programmers, can easily use AI and machine learning. Our other services and solutions include Flexible Internet Gateway, a cloud-based secure web gateway service; COTOHA 1-on-1 Assistant, which supports management staff as they improve their skills for facilitating effective one-on-one meetings with the latest AI technologies; and ThingsCloud®, an IoT platform service. As part of our global business initiatives, we also opened a permanent showroom in Thailand, which allowed many customers to experience our 5G and IoT solutions.

We will continue to promote DX across society, industry, work/lifestyles, and global

businesses to promote a Smart World and help realize sustainable local communities.



Providing Services that Help Advance the Evolution of an ICT Society

Pursuing Our Mission to Realize a Smart World

The NTT Communications Group intends to facilitate the DX that will lead customers to create new businesses and bolster their competitiveness and to realize a Smart World in which social issues are resolved through the utilization of ICT. Effective use of digital data is one of the key factors for achieving DX. Through our Smart Data Platform, which enables customers to make full use of data, we will encourage our customers to promote DX in order to resolve social issues and achieve sustainable growth, which in turn will lead to generating new value through DX.

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 2022, to continue to provide customers with valuable IoT solutions combined with our services, we made value proposals for their business operation challenges and expanded the capabilities of our co-creation programs with partner companies.

In November 2022, as a result of our customer co-creation efforts, we started pilot testing to create use cases for next-generation medical care based on advanced technologies such as local 5G and self-driving robots. In February 2023, we started pilot

testing the use of smart road lamps to reduce traffic accidents on icy roads.

In terms of our co-creation programs with partner companies, we increased the number of participating companies in the Things Partner® Program to 50, as of March 2023, through online events and discussions on sector-specific areas for applying IoT during the COVID-19 pandemic. With the reorganization of the DOCOMO Group, approximately 5,500 participating companies in the NTT DOCOMO 5G Open Partner Program, as of March 2023, have also been added to our list, which will further strengthen our co-creation programs.

Following the reorganization of the DOCOMO Group in July 2022, we established a new structure to expand our services, and we now offer comprehensive one-stop services to support all aspects of IoT implementation, from introduction to operation.

In October 2022, we began offering a multiple mobile line redundancy solution for IoT devices, which combines DOCOMO IoT Managed Service and IoT Connect Mobile® Type S to provide multi-carrier redundancy. With this one-stop solution, our customers no longer need to separately purchase and operate each device to enjoy the benefits of a highly reliable network.

We will combine different IoT assets to help customers achieve DX through data utilization, while also strengthening our IoT solutions that contribute to ESG and GX.

Promotion of DX in Our Global Businesses

Following the reorganization of the global business operations of the NTT Group and NTT DOCOMO Group, NTT Communications is expanding its global reach together with its subsidiaries NTT Com Asia Limited, NTT Communications China, Shanghai NTT Telecommunications Engineering, and Mobile Innovation. To fuel the global expansion of our docomo business brand, Mobile Innovation in Thailand has set up a its Customer Experience Center as a showroom where visitors can try out some of our 5G and IoT solutions currently offered in Japan, including EDGEMATRIX® for the construction industry and AVATOUR® for the video industry. In collaboration with the other NTT Group companies involved, we will continue to contribute to DX in our global businesses by proposing and introducing our docomo business brand to a wide range of customers.



Promotion of Business Co-Creation for a Better Society

Our docomo business brand uses mobile and IoT technologies and other synergies of the new DOCOMO Group to help revitalize local communities together with our customers and local governments nationwide.

A major challenge facing local communities is a shortage of workers due to an aging and decreasing population, which calls for greater efficiency through DX. We will contribute across a wide range of sectors, including agriculture, fisheries, healthcare, transportation, and education, to addressing the challenges faced by each community and industry with the most effective solutions, thereby contributing to the realization of sustainable local communities.

Examples of Community Efforts to Promote Business Co-creation for a Better Society

- In January 2023, we started offering our NeWork as a new space for the Friendly Online program of the Kumamoto City Board of Education, which provides a virtual classroom for students who are chronically absent from school. The classroom is intended to enable students to communicate freely with each other and reduce their anxiety about being in group settings.

 For more details, see: <https://www.ntt.com/about-us/area-info/article/20221216.html>
(in Japanese only)

- We held the Niigata 2 km Virtual Walk from January 20 to March 31, 2023, in cooperation with a local computer college and other organizations. Visitors enjoyed virtual artworks that emerged against the actual backdrop of the city when they held up and looked with their smartphones at various spots where we had installed the AR artworks around the city.

 For more details, see: <https://www.ntt.com/about-us/area-info/article/20230113.html>
(in Japanese only)

- To support small and medium-sized enterprises moving to DX using 5G technology, we opened an exhibition space at the Kanazawa Mirai no Machi Creation Center, where visitors can experience our latest digital technologies for improving productivity and creating new businesses, and we held related seminars in December 2022 and January 2023 in cooperation with Kanazawa City and other organizations.

 For more details, see: <https://www.ntt.com/about-us/area-info/article/20221201.html>
(in Japanese only)

- In cooperation with the Kanazawa Marathon Organizing Committee, we provided the nation's first remote cheering system using AI technology at the Kanazawa Marathon 2022 in October 2022, which displayed pre-registered cheering messages when the relevant runners passed by, based on video analysis of their bib numbers.

 For more details, see: <https://www.ntt.com/about-us/area-info/article/20221021.html>
(in Japanese only)

- To realize a regional public transportation model to address the declining birthrate and aging population, we supported the operation of YOBERUN, a reservation-based shared-ride cab service launched by Iwakuni City in October 2022 after a pilot operation and discussions with local residents.

 For more details, see: <https://www.ntt.com/about-us/area-info/article/20221007.html>
(in Japanese only)

- We served as the secretariat of Digi-PoC TOYAMA, which focuses on resolving local issues through digital solutions and building business models. A debriefing session on the results of seven projects was held in March 2023. The program also started accepting applications in June of this year.

 For more details, see: <https://www.ntt.com/about-us/area-info/article/20230320.html>
(in Japanese only)

- From October 2022 to March 2023, we held international exchange classes between Fukuoka Prefecture's Yanagawa High School, which promotes international cross-cultural exchanges, and Thailand, using avatars to recreate classrooms in Japan and Thailand in the metaverse.

 For more details, see: https://www.ntt.com/about-us/area-info/article/20221021_2.html
(in Japanese only)



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 flexible access from anywhere to internal business systems, SaaS^{*1}, and websites scattered across on-premises^{*2} and public clouds^{*3}. However, many companies have been concerned over the cost and lead time required to implement solutions to create an ICT environment that addresses alternative working styles and new security threats.

In April 2021, NTT Communications launched Flexible Remote Access, a remote access service that allows employees to connect to these resources from anywhere, and Flexible Internet Gateway, a cloud-based Internet gateway service that enables users to configure security measures using high-performance, high-bandwidth UTM features. In the third quarter of fiscal 2023, we also plan to launch docomo business RINK™, a new integrated network service that offers a secure ICT environment based on the Zero Trust security model and supports diverse working styles.

The docomo business RINK™ service, providing multiple cloud-based security features and a variety of networks suitable for different work locations in a single package, can be introduced by any company. No specialized knowledge is required for design or configuration, thereby reducing the lead time and total cost of creating an ICT environment. The service also uses software-defined technology, a cutting-edge trend among global telecommunications providers for providing flexible, on-demand adjustment of bandwidth and configurations through a web portal. As a result, a

pleasant and productive working environment can be maintained even during high traffic conditions, such as when many employees are participating in a web conference from their offices.

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} In-house operation of information systems such as servers

^{*2} An open form of cloud computing environment that is provided to an unspecified number of companies or individuals

^{*3} 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

[docomo business RINK™]



Providing the Benefits of ICT to All

Now that ICT has become an indispensable social infrastructure, we are working with our Group companies and partners to realize DX across society and industry to resolve the issues facing our world today. This includes bridging the digital divide, allowing people all over the world to enjoy the benefits of ICT without any constraints related to where they live, their age, or economic standards. For example, in IoT we are working to create use cases that contribute to resolving such social issues 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/cotoha-cf.html> (in Japanese only)



Priority Activities

Promotion of Innovations that Break through Limits

Our Approach

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.

Main Achievements in Fiscal 2022 and Goals for the Coming Years

As in the previous fiscal year, we continued to promote the development and demonstration of new businesses in fiscal 2022. In April 2022, we started offering OsecT, which visualizes security risks in control systems, for commercial use under the OsecT wide-angle professional service. We are currently running a pilot demonstration for expanding the service for B2B2X. We are also generating value and demonstrating new businesses with medium- to long-term prospects, such as FinTech (Home Currency Anywhere), remote-controlled robotics, and space-related businesses.

In addition, we actively promoted innovation management in collaboration with internal and external parties. In fiscal 2022, we expanded the scope of DigiCom content, a new business creation content launched in 2016 for generating new businesses originating from employees, to include the DOCOMO Group, and held a ZERO ONE DRIVE contest. Starting in fiscal 2023, the contest will be held under the docomo STARTUP brand as a joint effort by the DOCOMO Group. We will continue to promote the development of new businesses, such as B2B2X model ventures based on data, and with our efforts to create new added value to bring about change.

Driving Creative Innovation

Promoting Creative and Innovative Smart X

• Innovation Center

The Innovation Center was established in 2020 to promote the creation of businesses with a medium- to long-term perspective for realizing a Smart World and contributing to the DX of our customers. The center is comprised of four divisions: the Technology Strategy Division, which works to gain technological superiority; the Design Division, which promotes customer-oriented management; the Technology Division, which drives the entire company with cutting-edge technologies; and the Produce Division, which leads the development of new businesses.

• Creating New Businesses

The Innovation Center has been creating a number of new businesses. OsecT, which visualizes and detects security risks in control systems for production lines, passed verification testing and was launched as a commercial service in April 2022. To expand the scope of its application, we are now confirming its technical and business feasibility with multiple companies. We have also developed and demonstrated Droppin, an instant search and reservation service for workspaces that best suit the needs of users, in partnership with various coworking spaces and private work booths to support flexible workstyles, as well as Home Currency Anywhere, a foreign currency exchange platform with guaranteed rates that dramatically accelerates



and improves cross-border business. Some of our next business projects under discussion from a mid- to long-term perspective are remote-controlled robotics and space-related businesses. We will continue to create new added value to bring about change and drive creative innovation and new businesses for realizing a Smart World.

Promotion of Innovation Management

Promoting Creative Innovation through Internal and External Collaboration

• Internal and External Collaboration

We believe that promoting internal innovation and co-creation and collaboration with external parties are essential for generating innovation and new businesses to resolve social issues. With this in mind, we are developing mechanisms for encouraging innovation.

In fiscal 2022, we expanded the scope of the DigiCom contest, which was originally started to encourage employees to innovate and to develop human resources and a corporate culture conducive for driving innovation, and it was relaunched under a new name, Zero One Drive, to unite the efforts of the entire DOCOMO Group. Moreover, as one way to encourage healthy competition with other companies, we hold the ExTorch open innovation program for co-creation of new value by drawing upon NTT Communications' extensive resources, including services, technologies, infrastructure, and data. ExTorch connects startup companies with our various internal departments to co-create new businesses.

• Creating Data-Centered Businesses

We are also co-creating with other companies to develop businesses that use data based on the B2B2X model. Node-AI, an AI development assistance tool and a mechanism for optimizing AI that was developed by the Innovation Center, led to the provision of the AI Plant Operation Assistance Solution, developed through collaboration with the Yokogawa Solution Service Corporation.



See also CASE 01: Accelerated Problem-Solving through Social Implementation of Node-AI in this report.



Priority Activities

ICT Transformation

Our Approach

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)





Main Achievements in Fiscal 2022 and Goals for the Coming Years

In preparation for the arrival in Japan of diplomats from various countries for a government-sponsored event in fiscal 2022, we took every precaution to ensure that our telecommunications facilities were properly protected and that we were ready to act quickly and effectively in the event of any incidents. These special security and maintenance efforts contributed to a successful, problem-free event.

In addition, we have clarified the required roles, competencies, and skills of employees in charge of disaster response and established a new certification system. Under the system, we will develop highly specialized human resources by indicating the direction and roadmap for improving their training and skills.

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 2023, we will continue to strengthen our network security by promoting 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 in IT as well as OT environments, regardless of enterprise scale.

*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.

Development of Disaster-Resilient Networks

Keeping Networks Reliable Following Disasters

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 that started on August 3, 2022, caused extensive damage in the Tohoku and Hokuriku regions of Japan. The heavy downpour collapsed a road, consequently damaging several backbone relay cables between Yamagata and Fukushima on August 3 and between Fukui and Shiga on August 5. To restore the cables, we built new relay cable lines that bypassed the collapsed areas between those regions on August 8 and 10, respectively, and all within five days of the disaster.

[Damaged road between Yamagata and Fukushima]



[Damaged road between Fukui and Shiga]





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> (in Japanese only)

Providing Services that Underpin Corporate Business Continuity

Offering a range of services to respond to such crises as major earthquakes and pandemics, NTT Communications supports the continuity of its customers' businesses. For example, earthquake early-warning information is provided through a service and includes details about seismic intensity and arrival time before the tremors are felt. As the service enables initial damage prevention and ensures personal safety, it is considered effective for formulating a business continuity plan (BCP), since business restoration can be expected soon after an earthquake. A service that simultaneously reports personal safety confirmations both verifies and gathers information on the safety of employees during a pandemic or natural disaster. Available on a routine basis via communications networks, it is also effective in confirming the safety of school contact networks and elderly persons as well as for simultaneously contacting employees dispatched to client companies.

In addition to these services to protect the personal safety of customers, 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 began offering a one-stop solution for multi-carrier redundancy in December 2022 to enable companies that use IoT in their business development to construct robust networks.

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]



See also CASE 5: Submarine Cables that Connect the World to the Future in this report.



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.

As remote work became increasingly widespread due to the COVID-19 pandemic in fiscal 2021, we realized we had truly entered the era of zero trust. One major change we observed was the increased business use of smart devices. This led us to develop and provide Anshin Mobile Security for Business, an MTD*¹ that offers the same level of protection against cyber-attacks as for conventional PCs. To counter new threats arising from the shift to the cloud, we started offering Managed CSPM*² to provide enhanced cloud security for customers by visualizing the

status of IaaS*³ misconfigurations and compliance. In response to the increasing frequency and sophistication of cyber-attacks and the persistent shortage of security personnel, we have also launched Managed SOAR*⁴ for automated incident response from the detection to handling of cyber-attacks. We will continue to contribute to customer DX by providing solutions for safely using data and generating new value.

*1 Mobile Threat Defense: A solution that blocks the download of malicious apps, malware infection, and phishing sites that steal personal information.

*2 Cloud Security Posture Management: A solution that automatically assesses and monitors various settings in a cloud environment to ensure compliance with security policies.

*3 Infrastructure as a Service: A business model that delivers IT infrastructure such as computing, storage, and network resources via the Internet.

*4 Security Orchestration, Automation and Response: A solution to streamline and automate security operations by consolidating and analyzing data from various products, platforms, and external sources, and by taking action through pre-defined processes.

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



Priority Activities

Promotion of Corporate Citizenship

Our Approach

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.

[Social Action Principles]

Sustainability	We conduct lean but sustainable activities over the long term
Efficiency	We engage in cost-effective activities to ensure continuity.
Due Diligence	We carefully assess the relative benefit to society of prospective donations.
Global Perspective	We contribute to Japan and the international community.
Skills	We utilize services developed for information distribution markets as well as employee abilities gained in those markets for the benefit of society.

Main Achievements in Fiscal 2022 and Goals for the Coming Years

We conduct social contribution activities that support a sustainable future. Ten community engagement projects carried out in fiscal 2022 included the CO₂ Emissions Reduction Challenge as a Groupwide environmental protection initiative as well as pro bono activities. We will continue to provide an environment that encourages more employees to take part in social contribution and volunteer activities, and expand these opportunities.

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 2022, 4,134 employees participated in 115 social contribution activities, some of which were canceled or reduced to contain the spread of COVID-19.

[Social Contribution Activities in Fiscal 2022]

	Number of Projects	Number of Participants	Activity Expenditure (Yen)
Preservation of the Natural Environment	26	3,348	14,860,321
Social Welfare	43	529	2,292,767
Promotion of Education and Culture	14	81	3,551,750
Regional Development and Exchange	25	176	20,163,212
International Exchange	1	—	247,000
Others	6	—	5,370,000
Total	115	4,134	46,485,050



Environmental Protection Efforts

When we launched the Green Program for Employee app, which visualizes the amount of CO₂ emitted from daily life and promotes eco-action by employees, we first introduced it to the NTT Communications Group in November 2022, and we held the CO₂ Emission Reduction Challenge to promote its use Groupwide. The event drew about 2,300 employees, who used various app features, such as Eco-Efficiency Assessment, Dietary Record, Eco Action Registration, and Eco Quiz, to raise environmental awareness and encourage changes in daily behaviors to reduce CO₂ emissions.

In addition, NTT Communications has participated in cleanup campaigns in Tokyo's Chiyoda Ward since 2008. These events were suspended to prevent the spread of COVID-19 and then resumed in November 2021. Employees and partner employees working at our headquarters building also pick up empty cans and cigarette butts dumped around the building each morning on their way to work to keep the area clean. We will continue these cleanup activities.

Pro Bono Activities

The NTT Communications Group promotes pro bono activities that apply the expertise of its employees.

As a member of the new DOCOMO Group, the NTT Communications Group participated in a pro bono project sponsored by NTT DOCOMO. Nine employees from the NTT Communications Group

participated in helping three organizations resolve some of their issues over about four months starting in October 2022. They conducted surveys, proposed necessary actions, and created promotional tools for each organization. Project members commented that although managing both work and the project was a challenge, participation in the project helped improve skills, and that having the opportunity to communicate with a wide variety of people from the supported organizations and members of the pro bono project was very valuable and inspiring.

In June 2022, NTT Com Engineering Corporation gave a special lecture, Diversity Management Initiatives in the Information and Communication Technology Industry, for Chuo University's Diversity Management Course. The company monitors and maintains international submarine cables 24 hours a day, 365 days a year at its Cable Network Operation Center (Cable NOC). The speaker discussed the importance of submarine cables as communication infrastructure and explained how the Cable NOC team, consisting of diverse members from more than ten countries, approaches and manages diversity in their work. Cable NOC members participated online to help students better understand the realities of the workplace. After the lecture, many students asked questions about diversity and inclusion in organizational and team management, displaying a different level of enthusiasm and inquisitiveness compared to those in internships and the like.

We believe that engaging in pro bono activities as a way to contribute to society creates a virtuous cycle in which employees can develop their careers and achieve personal growth while also generating new

value through business and addressing social issues. NTT Communications will continue to actively engage in pro bono activities.

[Special lecture given at Chuo University]





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 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.

[Major Social Contribution Activities at Group Companies in Fiscal 2022]

Company Name	Activity
NTT BizLink	Live streaming of graduation ceremonies by deploying the company's video streaming technology for those unable to attend, including parents, other relatives, and current students, during the COVID-19 pandemic, and live streaming for parents who could not go to Sports Day because admission had been limited due to the pandemic
NTT Com Engineering	Free lecture entitled "Diversity Management Initiatives in the Information and Communication Technology Industry" at Chuo University
NTTCom Online Marketing Solutions	Selling used books collected from employees and donating the proceeds to support education for girls in developing countries
N.F. Laboratories	Providing free lectures on security to academic institutions such as technical colleges and universities
NTT Com DD	Sending Christmas cards and gifts to children via World Vision's Child Sponsorship Program
NTT Com Asia	Organizing the local cleanup Green Action Caravan as a contribution to global environmental preservation
DOCOMO Business Solutions	Participation in activities of the paddy future support team to plant rice
NTT Communications Group	Organizing group events for the CO ₂ emissions reduction challenge
	Participation in the Shirai Woodland Preservation Project
	Cleanup campaigns in Tokyo's Chiyoda Ward
	Conducting the dementia supporter training courses
	Holding a sale of sweets made where people with disabilities are on the staff

[A graduation ceremony streamed using NTT BizLink's video streaming technology]



[Local cleanup Green Action Caravan, organized by NTT Com Asia]





Environment

Achieving carbon neutrality for a green and sustainable future

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 a rapidly changing global environment and accompanying 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



Priority Activities

- ▶ 049 Basic Philosophy and Vision
- ▶ 051 Environmental Management
- ▶ 056 Promotion of a Decarbonized Society
- ▶ 067 Development of a Closed-loop Society
- ▶ 070 Co-existing with Nature
- ▶ 075 Prevention of Environmental Pollution





Basic Philosophy and Vision

While emphasizing the philosophy in the NTT Group Global Sustainability Charter, established by the NTT Group, our environmental protection activities take shape as the NTT Communications Group Global Environmental Charter 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.



For more information on the NTT Communications Group Global Environmental Charter, see:
<https://www.ntt.com/about-us/csr/eco/details.html>

Environmental Statement and Eco Strategy 2030

Under the NTT Communications Group Environmental Statement and Eco Strategy 2030, we have continued to strengthen our environmental activities while closely monitoring global trends. 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.

In May 2023, the NTT Group announced its new medium-term management strategy for achieving carbon neutrality by fiscal 2040 with net-zero emissions from its own operations as well as from its supply chains (Scope 3). The NTT DOCOMO Group subsequently declared in November 2023 its commitment to the Net-Zero by 2040 plan. The NTT Communications Group will implement concrete measures toward the goal of the Net-Zero by 2040 plan by providing pioneering technologies and services, and all our employees around the world will unite in promoting environmental activities to realize a future in which people and the planet exist in harmony.

*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)

The NTT Communications Group Environmental Statement

We are dedicated to global environmental management for a future in which people and the planet remain in harmony, and

we will address three futures by providing technologies and services that pioneer eras.



Realizing a Decarbonized Future

We are contributing to the reduction of CO₂ emissions and facilitating adaptation to climate change risk.



Implementing Closed-loop Recycling

We are working toward more effective resource allocation.



Planning a Future of Natural Harmony




We are contributing to the preservation of ecosystems.



Eco Strategy 2030

Under Eco Strategy 2030, we have set out specific initiatives*¹ to help realize the three futures outlined in the Environmental Statement, based on the NTT Group's Environment and Energy Vision.

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%.

Three Futures We Are Targeting	Initiative	
 Realizing a Decarbonized Future	Rate of renewable energy use in the Company* ²	We will increase the rate of renewable energy use in the NTT Communications Group to 50% or more. (→ Scopes 1 and 2: 100% by fiscal 2030)
	Reducing GHG emissions from the Company (Scopes 1 and 2)	We will reduce GHG emissions in the NTT Communications Group by 50% compared to fiscal 2018* ³ . (→ Scopes 1 and 2: carbon neutrality by fiscal 2030)
	Reducing GHG emissions from the supply chain (Scope 3)	We will reduce GHG emissions from the supply chain by 15% compared to fiscal 2018. (→ Scopes 1, 2, and 3: Net-Zero by 2040)
	Conversion rate of our corporate fleet to EVs in Japan (%)	We will make EVs account for 100%* ⁴ of our corporate fleet used in Japan.
	Contributing to the reduction of GHG emissions across society	We will contribute to reducing GHG emissions across society by at least 10 times more than the NTT Communications Group's own emissions.
	Adapting to climate change	We will play our part in adapting to climate change by actively promoting initiatives through all our activities and by collaborating with our stakeholders.
 Implementing Closed-loop Recycling	Landfill waste disposal ratio	We will set our target for increasing the landfill rate of the waste generated by the NTT Communications Group to at least 99%.
 Planning a Future of Natural Harmony	Preservation of ecosystems	We will play our part in preserving ecosystems by actively promoting initiatives through all our activities and by collaborating with our stakeholders.

*¹ Quantitative targets for fiscal 2030. The scope of these targets set in March 2021 encompasses NTT Communications Corporation and 15 Group companies.

*² Including the amount used by customer equipment at the data centers

*³ Equivalent to 1.5°C SBT

*⁴ 50% by fiscal 2025 as the starting point. Following the reorganization with the then-NTT DOCOMO Group in July 2022, the target interim fiscal year was revised due to the acceptance of corporate fleet vehicles from the Group.



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 Sustainability Management 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.

Sustainability Office coordinates responses to the TCFD and TNFD and related activities of the NTT DOCOMO Group as a whole, along with other issues, under the Group's sustainability management.

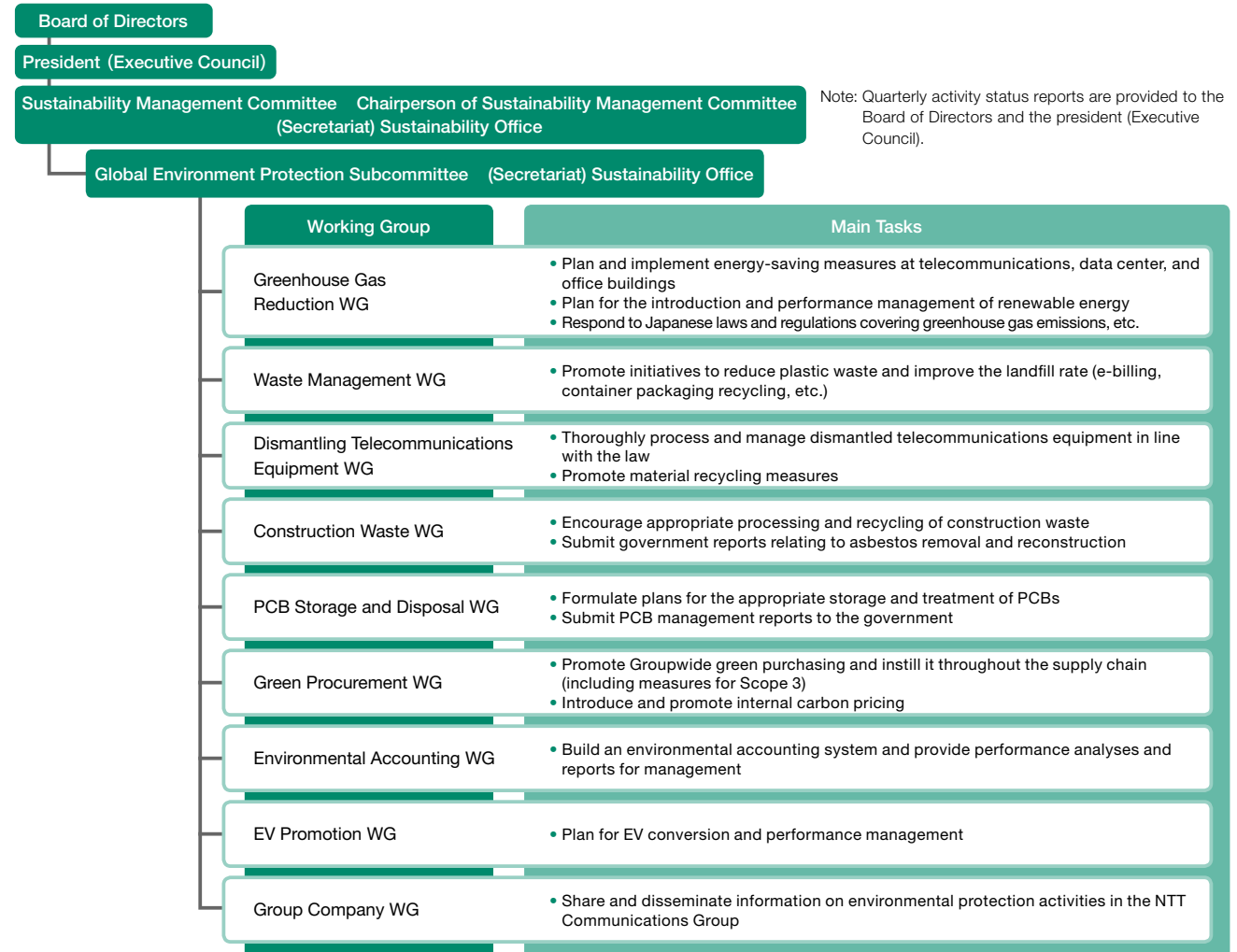
We believe that our approach to environmental issues is a key aspect of our business risk management. To that end, our Business Risk Management Committee, consisting of the senior executive president and other senior executives, assesses all potential risks and discusses appropriate measures to address them.

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

P019 For more information on our approach to sustainability management, see the "Sustainability Management" section of the report.

P112 For more information on our approach to business risk management, see the "Risk Management" section of the report.

[Environmental Protection Framework]



(As of March 31, 2023)



Environmental Impact of Business Activities

Fiscal 2022 Material Flow

Environmental Impact of Business Activities

INPUT

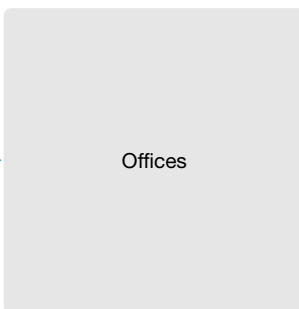
Energy	Power	5.0 hundred million kWh
	Green power	2.4 hundred million kWh
	Fuel	118 ten thousand ℓ
	Gas	16 ten thousand m³
	Heat	165 ten thousand MJ
Water resources	Water	23.6 ten thousand m³



OUTPUT

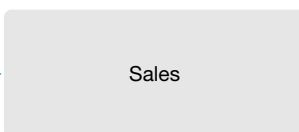
GHG emissions	Power	11.7 ten thousand tons-CO ₂ e
	Fuel	0.32 ten thousand tons-CO ₂ e
	Gas	0.03 ten thousand tons-CO ₂ e
	Heat	0.01 ten thousand tons-CO ₂ e
Waste generated and recycled*	General waste generated	463 t
	General waste recycled	449 t
	Industrial waste generated	2,237 t
	Industrial waste recycled	2,233 t
Wastewater	Total wastewater volume	23.6 ten thousand m³

Energy	Power	0.3 hundred million kWh
	Green power	0.16 hundred million kWh
	Heat	3,492 ten thousand MJ
Water resources	Water	8.8 ten thousand m³
Others (office supplies)	Paper	121 t
	Recycled paper and eco-friendly pulp	118 t



GHG emissions	Power	0.5 ten thousand tons-CO ₂ e
	Heat	0.2 ten thousand tons-CO ₂ e
Waste generated and recycled*	General waste generated	284 t
	Plastic waste generated	22 t
	General waste recycled	273 t
	Industrial waste generated	451 t
	Plastic waste generated	28 t
Wastewater	Industrial waste recycled	443 t
	Total wastewater volume	8.8 ten thousand m³

Energy	Fuel (automobile)	16.3 ten thousand ℓ
Others (office supplies)	Paper (brochures)	13 t
	Invoices	123 t



GHG emissions	Fuel	0.04 ten thousand tons-CO ₂ e
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Scope: NTT Communications Corporation and 17 Group companies

*We separate waste insofar as possible to improve the recycling rate. Note that waste volumes in this table do not include construction waste.



Environmental Accounting in Fiscal 2022

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

The total amount of environmental conservation cost in fiscal 2022 was approximately 3.63 billion yen, consisting of around 2.27 billion yen in investments and about 1.36 billion yen in expenses. Despite an increase in our introduction rate of renewable energy (including virtually renewable energy using non-fossil fuel certificates), global environmental conservation costs (expenses) decreased because of a decline in the unit price of renewable energy. On the other hand, an increase in global environmental conservation costs (investments) mainly due to the replacement of air-conditioning systems that consume a significant amount of electricity led to an increase in total expenses by approximately 1.04 billion yen from the previous fiscal year.

The economic benefit derived from environmental conservation in fiscal 2022 increased by approximately 210 million yen year on year to 1.73 billion yen, mainly due to increased reductions in electricity rates resulting from energy conservation measures.

[Environmental Conservation Costs (Categories Corresponding to Business Activities)]

(Millions of Yen)

Category	Key Measures		Investment		Expenses*	
			FY2021	FY2022	FY2021	FY2022
(1) Business area cost			942	2,234	1,549	1,250
Breakdown	Pollution prevention costs	Oil tank facility for power generator use Management of items using PCBs	198	353	93	76
	Global environmental conservation costs	Measures to reduce GHG Emissions resulting from electricity use	744	1,881	600	467
	Resource circulation costs	Waste disposal and reuse expense	0	0	856	707
(2) Upstream/downstream costs		Measures to recover, recycle, and reuse telecommunications equipment	32	39	1	1
(3) Administration costs		Environmental conservation management activities	0	0	70	79
(4) R&D costs		Allocated portion of the NTT Group's environmental R&D costs	0	0	0	23
(5) Social activity costs		Costs of supporting volunteer participation	0	0	2	7
(6) Environmental remediation costs			0	0	0	0
Total			974	2,272	1,622	1,360

*Not including depreciation

Scope: NTT Communications Corporation and 17 Group companies)

[Economic Benefits Associated with Environmental Conservation Activities (Actual Benefits)]

(Millions of Yen)

Category	Key Measures	FY2021	FY2022
Revenue	Revenues from sales (cables, metal scrap, etc.)	374	341
Cost reductions	Reductions in expenses as a result of measures such as those related to reducing electricity use	401	691
	Reductions in purchase cost as a result of reusing dismantled telecommunications equipment	274	174
	Decrease in postal and paper costs due to increased use of Mypage (online account page)	470	521
	Others	1	4
Total		1,521	1,731

Period: April 1 to March 31 of each year

Scope: NTT Communications Corporation and 17 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

Acquiring ISO 14001 Certification

Three companies in the NTT Communications Group have acquired ISO 14001 certification as of March 31, 2023. 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.

[Companies Certified under ISO 14001*1]

Organizations Certified		Date Certified
NTT Communications Corp*2	Procurement and Billing Department	October 1999
	Business Solution, Solution Services Department	March 2004
NTT Com DD Corporation		June 2012
NTTPC Communications, Inc.	Service Creation Division, System and Service Integration Department, System and Service Integration Group, Supplier Business Team	November 2003
	Technology and Operations Development Division, Business Process Service Department development and operation Group Service delivery team	

(As of March 31, 2023)

*1 Percentage of employees or target organizations to total Group employees: 13%

*2 Percentage of employees of target organizations to total employees: 25%

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 Sustainability Management 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 2022.

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

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

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 and an environmental conservation element of the procured item. The standards also include a request for cooperation from our suppliers in reducing GHG emissions as well as initiatives equivalent to SBTs to RFP conditions at the time of procurement and KPI management to ensure concrete and effective operations. In addition, we conducted a supplier self-assessment questionnaire (SAQ) mainly targeting the top 90% of suppliers in procurement value and suppliers of critical components to determine compliance with environmental and other relevant guidelines and technical requirements as part of the NTT Group, and we held interviews in person with some of these suppliers. These activities helped confirm that our suppliers are accelerating their efforts to obtain SBT certification and reduce GHG 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.

Utilization of Internal Carbon Pricing

NTT Communications has been utilizing internal carbon pricing (ICP) since September 2022 to guide investment decisions. For example, we applied an internal carbon price (6,500 yen/t-CO₂e) in fiscal 2022 when investing in capital equipment that can reduce GHG emissions. More specifically, ICP is applied for procuring network equipment and other necessary items. We will continue to use ICP to achieve net-zero emissions.

Sharing of Green Procurement Policies

We have posted our NTT Communications Corporation Guidelines for Sustainability in Supply Chain and Green Procurement Guidelines on our official website to share with suppliers our basic approach and requirements for procuring environmentally sound parts and products.

We will continue to closely communicate with our suppliers and work together to promote green procurement.

Fostering a Sense of Environmental Stewardship

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 2022, we conducted sustainability training for all employees (94.6% attendance), held workshops on the SDGs and business activities, and shared articles on our environmental activities with employees to deepen understanding of domestic and international social trends such as the SDGs, ESG investment, decarbonization efforts, and global risks. In November 2022, we conducted the CO₂ Reduction Challenge as an internal campaign for all employees. The campaign was intended to raise environmental awareness and encourage responsible conduct using the Green Program for Employee™, an app that visualizes CO₂ emissions from daily life and promotes eco-action, leading to further reductions in CO₂ emissions. In a follow-up survey, about 80% of the respondents reported that the campaign had raised their environmental awareness, and about 70% noted that they had been acting more responsibly toward the environment.

We are also 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 importance of co-existing with nature, we have conducted a range of environmental awareness and educational activities, including cleaning up around our offices 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 year-round. In fiscal 2023 and

beyond, we will continue to promote initiatives in which many employees can easily take part.

[Screen images of Green Program for Employee]



[Chiyoda Ward Cleanup Day]



[Shirai Woodland Preservation Project]





Priority Activities

Promotion of a Decarbonized Society

Our Approach

While the advance 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 (GHG) 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 GHG 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 GHG emissions from our Groupwide business activities toward achieving carbon neutrality for Scopes 1 and 2 by fiscal 2030 and net-zero emissions across Scopes 1, 2, and 3 by 2040.

Since electricity consumption accounts for more than 90% of total CO₂ emissions from business activities of the NTT Communications Group, 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.

Main Achievements in Fiscal 2022 and Goals for the Coming Years

In fiscal 2022, 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 by 4.3 times that of fiscal 2013, making steady progress toward achieving the target of an increase of 10 times more 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 GHG emissions was 17.1 times the volume of our own GHG emissions, thereby exceeding our fiscal 2030 target of a reduction of 10 times the volume.

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 48.6% in fiscal 2022. In fiscal 2023, 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 for Scopes 1 and 2 by fiscal 2030 and net-zero emissions across Scopes 1, 2, and 3 by 2040.



Climate Scenario Analysis and Initiatives

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). Following our new beginning as the NTT DOCOMO Group in July 2022, we conducted a fresh scenario analysis as a member of the DOCOMO Group in addition to our conventional analysis as a member of the NTT Group, and based on the results, we examined our efforts and actions as the NTT Communications Group. The analysis of the DOCOMO Group adopted two scenarios of climate-related risks and opportunities associated with the Group's operations: a well-below 2°C (e.g., 1.5°C) scenario of rapid decarbonization and a 4°C warmer scenario assuming apparent physical impacts.

Taking into account the DOCOMO Group's scenario analysis as an alternative perspective, we will continue to adopt various approaches for decarbonization and net-zero emissions, including our choice of scenario models.

*Reference scenarios

- A scenario assuming rapid decarbonization: IEA (International Energy Agency) World Energy Outlook 2018 Sustainable Development Scenario (SDS), and IEA Energy Technology Perspectives 2017 Beyond 2°C Scenario (B2DS)
- A scenario assuming apparent physical impacts: IPCC (Intergovernmental Panel on Climate Change) Fifth Assessment Report, and IPCC Special Report on Global Warming of 1.5°C

P019 For more information on related risk management initiatives, see the "Sustainability Management" section of the report.

P022 For more information on indicators and targets, see the "Indicators and Targets" section of the report.

[Risks and Opportunities Identified with Scenario Analysis, and a Summary of the Group's Initiatives]

			Potential Impact on Business (Risks and Opportunities)	Materiality (Business/Financial)	Timeframe	Initiatives by the NTT Communications Group
Well below 2°C scenario (e.g., 1.5°C scenario)	Transition risk	Policies/regulations	Carbon price/carbon tax <ul style="list-style-type: none"> Increased costs due to the introduction of a carbon tax Increased operating costs from purchasing carbon credits (emission allowances) Impact of carbon tax on procurement prices (equivalent to Scope 3) 	High	Long term	<ul style="list-style-type: none"> Reducing GHG emissions by improving the power efficiency of air-conditioning and IT equipment at data centers through new technologies (Green Nexcenter*) and by implementing power reduction measures Actively introducing renewable energy (including virtually renewable energy by using non-fossil fuel certificates) to achieve carbon neutrality by fiscal 2030 Introducing internal carbon pricing Introducing Net-Zero by 2040 plan
		Increased policies and regulations for products and services	<ul style="list-style-type: none"> Possibility of products not meeting energy efficiency regulations/standards, resulting in a loss of government or other customers, shifting demand to more satisfactory products/services 	Medium	Long term	<ul style="list-style-type: none"> Early launch of services based on customer trends and social needs <ul style="list-style-type: none"> Providing green power menu in data centers Visualizing CO₂ emissions in cloud services Providing PFs and solutions for decarbonization
	Industry/market	Energy price fluctuations	<ul style="list-style-type: none"> Increased energy prices and a shift in demand to energy-efficient products and services 	High	Long term	<ul style="list-style-type: none"> Reducing GHG emissions at data centers by improving the power efficiency of air-conditioning and IT equipment at data centers through new technologies (Green Nexcenter*) and by implementing power reduction measures Securing stable power sources through long-term fixed contracts with power companies, development of special power sources (e.g., PPA), etc. Promoting IOWN Initiative
		Changes in customer reputation, demands, and behavior	<ul style="list-style-type: none"> Customer disengagement and damaged corporate image if our efforts are perceived as passive Shift in customer needs toward services with better environmental performance 	Medium	Long term	<ul style="list-style-type: none"> Disclosing the 2030 carbon neutrality target and introducing renewable energy ahead of schedule Early deployment of services based on customer trends and social demands <ul style="list-style-type: none"> Green power menu at data centers Visualizing CO₂ emissions in cloud services Providing PFs and solutions for decarbonization Participating in carbon credit projects
4°C scenario	Physical risks	Chronic	Increased average temperatures and midsummer days <ul style="list-style-type: none"> Possibility of customers not choosing us for data center and network equipment with low air-conditioning management efficiency and capacity 	Medium	Long term	<ul style="list-style-type: none"> Reducing GHG emissions by improving the power efficiency of air-conditioning and IT equipment at data centers through new technologies (Green Nexcenter*) and by implementing various power reduction measures. Latest cooling technology to be offered commercially in selected data centers by the end of fiscal 2023. To be expanded in the future Promoting IOWN initiative
		Acute	Severe extreme weather conditions <ul style="list-style-type: none"> Damaged data centers due to flooding Damaged reputation from lack of resilience to disasters 	Medium	Short term	<ul style="list-style-type: none"> Reliable risk assessment when selecting a construction site Redundant facilities based on disaster simulation Securing multiple power supply routes assuming power supply interruption Reviewing and establishing equipment procurement plans addressing the risk of flooding at manufacturing plants

High materiality: Extremely important in climate action for business continuity and financial reasons

Medium materiality: Relatively less important, although potentially damaging

Low materiality: Limited impact on business, including future prospects

Timeframe: Short term (less than 3 years)

Timeframe: Medium term (less than 3 to 6 years)

Timeframe: Long term (6 years or more)

*For more information on our Green Nexcenter and future plans, see: https://www.ntt.com/about-us/press-releases/news/article/2023/1004_2.html (Japanese only)

For more information on our other initiatives, see: <https://www.ntt.com/en/about-us/csr/sustainability/policy/environment/report01.html#anc2>



Calculation of GHG Emissions (Fiscal 2022 Results)

For Scope 3, we calculated emissions by referring to unit emission databases and other materials produced through studies by the Ministry of the Environment and other government ministries and agencies.

[GHG Emissions by Scope and Category]

Category		Composition Ratio (%)	GHG Emissions (ten thousand tons-CO ₂ e)
Total emissions		100	216.1
Scope 1 (direct emissions of greenhouse gases from our own sources, such as fuel combustion)*1		0.3	0.6
Scope 2 (indirect emissions from the use of electricity, heat, and steam supplied by other companies) (market-based))*2		5.8	12.4
Scope 3 (indirect emissions other than Scopes 1 and 2, such as emissions by others related to activities of the NTT Communications Group)			203.1
	Category 1 (purchased goods and services)*3, 4	33.7	72.8
	Category 2 (capital goods)*3, 4	13.6	29.5
	Category 3 (fuel and energy activities not included in Scopes 1 or 2)	1.7	3.8
	Category 4 (upstream transportation and distribution)	0.5	1.1
	Category 5 (waste generated through business activities)	0.0*8	0.0*8
	Category 6 (business travel)*3	0.3	0.5
	Category 7 (employee commutations)*2	0.0*8	0.0*8
	Category 8 (upstream leased assets)*5	—	—
	Category 9 (downstream transportation and distribution)*6	—	—
	Category 10 (processing of products sold)*7	—	—
	Category 11 (use of products sold)*3	30.8	66.6
	Category 12 (disposal of products sold)	0.1	0.3
	Category 13 (downstream leased assets)	13.2	28.5
	Category 14 (franchise)*9	—	—
	Category 15 (investments)*10	—	—

*1 Includes emissions of greenhouse gases other than CO₂, such as CFC substitutes

*2 Emissions associated with electricity are calculated using emission factors obtained from electric power companies.

*3 We revised the calculation method for categories 1, 2, 6, 7, and 11 of Scope 3 to improve accuracy from FY2021 results.

*4 Calculated by multiplying each supplier's transaction amount by their emissions intensity (calculated from their disclosed data) or by the emissions intensity according to the transaction details.

*5 Counted for calculation, but no results were available (fuel and electricity used by leased assets are calculated under Scope 1 or 2)

*6 Counted for calculation, but no results were available (mostly outsourced transportation calculated under category 4)

*7 Counted for calculation, but no results were available (no intermediate product processing in main businesses)

*8 Less than 0.05

*9 Counted for calculation, but no results were available (not applicable)

*10 Counted for calculation, but no results were available (calculated in Scope 1 or 2) Scope: NTT Communications Corporation and 17 Group companies



Reduction of GHG

Fiscal 2022 Results

Fiscal 2022
Target**14.0** ten thousand tons-CO₂e or lower(The target of 2.8 ten thousand tons-CO₂e for the three Group companies that have been consolidated since the third quarter of FY2022 was added to the initial target of 11.1 ten thousand tons-CO₂e*.)

*YoY -20%

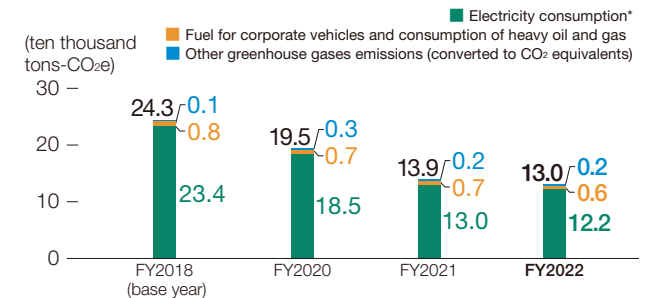
Fiscal 2022
Result**13.0** ten thousand tons-CO₂eIncludes emissions of greenhouse gases other than CO₂, such as CFC substitutes

We were able to meet our GHG emissions target (Scopes 1 and 2)* for fiscal 2022, mainly by expanding the introduction of renewable energy (including virtually renewable energy by using non-fossil fuel certificates), while further striving to save energy in telecommunications facilities and data centers and promoting remote work, which resulted in a decrease in power consumption in offices. The GHG emissions per unit of sales were 0.11 t-CO₂e per millions of yen (fiscal 2021 result: 0.13 t-CO₂e per millions of yen).

In fiscal 2023, 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 GHG emissions by 10% from the previous fiscal year. Through these efforts, we plan to become carbon neutral by fiscal 2030, with net-zero GHG emissions generated by our data centers, networks, and other facilities.

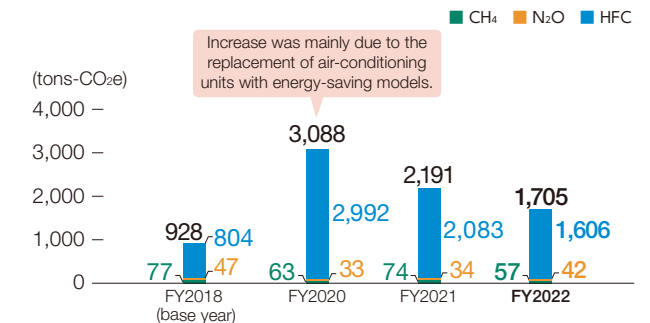
*Emissions related to electricity are calculated using emission factors obtained from electric power companies.

[GHG Emissions from Business Activities]



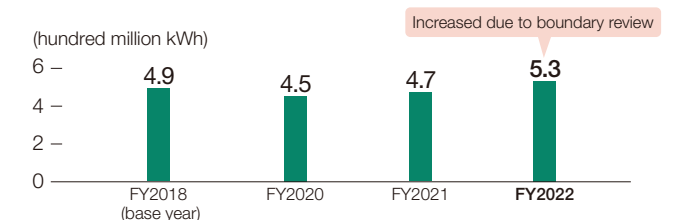
Scope: NTT Communications Corporation and 17 Group companies

*Emissions associated with electricity are calculated using emission factors obtained from electric power companies.

[Other GHG Emissions* (Converted to CO₂ Equivalents)]

Scope: NTT Communications Corporation and 17 Group companies

[Power Consumption (including electricity and renewable energy derived from GHG Protocol Scope 2 emissions from business activities)]



Scope: NTT Communications Corporation and 17 Group companies

● Contributing to the Decarbonization of Customers and Society

NTT Communications contributes to reducing the environmental impact of our business, our customers, and society as a whole through two approaches: "Green of ICT" to reduce our own environmental impact and "Green by ICT" to help our customers and society reduce their environmental impact.

Based on the Green by ICT approach, we are offering DX, GX, WX, and CX* solutions to help customers reduce their GHG emissions. We are also 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 highly power-efficient data centers, consequently improving the efficiency of public power consumption.

To fulfill our social responsibility as a member of the NTT Group, which endorses and participates in the GX League Basic Concept announced by the Ministry of Economy, Trade and Industry, we are actively participating in policy-making activities to realize a society in which companies that adopt GX can contribute to reducing GHG emissions while achieving growth with appropriate external recognition.

*DX: Digital transformation, GX: Green transformation, WX: Work style transformation, CX: Customer experience



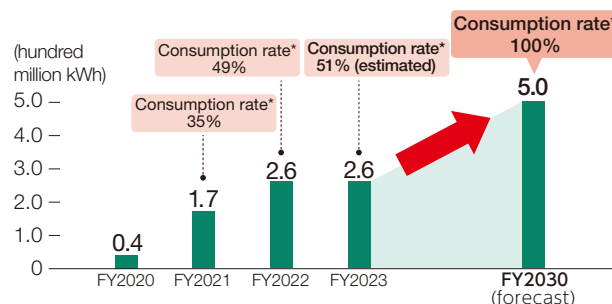
Expanding the Use of Renewable Energy

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 2022 achieved a 100% renewable energy rate in 42 of our 85 telecommunications facilities, including data centers. In fiscal 2023, we will continue to expand the use of renewable energy.

[Saitama 1 Data Center (100% powered by renewable energy from fiscal 2022)]



[Consumption rate of electricity derived from renewable energy sources (including virtually renewable energy by using non-fossil fuel certificates)]



Scope: NTT Communications Corporation and 17 Group companies

*Targeted GHG Protocol: Scope 2 emissions from business activities

Efforts to Achieve Net-Zero Emissions by 2040

In May 2023, the NTT Group announced its new medium-term management strategy for achieving carbon neutrality by fiscal 2040 with net-zero emissions from its own operations as well as from its supply chains (Scope 3). In response to this, the NTT Communications Group is also promoting concrete efforts to achieve the Net-Zero by 2040 plan announced in November 2023 by the NTT DOCOMO Group, including the launch of services that help customers and partner companies reduce their GHG emissions.

Evaluation by National and Local Governments

In fiscal 2022, 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 (Otemachi Place, Granpark Tower, and Shiodome Building) from the Tokyo Metropolitan Government for our global warming countermeasure plans for specified tenant buildings*.

We will continue to comply with laws and regulations on global warming countermeasures and actively help local communities achieve a decarbonized society through such means as participating in the Yokohama Decarbonization Innovation Council and registering in Osaka Prefecture’s decarbonization management

declaration system.

*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.



Initiatives Related to Telecommunications Facilities and Data Centers

Fiscal 2022 Results



Fiscal 2022
Target

12.7 ten thousand tons-CO₂e or lower

(The target of 2.8 ten thousand tons-CO₂e for the three Group companies that have been consolidated since the third quarter of FY2022 was added to the initial target of 9.9 ten thousand tons-CO₂e*)

*YoY -20%

Fiscal 2022
Result

12.2 ten thousand tons-CO₂e

Includes emissions of greenhouse gases other than CO₂, such as CFC substitutes

In fiscal 2022, our GHG emissions (Scopes 1 and 2) decreased as a result of the increased use of renewable energy as well as the augmented and expanded measures such as reducing electricity use in air-conditioning systems by making visible the power usage status of machinery and server rooms. Although there was a rise in demand for sales at data centers in Tokyo and Osaka as well as the installation of new cloud servers, we were nevertheless able to

achieve our FY2022 target.

GHG emissions are rising in fiscal 2023 due to ongoing robust data center and cloud service sales. However, we intend to meet our GHG emissions target at a year-on-year reduction of 10% by expanding visualization of power usage, implementing newly developed technologies, improving airflow, and optimizing equipment for telecommunications services.

The NTT Communications Group contributes to reducing GHG emissions from its own operations as well as its customers through the following initiatives.

- Introducing and utilizing energy-saving technologies in data centers
- Forecasting and visualizing CO₂ emissions in cloud services and offering carbon neutral services
- Offering customers a renewable energy menu for using data centers



For more information, see the "Special Feature: Data Center Services Supporting DX in Society for a Carbon Neutral Future" section of the report.

Data Center Initiatives

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 to promote a more effective use of energy and energy conservation.

In fiscal 2024, we plan to launch Green Nexcenter™, a service that supports the use of liquid-cooled equipment in ultra-energy-saving data centers. The service reduces the power used for cooling server equipment such as ChatGPT, which consumes vast amounts of energy and generates considerable heat, by approximately 30% compared to conventional data centers.

We will accelerate the decarbonization of our data centers by introducing leading-edge equipment and technologies.



Comparison to a
conventional
air-conditioning system

60%
reduction per year



Cooling Solutions for Servers Equipped with the Latest Technologies

Along with the recent increased demand for servers with robust processing capabilities, managing the extremely high heat generated by their equipment continues to be a challenge that requires cooling facilities or systems that can efficiently cool the super-heated servers. We have introduced the following cutting-edge cooling solutions to demonstrate and test their efficiency as well as operating systems at Nexcenter Labs in each NTT Communications' data center.

Examples of cooling solutions

- A cooling system mounted on the rear door of server racks suitable for high-density server rack applications
- A liquid cooling system that circulates chilled water from an outdoor cooling tower to the servers via cooling pipes placed on metal plates attached to the processors inside the servers (scheduled to be available in fiscal 2024)
- A liquid immersion cooling system that delivers excellent cooling efficiency by directly immersing the server board in a nonconductive cooling liquid

[Rear-door coolin]



[Liquid cooling]



[Liquid immersion cooling]



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.

Starting in the second half of fiscal 2025, we will be offering services at the new Keihanna Data Center (provisional name) to be constructed in Kyoto Prefecture by NTT Global Data Centers Corporation. We are currently working on a system that will virtually eliminate CO₂ emissions from this data center by using renewable energy according to customer needs.

*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 started to provide simulation to forecast CO₂ emissions and a dashboard to visualize emissions free of charge in fiscal 2022, the first cloud service provider in Japan to do so. The service allows customers to simulate the CO₂ emissions reduced by migrating from their conventional on-premise environment to the SDPF Cloud/Server, and to confirm the volume of CO₂ emitted by their usage on the portal. We will continue to promote efforts to help customers further reduce their environmental impact.

[Screen image of the Carbon Footprint Simulation for forecasting CO₂ emissions]



[Screen image of the Carbon Footprint Dashboard for visualizing CO₂ emissions]





Carbon Neutral Initiatives in Our Cloud Service

In June 2023, we successfully achieved the goal of making our Smart Data Platform Cloud/Server service carbon neutral by introducing renewable energy to all our sites by the end of fiscal 2023. With this service, we will support our customers in moving their on-premise environments to the cloud and reduce GHG emissions in their value chains.

Ongoing Efforts to Cut Cooling Power Consumption at Telecoms Facilities and Data Centers

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, 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 to reduce power used for cooling at our data centers, 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 the power usage effectiveness (PUE)*1 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 2022 compared to business-as-usual (BAU)*2 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.

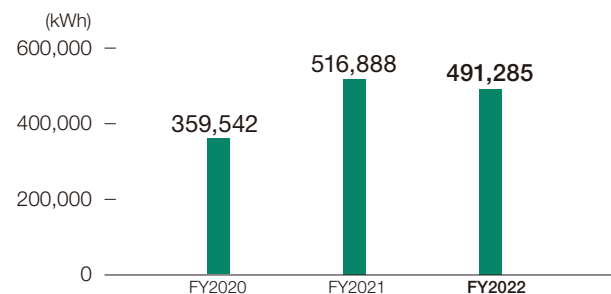
*1 Power usage effectiveness: (Power consumption of the entire data center)/(Power consumption of ICT equipment in the data center). An indicator for measuring the energy efficiency of a data center; the closer the number approaches 1, the more efficient the data center.

*2 A situation in which no special measures are taken.

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.

[Overall Amounts of Power Generated by Solar Panels]



Power Generated by Solar Power in Fiscal 2022

Approx.

49

ten thousand kWh



Office Initiatives

Fiscal 2022 Results

Fiscal 2022
Target1.4 ten thousand tons-CO₂e
or lower*Fiscal 2022
Result0.8 ten thousand tons-CO₂eIncludes emissions of greenhouse gases other than CO₂, such as CFC substitutes

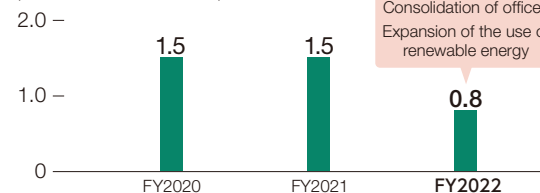
*Down at least 5% YoY

In fiscal 2022, we moved out of one of our largest offices, the Shiodome Building, to consolidate offices in the Tokyo metropolitan area, assuming that the maximum employee attendance rate would be 30%, as remote work is becoming common practice, which resulted in a decrease in our power consumption. We also expanded the use of renewable energy for electricity (including virtually renewable energy using non-fossil fuel certificates), and as a result, our GHG emissions decreased significantly compared to fiscal 2021.

In fiscal 2023, 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 GHG emissions by at least 5% compared to fiscal 2022.

[GHG Emissions from Offices]

(ten thousand tons-CO₂e)*Includes emissions of greenhouse gases other than CO₂, such as CFC substitutes

Scope: NTT Communications Corporation and 17 Group companies

Transportation Initiatives

Fiscal 2022 Results

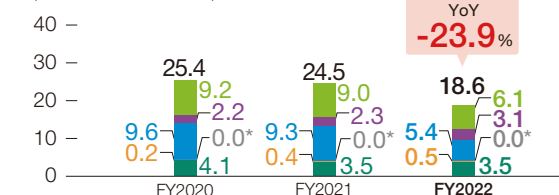
NTT Communications annually audits the amount of transportation for invoices, sales promotion tools, and office waste. Also, we voluntarily seek ways to streamline transportation such as by reducing the number, volume, and distance required for transport and by otherwise enhancing logistics.

In fiscal 2022, we worked to reduce the amount of paper by expanding web-based applications, digitalizing sales tools, and promoting remote sales. We also observed a decrease in the volume of dismantled telecommunications equipment transported due to the reorganization with NTT DOCOMO in July 2022. As a result, total transportation volume was 186,000 tkm. In fiscal 2023, we will continue to reduce transportation volume by promoting the use of web-based application systems and digitalization.

[Goods Transportation Volume under the Revised Energy Conservation Law]

■ Invoices ■ Connection notes ■ Sales promotion tools
■ Telecommunications equipment dismantled ■ Waste ■ Others

(ten thousand ton-kilometer)



*Less than 0.05

Scope: NTT Communications Corporation



Reducing Fuel Use by Company Vehicles

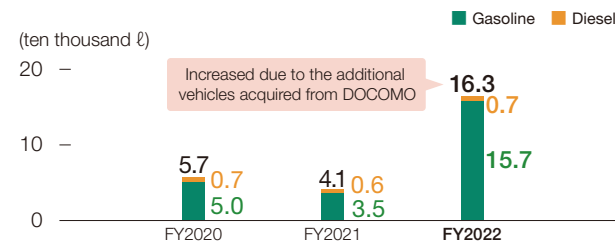
To help solve pollution problems and contribute to the realization of a low-carbon society, we are working to have EVs account for 100% of our corporate fleet by fiscal 2030 under the EV100 initiative declared by the NTT Group in October 2018. We are also reviewing the number of our sales vehicles and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

In fiscal 2022, we continued our efforts to introduce EVs, replacing 6 vehicles with EVs and scrapping 44 vehicles with the expansion of remote sales. As a result, the number of Company vehicles was 131 (including 46 EVs) at the end of fiscal 2022, compared to 197 (32 EVs) at the end of fiscal 2020.

Following the reorganization with the former NTT DOCOMO Group in July 2022, our Company fleet now possess an additional 443 vehicles (including 114 EVs) that were acquired from the former NTT DOCOMO Group. To this end, we started monitoring fuel consumption and other relevant data in the second quarter of fiscal 2022, and we have been managing the planned and actual number of vehicles since fiscal 2023.

Mainly due to the impact of these additional Company vehicles, gasoline and diesel consumption by Company vehicles in fiscal 2022 totaled 157,000 liters and 7,000 liters, respectively. The combined volume increased by 122,000 liters year on year.

[Fuel Consumption by Company Vehicles]



Scope: NTT Communications Corporation and 17 Group companies



For more information on EV 100, see:

<https://japan-clp.jp/en>

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 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).

*An electric propulsion system is a type of ship that turns a generator with its engines, drives motors with the electric power obtained, and turns propellers and bow thrusters for propulsion.

[Cable-laying ship Kizuna (8,598 tonnes)]



[Cable-laying ship Subaru (9,557 tonnes)]





Reducing the Carbon Footprint of Society through Our Products and Services

Environmental Labeling System for Solutions

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.

The NTT Communications Group has obtained a cumulative total of 12 solutions registered, which includes two certified services transferred from NTT DOCOMO to NTT Communications following the reorganization in July 2022. Looking ahead, we aim to obtain more certifications for the Environmental Labeling System for Solutions.



(Unit: %)

Certified Solutions (Excerpt)	CO ₂ Reduction Effect (at the Time of Certification)
Nexcenter	43
Enterprise Cloud	74
Arcstar IP Voice	30
Arcstar Universal One Mobiles	24



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-saving Performance with Leading-edge Quality**
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 GHG 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 GHG 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 GHG 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 tenth version was published in February 2023. Working together with our Group companies participating in this initiative, we will continue to roll out our ecological initiatives in the ICT field.



*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)



Priority Activities

Development of a Closed-loop Society

Our Approach

To contribute to the realization of a closed-loop 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 if we do not take appropriate action on a global scale, we run the risk of long-term damage to our natural environment and ecosystems as well as soaring prices and the depletion of various resources around the world. Also, failing to effectively respond to the growing demand of society for resource recycling may create business risks, such as not being able to meet the procurement standards of our suppliers and possibly damaging the reputation of our Company.

To fulfill our social responsibility regarding this issue, we organized working groups in the three areas of dismantled telecommunications equipment, construction waste, and office waste and are working in cooperation with other NTT Group companies to thoroughly implement the 3Rs (reduce, reuse, and recycle) while also promoting plastic recycling.

In addition, we are working to provide and co-create ICT platforms and solutions/services that lead to a closed-loop society, which can also

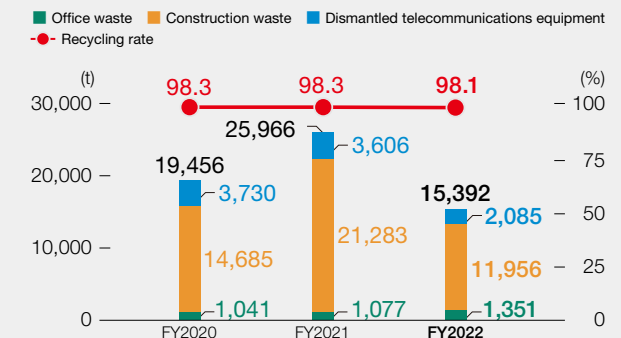
provide a business opportunity for increasing our corporate value. Through these initiatives and many other efforts, we are committed to a greener future with the most effective use of resources through proper waste management and promotion of reusing and recycling in our business activities.

Main Achievements in Fiscal 2022 and Goals for the Coming Years

In fiscal 2022, the total volume of waste from dismantled telecommunications equipment amounted to 2,085 tonnes, construction waste to 11,956 tonnes, and office waste to 1,351 tonnes. The total volume of waste generated decreased by 10,574 tonnes, compared to the previous fiscal year, to 15,392 tonnes, mainly due to a decrease in construction waste. The recycling rate for the total volume of waste was 98.1%, a slight decrease compared to the previous fiscal year (98.3%).

We will continue to manage the recycling rate as part of our efforts to create a recycling-oriented society and ensure that the 3Rs are thoroughly implemented in our business activities.

[Volume of Waste Generated and Recycling Rate]



Scope: NTT Communications Corporation and 17 Group companies



Building Business Models with Low Environmental Impact

Effectively Using Water Resources

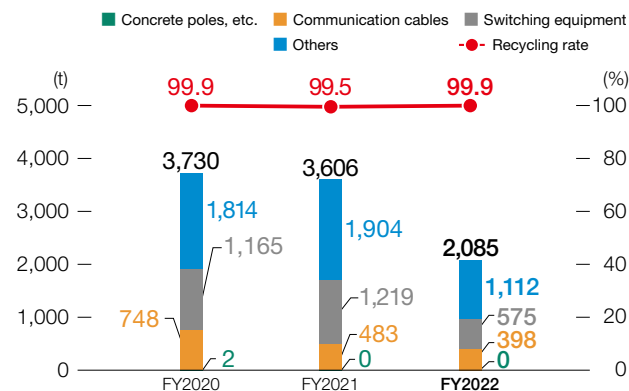
Water resources are indispensable for the survival of all living things, including humans, but the increasing world population and economic development have led to concerns over water shortages and pollution. We are striving to use water resources more effectively by recycling and reusing air-conditioning 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 volume of water used in fiscal 2022 was 324,000 m³.

Initiatives to Improve the Recycling 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,

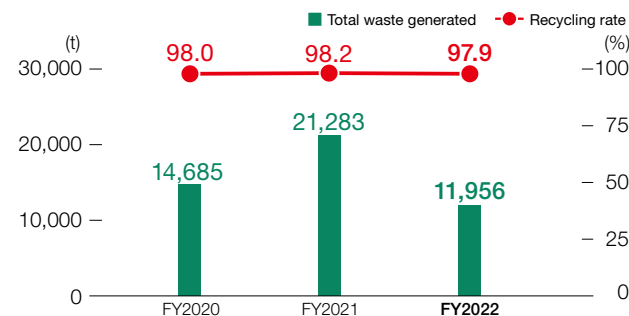
the recycling rate of office waste, which was 81.5% in fiscal 2013, has improved to 97.3%, as of fiscal 2022, showing steady progress.

[Total Volume and Recycling Rate of Dismantled Telecommunications Equipment]



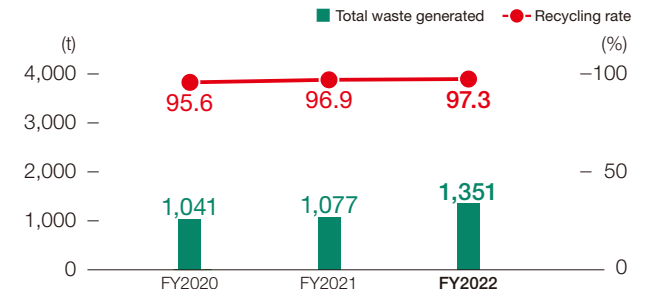
Scope: NTT Communications Corporation and 17 Group companies

[Total Volume and Recycling Rate of Construction Waste]



Scope: NTT Communications Corporation and 17 Group companies

[Total Office Waste and Recycling Rate]



Scope: NTT Communications Corporation and 17 Group companies

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 2022 we reused 75 items of dismantled equipment and 3,057 units of equipment and packages overall. In fiscal 2023, we will continue to promote the reuse of fixed assets and strive to reduce the amount of waste we generate.

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

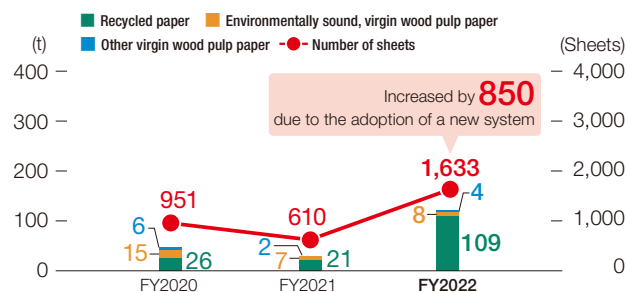


established a paper use indicator per fulltime employee in order to reduce the use of office paper. Since then, we have been working to raise awareness among employees through various efforts such as curbing the use of paper and increasing the rate of double-sided printing by using printing log data 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.

Since fiscal 2020, we have made significant progress in digitizing paper documents as part of our initiatives to promote remote work and work-life balance, resulting in a substantial decrease in the amount of paper used per employee (converted to A4-size office paper) from fiscal 2019 (3,585 sheets).

In fiscal 2022, the amount of office paper used per employee was 1,633 sheets, mainly due to the adoption of a system that uses a large amount of office paper following the reorganization with the NTT DOCOMO Group in July. When excluding the paper used by that system, the amount of office paper used per employee was 784 sheets (estimated), which was 174 sheets more than in fiscal 2021, mainly due to an increase in the number of employees coming to the office. We will continue to reduce the amount of office paper used by improving our business processes.

[Total and Per-employee Office Paper Use]



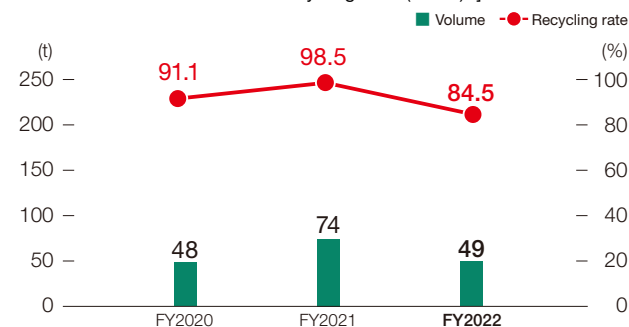
Scope: NTT Communications Corporation and 17 Group companies

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 2022, although the volume of plastic waste generated decreased due in part to the disposal of fixtures following a large-scale office relocation, the rate of plastic recycling worsened significantly. We will continue addressing plastic pollution through our business activities.

[Volume of Plastic Waste and Recycling Rate (Office)*]



Scope: NTT Communications Corporation and 17 Group companies

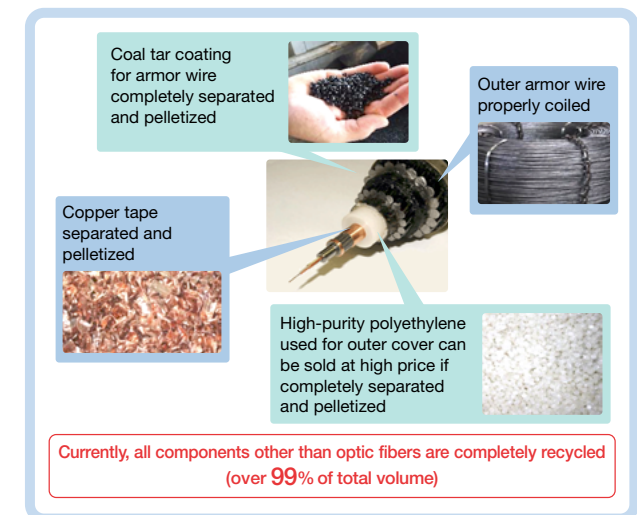
*Tabulated general and industrial waste generated from office buildings, including PET bottles, plastic waste, and other sources

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.





Co-existing with Nature

Primary Concept

In addition to the international deliberations related to the SDGs*, the UN Decade for Ecosystem Recovery from 2021 to 2030, and the Post 2020 Global Biodiversity Framework (GBF) adopted in December 2022, significant discussions have recently focused on the importance of conserving biodiversity and co-existence with nature as key environmental issues for realizing a sustainable society. These issues have also become key topics for risks related to the sustainability of business operations.

We have set “Planning a Future of Natural Harmony” as part of our environmental declaration and established the Biodiversity Action Plan. Under these policies, we are carrying out business activities from the construction of facilities to their operation and dismantling in accordance with the NTT Group Sustainability Design Guideline for Buildings and other guidelines. We are also engaged in local conservation efforts, such as conservation of satoyama (Japanese rural landscape) and local greening.

To fulfill our corporate social responsibility, we will continue to place a high priority on conservation of biodiversity throughout our business operations and conduct business while inspecting the progress of initiatives, identifying problems, and making improvements. We will also adopt a multifaceted approach, including the provision and co-creation of ICT/DX solutions and services that contribute to nature-positive economic activities, which can become business opportunities, as well as environmental contribution efforts such as participating in local conservation projects and disseminating environmental information.

*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

Main Achievements in Fiscal 2022 and Goals for the Coming Years

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 2023, we will continue promoting initiatives by leveraging our capacity to serve society as an ICT enterprise.

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



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 various actions.

These include satoyama conservation for environmental education, protecting ecosystems by cable-laying ships, assessing the potential environmental impact from the construction and dismantling of telecommunications facilities and data centers, and providing agricultural ICT solutions as part of nature-positive initiatives. We will continue to conserve ecosystems and work with our stakeholders through these efforts.

Initiatives Related to the TNFD

In accordance with the LEAP approach*¹ proposed by the TNFD, the NTT DOCOMO Group conducted an analysis*² of its nature-related dependencies, impacts, risks, and opportunities. The analysis also encompasses the business areas and value chains of NTT Communications. The Sustainability Office, responsible for promoting environmental activities, participated in the analysis through the identification of potential material issues, analysis of the value chain's location-specific issues, determination of material issues, and review of countermeasures, as a member of the DOCOMO Group.

*¹ A location-based approach to prioritizing impacts on natural capital and actions to address them. The approach involves four phases: locate interface with nature, evaluate dependencies and impacts on nature, assess nature-related risks and opportunities, and prepare to respond to nature-related risks and opportunities and report to investors.

*² This report is based on TNFD beta v0.4, released in March 2023. We will review the contents based on v1.0, released in September 2023, and take any necessary actions.



For the NTT DOCOMO Group TNFD Report, see:

<https://www.docomo.ne.jp/corporate/csr/ecology/protection/tnfd/> (in Japanese only)

[Risks and Opportunities Identified through Scenario Analysis and Overview of Initiatives]

Material nature-related risks and opportunities	The NTT DOCOMO Group's analysis based on the LEAP approach also includes the corporate business areas of NTT Communications. We identified "development of land with high conservation value," "impact on the surrounding ecosystem," and "resource extraction" as material issues based on an assessment of the relationship between the interests of stakeholders and our own business and considering the results of analyzing the value chain's location-specific issues described below.	
Potential impacts on business	Risks	Various potential risks (e.g., price increases and unstable supply of telecommunications equipment necessary for offering services may affect our financial plans when there is a shortage of supplies from resource extraction) have been identified, but as reviewed by the NTT DOCOMO Group, we have verified that there are no immediate material risks that would affect our business.
	Opportunities	We have identified many opportunities that could help with conserving biodiversity, including the provision of smart agriculture and fisheries services as well as services and solutions that contribute to reducing environmental impact.
Analysis of the value chain's location-specific issues	The analysis of the value chain's location-specific issues includes telecommunications facilities and equipment related to NTT Communications' business. Potential material issues were organized by each stage of the value chain (upstream, downstream, and direct operations) and risk hotspots and potential risks to be addressed in each value chain were identified through the analysis using IBAT* ¹ and Aqueduct* ² for risk themes including resource extraction, water use, land development, and surrounding ecosystems. In addition, a GAP analysis was conducted to prioritize items to address based on the identified material issues, and the SBTN's Action Framework* ³ AR3T was used to examine measures to address them.	

*¹ Integrated Biodiversity Assessment Tool, developed by the United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC)

*² A global water risk mapping tool developed by the World Resources Institute (WRI)

*³ A framework proposed by the SBTN, comprised of a series of four steps (avoid, reduce, regenerate and restore, and transform) to plan countermeasures for actions damage the environment

P019

For more information on related governance and risk management initiatives, see the "Sustainability Management" section of the report.

P049

For more information on indicators and targets, see the "Environmental Declaration" and "Eco Strategy 2030" section of the report.




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 Sustainability Design Guideline for Buildings (established in December 2022), and we reflect that understanding into our designs insofar as possible. In addition to our ongoing efforts to promote decarbonization, resource recycling, and co-existence with the environment, we are also working to create an environment that is safe and resilient to natural disasters, which are becoming more frequent and devastating, and to create more people-friendly workplaces to promote diversity and inclusion as well as health and productivity management. These efforts will contribute to the realization of a sustainable society.

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.

 For more information on the NTT Group Sustainability Design Guideline for Buildings, see:
<https://group.ntt.jp/design/> (in Japanese only)

Complying with the Environmental Impact Assessment

All developers planning large-scale projects, such as data center construction, are required to conduct a preliminary survey, forecast, and assessment of how the project will affect the surrounding environment, and to submit an Environmental Impact Assessment (EIA) report. The details of all submitted EIA reports are made public, and developers can modify their plans to be more considerate of neighboring residents and the surrounding environment by incorporating into their project plans comments from the national government, local governments, and the public.

NTT Communications has conducted an EIA to proceed with the expansion project for the sixth building of the Osaka 7 Data Center. We used a compliance checklist to ensure that the project is environmentally sound at each stage, including design, construction, and completion, and have completed checking the design phase as of August 2023.

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 of 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.

[Spring/summer zone]



[Autumn/winter zone]



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 co-existence 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.

[Cables laid on sand to avoid coral reefs]



[Debris collected from the seabed]



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 Antifouling 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.



For more information, see the “CASE 5: Submarine Cables Connecting the World to the Future” section of the report.

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 within national and quasi-national parks, so we emphasize consideration for biodiversity in their operations.

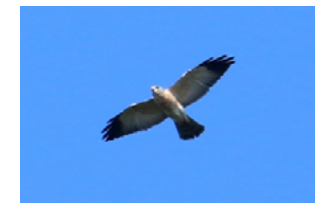
For our 32 wireless stations nationwide, we build micro-roads if needed for the patrol and maintenance of these

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.

[Watching the migration of Chinese sparrow hawks]





Contributing to a Nature-positive Future and 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, which is contributing to the restoration and co-existence of ecosystems such as the crested ibis, by utilizing and verifying aerial drone photography, paddy weeding robots, and ICT-based advanced water management systems.

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

P013 For more information, see the "CASE 3: Aiming for Eco-friendly and Sustainable Terraced Rice Paddy Farming" section of the report.

"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 59.91 million yen have been made mostly to NPOs

engaged in global environmental protection activities.

In fiscal 2022, we donated 510,000 yen to the Nature Conservation Society of Japan, our 24th 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

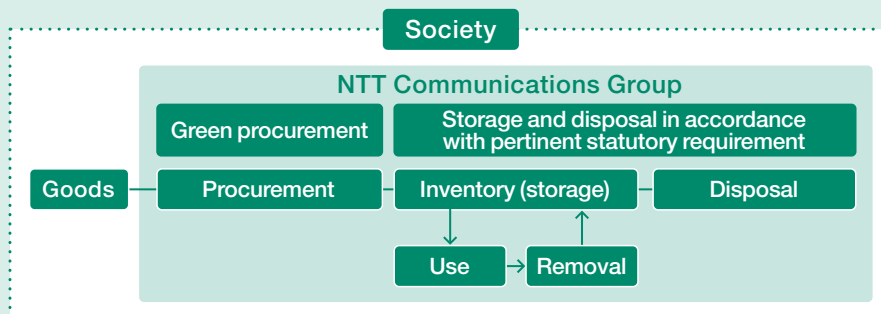
Primary Concept

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.

[Prevention of Environmental Pollution at Each Business Stage]



Main Achievements in Fiscal 2022 and Goals for the Coming Years

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 2022, we continued to introduce EVs and reduce the number of Company vehicles with the expansion of remote sales activities. However, following the reorganization in July 2022, we added 443 Company vehicles (including 114 EVs) that were acquired from the NTT DOCOMO Group. As a result, CO₂ emissions from Company vehicles increased by 292%, and NO_x and SO_x emissions by 247% and 105%, respectively. We will continue to review the number of vehicles owned and promote the use of EVs.



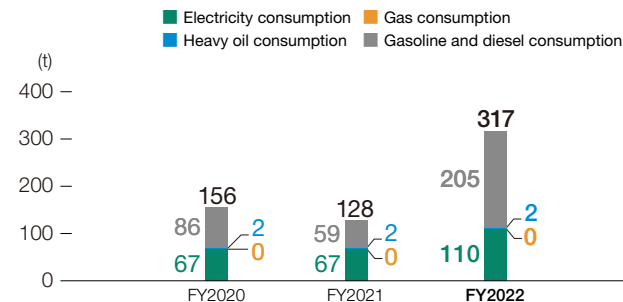
Initiatives to Address Environmental Pollutants

Preventing Air Pollution

Our business activities produce NOx and SOx emissions, which cause air pollution. Approximately half of the total NOx emissions has typically related to the use of gasoline and diesel in our operational vehicles. However, this was not the case in fiscal 2022, when total NOx emissions from vehicle use rose to 65%. This was due to a significant increase in the number of our Company vehicles following the reorganization with the NTT DOCOMO Group in July 2022, which resulted in higher gasoline and diesel fuel use. As for SOx, the majority (93%) is emitted during the generation of electricity that we use.

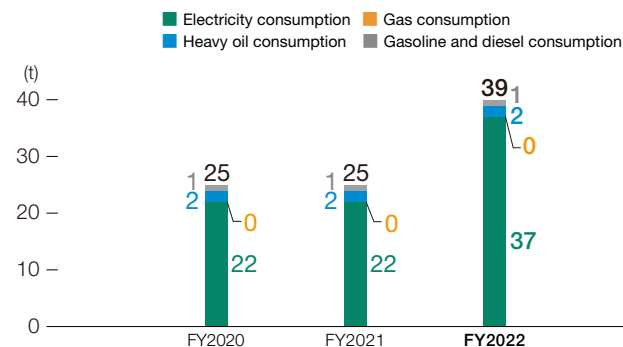
In fiscal 2022, NOx and SOx emissions were 317 tonnes (year-on-year increase of 147%) and 39 tonnes (year-on-year increase of 58%), respectively, as a result of the increased number of Company vehicles due to the aforementioned reorganization and increased use of reserve power due to legal inspections. 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.

[NOx Emissions]



Scope: NTT Communications Corporation and 17 Group companies

[SOx Emissions]



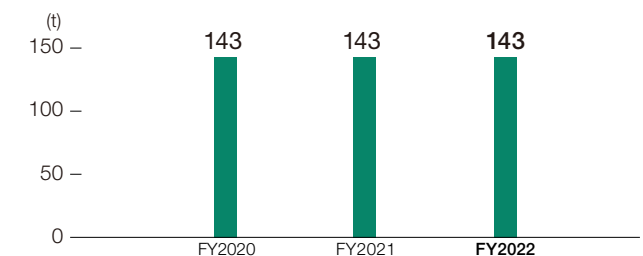
Scope: NTT Communications Corporation and 17 Group companies

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 2022 was approximately 143 tonnes, unchanged from the previous fiscal year.

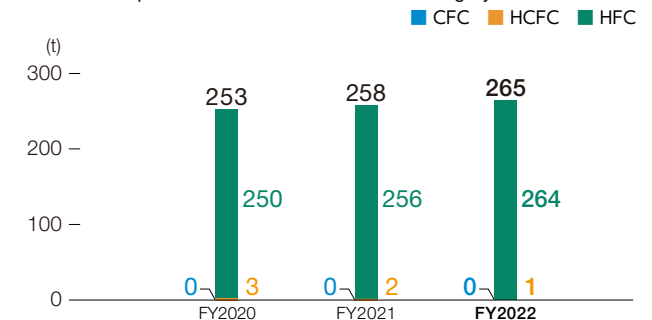
Meanwhile, the volume of specified chlorofluorocarbons (CFCs) used in our air-conditioning equipment in fiscal 2022 increased by around 7 tonnes from the preceding fiscal year to approximately 265 tonnes.

[Volume of Specified Halons Used in Fire-extinguishing Equipment]



Scope: NTT Communications Corporation and 17 Group companies

[Volume of Specified CFCs Used in Air-conditioning Systems]



Scope: NTT Communications Corporation and 17 Group companies



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. Since fiscal 2019, we have been conducting an annual survey of four buildings to confirm that airborne emissions have been below the statutory limit at all buildings subject to legal compliance. 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.

With the completion in fiscal 2022 of treatment procedures for equipment containing high concentrations of PCBs, including those newly discovered, we plan to complete detoxification treatment by the end of fiscal

2023. Meanwhile, we are also removing existing low-voltage capacitors that may contain low concentrations of PCBs and are systematically working to complete this by the disposal deadline of the end of fiscal 2026.

[Number of Transformers Stored]

	FY2020	FY2021	FY2022
Number of Transformers Stored	6	0	0

Scope: NTT Communications Corporation and 17 Group companies

[Number of Capacitors Stored]

		FY2020	FY2021	FY2022
Number of Capacitors Stored	High-voltage capacitors	0	0	0
	Low-voltage capacitors	2	12	4

Scope: NTT Communications Corporation and 17 Group companies

[Number of Electric Ballasts Stored]

	FY2020	FY2021	FY2022
Number of Electric Ballasts Stored	363	276	112

Scope: NTT Communications Corporation and 17 Group companies

Chemical Substance Management in Anticipation of Emergencies

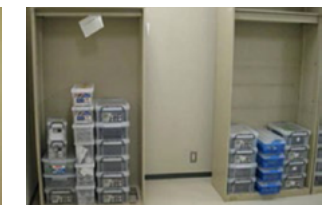
Against a backdrop of natural disasters occurring frequently on a global scale, there is a growing public concern over the management systems for environmental pollutants in times of emergency. As an owner and operator of IT infrastructure, we have been thorough in establishing storage and management 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.

[PCB storage location]



[Storage of PCBs]



Cases of Major Leakage

There were no incidents involving major leakages in the NTT Communications Group in fiscal 2022.

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.



Human Resources

Undertaking Business with Respect to Employees While Enabling Them to Succeed

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.

Targeted SDGs



Priority Activities

▶ 079 Human Capital

▶ 083 Development of Human Resources

▶ 091 Promotion of Diversity and Inclusion

▶ 102 Respect for Human Rights





Human Capital

People are the driving force for creating value in the world and realizing a sustainable society. Here we introduce the NTT Communications Group's stance and initiatives on human capital.

Governance

To create businesses with mid- to long-term competitive advantages for sustainable business growth and enhanced corporate value, it is essential to formulate and implement integrated strategies and investments for human capital as the source of competitiveness. We established the Human Resource Strategy Committee from this perspective to discuss, examine, and promote the formulation and execution of human resource strategies and development policies linked to our management strategies. Through the committee, we have developed a management governance structure that includes the formulation of mid- to long-term strategies and implementation management based on KPIs under major HR management themes, such as human resource portfolio management, strategic allocation of human resources for strengthening businesses, and resource management policies based on labor productivity indicators.

The committee also collaborates and deliberates with the Sustainability Management Committee on key human resource issues and periodically reports to the Board of Directors.

We have also established the Sustainable Growth Cycle (SGC), which combines growth in human resources, value provided, and business, as well as Sustainable Growth Metrics (SGMs) to promote management for sustainable

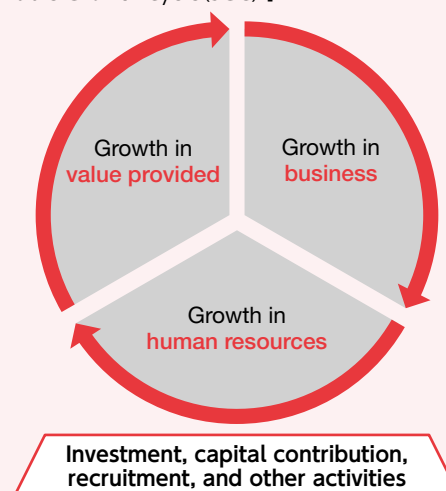
[Overview of Human Resource Strategy Committee]

	内容
Purpose	Discuss, examine, and promote the formulation and execution of human resource strategies and development policies linked to management strategies
Composition	Chairperson: Senior executive vice president (in charge of corporate affairs) Members: Senior executive vice president, heads of divisions, senior vice president of Corporate Planning, senior vice president of Human Resources
Meetings	Held as required by the discussion agenda, about once every quarter
Discussion topics	(1) Human resource strategies and policies linked to management strategies (2) Human resource measures and policies for expanding businesses and resolving business issues
Secretariat	Human Resources

business growth by visualizing progress to achieve change based on periodic and quantitative monitoring.

The SGM for growth in human resources includes important items for driving growth, such as the fill ratio

[Sustainable Growth Cycle (SGC)]



of key personnel required by each category of business promotion, diversity indicators, status of resource shift, and engagement scores. A monitoring cycle is set up to account for the level of change in each item, and the results are reported to the Human Resource Strategy Committee and others for discussion of issues and solutions.

Risk Management

We have established the Risk Management Rules 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. Risk management is conducted by the Business Risk Management Committee, chaired by the senior executive president, and we consider human risk as a Companywide concern. With regard to human resources, we assume the following as major risk items and examine the scenarios and the scope of impact while also establishing monitoring methods to conduct periodic risk management.

Geopolitical risk

- Rise in political, social, and military tensions in certain geographic locations makes it difficult to ensure the employee safety

Resilience-related risk associated with natural disasters

- Natural disasters such as typhoons, floods, earthquakes, and volcanic eruptions result in employee casualties

Pandemic risk

- Outbreak of an infectious disease pandemic results in employees becoming infected

Risk related to response to human rights issues

- Incidents of harassment and inappropriate corporate response



- Deterioration of the workplace environment and reputational risk caused by discriminatory comments or behavior based on gender, disabilities, or being insensitive to issues of religion and race

Risk related to corporate governance

- Insufficient control over Group companies and lack of coordination

Risk related to human resources (recruitment, training, and workstyles)

- Inability to recruit and train necessary human resources
- Decline in employee motivation leading to resignations
- Increased dissatisfaction related to promotions, transfers, evaluations, and growth opportunities
- Stagnation of personnel assignments, aging workforce, and increase in retirements
- Outdated programs for human resource development
- Occurrence of mental and physical illness among employees

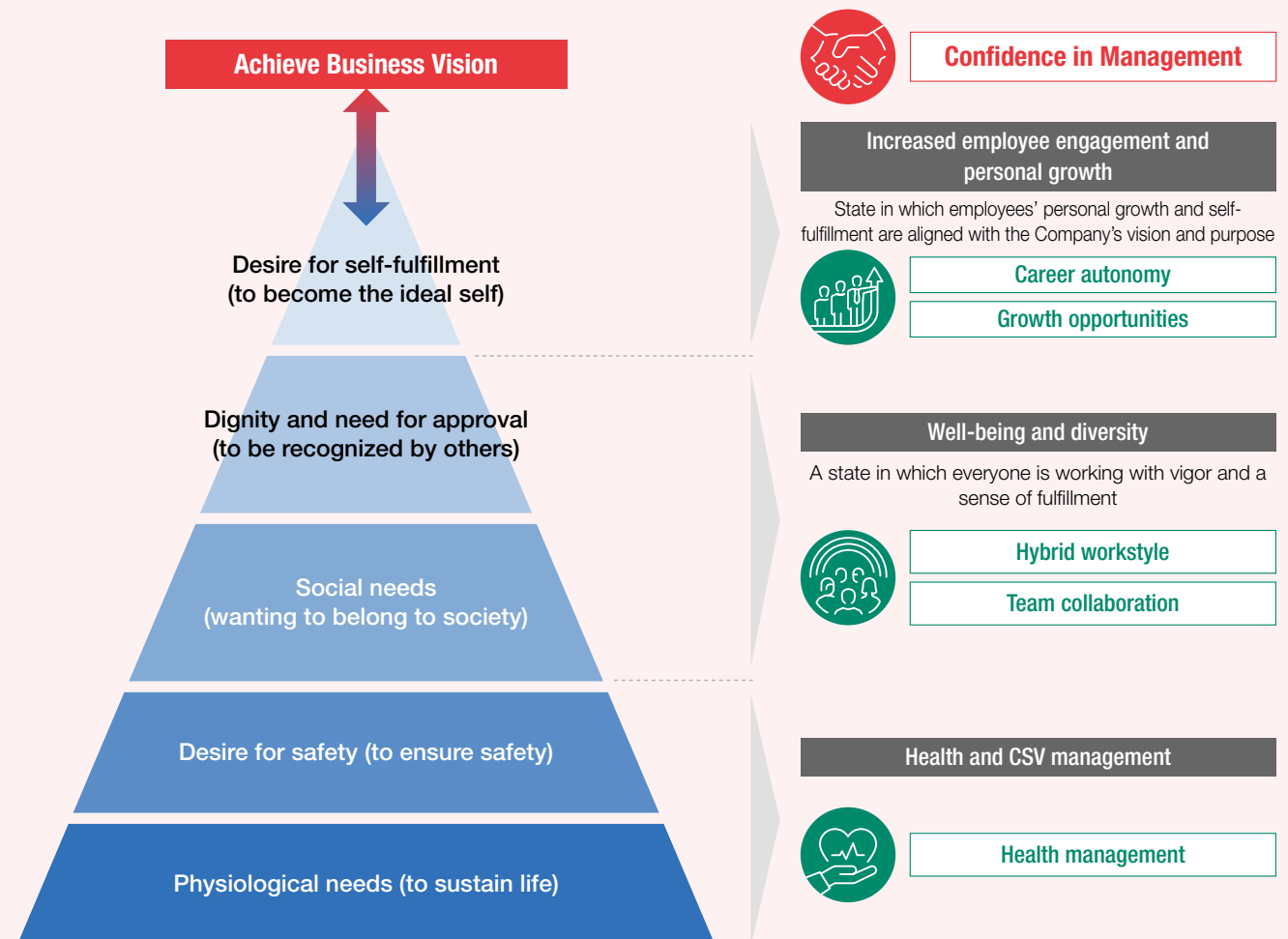
Conduct risk to stakeholders

- Unreasonable treatment or refusal to hire or promote minority employees due to failure to recognize value of diversity
- Concentration of workload on specific employees and lack of improvement in work efficiency resulting in long working hours and accumulated physical and mental stress as well as a delay in understanding the situation and inappropriate corporate response due to insufficient communication with relevant employees

We will ensure employee safety and security, boost motivation, and encourage personal growth by steadily addressing these risks, led by risk managers.

Strategy

To achieve our business vision, we are striving in various ways to fulfill the intrinsic motivation we all possess naturally and to help each employee achieve self-fulfillment and personal growth by maximizing their abilities.





Confidence in Management

We intend to achieve a state in which employees have confidence in management by transparently and honestly disclosing information, providing opportunities for employee dialogue and continuously investing in human resources.

Increased Employee Engagement and Personal Growth

We want to develop a state in which employee self-fulfillment and personal growth are aligned with the Company's vision and purpose.

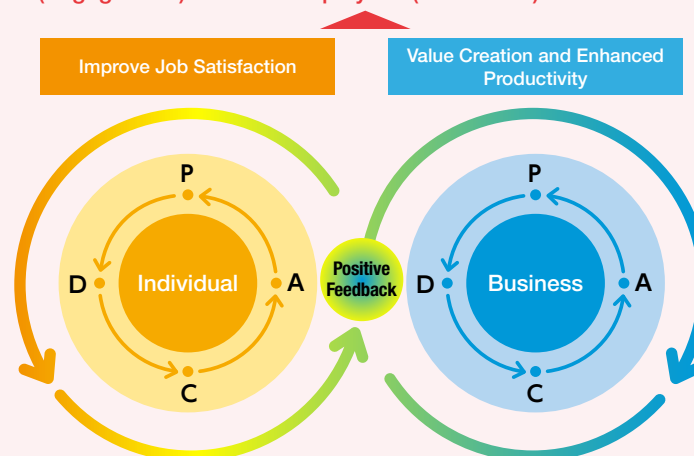
Career Autonomy

Based on our vision of supporting lifelong career development for self-fulfillment, we will establish an environment and structures that enable employees to independently learn and grow toward achieving career autonomy. In addition, the Career Design Office was established in 2020 to support employees as an organization specializing in career consulting, and the Motivating and Stance Theory, which summarizes the wisdom and expertise accumulated in the Career Design Office, is available to all managers for improving supervisor career support and interviewing skills.

By encouraging employees to think, decide, and act on their own, we hope to improve job satisfaction, link value creation and enhanced productivity to business growth, and increase engagement through a cycle of growth for both employees and the business.

[Approach to Human Resource Development]

Virtuous Cycle (Engagement) in which Employees (Individuals) and Business Grow Together



Growth Opportunities

As a leading DX company, we support autonomous upskilling for the sake of having all employees select and participate in in-house learning and educational content in the areas of data utilization, business/design, and engineering so that they can acquire new knowledge and skills that will contribute to DX and be applied to decision-making and work. We are fostering a culture in which individual employees can learn autonomously, openly learn from each other, and improve their personal skills together.

We also provide an online platform with options and information on learning and work and have created an environment in which employees can realize their careers through daily operations, thereby encouraging personal growth with a rich diversity of skills and experience. Options include an internal recruitment system that enables them to apply for positions required by the organization, an internal scouting system in which the organization offers positions to employees who have applied, and a dual work system in which staff can participate in work that is different from their main duties.

Well-being and Diversity

We are striving to create an environment in which everyone works with vigor and a sense of fulfillment.

Employment, Training, and Promotion of Diverse Human Resources

We are developing an environment in which members from various backgrounds respect each other, with the goal of realizing the well-being of each individual and creating new innovations. Specifically, we have continuously implemented measures such as supporting the career



development of female managers, assisting employees who are facing major life events, and employing people with disabilities in consideration of their aptitudes so that each employee can maximize their abilities.

Hybrid Workstyle

We are working to build a strong team by developing a working environment that enables employees to choose a highly flexible workstyle and workplace that combines face-to-face and remote operations according to the characteristics of their responsibilities and by increasing activities that generate more collaborative opportunities that also emphasize face-to-face communication. In July 2022, we introduced a system that allows employees to choose not only where to work but also where to live, allowing them to choose a workstyle that does not involve only relocation or moving to a new location exclusively (approximately 170 employees were using this system by the end of September 2023). We will further promote “work-in-life” (work as an important part of life) by creating a flexible environment in which each employee can freely design their own workstyle.

Team Collaboration

In addition to widely establishing and improving the quality of one-on-one meetings as a means of interactive communication for supporting members’ growth, and cultivating a culture of mutual praise and recognition, we have also launched an organizational development initiative to promote collaboration and co-creation based on dialogue. We intend to create a workplace in which diverse personalities are respected and recognized and employees can learn from experience through repeated trials to create new

value. This is premised on ensuring a sense of security for employees by creating an environment where they can freely communicate and collaborate across organizations and teams.

Health and CSV Management

Health Management

We promote health management for maintaining and promoting the physical and mental health of employees and their families, as the most fundamental initiative of our business operations.

CSV Management

We promote eco-friendly initiatives through activities such as having all employees understand how much carbon dioxide is emitted in their daily lives, and we are working to reduce these emissions through eco-action, as well as by preserving Satoyama. We also provide our employees with a wide range of opportunities for participating in social contribution activities such as pro bono activities in which they volunteer the skills and techniques developed through their work, as well as various fundraising activities to create a corporate culture in which our employees can be proud of these activities.

Indicators and Targets

In accordance with our Sustainability Policy, we have established main initiatives and related indicators for each of our priority activities for implementing human resource management.

Priority Activity (Materiality)	Main Initiatives	Indicator
Development of human resources	Promote measures that enable employees to learn and grow autonomously to realize their careers (a growth cycle in which employees and the business grow together)	Training costs per person: 220,000 yen per year
		DX human resources fill ratio (by end of FY2023): 100%
Promotion of diversity and inclusion	Promote hiring, development, assignment, and equal opportunities for diverse human resources	Percentage of female employees in managerial positions: 15% in FY2025
		Percentage of female employees appointed as new managers: 30%
		Percentage of male employees taking leave for childcare: 100%
		Percentage of employees with disabilities: 2.3%
		Hiring of external human resources: 30%
	Promote work-life balance	Year-on-year improvement in engagement score (mid-term target: 65%)
		Percentage of remote work implemented Organizations where remote work is the standard: 60% Organizations where employees work in offices: 40%
Thoroughly implement occupational safety and health and health management for employees	Zero operational accidents	
Respect for human rights	Proactively promote activities for human rights education	Attendance of human rights training: 100%
		Human rights due diligence: more than once a year
		Human rights violations: 0 incidents

These are the representative initiatives and indicators for fiscal 2023.



Priority Activities

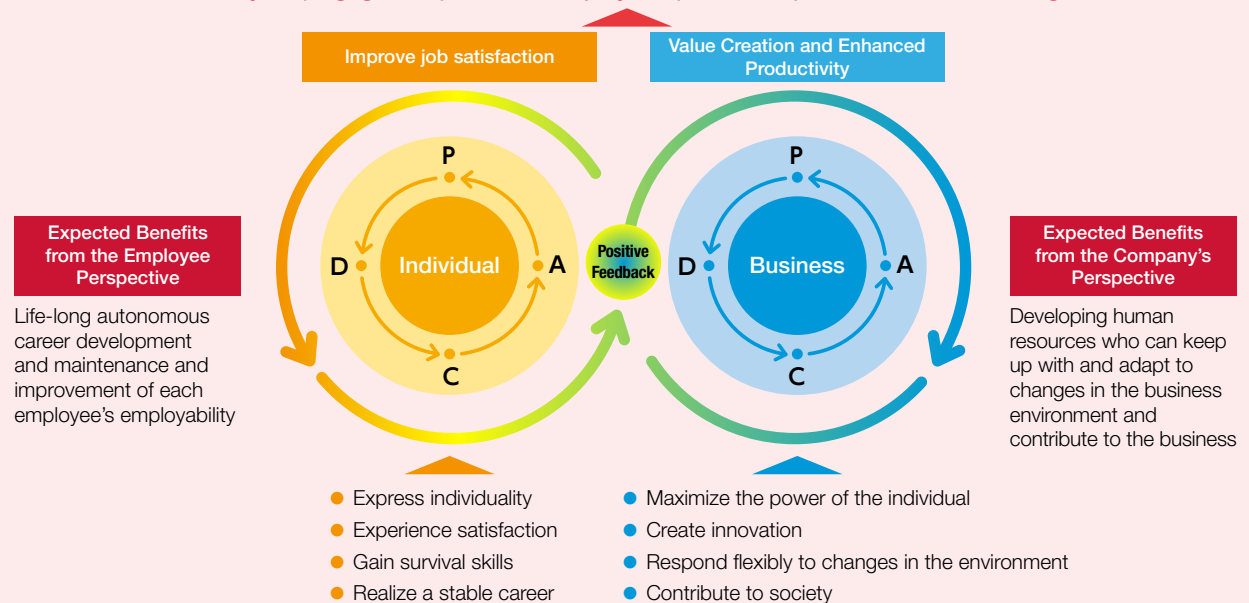
Development of Human Resources

Our Approach

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 establishing an autonomous learning environment for employees that encourages proactive self-investment, and by promoting measures that emphasize the development of personnel capable of driving DX, such as the ODYSSEY human resource development program, to strengthen sustainable, mutually beneficial relationships with employees.

[Approach to Human Resource Development]

Virtuous Cycle (Engagement) in which Employees (Individuals) and Business Grow Together



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 discover role models and peers, while a culture of mutual learning is fostered by showing and visualizing the learning process.
(3) Active	By providing information and options for finding a path to self-fulfillment through policies and systems, 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.



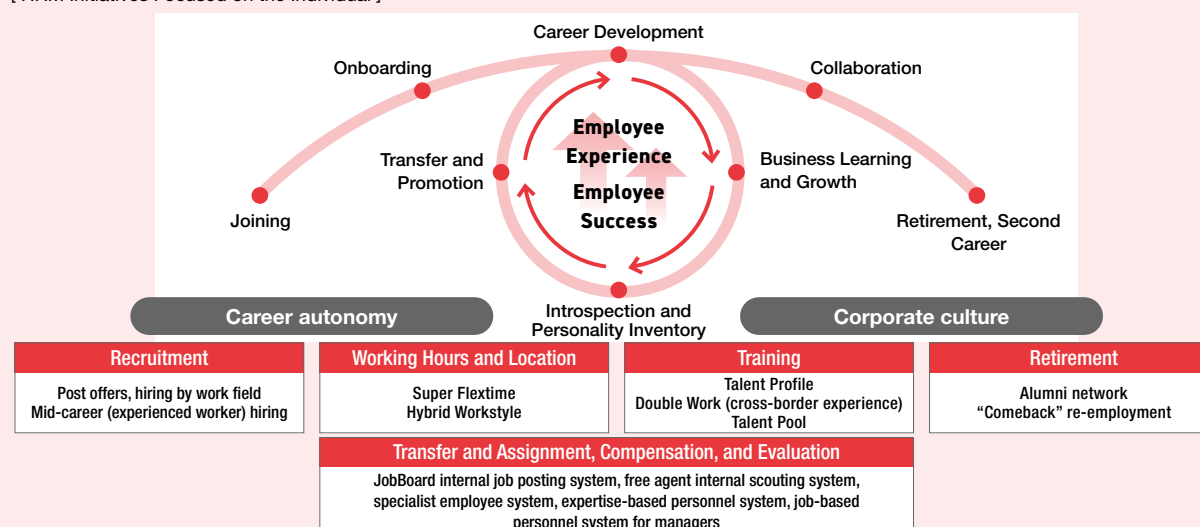
In today's world, where the creativity of each individual is increasingly tested, we must embrace a paradigm shift from the uniform management of the former era of mass production and consumption to employee-centered HRM*. In this era of change and diversity, we are promoting efforts to offer more choices for each employee journey as part of our HRM focused on the power of the individual.

Each employee should be able to choose a workstyle that matches his or her personal lifestyle and career plan, and should think, decide, and act for themselves toward self-realization. At the same time, we must create an environment in which employees can take on challenges and foster an organizational culture that encourages these efforts. We believe this will improve job satisfaction while also leading to business growth by creating value and enhancing productivity, making it possible to enhance engagement in a virtuous cycle of employee (individual) growth and business growth.

The power of human resources can change the future precisely because we are living in the digital age. Through employee-centered HRM, we will create a cycle in which employees and the business grow together toward a state in which employee work values, personal growth, and self-fulfillment are in harmony with the Company's philosophy and purpose.

*Human resource management

[HRM Initiatives Focused on the Individual]



Main Achievements in Fiscal 2022 and Goals for the Coming Years

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.



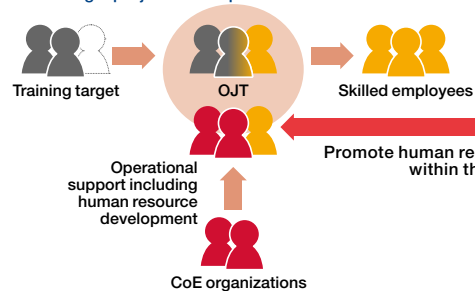
Main Achievements in Fiscal 2022 and Goals for the Coming Years

[Main Measures for Human Resource Development in Groupwide Enhancement Areas]

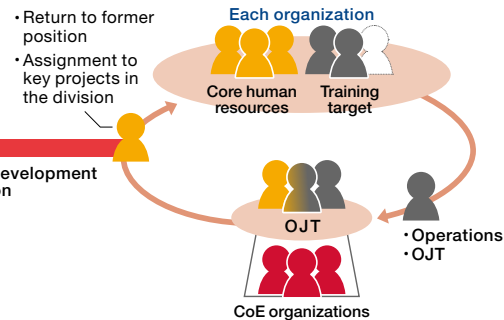
(1) Internal On-the-Job Training

Support for employee growth through technical assistance and mentoring

Strategic projects and operations within divisions



Practical experience at CoE organizations



(2) Support for Human Resource Development by CoE Organizations

Design CoE (design studio KOEL)

KOEL

DESIGN STUDIO by NTT Communications

1. Visioning
2. Business development
3. Business improvement
4. Communication design
5. Organizational design
6. Human resource development

For more information on Design CoE, see:
<https://www.ntt.com/jp/koel/solution>
(in Japanese only)

Data Scientist CoE (Digital Transformation Division)



Security CoE

(Information Security Division, N.F. Laboratories)



Training Biz

Outsourcing Biz

R&D

For more information on N.F. Laboratories, see:
<https://nflabs.jp/business/>
(in Japanese only)

(3) Support for Human Resource Development by Technical Advisors

Enhancement support

Service development skills

Engineering skills

Areas of expertise

Service development
Mentoring

Support for human resource
development

Seminars and
study groups

One-on-one, and
consultations on ideas in
development



For more information on support for human resource development by technical advisors, see:
https://www.ntt.com/shines/posts/b-t_20200625.html
(in Japanese only)

Target categories for human resource enhancement

Incubation and design

Consulting

Engineering
(agile/software)

Data
application

Security



Systems for Human Resource Development and Evaluation

Education and Training Systems

We provide a range of training programs designed to support employee skill development and encourage appropriate career path choices.

The new training program covers not only NTT Communications Group strategies and systems but also business conduct and attitudes. This helps to deepen employee understanding of the value and importance of always seeing and acting from the customer's perspective. To form the foundation for improving the basic skills of our employees and for autonomy in their careers, we also have learning management systems and provide practical training through experience-based learning cycles that improve self-management.

All employees gain hands-on experience in accordance with the career development plans they formulated and choose suitable training courses in consultation with their supervisors. We are creating a system that will enable employees to become aware of and improve their employability by applying a plan-do-check-act cycle in their daily work, as well as by disclosing their skills and collaborating with each other through mutual learning. To reinforce our software development capabilities and firmly establish modern product development methods, we invited three external technical advisors to speak in the autumn of 2019 and have been developing our skills through wide-ranging support, from regular study groups to

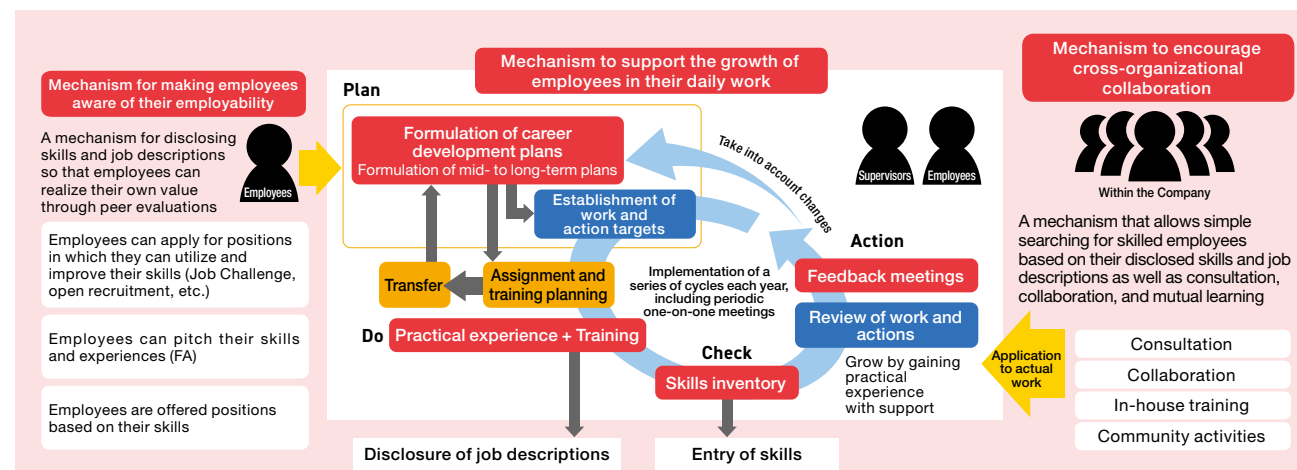
technical assistance for individual projects and support for organizational reform. Each advisor offers superior technical guidance and advice backed by ample knowledge and experience, providing valuable, useful input for employees.

As it strives to become a leading DX company, NTT Communications pursues the creation of a better customer experience (CX) and promotes career autonomy for its employees. We launched the DX Talent 100 initiative in fiscal 2022 so that all employees could add new knowledge and skills that contribute to DX (customers, society, industry DX, service development DX, and internal operation DX) and apply them to their decision-making and business operations. We are working to foster a culture in which all employees, including executives, are learning autonomously, and employees are openly engaged in mutual learning and enhancement.

We want employees to be chosen by society based on their own value, and not their company affiliation, so that they become individuals with unique personalities who can make their mark both within the Company and in the world. To this end, we will continue to invest in human resources by setting the goal of turning all employees as DX human resources, with half of them core DX personnel, that will also serve as a milestone when considering their careers.

In fiscal 2022, the average training cost was 205,000 yen for an average of 22 hours per employee. In the 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

[Double Awards for the Motivating Stance Theory]





it is necessary to emphasize employee-driven learning and career development that is more autonomous than Company-led training and personnel transfers. In addition to providing employee training required for carrying out jobs and developing careers, we enhanced courses that are highly needed by each organization and expanded online programs affected by the COVID-19 pandemic. In fiscal 2022, we also began offering Sharing Everyone's Learning Experience (support for studying based on books) to encourage employees to voluntarily choose to learn together.

Looking ahead, we plan to further strengthen online platforms that encourage autonomous career development and measures that contribute to open learning among employees.

Support for Career Design

Every employee must achieve career autonomy to think about their own careers and remain motivated to continue working.

We established the Career Design Office in 2020, which has interviewed approximately 3,000 employees to date in its responsibility to support career autonomy. Achieving career autonomy, however, depends upon recognizing the urgency to improve career interview skills for dedicated career support staff as well as supervisors who deal with their subordinates on a daily basis. The Motivating Stance Theory is a 500-page handbook that compiles the wisdom and expertise accumulated by NTT Communications' Career Design Office for improving the career interviewing skills of supervisors. We made the theory available to all managers and are also holding individual study sessions for each organization to improve the career interview skills of managers.

As an ideal way to achieve career autonomy, we believe it is important to maximize the overlap between employee aspirations and desires and the Company's vision and mission. Our goal is to create a virtuous cycle in which employees achieve growth through career autonomy, resulting in growth for the Company as well, which in turn leads to new growth opportunities for employees.

In fiscal 2023, we will further enhance the opportunities and environments we provide for employees to think autonomously about their future careers while strengthening support for employee growth, including helping supervisors develop their career support capabilities.

[Double Awards for the Motivating Stance Theory]

We received two awards for our Motivating Stance Theory handbook, the HR Award and the Good Career Company Award. This is the first time that a company has received both awards in the same fiscal year.

HR Award

The HR Awards are presented to initiatives that promote the growth of people and organizations based on voting by 240,000 HR professionals nationwide. In fiscal 2022, 13 companies out of 388 entries received awards. NTT Communications received the Excellence Award in the planning and human resources category.



HR Award Recipient Interview

<https://jinjibu.jp/article/detl/tonari/3031/>
(in Japanese only)

Good Career Company Award

The Good Career Company Awards are presented by the Ministry of Health, Labor and Welfare to companies that are committed to the autonomous career development of their employees. In fiscal 2022, 16 companies received awards out of 89 entries, with NTT Communications winning the Innovation Award.



Good Career Company Award 2022 Recipients

https://www.mhlw.go.jp/stf/newpage_30058.html
(in Japanese only)



Global Human Resource Development Program

As markets and user needs become increasingly diverse and complex due to rapid changes in social structures and technological trends, NTT Communications is also committed to developing global human resources who can demonstrate leadership and show results in a highly diverse environment, based on communication skills and specialized skills that meet international standards. Under the Global Challenging Program (GCP), an entry-level measure for global human resource development, we sought applications and dispatched 24 employees to our overseas offices in fiscal 2022.

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 2022, approximately 90 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 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

In April 2023, the NTT Group introduced new promotion and compensation systems based on expertise for developing mechanisms that enable each employee to acquire and demonstrate ever higher levels of expertise and skills and to create high added value while allowing diverse personnel to autonomously build diverse careers in various fields.

In the environment surrounding the NTT

Communications Group, the accelerating pace of digitization and rapid technological innovation have made it possible to create and provide new value across a broad range of business fields, while at the same time market competition is intensifying across industries and other boundaries. Under these circumstances, the new NTT Communications Group is striving to become a leading company that supports DX in society and industry through advanced mobile-first and cloud-first solutions. Achieving sustainable growth and development, however, requires creating new value by advancing business transformation and expanding into new business domains. To that end, we have revised the systems in which evaluations, salaries, and personnel transfers are determined based on expertise, rather than on years of service, age, or years in the position, so that employees can realize their career visions while maintaining their motivation to acquire higher levels of expertise.

Specifically, we established grade standards to clarify the required level of expertise and behavior for each of the 18 newly created specialized fields and established a system in which employees are promoted and paid according to the degree to which they acquire and demonstrate expertise. In addition, we will strengthen support for autonomous career development by shifting to personnel assignments that enable employees to improve their expertise and by enhancing training.

Through these efforts, we will realize a system that allows diverse employees to autonomously build and grow diverse careers while realizing different workstyles, thereby improving EX (Employee Experience) and creating new added value for our customers.



[Employee Data]

			FY2018	FY2019	FY2020	FY2021	FY2022
Number of employees*1	Non-consolidated		6,142	5,523	5,533	6,760	8,723
		Male	5,122	4,590	4,552	5,550	6,974
		Female	1,020	933	981	1,210	1,749
	Consolidated		23,337	11,494	11,602	11,846	16,851
Ratio of basic salary and remuneration per employee by gender*2	Managerial position	Base salary	—	—	1:1.02	1:1.01	1:1.01
		Total remuneration	—	—	1:1.03	1:1.01	1:1.02
	General positions	Base salary	—	—	1:1.17	1:1.16	1:1.18
		Total remuneration	—	—	1:1.17	1:1.17	1:1.17
Percentage of women in managerial positions*3			6.1	6.7	7.2	8.3	9.5
Turnover rate*4			4.1	3.6	2.4	2.6	2.6
New employees (foreign nationals)*5			237 (10)	203 (7)	203 (5)	257 (8)	221 (9)
	Male		163 (7)	137 (4)	137 (2)	176 (4)	149 (4)
	Female		74 (3)	66 (39)	66 (3)	81 (4)	72 (5)
	women		31.2	32.5	32.5	31.5	34.1
Number of experienced personnel hires			60	50	76	79	103
Percentage of experienced personnel hires among new hires			20.2	19.8	27.2	23.5	31.0
Number of rehires*5			57	57	47	113	127
Ratio of employees with disabilities*6	Non-consolidated		2.19	2.39	2.41	2.38	4.54
	Non-consolidated and domestic Group companies*7		2.11	2.27	2.23	2.34	2.66

*1 As of March 31 for each fiscal year

*2 Same salary structure applied to both male and female employees; differences are due to age structure, grade structure, etc., and the ratio is female to male

*3 As of March 31 for each fiscal year, scope: NTT Communications Corporation, including seconded employees

*4 As of March 31 for each fiscal year, scope: NTT Communications Corporation, excluding seconded employees

*5 As of April 1 for each fiscal year, scope: NTT Communications Corporation

*6 As of June 1 of the following year for each fiscal year

*7 NTT Communications Corporation and 9 domestic Group companies

Maintaining and Improving Motivation

Ongoing Employee Satisfaction Surveys

We have been conducting employee satisfaction surveys since fiscal 2011 and addressing issues identified in the results to improve employee job satisfaction and productivity. In fiscal 2021, we revised the process as an Employee Engagement Survey to compare results on common questions asked by the NTT Group and against average national and international results. In fiscal 2022, the second year of the survey, results for all items exceeded the previous year, particularly with regard to “customer orientation,” “acceptance of diversity,” “performance management,” “corporate ethics,” and “change management,” which improved by three points over the previous year. However, the positivity rate was low in items such as “strategy penetration,” “corporate culture and climate,” and “career,” despite the high correlation with engagement, indicating that there is still room for improvement.

As we work toward attaining an average positive response rate of 65% for the four employee engagement questions, which we call the Engagement 4KPIs, we began using them in fiscal 2023 as indicators of executive compensation and also started incorporating them into plans specific to each organization to encourage improvements. For fiscal 2022, the Engagement 4KPIs were 61%.

[Outline of Survey]

Period conducted: December 2022

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

Number of respondents: 18,555 (response rate: 85.0%)



[Scope of Calculations for Engagement 4KPIs for Fiscal 2022]

Companies: NTT Communications Corporation, NTT Com Engineering Corporation, NTT Com CSEO Corporation, DOCOMO Business Solutions, Inc.
Survey targets: Employees and contract workers at the above companies

[NTT Group's Four KPIs]

—Willingness to make voluntary contributions—

(1) I am motivated to contribute more than is required to get the job done at the company

—Attachment to and pride in the company—

(2) I am proud to work at this company

(3) I would recommend our company as a great place to work to those I know

—Job satisfaction—

(4) I gain a sense of personal accomplishment through my work



Engagement
4KPIs

61 % (FY2022)

Fostering a Culture of Challenge and Creating New Value —New Business Creation Program (docomo STARTUP)

To expand its future horizons, the DOCOMO Group implements various measures for inviting new ideas from employees and developing them into new businesses and services. As part of this effort, NTT Communications launched the DigiCom contest for new business creation in 2016 to develop future core businesses. In fiscal 2022, DigiCom was integrated with the new business creation programs of other DOCOMO Group companies and was relaunched under

a new name, “docomo STARTUP.” The new program consists of “COLLEGE,” in which participants learn new business skills and mindsets, “CHALLENGE,” a contest in which participants submit new business ideas, and “GROWTH,” for nurturing ideas with potential for commercialization. We will create businesses based on employee ideas using the lean startup methodology in areas of high uncertainty. As a result of past efforts, several projects have progressed to demonstration experiments with local governments and partner companies, and some projects have been launched as a service for customers.

docomo STARTUP 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. By taking the initiative to create new businesses, we are fostering a culture of challenge and opening up opportunities for discovering and developing human resources. We will continue to deliver new value through the creation of new businesses that change society.

[docomo STARTUP]



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.



Priority Activities

Promotion of Diversity and Inclusion

Our Approach

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.

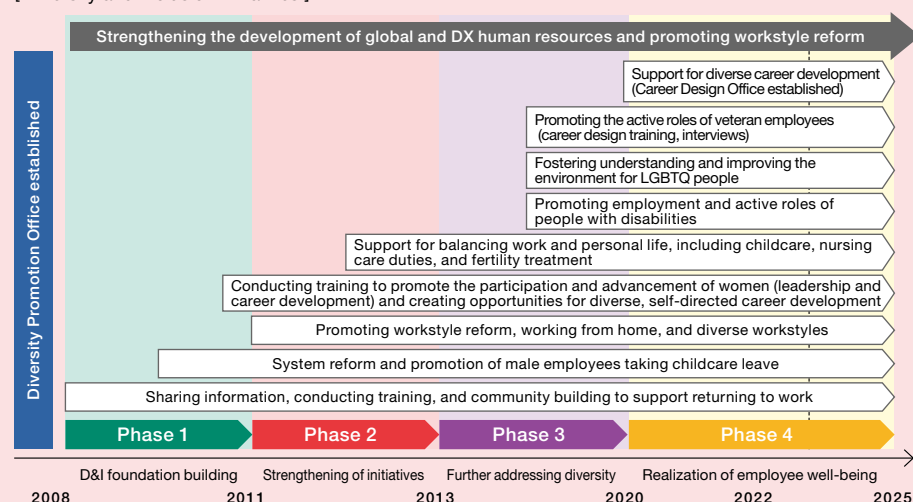
With the firm belief that promoting diversity is essential for the sustainable development of our business, we are promoting diversity and inclusion through our medium-term vision, which upholds goals such as creating working environments that make it easier for employees to design their life plans; 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.

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.

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

[Diversity and Inclusion Initiatives]



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





July 2022 to allow employees to live anywhere in Japan. 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]

	Past	July 2022
Definition	Work is basically performed at the business site	Work is basically performed through remote work
Work location	Business site	Home
Procedures for implementing remote work	Required an application by the employee and approval by a supervisor	Does not require application* by the employee *Application and approval are required when working in a location other than home

Main Achievements in Fiscal 2022 and Goals for the Coming Years

In fiscal 2022, 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 9.5% in fiscal 2022, and we achieved our 100% 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.

We are also making progress in controlling the number of working hours per employee, reducing the total to 1,956 hours in fiscal 2021 from the previous year while achieving a further reduction to 1,948 hours in fiscal 2022. However, since the total number of working hours per employee remains high, we will re-examine the ideal workstyles and find ways to continue to bring this number down.

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 zero incidents. Combined with a health checkup rate of 99.0%, we have more or less met our goal for this year. Going forward, we will continue our efforts to maintain and improve employee health across all our workplaces.

[Total Number of Working Hours]

	FY2018	FY2019	FY2020	FY2021	FY2022
Total number of working hours	1,904	1,885	1,980	1,956	1,948



Employment, Training, and Promotion of Diverse Human Resources

Promoting Women's Participation and Advancement

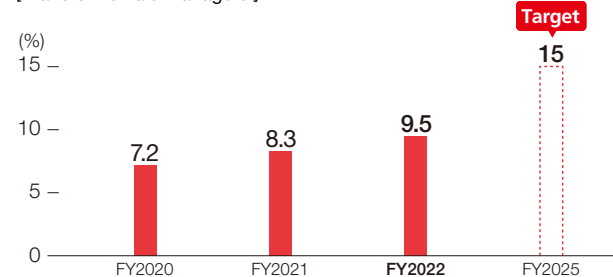
In line with the NTT Group's declaration to double the number of female managers in its organization, the NTT Communications Group supports employees at various stages of their career development to increase opportunities for engaging diverse human resources. In 2016, we received the highest order of 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 major 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 9.5% in fiscal 2022 (female executives ratio: 7.1%). Such progress can be attributed to the fact that many employees, regardless of gender, have begun to pursue autonomous career development 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.

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.

[Ratio of Female Managers]



Scope: Employees of NTT Communications Corporation including seconded employees

Comeback Re-employment

We are actively engaged in "Comeback" hiring, through which people who have left NTT Communications and gained experience in various businesses and industries return to the Company.

Comeback re-employment allows us to hire employees who have a deep understanding of our business and

also bring a perspective from outside our group, and we expect it will expand the scope of our business.

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.

Employees are positioned and actively contributing in various parts of our organization including sales and engineering. As of June 1, 2023, NTT Communications' rate of employees with disabilities is 4.54%, while the rate is 2.49% for the DOCOMO Group as a whole.



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.

We provide 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. In addition, we have established the Specialist Employee System for those who wish to focus mainly on increasing their expertise in a specific field. We are actively recruiting Specialist Employees, with plans to nearly double their number in fiscal 2023 compared to the previous year.

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, and short working hours.

On top of that, we introduced a system that allows employees to continue to work beyond the age of 65 and up to the age of 70, as long as their work is required by the Company. In addition to supporting the career aspirations of the working-age population, by providing seasoned employees with opportunities to play active roles, we expect the system to enhance their willingness to

take on challenges and continue demonstrating high levels of performance. We promote initiatives to develop career designs that keep them motivated regardless of age.

Initiatives for LGBTQ Issues

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

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. Since fiscal 2016, we have continuously been awarded the Gold rating, the highest in its PRIDE Index, and were rated Gold again in fiscal 2022.

[Virtual Background Distributed to Allies]



[PRIDE Index]





Work-in-Life (Work as an Important Part of Life)

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.

Supporting the Balance between Career and Child-raising/Nursing Care —Total Support from Before Childbirth to Reinstatement

In 2017, we obtained the Platinum Kurumin certification from the Ministry of Health, Labour and Welfare for formulating and actively promoting the Fifth Action Plan under the Act on Advancement of Measures to Support Raising Next-Generation Children*1. In our seminars for employees who were about to give birth or return to work after childbirth, and employees on childcare leave, we offer a curriculum that incorporates a variety of information, roundtable discussions by experienced participants, and career development programs. These seminars are open to participants regardless of gender or position, including not only mothers but their partners as well, and they have led to fostering a corporate culture that supports balancing life and work. In fiscal 2022, we encouraged male employees in particular to participate in childcare by delivering messages from the senior vice president of Human Resources and presenting “Ikupapa Leave” (a pattern of male childcare leave) to establish an environment in which male employees can easily apply for leave with the support of their supervisors. As a result, the percentage of male employees taking leave for childcare reached 132.8%*2. We have also started creating a supportive community for employees during childcare leave and have established a system that provides total care from before childbirth to after they return to work.

*1 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.

*2 Denominator: male employee whose partner gave birth during the fiscal year, numerator: male employee with a pre-elementary school child who took childcare leave, etc. (including the Company's unique leave system for childcare) during the fiscal year.

Support for Balancing Work with Fertility Treatment and Nursing Care

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 information 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 implemented measures for balancing work and nursing care, provided information, and fostered relationships between relevant employees. We encourage employees to prepare for the possibility of balancing work and nursing care at an early stage in order to prevent them 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.

[Platinum Kurumin Logo]



[Eruboshi Logo]



[Tomonin Logo]





[Changes in the Number of Employees Who Took Maternity, Childcare, or Nursing-care Leave in Fiscal 2022]

		FY2018	FY2019	FY2020	FY2021	FY2022
Maternity leave (persons)		63	55	54	34	67
Childcare leave (persons)		173	121	98	84	187
	Female	161	111	92	46	138
	Male	12	11	6	38	49
Percentage of male employees taking leave for childcare*1		—	—	—	67.8	132.8
Total number of reinstated employees from childcare leave		82	70	77	76	114
	Female	72	61	60	48	71
	Male	10	9	17	28	43
Total number of employees who were still with the Company 12 months after reinstatement from childcare leave		78	67	74	70*2	71*2
	Female	68	59	58	54	43
	Male	10	8	16	16	28
Reinstatement rate and retention rate of employees after childcare leave						
	Reinstatement rate					
	Female	96.0	96.8	96.8	100.0*3	97.3*3
	Male	90.9	100.0	100.0	100.0*3	100.0*3
	Retention rate					
	Female	94.4	96.7	96.7	90.0*4	89.6*4
	Male	100.0	88.9	94.1	94.1*4	100.0*4
Number of employees using the shorter working hour system for childcare		—	—	—	111	222
Number of employees taking nursing care leave		4	8	8	5	7
	Female	3	5	4	3	5
	Male	1	3	4	2	2
Number of employees registered for re-employment*5 (Number of employees re-employed for reasons related to childcare, transfer, or nursing care)		—	—	—	22 (1)	27 (2)
Average number of paid leave days taken		17.7	16.2	14.0	16.4	17.9
Average paid leave acquisition rate		89	81	70	82	90
Number of employees who resigned without becoming reinstated		4	2	2	0	3
	Female	3	2	2	0	3
	Male	1	0	0	0	0

*1 Denominator: male employees whose partner gave birth during the fiscal year, numerator: male employees with a pre-elementary school child who took childcare leave, etc. (including the Company's unique leave system for childcare) during the fiscal year.

*2 Number of reinstated employees after childcare leave in each fiscal year who were still with the Company 12 months later

*3 Number of reinstated employees in each fiscal year ÷ (Number of reinstated employees in each fiscal year + Number of employees who resigned without reinstatement from childcare leave in each fiscal year)

*4 Number of employees who were still with the Company 12 months after reinstatement from childcare leave in each fiscal year ÷ Number of reinstated employees from childcare leave in each fiscal year

*5 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.

[Three Key Areas of Reform]



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 70%.



Remote work rate

77%

(fiscal 2022 average)

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, 1.3% in fiscal 2021, and 1.2% in fiscal 2022, thus remaining consistently low and 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.

[Percentage of Employees Working Shorter Hours] (Unit: %)

FY2019	FY2020	FY2021	FY2022
2.4	1.7	1.3	1.2

• Environment and Tools

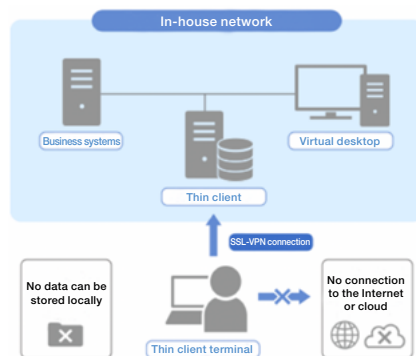
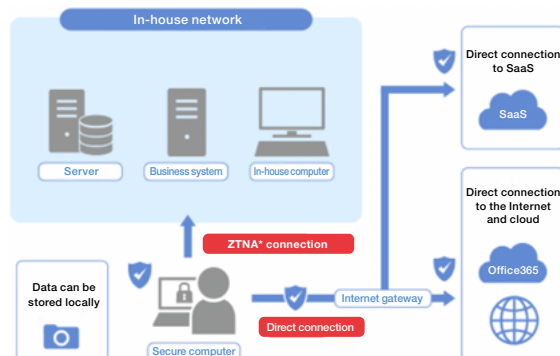
Although we asked all of our employees to work from home during the pandemic as a general rule, there were still certain situations that required them to come to the office, such as to fill out paper applications, sign contracts, and check the mail. This was an issue that needed to be addressed in order to promote a new way of working. To create a new workstyle tailored to hybrid working arrangements, we reviewed our entire business process, including digitization and moving online.

In addition, we replaced the previously introduced thin client PCs* with fat terminals that are unaffected by the network environment, rolling out these secured PCs throughout the Company to realize office ICT, which frees people from limitations of time and place and allows anyone to create a workplace anytime, anywhere. We are promoting home delivery and collection for replacements in the event of failure and automatic setup under the Internet environment, minimization of on-premise environments and review of perimeter defense, and zero-trust security systems. In our annual internal IT Environment Satisfaction Survey, 80% of employees expressed positive opinions about Secured PCs. We use daily communication data obtained from the cloud to visualize how the organization works. We have also taken on new challenges, including data utilization such as by providing awareness of the state of the organization and our own workstyles, based on graphs that display engagement scores and communication data. We will continue to explore new workstyles through automation and higher efficiency by capitalizing on DX.

*Specialized terminals without storage media that are used in virtual desktop environments



[New Working Environment]

Before Previous Office ICT Environment**After** Office ICT Environment with Secure Computers

*Zero Trust Network Access: Approach to security based on the zero-trust concept, in which communication is restricted to users with authorized access to the network.

- Raising Awareness and Corporate Culture

Now that we are a member of the DOCOMO Group, we are endorsing a hybrid workstyle, which incorporates a certain level of face-to-face communication from the perspective of integrating ideas among employees,

including workstyles, and an increasing number of teams have begun implementing in-person meetings.

Under this hybrid working environment, we also conducted one-on-one meetings between supervisors and subordinates to prevent any 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. In addition, we launched the “Go Together” project to create a sense of unity as the new NTT Communications Group under the DOCOMO business brand. We have fostered a culture of mutual support by verbalizing, communicating, and sharing each individual’s ideas and challenges for the Company’s next stage of growth.

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 2022 to questions in the “cooperative structure” and “communication” categories was over 70%, and improved by more than one point year-on-year. We will continue our efforts to further implement these initiatives.



Positive response to questions on “cooperative structure” and “communication”

72%

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 2022, 17.9 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.

[Support for Employee Leave]

	Main Support
Support for maternity and childcare	<p>We support employees expecting or raising children to balance work and family life through the following systems and measures.</p> <ul style="list-style-type: none"> • 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	<p>We support employees caring for a family member to balance work and family life through the following systems and measures.</p> <ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<p>Some of the systems related to life events (special leave, congratulatory and condolence payments, etc.) are available to same-sex partners.</p>
Others	<p>We offer leave systems to meet a variety of needs, including volunteer activities and recurrent learning.</p> <ul style="list-style-type: none"> • Life plan leave (5 days granted for every 5 years of service, which can be set aside as part of annual leave)



Thorough Occupational Safety and Health Management

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 that usually have 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. Stress checks are conducted each year in the autumn and in collaboration with the staff in charge at each office (fiscal 2022 response rate: 91.2%).

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)]

	FY2018	FY2019	FY2020	FY2021	FY2022
Occupational accidents	5	2	1	1	—
Commuting accidents	—	—	—	—	1

Scope: NTT Communications on a non-consolidated basis (excluding the rugby activities of the Symbol Team)

Health Management

Improving Employee Health

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, and as in the previous year, organized two “do Com-Walk” campaigns for all employees, one in the spring and the other in the autumn of fiscal 2022. In the spring we added the Com-Record campaign to encourage people to measure and record their weight and deepen their understanding of their own health. In the autumn, as a member of the new DOCOMO group, we jointly held the “Health Treasure Hunt” exercise event with DOCOMO, as well as the do Com-Fitness campaign, using an application that delivers exercise-related content to encourage people to be active indoors when walking outside was difficult due to the COVID-19 pandemic. In addition, we provided a program that allows those with lifestyle-related diseases to receive the necessary health guidance via a smartphone app, thereby raising employee awareness and improving lifestyle habits. The percentage of employees receiving the health guidance was 20.5% for fiscal 2021 and fiscal 2022. As a result of these efforts, the percentage of employees who exercised at least twice a week increased to 30.3% in fiscal 2022, up 0.7% from the previous year, while attendance and completion rates for health

guidance remained among the highest among NTT Group companies in fiscal 2022. We will continue to encourage employees to receive medical guidance and strive to improve attendance and completion rates.

[Health Challenge 2022 featuring the do Com-Walk, Com-Record, and do Com-Fitness Campaigns]



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 (528 participants in fiscal 2022). Other measures for further expanding our support include conducting a monthly pulse survey for self-care and line care, setting up consultation desks, both in and outside the organization, and developing counseling programs for employees being sent on overseas assignments.

These efforts resulted in our being recognized in March 2023 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.



[Health and Productivity Management Health Management Certification Logo]



As for measures undertaken by the NTT Group, the NTT Health Insurance Union offers outpatient checkups for dependent spouses and voluntarily insured persons for the early detection and treatment of illnesses and health management.



For more information on the NTT Health Insurance Union's outpatient checkups, see:

<https://www.nttkenpo.jp/member/health/dock.html>

(in Japanese only)

Measures for Mental Health

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 2022, we conducted the mental keeper training course for 200 employees (total number of certified employees: 3,447) to further enhance line care in the workplace. We also conducted team management training for 151 supervisors of employees with mental illnesses (NTT Communications: 72; affiliates: 79). 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 730 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. The seminar included content useful for everyday self-care, and in a post-seminar questionnaire, 97.9% of employees said it was either "very good" or "good."

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.

[Types of Consultation Services]

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

*A service providing medical information to employees using AskDoctors, one of the largest physician consultation sites in Japan



Priority Activities

Respect for Human Rights

Our Approach

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. There is also the risk that failure or any delays to properly address human rights issues may result in the loss of trust in the Company and its reputation in society, as well as the risk that it may ultimately lose business. In response, NTT Communications has been working to ensure respect for human rights by establishing the Rules for Preventing Harassment under its Basic Policy on Human Rights Education. To raise human rights awareness, we also conduct training for all full-time and temporary employees, disclose case studies, publish messages from top management regarding human rights education, distribute e-mails to employees, and widely disseminate information on internal and external contact points for

human rights. NTT Communications also conducts human rights due diligence and other measures to address human rights risks in the value chain. By pursuing these proactive human rights education activities and promoting human rights due diligence initiatives to enhance human rights management, we intend to establish a corporate constitution that does not tolerate any form of discrimination, create bright and vibrant workplaces, and realize a value chain that respects human rights.

Main Achievements in Fiscal 2022 and Goals for the Coming Years

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 2022, we were able to maintain attendance in human rights training at roughly the same level as the previous year at 25,233 (participation rate: 96.1%), down 0.2 points. We will continue our efforts in fiscal 2023 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 2022, we received 6,161 entries from 3,611 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.



Promoting Human Rights Education

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.

NTT Group Global Human Rights Policy

(1) Addressing to International Norms

The NTT Group discloses its global human rights policies both internally and externally, in addition to meeting the requirements* of international laws and evaluation organizations.

*International laws: International conventions and treaties adopted from a global perspective, including the "Universal Declaration of Human Rights"

(2) Addressing Critically Important Human Rights Issues

The NTT Group will identify critically important human rights issues and take action on these priority themes through the following:

1. Promotion of "Diversity & Inclusion" (prohibition of discrimination, respect for freedom and rights, fairness in the workplace, economic disparities and poverty)
2. Promotion of "Technology based on high ethical standards" (technology, data bias, privacy, personal data protection, and security)
3. Promotion of "Healthy Work in Daily Life (Health Management)" (diverse work styles, prohibition of forced labor and child labor, workplace safety, freedom of association and the right to organize, living wage, enhanced benefits)
4. Promotion of "appropriate expressions, speech, and other presentations" with consideration for human rights (freedom of expression and respect for human rights in advertising and other presentations)

(3) Scope of application

This policy applies to all employees and officers of the NTT Group. We also ask our suppliers and business partners to support this policy and strive to respect human rights.

(4) Due Diligence

Based on the UN Guiding Principles of Business and Human Rights, we will use the human rights due diligence process to identify, prevent, mitigate, and correct human rights issues globally. And we will strive to improve human rights awareness and human rights management throughout the NTT Group. In addition, due diligence will be conducted among the stakeholders in the entire business value chain, and a direct dialogue will be the basis of our efforts, especially with major suppliers. The status will be disclosed on our website, in our Sustainability Report, and in our Human Rights Report to evaluate and improve the process continuously.

(5) Accusation and Remedy

The NTT Group has established internal and external contact points for whistle-blowing at each Group company to prevent human rights violations. We promise to protect whistle-blowers from unfair personnel actions (e.g., dismissal, demotion) or other disadvantages resulting from their reporting. In addition, consultations and reports received at the contact points will be reported to the Board of Directors appropriately to ensure transparency. We will take sincere measures to resolve problems.



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

<https://group.ntt/en/newsrelease/2021/11/10/211110c.html>



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.

[NTT Communications Group Framework for Promoting Human Rights Education]

Human Rights Education Promotion Committee

Human Rights Education Promotion Executive Committee

Human Rights Education Department

Respective Responsibilities in the Promotion Framework

Human Rights Education Promotion Committee:	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.
Human Rights Education Promotion Executive Committee:	Responsible for executing the actions determined by the Human Rights Education Promotion Committee
Human Rights Education Department:	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.

Human Rights Due Diligence

The importance of addressing human rights risks that occur in the value chain is increasingly being recognized, and there are growing calls for companies to respond. Failure or delays in responding to such issues could lead to a deterioration in the corporate image and a loss of trust in a company and its public reputation. Furthermore, if such a situation cannot be remedied appropriately, customers may no longer do business with that company, which may affect its short-term as well as medium- to long-term business performance and financial position.

In response to these risks, we will implement the aforementioned initiatives while identifying, preventing, mitigating, and correcting human rights issues on a global scale by applying the human rights due diligence process in accordance with the United Nations Guiding Principles on Business and Human Rights, and strive to raise awareness of human rights and improve human rights management throughout the Group. In fiscal 2022, assessments were conducted for specific situations in which human rights issues were a concern. In addition, as a member of the NTT Group, we will conduct due diligence throughout the entire value chain and 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. Through these efforts, we hope to establish a rich corporate culture founded on respect for human rights and to become a corporate group that is always trusted and chosen, which are prerequisites for maintaining and expanding business opportunities.

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 2022, 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.

[Overview of Human Rights Education Training in Fiscal 2022]

	Overview
Major topics	Business and Human Rights <ul style="list-style-type: none"> • Definition of human rights • Human rights topics related to recent corporate activities • Ministry of Economy, Trade and Industry's Guidelines on Respecting Human Rights in Responsible Supply Chains
	Diverse Nature of Human Rights <ul style="list-style-type: none"> • Regulatory processes related to the workplace • Harassment in the workplace • Examples of internal consultation cases • Psychological safety • Persons with disabilities • LGBTQ and other sexual minorities • Discrimination • Human rights and the Internet
	Basic Policy on Human Rights Education <ul style="list-style-type: none"> • NTT Group's Human Rights Policy • NTT Communications Group's Basic Policy on Human Rights Education
Target	Full-time and temporary employees of the NTT Communications Group
Attendance	25,233

[Attendance of Human Rights Education Training] (Unit: %)

	FY2018	FY2019	FY2020	FY2021	FY2022
Attendance	88	89	87	96	96

Scope: NTT Communications Group

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 2022, 221 employees participated in this training.

Human Rights and Compliance Slogans

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 2022, we received 6,161 entries from 3,691 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 FY2022

Human Rights Category

Grand Prize	It's all in the way you say it
Special prize from the chairperson of the Human Rights Education Promotion Committee	Differences of opinion, once accepted, become common ground for agreement

Compliance Category

Grand Prize	Trust is built upon sincere responses
Special Prize from the chairperson of the Compliance Committee	As we continue, the circle of sincerity will continue to expand

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.



Governance

Remaining Trustworthy and Mission-oriented

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, the trend toward remote interactions has heightened the importance of ensuring information security as a social concern, and 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.

Targeted SDGs



Priority Activities

- ▶ 107 Thorough Compliance and Risk Management
- ▶ 114 Enhanced Value Chain Partnerships
- ▶ 120 Continuously Strengthening Information Security



Priority Activities

Thorough Compliance and Risk Management

Our Approach

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.

Main Achievements in Fiscal 2022 and Goals for the Coming Years

As part of our ongoing compliance efforts, we are fostering awareness of risk management and conducting compliance training. Attendance for the NTT Communications Group as a whole rose to 99.1% in fiscal 2022 from 98.9% in fiscal 2021, while the implementation rate for the corporate ethics survey rose to 95.2% from 94.1% in fiscal 2021. We also conducted training to promote understanding of harassment and management, and to raise awareness of the importance of good communication and building favorable working environments. 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 2022, the Business Risk Management Committee met twice, and Business Risk Management Subcommittee meetings were held 12 times. We reviewed the three material risks for fiscal 2022—the COVID-19 pandemic, information security, and resilience—and designated geopolitics, corporate governance, and information security as material risks that require a focused effort for fiscal 2023.

Sharing High Ethical Standards and Ensuring Compliance

Continuous Strengthening of Corporate Governance

- Our Foundational Mission, Core Beliefs, and Business Vision

The NTT Communications Group took the opportunity of its 20th anniversary in 2019 to establish its mission, “Creating communication methods that open up new possibilities for people and our world,” and its core beliefs, “Take the initiative,” “Inspire Each Other,” and “Respond to Society’s Needs.”

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>

Corporate Governance

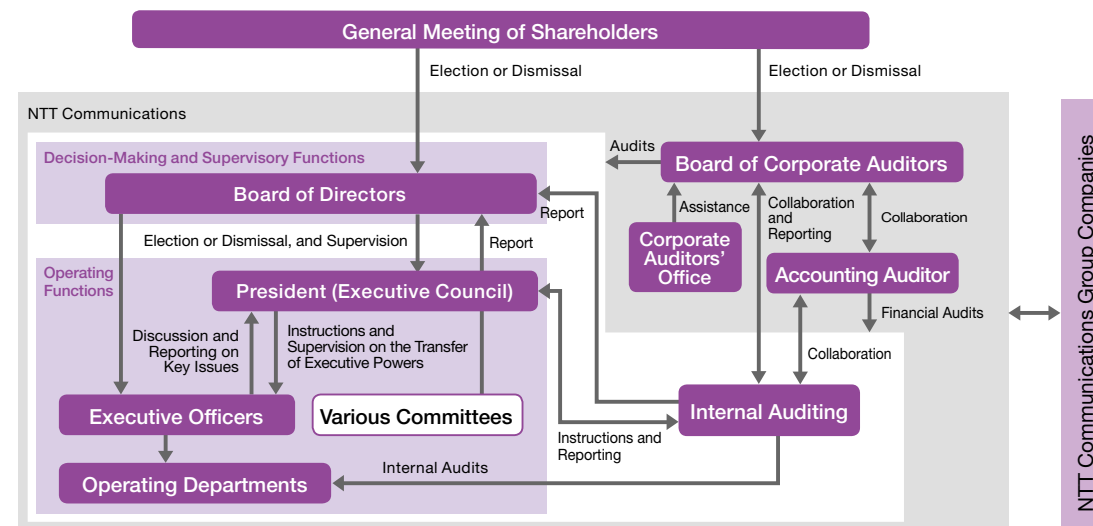
Corporate Governance Structure

NTT Communications has adopted a governance structure based on a system of Board of Directors and Board of Corporate Auditors and has recently assigned outside directors to bolster its governance functions. The board comprises eight members and is chaired by the president. In principle, it meets once a month to make key management decisions in compliance with laws and regulations, the Articles of Incorporation, and the Board of Directors’ rules.

We have set up an Internal Audit Department at the

head office to conduct annual internal audits by selecting audit items based on the results of risk assessment to minimize or prevent management risks and boost corporate value. The Board of Corporate Auditors comprises three auditors. In addition to attending important meetings such as those of the Board of Directors, they hold meetings of the Board of Corporate Auditors to audit the execution of directors’ duties with an emphasis on confirming the legality and appropriateness of management decisions. A dedicated organization and staff facilitate efficient audit operations. The corporate auditors conduct their audits in close cooperation with accounting firms and the Internal Audit Department by periodically sharing information on audit plans and results.

[Corporate Governance Structure]





● Appointing Directors

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

[Composition of Board Directors and Auditors (as of June 14, 2023)]

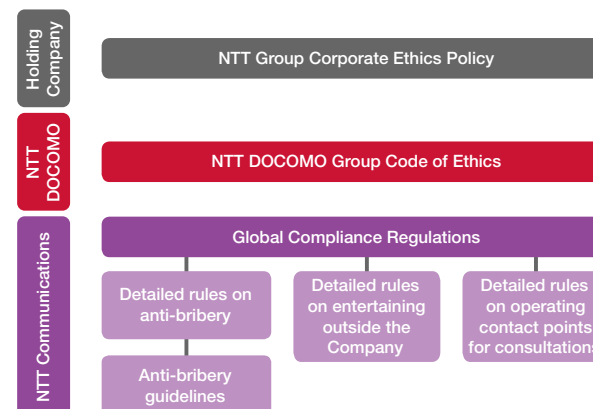
Directors	Name	Main Responsibilities and Roles
President and CEO Representative Member of the Board of the Company	Toru Maruoka	
Senior Executive Vice President Representative Member of the Board of the Company	Hidemune Sugahara	In charge of sales In charge of Global Business In charge of Digital Transformation
Senior Executive Vice President Representative Member of the Board of the Company	Keigo Kajimura	Executive Vice President of Platform Service Division In charge of Technology & Innovation, and Information Security
Senior Vice President Member of the Board	Hisashi Fujishima	Senior Vice President of Corporate Planning
Members of the Board	Masaaki Shintaku	
	Ikuko Suzuki	
	Minako Tsumenaga	
	Naoki Nakaminami	
Audit & Supervisory Board Members	Sakuo Sakamoto	
	Shuji Ota	
	Masanori Ozawa	

Continuously Enhancing Compliance Activities as a Company that Is Consistently Trusted by Society

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, as well as the NTT DOCOMO Group Code of Ethics, established by NTT DOCOMO, Inc. and applied across the NTT DOCOMO 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.

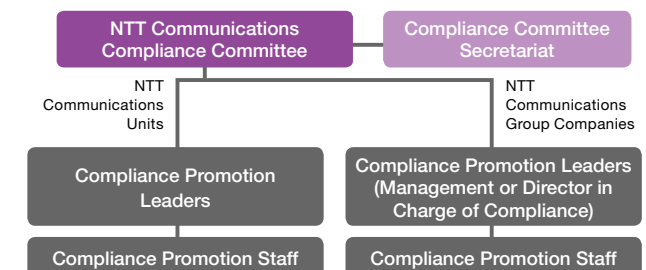
[Framework of Important Internal Rules on Compliance]



Specifically, we maintain the relevant rules under the Global Compliance Regulations that serve as the standard compliance policy for the NTT Communications Group. We also promote compliance led by the Compliance Committee, which is chaired 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.

[Compliance Promotion Framework]





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>

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 2022, we covered basic themes related to legal compliance in Japan and overseas, such as the Whistleblower Protection Act, prevention of harassment, and laws and regulations related to the use of data. We also organized additional training on specific themes such as key considerations for information management, including personal information protection, post-pandemic workstyles such as hybrid workstyles, conduct risk, and integrity. Attendance for the NTT Communications Group as a whole was 99.1%.

We are continuing training in fiscal 2023 on themes that

address changes in the business environment, such as promoting fair sales activity, appropriate use of SNS, and adapting to the post-pandemic era. By enhancing content and increasing attendance, we are working to strengthen compliance management across the Group.

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.

We are continuing to ensure fairness in operating our business by reviewing the rules on entertaining outside the Company, which was established in August 2021 in response to such factors as changes in the external environment.

Appropriate Advertising

Telecommunication services such as the Internet and smartphones have become indispensable infrastructure for daily life and business. Moreover, these areas are undergoing rapid technological innovation in which the content, providers, contracts, and other aspects related to services used by customers are becoming increasingly sophisticated and diverse.

NTT Communications will create new value by proposing fixed-mobile convergence services and integrated solutions under the corporate business brand "docomo business" and will provide these services to all types of customers, from large corporations to small and medium enterprises. In light of the evolution of the business environment, such as expanded service offerings and the rising number of customers, we are required to provide customers with more appropriate information and to display advertisements in an easy-to-



understand manner. To this end, NTT Communications practices established operational procedures, including an accountability system related to advertisements and a screening system for advertising. At the same time, we continuously strive to ensure the proper display of advertisements that are easy to understand by reviewing our advertising screening system and business processes in light of “docomo business.”

Initiatives on AI Ethics

With regard to artificial intelligence (AI), we are now observing more frequent uses of generative AI in daily life, even as it is also being promoted for specific applications in such areas as automated driving and robotics. On the other hand, AI is still in its technological infancy, with the risk that it may become entangled with ethical issues such as discrimination and prejudice, legal concerns such as copyrights, and other problems such as information leakage. 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 are 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/en/about-us/cs/principle.html>

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 2022, a total of 73* incidents related to the NTT Communications Group (43 related to harassment, 23 to dissatisfaction in the workplace, 5 to labor, and 18 others based on a broad categorization) were reported through the channels described above. The Compliance Office responded appropriately to the reports based on the judgment of the chairperson of the Compliance Committee, and investigated the facts and obtained third-party expert opinions as required, prior to implementing the necessary actions to prevent recurrence.

We are striving to improve our hotline so that it is easier to access for reporting and consultation by operating it in accordance with internal rules such as the Global Compliance Regulations under the revised Whistleblower Protection Act. These regulations 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.

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



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>

Corporate Culture for Maintaining and Improving Business Ethics

The NTT Communications Group regards integrity as a higher voluntary and proactive value that allows all of us to sincerely respond to society and stakeholders and to build trust, both as individuals and as a company. Accordingly, we are working to embody and instill integrity through measures such as compliance training.

In our corporate ethics survey for fiscal 2022, the ratio of employees responding that their workplaces have an open atmosphere was 95.8% (average positive response rate for related questions). We will continue to foster an open corporate culture to establish an integrity-based compliance infrastructure as a company that continues to be trusted and exists in harmony with society.



Continuously Upgrading the Risk Management Structure

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 mechanism for effectively addressing major risks that may affect our business management, we set up the Business Risk Management Committee, chaired by the senior executive president, to construct and implement a PDCA cycle for risk management.

The heads of units and presidents of Group companies comprising the members of the Business Risk Management Committee meet twice a year to address the changing business environment by defining risks that require action, identifying material risks, and discussing issues such as initiatives for promoting risk management. In fiscal 2023, the committee focused on the current status of internal and external risks as well as their impact and scope to identify 19 items, which were also assessed according to their assumed frequency of occurrence and impact. As a result, information security was identified and addressed as a material risk for the second consecutive fiscal year. In addition, we have recently designated geopolitics as a key risk due to the need to promote and strengthen new initiatives in response to economic security legislation,

as well as corporate governance, in order to strengthen effective initiatives under the “docomo business” brand, and measures for risk management were reinforced accordingly. Each risk item, including material risks, is handled by a Business Risk Management Subcommittee consisting of all units that meet each month to implement a practical PDCA cycle for risk management by examining and analyzing the occurrence of risks and discussing countermeasures. Operational audits are conducted to confirm the status of each unit's measures against risk, and similar activities are extended to principal Group companies in Japan to promote risk management throughout the Group.

Crisis Management

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.

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, NTT Communications has drawn up basic policies for establishing a system of internal controls for the entire NTT Group. Concurrently, as a member of the NTT DOCOMO 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. By conducting internal auditing activities throughout the year, 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 2022, we placed importance on the impact of the business integration with NTT DOCOMO and NTT COMWARE and worked to establish and confirm operation of an internal control framework Groupwide, focusing on newly established organizations and companies that had recently joined the NTT Communications Group. Since fiscal 2018, we have been conducting our internal audits using a digital auditing method (for detecting signs of inadequacy and fraud, and conducting continuous risk monitoring based on CAAT*), which was quickly introduced to new organizations and companies. We also analyzed digital audits for domestic Group companies more frequently to conduct more timely audits.

In addition, while utilizing digital auditing, we have also initiated full-scale auditing based on real-world communication. In particular, we visited eight branches nationwide, along with new organizations and domestic and overseas Group companies that recently joined the NTT Communications Group to provide guidance and support for establishing internal controls.

In fiscal 2023, to address information security and geopolitical risks and respond to additional business structure reforms, we designated the basic audit, themed audit, information security and systems audit, and NTT Group priority audit as the four pillars of our internal auditing. This framework will further strengthen the NTT Communications Group's internal controls overall by (1) continuing to upgrade and expand the scope of data-driven audits, and (2) reinforcing an on-site, real-world approach through face-to-face interviews.

*Computer-assisted audit techniques is an auditing method centered on big data analysis. Business Intelligence (BI) tools are used to visualize the results of analysis to reveal signs or trends of declining performance or fraud.



Priority Activities

Enhanced Value Chain Partnerships

Our Approach

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.

[Summary of NTT Communications Corporation Guidelines for Sustainability in Supply Chain]

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.

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.

[NTT Communications Corporation Guidelines for Sustainability in Supply Chain] ★ Indicates the main additions and enhanced item

Content		
Introduction★ Requests to Suppliers (Code of Conduct): Common Matters <ol style="list-style-type: none"> 1. Build management systems ★ 2. Detect inappropriate activities early by building complaint processing mechanisms 3. Publicize and disclose the status of initiatives related to these guidelines I. Human Rights and Labor <ol style="list-style-type: none"> 1. Prohibit forced labor ★ 2. Prohibit inhumane treatment 3. Prohibit child labor and make considerations for young workers 4. Prohibit discrimination ★ 5. Proper wages and allowances 6. Regulate working hours 7. Respect the right to freedom of association and collective bargaining 8. Implement human rights due diligence in the supply chain ★ 9. Promotion of "Technology that is based on high ethical standards." II. Occupational Health and Safety <ol style="list-style-type: none"> 1. Occupational Safety 	<ol style="list-style-type: none"> 2. Apply safety measures for equipment and instruments 3. Promote hygiene in the workplace 4. Apply appropriate measures for occupational injuries and illnesses ★ 5. Prepare for and respond to emergencies 6. Consider physical workload 7. Promote safety and hygiene in company facilities 8. Conduct health maintenance programs for employees 9. Communicate about safety and hygiene III. Environment <ol style="list-style-type: none"> 1. Obtain environmental permits and report to the government 2. Manage chemical substances contained in products 3. Manage chemical substances 4. Minimize environmental pollution (wastewater, sludge, exhaust, noise, vibration, etc.) 5. Reduce energy consumption and greenhouse gas emissions ★ 6. Reduce environmental burden by implementing product assessment 7. Effectively use resources and manage waste 8. Conserve biodiversity ★ 9. Implement environmental investigations in the supply chain 	IV. Fair Trade & Ethics <ol style="list-style-type: none"> 1. Prevent corruption and illegal political contributions, prohibit improperly providing or receiving benefits 2. Prohibit abuse of dominant bargaining position 3. Execute business fairly 4. Respect intellectual property 5. Appropriately manage imports and exports 6. Prevent improper acts 7. Responsibly procure minerals and carry out due diligence V. Product Quality and Safety Product Quality and Safety <ol style="list-style-type: none"> 1. Ensure product safety 2. Provide accurate product and service information VI. Information Security <ol style="list-style-type: none"> 1. Provide products and services that take into consideration security and privacy ★ 2. Prevent the leaking of confidential information 3. Protect personal information 4. Take countermeasures against cyber attacks on one's own company 5. Respond to security incidents ★ VII. Formulate business continuity plans



For more information on the NTT Communications Corporation Guidelines for Sustainability in Supply Chain, see:

https://www.ntt.com/content/dam/nttcom/hq/en/about-us/procurement/pdf/SustainabilityGuidelines_E_202211.pdf



Main Achievements in Fiscal 2022 and Goals for the Coming Years

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 have been continuously conducting sustainable procurement promotion surveys of our suppliers since fiscal 2016. In fiscal 2022, we also began utilizing EcoVadis^{*1}, a global rating organization, to conduct SAQs on about 130 suppliers covering roughly 90% of the NTT Group's total procurement to identify risks.

In fiscal 2023, 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. We will also continue to provide supplier information to EcoVadis.

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 2022.

To more accurately understand customer expectations, we analyzed the correlation between “docomo business” brand recognition and NPS^{*2}, and surveyed the intention to use Company-paid mobile terminals, enabling us to formulate focused sales and service strategies for the corporate business of the new DOCOMO Group.

In fiscal 2023, in addition to the annual relational survey, we will consider introducing a transactional survey to probe deeper into customer expectations and issues while also strengthening the survey on digital customer contact points to improve sales performance and service development.

^{*1} An organization that evaluates supply chain sustainability. Providing platforms for evaluating the sustainability of companies related to policy, measures, and achievements, EcoVadis conducts surveys and evaluations of suppliers in 175 countries and 200 industries from the perspective of four areas: the environment, labor conditions, business activities, and the supply chain.

^{*2} Net Promoter Score. An indicator that measures customer loyalty, which is highly correlated with a company's growth rate and profitability.

Collaboration with Suppliers to Ensure CSR Procurement and Green Procurement

Dissemination of Sustainable and Green 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 SAQs using EcoVadis, a global rating organization, and also hold meetings to exchange ideas on details and confirm that there are no risks.

While the target has been set to engages in direct dialogue with 40 supplier companies across the NTT Group each year in fiscal 2022, NTT Communications held direct dialogues with five key suppliers. In the course of developing mutual understanding and trust, we exchange views on human rights, the environment, information security, and other issues to promote further initiatives across the supply chain. Looking ahead, we will continue to work with our suppliers to promote sustainable procurement.



For more information on the NTT Communications Corporation Guidelines for Sustainability in Supply Chain, see: https://www.ntt.com/content/dam/nttcom/hq/en/about-us/procurement/pdf/SustainabilityGuidelines_E_202211.pdf



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

Developing Procurement Professionals

In maintaining sound Group management, we uphold our Sustainability Policy to thoroughly establish and enhance our awareness of 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 2022, a total of 77 employees have been certified (Grade A: 31, Grade B: 46), including those transferred in fiscal 2022 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 2022. We also encourage the acquisition of environmental qualifications, and three employees have passed the Certification Test for Environmental Specialists (Eco Test). As in the past, we also 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.

Response to Conflict Minerals

The NTT Communications Group will promote initiatives to refrain from using conflict minerals under the NTT Communications Corporation Guidelines for Sustainability in Supply Chain and will conduct procurement activities in accordance with the guidelines. The response to conflict minerals by major suppliers is confirmed by conducting a questionnaire

survey aimed at checking the operational status of the NTT Communications Corporation Guidelines for Sustainability in Supply Chain.

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 and Billing Department has been ISO 14001 certified since October 1999, and the scope of certification was expanded in fiscal 2022 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. We also engage in environmental protection by appropriately operating their environmental management system. In addition to setting and managing environmental targets as KPIs in line with our business operations, we have expressed our support for COOLCHOICE*, soliciting and selecting activities from all members, and proactively engaging in environmental protection activities that can be easily undertaken by everyone in the department, such as recycling pull tabs and participating in the Chiyoda ward local cleanup campaigns, candle night events, and Kodomo Mirai (Children's Future) used book donations.

*The Ministry of the Environment's national campaign to combat global warming.

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For more information, see: Acquiring ISO 14001 Certification.

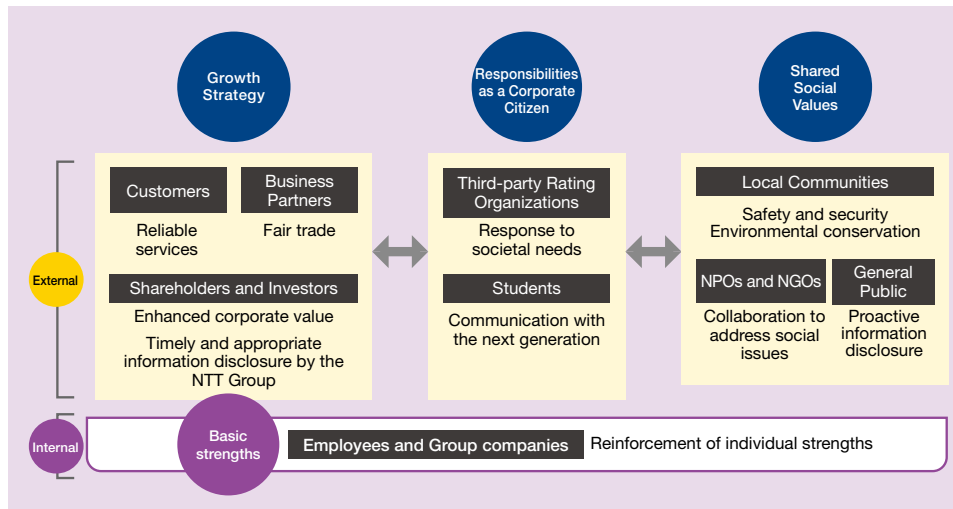


Enhance Stakeholder Engagement

Our Approach to Stakeholder Engagement

Building and enhancing stakeholder relationships are extremely important for the NTT Communications Group toward becoming a corporate group that creates the future and maintaining business operations. In a renewed effort to improve stakeholder engagement by disclosing information on sustainability, we have categorized our disclosure 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]

Stakeholder		Opportunities for Engagement	Main Themes
Customers	We gather feedback through such means as customer satisfaction (CS) surveys and take steps to improve satisfaction levels.	<ul style="list-style-type: none">• Voice of customer (VOC) survey, CS surveys• Exchange of opinions at the docomo business Forum• Exchange of opinions based on daily interaction with customers	<ul style="list-style-type: none">• Improving quality in products and services• Consideration of new products and services• Continuous improvement in customer service
Business Partners	We constantly exchange opinions to raise customer satisfaction and establish sustainability throughout the supply chain.	<ul style="list-style-type: none">• Supplier due diligence• Surveys, daily exchange of opinions	<ul style="list-style-type: none">• Improving quality in products and services• Consideration and co-creation of new products and services• Ensuring fair business practices• Ensuring sustainable procurement and respect for human rights
Society at Large	We create opportunities for engaging with diverse stakeholders in society to understand the issues and current status.	<ul style="list-style-type: none">• Dialogue with stakeholders• Exchange of opinions with NPOs, NGOs• Social contribution activities• Environmental protection activities	<ul style="list-style-type: none">• Contributing to the development of a sustainable society• Participation in social contribution and community activities• Harmony with local communities• Responsibility as a corporate citizen
Employees	We consistently incorporate employees' opinions to ensure effective employment and sustain employee motivation.	<ul style="list-style-type: none">• Comments from executives during dialogue meetings and lectures• e-learning programs and questionnaires• Feedback collected through the corporate website and helpline• KAIZEN Support Line• Employee satisfaction surveys	<ul style="list-style-type: none">• Instilling the corporate vision and philosophy• Instilling the Sustainability Policy• Self-development and creation of customer value• Realization of job satisfaction• Autonomous career development and personal growth
Third-party Rating Organizations	We meet the public need for information disclosure and cooperate with various surveys concerning the SDGs to develop a broad understanding of the status of our initiatives.	<ul style="list-style-type: none">• Participation in surveys conducted by research institutions in Japan and overseas• Publication of the Sustainability Report and information disclosure via the corporate website	<ul style="list-style-type: none">• The status of various initiatives for social issues, human resources, the environment, and corporate governance



● 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.

Our fiscal 2022's VOC survey was conducted to understand customer trends and challenges in rebuilding local communities through the use of ICT (including carbon neutrality, Smart City, and digital transformation (DX) of education and local government), in addition to the level of overall satisfaction with NTT Communications as well as its service and sales activities. We conducted a detailed analysis of survey results by customer attribute to gain a more detailed understanding of customer needs in focused DX areas and security services, and we incorporated the learnings into service development.

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.

[Examples of Policies and Guidelines for Sustainability Priority Areas and Priority Activities]

Sustainability Priority Areas and Priority Activities		Policies and Guidelines	Page in Report
Society	Promotion of DX to connect society with the future Promotion of innovations that break through limits	Our Mission	006 035 039
	ICT transformation	NTT Communications Three Disaster Policy Fundamentals	041
	Promotion of corporate citizenship	Social Action Principles	045
Environment	Promotion of a decarbonized society Development of a closed-loop society	Global Environmental Charter	049
		Environmental Statement	049
		Eco Strategy 2030	050
		Biodiversity Action Plan	070
Human Resources	Promotion of diversity and inclusion	Promotion of Diversity Fundamental Policy	091
	Respect for human rights	Basic Policy on Human Rights Education	102
Governance	Thorough compliance and risk management	Basic Approach for Maintaining an Internal Control System	113
	Enhanced value chain partnerships	NTT Communications Corporation Guidelines for Sustainability in Supply Chain	114
	Continuously strengthening information security	NTT Communications Security Declaration	120



Priority Activities

Continuously Strengthening Information Security

Our Approach

To address information security issues that are growing in sophistication and severity due to social trends for realizing a remote world, we are continuously promoting our security governance and strengthening 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 NTT Communications 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.

Main Achievements in Fiscal 2022 and Goals for the Coming Years

We are continuously strengthening our information security, including reinforcing our ongoing security management and appropriately managing personal information.

In fiscal 2022, we achieved our goal of zero serious incidents, and we will continue to strengthen our efforts to maintain this level of success.

In addition, we revised and enforced our information security rules in January 2023 to comply with NTT Group regulations and global standard security policies. In fiscal 2023, we will establish operations based on the revised rules. We will also reinforce our ability to respond to security risks by automating and streamlining security operations and improve IT governance by centralizing IT/OT asset management.

Priority Activities Continuously Strengthening Information Security

Ensuring Information Security

● Basic Policy

“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.



Appropriate Management of Personal Information

Protection of Customer Information and Personal Information

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 Personal Information Management 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. 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. We will continue to protect customer privacy and promote the appropriate use of 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/

● Raising Workplace Awareness and Providing Thorough Training

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.

[Information Security Training Attendance]

Type of Training	FY2018	FY2019	FY2020	FY2021	FY2022
Information security training (total)	15,055	11,641	16,449	19,783	22,994
Companywide security training and assessment of understanding	14,941	11,527	16,291	19,588	22,819
Training for managers and leaders in charge of implementing security management	114	114	158	195	175



- Information Security Management Structure

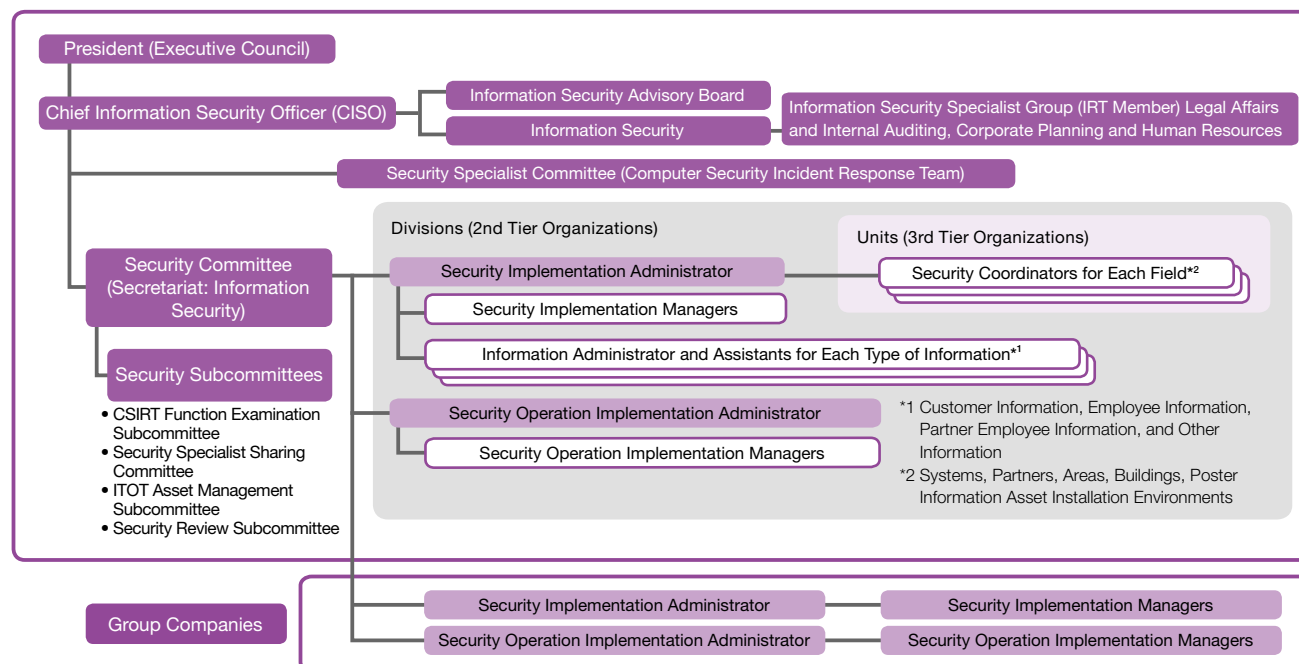
We set common targets on information security management for our operations in Japan and overseas, based on the requirements of ISO/IEC 27001. Specifically, we implement the following measures under the leadership of the chief information security officer (CISO): formulate rules and standards and educate 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 2023, we will apply the lessons learned from the unauthorized access incident and leverage our experience in international sporting events to develop comprehensive IT/OT security, security measures that lie at the foundation of the DOCOMO Group's business, and related actions that contribute to the country and society.

We will also establish evidence-based information security investigations and improve the efficiency of our security operations by automating the alert/incident response.

In terms of developing security specialists, we achieved the objectives of our plan for developing advanced security specialists by jointly operating a remote training program with N.F. Laboratories, Inc.

[Security Management Framework]



- Third-party Assessment and Certifications

As of March 2023, 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



Sustainability Accounting Co., Ltd.

Independent Assurance Statement

October 19, 2023

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 for the fiscal year 2022 reported in NTT Communications Corporation Sustainability Report 2023, which indicate 9.5 % for the percentage of women in managerial positions (Non-consolidated, as of March 31, 2023), 7.1 % for female executives ratio (Non-consolidated, as of March 31, 2023), 132.8 % for the percentage of male employees taking leave for childcare (Non-consolidated), 4.54 % (Non-consolidated) and 2.66 % (Non-consolidated and domestic Group companies) for the ratio of employees with disabilities (as of June 1, 2023), GHG emissions: 5.91 kt-CO₂e for Scope1, 124 kt-CO₂e for Scope2 and 2.03 Mt-CO₂e for Scope3 (Category 1,2,3,4,5,6,7,11,12,13), 256 GWh (48.6 %) for the consumption and rate of electricity derived from renewable energy source, 15.4 kt for the total waste generated and 324 thousand m³ for the total water used (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, 2023)

Company Name	NTT Communications Corporation
Headquarters	Otemachi Place West Tower 2-3-1 Otemachi, Chiyoda-ku, Tokyo 100-8019, Japan
Date Established	July 1, 1999
Paid-in Capital	230.9 billion yen
Operating Revenues*¹	1,097.0 billion yen
Operating Income*¹	119.1 billion yen
Number of Employees	9,300 (NTT Communications Group: 17,800)* ²
Business	Long-distance telecommunications operations in Japan, international telecommunications business, solutions business, and related business

*¹ Results for FY2022 (NTT Communications Corporation)

*² As of July 2023

Group Companies (as of July 1, 2023)

- 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
- COMWARE Financial Systems Corporation
- DOCOMO Business Solutions, Inc.
- N. F. Laboratories, Inc.
- NTT BizLink, Inc.
- codeTakt Inc.
- DOCOMO gacco, Inc.
- Phone Appli Inc.
- 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 in 2022.



- Received five awards, including the Overall Grand Prize for SDPF Node-AI, in the 16th ASPIC IoT/AI/Cloud Awards 2022, held in November 2022.



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]

Services and Solutions	Cloud and Data Center	5G	Network and Mobile
Telephone and Visual Communication	Operational Management	Security	IoT
AI	Data Utilization	Business Support and Marketing	Disaster Countermeasures



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 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. The first half of the report presents the future direction of NTT Communications and examples of solutions addressing social issues based on our Re-connect X medium-term business vision, followed by the results of our priority activities in fiscal 2022.

◆ Scope of the Report

This report covers the activities of NTT Communications Corporation and the following Group companies as of fiscal 2022, unless otherwise indicated.

*17 Group companies (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 Appli Inc., NTT Com Asia Limited, NTT Communications China Co., LTD, Mobile Innovation Co., Ltd., Shanghai NTT Telecommunications Engineering Co., Ltd.)

Note: The scope for environment-related data and content in this report includes NTT Resonant Inc. and X-LISTING Co., Ltd. but does not include DOCOMO gacco, Inc. or Mobile Innovation Co., Ltd.

◆ Period Covered

Fiscal 2022: April 1, 2022 to March 31, 2023

(Also contains information on activities conducted before or after this period)

◆ Issue Date Information

This report: November 2023

(Previous report: December 2022; next report: scheduled for December 2024)

◆ Reference Guidelines

GRI Sustainability Reporting Standards 2016/2018/2019/2020/2021

Environmental Reporting Guidelines 2018, Ministry of the Environment

Environmental Accounting Guidelines 2005, Ministry of the Environment

ISO 26000:2010 Guidelines on Social Responsibility

◆ Inquiries

Sustainability Promotion Office, Human Resources, NTT Communications Corporation

◆ Registered Trademarks

IOWN® is a trademark or registered trademark of Nippon Telegraph and Telephone Corporation.

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

<https://www.ntt.com/en/about-us/csr.html>

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:

<https://www.ntt.com/en/about-us/csr/pdf/download.html>