



NTT Group Sustainability Report 2022



CONTENTS

002 Editorial Policy

004 NTT Group Sustainability

- CEO Message
- NTT's Mission, Vision, Values
- Process for selecting material issues for three themes for achieving Self as We, which underpins NTT's vision for a sustainable society
- Contributing to the development of a sustainable society with medium-term strategies
- Organization for Implementation
- Stakeholder Engagement
- Message from Management (Senior Executive Vice President) (1)
- Initiatives for human capital management
- Message from Management (Senior Executive Vice President) (2)
- IOWN concept
- 2021 highlights

028 Ensuring the positive coexistence of nature and humanity

- **Feature 1** Environment and Energy Vision
- Social Challenge 1–3
- Business Activity 1–11
- TCFD

068 Improving prosperity for all people and cultures

- **Feature 2** Transformation to a New Management Style
- Social Challenge 4–6
- Business Activity 12–21

125 Maximizing well-being for all

- **Feature 3** Promoting Supplier Engagement
- Social Challenge 7–9
- Business Activity 22–30

161 Data List

170 Independent Assurance Statement

171 GRI Content Index

Editorial Policy

The composition of this Data Book closely corresponds with items in the NTT Group Sustainability Priority Activities in order to report comprehensively and in an easy to understand manner to stakeholders, including investors who value ESG. While the report covers the status of the NTT Group overall as much as possible, the scope of data is clearly noted when it is limited to a part of the Group.

For detailed information on the business strategies of NTT (hereinafter “the Company”) and operations, please refer to Annual Report 2022. For details on ongoing efforts related to sustainability and achievements at NTT Group companies, please refer to the Sustainability Report published separately by each company.

■ **NTT IR Site**
<https://group.ntt/en/ir/>

■ **NTT Group Sustainability Site**
<https://group.ntt/en/csr/>

Reporting Period April 1, 2021 to March 31, 2022 Certain activities implemented after March 31, 2022 and the outlook for the future are also included.

Publication Date November 23, 2021 (Previous report: December 2021; Next report (tentative): October 2023)

Decision Making Process for Published Content To determine the content requirements for the publication, the Board of Directors discussed sustainability and other basic policies in April 2022, and then the representative director and senior executive vice president acted on their authority under the organizational rules to confirm and approve the content.

Reference Guidelines

- GRI Sustainability Reporting Standards 2016/2018/2019
- Environmental Reporting Guidelines 2018, Japan Ministry of the Environment
- ISO 26000: Guidance on Social Responsibility

Legend

- Nippon Telegraph and Telephone Corporation is abbreviated as NTT, Nippon Telegraph and Telephone East Corporation as NTT East, and Nippon Telegraph and Telephone West Corporation as NTT West. Some group companies of the NTT Group are defined with “エヌ・ティ・ティ” for registration purposes, but in general use the NTT notation. In principle, notations for status of incorporation have been omitted from the names of NTT Group companies.
- Figures in the numerical tables have been rounded and therefore may not necessarily add up to the total figures.
- The names of companies, products and services are the registered trademarks or trademarks of each company.

Third-Party Assurance The NTT Group obtained third-party assurance from Sustainability Accounting Co., Ltd. with regard to indicators for the fiscal 2021 results of “Improving prosperity for all people and cultures” and “Maximizing well-being for all,” and for the indicators of CO₂ emission volumes (Scopes 1, 2, and 3), waste disposal volumes, and water intake (clean water) within the fiscal 2021 results of “Ensuring the positive coexisting of nature and humanity,” from the NTT Group CSR Priority Activities. (See page 170)

Scope of Disclosure

The Data Book covers the NTT Group in its entirety. The scope of reporting for some sections are as follows.

[A] Main companies: NTT, NTT East, NTT West, NTT Communications, NTT DOCOMO, NTT DATA, NTT Facilities, NTT COMWARE, NTT Urban Solutions

[B] Domestic Group companies: 282

[C] Domestic and overseas Group companies: 964

[D] Main companies + operating companies

<Operating companies: 10> NTT East Group, 6 companies
 (NTT EAST-HOKKAIDO, NTT EAST-TOHOKU, NTT EAST-KANSHINETSU, NTT EAST-MINAMIKANTO, NTT EAST SERVICE, NTT-ME),
 NTT West Group, 4 companies
 (NTT MARKETING ACT, NTT BUSINESS SOLUTIONS, NTT FIELDTECHNO, NTT BUSINESS ASSOCIE WEST)

[E] Companies subject to NTT Group plans to double the number of female managers

<[D] + the companies below: 23> NTT Urban Development, NTT FINANCE, NTT BUSINESS ASSOCIE, NTT BUSINESS ASSOCIE EAST, NTT Electronics, NTT Advanced Technology, NTT LOGISCO, NTT ADVERTISING, NTT TechnoCross, InfoCom Research, NTT LEARNING SYSTEMS, NTT TRAVEL SERVICE, NTT CLARUTY

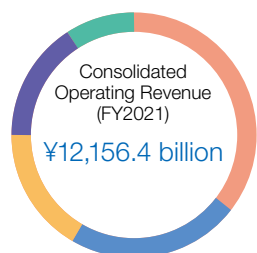
Note: Unless specifically stated otherwise, the scope of environmental performance statistics refers to domestic companies.

Inquiries

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At a Glance NTT Group

The experience and advanced technologies developed by the NTT Group will be used to achieve a “paraconsistent”^{*} society, and contribute to resolving social issues faced by society as a whole.
(*Where opposing concepts or matters are both achieved inclusively)



Integrated ICT Business

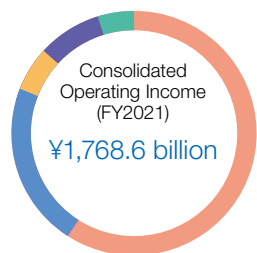
In addition to promoting sales of 5G services and “docomo Hikari,” etc., for corporate business, we promoted initiatives for “docomo Business,” a corporate business brand unifying NTT DOCOMO, NTT Communications, and NTT Comware, to support all corporate customers with one-stop service. In the smart life area, we are advancing collaboration with various businesses and worked to provide new added value.

Consolidated
Operating Revenue
Ratio (FY2021)

41.7%
(¥5,870.2 billion)

Consolidated
Operating Income
Ratio (FY2021)

59.7%
(¥1,072.5 billion)



Regional communications

Centered on the Hikari Collaboration Model provides wholesale fiber-optic access services to various service providers, and also strengthening the solutions business with the aim of revitalizing local communities and regional economies.

22.8%
(¥3,207.6 billion)

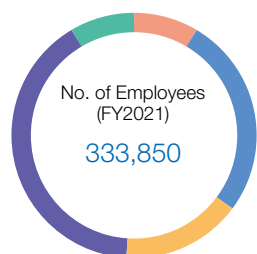
24.5%
(¥440.0 billion)

Global Solutions Business

In the Global Solutions business, we worked to enhance our ability to provide services in growth areas, including the data center business and managed services, as well as expanding and providing various IT services in a reliable manner, such as digitization proposals and system integration in response to market changes.

25.7%
(¥3,615.2 billion)

11.7%
(¥210.5 billion)



Others (Real Estate, Energy and Others)

Provides services related to the real estate business, energy business, and other businesses.

9.9%
(¥1,396.0 billion)

4.0%
(¥72.5 billion)

^{*} The percentage of each segment's simple total (including inter-segment transactions)

List of Memberships (as of November 2022) Keidanren (Japan Business Federation, general incorporated association; vice chair) Tokyo Employers' Association (honorary chairman, deputy chairman, president) Telecommunications Carriers Association (incorporated association; chairman, director) ITU Association of Japan (general incorporated association; director, council member, advisor) Association of Radio Industries and Businesses (general incorporated association; director, member of the management adviser) ICT Ecology Guideline Council Telecommunication Technology Committee (incorporated association; vice chairman)

NTT Group's Roots

NTT Group has continued to develop a range of solutions as a partner that enables society and industry to move ahead.

It was some 70 years ago that the telephone and telegraph services provided by the Ministry of Communications and Ministry of Telecommunications were handed over to Nippon Telegraph and Telephone Public Corporation. With economic growth booming following the country's post-war recovery, the company began exploring a range of avenues to meet growing public demand for telephone services that connect in an instant.

After subsequently undergoing a name-change to NTT, the company expanded its businesses including the regional communications, long-distance and international communications, mobile communications, and global data communications sectors, based on its roots that aim to respond to the needs of customers and challenges faced by industry and society.

Focused on creating a better future for Japan and the world... Never losing sight of the goal as "Your Value Partner."

Privatized in 1985.

Our Dynamic Loop – The Heart of NTT

The single continuous curve represents the dynamism and our commitment for continuous innovation and delivering value to people and society.



A small inner loop at the top of the mark ensures that the voice of customers and society is always heard. This symbol represents NTT's vision and its commitment to developing a harmonious society through both business and cooperation.

NTT Group's History

NTT has contributed to lifestyles of people through its business activities.

Ever since being established as the Nippon Telegraph and Telephone Public Corporation in 1952, the NTT Group has developed a wide range of technologies and services, and has been delivering infrastructure for services like mobile phones, internet and cloud computing that could never have been imagined in the past. At the heart of these achievements is NTT's underlying commitment to working as a partner that supports society and industry as a whole.

1952

"Nippon Telegraph and Telephone Public Corporation" established



In 1952, the telephone and telegraph services delivered by the Ministry of Communications and Ministry of Telecommunications were handed over to Nippon Telegraph and Telephone Public Corporation. The company developed various technologies to meet growing public demand for telephone services that connect in an instant.

1980s

NTT Group born from telecommunications liberalization

Nippon Telegraph and Telephone Public Corporation was privatized in 1985 following liberalization of telecommunications services, resulting in the birth of "Nippon Telegraph and Telephone Corporation (NTT)."



1987

Mobile telephone services Launched

1988

NTT Data established
World's first ISDN service Launched

1990s

Expanded telephone services with view of building an advanced telecommunications society



Phone services with a broad range of plans to suit customer usage scenarios were launched. The Open Computer Network (OCN) was launched with the view of expanding Internet use.

1991

NTT DOCOMO established

1996

OCN internet connection services launched

1998

i-mode services launched

1999

NTT Group transitioned to holding company structure

2000s

Full-scale roll-out of broadband ubiquitous services

NTT began offering the FLET'S ISDN always-on service as well as the B FLET'S optical fiber service, facilitating the widespread roll-out of high-speed, high-capacity communication services.



2007

Hikari TV services Launched

2008

Cloud services launched

2009

Android OS smartphones Launched

2000

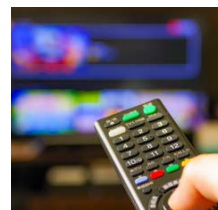
ISDN flat-rate services launched

2001

Optical fiber services launched for general households

2004

Osaifu-Keitai (Mobile Wallet) announced Hikari Denwa services launched



2010s

Global ICT services framework developed

NTT Group had primarily been operating in markets in Asia, Europe, and the US, and acquired Dimension Data and Keane in preparation for delivering total ICT services around the globe, including Australia, South America, Africa, and the Middle East.



2010

Acquired Dimension Data
LTE (Xi) services launched
Acquired Keane (currently NTT DATA, Inc.)

2013

iPhone launched

2014

"Kake-hodai & Pake-Aeru" phone plans launched
"Hikari Collaboration Model" launched
"docomo Hikari" launched

2016

Acquired Dell Services (currently NTT DATA, Inc.)

2018

"Your Value Partner 2025" medium-term management strategy formulated

2020s

IOWN concept released

Framework involving devices, networks and information processing infrastructure built on optical and other innovative technologies, to deliver high-speed and high-capacity communications, and vast computing resources exceeding the limits of existing infrastructure. Specifications are planned to be finalized by 2024 for a 2030 roll-out.



2020

5G services launched from March 25
Communication speeds up to 4.1 Gbps downstream

2021

Provided support for the Olympic and Paralympic Games Tokyo 2020 as a Gold Partner 2021 Green Innovation toward 2040 announced A new management style unveiled



message

CEO Message



Akira Shimada

President and Chief Executive Officer,
Representative Member of the Board

NTT's Vision of a Sustainable Society

The NTT Group established its Global Sustainability Charter in Autumn when it restructured its medium-term management strategy. This new Charter encompasses three key themes.

(1) Ensuring the positive coexistence of nature and humanity:

Aiming to solve environmental issues as well as achieve economic growth

(2) Improving prosperity for all people and cultures:

Accepting diverse, inclusive cultures while aiming to build a better society and create value

(3) Maximizing well-being for all:

We aim to maximize the well-being of everyone by respecting human rights and encouraging diversity and inclusion.

Nine challenges and thirty business activities have been established under these three themes, to be implemented alongside business operations as part of our goal to achieve a sustainable society.

We have also developed a structured approach for our environmental vision, management style, and human rights policy based on this new Sustainability Charter.

Three themes the NTT Group is pursuing

We will be continuing our efforts toward transformation undertaken thus far, while also creating a path forward by responding to changes, or, at times, pre-empting changes and transforming ourselves, in line with the NTT Group Global Sustainability Charter. To ensure that we continue to be a company that is chosen by our customers, we need to raise the quality of our products and services. We will be pursuing the following three initiatives to ensure that the NTT Group delivers new experiences and value to our customers.

The first of these initiatives is to create better customer experiences (CX) through improved employee experiences (EX). We will be taking the sense of excitement felt by each of our employees and using it as a source of inspiration for “creating new value, experiences, and excitement for our customers (meaning CX).”

From April 2023, we will be rolling out a new and revised specialization-based personnel compensation system for the main companies of the NTT Group. The source of motivation for creating new value for our customers is the potential of employees. This revision will help to inspire each and every employee to further increase their specializations and acquire, or maximize their skills, as part of our efforts to create added value across a broad range of fields.

I want to harness the potential of our employees to generate new value, and provide customers with a new sense of excitement.

The second initiative is to decarbonize through technology. The decarbonization of society is a matter of urgency. I believe it is the mission of those of us living in the present to ensure that our descendants can live sustainably on the planet. The NTT Group has set a goal of achieving carbon neutrality by 2040. In order to realize this goal we are working to drastically reduce our power consumption through the promotion of Innovative Optical & Wireless Networks (IOWN), and to develop and expand our use of renewable energy. An example is Green 5G provided by DOCOMO provided as part of its service aimed at achieving carbon neutrality. Initiatives like these illustrate just some of the ways that the NTT Group is helping to alleviate the impact that society as a whole has on the environment.

The third initiative is to maintain connectivity with infrastructure and critical IT systems even in the event of major disasters. We will be making efforts to enhance our preparations for more widespread and complex large-scale disasters like an earthquake directly underneath Tokyo or the Nankai Trough off Japan's southern coastline. In addition to wired-and-wireless networks and other services, the NTT Group is also involved in numerous national projects like systems that provide connectivity for financial institutions. It goes without saying that networks and critical systems like these are the very foundation of Japan and serve as an indispensable infrastructure. Preparation is the key to staying connected. We therefore need to continue taking into consideration all the possible risks that could occur.

Mission and ideals of the NTT Group

When considering the NTT Group five years from now, moving ahead with these three initiatives provides an opportunity to contribute to the creation of a sustainable society, and also serves as a chance for the NTT Group to generate revenue. We need to contribute to society while simultaneously delivering organizational growth. An example that illustrates this is the way NTT DATA is working to digitize valuable materials held by the Vatican Library. We have built up a business model where donations provided by those who view digital archives of valuable documents and collections serve as the funds for future archiving work. Harnessing the capabilities of IT to preserve our historical assets and culture for future generations, making them available as training material to as many people as possible around the world, is a socially significant initiative that helps to maintain digital archiving efforts and contribute to global cultural and research activities.

We will be shifting our ideals from a company that “connects communications” to a company that “connects data to create new value for people, business and society.” We will be accelerating our growth as a group that provides services to make customer businesses and lifestyle even better by utilizing a broad range of data. I am confident that we will develop various solutions through close collaboration with our partners, by applying our technology and know-how across a broad range of fields. Creating new business sectors as part of these efforts will help to expand our business base, as we aim to develop into a customer-centric company.

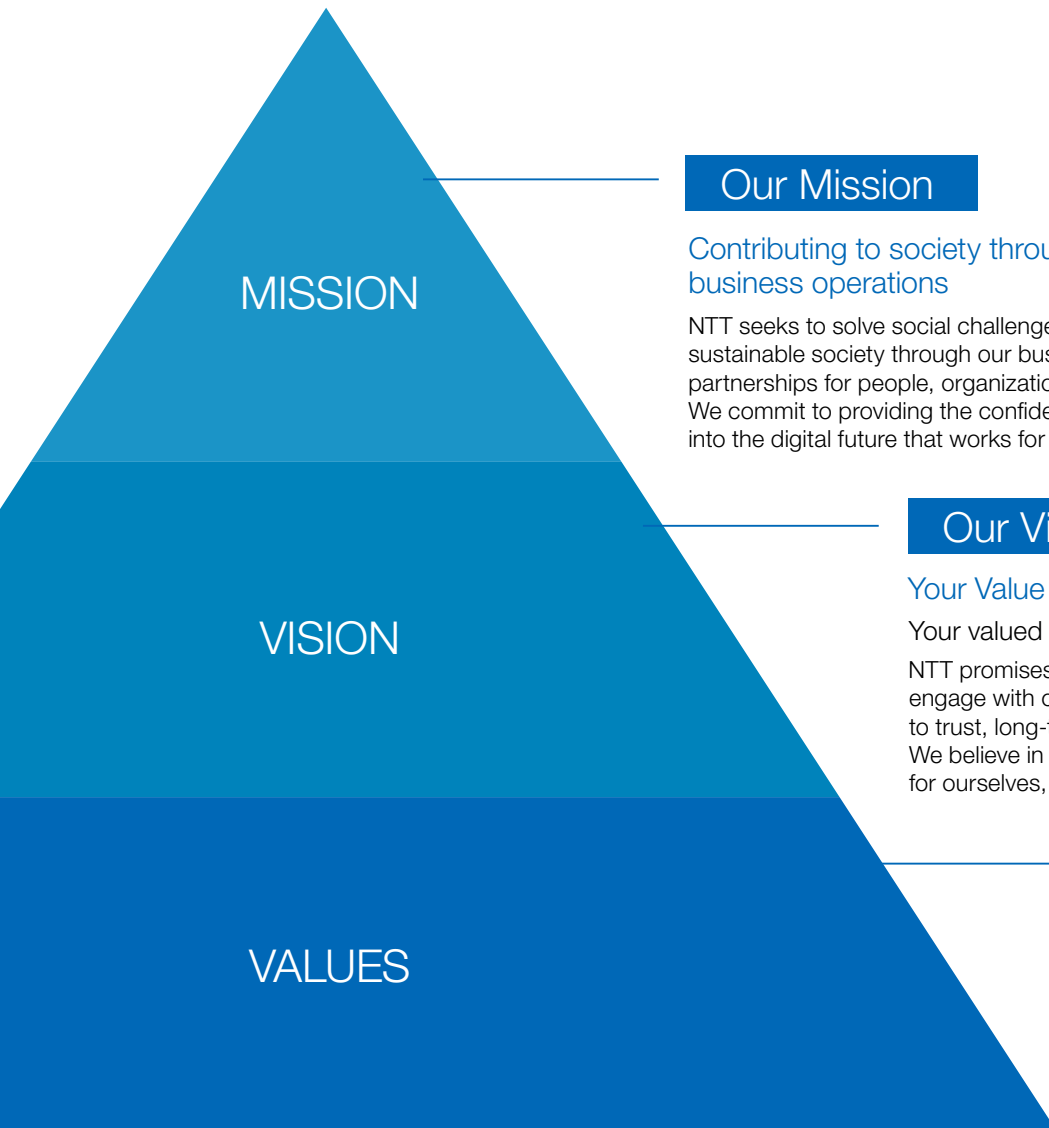
I would like to take this opportunity to ask for your continued support moving forward.



Akira Shimada

President and Chief Executive Officer,
Representative Member of the Board

NTT's Mission, Vision, Values



Our Mission

Contributing to society through our business operations

NTT seeks to solve social challenges and create a sustainable society through our business operations and partnerships for people, organizations, and communities. We commit to providing the confidence needed to move into the digital future that works for all of us.

Our Vision

Your Value Partner

Your valued partner that is committed and can be trusted

NTT promises to always listen to our clients and the world at large. We engage with clients and society as a valued partner with a deep commitment to trust, long-term relationships and mutual success.

We believe in achieving transformative results through technology innovation for ourselves, our clients, and society.

Our Values

Connect Trust Integrity

Our shared values informs all our decision making

NTT's values are based on trust, integrity, and connecting. We always act with a moral and ethical code across our trusted relationships with clients, employees, partners, and society. We are a trustworthy company that believes in the value of diversity and inclusion in our people and the world.

We are NTT.

NTT will continue to innovate through imagination and by challenging ourselves.

We always listen to our clients, employees, and the world at large. NTT's culture is based on our core belief of responding to the needs of our clients and society to help achieve their best future possible. This is NTT's vision and its commitment to developing a harmonious society through both business and co-operation.

What Exactly is “Our Vision for a Sustainable Society”

NTT's Vision of a Sustainable Society



Global versus Local.

Environmental versus Economic.

Today versus the Future.

Many seemingly contradictory ideas, perceptions, and values exist around the world.

Yet a single phenomenon can be interpreted differently depending on perspective.

Instead of focusing only on one perspective, the NTT Group will be making them all a reality.

That is the sustainable society we are setting out to achieve.

The “Self as We” concept underpins the NTT Group’s efforts to achieve this goal.

“We” live our lives supported by the connections between diverse people, things, and technologies.

The well-being of everyone throughout society is maximized by seeking our own happiness along with the happiness of others.

Being sincere in accepting of others and building connections across the entire globe will achieve a greater harmony with nature and make culture flourish.

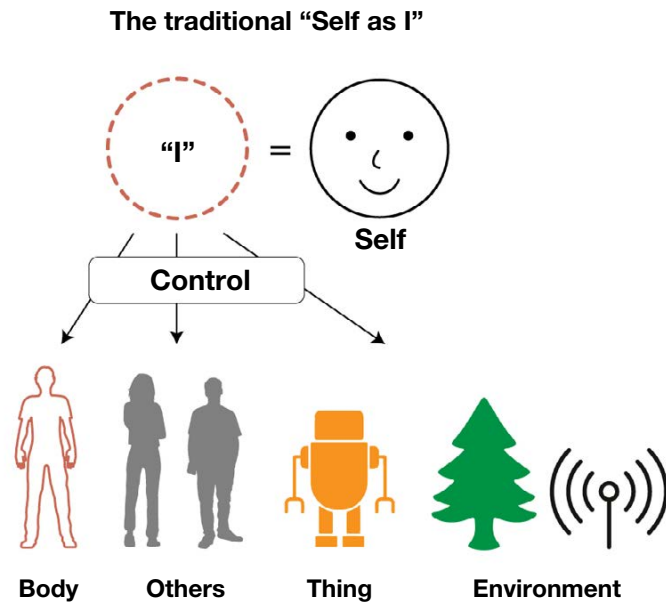
The NTT Group acts with high ethical standards in its commitment to achieving “sustainability” that helps to resolve social issues, while growing also as a company.

The Self as We concept

Self as We is a concept where the individual 'self' is part of the whole 'We'.

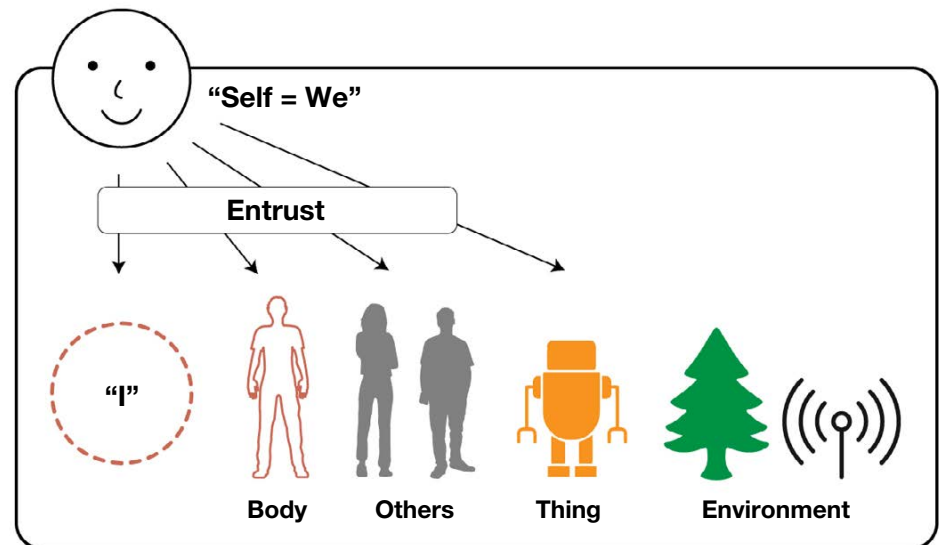
It extends beyond the individual level—it is also about making others happy at the same time, and achieving a broad range of policies backed with a sense of altruistic purpose.

“Self as We”



“I” as an individual (self-centered, self-sustaining)
A choice between being either active or passive

“Self as We”



“I” as one of all the individuals (non-self-centered, non-self-sustaining)
Collaboration with others in the same situation

Three themes for achieving a sustainable society

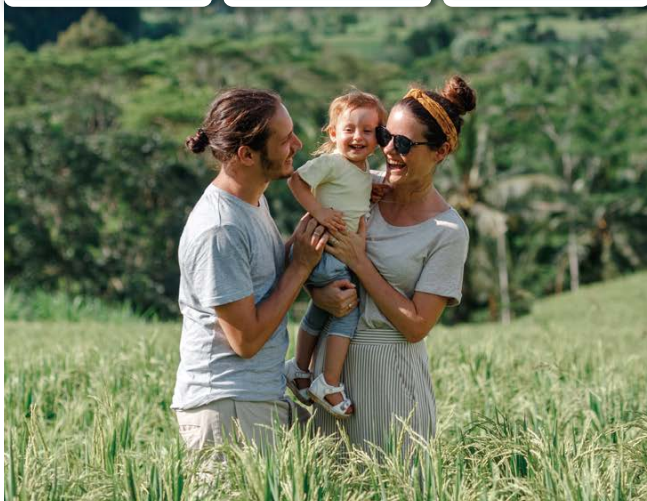
To achieve the sustainable society that NTT is envisioning, we will be promoting initiatives for a “sustainable society” by achieving both “Growth as a company” and “Resolving social issues” as part of these three themes, by driving ahead with the IOWN concept based on NTT’s high ethical standards, advanced technology and innovation.

Ensuring the positive coexistence of nature and humanity

Moving toward a decarbonized society

A commitment to a resource-recycling future

A future where people and nature are in harmony



Ensuring the positive coexistence of nature and humanity
Contributing to solving environmental issues as well as achieving economic growth.

Improving prosperity for all people and cultures

Establish shared ethical standards

Prepare for a new future with the power of technology

Moving towards a safe, secure, and resilient society



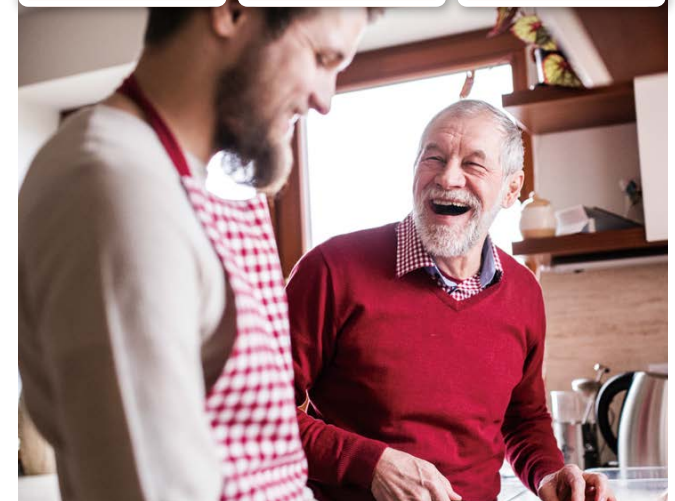
Improving prosperity for all people and cultures
Accepting diverse, democratic cultures while contributing to a better society and creating value.

Maximizing well-being for all

Respect for human rights

Diversity & Inclusion

Creating new work style models



Maximizing well-being for all
Contribute to maximizing the well-being of everyone by respecting human rights and encouraging diversity and inclusion.

The three themes cover nine challenges and thirty business activities

We are actively implementing these initiatives to contribute to the development of a sustainable society.

A broad range of sustainability indicators have been defined.

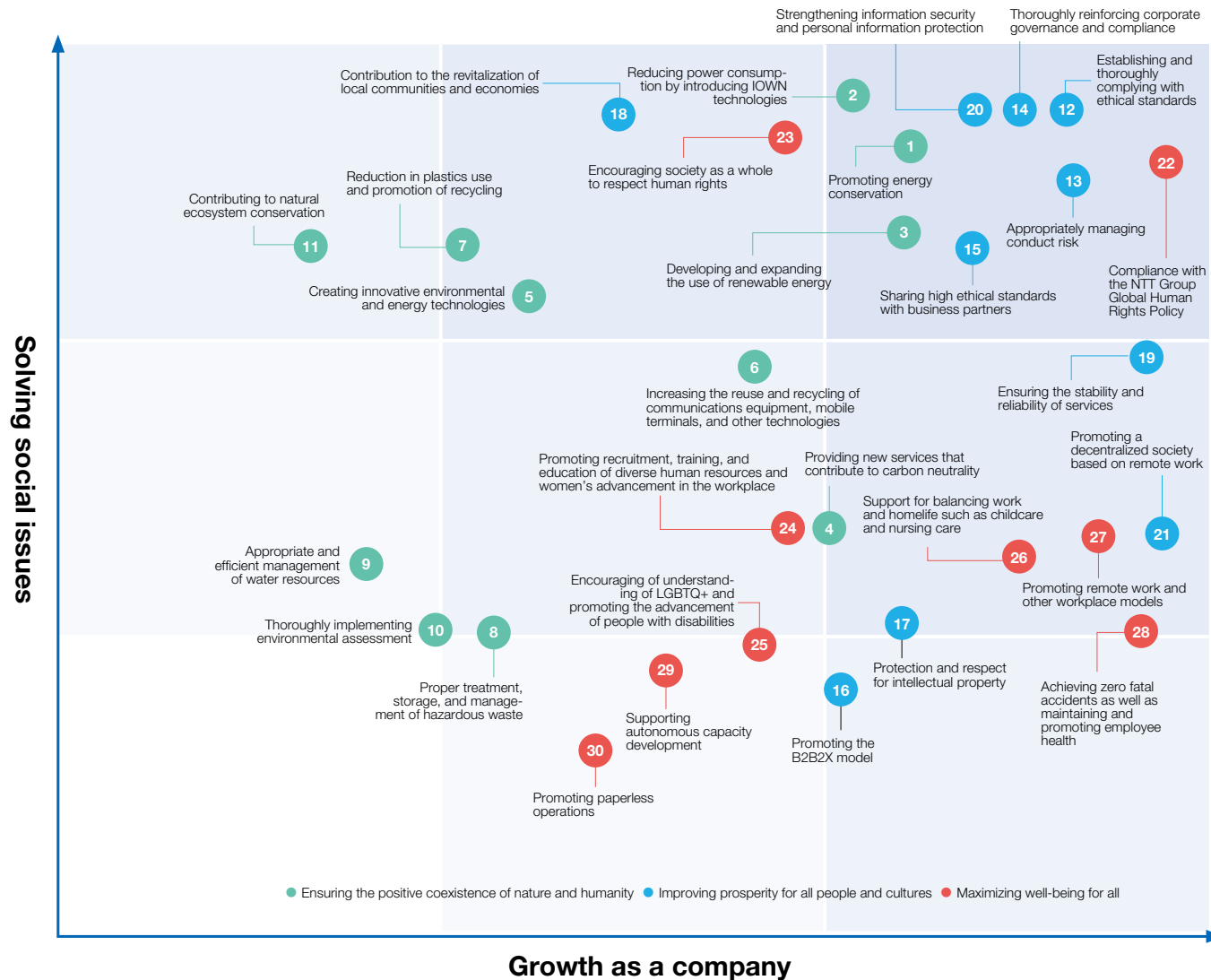
Of these, the following items have been added as key financial indicators, with compensation of members of the Board and audit & supervisory Board members linked accordingly:

- “Carbon neutrality” as an indicator for environmental issues
- “B2B2X earnings” as an indicator for resolving social issues
- “Ratio of women newly promoted to management positions” as an indicator for human rights, diversity and inclusion



Process for Selecting Material Issues

Material issues (materiality) are selected using the following steps based on the GRI materiality standards and processes.



STEP1

Identifying material issues

Using evaluation organizations like third party institutions, ISO26000 and GRI Standards, global trends, internal workshops, and materiality at other companies as a guide, we identify material issues through a comprehensive review of new problems related to sustainability, in order to discuss and select important issues that NTT should address on a global scale.



STEP2

Setting priorities

NTT assesses the priorities to be addressed based on their impact on two aspects, “Growth as a company” and “Solving social issues.” To achieve management that simultaneously helps resolve social issues while achieving business growth, NTT assesses priorities by incorporating the opinions of outside experts.



STEP3

Confirming validity & approval

NTT also incorporates the opinions of third parties from a global perspective, which are then deliberated by the Sustainability Committee and approved by the Board of Directors.

* These are reviewed regularly (once/year) and revised when necessary.

Contributing to development of a sustainable society with medium-term strategies

NTT Group works together with its partners as “Your Value Partner” to resolve social issues through its business operations and respond to future changes in the operating environment, such as the advancement of digitization and DX. To guide us in this pursuit, we refined the NTT Group Medium-Term Management Strategy announced in November 2018 to accelerate our transformation into an open, global, and innovative new NTT.

Background of the Re-Examination of the Medium-Term Management Strategy and New Strategic Frameworks Future Changes in the Operating Environment



Directionality of NTT Group's Transformation and New Strategic Frameworks

Social / Economic Directionality	NTT Group's Directionality	New Strategic Frameworks	Initiatives to Achieve the Strategy
Society During COVID-19 and Post-COVID-19	A New Management Style Suitable for a Decentralized Network Society	Transformation to a New Management Style	<ul style="list-style-type: none"> • New style based on remote work
Advancement of Digitalization / DX	Enhance Domestic and Global Business	Enhance Domestic and Global Business	<ul style="list-style-type: none"> • Growth and strengthening of the newly formed DOCOMO Group • Promotion of the IOWN development / rollout plan • Enhance competitiveness in global business • Promote the B2B2X model • Strengthening of new businesses
Achieving well-being in society	Enhancement of Corporate Value through ESG Initiatives	Enhancement of Corporate Value	<ul style="list-style-type: none"> • New Environmental and Energy Vision • Disaster countermeasures initiatives • Enhancement of returns to shareholders

Contribute to Achieving a Sustainable Society

Organization for Implementation

In November, the NTT Group moved to a new organizational structure by establishing the “Sustainability Committee” under the Board of Directors, chaired by the Chief Executive Officer. The committee reviews and discusses strategies concerning sustainability, the status of implementation of activities, and information disclosure, and implements relevant initiatives. The Sustainability Committee includes the Corporate Ethics Committee, Human Rights Committee, and Green Innovation Committee to handle the individual topics relevant to each sub-committee. Efforts toward sustainability throughout the entire group are also implemented by holding Group Sustainability Committee meetings (with senior executive vice presidents of major group companies). The meetings are for sharing common challenges and examples of success from each Group company, and for monitoring progress on sustainability implementation with respect to PDCA cycles and further promoting a sense of unity throughout the group.

- (1) Evaluation** The viability, effectiveness, and progress of measures are checked every year by employing the PDCA cycle to review and expand the focus of activities. Attainment levels are also linked to the evaluation standards of directors.
- (2) Disclosures** Internal conferences involving global group companies are held for reporting the results of efforts and facilitating dialogue, which are then disclosed on the website and in sustainability reports. The impact of climate change risks and revenue opportunities on business activities and revenue are disclosed in accordance with TCFD, an international framework created to develop such disclosures.
- (3) Dialogue with Third Parties** Each process involves dialogue with experts and other third parties, with a PDCA cycle used to obtain evaluations from third parties for reviewing and expanding the focus of activities as needed.

Sustainability Promotion System (from November 10, 2021)



Stakeholder Engagement

The Fundamental Principle

The NTT Group provides products and services to diverse stakeholders around the world, and its value chain continues to expand globally and grow in complexity. Along with these changes, our stakeholders' needs and expectations are also becoming increasingly diverse, and we must accurately understand and reflect them in our business activities through stakeholder engagement. Stakeholder input, particularly on social and environmental issues, can help us to become more competitive and accountable while guaranteeing our public license to conduct operations in the various regions in which we conduct business. Stakeholder engagement forms the building blocks of trust-based, value-generating relationships. To properly develop these relationships, the NTT Group follows global guidelines based in part on the AA1000 Stakeholder Engagement Standard (AA1000SES) and AA1000 Account Ability Principles Standard (AA1000APS) and applies them to all of our worldwide operations. By having all Group companies apply the same principles to engaging with stakeholders, we intend to promote effective, efficient, and ultimately value-creating interactions between the NTT Group and its stakeholders. It goes without saying that all means of engagement shall be conducted according to relevant laws, regulations, and legal requirements.

Benefits of Stakeholder Engagement

Benefits for the NTT Group

- Identify emerging environmental/social trends and reflect them in strategy formulation
- Identify potential risks and develop countermeasures
- More closely manage our brand reputation
- Identify opportunities for potential new businesses, collaboration, and innovation
- Improve community relations and support for operations, in particular by involving stakeholders in decisions to ensure their needs are taken into consideration
- Improve our understanding of sensitive issues and of stakeholders' opinions of us
- Make more sustainable business decisions based on stakeholder input

Benefits for Stakeholders

- Clearer understanding of the NTT Group strategy and projects
- provide relevant feedback in line with expectations

Process of Stakeholder Engagement

Step 1 Plan

Levels and Methods of Engagement

Level of engagement	Examples of engagement methods
Monitor	Tracking of media and one-way communications to the company
Inform	Provision of information from the company to stakeholders through letters, bulletins, websites, speeches, reports, etc., with no invitation to respond
Consult	Two-way exchange of information between the company and stakeholders through surveys, focus groups, workshops, etc., with an expectation of responses from both sides
Involve	Two-way exchange of information between the company and stakeholders, with stakeholders more actively involved in decision-making, through establishment of advisory panels or multi-stakeholder dialogues
Collaborate	Joint ventures and partnerships on specific projects

Potential Risks of Engagement with Specific Stakeholders

- Unwillingness to engage on the part of stakeholders
- Disruptive stakeholders
- Creation of unrealistic and unfulfillable expectations of the company on the part of stakeholders
- Inter-stakeholder conflicts and other issues could potentially result in criticism of the company and damage to the company's reputation

Step 2 Do

While engaging with stakeholders, discussions should be held on mutual expectations regarding such engagement, and any necessary revisions to initial engagement plans should take into consideration stakeholder requests as well as the NTT Group's initial intentions.

Factors Requiring Consideration during Engagement

- Levels of contribution and a clear definition of participant roles
- Details of the process, including timelines and methods
- Timely provision of instructions and required materials for participation in and meaningful contribution to the engagement process
- Boundaries of disclosure of required information, including confidentiality requirements
- Communication of the results of the engagement

When holding events attended by multiple stakeholders, care must be taken to ensure balanced participation to minimize risk and maximize value.

Step 3 Follow-up and Review

After concluding the engagement, results must be reported both internally and to participating stakeholders as well as externally to the wider public as necessary to conduct both an evaluation of the outcome of the engagement and a review of the engagement process itself and define KPIs for the assessment of results.

Factors that Should Be Included in Reports and Information Disclosure

- The purpose, scope, method and participants of the engagement
- A summary of content, including issues and concerns raised during the process
- NTT Group response to the outcomes of the engagement

Regarding the review of the engagement process itself, an internal review should be conducted and feedback should be sought from participating stakeholders regarding how they felt about their involvement, and a plan for improvement should be developed based on the results of these.

Identifying Stakeholders

Our stakeholders are organizations or individuals who have an interest, in one way or another, in the business activities or decision making of the NTT Group. Major stakeholders of the NTT Group include customers (corporations and individuals), shareholders and investors, employees (employees, their families and retired employees), local communities, business partners, ICT companies and industry associations, central government and administrative agencies.

The NTT Group will fulfill its responsibilities and the expectations of its various stakeholders related to these businesses.

Customers (Individuals and Corporations)

All customers, both corporate and individual, who use services provided by the NTT Group

NTT's Approach	Methods of Engagement (examples)	Why We Engage
As we strive to be chosen as "Your Value Partner," each individual employee will strive for an even higher awareness of sustainability to provide safe, secure services that are high in quality and convenient from the customer's standpoint.	<ul style="list-style-type: none"> ■ Customer information service ■ Customer satisfaction surveys ■ Website, social media 	The NTT Group endeavors to enhance customer satisfaction and become "Your Value Partner" for our customers by understanding customer needs in order to provide higher quality services and products.

Shareholders and Investors

Individual and institutional investors including the shareholders and creditors of the NTT Group

NTT's Approach	Methods of Engagement (examples)	Why We Engage
We will return profits to shareholders while maintaining a sound financial standing and enhance our corporate value. We will also endeavor to disclose information related to the Group in a timely, appropriate, and fair manner.	<ul style="list-style-type: none"> ■ General Meeting of Shareholders, earnings reports ■ Explanatory presentation for individual investors ■ Explanatory presentation for institutional investors ■ Annual reports 	We endeavor to disclose information in a timely, appropriate, and fair manner to return profits to shareholders while maintaining a sound financial standing and enhancing our corporate value.

Employees (Employees, Their Families, and Retired Employees)

Employees who work at the NTT Group and retired employees who support the NTT Group's sustainability ideals

NTT's Approach	Methods of Engagement (examples)	Why We Engage
We will pursue various employee initiatives to create safe and healthy workplaces in which everyone can realize their full potential and be rewarded in their work and daily lives. We will also value communication with retired employees.	<ul style="list-style-type: none"> ■ Employee satisfaction surveys ■ Regular interviews ■ Dialogue between labor and management ■ Corporate ethics helplines ■ Hold sustainability conferences 	We create safe and healthy workplaces for our employees and support their daily lives so that each individual employee can realize their full potential and carry out their work with a high sense of CSR.

Local Communities

People in local communities who are connected to us through the businesses of NTT Group companies

NTT's Approach	Methods of Engagement (examples)	Why We Engage
We will support local communities through our ICT business and operations to support society and provide disaster recovery.	<ul style="list-style-type: none"> ■ Support and collaboration through social contribution activities ■ Negotiations with local residents on construction work, system development, and other activities ■ Support through donations and sponsorships 	We seek to contribute to the development of a flourishing and vibrant community and to understand and identify the issues faced by local communities in order to provide social contributions and disaster countermeasures through our ICT business.

Business Partners

Business partners who support us in various ways in providing the NTT Group's services

NTT's Approach	Methods of Engagement (examples)	Why We Engage
We will seek to work together to create and implement services that help to solve a variety of social issues.	<ul style="list-style-type: none"> ■ Inquiry forms ■ Disclosure of procurement policies and guidelines ■ Questionnaires of suppliers ■ Briefing for suppliers 	By procuring products with due consideration to the environment and human rights, and by forging partnerships based on fairness, we will fulfill our social responsibilities as a company and achieve sustainable growth alongside our business partners.

ICT Companies and Industry Associations

Other ICT companies and people in industry associations who are striving to develop Japan's information and telecommunications

NTT's Approach	Methods of Engagement (examples)	Why We Engage
We will engage in discussions on the direction and initiatives for the information and telecommunications industry, not only in Japan but from a global perspective, and seek to address diverse social issues together.	<ul style="list-style-type: none"> ■ Participation in industry associations and related initiatives ■ Participation in conferences 	We will engage in discussions on the direction and initiatives for the information and telecommunications industry. By doing this, we will invigorate the industry and contribute to society by promoting development and progress in information and telecommunications.

Central Government and Administrative Agencies

Central and local governments and administrative agencies that make policy decisions on information and telecommunications, employment and the economy, the environment, and other issues

NTT's Approach	Methods of Engagement (examples)	Why We Engage
We will fulfill our responsibility as an information and telecommunications company by adhering to the policies of the central government, administrative agencies, and local governments.	<ul style="list-style-type: none"> ■ Response to laws and regulations ■ Policy proposals ■ Participation in joint projects between the government and private sector 	We will respond to and comply with central and local government and administrative agency policies. Therefore, we will carry out business activities in an appropriate manner and contribute to resolving social issues faced by the Japanese people and local governments.

NGOs, NPOs, and Experts

NGOs, NPOs, and experts who are positioned within the NTT Group's domain of activities including sustainability

NTT's Approach	Methods of Engagement (examples)	Why We Engage
We will contribute to creating a sustainable society by sharing the expert knowledge and experience of NGOs, NPOs, and experts, and by incorporating them into the telecommunications industry.	<ul style="list-style-type: none"> ■ Participation and collaboration with study groups and activities of each organization ■ Dialogues ■ Collaborative projects 	The NTT Group provides services that extend beyond telecommunications to broader domains, and gaining the specialized perspectives of NGOs, NPOs, and experts allows the Group to appropriately and effectively develop business activities.

message

Message from Management
(Senior Executive Vice President)



Takashi Hiroi

Senior Executive Vice President CFO,
Representative Member of the Board

Achieving a sustainable society and profit growth

When we look at the various issues that plague society these days, there are simply too many to mention—the increasingly tense global situation, circumstances related to carbon neutrality, the rapid increase in traffic and network loads due to a spike in remote operations spurred by COVID-19, and soaring oil prices to name a few. The NTT Group aims to help achieve a sustainable society by promoting its own transformation in response to the direction of society and the economy and solving various social issues through its business operations. To ensure that the NTT Group keeps on track for sustainable growth, efforts have been made to grow and strengthen the new DOCOMO Group, coupled with significant restructuring of business segments from January 2022. In May 2022, we also announced reorganization of our global businesses. We are also aiming to boost corporate value through initiatives geared for ESGs, and in November 2021 we created and announced the NTT Group Global Sustainability Charter. In order to implement these initiatives, performance indicators for officer compensation was freshly updated covering aspects like amount of greenhouse gas emissions or ratio of women in management positions. Going forward, we will be making greater effort for the disclosure of non-financial information like utilization of human capital, while also preempting trends in social values likely to undergo significant changes such as environmental issues, in an attempt to achieve more advanced disclosure.

Achieving carbon neutrality

To reach carbon neutrality, around half of efforts to reduce energy consumption will come from increasing the efficiency of electricity usage while the other half will be from innovations based on IOWN. In addition to ongoing efforts towards energy-efficiency, we will also be rolling out measures such as switching to renewable energy sources for our power consumption. We are also looking at highlighting use cases and other benefits of IOWN with an eye toward commercialization.

Initiatives for human capital management

Human capital development is drawing a greater level of attention throughout society every year and is an area in which we will be placing a greater focus. Strategic investment into human capital is considered a key factor underpinning “sustainability management” that aims to achieve both sustainability for society as well as corporate growth and earning power—we are planning to make improvements with a focus on the following three areas.

The first will be “linking management strategy and human resources strategy.” In October 2021, NTT unveiled its “New Management Style.” We believe that promoting diverse work styles and increasing opportunities to harness the capabilities of people from diverse backgrounds will help to achieve a more open, global and innovative business management style. We are promoting the participation of women, foreign employees and outside personnel as part of these efforts and introduced a job-based personnel system last fiscal year to encourage self-guided career formation. We are moving ahead with a shift from company-driven career development to a system that allows employees to control the development of their own careers.

The second area is gaining an understanding (visualization) of the gap between available personnel and our human resources strategy, against the business model and management strategy we are striving to achieve. We aim to disclose various types of information required in response to trends in systems, laws and policies, and in response to requests like this from society. We are also looking at spurring effective investments toward human capital, by analyzing the gap in skills between the business model or management strategy that we are striving to achieve for the future, and the currently available personnel with their skills and specializations.

We consider “visualization of human capital” as an essential step for advancing both corporate and personnel growth to create value and subsequently a more prosperous society. Looking ahead, we will be engaging in discussion to develop a clear awareness and vision for investment into human capital, with efforts including defining our expectations of personnel that match our management strategy, implementing policies to facilitate securing and training, and establishing indicators and targets for monitoring the results.

The third area is establishing a corporate culture that encourages behavioral changes among individuals throughout the organization. We want to develop a culture that respects more open, flat and flexible communications, and diverse values, that also embrace the action of taking on challenges without fear of failure. To better visualize the way this culture is instilled, the NTT Group in fiscal 2021 revamped its existing Employee Satisfaction Survey, which focused on questions related to ease of working, and added questions related to job satisfaction. Approximately 130,000 Group employees in Japan responded.

By understanding current levels of engagement among NTT Group employees and the issues that need to be improved, and by taking action to make improvements, we hope to increase the number of highly engaged employees who identify with the company's and organization's policies and strategies, as well as feel pride and take initiative in their work.

The employee engagement rate has a major impact on labor productivity and is also directly related to business performance. This provided a clearer image of specific issues when viewed against domestic and international standards, and we will be investigating potential courses of action that can be taken to establish a corporate culture that encourages behavioral changes.

Management strategy and sustainability

Carbon neutrality and various policies related to human capital only make sense if they are tied to the management strategy and incorporated specifically within action plans. Initiatives aimed at achieving carbon neutrality can help to reduce the costs that society or companies would have to bear in the future and providing our initiatives as solutions could also result in potential business opportunities. We believe that advancing Diversity & Inclusion as part of the human resources strategy creates an open workplace environment and being able to harness the potential of diverse human resources in turn results in greater productivity. As work styles, unconstrained by location or time, become increasingly commonplace we introduced the Remote Standard from July 2022 to address the need for companies to provide flexible working arrangements. We will continue creating an environment where individual diversity can lead to dialogue, innovation and positive business outcomes.

The NTT Group will strive to become an innovative corporation spearheading societal transformation by inviting dialogue and communication with various market players and a broad range of stakeholders.



Initiatives for human capital management

New management style

In October 2021, the NTT Group unveiled its “New Management Style.” In addition to promoting the appointment of female managers (newly appointed managers in FY2021: 29% (target 30%)), introducing new work styles (from July 2022) based on remote work and expanding satellite offices (551 locations at the end of September 2022) for promoting work-in-life (health management) through the workplace-residence proximity, we began a trial at the holding company from October 2022 for decentralizing the organization in order to enhance resilience.

We believe that promoting diverse work styles and increasing opportunities to harness the capabilities of people from diverse backgrounds will help achieve a more open, global and innovative business. We are promoting the participation of women, foreign employees and outside personnel as part of these efforts to increase the choices for working time, place, and residence. The NTT Group has reviewed its personnel system to assign the right person to the right job at the right time regardless of their gender, years employed, or age. We are focusing on specialization, encouraging self-guided career formation, and also raising the starting salary of new recruits as part of efforts to revise the personnel system for general employees.

Promotion of participation of women, foreign employees and outside personnel	Target	Results
Promote the appointment of females as managers and Board members Enhance various support and training programs	Newly appointed managers: 30% every year	29%
	Managers: 15% in FY2025	8.7%
	Board members: 25% to 30% in FY2025	17.7%
Aggressively hire foreign employees and outside personnel	Mid-career hires*: 30% in FY2023	32.5%

*Outside personnel

Introduction of new personnel system	Target	Results
Expand job-based personnel system to all management positions	-	Introduced in October 2021
Promote self-guiding career formation for general employees (revision to specialization-based personnel compensation system)		New system to be introduced in April 2023

Promotion of work-in-life (health management) through the workplace-residence proximity	Target	Results
Ensure remote work for employees, and provide them with the freedom to choose their place of work (no need for relocations and unaccompanied assignments, recruitment of remote-based employees, expansion of satellite offices, etc.)	FY2022 260 or more locations*	End of September, FY2022 551 locations*

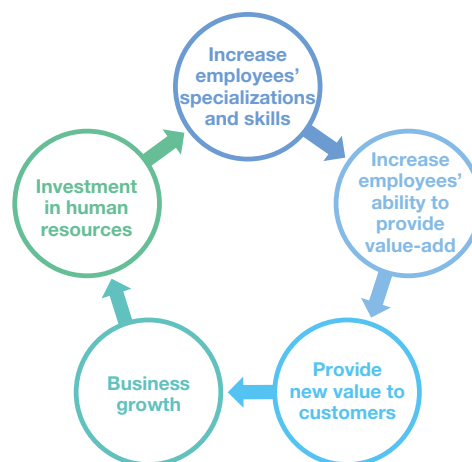
*Satellite offices

Decentralization of the organization (including head office and back-office employees)	Target	Results
Decentralize organization from metropolitan areas to regional areas (core cities)	From FY2022	Began trial in October 2022
Further accelerate community-based regional revitalization businesses for primary or other industries in the region	From FY2021	

Management where investment in human resources leads to value provided to customers

The NTT Group focuses on assigning the best-suited person to the work and post, regardless of age, and is moving ahead with self-guided career development that will result in better earnings for the company by boosting the motivation of employees to take on challenges and encouraging them to enhance their skills by acquiring specialized knowledge. To achieve this, we are implementing a system for posts with clearly defined roles that assigns the right person to the right job, while taking into account employees' career plans, in line with the job-based personnel system introduced in October 2021 for all management positions. We will also be rolling out a system for general employees from April 2023, built on a revised personnel compensation system with a greater focus on specialization so that employees can work on enhancing their professional areas of specialization and forge their own path forward.

Providing customers with a new sense of excitement only comes about due to having the motivation or taking action to create something new. In fact, each and every idea or product is created by a "person." We believe that employees creating added value helps to increase convenience throughout our customers' lifestyles and can even lead to the development of new social trends. All of these revisions have helped to inspire each and every employee to further increase their specializations and acquire or maximize their skills and have resulted in the creation of a working environment that allows them to create added value in a broad range of fields. Creating new value by reforming business and expanding into new business areas will provide the impetus for continued growth and development through the entire NTT Group.



Introduction of job-based personnel system to all management positions (October 2021)

Shift to assigning the right person to the right job for greater strategic capability

- Job definition and grading linked to management strategy and business strategy importance
- Assign the right person that suits the roles and tasks required of each job, regardless of number of years employed or age
- Framework where compensation is determined based on job assignment. Move to a working environment where special appointments or salary reductions are the norm
- Transform awareness for management positions and increase employee motivation to take on challenges, and promote self-guided career development

Revision to specialization-based personnel compensation system (general employees, April 2023)

Personnel compensation system that rewards specialization with promotions

- Framework that eliminates requirements for years employed or years served, and provides promotions and salary increases corresponding to acquired specialization or level of skills (set grade standards that clarifies the specializations or other skills required in 18 specialist fields)
- Formation of a new "Specialist Course" that provides high compensation for employees with a particularly high level of specialization (career diversification)

Personnel system that supports self-guided career development

- Shift to personnel assignment and transfer policy to boost specialization
- Greater support for self-guided career development (enhanced training, better career consulting functions, etc.)

Engagement Survey

In fiscal 2021, NTT Group revamped its existing Employee Satisfaction Survey, which focused on questions relating to ease of working, and added questions relating to job satisfaction as an indicator for defining culture. It also conducted a Group-wide Engagement Survey to quantify employees' attachment to and trust in the company to which they belong as an "engagement score." By understanding the issues that need to be improved for establishing corporate culture, and by taking action to make improvements, we hope to establish a corporate culture where employees identify with the company's and organization's policies and strategies, as well as feeling pride in their work.

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

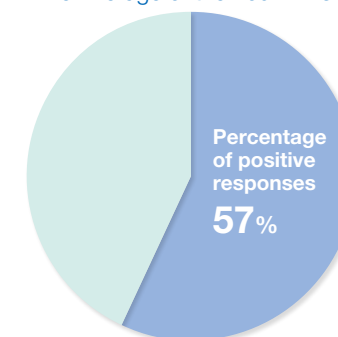
Attachment to and pride in the company

- (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

The Average of the Four KPIs



Flexible work styles not bound by time and place

In September 2021, we declared our policy aimed at eliminating the pressures of job transfers or working away from their family, as part of efforts to create work styles throughout the entire NTT Group that are no longer constrained by location or time. In July 2022, we introduced a work system that generally allows employees to work anywhere as long as they reside in Japan, and successfully rolled out Remote Standard for 30,000 employees, around half of all of those working at the Group's main companies. We believe that flexible work styles encourage individual diversity, dialog and innovation, which will lead to a work environment that delivers positive business outcomes.

Previous System Revisions (2020)

System revisions due to COVID-19

Work-from-home (with upper limit)	→	Remote work (no restrictions to frequency or location)
Commuting allowance (fixed payments)	→	Commuting allowance (payment corresponding to actual commuting)
No work-from-home stipends	→	Remote work stipend (equivalent to energy, water and communication costs)
Flex (with Core Times)	→	Super flex-time system (without core times, can be staggered)

**Achieved work styles not bound by time and place.
To eliminate restrictions by place of residence...**

New system "Remote Standard" (2022)

Past work style

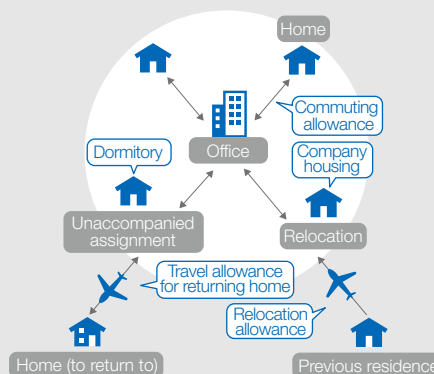
- Commuting to the office was the norm
- Reside within commuting distance to office
- Remote work required approval
- Commuting allowance paid when commuting to office

New work style (Remote Standard)

- Remote work is the norm (hybrid work with both remote work and commuting to the office)
- No restrictions to place of residence
- Travel allowance paid when commuting to office (processed as business trip, no upper limit)
- Initially available for approx. 30,000 employees, mainly office workers

Past Work Style

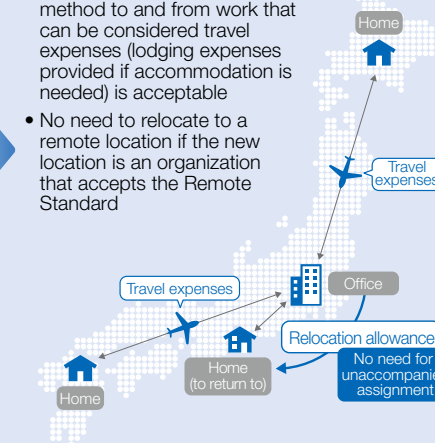
- In general, reside in a location within 2 hours commuting distance (one-way)
- Relocation or unaccompanied assignment if transferred to remote locations



New Work Style

Remote Standard

- Any residence in Japan is acceptable
- Any reasonable transportation method to and from work that can be considered travel expenses (lodging expenses provided if accommodation is needed) is acceptable
- No need to relocate to a remote location if the new location is an organization that accepts the Remote Standard



Decentralization of the Organization (Including Head Officers and Back-Offices)

The NTT Group began initiatives for decentralizing the organization from metropolitan areas to regional areas (core cities)

<Specific Initiatives>

- Trial run for dispersing the organization across regions to begin at the holding company (starting in October 2022)
- From the standpoint of resilience, we will aim for sustainable business operations by opening offices in Takasaki City and Kyoto City for promoting distributed offices
The first step will involve a trial of certain organizations (with approx. 200 employees) of the holding company
- The trial will be used to test for issues or measures related to business operations and communications with distributed offices, with a view to applying it to actual operations
- Introduce a working style based on telework in which employees engage in head office operations while residing in a distant location
- Introduce a "hometown double work" program to contribute to the revitalization of local communities and areas associated with the Company while continuing current assignments

message

Message from Management
(Senior Executive Vice President)



Katsuhiko Kawazoe
Senior Executive Vice President CTO,
Representative Member of the Board

Using Technology to Achieve Sustainability

The 21st century world that we all live in today is facing major challenges on the way to achieving a low-carbon and sustainable environmentally-oriented society. The NTT Group views resolving issues like climate change as one of its key corporate activities in its goal of building a sustainable society and implements various initiatives in line with its "Your Valued Partner" management philosophy. The NTT Group is aiming to achieve sustainability based on technology with a key focus on the Innovative Optical and Wireless Network (IOWN).

Providing customers with reliable telecommunications services is the most important role for NTT Group to fulfill. As IoT becomes more widely used and the services that are essential to our daily lives diversify, the amount of traffic continues to grow, and we are approaching various limits in terms of data volume, latency, and power consumption. While the NTT Group initially aimed for commercialization of IOWN around 2030, a number of social issues have emerged, including the aforementioned rapid increase of network load, the global situation regarding carbon neutrality, the expansion of traffic due to a spike in remote usage spurred by COVID-19, and soaring oil prices. For these reasons, the NTT Group will move its 2030 target forward and start offering IOWN services during fiscal 2022. We are introducing these services to users who have a need for advanced services and planning to introduce services for specific applications and areas while achieving further advancements with technological demonstrations. We are already running a proof-of-concept for the "Urban DTC®" (DTC: Digital Twin Computing) initiative aimed at increasing comfort in cities using data on buildings, urban spaces and behavior of people, at the "Urbanet Nagoya Nexta Building" next-generation advanced office that opened in June 2022. After putting some technologies to practical use during fiscal 2022, we will also gradually be installing equipment in facilities of the NTT Group. We plan to showcase the results of our IOWN-related efforts at the 2025 World Exposition to be held in Osaka, Kansai.

The Value that IOWN Provides and Collaborating with Our Partners

In September 2021, we unveiled our new environment and energy vision, "NTT Green Innovation toward 2040" aimed at achieving zero environmental impact while continuing economic growth, by reducing the environmental impact of our business activities and creating breakthrough innovation. This vision was designed so that the NTT Group is able to achieve carbon neutrality in fiscal 2040 with IOWN, ten years before the 2050 goal for carbon neutrality set by the Japanese government.

Additional utilization of optical technology is important for implementing the IT infrastructure with both high performance and low power consumption that IOWN is aiming for. We will introduce optical technology, which can handle signals while using less power than electricity, not only for transmission, but also for processing. This will enable us to achieve advanced fusion of light and electricity (photoelectric merging technology), in which optical technology is applied in extremely close proximity to the parts where operations are performed. Incorporating this technology into semiconductors will fundamentally solve the aforementioned issues. Photoelectric merging technology is an area in which NTT excels, given the optical-related technologies it has amassed.

At present, Japanese companies possess significant technology and manufacturing capabilities in the semiconductor value chain. However, we have not yet achieved the kind of presence a global stakeholder should have. Our goal is for Japan to spearhead IOWN in collaboration with our global partners and become an indispensable global player in the semiconductor value chain. Established in the United States in 2020, the IOWN Global Forum has already attracted more than 100 members from Europe, the United States, and Asia. This forum is unique in that it is not limited to the IT and telecommunications industries, but also encompasses the automotive, plant, and financial industries, as well as academic institutions. We believe that we can work hand in hand with the members of the forum to create a value chain that utilizes IOWN in every industry.

Investment in human capital is essential to continue producing research results

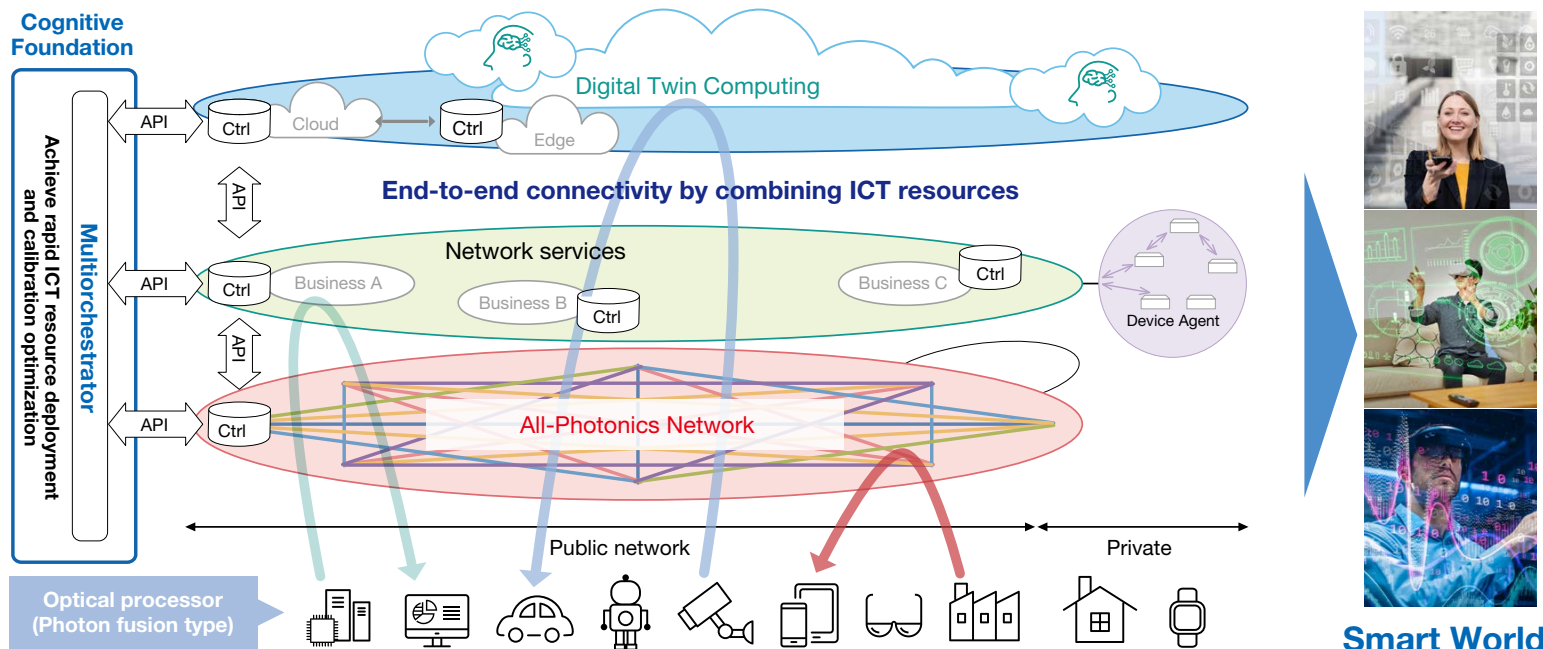
Research and development at NTT involves approximately 2,300 researchers conducting a broad, diverse range of research, from basic research to R&D that underpins business development at operating companies, based on the principle of creating world-leading technologies and services and contributing to the development of society, industry, and academia. We are creating competitive technologies as part of the research and development that forms the source of growth for the NTT Group, and will go on to create new value through open innovation and collaboration with various companies, universities and research institutions. It is vital to view each and every employee as an independent researcher with a high level of market value. To facilitate this, we are supporting diversity-rich career formation, from basic research to technology management, in line with each individual's career plan. With even more rapid changes occurring today, we are regularly reviewing training programs to ensure they are up to date and optimized for nurturing researchers with a high level of market value.

Going forward, we will need excellent researchers in a wide range of fields such as encryption technology energy. To this end, we will aim to make NTT Group more attractive, not only in terms of compensation, but also in terms of prestige, the research environment, and many other aspects so that people wish to work here.



What is IOWN concept

An abbreviation for the Innovative Optical and Wireless Network (IOWN), this concept is a step for achieving a Smart World through the fusion of photonics-electronics convergence technology and three core elements—an All-Photonics Network, Digital Twin Computing, and Cognitive Foundation.



All-photonics network (APN) for achieving the IOWN concept

This is the core concept that delivers a stable, high-capacity communications network with computing capacity that exceeds the performance of conventional computing technologies and networks, with lower power consumption and overcoming communication latency issues.

Limits and reduces power consumption

- (1) Low power consumption
 - No conversion between light ↔ electricity
 - Integrated opto-electronic information processing

Power efficiency*1
100 times higher

Capable of handling increasing traffic

- (2) High capacity and high quality
 - Allocate wavelength for each service
 - IP-independent

Transmission capacity*2
125 times higher

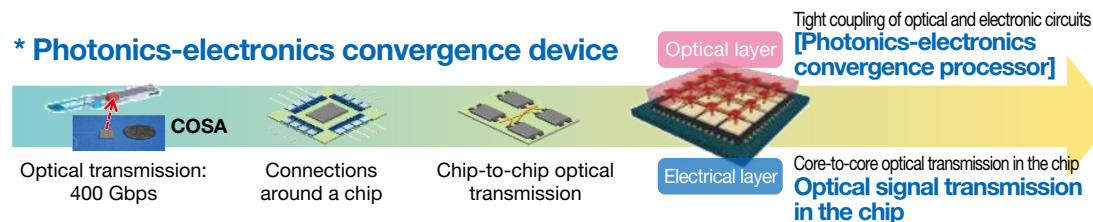
Low-latency transmission backbone

- (3) Low latency
 - No data compression
 - No queueing

End-to-end delay*3
1/200

*1 Target value of power efficiency of photonics technology-applied part. *2 Target value of communication capacity per optical fiber. *3 Target end-end delay for video traffic that does not require compression within the same prefecture

* Photonics-electronics convergence device

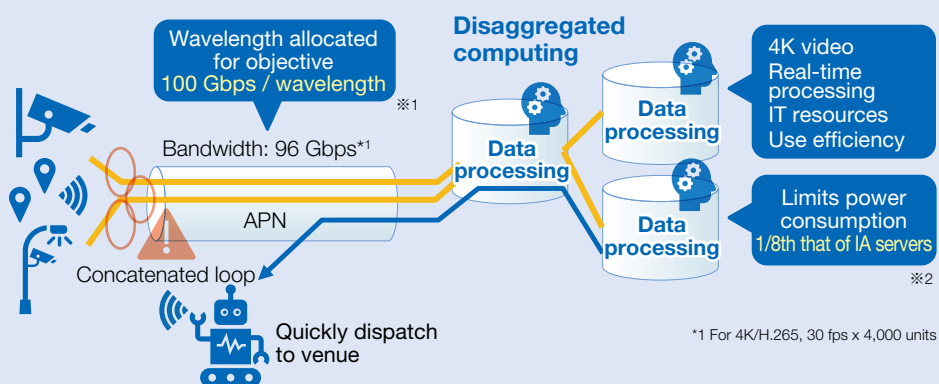


Future use cases achieved with IOWN

Going forward, the goal is to implement use cases raised at the IOWN Global Forum by demonstrating conceptual use cases among a wide range of companies and organizations.

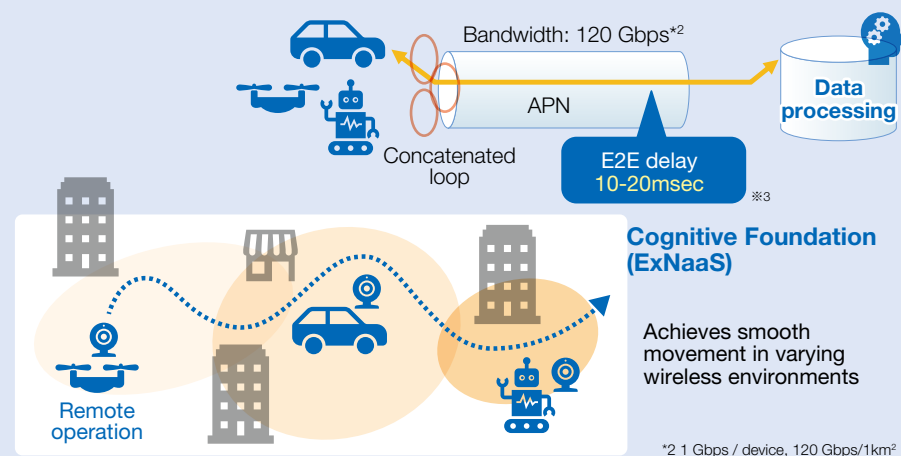
Area management

Capable of high-speed processing of data generated from the large number of cameras and other sensors installed around the venue, together with low power consumption



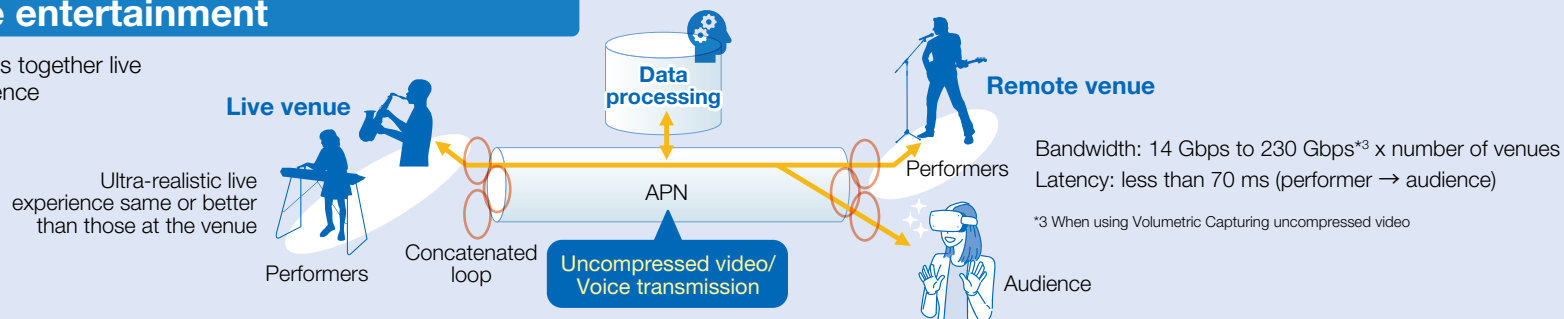
Smart mobility

Automation of logistics within a venue by using automatically driven vehicles, transportation robots, drones, and more



Live entertainment

Achieves live entertainment that brings together live venues, remote venues and the audience



※1・2・3: Target value of R&D

2021 highlights

Ensuring the positive coexistence of nature and humanity

GHG reduction
(Scope1+2)

38% (compared to FY2013)
reduction

Recycling rate

97.8%

Improving prosperity for all people and cultures

B2B2X earnings

544.1 billion

Ratio of remote work

77.3%

Maximizing well-being for all

Ratio of women newly promoted to management positions

29.1%

Ratio of direct dialogue with critical suppliers

100%