

# Welcome to your CDP Climate Change Questionnaire 2022

## C0. Introduction

### C0.1

#### (C0.1) Give a general description and introduction to your organization.

NTT DATA is a leading global IT services provider, operating in 203 cities across 52 countries with approximately 150,000 professionals, providing IT services to various organizations and businesses. Our mission is to build long-term relationships with clients, to do this we strive towards carbon neutrality in collaboration with them and a wide range of partners and colleagues across the globe.

Name: NTT DATA Corporation

Head Office: Toyosu Center Building, 3-3, Toyosu 3-chome, Koto-ku, Tokyo 135-6033, Japan

Established: May 23, 1988

Common Stock: 142,520 million yen (as of March 31, 2022)

Net Sales: 2,551,906 million yen (April 1, 2021 to March 31 2022)

Number of Employees: 151,600 (consolidated) (as of March 31, 2022)

Account Settlement Date: March 31

Business Areas: System integration

### C0.2

#### (C0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date	Indicate if you are providing emissions data for past reporting years
Reporting year	April 1, 2021	March 31, 2022	No

### C0.3

#### (C0.3) Select the countries/areas in which you operate.

- Argentina
- Australia
- Belgium
- Brazil
- Canada

Chile  
China  
Colombia  
Czechia  
Denmark  
Finland  
France  
Germany  
Hungary  
India  
Indonesia  
Italy  
Japan  
Luxembourg  
Malaysia  
Mexico  
Morocco  
Myanmar  
Netherlands  
Norway  
Peru  
Philippines  
Poland  
Portugal  
Romania  
Singapore  
Slovakia  
Spain  
Sweden  
Switzerland  
Thailand  
Turkey  
Ukraine  
United Kingdom of Great Britain and Northern Ireland  
United States of America  
Viet Nam

## **C0.4**

**(C0.4) Select the currency used for all financial information disclosed throughout your response.**

JPY

## C0.5

**(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.**

Financial control

## C0.8

**(C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?**

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
Yes, an ISIN code	JP3165700000

# C1. Governance

## C1.1

**(C1.1) Is there board-level oversight of climate-related issues within your organization?**

Yes

### C1.1a

**(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.**

Position of individual(s)	Please explain
Director on board	<p>The Representative Director and Senior Executive Vice President is the chairperson of the Climate Action Committee and bears highest executive responsibility for matters related to climate change. He also serves as the CRO. In the reporting year, the companywide Climate Action Committee was established to formulate strategy on climate change, evaluate risks and opportunities, and manage targets. The chairperson confirms various results and decides on policy every half year for GHG reduction actions, including monitoring the deployment of renewable energy and promoting actions across the supply chain. As the CRO, the chairperson also manages climate change risk as a part of company-wide risk management.</p> <p>In the FY2021 reporting year, the Representative Director made decisions on a plan for the introduction of reusable energy by FY2030, strengthening global linkages for climate change initiatives by NTT DATA becoming a CDP Gold Accredited Partner (climate change consultancy and software solutions provider)</p>

	and a Premium member of the CDP Supply Chain Program, and establishing a task force to promote behavioral change in personnel. Those decisions were the basis for the submission to the Board of a refined NTT DATA Carbon-Neutral Vision 2050.
--	---

## C1.1b

**(C1.1b) Provide further details on the board’s oversight of climate-related issues.**

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – some meetings	Reviewing and guiding strategy	<p>The Representative Director and Senior Vice President oversees assessment of climate change risks and opportunities analyzed by the Green Innovation Office, which was launched in the reporting year, the setting of GHG emissions reduction targets, and the results of countermeasure consideration. An example is the once a quarter confirmation of results and decisions on directions relating to GHG emissions reduction actions, such as deployment of renewable energy and promoting actions across the supply chain. The Director is also the CRO and the Chair of the Internal Control Promotion Committee which undertakes company-wide risk management.</p> <p>In the reporting year, the risk associated with climate change was positioned in company-wide risk management as material. Analysis and assessment of risks and opportunities from climate change were also undertaken in accordance with the TCFD framework and responses based on results of assessment over a longer time horizon than other risks were considered and disclosed in the annual securities report.</p> <p>The Representative Director and Senior Vice President serving as the Chair of the Climate Action Committee also led the formulation for the Board of an overall picture of the climate change strategy in the FY2021 report on activities relating to climate change and the medium-term management plan (FY2022-FY2025), and a Board member reviewing and guiding strategy was implemented.</p> <p>Also in the reporting year, goals responding to the SBTi</p>

		announcement of a net zero standard were refined and information disclosed in response to new TCFD criteria was reviewed and decided. Comments received from many internal and external directors in relation to the latest climate change trends and information were reflected in overall strategies.
--	--	---

## C1.1d

**(C1.1d) Does your organization have at least one board member with competence on climate-related issues?**

	Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues
Row 1	Yes	<p>NTT DATA has established a Climate Action Committee for the two purposes of achieving carbon neutrality targets in the NTT DATA Group companies and contributing to clients through green business. The Representative Director and Senior Vice President who works in that committee has a high level of expertise in two major areas. One is that the Director is a member of the Japan Techno-Economics Society's Expert Committee on Carbon Neutrality and therefore has access to the latest information from an external body that is expert in carbon neutrality. He is also Chair of the ISO14001 Eco Activity Promotion Committee, has a high level of expertise in environmental management, including carbon neutrality, and often responds to interviews in his capacity as a senior manager in environmental management.</p> <p>The second key point is that he has global business knowledge about climate change. Until June 2020, the Director was the director in charge of global marketing and the Europe and North America segments and had responsibility for growing the business of NTT DATA Group overseas companies in over 50 countries. In that context, in the course of debates with management in offshore client companies in Europe, where there is strong interest in climate change, he acquired expert knowledge of how corporations should be in relation to climate change and about opportunities for business contributions.</p>

## C1.2

**(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.**

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues

Chief Risks Officer (CRO)	Both assessing and managing climate-related risks and opportunities	Quarterly
---------------------------	---	-----------

## C1.2a

**(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).**

The CRO, who is the Representative Director and Senior Executive Vice President and the Chairperson of the Climate Action Committee, has chief executive responsibility for climate change.

NTT DATA Group has established 'sustainability management' as an objective of the medium-term management plan (FY2022-FY2025).

The Climate Action Committee, which was launched in FY2020 to execute this initiative company-wide, in the reporting year also newly established the Green Innovation Office and has progressed initiatives to involve all NTT DATA business units by establishing around ten taskforces.

The director who chairs the Climate Action Committee (and also serves as the CRO) verifies assessments of the impact of climate change risks and opportunities on NTT DATA-wide business and corporate activities, which are reported to the Committee, and once every six months he also verifies results and decides policies with respect to established GHG emission reduction targets and countermeasures. Particularly important matters are reported to the Board of Directors at least once a year. In 2019, the Board confirmed the SBT 1.5°C target and it progressed to approval as a Science-Based Target (SBT).

In the reporting year, climate change-related risk was separately defined as one of only 14 material risks in company-wide risk management. Those 14 items of material risk were confirmed by the Board and disclosed in the annual securities report.

Through the Climate Action Committee and the Green Innovation Office, the Board of Directors also approved a revised NTT DATA Carbon-Neutral Vision 2050, and to advance climate action to achievement of goals, progressed CDP and activities for achieving a net zero society by NTT DATA becoming a CDP Gold Accredited Partner (climate change consultancy and software solutions provider) and a Premium member participating in the CDP Supply Chain Program. Specific risk response measures included the decision to start introduction of 100% renewable energy to the building with HQ's functions in Japan and to NTT DATA's three main services, and conducting supply chain briefings of the top 70% of suppliers by purchase amount, as part of active promotion to suppliers.

Risk management related to climate change is also integrated into company-wide risk management. Company-level risk management is performed by the Internal Control Promotion Committee, which is chaired by the CRO and comprises the heads of organizations involved in corporate ethics and convened every six months.

There are therefore four monitoring opportunities related to climate change risk each year, including two related to the environment and climate change and two related to company-level risk management. The Representative Director and Senior Executive Vice President, who is the chairperson of the Climate Action Committee and the CRO, has chief executive responsibility for climate change, which enables assessment and management from both aspects of prompt

advancement of strategies specific to climate change, and response to climate change risk as part of overall risk management.

## C1.3

**(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?**

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	

### C1.3a

**(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).**

Entitled to incentive	Type of incentive	Activity incentivized	Comment
Director on board	Monetary reward	Emissions reduction target	Director's remuneration is linked by a KPI to reductions in Scope 1 and 2 CO2 emissions. The consolidated NTT DATA Group has company-wide annual GHG emissions reduction targets and director remuneration is adjusted up or down according to target achievement.
Management group	Monetary reward	Emissions reduction target	A sustainability response including a climate change response is defined in management job descriptions. Annual KPI targets for climate change responses are established according to each organization's mission, and assessment is linked to achievement of those targets.
All employees	Monetary reward	Emissions reduction target	Annual KPIs for all personnel are established for climate change responses as appropriate to the mission of the organization with which they are affiliated. Assessment is linked to achievement of targets. At the same time, NTT DATA operates an awards system for contribution to sustainability across the consolidated NTT DATA Group, and outstanding initiatives are selected for major and entry prizes on the basis of judging, there is an awards event, and relevant members are given monetary awards.  In the reporting year, a carbon footprint calculation and registration tool developed by a Spanish NTT DATA Group company, NTT DATA Spain, S.L.U., received the President's Award.

## C2. Risks and opportunities

### C2.1

**(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?**

Yes

#### C2.1a

**(C2.1a) How does your organization define short-, medium- and long-term time horizons?**

	From (years)	To (years)	Comment
Short-term	0	4	We define "Short-term" as the period until 2025.
Medium-term	4	8	We define "Medium-term" as the period until 2030.
Long-term	8	28	We define "Long-term" as the period until 2050.

#### C2.1b

**(C2.1b) How does your organization define substantive financial or strategic impact on your business?**

The Internal Control Promotion Committee, which meets twice a year and is chaired by the Representative Director and Senior Executive Vice President, who is the CRO, defines material risk to business, both financial and strategic.

More than 50 nominated risks are plotted using a matrix in which one axis is large, medium, or low level of impact (magnitude of impact) and the other is high, medium, or low likelihood of occurrence, and risks with greater than large level of impact and greater than medium likelihood of occurrence, or risks with greater than medium level of impact and greater than high likelihood of occurrence, are defined as material (Substantive). Risks were put before the Board in the annual report and climate change risk was defined as a material risk.

Climate change assessment is undertaken in relation to opportunities as well as risks, based on scenario analysis. Climate-related risks and opportunities have longer horizons than other material risks and are therefore assessed by the Internal Control Promotion Committee, after which the Climate Action Committee and the Eco Activity Committee undertake assessments from the medium to long-term perspective.

Assessments of climate change risks and opportunities are considered on short, medium and long-term time horizons, financial impact is divided into four levels of high, medium-high, medium and low level of impact, and likelihood of occurrence is divided into four levels of virtually certain, very likely, likely and unlikely.

\* Definition of financial impact

High: Turnover of at least 100 billion yen, or an operating profit of at least 10 billion yen, or impact on share price of at least 10 billion yen



Medium-high: Turnover of at least 10 billion yen to less than 100 billion yen, or operating profit of at least 1 billion yen to less than 10 billion yen, or impact on share price of at least 1 billion yen to less than 10 billion yen

Medium: Turnover of at least 1 billion yen to less than 10 billion yen, or operating profit of at least 100 million yen to less than 1 billion yen, or impact on share price of less than 100 million yen to less than 1 billion yen

Low: Turnover of less than 1 billion yen, or operating profit of less than 100 million yen, or impact on share price of less than 100 million yen

## C2.2

**(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.**

---

### **Value chain stage(s) covered**

Direct operations

Upstream

Downstream

### **Risk management process**

Integrated into multi-disciplinary company-wide risk management process

### **Frequency of assessment**

More than once a year

### **Time horizon(s) covered**

Short-term

Medium-term

Long-term

### **Description of process**

Risk management related to climate change is integrated into company-wide risk management. Company-level risk assessments are made by the Internal Control Promotion Committee, which meets every half year, is chaired by the CRO, and comprises the heads of organizations involved in corporate ethics.

The Internal Control Promotion Committee deliberated on company-wide material risk anticipated in the reporting year and defined climate-related risk as one of only 14 material risks to the company. Those 14 material risks were confirmed by the Board and disclosed in the annual securities report.

In relation to more detailed risks and opportunities associated with climate change, risks in direct operations and through the supply chain are brought to light through investigation of short, medium and long-term risk (assuming short-term is to FY2025, medium-term is to FY2030, long-term is to FY2050), and opportunities are assessed by the company-wide Climate Action Committee (chaired by the CRO). In the reporting year, three risks with a high level of impact (risk of devaluation by investors and financial institutions from delays in response to climate change, greater frequency of typhoons

and other natural disasters as a result of abnormal weather, cost increases from carbon pricing), and three opportunities (increase in turnover from creation of offerings associated with sustainability, increase in turnover from consulting services for realization of a sustainable society, increase in turnover from provision of resilient cloud services contributing to carbon neutrality) were resolved by the Board, and from among the 14 material risks the risks and opportunities were disclosed as detail under the climate change item in the annual securities report, in compliance with TCFD.

The CRO determines priorities based on the degrees of difficulty, urgency and financial impact of a response for countermeasures proposed by the Climate Action Committee, using as important criteria the risks, opportunities and GHG emissions associated with climate change, financial impact, and a ranking for climate change by an external company. In March 2022 in the Climate Action Committee, risks and opportunities having been brought to light through investigation, strategies through to 2025 were confirmed, which comprised three points: Company emissions reductions targets (e.g. yearly plans to introduce renewable energies), growing business related to climate change (e.g. commitment to defining parameters based on client inquiry), and devising organic mechanisms for advancing those objectives (e.g. external disclosure aligned to global initiatives, internal dissemination and marketing communications).

In relation to progress and outcomes from risk responses to climate change, as part of the Climate Action Committee's mission, approximately ten taskforces were formed, including a visualization taskforce, a consulting taskforce and a reductions taskforce, and having assigned a responsible director to each taskforce, a process was established for weekly to monthly reporting by directors. Through the reporting process in each taskforce the Green Innovation Office confirms changes or otherwise in short, medium and long-term risks and opportunities identified in association with the CRO and others, and change prompts debate and decisions about whether additional investment is needed or whether there is a need to form linkages with new internal or external stakeholders.

## C2.2a

### (C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	<p>Due to an increase in the current tax rate for global warming countermeasures, the cost of electricity is expected to rise, possibly affecting our financial position.</p> <p>If we were to purchase the full amount of the emissions in order to achieve the targets of the third planning period (2020-2024) in the Tokyo CaT (Tokyo Cap-and-Trade program), a cost of approximately 300 million yen is expected to be incurred (Calculated as: Amount of certificates or credit needed to be purchased in the third period: 550,000 t-CO<sub>2</sub> x Carbon credits price: 540 yen/t-CO<sub>2</sub>. * It is anticipated there will be a partial offset due to a surplus from the second period).</p>

Emerging regulation	Relevant, always included	<p>There is heightened risk that carbon pricing (a carbon tax) will be introduced in Japan and elsewhere to help achieve a decarbonized society by 2050 according to the Paris Agreement.</p> <p>In the IT services industry there is growing demand for telecommuting due to the COVID pandemic and for use of digital technologies for more efficient business, which means that without countermeasures, energy consumption in NTT DATA cloud and data centers may continue to increase. A particular feature of the Company is that some 90% of Scope 1 and 2 power consumption in NTT DATA cloud and data centers is due to power use, and because there will be high management impact from use of power from fossil fuels, for business continuity it can be expected power from renewable energies will require to be procured. However, renewable energies in Japan, which accounts for the majority of turnover, are expensive, and the potential for power generation and a certificate trading scheme are still in development, which means that any sudden introduction of renewable energies will be associated with difficulty. Given these circumstances, there are concerns that domestic regulation will be significantly toughened in order to achieve Paris Agreement targets, the cost burden of CO2 emissions will increase, and significant impediments to business continuity will result. A particularly significant financial risk is the multiplier effect of the advanced economics carbon price cited in “Table 2.2 CO2 prices for electricity, industry and energy production in NZE” in the International Energy Agency Net Zero by 2050 report, for current forecasts for annual emissions of greenhouse gases (Scope 1 &amp; 2 208Kt-CO2e), which gives rise to estimates of approximately 7 billion yen in carbon price costs from FY2022 to FY2025. This was confirmed by the Board and noted in the annual securities report.</p>
Technology	Relevant, always included	<p>As demands from the global society for Net-Zero grow, there is never-before-experienced demand for new technology and innovative initiative. If NTT DATA falls behind competitors in developing the technology sought to address climate change, we will be unable to respond to the expectations of clients with whom we have built long-standing relationships, and there is a risk that our business will decline and we will lose market share in IT services.</p> <p>For example, the residual need for initiatives to eliminate carbon to reduce greenhouse gas emissions arising from inability to respond with energy conservation and renewable energies for achieving Net-Zero.</p> <p>The technology and initiatives for social use are still in verification stage and are yet to be established. If we fall behind other competing companies in this area, we will miss new business opportunities.</p> <p>Clients look for strong environmental performance as well as security and convenience in their use of data centers. We are already developing and incorporating new technologies to achieve high environmental performance in data centers, such as immersion cooling</p>

		and air conditioning IoT. If we fall behind in these areas, even existing data center clients will relocate to data centers and cloud services that have better environmental performance, which presents the risk of a resulting reduction in NTT DATA's existing business.
Legal	Relevant, always included	The almost all of our major data centers are located in the mid-latitudes of the northern hemisphere where torrential rains caused by climate change occur frequently. Due to the business characteristics of NTT Data, there is a risk of our data centers shutting down in Japan and overseas due to power supply interruptions, flooding, and lightning strikes that are caused by abnormal weather phenomena (large-scale typhoons, floods, heatwaves, and sudden torrential downpours etc.). This may exert an enormous impact on large-scale systems of NTT Data that support financial, medical and other national social infrastructure, resulting in the risk of lawsuits being filed against us.
Market	Relevant, always included	There are growing demands in the global society for responses to climate change, and governments of all nations and companies in a variety of industries, are being required to structurally reform business with a view to alleviating and adapting to climate change, and to innovate by using new technologies and creating new mechanisms. NTT DATA primarily provides business consulting and system configuration and management services to clients, but if we were to fall behind other competitor companies in providing the new technologies and mechanisms sought by clients for innovation in climate change, then in addition to missing out on new business opportunities associated with climate change, there is a risk of a gradual decrease even in existing business, as society's response to climate change advances.
Reputation	Relevant, always included	Demands by investors for greater disclosure of information related to climate change may increase, our share price may drop due to a lowering of our rating by investors, and conditions for raising funds from the market may deteriorate. Due to a drop in our social rating by ESG, it is also possible that our employee retention rate may drop or it may become more difficult to recruit talented staff who are highly motivated to resolve social issues.  An anticipated material financial risk is a one percent decline in total share price (a total loss of 34 billion yen on current price) caused by the risk of downgrading by investors and financial institutions as a result of delayed response to climate change. This was confirmed by the Board and noted in the annual securities report.
Acute physical	Relevant, always included	A lot of the social infrastructure based on systems and services provided by our group may suffer damage as a result of our data centers shutting down in Japan and Europe due to power supply interruptions, flooding, and lightning strikes that are caused by abnormal weather phenomena (large-scale typhoons, floods,

		<p>heatwaves, and sudden torrential downpours etc.). Besides the risk of a drop in our social trust and brand image, our financial situation may be greatly affected by a reduction in our income, payout of large, unavoidable repair expenses and so on.</p> <p>An anticipated material financial risk is an estimated loss of earnings of 13 billion yen in the event of a five-day shutdown in major data center transmissions due to a typhoon in metropolitan Tokyo in Japan, where the major data centers are located. This was confirmed by the Board and noted in the annual securities report.</p>
Chronic physical	Relevant, always included	<p>Energy cost may increase following a rise in the air-conditioning load of our data centers as a result of a rise in the mean temperature. When the air temperature in the data centers of NTT DATA in Japan rises by 1 degree Celsius, the power consumption increases by about 4.21 GWh and the annual energy cost is estimated to increase by approximately 100 million yen.</p>

## C2.3

**(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?**

Yes

## C2.3a

**(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.**

---

### Identifier

Risk 1

### Where in the value chain does the risk driver occur?

Direct operations

### Risk type & Primary climate-related risk driver

Emerging regulation  
Carbon pricing mechanisms

### Primary potential financial impact

Increased indirect (operating) costs

### Company-specific description

NTT DATA's turnover from the EU and Japan, regions in which carbon pricing (a carbon tax) has already been introduced or its introduction is being considered, account for approximately 80% of consolidated turnover, and if introduction is decided in Japan, where most clients are located, at least 60% of turnover will be significantly impacted. In a context in which the consensus of global society is for net zero by 2050 and there are

growing demands on companies from legislation and ordinances, we can expect increasing costs going forward, due to carbon pricing. In the IT services industry there is growing demand for telecommuting due to the COVID pandemic and for use of digital technologies for more efficient business, which means that without countermeasures, energy consumption in NTT DATA cloud and data centers may continue to increase. A particular feature of the Company is that some 90% of Scope 1 and 2 power consumption in NTT DATA cloud and data centers is due to power use and there will be high management impact from use of power from fossil fuels. In that event, procurement of power from renewable energies is required, and power procurement costs is expected to increase. The result we will confront will be the risk of a decline in business profit.

**Time horizon**

Long-term

**Likelihood**

Virtually certain

**Magnitude of impact**

Medium-high

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

7,000,000,000

**Potential financial impact figure – minimum (currency)**

**Potential financial impact figure – maximum (currency)**

**Explanation of financial impact figure**

The multiplier effect of the advanced economics carbon price cited in “Table 2.2 CO2 prices for electricity, industry and energy production in NZE” in the International Energy Agency Net Zero by 2050 report was applied to the current forecast for annual emissions of greenhouse gas. Specifically, if the current forecast for annual emissions of greenhouse gas (Scope 1 & 2 208Kt-CO2e) continues to 2025, then we estimate that from FY2022 to FY2025, approximately 7 billion yen in carbon price costs will result. This was confirmed by the Board and noted in the annual securities report. By way of reference, if the current forecast for annual emissions of greenhouse gas (Scope 1 & 2 208Kt-CO2e) were to continue to 2040, then from FY2022 to FY2040 we estimate approximately 70 billion yen in carbon price costs will result.

Calculation formula

$208,000 \text{ t-CO}_2\text{e/year} * \text{USD}75/\text{t-CO}_2\text{e} * \text{USD}112/\text{JPY} * 4 \text{ years} = 6,988,900,000 \text{ yen}$

Roughly 7,000,000,000 yen

- Values used

Forecast for annual emissions of greenhouse gas (Scope 1 and 2): 208,000 t-CO<sub>2</sub>e

- IEA scenario carbon price (to 2025): USD75
- IEA scenario carbon price (to 2030): USD130
- IEA scenario carbon price (to 2040): USD205
- Exchange rate assumption: USD112/JPY

### Cost of response to risk

5,000,000,000

### Description of response and explanation of cost calculation

In order to minimize the impact of a carbon tax, we have purchased renewable energies and installed equipment for self-generation of power from renewable energies in NTT DATA buildings. In March 2018 we completed Mitaka Data Center EAST, which incorporates photovoltaic power generation and an outside air cooling system using natural energy (outside air in spring, autumn and winter). We now have three buildings with photovoltaic power installed. Photovoltaic systems are now installed in approximately 17% of our buildings in Japan. We have also progressed introduction of renewable energy to our global data centers and offices, and have plans for carbon neutrality in use of our own services in data centers in FY2030 and also for carbon neutrality in our offices in FY2040.

We have introduced renewable energies to data centers and offices, and to save energy in data centers we have invested in IoT for energy saving and in a new method of immersion cooling that directly cools ICT equipment in a special liquid, making air conditioning unnecessary and reducing cooling energy by up to 97%. Together with renewable energy, we estimate from 1.2 to 1.5 billion yen annually.

Cumulative investment in the medium-term management plan for the four financial years from FY2022 to FY2025, has anticipated power from renewable energies will need to be purchased for the purposes of business continuity. In the fiscal years 2022 to 2025, approximately 5 billion yen ((¥1.2b × 2 yrs) + (¥1.5b × 2 yrs) = ¥5.1b, or approx. ¥5b) will be invested in energy saving measures and introduction of renewable energy. This has been confirmed by the Board and noted in the annual securities report.

### Comment

---

#### Identifier

Risk 2

#### Where in the value chain does the risk driver occur?

Direct operations

#### Risk type & Primary climate-related risk driver

Acute physical

Cyclone, hurricane, typhoon

#### Primary potential financial impact



Decreased revenues due to reduced production capacity

### **Company-specific description**

Over 50% of turnover is associated with data centers, and nearly all major data centers are in the middle latitudes of the northern hemisphere, a region subject to frequent torrential rain as a result of climate change. Banking institutions, which are NTT DATA's major clients, are seeking low-latency trade processing with the Tokyo Stock Exchange, which is notably in the Tokyo Bay neighborhood. According to a flood risk search service provided by the City of Tokyo, when anticipated maximum heavy rain falls the Nihonbashi River adjacent to the Tokyo Stock Exchange will be affected and there is a risk of one to two meter flooding, but even with risking risk of flood damage, the trend is for use of data center services near to the Tokyo Stock Exchange. Public institutions, which are also major clients, and the data centers and internet exchanges of other companies with which NTT DATA has mutual connections, are also located in the Tokyo Bay neighborhood and for reasons of low-latency communications processing and more efficient mutual connections, the trend is also for data centers in the Tokyo Bay neighborhood to be used. In Japan, where our head office is located, data centers therefore tend to be in the metropolitan area relatively close to the coastal region, and are particularly vulnerable to the effects of abnormal weather. In the USA also, the American New York Stock Exchange and the internet exchange are located in the New York Bay neighborhood, and just as in Japan, for reasons of low-latency and efficient mutual connection with major clients and the data centers of other companies, NTT DATA's data center is also in the New York Bay neighborhood. For these reasons NTT DATA's data centers are particularly vulnerable to the effects of abnormal weather. Interruptions to power transmission to data centers in and outside Japan due to abnormal weather (major typhoons, flooding, heat waves, cloud bursts), and shutdown of data centers due to flooding or lightning strikes are whole-of-company risks.

### **Time horizon**

Short-term

### **Likelihood**

Virtually certain

### **Magnitude of impact**

Medium-high

### **Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

### **Potential financial impact figure (currency)**

13,000,000,000

### **Potential financial impact figure – minimum (currency)**

### **Potential financial impact figure – maximum (currency)**



### **Explanation of financial impact figure**

In the event of a five-day shutdown of major data centers due to typhoon centered on the Tokyo metropolitan area in Japan, where NTT DATA's most mission critical facilities are located, the risk of loss of turnover on a lost turnover basis is estimated to be 13 billion yen (Dividing the FY2020 turnover from services that would be impacted, of 944.8 billion yen by days in the year, a five-day loss in turnover would be approximately 13 billion yen). This was confirmed by the Board and noted in the annual securities report. In reality, as it is likely there would be a greater loss of turnover due to loss of credibility and increased costs, this figure is a minimum estimate.

Calculation formula

Annual 948,800,000,000 yen/365 days \* 5 days = 12,942,465,753 yen

Roughly 13,000,000,000 yen

### **Cost of response to risk**

8,000,000,000

### **Description of response and explanation of cost calculation**

In FY2020, together with TEPCO Power Grid, Inc. and Hitachi, NTT DATA established Grid Sky Way LLP in March 2020 (in June 2020, we were joined by Chugoku Electric Power Transmission & Distribution Co., Inc.). The partnership will build and verify systems for more advanced inspections of power and other infrastructure using drones, and for increasing infrastructure resilience as a countermeasure to natural disasters, which are becoming more severe due to extreme weather events, and NTT DATA's role is to build a testing environment for the drone's operating system. In the reporting year the limited liability partnership tested automatic drone flight for inspection of power facilities by flying drones in the skies over transmission lines near power transmission facilities in Okayama Prefecture.

During the COVID pandemic since 2020, NTT DATA has enhanced the company's internal network band to establish and improve a telecommuting environment for staff, which has also indirectly contributed to enhancing data center resilience against climate change.

NTT DATA's 2022 investment of 2 billion yen in these initiatives (1 billion yen for enhanced communications circuits and 1 billion yen in improved building equipment) was the basis for the same figure of 2 billion yen from 2023 being anticipated in the mid-term management plan (FY2022 to FY2025), for a cumulative investment over four years calculated at 8 billion yen (¥2b x 4 yrs = ¥8b). This was confirmed by the Board and noted in the annual securities report.

### **Comment**

---

#### **Identifier**

Risk 5

#### **Where in the value chain does the risk driver occur?**

Direct operations

**Risk type & Primary climate-related risk driver**

Reputation

Increased stakeholder concern or negative stakeholder feedback

**Primary potential financial impact**

Decreased access to capital

**Company-specific description**

In the event there is a delay in response to greater demand from investors to companies for disclosure of information relating to climate change, or failure to engage adequately to reduce GHG emissions, there is a risk of a fall in share price associated with reduced ratings from investors and of worsening financing terms from the market.

Among NTT DATA shareholders, offshore corporations account for 17.52% (as at 31 March 2022), and offshore investors are more likely than Japanese domestic investors to actively undertake ESG investment. For that reason, there is a risk that in relation to reduced ratings from offshore investors, NTT DATA may be subject to a decline in corporate value due to a fall in share price.

Among NTT DATA shareholders, Japanese domestic financial institutions account for 20.92% (as at 31 March 2022). In Japan also, multiple financial institutions have begun to join "the Partnership for Carbon Accounting Financials" to developing to assess and disclose the GHG emissions of loans and investments for financial institutions, and for that reason there is a risk of NTT DATA being subject a decline in corporate value in relation to reduced ratings from domestic financial institutions.

**Time horizon**

Short-term

**Likelihood**

Virtually certain

**Magnitude of impact**

High

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

34,000,000,000

**Potential financial impact figure – minimum (currency)**

**Potential financial impact figure – maximum (currency)**

**Explanation of financial impact figure**

If ratings from offshore investors and domestic financial institutions were to decline, the effect on market capitalization of a one percent fall in the price of shares held would be

approximately 34 billion yen. This has been confirmed by the Board and noted in the annual securities report.

\* Estimated from 1,402,500,000 issued shares (31/3/2022)

Calculation formula

$1,402,500,000 \text{ shares} \times 1\% \times (\text{market capitalization } 3,391,245,000,000$

$\text{yen}/1,402,500,000 \text{ shares}) = 33,912,450,000 \text{ yen}$

Roughly 34,000,000,000 yen

### **Cost of response to risk**

5,000,000,000

### **Description of response and explanation of cost calculation**

In order to respond quickly to demands from investors for disclosure of climate change information, and to speed up initiatives to reduce emission of greenhouse gases, in addition to the existing Climate Change Action Committee, NTT DATA has established the dedicated Green Innovation Office. The organization is responding to increased demands for information disclosure by progressing efficiencies and climate action in NTT DATA Group calculation and visibility of greenhouse gas emissions. For example, in the reporting year, through internal initiatives the organization progressed the start of provision of greenhouse gas emission visibility platforms which retain many varied emissions units and logic. The organization also provided support for business and technology development by building infrastructure for distribution of distributed energy information towards realization of carbon neutrality. Investment in climate-related innovation is an initiative that will improve NTT DATA's reputation for climate action, as a result of our provision of climate-related IT services, and consulting to create technology and business models to promote society's carbon neutrality.

In the medium-term management plan (FY2022 to FY2025) the investment in the above Green Innovation Office activities will be from 1 billion to 1.5 billion yen a year, which over four years will be a cumulative investment of 5 billion yen (¥1b + ¥1b + ¥1.5b + ¥1.5b = ¥5b). Based on actual investment in 2021 in starting to build distribution infrastructure for distributed energy information and the 2022 budget, it is an investment in green innovation proposals chosen internally, and has been confirmed by the Board and noted in the annual securities report.

This investment is estimated to be 50% in service development for client and society's achievements of net zero, and around 50% in investment in initiatives to promote innovation for greenhouse gas emission visibility and reduction actions to achieve NTT DATA's own net zero.

### **Comment**

## **C2.4**

**(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?**

Yes

## C2.4a

**(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.**

---

**Identifier**

Opp1

**Where in the value chain does the opportunity occur?**

Direct operations

**Opportunity type**

Products and services

**Primary climate-related opportunity driver**

Development of new products or services through R&D and innovation

**Primary potential financial impact**

Increased revenues resulting from increased demand for products and services

**Company-specific description**

Greenhouse gas reductions in accordance with SBT initiative net zero standards, and disclosure of climate change responses compliant with TCFD are becoming priority tasks, particularly in global companies, and even in Japan, which accounts for approximately 60% of NTT DATA's turnover, disclosure in annual securities reports in accordance with TCFD in the prime market (the prime market of the Tokyo Stock Exchange for companies seeking constructive dialogue with global investors) looks set to become truly mandatory from FY2023. Important NTT DATA clients are also listed on the prime market, so visibility of greenhouse gas emissions through the client supply chain, creation of new projects and business reform in companies' management and business and response to climate change, and investment in associated systems, will create business opportunities for NTT DATA as a provider of IT services. NTT DATA defines general sustainability services and systems, including these climate-related solutions, as 'sustainability-related offerings', and their creation is an important strategy in the medium-term management plan (FY2022 to FY2025).

Among sustainability-related offerings, one of the most important in the short term is management of greenhouse gases, and NTT DATA is already providing data center and office building air conditioning optimization AI services and solutions to make GHG emissions visible. According to global information market survey reports, the size of the world's carbon footprint management market grew at approximately seven percent CAGR from 2015 to 2020. GHG emissions visibility solutions are a service that client companies in a wide range of industries are seeking.

**Time horizon**

Short-term

**Likelihood**

Very likely

**Magnitude of impact**

High

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

200,000,000,000

**Potential financial impact figure – minimum (currency)**

**Potential financial impact figure – maximum (currency)**

**Explanation of financial impact figure**

The financial impact of greater sustainability-related offerings focusing on climate-related solutions is estimated in FY2022 to FY2025 to be approximately 200 billion yen. That constitutes NTT DATA's plans for visibility of carbon footprints as the first climate-related step, and providing the below products and services as appropriate to the attributes of each market segment. The number of services for each segment are cumulative values, and typical services are noted. The indicative size of 200 million yen per item is an estimate that, based on NTT DATA's new businesses to date (several thousand to several billion yen), is not an excessive evaluation, and has been confirmed by the Board.

- Clients common to all segments: carbon footprint visibility platform (numbers included in each segment)
- Public and social infrastructure segment: 300 carbon credit trade management infrastructure platforms
- Finance segment: build 300 sustainability finance platforms for investment and lending as appropriate to climate change risk
- Corporation segment: 300 platforms - utilities-related, for use of reusable energy and development of distributed energy infrastructure, and manufacturing-related, for greenhouse gas visibility and reduction across corporate supply chains

Calculation formula

300 platforms/segment \* 3 segments = 900, roughly 1000 platforms

1000 platforms \* 200 million yen/platform = 200 billion yen

**Cost to realize opportunity**

32,000,000,000

**Strategy to realize opportunity and explanation of cost calculation**

Investment to increase sustainability-related offerings, primarily of climate-related solutions, will be in development of many and varied carbon footprint visibility platforms, pre-sales costs and cost of skilling technicians. NTT DATA will also invest in market research into sustainability and investigation of business models with a view to creating

new business by combining advanced technology and social issues.

As an example, in collaboration with a Japanese chemical materials manufacturer, NTT DATA jointly developed carbon footprint infrastructure for separate final products and entered that market. The carbon footprint infrastructure uses a product composition table for tens of thousands of types of chemical products to reflect differences in materials and processes and enable capture of the GHG emissions of each final product. The chemical materials manufacturer uses the infrastructure to promptly convey the carbon footprint of each product to delivery sites and to specify hot spots for emissions reductions and is able to engage organizationally in decarbonization by introducing internal carbon pricing.

Investment from FY2022 to FY2025 will be 32 billion yen. That constitutes a 2 billion yen investment in whole-of-company technology development to contribute to adaptation to and amelioration of climate change in 2022, plus 6 billion yen in climate-related investments and social reform for each business area, giving a total base of 8 billion yen, cumulative over four years. This investment was confirmed by the Board and has been noted in the annual securities report.

## Comment

---

### Identifier

Opp2

### Where in the value chain does the opportunity occur?

Direct operations

### Opportunity type

Products and services

### Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

### Primary potential financial impact

Increased revenues resulting from increased demand for products and services

### Company-specific description

Agreement was reached at COP26 that the world would strive towards a target of 1.5oC, and in addition to growing demand by governments and finance authorities that companies disclose and reduce, the Glasgow Financial Alliance for Net-Zero was formed and there are also signs that investors are demanding companies reduce emissions of greenhouse gas.

This is therefore the backdrop to growing need for responses to climate change in corporate management and business and for formulation of strategies and reduction measures. In climate change responses, however, changes in the external environment in the nature and level of demands are rapid, and often a degree of specialist expertise is needed to calculate greenhouse gas emissions, so that often difficulties can arise when companies single-handedly formulate whole-of-company strategies and address

them all. For that reason, in the four years of NTT DATA's medium-term management plan (FY2022 to FY2025), we anticipate that those needs will grow further and that business opportunities in climate change and sustainability consulting will increase. In the first instance, NTT DATA used its position as Japan's first and the world's 20th or so CDP Gold Accredited Partner (climate change consultancy and software), where CDP is an international NGO with over 30 years' experience and a broad track record in development in the public and finance sectors and in climate change, and adopting public and financial institutions engaged in net zero as its main targets, launched a consulting service in climate change action. NTT DATA is newly providing consulting services in formulating corporate climate change response strategies, visibility of greenhouse gas emissions, energy saving in data centers, use of renewable energies, and optimization of energy efficiency. For NTT DATA, these consultancy services are entry level services that are an opportunity for increased need for opportunity 1 'Sustainability-related offerings (IT system services)', and in the medium-term management plan (FY2022 to 2025) are defined as a separate strategy from offerings. In other words, in the future, we anticipate climate change consulting services will themselves increase and offering opportunities will grow accordingly.

**Time horizon**

Short-term

**Likelihood**

Very likely

**Magnitude of impact**

Medium-high

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

20,000,000,000

**Potential financial impact figure – minimum (currency)**

**Potential financial impact figure – maximum (currency)**

**Explanation of financial impact figure**

Research and Markets, the global market research firm, in a report titled 'Management Consulting Services Global Market Report 2021: COVID-19 Impact and Recovery to 2030', reported that global consulting services will be 13 quadrillion yen in 2025 (USD 120.1061 billion), or a CAGR of eight percent (FY2021 to 2025). Even if it focuses only on sustainability consulting, at a CAGR of 4.5 percent (2021-2027), by 2027 global information market research is expected to reach 1.47 trillion yen (USD 10.88 billion). The market is big. The impediment to market growth is a shortage of human resources in the consulting industry who are able to deliver. NTT DATA's turnover from consulting as at FY2021 (April 2021 to March 2022) was 357.3 billion yen, which by FY2023 at a

CAGR of six percent, is anticipated to reach 380 billion yen.

As over ten percent of staff in Japan at this time are consultancy assets (1700 people as at March 2022), we used the same proportion globally, giving 140,000 people  $\times$  10% = 14,000 people. Of those, and estimating from the proportion of sustainability-related turnover in consolidated turnover in FY2025, we took it that seven percent would be sustainability-related consulting services. We estimate that globally, per capita consulting turnover will be in the order of 20 million yen annually.

As a result, climate-related consulting service opportunities in FY2025 are estimated to increase to 20 billion yen of turnover. This figure has been confirmed by the Board and noted in the annual securities report.

Calculation formula

14,000 people \* sustainability-related portion 7% \* turnover 20,000,000 yen/person = 19,600,000,000 yen

Roughly 20,000,000,000 yen

### **Cost to realize opportunity**

4,000,000,000

### **Strategy to realize opportunity and explanation of cost calculation**

Given the market size of sustainability consulting, at a CAGR of 4.5 percent (2021-2027), by 2027 global information market research is expected to reach 1.47 trillion yen (USD 10.88 billion), which is a big market. In contrast to sufficiently high market demand, securing sufficient human assets capable of high quality consulting is considered likely to be an upper limiting factor for financial impact.

In contrast, in NTT DATA's new medium-term management plan (FY2022 to FY2025), we are planning to respond to need with a system of personnel readiness on a scale of approximately 14,000 people as a global total, by increasing consulting service to 1,000 people. The additional 1,000 people who will be retained as consultants who formulate strategy and support implementation, will be trained and acquired as described hereafter.

1. Internal training (500 to 700 people): people with a grounding in consulting will be selected from among consulting, marketing and development personnel and allocated to projects in the climate change and other fields, or trained off the job.
2. Acquire sustainability and climate-related consultants (300 to 500 people): acquisition of human resources will be progressed through efforts to recruit personnel with experience as consultants in the climate change and related fields, or recruitment of personnel with experience related to climate change in government or corporations will be beefed up globally.

With a view to training climate-related consultants, sustainability in-service training is being incorporated into the standard internal training system, and mid-term hiring and internship systems are being used for sustainability-related training for primarily the younger demographic. NTT DATA is also using its IT technology to share knowledge within the Group through the Digital Work Place information sharing solution, including for Group companies, online seminars, and websites.

In 2022 NTT DATA invested approximately one billion yen in training, acquiring and in-



service training of consultants relating to climate change action. That comprised 500 million yen in human assets training and acquisition and 500 million yen in in-service training and surveys.

The Board resolved to invest 4 billion yen from FY2022 to FY2025, which was noted in the annual securities report.

## Comment

---

### Identifier

Opp3

### Where in the value chain does the opportunity occur?

Direct operations

### Opportunity type

Products and services

### Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

### Primary potential financial impact

Increased revenues resulting from increased demand for products and services

### Company-specific description

It is anticipated that in addition to increasing abnormal weather in the form of typhoons and localized torrential rain, heightened need for carbon neutrality will advance energy savings from joint use and equipment consolidation and introduction of renewable energies, and will increase the need for transition to the cloud, which is resilient and will contribute to carbon neutrality, to make it possible to avoid data loss. NTT DATA's major clients, banking and public institutions in particular, are seeking the cloud, which is both resilient and carbon neutral. For that reason, demand will itself increase for joint-use cloud services, which are resistant to climate disaster and contribute to energy savings, because they are created from robust infrastructure of the type typical of community cloud services, and by also operating those services using renewable energies, we anticipate even greater growth in business opportunities.

Currently, NTT DATA provides joint-use main business systems, such as the Chigin Kyodo Center used by 60 Japanese banks, or almost 40% of all regional banks (as at 1 June 2022). Over 90% of Japan's credit unions, or 241 credit unions, are members of the comprehensive online Shinkin Kyodo System for credit unions, giving us particular strength at a national level in large-scale community cloud services. By leveraging our pre-eminence in scale, there are further big business opportunities in the cloud, which is both resilient and carbon neutral.

NTT DATA has also resolved to introduce renewable energy into all our data centers by 2030, and we have begun gradually implementing that decision. This will result in all our cloud services from our assets using our data centers being operated with renewable energies.

**Time horizon**

Short-term

**Likelihood**

Very likely

**Magnitude of impact**

High

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

150,000,000,000

**Potential financial impact figure – minimum (currency)**

**Potential financial impact figure – maximum (currency)**

**Explanation of financial impact figure**

NTT DATA's turnover from cloud business in FY2021 was 250 billion yen. In FY2025 we expect turnover will be 400 billion yen. By dint of responses to improved resilience related to climate change and introduction of renewable energies, we believe turnover will grow, and anticipate the increase in turnover from FY2022 to FY2025 will be a financial impact of 150 billion yen.

Calculation formula

Cloud-related FY2025 turnover 400 billion yen – FY2021 turnover 250 billion yen = resilience and renewable energy response increase of 150 billion yen

**Cost to realize opportunity**

19,000,000,000

**Strategy to realize opportunity and explanation of cost calculation**

As of April 2022, NTT DATA began introducing 100% renewable energies to three services, including our Open Canvas(R) cloud service, which has high reliability and security, to improve resilience related to climate change from the cloud and as a response to introduction of renewable energies. NTT DATA has decided that by 2030 we will have introduced renewable energies to all our data centers, and the introduction of 100% renewable energies to these services is a part of that strategy. We intend to continue to systematically transition to renewable energy operation of cloud services used by our data centers.

The Board resolved in the medium-term management plan (FY2022 to FY2025) to invest 19 billion yen in technology development associated with improved resilience from the cloud and introduction of renewable energies, which was noted in the annual securities report. The 19 billion yen comprises 10 billion yen for development of technology for resilient clouds that will be helpful for climate change and enhanced

global delivery centers, and additional investment of 9 billion yen in toughening and extending the life of the existing cloud.

**Comment**

## C3. Business Strategy

### C3.1

**(C3.1) Does your organization’s strategy include a transition plan that aligns with a 1.5°C world?**

Row 1

**Transition plan**

Yes, we have a transition plan which aligns with a 1.5°C world

**Publicly available transition plan**

Yes

**Mechanism by which feedback is collected from shareholders on your transition plan**

Our transition plan is voted on at Annual General Meetings (AGMs)

**Attach any relevant documents which detail your transition plan (optional)**

NTT DATA has decided at a general meeting of shareholders on the pros and cons of sustainability management including the SBTi 1.5 °C target by 2030 and carbon neutrality, as one of new medium-term management plan. This content is disclosed in the Business Report (Page16) included in the Notice of Convocation of the 34th General Meeting of Shareholders.



20220518\_NoticeOfConvocationOfThe34thOrdinaryGeneralMeetingOfShareholders.pdf



NTTDATA\_SustainabilityReport\_2021.pdf



NTTDATA\_IntegratedReport\_2021.pdf

### C3.2

**(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?**

Use of climate-related scenario analysis to inform strategy	
Row 1	Yes, qualitative and quantitative

### C3.2a

**(C3.2a) Provide details of your organization’s use of climate-related scenario analysis.**

Climate-related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Transition scenarios IEA NZE 2050	Company-wide		<p><b>Scenario</b> More than 90% renewable energy will be introduced by 2050. Introduction of carbon pricing will also proceed. The physical impact of climate change will be sustained at FY2021 levels.</p> <p><b>Boundary</b> The NTT DATA Group is engaged in five areas of business; in Japan, in public and social infrastructure, finance, and corporation and solutions, and offshore in North America, the EMEA and Latin America, and all clients and all suppliers are likely to experience climate-related impacts. For that reason, the boundary is all businesses and their associated value chains.</p> <p><b>Time horizon</b> From now to 2050.</p> <p><b>Trends in socioeconomic development</b> An SSP1-1.9 world is anticipated.</p>
Transition scenarios IEA SDS	Company-wide		<p><b>Scenario</b> More than 50% renewable energy will be introduced by 2050. The physical impact of climate change will be sustained at FY2021 levels.</p> <p><b>Boundary</b> The NTT DATA Group is engaged in five areas of business; in Japan, in public and social infrastructure, finance, and corporation and solutions, and offshore in North America, the EMEA and Latin America, and all clients and all suppliers are likely to experience climate-related impacts. For that reason, the boundary is all businesses and their associated value chains.</p> <p><b>Time horizon</b> The long term from now to 2050.</p> <p><b>Trends in socioeconomic development</b> An SSP1-2.6 world is anticipated.</p>
Physical climate	Company-wide		<p><b>Scenario</b> As reported in IPCC Report 6, at an increase of 4oC or greater, the frequency of abnormal weather events will</p>

<p>scenarios RCP 8.5</p>			<p>be eight times the present. The risk of occurrence of phenomena leading to destruction of facilities and cessation of transport facilities due to abnormal weather will increase on the reporting year.</p> <p>Boundary The NTT DATA Group is engaged in five areas of business; in Japan, in public and social infrastructure, finance, and corporation and solutions, and offshore in North America, the EMEA and Latin America, and all clients and all suppliers are likely to experience climate-related impacts. For that reason, the boundary is all businesses and their associated value chains.</p> <p>Time horizon The long term from now to 2050.</p> <p>Trends in socioeconomic development An SSP5-8.5 world is anticipated.</p>
<p>Physical climate scenarios RCP 1.9</p>	<p>Company-wide</p>		<p>Scenario As reported in IPCC Report 6, at an increase of 1.5oC, the frequency of abnormal weather events will be almost the same level as in the reporting year.</p> <p>Boundary The NTT DATA Group is engaged in five areas of business; in Japan, in public and social infrastructure, finance, and corporation and solutions, and offshore in North America, the EMEA and Latin America, and all clients and all suppliers are likely to experience climate-related impacts. For that reason, the boundary is all businesses and their associated value chains.</p> <p>Time horizon The long term from now to 2050.</p> <p>Trends in socioeconomic development An SSP1-1.9 world is anticipated.</p>

### C3.2b

**(C3.2b) Provide details of the focal questions your organization seeks to address by using climate-related scenario analysis, and summarize the results with respect to these questions.**

Row 1

## Focal questions

NTT DATA has undertaken analysis of scenarios for 1.5 degrees to 4 degrees for the period up to 2050. The premise for analysis was evaluation of the materiality of risks and opportunities for ten risks (including heatwaves etc) and five opportunities (including resilience etc), and the following three risks and three opportunities, a total of six items, were judged material.

SSP1-1.9

(Transition risks)

1. There are growing demands for disclosure of information related to climate change, but in the event we are unable to adequately respond to those demands, there is a risk of a fall in share price associated with a decline in ratings by investors and worse financial terms from the market.

2. Turnover from the EU and Japan, where there are regions in which carbon pricing (carbon tax) has already been introduced and regions where its introduction is being considered, account for approximately 80% of NTT DATA's consolidated turnover. It can be anticipated that where the consensus of global society is for net zero by 2050 and demands arising from laws and ordinances on companies are growing, going forward, there will be cost increases due to carbon pricing.

(Opportunities)

3. The market related to climate change is continuing to grow, and even in Japan, where it accounts for approximately 60% of turnover, disclosure in annual securities reports in accordance with TCFD in the prime market looks set to become truly mandatory from FY2023. There are opportunities to acquire new revenue by rolling out AI services that optimize air conditioning in data centers and office buildings, leveraging our major strength, software development capabilities, and visibility solutions for GHG emissions.

4. In climate change responses, changes in the external environment in the level of demands are rapid, and often a degree of specialist expertise is needed to calculate GHGs, so that often difficulties can arise when companies single-handedly formulate whole-of-company strategies and address them all. For that reason, we anticipate growing need and increased business opportunities in climate change and sustainability consulting in our medium-term management plan.

5. It is anticipated that with increased in abnormal weather, heightened need for carbon neutrality, our major clients, banking and public institutions in particular, are seeking the cloud, which is both resilient and carbon neutral. For that reason, demand will itself increase for joint-use cloud services, which are resistant to climate disaster and contribute to energy savings, and by also operating those services using renewable energies, we anticipate even greater growth in business opportunities.

SSP5-8.5

(Physical risks)

6. We have sites in places where IPCC Report 6 regional risks are high, and interruptions to power transmission to data centers in and outside Japan due to

abnormal weather, and shutdown of data centers due to flooding or lightning strikes are whole-of-company risks.

### **Results of the climate-related scenario analysis with respect to the focal questions**

(Transition risks)

Results of SSP1-1.9 scenario analysis

In the SSP1-1.9 scenario, we assessed the decline in both financial risk due to current and long-term carbon pricing in all NTT DATA segments and risk of a decline in ratings due to inability to respond adequately to investor demands in relation to climate change from progressing introduction of renewable energies to global data centers and offices. We plan to reflect the results of assessment in the overall climate strategy and to introduce 100% renewable energies to our own use of services in data centers in FY2030, and to 100% including offices in FY2040.

(Physical risks)

Results of SSP5-8.5 scenario analysis

In the SSP5-8.5 scenario, we assessed that there is a somewhat high level of risk of impact on turnover from increased abnormal weather and associated social and economic damage and decline in client revenue. We also assessed that in Japan, where there is an apparent tendency for increased rainfall, in the fields of public and social infrastructure, finance, and corporations and solutions, frequent typhoons and sporadic torrential rain will increase the risk of flooding of data centers and offices.

(Opportunities)

Results of SSP1-1.9 scenario analysis

In the SSP1-1.9 scenario, we assessed that creation of sustainability-related offerings (e.g. IT services and systems) tied to social systems and regulations considered necessary is material. We will invest in joint R&D with external innovators, the cost of technological support, the cost of pre-sales and the cost of training technicians, which will enable us to secure advanced technologies. We will also invest in market research into sustainability, investigation of new business models and developing offerings using IT technology, which will enable us to create new business by combining advanced technologies and social issues.

As need for formulation of strategies and reduction measures in corporate management and business increase, we anticipate that climate-related consulting services to clients will grow.

NTT DATA is creating templates for our data gathering processes, our calculation methodologies and our data use methods and is progressing initiatives to provide them through consulting services. We are also enhancing our recruitment to support that consulting, by leveraging our strength as the number-one ranked most popular company in IT-related industries.

Results of SSP5-8.5 scenario analysis

We assessed that there is a somewhat high level of risk of impact on turnover from increased abnormal weather and associated social and economic damage, but as

clients will need to respond to similar risks, there are opportunities for increased demand for NTT DATA’s cloud and joint-use services which incorporate hazard countermeasures and double-redundant data loss countermeasures.

### C3.3

**(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.**

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	<p>In order to realize the net zero society elucidated under SSP1-1.9, our company plans to expand GHG emissions visualization software products by leveraging our key strengths in software development, work optimizations and disaster responses that take advantage of our AI tools, consulting services pertaining to the development and advancement of software with low GHG emissions, and data center services that will contribute toward decarbonization. We plan to achieve net sales for the company by FY2025 of 200 billion yen (as stated in our annual securities report) by creating new sustainability-related services and product-related offerings. We anticipate that net sales from increased consulting services opportunities will expand to 20 billion yen by FY2025 (as stated in our annual securities report).</p> <p>Furthermore, we expect to achieve net sales from our cloud business of 400 billion yen by FY2025.</p> <p>Among these actions, our company will be utilizing AI tools for disaster preparedness in order to facilitate adaptations to climate change. As for the rest, we will be working toward mitigating the impact of climate change.</p>
Supply chain and/or value chain	Yes	<p>In accordance with SSP5-8.5, we expect to see greater risks of outages resulting from flooding caused by typhoons and torrential rain, transmission line breaks and lightning strikes, and energy shortages stemming from increased power demands. Assuming that a typhoon strikes the Tokyo Metropolitan Area, where our company’s most mission-critical facilities are located, and our key data centers cease operations for five days, we risk the possibility of suffering lost sales in the amount of 13 billion yen per year (as stated in our annual securities report).</p> <p>If an outage occurs, not only could that represent a risk of</p>



		<p>sales loss for the company, it may affect the large-scale NTT DATA system that supports various forms of Japanese social infrastructure, such as the Japanese financial and medical systems, thereby potentially resulting in serious disruptions to the social activities of Japanese citizens. These actions will help our company adapt to climate change.</p>
<p>Investment in R&amp;D</p>	<p>Yes</p>	<p>In accordance with SSP1-1.9, responses to abnormal weather and efforts to achieve decarbonization are expected to increase the need for clouds that utilize resilient and renewable energy. We anticipate that net sales will reach 150 billion yen in FY2025.</p> <p>Therefore, the company will invest in research and development of energy-saving technologies to ensure that power consumption from our data centers can be addressed using renewable energy alone. We are engaged in various forms of research and development, such as: immersion cooling and water cooling technologies that will cool servers through direct contact with refrigerants, thereby eliminating the need for air cooling; technology to optimize air conditioning through AI-based controls that use IoT technology to measure energy consumption levels of servers in order to maintain server room temperatures at ideal temperatures; and virtual server and microservices technology intended to further optimize processing capabilities of physical servers in order to enable a single server to process larger numbers of user requests. Additionally, we are advancing efforts to promote geographic decentralization of data centers to make them more resilient, and to improve the durability of their buildings.</p> <p>Furthermore, by utilizing the technologies of Innovative Optical and Wireless Network (IOWN), an optical technology-centered technological initiative helmed by the NTT Group, we are participating as a core technological developer and provider in efforts to conceptualize network and information processing infrastructure, which includes terminal devices, that can provide high-speed, high volume communications that exceed the limits of traditional infrastructure, as well as massive computational resources; we are also engaged in related Group-wide investments, human resource training, and coordinated R&amp;D. Among these actions, our actions toward realizing a more resilient cloud will help our company adapt to climate</p>

		change. As for the rest, we will be working toward mitigating the impact of climate change.
Operations	Yes	Net zero responses will become a matter of social consensus in global society by 2050 described in SSP1-1.9, and companies will be forced to respond through laws and regulations, etc. we anticipate that carbon pricing will be implemented at a global scale, thereby increasing operating costs. Based on our calculations of cost impact amount, estimated by multiplying residual emissions from FY2022 to FY2040 by the carbon price of the International Energy Agency (IEA) Net Zero Scenario, we anticipate that 70 billion yen in added costs will arise. These actions will help our company mitigate the impact of climate change.

### C3.4

**(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.**

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Indirect costs Capital allocation Assets	<p>Assessments of climate change risks and opportunities are considered on short, medium and long-term time horizons, financial impact is divided into four levels of high, medium-high, medium and low level of impact, and likelihood of occurrence is divided into four levels of virtually certain, very likely, likely and unlikely.</p> <p>* Definition of financial impact                      High: Turnover of at least 100 billion yen, or an operating profit of at least 10 billion yen, or impact on share price of at least 10 billion yen                      Medium-high: Turnover of at least 10 billion yen to less than 100 billion yen, or operating profit of at least 1 billion yen to less than 10 billion yen, or impact on share price of at least 1 billion yen to less than 10 billion yen                      Medium: Turnover of at least 1 billion yen to less than 10 billion yen, or operating profit of at least 100 million yen to less than 1 billion yen, or impact on share price of less than 100 million yen to less than 1 billion yen                      Low: Turnover of less than 1 billion yen, or operating profit of less than 100 million yen, or impact on share price of less than 100 million yen</p> <p>1. Revenues                      (Opportunity 1) Increase in need for creation of "climate change and sustainability-related offerings"                      -Short-term period</p>

		<p>- Magnitude of impact: high          -Opportunities: FY2025 sales impact +200 billion yen          It is estimated that client decarbonization efforts will accelerate, that sustainability-related business will expand in various industries, and opportunities to adopt digital technologies will accelerate thanks to technological innovation. Estimated net sales from the creation of new Sustainability-related Offerings in FY2025 as the impact amount.          -Investment amount: FY2022 to FY2025: 32 billion yen          Record amounts invested to develop technologies and create Sustainability-related Offerings that contribute to adapting to and mitigating climate change in society as a whole and in companies.</p> <p>(Opportunity 2) Increased consulting services for realizing a sustainable society          -Short-term period          - Magnitude of impact: medium-high          -Opportunities: FY2025 sales impact +20 billion yen          It is estimated that there will be increased opportunities to provide consulting services in conjunction with the expansion of sustainability-related business in various industries. Estimated impact amount after assuming the ratio of sustainability-related business to total NTT DATA consulting net sales.          -Investment amount: FY2022 to FY2025: 4 billion yen          Record investments in creating and developing sustainability-related consulting human resources, and investments in measures for strengthening consulting in areas such as related environmental improvements.</p> <p>(Opportunity 3) Increased need for transition to the cloud, which contributes to resilience and carbon neutrality          -Short-term period          - Magnitude of impact: medium-high          -Opportunities: FY2025 sales impact +150 billion yen          It is estimated that in addition to increasing abnormal weather in the form of typhoons and localized torrential rain, heightened need for carbon neutrality will advance energy savings from joint use and equipment consolidation and introduction of renewable energies, and will increase the need for transition to the NTT DATA's cloud, which is resilient and will contribute to carbon neutrality, to make it possible to avoid data loss.          -Investment amount: FY2022 to FY2025: 19 billion yen          Record amounts for cloud-related technology development and for cloud-related investments in, for example, strengthening global delivery centers.</p> <p>2. Indirect costs          (Risk 5) Increased costs from carbon pricing          -Period: Long-term</p>
--	--	--

		<p>- Magnitude of impact: Medium-high</p> <p>-Projected financial impact: ▲ 7 billion yen between FY2022 and FY2025</p> <p>Net zero responses will become a matter of social consensus in global society by 2050, and companies will be forced to respond through laws and regulations, etc. Estimated cost impact amount by multiplying residual emissions from FY2022 to FY2040 by the carbon price of the International Energy Agency (IEA) Net Zero Scenario. Note: FY2022 to FY2040 cumulative total of 70 billion yen</p> <p>-Countermeasure cost/Investment amount: 5 billion yen</p> <p>Promote decarbonization of the NTT DATA supply chain by saving energy and introducing renewable energy to reduce carbon emissions. Record investment amounts into energy-saving measures and introduction of renewable energy, etc. (cumulative total for FY2022 through FY2025).</p> <p>3. Capital allocation</p> <p>(Risk 2) Increased disaster risk due to abnormal weather</p> <p>-Period: Short-term</p> <p>-Magnitude of impact: High</p> <p>-Projected financial impact: 13 billion yen</p> <p>There are also bases in places where risk-by-region is high according to the IPCC 6th Report, and various measures are being taken to ensure business continuity based on hazard maps, etc. Estimated sales impact amount if communications, etc. go down for 5 days at major data centers centered in the Tokyo Metropolitan Area due to a typhoon.</p> <p>-Countermeasure cost/Investment amount: 8 billion yen</p> <p>BCPs for data centers, offices, communications, etc. have been maximized. Record the costs (cumulative total from FY2022 to FY2025) to enhance and renew data center, remote access, and maintenance environments, etc. for ensuring business continuity.</p> <p>4. Assets</p> <p>(Risk 1) Risk of ratings decline due to low climate-related rating</p> <p>-Period: Short-term</p> <p>-Magnitude of impact: High</p> <p>-Projected financial impact: 34 billion yen</p> <p>It is estimated the impact on market capitalization of a 1% drop in stock prices due to a decline in ratings of offshore investors and domestic financial institutions due to delays in climate-related initiatives.</p> <p>-Countermeasure cost/Investment amount: 5 billion yen</p> <p>Establish the Green Innovation Offices* as organizations dedicated to decarbonization and accelerating responses to make clients and society greener through the NTT DATA Group supply chain, and promote activities via the Climate Action Committee. Record activity costs and innovation investment amounts (cumulative from FY2022 to FY2025) incurred by the Green Innovation Offices.</p>
--	--	---

## C3.5

**(C3.5) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's transition to a 1.5°C world?**

Yes

### C3.5a

**(C3.5a) Quantify the percentage share of your spending/revenue that is aligned with your organization's transition to a 1.5°C world.**

---

#### Financial Metric

Other, please specify

Cost of purchasing renewable energy

**Percentage share of selected financial metric aligned with a 1.5°C world in the reporting year (%)**

19.5

**Percentage share of selected financial metric planned to align with a 1.5°C world in 2025 (%)**

24.4

**Percentage share of selected financial metric planned to align with a 1.5°C world in 2030 (%)**

32.4

**Describe the methodology used to identify spending/revenue that is aligned with a 1.5°C world**

We took rate of growth in annual company turnover to be equal to rate of growth in introduction of renewable energies, took the arithmetic mean of rate of growth in annual turnover from 2017 to 2021, and hypothesized that the company's rate of growth in annual company turnover is equal to the rate of growth in introduction of renewable energies, which is equal to 5.8%. The rate of introduction of renewable energies in 2050 is planned to be 100%.

\* Turnover

2017: 2,039,690 million yen

2018: 2,163,625 million yen

2019: 2,266,808 million yen

2020: 2,318,658 million yen

2021: 2,551,906 million yen

From the foregoing,

FY2021 investment in introduction of renewable energies / 2050 investment in introduction of renewable energies =

$$\{1 / ((1.058)^{(2050-2021))} \times 100\} / 1 = 19.4\%$$

2025 investment in introduction of renewable energies / 2050 investment in introduction of renewable energies =

$$\{1 / ((1.058)^{(2050-2025))} \times 100\} / 1 = 24.4\%$$

2030 investment in introduction of renewable energies / 2050 investment in introduction of renewable energies =

$$\{1 / ((1.058)^{(2050-2030))} \times 100\} / 1 = 32.4\%$$

## C4. Targets and performance

### C4.1

**(C4.1) Did you have an emissions target that was active in the reporting year?**

Absolute target

#### C4.1a

**(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.**

---

**Target reference number**

Abs 1

**Year target was set**

2021

**Target coverage**

Company-wide

**Scope(s)**

Scope 1

Scope 2

**Scope 2 accounting method**

Market-based

**Scope 3 category(ies)**

**Base year**

2016

**Base year Scope 1 emissions covered by target (metric tons CO<sub>2</sub>e)**

13,117

**Base year Scope 2 emissions covered by target (metric tons CO<sub>2</sub>e)**

242,842

**Base year Scope 3 emissions covered by target (metric tons CO<sub>2</sub>e)**

**Total base year emissions covered by target in all selected Scopes (metric tons CO<sub>2</sub>e)**

255,959

**Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1**

100

**Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2**

100

**Base year Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)**

**Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes**

100

**Target year**

2030

**Targeted reduction from base year (%)**

60

**Total emissions in target year covered by target in all selected Scopes (metric tons CO<sub>2</sub>e) [auto-calculated]**

102,383.6

**Scope 1 emissions in reporting year covered by target (metric tons CO<sub>2</sub>e)**

9,613

**Scope 2 emissions in reporting year covered by target (metric tons CO<sub>2</sub>e)**

130,066

**Scope 3 emissions in reporting year covered by target (metric tons CO<sub>2</sub>e)**

**Total emissions in reporting year covered by target in all selected scopes (metric tons CO<sub>2</sub>e)**

139,679

**% of target achieved relative to base year [auto-calculated]**

75.7152512707

**Target status in reporting year**

Revised

**Is this a science-based target?**

Yes, and this target has been approved by the Science Based Targets initiative

**Target ambition**

1.5°C aligned

**Please explain target coverage and identify any exclusions**

This target of the NTT DATA Group was approved by science-based targets initiative as a 1.5°C target in June 2020 after SBT commitment in March 2019. The scope of the target is the consolidated NTT DATA Group (company-wide).

**Plan for achieving target, and progress made to the end of the reporting year**

Realize the following goals: zero greenhouse gas emissions from data centers by 2030, carbon neutrality by 2040 (zero Scope 1 and 2 emissions), and net zero emissions by 2050. Plan to introduce renewable energy to data centers, and to achieve zero emissions by implementing cutting-edge energy-saving technologies. During the reporting year, achieved a 75% reduction over the base year through implementation of renewable energy, energy conservation, and office consolidation, among other efforts.

**List the emissions reduction initiatives which contributed most to achieving this target**

---

**Target reference number**

Abs 2

**Year target was set**

2021

**Target coverage**

Company-wide

**Scope(s)**

Scope 3

**Scope 2 accounting method**

**Scope 3 category(ies)**

Category 1: Purchased goods and services

Category 2: Capital goods

Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)



Category 4: Upstream transportation and distribution

Category 5: Waste generated in operations

Category 6: Business travel

Category 7: Employee commuting

Category 8: Upstream leased assets

Category 11: Use of sold products

Category 12: End-of-life treatment of sold products

Category 13: Downstream leased assets

**Base year**

2016

**Base year Scope 1 emissions covered by target (metric tons CO<sub>2</sub>e)**

**Base year Scope 2 emissions covered by target (metric tons CO<sub>2</sub>e)**

**Base year Scope 3 emissions covered by target (metric tons CO<sub>2</sub>e)**

2,125,022

**Total base year emissions covered by target in all selected Scopes (metric tons CO<sub>2</sub>e)**

2,125,022

**Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1**

**Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2**

**Base year Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)**

100

**Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes**

100

**Target year**

2030

**Targeted reduction from base year (%)**

55

**Total emissions in target year covered by target in all selected Scopes (metric tons CO<sub>2</sub>e) [auto-calculated]**

956,259.9

**Scope 1 emissions in reporting year covered by target (metric tons CO2e)**

**Scope 2 emissions in reporting year covered by target (metric tons CO2e)**

**Scope 3 emissions in reporting year covered by target (metric tons CO2e)**

1,639,180

**Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)**

1,639,180

**% of target achieved relative to base year [auto-calculated]**

41.5689386232

**Target status in reporting year**

Revised

**Is this a science-based target?**

Yes, and this target has been approved by the Science Based Targets initiative

**Target ambition**

Well-below 2°C aligned

**Please explain target coverage and identify any exclusions**

This target of the NTT DATA Group was approved by science-based targets initiative in June 2020 after SBT commitment in March 2019. The scope of the target is the consolidated NTT DATA Group (company-wide). During the reporting year, the calculation logic was changed. For circumstances where services are being offered in a format where data center space is being leased to clients (housing and colocation services), we sought conformity with an NTT Group Scope 3 calculation policy with a Scope 3, Category 13 rate of emissions, as opposed to Scope 2. Transitions from Scope 2 emissions to Scope 3 Category 13 greenhouse gas emission were uniformly implemented from 2016, the base year, to 2021, the reporting year. Accordingly, the base year emissions were revised from 1,997,401 tonCO2e to 2,125,022 tonCO2e. The target of 55% reduction remains unmodified.

The revised values are in the process of being guaranteed by third parties.

**Plan for achieving target, and progress made to the end of the reporting year**

NTT DATA is implementing the following supplier engagement strategy in order to reduce emissions in Categories 1, 2, and 11, which significantly contribute to the SBT Scope 3 reduction targets.

1. Share GHG target settings, reduction know-how, good practices, and tools, etc. attributable to efforts implemented, and knowledge held, by NTT DATA with suppliers,

and attain a shared understanding of circumstances.

2. Support SBTi target setting promotions and GHG emission reducing activities by suppliers.

3. Have suppliers commit to achieving reductions comparable to the reduction targets of NTT DATA (NTT DATA's annual reduction levels of 4.2%), and advance reductions through collaborative efforts.

Of FY2021 emissions, Categories 1, 2, and 11 of Scope 3 comprise approximately 85% of the entirety of Scope 3. At least 80% of the suppliers who are the sellers in question will be targets of engagement, and GHG emissions reductions related to the supply chains in question are indispensable toward achieving annual reductions of 4.2%, which will be necessary to realize the SBT net zero long-term targets NTT DATA is committed to (interim goal of 60% reductions by FY2030, long-term goal of net zero by FY2050). In collaboration with suppliers, we held our first supplier briefing on climate change response in FY2021 (reporting year) (approximately 150 companies, corresponding to the top 80% of companies in terms of purchase amounts). We shared with them our greenhouse gas reduction goals, policies for addressing climate action, and future procurement policies, confirmed and supported engagement circumstances for each supplier, and engaged in effective activities to promote SBTi goal setting and reduce GHG emissions at each supplier.

**List the emissions reduction initiatives which contributed most to achieving this target**

## C4.2

**(C4.2) Did you have any other climate-related targets that were active in the reporting year?**

Target(s) to increase low-carbon energy consumption or production

Net-zero target(s)

Other climate-related target(s)

## C4.2a

**(C4.2a) Provide details of your target(s) to increase low-carbon energy consumption or production.**

---

**Target reference number**

Low 1

**Year target was set**

2021

**Target coverage**

Company-wide

**Target type: energy carrier**

Electricity

**Target type: activity**

Consumption

**Target type: energy source**

Low-carbon energy source(s)

**Base year**

2016

**Consumption or production of selected energy carrier in base year (MWh)**

0

**% share of low-carbon or renewable energy in base year**

0

**Target year**

2030

**% share of low-carbon or renewable energy in target year**

80

**% share of low-carbon or renewable energy in reporting year**

20

**% of target achieved relative to base year [auto-calculated]**

25

**Target status in reporting year**

Underway

**Is this target part of an emissions target?**

This target is part of the 2050 net zero target. We have established plans to achieve Scope 1 and 2 carbon neutrality for 2040, and carbon neutrality for data centers by 2030; we intend to realize these goals through energy conservation and implementation of renewable energy.

In order to realize reductions in greenhouse gas emissions, we are also pursuing plans to implement renewable energy through our Medium-term Management Plan for all companies in the Group.

**Is this target part of an overarching initiative?**

Science Based Targets initiative

**Please explain target coverage and identify any exclusions**

Target coverage encompasses 100% of the consolidated NTT DATA Group (company-wide).

**Plan for achieving target, and progress made to the end of the reporting year**

Renewable energy implementation targets have been set as a consolidated KPI for the NTT DATA Group (company-wide), and we have also included renewable energy implementation plans in our business plans and are engaging in relevant initiatives. By FY2022, we plan to achieve at least 50% renewable energy implementation in Europe and the U.S., and at least 30% in Asia and China, including Japan.

**List the actions which contributed most to achieving this target**

## C4.2b

**(C4.2b) Provide details of any other climate-related targets, including methane reduction targets.**

---

**Target reference number**

Oth 1

**Year target was set**

2019

**Target coverage**

Country/region

**Target type: absolute or intensity**

Absolute

**Target type: category & Metric (target numerator if reporting an intensity target)**

Waste management

Other, please specify

Amount (metric tons) of waste for final disposal

**Target denominator (intensity targets only)**

**Base year**

2013

**Figure or percentage in base year**

207

**Target year**

2021

**Figure or percentage in target year**

20.7

**Figure or percentage in reporting year**

20.4

**% of target achieved relative to base year [auto-calculated]**

100.1610305958

**Target status in reporting year**

Achieved

**Is this target part of an emissions target?**

Yes, Oth1 leads to a reduction in Scope 3 Cat5. [Abs2]

**Is this target part of an overarching initiative?**

No, it's not part of an overarching initiative

**Please explain target coverage and identify any exclusions**

Compared to the reference year, we aim to maintain the reduction at 90 per cent. The coverage is approximately 60 per cent by ratio of net sales, since the scope is Japan.

**Plan for achieving target, and progress made to the end of the reporting year**

**List the actions which contributed most to achieving this target**

- Individualized approaches to Group companies with significant emissions based on waste disposal data analyses (target management feedback, individualized interviews, and proposals of countermeasures based on their circumstances)
- Consolidate companies with high recycling rates among waste disposal companies that concluded basic agreements in Japan

---

**Target reference number**

Oth 2

**Year target was set**

2019

**Target coverage**

Country/region

**Target type: absolute or intensity**

Absolute

**Target type: category & Metric (target numerator if reporting an intensity target)**

Waste management

Other, please specify

Ratio of waste for final disposal (Final disposal amount / total amount of waste)

**Target denominator (intensity targets only)**

**Base year**

2013

**Figure or percentage in base year**

4.5

**Target year**

2021

**Figure or percentage in target year**

1

**Figure or percentage in reporting year**

0.44

**% of target achieved relative to base year [auto-calculated]**

116

**Target status in reporting year**

Achieved

**Is this target part of an emissions target?**

Yes, Oth2 leads to a reduction in Scope 3 Cat5. [Abs2]

**Is this target part of an overarching initiative?**

No, it's not part of an overarching initiative

**Please explain target coverage and identify any exclusions**

The final waste disposal rate in 2013 was 4.5 per cent but we aim to maintain the reduction at 1.0 per cent. The coverage is approximately 60 per cent by ratio of net sales, since the scope is Japan.

**Plan for achieving target, and progress made to the end of the reporting year**

**List the actions which contributed most to achieving this target**

- Individualized approaches to Group companies with significant emissions based on waste disposal data analyses (target management feedback, individualized interviews, and proposals of countermeasures based on their circumstances)
- Consolidate companies with high recycling rates among waste disposal companies that concluded basic agreements in Japan

## C4.2c

**(C4.2c) Provide details of your net-zero target(s).**

---

**Target reference number**

NZ1

**Target coverage**

Company-wide

**Absolute/intensity emission target(s) linked to this net-zero target**

Abs1

Abs2

**Target year for achieving net zero**

2050

**Is this a science-based target?**

Yes, we consider this a science-based target, and we have committed to seek validation of this target by the Science Based Targets initiative in the next 2 years

**Please explain target coverage and identify any exclusions**

In FY2020, "NTT DATA Carbon- Neutral Vision 2050" was formulated and published on the website. We also committed to the SBT Business Ambition for 1.5 °C. The target year is 2050.

Coverage is company-wide.

**Do you intend to neutralize any unabated emissions with permanent carbon removals at the target year?**

Yes

**Planned milestones and/or near-term investments for neutralization at target year**

For data centers, which represent 70% of Scope 1 and Scope 2 greenhouse gas emissions, will be made carbon neutral with respect to Scopes 1 and 2 by 2030.

By 2040, Scopes 1 and 2, including offices, will be made carbon neutral.

By 2030, we intend to achieve 55% emissions reductions through our supply chain, and 90% by 2050.

For the remaining 10% in reductions, as we move toward 2050, we will realize net-zero emissions via carbon removal as defined under SBTi standards.

**Planned actions to mitigate emissions beyond your value chain (optional)**

We will realize zero emissions through the implementation of renewable energy at data centers, and through the implementation of cutting-edge energy conservation technologies. We intend to implement immersion cooling as a form of energy conservation, and have achieved 97% energy savings through trial when compared to traditional systems. In offices, we will achieve carbon neutrality through energy savings using AI-based air conditioning control, etc. and the introduction of renewable energy. With respect to emissions reductions through the supply chain, NTT DATA is implementing the following supplier engagement strategy in order to reduce emissions



in Categories 1, 2, and 11, which significantly contribute to the SBT Scope 3 reduction targets.

1. Share GHG target settings, reduction know-how, good practices, and tools, etc. attributable to efforts implemented, and knowledge held, by NTT DATA with suppliers, and attain a shared understanding of circumstances.
2. Support SBTi target setting promotions and GHG emission reducing activities by suppliers.
3. Have suppliers commit to achieving reductions comparable to the reduction targets of NTT DATA, and advance reductions through collaborative efforts.

Furthermore, during the reporting year, we considered multiple neutralization measures meant to achieve net zero emissions, and planned to realize this through the removal of carbon. As part of this effort, we engaged in business to demonstrate measurement of blue carbon absorption volumes, in collaboration with local governments and other organizations. Going forward, we will continue to work with clients, administrative agencies, and universities, among other entities, on mitigation efforts and neutralization of lingering emissions.

### C4.3

**(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.**

Yes

#### C4.3a

**(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.**

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	0
To be implemented*	2	1,201
Implementation commenced*	4	44,168
Implemented*	5	19,806
Not to be implemented	0	0

#### C4.3b

**(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.**

---

**Initiative category & Initiative type**

Energy efficiency in buildings  
Heating, Ventilation and Air Conditioning (HVAC)

**Estimated annual CO<sub>2</sub>e savings (metric tonnes CO<sub>2</sub>e)**

1,201

**Scope(s) or Scope 3 category(ies) where emissions savings occur**

Scope 2 (market-based)

**Voluntary/Mandatory**

Voluntary

**Annual monetary savings (unit currency – as specified in C0.4)**

51,493,441

**Investment required (unit currency – as specified in C0.4)**

1,078,812,000

**Payback period**

16-20 years

**Estimated lifetime of the initiative**

1-2 years

**Comment**

Introduction of centrally controllable high-efficiency air conditioning, uninterruptible power supply (UPS) system integration, etc.

---

**Initiative category & Initiative type**

Energy efficiency in production processes  
Process optimization

**Estimated annual CO<sub>2</sub>e savings (metric tonnes CO<sub>2</sub>e)**

6,423

**Scope(s) or Scope 3 category(ies) where emissions savings occur**

Scope 2 (market-based)

**Voluntary/Mandatory**

Voluntary

**Annual monetary savings (unit currency – as specified in C0.4)**

257,477,909

**Investment required (unit currency – as specified in C0.4)**

11,000,000

**Payback period**

<1 year

**Estimated lifetime of the initiative**

1-2 years

**Comment**

Boosted operating efficiency of office facilities (through optimization of ventilation equipment operating methods, number of air conditioners in operation, and timing of air conditioner operation as well as optimization of lighting by switching off lights not in use, etc.).

---

**Initiative category & Initiative type**

Low-carbon energy consumption  
Low-carbon electricity mix

**Estimated annual CO2e savings (metric tonnes CO2e)**

12,183

**Scope(s) or Scope 3 category(ies) where emissions savings occur**

Scope 2 (market-based)

**Voluntary/Mandatory**

Voluntary

**Annual monetary savings (unit currency – as specified in C0.4)**

1,747,000,000

**Investment required (unit currency – as specified in C0.4)**

250,000,000

**Payback period**

<1 year

**Estimated lifetime of the initiative**

21-30 years

**Comment**

Renewable energy consumption increased due to the promotion of renewable energy procurement from the previous year.  
The difference in electricity use from renewable energy sources between the current year and the previous year is: 92,076,939 kWh - 59,938,455 kWh = 32,138,484 kWh  
Multiplied by the primary unit of the US, which uses large amounts of renewable energy, of 0.000379073 e/kWh,  
 $32,138,484 \text{ kWh} \times 0.000379073 \text{ tCO}_2\text{e/kWh} = 12,183 \text{ t-CO}_2\text{e}$

### C4.3c

#### (C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Financial optimization calculations	Through financial optimization calculations, the amounts of emissions reduction and activities costs associated with each annual emissions reduction activities are managed on a quarterly basis on a building and activities basis, and the necessary budget for the target is calculated by comparing the target with the actual results and comparing them over time to promote investment in emissions reduction activities.
Compliance with regulatory requirements/standards	In Tokyo, where NTT DATA's headquarters are located, the Tokyo Metropolitan Government imposes obligations on companies to reduce total greenhouse gas emissions, and operates emissions transaction systems, in accordance with Tokyo Metropolitan Ordinances. NTT DATA has achieved reductions that exceed the targets set by the Tokyo Metropolitan Government. Furthermore, although regions like Europe, the U.S., and Asia represent roughly half of our business, we are addressing climate change in ways that adhere to the laws and regulations of each nation, and are satisfying their reduction targets.
Dedicated budget for energy efficiency	In order to advance efforts to conserve energy at data centers, our corporate headquarters have budgeted investments for energy conservation, and are advancing planned energy conservation investments, which include efforts such as the implementation of immersion cooling and air conditioning IoT.
Dedicated budget for other emissions reduction activities	In order to advance efforts to reduce greenhouse gas emissions stemming from our supply chain, our corporate headquarters have allocated budget to these efforts. Furthermore, we are advancing various activities, such as CDP Supply Chain Program Premium Member activities to heighten supplier engagement, development of platforms to promote visualization of supply chain-based emissions, and the clarification of calculation criteria for each category.
Employee engagement	All of our organizations have set activity targets, such as efforts to reduce greenhouse gas emissions in light of each organization's mission, as KPIs. KPIs are also linked to salaries for officers, heads of organizations, and employees, among other factors, and KPI-related activities are being performed throughout the year.
Internal price on carbon	We will implement a company-wide internal carbon pricing system. Using a website for employees, we post greenhouse gas emissions and carbon pricing by organization and activity. In order to promote

	<p>efforts to encourage greenhouse gas emissions reductions by each organization and employee, we are promoting activities in conjunction with KPIs for each organization, such as greenhouse gas emissions reductions.</p>
<p>Partnering with governments on technology development</p>	<p>NTT DATA is working with governments in Japan, the EU, and the United States to develop a number of climate change-related technologies.</p> <ul style="list-style-type: none"> <li>-In Japan, we are addressing surveys by the Ministry of the Environment, Ministry of Economy, Trade and Industry, Ministry of Internal Affairs and Communications, Ministry of Agriculture, Forestry and Fisheries, and the Financial Services Agency in response to climate change, and a variety of initiatives to develop and operate platforms to visualize and reduce greenhouse gas emissions, and promote disclosures that address the TCFD, among other efforts.</li> <li>-In the EU, we have been working in tandem with various national governments and the World Bank on a variety of projects intended to consider and investigate policies, and establish work operations and systems, meant to address climate change policies.</li> <li>-We utilize AW3D, a satellite image analysis service, in more than 900 projects in 115 countries around the world for disaster prevention efforts intended to adapt to climate change, and environmental impact studies on solar and wind power generation to help mitigate climate change.</li> </ul>

## C4.5

**(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?**

Yes

## C4.5a

**(C4.5a) Provide details of your products and/or services that you classify as low-carbon products.**

**Level of aggregation**

Product or service

**Taxonomy used to classify product(s) or service(s) as low-carbon**

Low-Carbon Investment (LCI) Registry Taxonomy

**Type of product(s) or service(s)**

Systems integration

Other, please specify

Green data center

**Description of product(s) or service(s)**

NTT DATA is promoting the construction and operation of environmentally friendly “Green Data Centers (GreenDC).” Three actions to take Green DC to the next stage were launched during the reporting year, led by Mitaka Data Center EAST, which is the culmination of the key elements of Green DC services, such as high-voltage direct current power supply, virtualization technology, and cooling air flow control technology.

1. Implementation and expansion of renewable energy

During the reporting year, we began implementing renewable energy at the Dojima Data Center and Shinagawa Office Building. We are also engaged in efforts to procure energy from renewable energy sources at Mitaka DC EAST.

2. Advanced energy conservation

By visualizing the operating environments of servers and other equipment using IoT, etc., we have conducted verification experiments, in conjunction with ICT equipment manufacturers, pertaining to temperature optimization (reduction of energy used for cooling) that eases the air conditioning temperature and humidity settings in machine rooms, and maximizes the durability of leading ICT equipment.

Based on the results, we have advanced the deployment of services meant to realize reduced power consumption for data centers as a whole, including ICT equipment.

3. New energy management

We intend to achieve comprehensive energy utilization from procurement to provision to operation as next generation energy management data centers through cross-industry collaborations.

**Have you estimated the avoided emissions of this low-carbon product(s) or service(s)**

Yes

**Methodology used to calculate avoided emissions**

Evaluating the carbon-reducing impacts of ICT

**Life cycle stage(s) covered for the low-carbon product(s) or services(s)**

Use stage

**Functional unit used**

Comparison of power usage during one year of data center operation between a conventional data center and a Green Data Center based on PUE (power usage effectiveness), a data center power usage efficiency index.

**Reference product/service or baseline scenario used**

PUE of one of our conventional data centers: 1.7

**Life cycle stage(s) covered for the reference product/service or baseline scenario**

Use stage

**Estimated avoided emissions (metric tons CO<sub>2</sub>e per functional unit) compared to reference product/service or baseline scenario**

50,000

**Explain your calculation of avoided emissions, including any assumptions**

Calculated by comparing the amount of greenhouse gas emissions realized with PUE 1.3 at the Green Data Center, and the amount of greenhouse gas emissions produced if the same amount of electricity were to be used at one of our conventional data centers (PUE 1.7).

**Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year**

10

---

**Level of aggregation**

Product or service

**Taxonomy used to classify product(s) or service(s) as low-carbon**

Low-Carbon Investment (LCI) Registry Taxonomy

**Type of product(s) or service(s)**

Other

Other, please specify

Energy-renewable

**Description of product(s) or service(s)**

Beginning in April 2022, our company began operating the key services we provide (ANSER® and CAFIS® for payment and financial services, and OpenCanvas® for digital transformation infrastructure) using 100% renewable energy for all electric power used.

**Have you estimated the avoided emissions of this low-carbon product(s) or service(s)**

Yes

**Methodology used to calculate avoided emissions**

Evaluating the carbon-reducing impacts of ICT

**Life cycle stage(s) covered for the low-carbon product(s) or services(s)**

Use stage

**Functional unit used**

Comparison of greenhouse gas emissions from electricity consumption before and after the introduction of renewable energy during one year of operation of the service in question.

**Reference product/service or baseline scenario used**

Greenhouse gas emissions from electricity consumption before the introduction of renewable energy during one year of operation of the service in question: 10,000 t-CO<sub>2</sub>

**Life cycle stage(s) covered for the reference product/service or baseline scenario**

Use stage

**Estimated avoided emissions (metric tons CO<sub>2</sub>e per functional unit) compared to reference product/service or baseline scenario**

10,000

**Explain your calculation of avoided emissions, including any assumptions**

Calculated based on the difference between the amount of greenhouse gas emissions before the introduction of renewable energy and the zero emissions that will result from the implementation of renewable energy for the amount of electric power used for the service in question.

**Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year**

2

---

**Level of aggregation**

Product or service

**Taxonomy used to classify product(s) or service(s) as low-carbon**

Low-Carbon Investment (LCI) Registry Taxonomy

**Type of product(s) or service(s)**

Other

Other, please specify

Energy-renewable

**Description of product(s) or service(s)**

Starting in December 2022, we will go carbon neutral for the electric power used at our BPO Center in Okinawa, Japan, where we operate our BPO business. We will provide 100% carbon neutral services through on-site solar power generation, wooden biomass co-combustion power generation as an alternative fuel to coal, and wind power generation, among other sources.

**Have you estimated the avoided emissions of this low-carbon product(s) or service(s)**

Yes

**Methodology used to calculate avoided emissions**

Evaluating the carbon-reducing impacts of ICT

**Life cycle stage(s) covered for the low-carbon product(s) or services(s)**

Use stage



**Functional unit used**

Calculated by comparing the greenhouse gas emissions from the electric power consumption of the service in question with the estimated greenhouse gas emissions from electric power consumption at other existing centers of a similar size.

**Reference product/service or baseline scenario used**

Greenhouse gas emissions from an existing center of the same size as the new BPO Center under the service in question: 1,000 tons

**Life cycle stage(s) covered for the reference product/service or baseline scenario**

Use stage

**Estimated avoided emissions (metric tons CO<sub>2</sub>e per functional unit) compared to reference product/service or baseline scenario**

1,000

**Explain your calculation of avoided emissions, including any assumptions**

Calculated by comparing the amount of electric power used for the service in question with the estimated emissions at other existing centers of the same scale.

**Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year**

0.1

## C5. Emissions methodology

### C5.1

**(C5.1) Is this your first year of reporting emissions data to CDP?**

No

### C5.1a

**(C5.1a) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?**

Row 1

---

**Has there been a structural change?**

No

## C5.1b

**(C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?**

	Change(s) in methodology, boundary, and/or reporting year definition?	Details of methodology, boundary, and/or reporting year definition change(s)
Row 1	Yes, a change in methodology	<p>During the reporting year, the calculation methodology was changed. For circumstances where services are being offered in a format where data center space is being leased to clients (housing and colocation services), we sought conformity with an NTT Group Scope 3 calculation policy with a Scope 3, Category 13 rate of emissions, as opposed to Scope 2. Transitions from Scope 2 emissions to Scope 3 Category 13 greenhouse gas emission were uniformly implemented from 2016, the base year, to 2021, the reporting year. We plan to have all revised values be guaranteed via third-party verification.</p> <p>By reviewing past performance data for Japan, where our headquarters and many of our asset data centers are located, and the North American sector, we calculated a proportional ratio to prorate past Scope 2 values to Scope 2 (S2) and Scope 3 Category 13 (S3C13).</p> <p>a. Proportional Rate in Japan S2: S3C13 = 53.7: 46.3  b. Proportional Rate in North American Sector S2: S3C13 = 77.6: 22.4</p> <p>Using the proportional rates above, we prorate emissions from the base year.</p> <p>The prorated results for a are as follows. This was calculated based on the arithmetic mean of the prorated rates for the two years of 2020 and 2021.</p> <p>FY2016 S2 (electric power) = 131,190t S3C13 = 122,587t, S2 (other than electric power) = 11,164t (total 264,941t)  FY2017 S2 (electric power) = 124,535t S3C13 = 104,959t, S2 (other than electric power) = 9,695t (total 239,189t)  FY2018 S2 (electric power) = 122,930t S3C13 = 116,713t, S2 (other than electric power) = 8,529t (total 248,172t)  FY2019 S2 (electric power) = 112,959t S3C13 = 95,074t, S2 (other than electric power) = 8,706t (total 216,739t)</p> <p>The prorated results for b are as follows.</p> <p>FY2016 S2 = 39,678t S3C13 = 11,482t (total 51,160t)  FY2017 S2 = 55,277t S3C13 = 15,996t (total 71,273t)</p>

		FY2018 S2 = 34,988t S3C13 = 10,125t (total 45,113t)
		FY2019 S2 = 32,046t S3C13 = 9,273t (total 41,319t)
		FY2020 S2 = 35,055t S3C13 = 10,144t (total 45,199t)

## C5.1c

**(C5.1c) Have your organization’s base year emissions been recalculated as result of the changes or errors reported in C5.1a and C5.1b?**

	Base year recalculation	Base year emissions recalculation policy, including significance threshold
Row 1	Yes	<p>Calculation methodology was changed during the reporting year, and emissions were recalculated starting from the base year.</p> <p>With respect to electric power use amounts in circumstances where services are being offered in a format where our asset data center space is being leased to clients (housing and colocation services), we sought conformity with an NTT Group Scope 3 calculation policy with a Scope 3, Category 13 rate of emissions, as opposed to Scope 2. Hosting services operating their own IT services at our data centers remain at Scope 2. Transitions from Scope 2 emissions to Scope 3 Category 13 greenhouse gas emission were uniformly implemented from 2016, the base year, to 2021, the reporting year. The revised values are in the process of being verified by third parties. By reviewing past performance data for Japan, where our headquarters and many of our asset data centers are located, and the North American sector, we calculated a proportional ratio to prorate past Scope 2 values to Scope 2 (S2) and Scope 3 Category 13 (S3C13).</p> <p>a. Proportional Rate in Japan S2: S3C13 = 53.7: 46.3                      b. Proportional Rate in North American Sector S2: S3C13 = 77.6: 22.4                      c. Proportional Rate of Other Areas S2: S3C13 = 100: 0</p> <p>Base year emissions were calculated using the above proration rate for hosting services : housing and colocation services.                      The prorated results for a are as follows.                      FY2016 S2 (electric power) = 131,190t S3C13 = 122,587 t-CO2e</p> <p>The prorated results for b are as follows.                      FY2016 S2 = 39,678t S3C13 = 11,482 t-CO2e</p> <p>The prorated results for c are as follows.                      FY2016 S2 = 71974t S3C13 = 0 t-CO2e</p> <p>As a result, the reference values for the SBT base year were as follows.                      Scope 1: 13,117 t-CO2                      Scope 2: 242,842 t-CO2                      Scope 3: 2,125,022 t-CO2</p>

		Total: 2,380,981 t-CO2
--	--	------------------------

## C5.2

**(C5.2) Provide your base year and base year emissions.**

### Scope 1

---

**Base year start**

April 1, 2016

**Base year end**

March 31, 2017

**Base year emissions (metric tons CO2e)**

13,117

**Comment**

This is base year for SBT.

### Scope 2 (location-based)

---

**Base year start**

April 1, 2016

**Base year end**

March 31, 2017

**Base year emissions (metric tons CO2e)**

292,177

**Comment**

### Scope 2 (market-based)

---

**Base year start**

April 1, 2016

**Base year end**

March 31, 2017

**Base year emissions (metric tons CO2e)**

242,842

**Comment**

This is base year for SBT.

### Scope 3 category 1: Purchased goods and services

---

**Base year start**

April 1, 2016

**Base year end**

March 31, 2017

**Base year emissions (metric tons CO2e)**

484,274

**Comment**

**Scope 3 category 2: Capital goods**

---

**Base year start**

April 1, 2016

**Base year end**

March 31, 2017

**Base year emissions (metric tons CO2e)**

193,231

**Comment**

**Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)**

---

**Base year start**

April 1, 2016

**Base year end**

March 31, 2017

**Base year emissions (metric tons CO2e)**

26,413

**Comment**

**Scope 3 category 4: Upstream transportation and distribution**

---

**Base year start**

April 1, 2016

**Base year end**

March 31, 2017

**Base year emissions (metric tons CO2e)**

39,095

**Comment**

**Scope 3 category 5: Waste generated in operations**

---

**Base year start**

April 1, 2016

**Base year end**

March 31, 2017

**Base year emissions (metric tons CO2e)**

1,394

**Comment**

**Scope 3 category 6: Business travel**

---

**Base year start**

April 1, 2016

**Base year end**

March 31, 2017

**Base year emissions (metric tons CO2e)**

52,557

**Comment**

**Scope 3 category 7: Employee commuting**

---

**Base year start**

April 1, 2016

**Base year end**

March 31, 2017

**Base year emissions (metric tons CO2e)**

35,143

**Comment**

**Scope 3 category 8: Upstream leased assets**

---

**Base year start**

April 1, 2016

**Base year end**

March 31, 2017

**Base year emissions (metric tons CO2e)**

0

**Comment**

**Scope 3 category 9: Downstream transportation and distribution**

---

**Base year start**

**Base year end**

**Base year emissions (metric tons CO2e)**

**Comment**

**Scope 3 category 10: Processing of sold products**

---

**Base year start**

**Base year end**

**Base year emissions (metric tons CO2e)**

**Comment**

**Scope 3 category 11: Use of sold products**

---

**Base year start**

April 1, 2016

**Base year end**

March 31, 2017

**Base year emissions (metric tons CO2e)**

1,165,159

**Comment**

**Scope 3 category 12: End of life treatment of sold products**

---

**Base year start**

April 1, 2016

**Base year end**

March 31, 2017

**Base year emissions (metric tons CO<sub>2</sub>e)**

5,169

**Comment**

**Scope 3 category 13: Downstream leased assets**

---

**Base year start**

April 1, 2016

**Base year end**

March 31, 2017

**Base year emissions (metric tons CO<sub>2</sub>e)**

122,587

**Comment**

**Scope 3 category 14: Franchises**

---

**Base year start**

**Base year end**

**Base year emissions (metric tons CO<sub>2</sub>e)**

**Comment**

**Scope 3 category 15: Investments**

---

**Base year start**

**Base year end**

**Base year emissions (metric tons CO<sub>2</sub>e)**

**Comment**

**Scope 3: Other (upstream)**

---



**Base year start**

**Base year end**

**Base year emissions (metric tons CO<sub>2</sub>e)**

**Comment**

**Scope 3: Other (downstream)**

---

**Base year start**

**Base year end**

**Base year emissions (metric tons CO<sub>2</sub>e)**

**Comment**

## C5.3

**(C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.**

Japan Ministry of the Environment, Law Concerning the Promotion of the Measures to Cope with Global Warming, Superseded by Revision of the Act on Promotion of Global Warming Countermeasures (2005 Amendment)  
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

## C6. Emissions data

### C6.1

**(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO<sub>2</sub>e?**

**Reporting year**

---

**Gross global Scope 1 emissions (metric tons CO<sub>2</sub>e)**

9,613

**Comment**

Gross global Scope 1 emission for FY2020: 7,241

## C6.2

**(C6.2) Describe your organization's approach to reporting Scope 2 emissions.**

Row 1

---

**Scope 2, location-based**

We are reporting a Scope 2, location-based figure

**Scope 2, market-based**

We are reporting a Scope 2, market-based figure

**Comment**

## C6.3

**(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO<sub>2</sub>e?**

Reporting year

---

**Scope 2, location-based**

165,748

**Scope 2, market-based (if applicable)**

130,066

**Comment**

Location-based gross global Scope 2 emission for FY2020: 170,465  
Market-based gross global Scope 2 emission for FY2020: 154,867

In the reporting year, changes were made to the calculation methodologies for Scope 2 and Scope 3 Category 13. For circumstances where services are being offered in a format where data center space is being leased to clients (housing and colocation services), we are working to conform to a NTT Group Scope 3 calculation policy which calculate the emissions from the housing and colocation services as a Scope 3, Category 13, not Scope 2. The Scope 2 reported values are the modified values. The same methodology change has been made for the values from the base year.

## C6.4

**(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?**

No

## C6.5

**(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.**

### **Purchased goods and services**

---

**Evaluation status**

Relevant, calculated

**Emissions in reporting year (metric tons CO2e)**

529,120

**Emissions calculation methodology**

Spend-based method

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

0

**Please explain**

Most of the goods and services purchased by our company are hardware, software, etc. used to provide ICT services to our clients. Calculated by purchase amounts (yen) x relevant unit value (based on Ministry of the Environment's "Database on Emissions Unit Values for Accounting of Greenhouse Gas Emissions, etc., by Organizations Throughout the Supply Chain (Ver. 3.2)").

### **Capital goods**

---

**Evaluation status**

Relevant, calculated

**Emissions in reporting year (metric tons CO2e)**

133,792

**Emissions calculation methodology**

Spend-based method

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

0

**Please explain**

Most of our company's capital goods are hardware, etc. used to provide ICT services to our clients. Purchase amounts (yen) x relevant unit value (based on Ministry of the Environment's "Database on Emissions Unit Values for Accounting of Greenhouse Gas Emissions, etc., by Organizations Throughout the Supply Chain (Ver. 3.2)")

## Fuel-and-energy-related activities (not included in Scope 1 or 2)

---

### Evaluation status

Relevant, calculated

### Emissions in reporting year (metric tons CO<sub>2</sub>e)

33,869

### Emissions calculation methodology

Fuel-based method

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

78

### Please explain

Electricity consumption (kWh) x relevant unit value (Ministry of the Environment's "Database on Emissions Unit Values for Accounting of Greenhouse Gas Emissions, etc., by Organizations Throughout the Supply Chain (Ver. 3.2)," etc.)

Fuel consumption (kWh) x relevant unit value (IDEAv2)

## Upstream transportation and distribution

---

### Evaluation status

Relevant, calculated

### Emissions in reporting year (metric tons CO<sub>2</sub>e)

52,966

### Emissions calculation methodology

Spend-based method

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

1

### Please explain

We outsource transportation and deliveries to other companies, and their amounts are managed under the total amount for transportation and delivery under our company's system. Furthermore, NTT DATA is an IT services and consulting company, does not manufacture physical products, and provides our deliverables through networks. Therefore, we provide very limited downstream transportation and deliveries, and even if any do arise, they are accounted under Category 4.

(Logistics of purchased equipment) purchase amounts (yen) x logistics cost ratio (\*1) x relevant primary unit (Ministry of the Environment's "Database on Emissions Unit Values for Accounting of Greenhouse Gas Emissions, etc., by Organizations Throughout the Supply Chain (Ver. 3.2)")

\*1: From Japan Institute of Logistics Systems “Logistics Cost Survey 2021”

(Purchased logistics services) Actual logistics (ton-kilo) x relevant primary unit (from “Joint Guidelines for Calculating CO2 Emissions in the Logistics Sector (Ver. 3.1)” by the Ministry of Economy, Trade and Industry/Ministry of Land, Infrastructure, Transport, and Tourism

## Waste generated in operations

---

### Evaluation status

Relevant, calculated

### Emissions in reporting year (metric tons CO2e)

3,944

### Emissions calculation methodology

Waste-type-specific method

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

51

### Please explain

Amount of waste (t) x relevant unit value (Ministry of the Environment’s “Database on Emissions Unit Values for Accounting of Greenhouse Gas Emissions, etc., by Organizations Throughout the Supply Chain (Ver. 3.2),” IDEAv2)

## Business travel

---

### Evaluation status

Relevant, calculated

### Emissions in reporting year (metric tons CO2e)

22,018

### Emissions calculation methodology

Spend-based method

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

### Please explain

Transportation costs (yen) x relevant unit value (Ministry of the Environment’s “Database on Emissions Unit Values for Accounting of Greenhouse Gas Emissions, etc., by Organizations Throughout the Supply Chain (Ver. 3.2)”) )

## Employee commuting

---

**Evaluation status**

Relevant, calculated

**Emissions in reporting year (metric tons CO2e)**

30,912

**Emissions calculation methodology**

Spend-based method

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

0

**Please explain**

Transportation costs (yen) x relevant unit value (Ministry of the Environment's "Database on Emissions Unit Values for Accounting of Greenhouse Gas Emissions, etc., by Organizations Throughout the Supply Chain (Ver. 3.2)")

**Upstream leased assets**

---

**Evaluation status**

Not relevant, explanation provided

**Please explain**

The Company's leased assets are mainly office equipment, etc., and the electricity consumption during operation is recorded in Scope 2 electricity consumption in the same manner as the Company's own assets.

**Downstream transportation and distribution**

---

**Evaluation status**

Not relevant, explanation provided

**Please explain**

NTT DATA is an IT services and consulting company, does not manufacture physical products, and provides our deliverables through networks. Even if any downstream transportation and deliveries arise, they are accounted under Category 4 in our system. In order to comply with the criteria of the GHG Protocol, and to avoid double counting, we do not report under this category.

**Processing of sold products**

---

**Evaluation status**

Not relevant, explanation provided

**Please explain**

NTT DATA is an IT services and consulting company, and does not manufacture or process physical products. As such, we have no product processing processes.

**Use of sold products**

---

**Evaluation status**

Relevant, calculated

**Emissions in reporting year (metric tons CO2e)**

731,806

**Emissions calculation methodology**

Spend-based method

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

0

**Please explain**

Most of the products sold by our company are hardware, software, etc. used to provide ICT services to our clients, and the majority of the electric power usage is use of hardware by clients. In accordance with the item-specific emissions of purchased products and services in Category 1, the calculation was done using the percentage of GHG emissions at the time of use by item.

**End of life treatment of sold products**

---

**Evaluation status**

Relevant, calculated

**Emissions in reporting year (metric tons CO2e)**

4,770

**Emissions calculation methodology**

Waste-type-specific method

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

0

**Please explain**

In accordance with the item-specific emissions of purchased products and services in Category 1, the calculation was done using the percentage of GHG emissions at the time of disposal by item.

**Downstream leased assets**

---

**Evaluation status**

Relevant, calculated

**Emissions in reporting year (metric tons CO2e)**

95,981

**Emissions calculation methodology**

Fuel-based method

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

100

**Please explain**

Electricity consumption (kWh) x relevant unit value (Ministry of the Environment's "Database on Emissions Unit Values for Accounting of Greenhouse Gas Emissions, etc., by Organizations Throughout the Supply Chain (Ver. 3.2)")

**Franchises**

---

**Evaluation status**

Not relevant, explanation provided

**Please explain**

NTT DATA does not have any franchise business.

**Investments**

---

**Evaluation status**

Not relevant, explanation provided

**Please explain**

NTT DATA does not benefit from its stock investments in other companies.

**Other (upstream)**

---

**Evaluation status**

Not relevant, explanation provided

**Please explain**

All emissions for NTT DATA are included in categories 1 through 15.

**Other (downstream)**

---

**Evaluation status**

Not relevant, explanation provided

**Please explain**

All emissions for NTT DATA are included in categories 1 through 15.

## C6.7

**(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?**

No



## C6.10

**(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO<sub>2</sub>e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.**

---

**Intensity figure**

5.47

**Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO<sub>2</sub>e)**

139,679

**Metric denominator**

unit total revenue

**Metric denominator: Unit total**

2,551,906,000,000

**Scope 2 figure used**

Market-based

**% change from previous year**

22

**Direction of change**

Decreased

**Reason for change**

As Scope 1 + 2 emissions calculation methodology for the last fiscal year was changed in accordance with NTT Group policy, per unit net sales were recalculated. The result was 6.97. When compared with the emissions calculated by former methodology, there was a 22% reduction. This was due to the fact that, in addition to increased net sales, Scope 1 and 2 emissions were reduced through large-scale introduction of renewable energy, implementation of high-efficiency air conditioning to data centers, assertive implementation of office operation optimizations due to office equipment operational efficiency and office reforms, and improvement of emissions coefficients.

---

**Intensity figure**

0.92

**Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO<sub>2</sub>e)**

139,679

**Metric denominator**

full time equivalent (FTE) employee

**Metric denominator: Unit total**

151,600

**Scope 2 figure used**

Market-based

**% change from previous year**

20

**Direction of change**

Decreased

**Reason for change**

As Scope 1 + 2 emissions calculation methodology for the last fiscal year was changed in accordance with NTT Group policy, per unit net sales were recalculated. The result was 1.16. When compared with the emissions calculated by former methodology, there was a 20% reduction. This was due to the fact that, although the number of overseas employees increased, Scope 1 and 2 emissions were reduced through large-scale introduction of renewable energy, implementation of high-efficiency air conditioning to data centers, assertive implementation of office operation optimizations due to office equipment operational efficiency and office reforms, and improvement of emissions coefficients.

## C7. Emissions breakdowns

### C7.1

**(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?**

Yes

### C7.1a

**(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).**

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	9,013	IPCC Fourth Assessment Report (AR4 - 100 year)
CH4	11	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	60	IPCC Fourth Assessment Report (AR4 - 100 year)

HFCs	516	IPCC Fourth Assessment Report (AR4 - 100 year)
PFCs	2	IPCC Fourth Assessment Report (AR4 - 100 year)
SF6	11	IPCC Fourth Assessment Report (AR4 - 100 year)
NF3	0	IPCC Fourth Assessment Report (AR4 - 100 year)

## C7.2

**(C7.2) Break down your total gross global Scope 1 emissions by country/region.**

Country/Region	Scope 1 emissions (metric tons CO2e)
Japan	4,710
United States of America	690
Other, please specify 19 Europe & Latam countries (DACH, Spain, Italy, Romania, Brazil, Peru etc.)	1,420
Other, please specify 27 Europe & Latam countries (Germany, USA, Denmark, Malaysia etc)	2,621
Other, please specify APAC (Myanmar, Thailand, Viet nam etc.)	80
China	92

## C7.3

**(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.**

By business division

### C7.3a

**(C7.3a) Break down your total gross global Scope 1 emissions by business division.**

Business division	Scope 1 emissions (metric ton CO2e)
Data Center	4,990
Office	775
Transportation	3,848

## C7.5

**(C7.5) Break down your total gross global Scope 2 emissions by country/region.**

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Japan	106,075	96,323
United States of America	46,174	24,835
Other, please specify 19 Europe & Latam countries (DACH, Spain, Italy, Romania, Brazil, Peru etc.)	3,940	955
Other, please specify 27 Europe & Latam countries (Germany, USA, Denmark, Malaysia etc)	4,019	1,804
Other, please specify APAC (Myanmar, Thailand, Viet nam etc.)	3,657	4,266
China	1,882	1,882

## C7.6

**(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.**

By business division

### C7.6a

**(C7.6a) Break down your total gross global Scope 2 emissions by business division.**

Business division	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Data Center	127,978	100,427
Office	37,770	29,639

## C7.9

**(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?**

Decreased

### C7.9a

**(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.**

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	12,183	Decreased	7.5	<p>Renewable energy consumption increased due to the promotion of renewable energy procurement from the previous year.</p> <p>The difference in electricity usage amount from renewable energy sources between the current year and the previous year is:  <math>92,076,939 \text{ kWh} - 59,938,455 \text{ kWh} = 32,138,484 \text{ kWh}</math></p> <p>Multiplied by the primary unit of the US, which uses large amounts of renewable energy, <math>0.000379073 \text{ tCO}_2\text{e/kWh}</math>,  <math>32,138,484 \text{ kWh} \times 0.000379073 \text{ tCO}_2\text{e/kWh} = 12,183 \text{ t-CO}_2\text{e}</math></p> <p>As Scope 1 and 2 emissions for the previous year were <math>162,406 \text{ t-CO}_2\text{e}</math>, the rate of change is <math>12,183/162,406 \times 100 = 7.53 \text{ (\%)}</math></p> <p>*Emissions from the previous year differ from the response provided last year due to a change in the calculation method.</p>
Other emissions reduction activities	7,624	Decreased	4.69	<p>Implemented measures in C4.3a and reduced by <math>7,624 \text{ t-CO}_2</math>. As Scope 1 and 2 emissions for the previous year were <math>162,406 \text{ t-CO}_2\text{e}</math>, the rate of change is - <math>7,624/162,406 \times 100 = 4.69 \text{ (\%)}</math></p> <p>*Emissions from the previous year differ from the response provided last year due to a change in the calculation method.</p>
Divestment	0	No change	0	
Acquisitions	0	No change	0	
Mergers	0	No change	0	
Change in output	29,777	Decreased	18.33	<p>Although sales increased, due to various factors such as the implementation of renewable energy and centrally controllable, high-efficiency air conditioning, and more efficient operation of office facilities,</p>

				<p>emissions were reduced by 29,101 t-CO<sub>2</sub>. As Scope 1 and 2 emissions for the previous year were 162,406 t-CO<sub>2</sub>e, the rate of change is <math>29,101 / 162,406 \times 100 = 17.92</math> (%)</p> <p><math>-29,777 = 137,417</math> (emissions in 2021) - <math>162,406</math> (emissions in 2020) - <math>12,183</math> (use of renewable energy) - <math>(-7,624)</math> (emission reduction activities) - <math>229</math> (change in emissions calculation method)</p> <p>*Emissions from the previous year differ from the response provided last year due to a change in the calculation method.</p>
Change in methodology	229	Decreased	0.14	<p>The change in the CO<sub>2</sub> conversion factor resulted in a decrease of 229 t-CO<sub>2</sub>. The coefficients for FY2021 and FY2020 are as follows</p> <p>FY2021</p> <p>Hokkaido Electric Power Company 0.550 t-CO<sub>2</sub>/MWh</p> <p>Tohoku Electric Power 0.457 t-CO<sub>2</sub>/MWh</p> <p>TEPCO Energy Partner, Incorporated 0.443 t-CO<sub>2</sub>/MWh</p> <p>Hokuriku Electric Power Company 0.466 t-CO<sub>2</sub>/MWh</p> <p>Chubu Electric Power 0.379 t-CO<sub>2</sub>/MWh</p> <p>Kansai Electric Power Company 0.351 t-CO<sub>2</sub>/MWh</p> <p>Shikoku Electric Power Company 0.574 t-CO<sub>2</sub>/MWh</p> <p>The Chugoku Electric Power Company 0.521 t-CO<sub>2</sub>/MWh</p> <p>Kyushu Electric Power 0.480 t-CO<sub>2</sub>/MWh</p> <p>Okinawa Electric Power 0.705 t-CO<sub>2</sub>/MWh</p> <p>Ennet Corporation 0.385 t-CO<sub>2</sub>/MWh</p> <p>Other (including unknown companies) 0.453 t-CO<sub>2</sub>/MWh</p> <p>US Average 0.45 kgCO<sub>2</sub>/kWh and 0.000379073 t-CO<sub>2</sub>/kWh</p> <p>EU Average 0.313 kgCO<sub>2</sub>/kWh</p> <p>China Average 0.65 kgCO<sub>2</sub>/kWh</p> <p>Southeast Asia Average 0.577 kgCO<sub>2</sub>/kWh</p> <p>India Average 0.97 kgCO<sub>2</sub>/kWh</p>

				<p>FY2020</p> <p>Hokkaido Electric Power Company 0.601 t-CO2/MWh</p> <p>Tohoku Electric Power 0.522 t-CO2/MWh</p> <p>TEPCO Energy Partner, Incorporated 0.442 t-CO2/MWh</p> <p>Hokuriku Electric Power Company 0.498 t-CO2/MWh</p> <p>Chubu Electric Power 0.426 t-CO2/MWh</p> <p>Kansai Electric Power Company 0.318 t-CO2/MWh</p> <p>Shikoku Electric Power Company 0.411 t-CO2/MWh</p> <p>The Chugoku Electric Power Company 0.585 t-CO2/MWh</p> <p>Kyushu Electric Power 0.371 t-CO2/MWh</p> <p>Okinawa Electric Power 0.787 t-CO2/MWh</p> <p>Ennet Corporation 0.409 t-CO2/MWh</p> <p>Other Japanese domestic 0.470 t-CO2/MWh</p> <p>US Average 0.45 kgCO2/kWh and 0.000379073 t-CO2/kWh</p> <p>EU Average 0.313 kgCO2/kWh</p> <p>China Average 0.65 kgCO2/kWh</p> <p>Southeast Asia Average 0.577 kgCO2/kWh</p> <p>India Average 0.97 kgCO2/kWh</p> <p>Electric power purchase quantities in 2021, calculated using the 2021 coefficient, are 101,433 t-CO2</p> <p>Electric power purchase quantities in 2020, calculated using the 2020 coefficient, are 101,204 t-CO2</p> <p><math>101,433 - 101,204 = 229</math></p> <p>As Scope 1 and 2 emissions for the previous year were 162,406 t-CO2e, the rate of change is <math>229 / 162,406 \times 100 = 0.14</math> (%)</p> <p>*Emissions from the previous year differ from the response provided last year due to a change in the calculation method.</p>
Change in boundary	0	No change	0	

Change in physical operating conditions	0	No change	0	
Unidentified	0	No change	0	
Other	0	No change	0	

### C7.9b

**(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?**

Market-based

## C8. Energy

### C8.1

**(C8.1) What percentage of your total operational spend in the reporting year was on energy?**

More than 20% but less than or equal to 25%

### C8.2

**(C8.2) Select which energy-related activities your organization has undertaken.**

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	Yes
Consumption of purchased or acquired steam	Yes
Consumption of purchased or acquired cooling	Yes
Generation of electricity, heat, steam, or cooling	Yes



## C8.2a

**(C8.2a) Report your organization’s energy consumption totals (excluding feedstocks) in MWh.**

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	0	39,522	39,522
Consumption of purchased or acquired electricity		91,864	237,769	329,633
Consumption of purchased or acquired heat		0	6,262	6,262
Consumption of purchased or acquired steam		0	10,974	10,974
Consumption of purchased or acquired cooling		0	34,124	34,124
Consumption of self-generated non-fuel renewable energy		213		213
Total energy consumption		92,077	328,651	420,728

## C8.2b

**(C8.2b) Select the applications of your organization’s consumption of fuel.**

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	No
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No

Consumption of fuel for co-generation or tri-generation	No
---	----

## C8.2c

**(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.**

### Sustainable biomass

---

**Heating value**

HHV

**Total fuel MWh consumed by the organization**

0

**MWh fuel consumed for self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

0

**Comment**

### Other biomass

---

**Heating value**

HHV

**Total fuel MWh consumed by the organization**

0

**MWh fuel consumed for self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

0

**Comment**

### Other renewable fuels (e.g. renewable hydrogen)

---

**Heating value**

HHV

**Total fuel MWh consumed by the organization**

0

**MWh fuel consumed for self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

0

**Comment**

## Coal

---

**Heating value**

HHV

**Total fuel MWh consumed by the organization**

0

**MWh fuel consumed for self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

0

**Comment**

## Oil

---

**Heating value**

HHV

**Total fuel MWh consumed by the organization**

18,036

**MWh fuel consumed for self-generation of electricity**

955

**MWh fuel consumed for self-generation of heat**

0

**Comment**

## Gas

---

**Heating value**

HHV

**Total fuel MWh consumed by the organization**

21,486

**MWh fuel consumed for self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

0

**Comment**

**Other non-renewable fuels (e.g. non-renewable hydrogen)**

---

**Heating value**

HHV

**Total fuel MWh consumed by the organization**

0

**MWh fuel consumed for self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

0

**Comment**

**Total fuel**

---

**Heating value**

HHV

**Total fuel MWh consumed by the organization**

39,522

**MWh fuel consumed for self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

0

**Comment**

## C8.2d

**(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.**

	<b>Total Gross generation (MWh)</b>	<b>Generation that is consumed by the organization (MWh)</b>	<b>Gross generation from renewable sources (MWh)</b>	<b>Generation from renewable sources that is consumed by the organization (MWh)</b>
Electricity	2,188	1,678	723	213

Heat	0	0	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

## C8.2e

**(C8.2e) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero or near-zero emission factor in the market-based Scope 2 figure reported in C6.3.**

---

### Sourcing method

Green electricity products from an energy supplier (e.g. green tariffs)

### Energy carrier

Electricity

### Low-carbon technology type

Solar

### Country/area of low-carbon energy consumption

Japan

### Tracking instrument used

NFC – Renewable

### Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

14,613

### Country/area of origin (generation) of the low-carbon energy or energy attribute

Japan

### Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2,021

### Comment

---

### Sourcing method

Green electricity products from an energy supplier (e.g. green tariffs)

### Energy carrier

Electricity

**Low-carbon technology type**

Renewable energy mix, please specify  
mixture of solar energy, hydropower, biomass and geothermal energy

**Country/area of low-carbon energy consumption**

Argentina

**Tracking instrument used**

Contract

**Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)**

16

**Country/area of origin (generation) of the low-carbon energy or energy attribute**

Argentina

**Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)**

**Comment**

---

**Sourcing method**

Green electricity products from an energy supplier (e.g. green tariffs)

**Energy carrier**

Electricity

**Low-carbon technology type**

Renewable energy mix, please specify  
mixture of solar energy, hydropower, biomass and geothermal energy

**Country/area of low-carbon energy consumption**

Belgium

**Tracking instrument used**

Contract

**Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)**

13

**Country/area of origin (generation) of the low-carbon energy or energy attribute**

Belgium

**Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)**

**Comment**

---

**Sourcing method**

Green electricity products from an energy supplier (e.g. green tariffs)

**Energy carrier**

Electricity

**Low-carbon technology type**

Renewable energy mix, please specify  
mixture of solar energy, hydropower, biomass and geothermal energy

**Country/area of low-carbon energy consumption**

Netherlands

**Tracking instrument used**

Contract

**Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)**

2

**Country/area of origin (generation) of the low-carbon energy or energy attribute**

Netherlands

**Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)**

**Comment**

---

**Sourcing method**

Green electricity products from an energy supplier (e.g. green tariffs)

**Energy carrier**

Electricity

**Low-carbon technology type**

Renewable energy mix, please specify

mixture of solar energy, hydropower, biomass and geothermal energy

**Country/area of low-carbon energy consumption**

Brazil

**Tracking instrument used**

Contract

**Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)**

444

**Country/area of origin (generation) of the low-carbon energy or energy attribute**

Brazil

**Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)**

**Comment**

---

**Sourcing method**

Green electricity products from an energy supplier (e.g. green tariffs)

**Energy carrier**

Electricity

**Low-carbon technology type**

Renewable energy mix, please specify  
mixture of solar energy, hydropower, biomass and geothermal energy

**Country/area of low-carbon energy consumption**

Chile

**Tracking instrument used**

Contract

**Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)**

59

**Country/area of origin (generation) of the low-carbon energy or energy attribute**

Chile



**Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)**

**Comment**

---

**Sourcing method**

Green electricity products from an energy supplier (e.g. green tariffs)

**Energy carrier**

Electricity

**Low-carbon technology type**

Renewable energy mix, please specify  
mixture of solar energy, hydropower, biomass and geothermal energy

**Country/area of low-carbon energy consumption**

China

**Tracking instrument used**

Contract

**Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)**

247

**Country/area of origin (generation) of the low-carbon energy or energy attribute**

China

**Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)**

**Comment**

---

**Sourcing method**

Unbundled energy attribute certificates (EACs) purchase

**Energy carrier**

Electricity

**Low-carbon technology type**

Hydropower (capacity unknown)

**Country/area of low-carbon energy consumption**

China

**Tracking instrument used**

I-REC

**Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)**

3,177

**Country/area of origin (generation) of the low-carbon energy or energy attribute**

China

**Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)**

**Comment**

---

**Sourcing method**

Green electricity products from an energy supplier (e.g. green tariffs)

**Energy carrier**

Electricity

**Low-carbon technology type**

Renewable energy mix, please specify  
mixture of solar energy, hydropower, biomass and geothermal energy

**Country/area of low-carbon energy consumption**

Colombia

**Tracking instrument used**

Contract

**Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)**

92

**Country/area of origin (generation) of the low-carbon energy or energy attribute**

Colombia

**Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)**

## Comment

---

### Sourcing method

Green electricity products from an energy supplier (e.g. green tariffs)

### Energy carrier

Electricity

### Low-carbon technology type

Renewable energy mix, please specify  
mixture of solar energy, hydropower, biomass and geothermal energy

### Country/area of low-carbon energy consumption

Finland

### Tracking instrument used

Contract

### Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

2

### Country/area of origin (generation) of the low-carbon energy or energy attribute

Finland

### Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

## Comment

---

### Sourcing method

Green electricity products from an energy supplier (e.g. green tariffs)

### Energy carrier

Electricity

### Low-carbon technology type

Renewable energy mix, please specify  
mixture of solar energy, hydropower, biomass and geothermal energy

### Country/area of low-carbon energy consumption

France

**Tracking instrument used**

Contract

**Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)**

0.3

**Country/area of origin (generation) of the low-carbon energy or energy attribute**

France

**Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)**

**Comment**

---

**Sourcing method**

Green electricity products from an energy supplier (e.g. green tariffs)

**Energy carrier**

Electricity

**Low-carbon technology type**

Renewable energy mix, please specify  
mixture of solar energy, hydropower, biomass and geothermal energy

**Country/area of low-carbon energy consumption**

Germany

**Tracking instrument used**

Contract

**Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)**

5,382

**Country/area of origin (generation) of the low-carbon energy or energy attribute**

Germany

**Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)**

**Comment**

---

**Sourcing method**

Unbundled energy attribute certificates (EACs) purchase

**Energy carrier**

Electricity

**Low-carbon technology type**

Hydropower (capacity unknown)

**Country/area of low-carbon energy consumption**

India

**Tracking instrument used**

Indian REC

**Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)**

520

**Country/area of origin (generation) of the low-carbon energy or energy attribute**

India

**Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)**

**Comment**

---

**Sourcing method**

Green electricity products from an energy supplier (e.g. green tariffs)

**Energy carrier**

Electricity

**Low-carbon technology type**

Renewable energy mix, please specify  
mixture of solar energy, hydropower, biomass and geothermal energy

**Country/area of low-carbon energy consumption**

Italy

**Tracking instrument used**

Contract

**Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)**

4,921

**Country/area of origin (generation) of the low-carbon energy or energy attribute**

Italy

**Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)**

**Comment**

---

**Sourcing method**

Unbundled energy attribute certificates (EACs) purchase

**Energy carrier**

Electricity

**Low-carbon technology type**

Hydropower (capacity unknown)

**Country/area of low-carbon energy consumption**

Italy

**Tracking instrument used**

GO

**Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)**

100

**Country/area of origin (generation) of the low-carbon energy or energy attribute**

Italy

**Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)**

**Comment**

---

**Sourcing method**

Green electricity products from an energy supplier (e.g. green tariffs)

**Energy carrier**

Electricity

**Low-carbon technology type**

Renewable energy mix, please specify  
mixture of solar energy, hydropower, biomass and geothermal energy

**Country/area of low-carbon energy consumption**

Luxembourg

**Tracking instrument used**

Contract

**Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)**

8

**Country/area of origin (generation) of the low-carbon energy or energy attribute**

Luxembourg

**Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)**

**Comment**

---

**Sourcing method**

Green electricity products from an energy supplier (e.g. green tariffs)

**Energy carrier**

Electricity

**Low-carbon technology type**

Renewable energy mix, please specify  
mixture of solar energy, hydropower, biomass and geothermal energy

**Country/area of low-carbon energy consumption**

Mexico

**Tracking instrument used**

Contract

**Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)**

18

**Country/area of origin (generation) of the low-carbon energy or energy attribute**

Mexico

**Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)**

**Comment**

---

**Sourcing method**

Green electricity products from an energy supplier (e.g. green tariffs)

**Energy carrier**

Electricity

**Low-carbon technology type**

Renewable energy mix, please specify  
mixture of solar energy, hydropower, biomass and geothermal energy

**Country/area of low-carbon energy consumption**

Morocco

**Tracking instrument used**

Contract

**Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)**

18

**Country/area of origin (generation) of the low-carbon energy or energy attribute**

Morocco

**Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)**

**Comment**

---

**Sourcing method**

Green electricity products from an energy supplier (e.g. green tariffs)

**Energy carrier**



Electricity

**Low-carbon technology type**

Renewable energy mix, please specify  
mixture of solar energy, hydropower, biomass and geothermal energy

**Country/area of low-carbon energy consumption**

Peru

**Tracking instrument used**

Contract

**Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)**

170

**Country/area of origin (generation) of the low-carbon energy or energy attribute**

Peru

**Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)**

**Comment**

---

**Sourcing method**

Unbundled energy attribute certificates (EACs) purchase

**Energy carrier**

Electricity

**Low-carbon technology type**

Hydropower (capacity unknown)

**Country/area of low-carbon energy consumption**

Poland

**Tracking instrument used**

GO

**Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)**

2

**Country/area of origin (generation) of the low-carbon energy or energy attribute**

Poland

**Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)**

**Comment**

---

**Sourcing method**

Green electricity products from an energy supplier (e.g. green tariffs)

**Energy carrier**

Electricity

**Low-carbon technology type**

Renewable energy mix, please specify  
mixture of solar energy, hydropower, biomass and geothermal energy

**Country/area of low-carbon energy consumption**

Portugal

**Tracking instrument used**

Contract

**Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)**

177

**Country/area of origin (generation) of the low-carbon energy or energy attribute**

Portugal

**Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)**

**Comment**

---

**Sourcing method**

Green electricity products from an energy supplier (e.g. green tariffs)

**Energy carrier**

Electricity

**Low-carbon technology type**

Renewable energy mix, please specify  
mixture of solar energy, hydropower, biomass and geothermal energy

**Country/area of low-carbon energy consumption**

Romania

**Tracking instrument used**

Contract

**Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)**

1,216

**Country/area of origin (generation) of the low-carbon energy or energy attribute**

Romania

**Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)**

**Comment**

---

**Sourcing method**

Green electricity products from an energy supplier (e.g. green tariffs)

**Energy carrier**

Electricity

**Low-carbon technology type**

Renewable energy mix, please specify  
mixture of solar energy, hydropower, biomass and geothermal energy

**Country/area of low-carbon energy consumption**

Spain

**Tracking instrument used**

Contract

**Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)**

3,368

**Country/area of origin (generation) of the low-carbon energy or energy attribute**

Spain

**Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)**

**Comment**

---

**Sourcing method**

Unbundled energy attribute certificates (EACs) purchase

**Energy carrier**

Electricity

**Low-carbon technology type**

Hydropower (capacity unknown)

**Country/area of low-carbon energy consumption**

Spain

**Tracking instrument used**

GO

**Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)**

1,218

**Country/area of origin (generation) of the low-carbon energy or energy attribute**

Spain

**Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)**

**Comment**

---

**Sourcing method**

Green electricity products from an energy supplier (e.g. green tariffs)

**Energy carrier**

Electricity

**Low-carbon technology type**

Renewable energy mix, please specify  
mixture of solar energy, hydropower, biomass and geothermal energy

**Country/area of low-carbon energy consumption**

Switzerland

**Tracking instrument used**

Contract

**Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)**

0.5

**Country/area of origin (generation) of the low-carbon energy or energy attribute**

Switzerland

**Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)**

**Comment**

---

**Sourcing method**

Green electricity products from an energy supplier (e.g. green tariffs)

**Energy carrier**

Electricity

**Low-carbon technology type**

Renewable energy mix, please specify  
mixture of solar energy, hydropower, biomass and geothermal energy

**Country/area of low-carbon energy consumption**

United Kingdom of Great Britain and Northern Ireland

**Tracking instrument used**

Contract

**Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)**

35

**Country/area of origin (generation) of the low-carbon energy or energy attribute**

United Kingdom of Great Britain and Northern Ireland

**Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)**

## Comment

---

### Sourcing method

Green electricity products from an energy supplier (e.g. green tariffs)

### Energy carrier

Electricity

### Low-carbon technology type

Renewable energy mix, please specify  
mixture of solar energy, hydropower, biomass and geothermal energy

### Country/area of low-carbon energy consumption

United States of America

### Tracking instrument used

Contract

### Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

6,564

### Country/area of origin (generation) of the low-carbon energy or energy attribute

United States of America

### Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

## Comment

---

### Sourcing method

Unbundled energy attribute certificates (EACs) purchase

### Energy carrier

Electricity

### Low-carbon technology type

Hydropower (capacity unknown)

### Country/area of low-carbon energy consumption

United States of America

### Tracking instrument used

US-REC

**Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)**

49,304

**Country/area of origin (generation) of the low-carbon energy or energy attribute**

United States of America

**Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)**

**Comment**

---

**Sourcing method**

Unbundled energy attribute certificates (EACs) purchase

**Energy carrier**

Electricity

**Low-carbon technology type**

Solar

**Country/area of low-carbon energy consumption**

Viet Nam

**Tracking instrument used**

I-REC

**Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)**

179

**Country/area of origin (generation) of the low-carbon energy or energy attribute**

Viet Nam

**Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)**

**Comment**

## C8.2g

(C8.2g) Provide a breakdown of your non-fuel energy consumption by country.

---

**Country/area**

Japan

**Consumption of electricity (MWh)**

191,130

**Consumption of heat, steam, and cooling (MWh)**

48,254

**Total non-fuel energy consumption (MWh) [Auto-calculated]**

239,384

---

**Country/area**

United States of America

**Consumption of electricity (MWh)**

106,953

**Consumption of heat, steam, and cooling (MWh)**

0

**Total non-fuel energy consumption (MWh) [Auto-calculated]**

106,953

---

**Country/area**

Other, please specify

19 Europe & Latam countries (DACH, Spain, Italy, Romania, Brazil, Peru etc.)

**Consumption of electricity (MWh)**

14,994

**Consumption of heat, steam, and cooling (MWh)**

0

**Total non-fuel energy consumption (MWh) [Auto-calculated]**

14,994



---

**Country/area**

Other, please specify

27 Europe & Latam countries (Germany, USA, Denmark, Malaysia etc)

**Consumption of electricity (MWh)**

11,752

**Consumption of heat, steam, and cooling (MWh)**

3,073

**Total non-fuel energy consumption (MWh) [Auto-calculated]**

14,825

---

**Country/area**

Other, please specify

APAC (Myanmar, Thailand, Viet nam etc.)

**Consumption of electricity (MWh)**

717

**Consumption of heat, steam, and cooling (MWh)**

0

**Total non-fuel energy consumption (MWh) [Auto-calculated]**

717

---

**Country/area**

China

**Consumption of electricity (MWh)**

4,299

**Consumption of heat, steam, and cooling (MWh)**

33

**Total non-fuel energy consumption (MWh) [Auto-calculated]**

4,332

## C9. Additional metrics

### C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

## C10. Verification

### C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

### C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

---

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

 Verification\_Statement\_ISO\_14064\_NTT\_DATA\_EMEAL\_2022.pdf

 AS\_NTT DATA2021\_EN\_Fixed20220708.pdf

 CDP-verification-letter\_NTT\_DATA\_FY2021\_Fixed.pdf

**Page/ section reference**

“AS\_NTT DATA2021\_EN\_Fixed20220708.pdf” is Third Party Verification of GHG emissions in Japan and North America. Emissions data is listed in P.2 of “CDP-verification-letter\_NTT\_DATA\_FY2021\_Fixed.pdf”.

"Verification\_Statement\_ISO\_14064\_NTT\_DATA\_EMEAL\_2022.pdf" is Third Party Verification of GHG emissions in 19 Europe & Latam countries.  
(5,400 ton-CO<sub>2</sub>e(Japan and North America)+1,420 ton-CO<sub>2</sub>e(19 Europe & Latam countries))/9,613 ton-CO<sub>2</sub>e(Scope1)=71%

**Relevant standard**

ISO14064-3

**Proportion of reported emissions verified (%)**

71

## C10.1b

**(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.**

---

**Scope 2 approach**

Scope 2 location-based

**Verification or assurance cycle in place**

Annual process


**Status in the current reporting year**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

 AS\_NTT DATA2021\_EN\_Fixed20220708.pdf

 CDP-verification-letter\_NTT\_DATA\_FY2021\_Fixed.pdf

**Page/ section reference**

"AS\_NTT DATA2021\_EN\_Fixed20220708.pdf" is Third Party Verification of Greenhouse Gas Emissions.

Emissions data is listed in P.2 of "CDP-verification-letter\_NTT\_DATA\_FY2021\_Fixed.pdf".

**Relevant standard**

ISO14064-3

**Proportion of reported emissions verified (%)**

92

**Scope 2 approach**

Scope 2 market-based

**Verification or assurance cycle in place**

Annual process


**Status in the current reporting year**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

 AS\_NTT DATA2021\_EN\_Fixed20220708.pdf

 CDP-verification-letter\_NTT\_DATA\_FY2021\_Fixed.pdf

**Page/ section reference**

“AS\_NTT DATA2021\_EN\_Fixed20220708.pdf” is Third Party Verification of Greenhouse Gas Emissions.

Emissions data is listed in P.2 of “CDP-verification-letter\_NTT\_DATA\_FY2021\_Fixed.pdf”.

**Relevant standard**

ISO14064-3

**Proportion of reported emissions verified (%)**

93

## C10.1c

**(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.**

---

**Scope 3 category**

Scope 3: Purchased goods and services

Scope 3: Capital goods

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)

Scope 3: Upstream transportation and distribution

Scope 3: Waste generated in operations

Scope 3: Business travel

Scope 3: Employee commuting

Scope 3: Upstream leased assets

Scope 3: Use of sold products

Scope 3: End-of-life treatment of sold products

Scope 3: Downstream leased assets

**Verification or assurance cycle in place**

Annual process


**Status in the current reporting year**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

 AS\_NTT DATA2021\_EN\_Fixed20220708.pdf

 CDP-verification-letter\_NTT\_DATA\_FY2021\_Fixed.pdf

**Page/section reference**

“AS\_NTT DATA2021\_EN\_Fixed20220708.pdf” is Third Party Verification of Greenhouse Gas Emissions.

Emissions data is listed in P.2 of “CDP-verification-letter\_NTT\_DATA\_FY2021\_Fixed.pdf”.

**Relevant standard**

ISO14064-3

**Proportion of reported emissions verified (%)**

100

**C10.2**


**(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?**

Yes

**C10.2a**

**(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?**

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C7. Emissions breakdown	Progress against emissions reduction target	Reasonable assurance pursuant to ISAE3000 and ISAE3410 standards	Verification of annual emissions of specified GHGs from our eight buildings in Tokyo annually.

			<p>Those are a part of the emissions of "Data Center" in C7.3a, C7.6a.</p> <p> 1, 2, 3, 4, 5, 6, 7, 8</p>
--	--	--	--

-  <sup>1</sup>FY2020\_Verification\_Results\_Report\_3\_Mita.pdf
-  <sup>2</sup>FY2020\_Verification\_Results\_Report\_4\_Kasai.pdf
-  <sup>3</sup>FY2020\_Verification\_Results\_Report\_5\_AreaShinagawa.pdf
-  <sup>4</sup>FY2020\_Verification\_Results\_Report\_2\_OmoriSanno.pdf.pdf
-  <sup>5</sup>FY2020\_Verification\_Results\_Report\_1\_Otemachi.pdf.pdf
-  <sup>6</sup>FY2020\_Verification\_Results\_Report\_7\_Mitaka.pdf
-  <sup>7</sup>FY2020\_Verification\_Results\_Report\_8\_MitakaEast.pdf
-  <sup>8</sup>FY2020\_Verification\_Results\_Report\_6\_ShinagawaTwins.pdf

## C11. Carbon pricing

### C11.1

**(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?**

Yes

### C11.1a

**(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.**

Japan carbon tax  
Tokyo CaT - ETS

### C11.1b

**(C11.1b) Complete the following table for each of the emissions trading schemes you are regulated by.**

**Tokyo CaT - ETS**

**% of Scope 1 emissions covered by the ETS**

4

**% of Scope 2 emissions covered by the ETS**

75.39

**Period start date**

April 1, 2020

**Period end date**

March 31, 2025

**Allowances allocated**

589,981

**Allowances purchased**

0

**Verified Scope 1 emissions in metric tons CO<sub>2</sub>e**

402

**Verified Scope 2 emissions in metric tons CO<sub>2</sub>e**

105,307

**Details of ownership**

Facilities we own and operate

**Comment**

In reporting year, initiatives were being taken to achieve the targets of the third planning period (FY2020 – 2024) of Tokyo CaT.

Tokyo CaT covers Scope 1 and 2.

## C11.1c

(C11.1c) Complete the following table for each of the tax systems you are regulated by.

### Japan carbon tax

---

**Period start date**

April 1, 2021

**Period end date**

March 31, 2022

**% of total Scope 1 emissions covered by tax**

72

**Total cost of tax paid**

29,198,496

**Comment**

As this is an upstream tax, minute figures cannot be calculated. The value computed by multiplying the emissions of Japan with the figure “JPY 289 per ton of CO<sub>2</sub> emissions” stated on Ministry of the Environment’s HP [Details on the Carbon Tax] is approximately 57 million yen.

## C11.1d

**(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?**

We elected to participate due to the fact that eight of our buildings in Tokyo (offices, data centers) became subject to Tokyo Metropolitan Ordinances as large-scale business establishments.

In order to address this situation, we plan to do the followings in FY2022:

1. Upgrade power equipment to equipment with greater levels of efficiency (transformers, UPS, etc.)
2. Upgrade air conditioning equipment to equipment with greater levels of efficiency (turbo refrigerators, individualized air conditioners, etc.)
3. Improve operations of air conditioning, lighting, and common equipment
4. Use renewable energy

Through these, and other efforts, we are striving to reduce our energy consumption.

Furthermore, emissions are monitored via the “Climate Action Committee,” and through this monitoring we provide reports and make decisions at Corporate Management Committee, including CROs on whether credits need to be purchased to comply with ordinances, or whether excess credits should be sold, among other matters. Simulations of the future were conducted based on the results of the reduction efforts and monitoring of the above four items, and it was determined that there was no need to purchase credits or sell excess credits in the reporting year.

## C11.2

**(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?**

No

## C11.3

**(C11.3) Does your organization use an internal price on carbon?**

Yes

## C11.3a

**(C11.3a) Provide details of how your organization uses an internal price on carbon.**

---

### Objective for implementing an internal carbon price

- Stakeholder expectations
- Change internal behavior
- Drive energy efficiency
- Drive low-carbon investment



Identify and seize low-carbon opportunities

**GHG Scope**

Scope 3

**Application**

Company-wide

**Actual price(s) used (Currency /metric ton)**

6,500

**Variance of price(s) used**

Evolutionary uniforming price.

**Type of internal carbon price**

Shadow price

**Impact & implication**

About 80% of NTT DATA's consolidated sales come from regions such as the European Union and Japan that have already introduced carbon pricing or are in the process of considering such a system. In particular, if carbon pricing starts in earnest in Japan where we have many clients, at least 60% of sales will be greatly affected. Energy consumption is expected to increase in the IT services industry as demand continues to increase for the use of digital technologies to improve operational efficiency and for remote work, which was spread by the COVID-19 pandemic. It is necessary to take energy saving measures, such as operation efficiency improvement of office facilities and system integration, and promote the usage of renewable energy. In order to change the behavior of employees, we also started the visualization of our own emissions per organization for all employees on the Corporate GHG emission dashboard. Along with the introduction of internal carbon pricing, we are promoting energy saving by making employees aware of the cost of electricity consumption. Moreover, we will use the funds from carbon pricing to procure renewable energy and promote both energy conservation and the introduction of renewable energy.

## C12. Engagement

### C12.1

**(C12.1) Do you engage with your value chain on climate-related issues?**

Yes, our suppliers

Yes, other partners in the value chain

### C12.1a

**(C12.1a) Provide details of your climate-related supplier engagement strategy.**

### **Type of engagement**

Engagement & incentivization (changing supplier behavior)

### **Details of engagement**

Run an engagement campaign to educate suppliers about climate change

### **% of suppliers by number**

10

### **% total procurement spend (direct and indirect)**

80

### **% of supplier-related Scope 3 emissions as reported in C6.5**

32

### **Rationale for the coverage of your engagement**

Of FY2021 emissions, Categories 1, 2 and 11 of Scope 3 comprise approximately 85% of the entirety of Scope 3. At least 80% of the suppliers who are the sellers in question will be targets of engagement, and GHG emissions reductions related to the supply chains in question are indispensable toward achieving annual reductions of 4.2%, which will be necessary to realize the long-term net zero SBT targets the Company is committed to (interim goal of 60% reductions by FY2030, long-term goal of net zero by FY2050).

NTT DATA is implementing the following supplier engagement strategy in order to reduce emissions in Categories 1, 2, and 11, which significantly contribute to the reduction targets for Scope 3.

1. Share GHG target settings, reduction know-how, good practices, and tools, etc. attributable to efforts implemented, and knowledge held, by the Company with suppliers, and attain a shared understanding of circumstances
2. Support SBTi target setting promotions and GHG emission reducing activities by suppliers
3. Have suppliers commit to achieving reductions comparable to the reduction targets of the Company (the Company's annual reduction levels of 4.2%), and advance reductions through collaborative efforts.

### **Impact of engagement, including measures of success**

In collaboration with suppliers, we held our first supplier briefing on climate change response in FY2021 (reporting year) (approximately 150 companies, corresponding to the top 80% of companies in terms of purchase amounts). We shared with them our greenhouse gas reduction goals, policies for addressing climate action, and future procurement policies, confirmed and supported engagement circumstances for each supplier, and engaged in effective activities to promote SBTi goal setting and reduce GHG emissions at each supplier.

We also regularly held individualized interviews with key suppliers (roughly the top 40% in terms of purchase amounts) focused on climate change, and ascertained details regarding each company's climate change initiative status and greenhouse gas emissions reduction approaches.

In order to achieve the decarbonization goal of 4.2% reduction per year (60% reduction

by FY2030, net zero by FY2050), we intend to have all companies in the top 80% in terms of purchase amounts initiate action toward their SBTi targets by FY2024, and will continuously engage with these companies through briefings and individualized dialogues.

Before the briefings, approximately the top 40% of companies in terms of purchase amounts had taken action to achieve SBTi targets, but after the briefings, approximately the top 50% replied that they would be taking action in the near future. In FY2021, NTT DATA formulated hardware procurement rules and issued a news release to encourage action by companies that intend to undertake decarbonization, and to encourage decarbonization efforts by the remaining 50% or so of companies that do not plan to undertake decarbonization. In FY2022, we will consider adding SBTi target setting to the requirements to certify software development vendors, and it will start operation from FY2023. Further promote initiatives throughout the supply chain. Furthermore, in order to further expand the scope of supplier engagement in the future, the Company joined the CDP Supply Chain Program as a Premium Member in April of 2022.

### Comment

## C12.1d

### (C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.

[1st Case]

NTT DATA, together with The Nippon Telegraph and Telephone Corporation (NTT), East Japan Railway Company (JR East), and NTT FACILITIES, INC., conducted a joint demonstration project to apply the "technology for calculating optimal air conditioning control scenarios" developed by NTT to the office lobby of a large office building (standard floor area: approximately 2281m<sup>2</sup>) with commercial facilities. As a result, it was demonstrated that energy consumption could be reduced by approximately 50% while maintaining the comfort of the office lobby during the summer season. This achievement is expected to contribute to the realization of carbon neutrality, which is the joint goal of both groups, based on NTT's environmental energy vision "NTT Green Innovation toward 2040" and JR East Group's long-term environmental goal "Zero Carbon Challenge 2050. In this experiment, NTT's "technology for calculating optimal air conditioning control scenarios" was applied to the air conditioning operation of an office lobby in the building in question during the summer. The Company worked to reduce costs while building on these results, and managed to develop services from them. And, through applications at several specific businesses, we intend to achieve GHG emission reductions.

[2nd Case]

Working with unerry Co., Ltd. (hereinafter "unerry"), which has worked on various consulting projects and marketing measures that lead to changes in consumer behavior, we developed technology, based on big data on population flow, that estimates population flow information to a very sophisticated degree, and utilized this technology for the "Congestion Forecast for Tomorrow" operated by the Tokyo Olympics and Paralympics Organising Committee. This

technology is realized by taking the position information data from “Mobile Kuukan Tokei®,” population statistics information provided by NTT Docomo, Inc. (“Docomo”), and “Beacon Bank®,” an offline behavioral data platform provided by unerry, and synergizing it with the expanded estimation technology jointly developed by NTT DATA and unerry. Going forward, NTT DATA will deploy this technology as a population flow forecasting service within positional information services, and we also plan to promote its use to mitigate congestion and promote sightseeing in the midst of the COVID-19 pandemic, and combine it with the results from the [1st Case] described above in order to further optimize air conditioning operations, and advance reductions to greenhouse gas emissions.

## C12.2

### **(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization’s purchasing process?**

Yes, suppliers have to meet climate-related requirements, but they are not included in our supplier contracts

## C12.2a

### **(C12.2a) Provide details of the climate-related requirements that suppliers have to meet as part of your organization’s purchasing process and the compliance mechanisms in place.**

---

#### **Climate-related requirement**

Implementation of emissions reduction initiatives

#### **Description of this climate related requirement**

The NTT DATA Group has established procurement guidelines to promote sustainability management called the NTT DATA Guidelines for CSR in the Supply Chain. These Guidelines apply to products and services procured by the NTT DATA Group, and the following three requests have been issued to our suppliers principally from the perspective of climate change.

We have acquired letters of agreement pertaining to these Guidelines from approximately 70% of our top suppliers in terms of procurement value, and, by disseminating this information internally, we are encouraging procurements from suppliers who are promoting climate change initiatives.

1. Establishment and operation of environmental management systems  
After preparing the organizational structure, planned activities, division of responsibilities, procedures, processes, and management resources, we ask our suppliers to create environmental policies, and make continuous improvements while perpetuating the PDCA cycle.
2. Reduction of greenhouse gas emissions

We set goals for our suppliers, propose plans to them, and ask them to formulate plans to achieve continuous reductions.

3. Effective use of resources and energy

We ask them to reduce materials used on products and waste resulting therefrom, promote use of recycled resources and recycled components, and promote utilization of renewable energy.

**% suppliers by procurement spend that have to comply with this climate-related requirement**

100

**% suppliers by procurement spend in compliance with this climate-related requirement**

70

**Mechanisms for monitoring compliance with this climate-related requirement**

Supplier self-assessment

Supplier scorecard or rating

**Response to supplier non-compliance with this climate-related requirement**

Retain and engage

---

**Climate-related requirement**

Setting a science-based emissions reduction target

**Description of this climate related requirement**

As a majority of GHG stemming from supplier procurements for NTT DATA in FY2021 came from hardware, we established hardware procurement rules in FY2021, and publicly announced that we would be prioritizing procurements from hardware vendors that have publicly announced that they are implementing, or were planning, initiatives to reduce GHG.

The substance of this rule is intended to promote GHG reduction efforts at hardware vendors to achieve reductions throughout the supply chain, and we are specifically implementing the following two points.

1. Investigating the status of hardware vendors with respect to their decarbonized target settings (SBT levels), perpetuating operational cycles to promote target settings, and advancing climate actions through our supply chain.

2. Deploying internal policies promoting procurements from hardware vendors that have implemented, or are planning to implement, GHG reduction initiatives and, as a general matter, procuring products from hardware vendors on the environmental target settings status list by periodically updating and sharing said list.

The scope of the rules applies to the major categories of hardware products procured by the Company, which represent approximately 7% of the total value of all products received and inspected, and approximately 73% of the total value of all hardware

products procured.

Compliance rate when the procurement amounts for all hardware products is set as the population parameter is approximately 66%.

**% suppliers by procurement spend that have to comply with this climate-related requirement**

73

**% suppliers by procurement spend in compliance with this climate-related requirement**

66

**Mechanisms for monitoring compliance with this climate-related requirement**

Supplier self-assessment

**Response to supplier non-compliance with this climate-related requirement**

Retain and engage

## C12.3

**(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?**

Row 1

**Direct or indirect engagement that could influence policy, law, or regulation that may impact the climate**

Yes, we engage directly with policy makers

Yes, we engage indirectly through trade associations

Yes, we engage indirectly by funding other organizations whose activities may influence policy, law, or regulation that may significantly impact the climate

**Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?**

Yes

**Attach commitment or position statement(s)**

- Expressions of support for the “Business Ambition For 1.5°C” proposed by SBT
- Expressions of support for the TCFD recommendations
- Expressions of support for the “Science-Business Targets Campaign” proposed by the CDP

 CDP\_Science-Based\_Targets\_Campaign\_-\_2020\_impact\_report\_spreads.pdf

 Approved\_BA1.5.pdf

 Recommendation\_of\_TCFD.pdf

**Describe the process(es) your organization has in place to ensure that your engagement activities are consistent with your overall climate change strategy**

The expressions of support have been approved by our officers, and engagement opportunities are undertaken across the company under the direction of the Climate Change Action Promotion Committee, headed by the Representative Director, Vice President & Executive Officer, with progress being managed by our officers. The Board of Directors supervises the results of the activities of the Climate Change Action Promotion Committee as a management issue, and reports on the progress of the Committee in financial statements and the annual securities report.

## C12.3a

**(C12.3a) On what policy, law, or regulation that may impact the climate has your organization been engaging directly with policy makers in the reporting year?**

---

**Focus of policy, law, or regulation that may impact the climate**

Renewable energy generation

**Specify the policy, law, or regulation on which your organization is engaging with policy makers**

The Japanese government's "2050 Carbon Neutrality Declaration" and "Amended Act on the Promotion of Global Warming Countermeasures" (from April 2022 onward)

**Policy, law, or regulation geographic coverage**

National

**Country/region the policy, law, or regulation applies to**

Japan

**Your organization's position on the policy, law, or regulation**

Support with no exceptions

**Description of engagement with policy makers**

In addition to supporting the New Energy and Industrial Technology Development Organization's (hereinafter "NEDO") development of the proposed "business to promote the creation of research and development type startup support businesses/startup businesses utilizing technological seeds lying dormant in communities and technological seeds in the environmental field," we have identified the startups that should be adopted for this business, provided support for policy considerations with respect to initiatives by each company, among other efforts, and are advancing the development of the startup companies. The aim of this business is to create a sustainable society in the midst of structural changes such as the digital transformation and carbon neutrality. Therefore, this project is one of the policies meant to achieve the goals of the Paris Agreement.

**Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation**

**Have you evaluated whether your organization's engagement is aligned with the goals of the Paris Agreement?**

Yes, we have evaluated, and it is aligned

---

**Focus of policy, law, or regulation that may impact the climate**

Renewable energy generation

**Specify the policy, law, or regulation on which your organization is engaging with policy makers**

The Japanese government's "2050 Carbon Neutrality Declaration" and "Amended Act on Promotion of Global Warming Countermeasure" (from April 2022 onward)

**Policy, law, or regulation geographic coverage**

National

**Country/region the policy, law, or regulation applies to**

Japan

**Your organization's position on the policy, law, or regulation**

Support with no exceptions

**Description of engagement with policy makers**

We acted as a business leader of one of the eight businesses under the Ministry of the Environment's "demonstration business for producing electrolytic hydrogen from renewable energy, and supplying and utilizing hydrogen mixed gas," and were in charge of business management and business viability evaluations. In order to promote medium and long term global warming countermeasures through decarbonization and full-scale use of hydrogen, this project worked to electrolyze water using wind power generated in Noshiro City, Akita Prefecture in order to produce hydrogen with low levels of carbon, and verified that this aim could be realized and was commercially viable. This project is one of the policies meant to achieve the goals of the Paris Agreement.

**Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation**

**Have you evaluated whether your organization's engagement is aligned with the goals of the Paris Agreement?**

Yes, we have evaluated, and it is aligned



## C12.3b

**(C12.3b) Provide details of the trade associations your organization engages with which are likely to take a position on any policy, law or regulation that may impact the climate.**

---

### Trade association

Other, please specify  
CDP

### Is your organization's position on climate change consistent with theirs?

Consistent

### Has your organization influenced, or is your organization attempting to influence their position?

We publicly promote their current position

### State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

CDP collects and discloses information on activities related to CO<sub>2</sub>, water, forests, and living organisms from more than 13,000 companies worldwide, with the aim of maintaining a healthy and prosperous economy for people and the planet. NTT DATA have expressed its full support for the activities of this organization. As a CDP Gold Accredited Solutions Provider and Supply Chain Premium Member, we are taking the lead in disclosing information about its activities and making press releases to raise awareness of the organization throughout our supply chain and to encourage the supply chain companies to join the organization.

### Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

10,000,000

### Describe the aim of your organization's funding

Many of our main clients are in the public and financial sectors, and they are supportive of our net zero initiatives. In order to continue existing business and to capture new business opportunities related to decarbonization, it has become essential that we manage greenhouse gas emissions across the global supply chain.

Therefore, by investing in this international organization and vitalizing its activities, we are working to realize GHG emissions management including Scope 3.

In addition to the above, our primary investment objective will have the secondary effect of providing accurate information on our company's sustainability initiatives to our company's major clients, suppliers and foreign investors.

### Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

---

**Trade association**

Japan Business Federation (Keidanren)

**Is your organization's position on climate change consistent with theirs?**

Consistent

**Has your organization influenced, or is your organization attempting to influence their position?**

We publicly promote their current position

**State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)**

The Japan Business Federation is the largest economic organization in Japan, comprised primarily of major Japanese companies.

They have proposed the following three goals.

[A] Development of net zero emissions technology

[B] Dissemination and implementation of net zero emissions technology

[C] Financing companies that work on [A] and [B] above

We have expressed the total support for the above three goals, and are leading the ICT industry by developing technologies to visualize CO2 emissions and reduce energy consumption at data centers and offices, and are working to disseminate them throughout society as a whole through public relations activities.

**Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)**

1,000,000

**Describe the aim of your organization's funding**

The purpose of investments into the Japan Business Federation is to propose and promote carbon neutral policies, such as the introduction of renewable energy by the Japanese government, through the organization. Furthermore, this organization includes among its membership a number of banks that actively address climate change issues, and are beginning to engage in efforts to address climate change, and we intend to expand business opportunities by providing solutions that utilize our ICT technologies. By advancing them alongside our business efforts, we will accelerate our initiatives to address climate change.

**Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?**

Yes, we have evaluated, and it is aligned

**Trade association**

Other, please specify

JEITA Green x Digital consortium

**Is your organization's position on climate change consistent with theirs?**

Consistent

**Has your organization influenced, or is your organization attempting to influence their position?**

We publicly promote their current position

**State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)**

The Green x Digital consortium was established by JEITA and is open to non-JEITA member companies. NTT DATA entirely agrees with the consortium's policy of "Through initiatives such as digitization of environment-related fields and creation of new business models, we will work to enable Japanese companies related industries to lead the global green market". Our head of business department participate in the Green x Digital Consortium Steering Committee for contribute the consortium. In addition, five or more managers and general employees are dispatched to run or participate sub-working groups to visualize greenhouse gas emissions or to realize Virtual PPA in Japan. These employees are working in a variety of positions, acting in some cases as sub-leaders of the rule investigation sub-working group and the data format linking sub-working group, and are taking the lead on efforts to visualize greenhouse gas emissions information and investigate distribution-related technologies.

**Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)**

180,000

**Describe the aim of your organization's funding**

The purpose of investments into the Green x Digital consortium is to increase competitiveness in the market so that we can create more offerings for our services and products. With respect to visualization products we are developing using our own ICT technical capabilities, we are identifying demand through our activities in this organization and expanding functionality as necessary. In addition, the company is investigating ways to ensure compatibility and interoperability based on the specifications of competing products.

**Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?**

Yes, we have evaluated, and it is aligned

---

**Trade association**

Other, please specify

JISA: Japan Information Technology Service Industry Association

**Is your organization's position on climate change consistent with theirs?**

Consistent

**Has your organization influenced, or is your organization attempting to influence their position?**

We publicly promote their current position

**State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)**

JISA is an industry association consisting of 567 major information service companies, mainly comprised of Japan's leading system integrators, leading software developers, and think tanks. NTT DATA has endorsed the organization's Low Carbon Society Action Plan FY2030 targets (37.7% reduction in office-related CO2 emissions by FY2030 compared to the base year (FY2006), 7.8% reduction in data center-related CO2 emissions by FY2030 compared to the base year (FY2006)). We have also dispatched one officer to act as the vice chair of the organization, and five individuals to the data center subcommittee, and are working to support efforts to improve the technological capabilities of the industry as a whole, and reduce greenhouse gas emissions by introducing our own data center technologies.

**Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)**

3,545,000

**Describe the aim of your organization's funding**

Our reason for investing in this organization is to investigate technologies held by hardware vendors pertaining to data center energy consumption reduction and resilience enhancements, incorporate said technologies into our data centers in a timely manner, share hardware vendor technologies from areas that are not competitive to the Company with the industry as a whole, and thereby accelerate greenhouse gas emissions reductions and social infrastructure maintenance for the entire industry.

**Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?**

Yes, we have evaluated, and it is aligned

---

**Trade association**

Other, please specify  
Green Software Foundation

**Is your organization's position on climate change consistent with theirs?**

Consistent

**Has your organization influenced, or is your organization attempting to influence their position?**

We publicly promote their current position

**State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)**

The Green Software Foundation (hereinafter the "GSF") is an industry organization established under the Linux Foundation with the mission of establishing and disseminating development standards, tools, and best practices necessary to reduce CO2 emissions stemming from software.

In addition to expressing our support for the organization's goal of "reducing greenhouse gas emissions in the ICT sector by 45% by 2030," we are also working as a Steering Member to accelerate the standards-development and awareness-raising activities.

Through the activities of this organization, we have collaboratively defined "Software Carbon Intensity" as an indicator of the fuel consumption represented by software itself.

**Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)**

11,000,000

**Describe the aim of your organization's funding**

The purpose of our investment into this organization is to leverage our strengths in software development, create trends toward software-driven energy conservation (in contrast to traditional hardware-driven energy conservation efforts in the ICT sector), and foster new demand for our new services, products, and consulting services. Energy consumption is expected to be reduced through various creative means, such as the use of existing libraries during software development and runtime optimization of codes. Using software carbon intensity scoring method defined by the GSF, we have engaged in efforts to reduce greenhouse gas emissions in unexplored areas, and are accelerating the realization of carbon neutrality.

**Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?**

Yes, we have evaluated, and it is aligned

---

**Trade association**

Other, please specify

Japan Environmental Club

**Is your organization's position on climate change consistent with theirs?**

Consistent

**Has your organization influenced, or is your organization attempting to influence their position?**

We publicly promote their current position

**State the trade association’s position on climate change, explain where your organization’s position differs, and how you are attempting to influence their position (if applicable)**

Japan Environmental Club is an industry organization comprised of corporations, local governments, the general public, and researchers specializing in various fields, which addresses global environmental problems, and proposes symbiosis between corporate management and the natural environment, as well as lifestyles for citizens.

The aim of this organization is to “engage in exchange, research, and policy support projects to resolve economic and social issues centered around global environmental problems, and contribute to the creation of sustainable corporate management, symbiotic environments through the maintenance and restoration of the rich natural environments of local communities, and lifestyle principles for the day-to-day lives of citizens.” In addition to expressing our support of this mission, our Group has also dispatched our own officers to this organization so that they may support dissemination of knowledge and initiatives pertaining to SDGs and climate change to companies and citizens.

**Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)**

600,000

**Describe the aim of your organization’s funding**

The purpose of our investment in this organization is to promote awareness of the need to go carbon neutral and address climate change not only in the supply chain and data center industry, but also in society as a whole, including among citizens.

**Have you evaluated whether your organization’s engagement with this trade association is aligned with the goals of the Paris Agreement?**

Yes, we have evaluated, and it is aligned

## C12.3c

**(C12.3c) Provide details of the funding you provided to other organizations in the reporting year whose activities could influence policy, law, or regulation that may impact the climate.**

---

**Type of organization**

University or other educational institution

**State the organization to which you provided funding**

National university corporation

Tohoku University

**Funding figure your organization provided to this organization in the reporting year (currency as selected in C0.4)**

2,999,000

**Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate**

This university is engaged in research and development of drone takeoff/landing systems and takeoff/landing technology for facility inspections using drones to improve efficiency and energy conservation during infrastructure facility inspections. By providing funding, we are accelerating research and development in this advanced research. In addition, we are also working on social applications for this technology, and is working on applying them to electric power companies and other similar entities. During the reporting year, we began joint development with this university on drone takeoff/landing systems suitable for infrastructure facility inspections. Energy conservation in infrastructure facility inspections is part of Japan's green growth strategy in line with its 2050 carbon neutrality goals, and the results of this research will contribute to achieving the goals of the Paris Agreement.

**Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?**

Yes, we have evaluated, and it is aligned

## C12.4

**(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).**

---


**Publication**

In mainstream reports

**Status**

Complete

**Attach the document**

 yuho2022\_all\_00.pdf

 Annual\_Security\_Report\_FY2021\_Excerpt\_EN.pdf

**Page/Section reference**

"yuho2022\_all\_00.pdf" is The 343th Annual Securities Report

- Governance (Page 19): Describes the management system by the Internal Control Promotion Committee
- Strategy (Page 15): New Medium-Term Management Plan and strategy
- Risks (Page 24-28): Material Risks "(2) Climate-Related Risks"
- Emission targets and Other metrics (Page28): SBT and other indicators

"Annual\_Security\_Report\_FY2021\_Excerpt\_EN.pdf" is a translation file with only the relevant parts extracted.

### **Content elements**

Governance  
Strategy  
Risks & opportunities  
Emission targets  
Other metrics

### **Comment**

---

### **Publication**

In voluntary sustainability report

### **Status**

Underway – previous year attached

### **Attach the document**

 NTTDATA\_SustainabilityReport\_2021.pdf

### **Page/Section reference**

"NTTDATA\_SustainabilityReport\_2021.pdf" is the NTT DATA Group Sustainability Report for the previous year.

- Governance (Page 66)
- Strategy (Page 67)
- Risks and Opportunities (Page 68-75)
- Emissions figures ( Page 61,78,85-87)
- Emission targets (Page 57,60) : "Environmental Targets"
- Other metrics(Page 61): Medium-Term Targets "Reduce the amount of waste for final disposal"

### **Content elements**

Governance  
Strategy  
Risks & opportunities  
Emissions figures  
Emission targets  
Other metrics

### **Comment**



## C15. Biodiversity

### C15.1

**(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?**

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues	Description of oversight and objectives relating to biodiversity
Row 1	Yes, both board-level oversight and executive management-level responsibility	<p>We have positioned biodiversity as one of our key material issues in order to promote sustainability management. Furthermore, our Board of Directors also discusses target settings and strategies for material issues, including biodiversity. We have established the Green Innovation Office, have positioned climate change, biodiversity, and circular economies as priority areas, and are proceeding with various activities such as collaborative efforts with internal and external parties, risk responses, and creation of business opportunities.</p> <p>In addition, the Company has set participation in biodiversity initiatives as one of our key management indicators, and each organization has set specific goals and promoted activities with employee participation.</p>

### C15.2

**(C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?**

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments	Initiatives endorsed
Row 1	Yes, we have made public commitments and publicly endorsed initiatives related to biodiversity	Commitment to avoidance of negative impacts on threatened and protected species	<p>SDG</p> <p>Other, please specify</p> <p>The Japan Environment Club was established in 1994. Promote activities in industry, government and academia with biodiversity as the main theme. The past presidents of the Club are directors of NTTDATA, and we promotes the Club activities as a whole.</p>

### C15.3

**(C15.3) Does your organization assess the impact of its value chain on biodiversity?**

Does your organization assess the impact of its value chain on biodiversity?	
Row 1	No, but we plan to assess biodiversity-related impacts within the next two years

### C15.4

**(C15.4) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?**

	Have you taken any actions in the reporting period to progress your biodiversity-related commitments?	Type of action taken to progress biodiversity-related commitments
Row 1	Yes, we are taking actions to progress our biodiversity-related commitments	Land/water protection Land/water management Species management Education & awareness Law & policy Livelihood, economic & other incentives

### C15.5

**(C15.5) Does your organization use biodiversity indicators to monitor performance across its activities?**

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1	No, we do not use indicators, but plan to within the next two years	State and benefit indicators Pressure indicators Response indicators

### C15.6

**(C15.6) Have you published information about your organization’s response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).**

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
No publications		

## C16. Signoff

### C-FI

**(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.**

### C16.1

**(C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.**

	Job title	Corresponding job category
Row 1	Representative Director and Senior Executive Vice President	Director on board

## Submit your response

**In which language are you submitting your response?**

English

**Please confirm how your response should be handled by CDP**

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

**Please confirm below**

I have read and accept the applicable Terms