Welcome to your CDP Climate Change Questionnaire 2023

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 across 56 countries with approx. 190,000 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, 2023)
Net Sales: 3,490,182 million yen (April 1, 2022 to March 31, 2023)
Number of Employees: 195,106 (consolidated) (as of March 31, 2023)
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 and indicate whether you will be providing emissions data for past reporting years.

Reporting year

Start date

April 1, 2022

End date

March 31, 2023

Indicate if you are providing emissions data for past reporting years

Yes

Select the number of past reporting years you will be providing Scope 1 emissions data for

Not providing past emissions data for Scope 1

Select the number of past reporting years you will be providing Scope 2 emissions data for

2 years

Select the number of past reporting years you will be providing Scope 3 emissions data for

2 years

C0.3

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

Argentina
Australia
Austria
Belgium
Brazil
Chile
China
Colombia
Czechia
Denmark
Finland
Germany
Hungary
India
Indonesia
Italy
Japan
Luxembourg
Malaysia
Mexico
Morocco
Myanmar
Netherlands
Norway
Peru
Philippines
Poland
Portugal
Romania
Serbia
Singapore
Slovakia
Spain
Sweden

Switzerland
Taiwan, China
Thailand
Turkey
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 or committee	Responsibilities for climate-related issues

Director on board	The Representative Director and Senior Executive Vice President is the chairperson of the Green Action Committee (formerly called the Climate Action Committee) and bears highest executive responsibility for matters related to climate change. He also serves as the CRO. In FY2021, the companywide Climate Action Committee was established to formulate strategies 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. In FY2021, the Representative Director made decisions on a plan for the introduction of reusable energy by 2030, strengthening global linkages for climate change initiatives by NTT DATA becoming a CDP Gold Accredited Partner (climate change consultancy and software solutions provider) 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. In May 2023, the Board of Directors decided to change the Net-Zero target year for the NTT DATA Group from 2050 to 2040 on the basis of the global accelerating moves to achieve Net-Zero.

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	Overseeing and guiding employee incentives Reviewing and guiding strategy Overseeing and guiding the development of a transition plan Monitoring the implementation of a transition plan Overseeing the setting of corporate targets	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 FY2021, 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 the chairperson of the Green Action Committee (formerly called the Climate Action Committee). The Director is also the CRO and the Chair of the Internal Control Promotion Committee which undertakes company-wide risk management.

	Monitoring progress towards corporate targets Overseeing value chain engagement Reviewing and guiding the risk management process	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. Specific risk response measures included the decision to start introducing 100% renewable energy into our headquarters office building in Japan and into NTT DATA's three main services, as well as start supply chain briefings conducted for the top 80% of suppliers by purchase amount to share our GHG emissions reduction targets, reduction know-how and encourage suppliers to set SBT targets with the aim of supporting suppliers' GHG emissions reduction initiatives. The Director also manages and guides employee incentivization, including President Award as part of our Corporate Foundation Day awards. In 2023, our Representative Director, President and Chief Executive Officer presented this award to NTT DATA Italy for their carbon sink solution. The Director serving as the Chair of the Green Action Committee (formerly called 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 (FY2022-2025), and a Board member reviewing and guiding strategy was implemented. Also, in FY2021, response to the SBTi announcement of the Corporate Net-Zero Standard 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. Further, in May 2023, the Board of Directors decided to change the Net-Zero target year for the NTT DATA Group from 2050 to 2040 in light of our GHG emissions reduction status to date and GHG emissions management associated with the future expansion of our business scale, as well as the global acceleration of moves to achieve Net-Zero.

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	NTT DATA has established a Green Action Committee (formerly called the Climate Action Committee) for the two purposes of achieving Net-Zero 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. 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.

C1.2

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

Position or committee

Chief Risks Officer (CRO)

Climate-related responsibilities of this position

Providing climate-related employee incentives
Developing a climate transition plan
Implementing a climate transition plan

Setting climate-related corporate targets
Monitoring progress against climate-related corporate targets
Managing value chain engagement on climate-related issues
Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Coverage of responsibilities

Reporting line

Reports to the board directly

Frequency of reporting to the board on climate-related issues via this reporting line

Quarterly

Please explain

The CRO, who is the Representative Director and Senior Executive Vice President and the Chairperson of the Green Action Committee (formerly called 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 (FY2022-2025).
The Climate Action Committee (currently called the Green Action Committee), which was launched in FY2020 to execute this initiative company-wide, in FY2021 also newly established the Green Innovation Office and has progressed initiatives to involve all NTT DATA business units by establishing around ten taskforces.
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 the reporting year, it was decided to change our Net-Zero target year from 2050 to 2040.
The CRO also manages and guides employee incentivization, including President Award as part of our Corporate Foundation Day awards. In 2023, our Representative Director, President and Chief Executive Officer presented this award to NTT DATA Italy for their carbon sink solution.
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 three times a year. In the reporting year, climate change-related risk was separately defined as one of only 16 material risks in company-wide risk management. Those 16 items of material risk were confirmed by the Board and disclosed in the annual securities report.
In FY2022, through the Climate Action Committee (currently called the Green 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 carbon neutral 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.
In May 2023, the Board of Directors decided to set the Net-Zero target year for the NTT DATA Group 10 years earlier in light of the global acceleration of moves to achieve Net-Zero.

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

Director on board

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary

Performance indicator(s)

Achievement of climate transition plan KPI
Progress towards a climate-related target
Achievement of a climate-related target

Incentive plan(s) this incentive is linked to

Both Short-Term and Long-Term Incentive Plan

Further details of incentive(s)

Since FY2022, climate change responses have become part of directors' medium- to long-term performance-linked compensation, which comprises 20% of director remuneration. The extent of achievement of reduction targets for Scope 1 and 2 GHG emissions against the base year of FY2020 is consequently linked to 20% of directors' financial remuneration so as to deepen employee and management engagement in achieving the targets. Specifically, KPIs have been set for carbon emissions reduction, etc., for each business organization, enhancing employee engagement in the achievement of targets.

Short-term performance-linked compensation with a 5% evaluation weight is also given to directors who are not Audit and Supervisory Committee members in the event that our GHG emissions reduction plan is achieved.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

This incentive contributes to achieving the transition plan milestones of Net-Zero Scope 1 and 2 emissions in data centers by 2030 and in offices by 2035, as well as Net-Zero Scope 1, 2 and 3 emissions by 2040.

Entitled to incentive

Management group

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary

Performance indicator(s)

Progress towards a climate-related target

Incentive plan(s) this incentive is linked to

Short-Term Incentive Plan

Further details of incentive(s)

Management staff take on the mission of contributing to sustainability, climate change responses included, in line with their roles, and sustainability contribution targets are set for each fiscal year, with compensation linked to the extent to which these targets are achieved.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

This incentive contributes to achieving our annual GHG reduction KPIs, the 68% reduction of Scope 1 and 2 emissions by 2030 (compared to FY2021) and the 42% reduction of Scope 3 emissions by 2030 (compared to FY2021), both of which are milestones in our transition plan.

Entitled to incentive

All employees

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary

Other, please specify

Internal company award

Performance indicator(s)

Achievement of climate transition plan KPI

Incentive plan(s) this incentive is linked to

Short-Term Incentive Plan

Further details of incentive(s)

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, NTT DATA Italy, a Group company in Italy, received the President Award for its carbon sink solution.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

This incentive contributes to achieving our annual GHG reduction KPIs, the 68% reduction of Scope 1 and 2 emissions by 2030 (compared to FY2021) and the 42% reduction of Scope 3 emissions by 2030 (compared to FY2021), both of which are milestones in our transition plan.

Entitled to incentive

Chief Procurement Officer (CPO)

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary

Performance indicator(s)

Progress towards a climate-related target
Increased engagement with suppliers on climate-related issues

Incentive plan(s) this incentive is linked to

Short-Term Incentive Plan

Further details of incentive(s)

Our CPO takes on the mission of contributing to climate change responses and other elements of sustainability and sets sustainability contribution targets such as improving supplier engagement for each fiscal year, with compensation linked to the extent to which these targets are achieved.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

This incentive contributes to achieving our annual GHG reduction KPIs, the 68% reduction of Scope 1 and 2 emissions by 2030 (compared to FY2021) and the 42% reduction of Scope 3 emissions by 2030 (compared to FY2021), both of which are milestones in our transition plan.

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	3	We define "Short-term" as the period until 2025. The reporting period for the contents of this response is FY2022, while the period of our medium-term management plan is from FY2022 to FY2025, although the reporting point is July 2023. Therefore, the short-term is the period from FY2022 to FY2025, and the financial impact and cost of countermeasures and investments will be answered.
Medium-term	3	7	We define "Medium-term" as the period until 2030.
Long-term	7	17	We define "Long-term" as the period until 2040.

C2.1b

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

The Internal Control Promotion Committee, which meets three times 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 100 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 Green Action Committee (formerly called 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 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.
* Magnitude of 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 three times a 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 16 material risks to the company. Those 16 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 FY2040), and opportunities are assessed by the company-wide Green Action Committee (formerly called the Climate Action Committee) chaired by the CRO. Risks are assessed by the Internal Control Promotion Committee and the Green Action Committee (formerly called the Climate Action Committee) four times a year, and opportunities are assessed by the Green Action Committee (formerly called the Climate Action Committee) four times a year. 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 16 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 Green Action Committee (formerly called 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 2023, the Green Action Committee (formerly called the Climate Action Committee) identified risks and opportunities and then approved a strategy for the company's emissions reduction targets (renewable energy introduction plans for each fiscal year, etc.). Reports were also made on the status of climate change-related business growth in Japan and overseas, the launch of a global business strategy team, the status of the company's GHG emission reduction, and the status of progress with changing employees' sustainability behavior.
In relation to progress and outcomes from risk responses to climate change, as part of the Green Action Committee (formerly called the Climate Action Committee)'s mission, approx. ten taskforces were formed, including External Disclosure Taskforce, Business Development Taskforce and a GHG Reduction Taskforce, and having assigned a responsible executive officer to each taskforce, a process was established for weekly to monthly reporting to the executive officer in charge. 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	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. 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 Cap-and-Trade program (Tokyo CaT) in accordance with Tokyo Metropolitan Ordinances, a cost of approx. 300 million yen is expected to be incurred. (Calculated as: Amount of certificates or credit needed to be purchased in the third period: 505,000 t-CO2 x Carbon credits price: 650 yen/t-CO2. * It is anticipated there will be a partial offset due to a surplus from the second period).
Emerging regulation	Relevant, always included	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. 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 approx. 80% 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 energy will require to be procured. However, renewable energy 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 energy 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, as well as

		the “Advanced economies with net zero emissions pledges” cited in the “Table B.2 CO2 prices for electricity, industry and energy production in selected regions by scenario” of the “World Energy Outlook 2022” report, for actual result of the annual GHG emissions in FY2020 (Scope 1 & 2 162Kt-CO2e), which gives rise to estimates of approx. 7 billion yen in carbon price costs from FY2022 to FY2025. This was confirmed by the Board and noted in the annual securities report.
Technology	Relevant, always included	As demand for a Net-Zero global society increases, innovations leading to new technologies and mechanisms are needed. If NTT DATA falls behind its competition in developing technologies required to respond to climate change, it may no longer be able to meet the needs of clients with whom it has developed relationships over many years, which would create the risk that its business would shrink and its share of the IT services market would be damaged. For example, carbon removal initiatives are needed for reducing residual GHG emissions that cannot be dealt with via energy conservation and renewable energy for achieving Net-Zero. Development and projects including DACCS (Direct Air Carbon Capture and Storage) and blue carbon are being pursued around the world, but present issues in terms of reducing costs and realizing large-scale operations still exist. If we fall behind our competition in such areas, we will lose opportunities for new business. Better environmental performance, in addition to security and convenience, is required for clients’ use of our data centers. Advances are being made in the development and introduction of new technologies such as immersion cooling and A/C IoT for demonstrating higher environmental performance in data centers. If we fall behind in such areas, migration to data centers and cloud services with better environmental performance could advance even to NTT DATA’s existing data center clients, which would create the risk that NTT DATA’s existing business will contract.
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	The demand to respond to social climate change is increasing globally, and thus national governments, and companies in many industries, must achieve the innovations needed to create business structural transformations and new technological uses and mechanisms for

		mitigating and adapting to climate change. NTT DATA provides services, mainly in the form of business consulting and the construction and operation of systems, etc., to its clients. If NTT DATA falls behind its competition in providing the new technologies and mechanisms our clients need to innovate with respect to climate change, we will not only lose new business opportunities relating to climate change, but also run the risk of gradually losing our existing clients as society responds to climate change.
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 we will lose our customers, and 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 24 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 and climate-related public disclosure. 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, 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. Abnormal weather could also affect employee safety during commuting or on business trips, and there are also risks around securing employee safety and dealing with greater operating loads while recovering from data center transmission breakdowns and infrastructure damage. An anticipated material financial risk is an estimated loss of earnings of 14 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.
Chronic physical	Relevant, always included	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 2.26 GWh and the annual energy cost is estimated to increase by approx. 70 million yen.

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 approx. 90% of consolidated turnover, and if introduction is decided in Japan, where most clients are located, at least 50% 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 approx. 80% 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 if we continue using fossil-fuel-derived electricity. In that event, procurement of power from renewable energy is necessary. Since the unit price of renewable electricity is currently 2~5 yen higher than fossil-fuel-derived electricity, the power procurement cost 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 as well as the carbon price of the “Advanced economies with net zero emissions pledges” cited in the “Table B.2 CO2 prices for electricity, industry and energy production in selected regions by scenario” of the “World Energy Outlook 2022” report was applied to the actual result of annual GHG emissions. Specifically, if the actual result of FY2020 annual GHG emissions (Scope 1 & 2 162Kt-CO2e) continues to 2025, then we estimate that from FY2022 to FY2025, approx. 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 actual result of FY2020 annual GHG emissions (Scope 1 & 2 162Kt-CO2e) were to continue to 2040, then from FY2025 to FY2035 we estimate approx. 30 billion yen in carbon price costs will result.

Calculation formula
162,000 t-CO2e/year * USD75/t-CO2e * 135JPY/USD * 4 years = 6,561,000,000 yen
Roughly 7,000,000,000 yen
※This financial impact was approved by the Board of Directors and included in the FY2022 Annual Securities Report.

Values used
•Actual result of FY2020 GHG emissions (Scope 1 and 2): 162,000 t-CO2e
•IEA scenario carbon price (to 2025): USD75
•IEA scenario carbon price (to 2030): USD140
•IEA scenario carbon price (to 2040): USD205
•Exchange rate assumption: USD135/JPY

Cost of response to risk

5,000,000,000

Description of response and explanation of cost calculation

To minimize the impact of a carbon tax, we have been purchasing renewables and installing inhouse renewables generation equipment in our buildings. In 2018, we completed construction of Mitaka Data Center EAST, which incorporates PV generation and an outside air-cooling system using natural energy. In 2020, we formed a partnership agreement toward realizing a decarbonized society with Okinawa Prefecture, and in 2022, we achieved carbon neutrality in the power used in our BPO Center there. In FY2022, we expanded the introduction of renewables, generating 825MWh on a consolidated basis. We are also introducing renewables in our DCs and offices globally. Our plan is to achieve Net-Zero in the use of our services in our DCs by 2030 and in our offices by 2035.

To increase the amount of renewable energy used in our DCs and offices, we are also introducing new technologies. For example, we have been conducting demonstration testing of film-type perovskite solar cells installed on the exterior walls of buildings, and plan to verify the generating efficiency and GHG reduction effect from 2024. Going forward, we also plan to install in other owned existing facilities to generate and utilize renewable energy, contributing to local production and local consumption of renewables.

To save energy in our DCs, we plan to invest in a new method of immersion cooling that eliminates the need for air conditioning and reduces cooling energy by up to 97%, achieved by using a special liquid to directly cool ICT equipment, and to invest in IoT technology for further energy savings. Together with renewable energy, we envisage investing around ¥900 million annually, and around ¥1 billion in capital investment in energy-saving construction in DCs in FY2023.

Under our Medium-Term Management Plan, covering the four-year period from FY2022 to FY2025, we need to procure electricity from renewable energy sources to continue our business. For this reason, we plan to make cumulative investments totalling around ¥5 billion ([¥900 million per annum x 4 years] + [¥1 billion in additional funds] ≒ ¥5 billion) in energy-saving measures and the introduction of renewable energy. Given our plan to achieve Net-Zero in our DCs by 2030 and in our offices by 2035, we will also invest around ¥20 billion in cutting-edge renewable energy technologies, energy-saving technologies, and long-term PPA from FY2025 to FY2035. This was approved 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 40% 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)

14,000,000,000

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 14 billion yen (Dividing the FY2021 turnover from services that would be impacted, of 1,000.4 billion yen by days in the year, a five-day loss in turnover would be approx. 14 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 1,000,400,000,000 yen/365 days * 5 days = 13,704,109,589 yen
Roughly 14,000,000,000 yen

Cost of response to risk

9,000,000,000

Description of response and explanation of cost calculation

Together with TEPCO Power Grid, Inc. and Hitachi, NTT DATA established Grid Sky Way LLP in March 2020. The LLP 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 including flooding, which becomes more severe due to extreme weather events, and our role is to build a testing environment for the drone's operating system. In FY2021, the LLP tested automatic drone flight for inspection of power facilities by flying drones over transmission lines near power transmission facilities in Okayama Prefecture. In FY2022, the LLP engaged in joint drone testing using the Grid Sky Way system in 44 spots around Japan over nine months. The next step is to build a drone flight path platform to support drone flight beyond visual line of sight toward drone use in infrastructure maintenance and as a disaster countermeasure. This will enable a quick and comprehensive understanding of evacuation routes, the extent of damage to buildings and flooding situation of data centers in the event of a disaster, upgrading the disaster response operations of administrative institutions and infrastructure providers.
During the COVID pandemic, NTT DATA has enhanced the company's internal network band to establish and improve a telecommuting environment for staff, which has contributed to enhancing data center resilience against climate change. Also, in FY2022, we conducted two rounds of disaster drills including data center clients to ensure a quick initial response to natural disasters. We plan to invest in updating our disaster response system and will create system requirements, including those for clients.
The cost calculation is based on actual investments in FY2022 of ¥2.25 billion, comprising ¥1.25 billion for enhancing telecommunication lines and adding systemic functions, including building a verification environment for drone traffic management, and ¥1 billion for renewing building facilities to boost durability by, for example, building data centers with resilience functions, combined with planned investment in amounts equivalent to the FY2022 total (¥2.25 billion) in each of FY2023 and subsequent years.

During the four years of our Medium-Term Management Plan (FY2022–2025), we will invest a cumulative total of ¥9 billion (¥2.25 billion × 4 years). This was approved 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 12.94% (as of 31 March 2023), 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 20.10% (as of 31 March 2023). In Japan, multiple financial institutions have decided to declare compliance with the GHG supply chain emissions calculation standards for financial institutions, the Partnership for Carbon Accounting Financials, 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)

24,000,000,000

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 approx. 24 billion yen. This has been confirmed by the Board and noted in the annual securities report.
* Estimated from 1,402,500,000 issued shares (31/9/2022)

Calculation formula
1,402,500,000 shares × 1% × (market capitalization 2,429,130,000,000 yen/1,402,500,000 shares) = 24,291,300,000 yen
Roughly 24,000,000,000 yen

Cost of response to risk

5,000,000,000

Description of response and explanation of cost calculation

To respond quickly to demands from investors for climate-related information disclosure, and to speed up initiatives to reduce GHG, NTT DATA has established the dedicated Green Innovation Office, which responds to increased demands for information disclosure by progressing efficiencies and climate action in GHG calculation and visibility. In FY2023, we are providing renewable energy and energy conservation service menus designed to reduce GHG using digital technologies, enabling clients to develop mechanisms for reducing emissions through decarbonization strategies. Specifically, this comprises a one-stop service from securing land for solar power generation to design, procurement and construction, subsidy utilization, connection to the grid, and a menu of optimization services using digital technologies for inter-company partnership in supply chains, transport and sales, and buildings with large-scale energy equipment. We also plan to move our IT services onto the cloud and shift our business model from device sales to service provision, aiming to achieve Net-Zero by 2040 by having clients shift their operations to our BPO centers and DCs and by accelerating our initiatives to reduce GHG, including cutting-edge energy conservation and 100% renewable introduction. In addition, in FY2022, the disclosure of sustainability information in our FY2021 Annual Securities Report was selected as a best practice by Japan's Financial Services Agency (FSA). Selection was based on discussion among the FSA, investors, analysts, and companies, with NTT DATA's disclosure identified as a best practice aligned with the four thematic areas of TCFD (governance, strategy, risk management, and metrics and targets).
In the medium-term management plan (FY2022 to FY2025) the investment in the above Green Innovation Office activities will be ¥1~1.5b a year, which will be a cumulative

investment of ¥5b (¥1b + ¥1b + ¥1.5b + ¥1.5b = ¥5b). Based on actual investment in FY2021 and FY2022 to build distribution infrastructure for distributed energy information and the FY2023 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 carbon neutrality, and around 50% in investment in initiatives to promote innovation for GHG visibility and reduction actions to achieve NTT DATA's own Net-Zero.

Comment

The provision of such climate-related IT services and consulting will also enhance our climate action assessment.

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

GHG reductions in accordance with SBTi's Corporate 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 approx. 50% of NTT DATA's turnover, disclosure of sustainability-related information including climate change in annual securities reports become mandatory from FY2023. Important NTT DATA clients are also listed on the prime market, so visibility of GHG 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 GHG, 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 approx. seven percent CAGR from 2022 to 2023. 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 approx. 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. In FY2023, we checked the validity of the estimate based on sampling of the value of actual projects. The figure has been approved by the Board of Directors.

•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 GHG 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

51,000,000,000

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 multiple carbon footprint visibility platforms, pre-sales costs and costs of skilling technicians.
For example, in collaboration with a Japanese chemical material manufacturer, NTT DATA jointly developed a carbon footprint infrastructure for separate final products, which 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 footprint of each final product. In FY2022, NTT DATA further expanded its global business, with our European group companies developing an emission visualization dashboard which uses a method created by GSF for assessing carbon emissions when using software, in which NTT DATA participates as a member, and we are expanding the scope of application while accepting ongoing orders from clients. In FY2023, we will support clients' energy-saving measures and introduction of renewables through our GHG reduction services. We are also participating in testing toward the establishment of technologies to realize the carbon separation and recovery cost below ¥2,000/t-CO2 in 2030 sought by the government and will further strengthen investment in business creation and carbon recovery technologies which will provide new means of carbon reduction toward achieving carbon neutrality. Investment for the FY2022–2025 period will be ¥51 billion. This represents the cumulative total for four years derived from the ¥12.8 billion in FY2022 noted below.
1. ¥2 billion for company-wide technology development investment contributing to climate change adaptation and mitigation, including joint development of a carbon footprint platform by final product and market entry (joint R&D with clients ¥0.8–1.2 billion + skilling technicians for new technologies and pre-sales support ¥0.8–1.2 billion)
2. ¥4.5 billion for global pre-sales expenditure and actual business, including deployment of the emission visualization dashboard in Europe, etc.
3. ¥6.3 billion in digital service creation and PoC, supporting the emission reduction, social transformation and climate-related investment by business area (approx. ¥3 billion in the creation of joint projects and approx. ¥3 billion in social deployment through sustainability-related data linkage and the PoC)
The above investment has been approved by the Board and 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

The Glasgow Financial Alliance for Net-Zero (GFANZ), launched in April 2021, issues guidance and reports related to transition plans, with financial institutions now encouraging the companies in which they invest to reduce their GHG emissions.
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 GHG 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 in FY2021. NTT DATA is newly providing consulting services in formulating corporate climate change response strategies, visibility of GHG emissions, energy saving in data centers, use of renewable energy, 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)

40,000,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

According to “Global Management Consulting Services Global Market Report 2022: Market Forecast, Trends and Strategies” by global market research firm The Business Research Company, the global consulting services market will reach a value of ¥178.3 trillion ($1,320.94 billion) in 2026, at a CAGR of 7.9% (FY2022–2026). A market survey by Global Information forecasts that even just the sustainability consulting market will reach ¥1.6 trillion by 2028, with a CAGR of 5.2% (2022–2028). 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 357.5 billion yen, which by FY2023 at a CAGR of six percent, is anticipated to reach 380 billion yen.
From the FY2025 sustainability-related consolidated sales target, which adds the 5.7% per annum average sales growth rate from the last three years to actual consolidated sales in FY2021, we see the sustainability-related consolidated sales ratio for FY2025 as sitting at 6.3%. We also used the 18% envisaged ratio of FY2025 consulting sales, which adds the ratio of NTT DATA’s FY2021 consolidated sales comprising consolidated consulting sales and the growth rate of the latter, to calculate sustainability-related sales in FY2025. As a result, climate-related consulting service opportunities in FY2025 are estimated to increase to 40 billion yen of turnover. This figure has been confirmed by the Board and noted in the annual securities report.

Calculation formula
FY2021 actual consolidated sales ¥2,551,900,000,000 x (1.057)4 x sustainability-related ratio 6.3% x consulting sales ratio 18% = ¥36,100,000,000
※This financial impact was approved by the Board of Directors and included in the FY2022 Annual Securities Report.

Cost to realize opportunity

4,000,000,000

Strategy to realize opportunity and explanation of cost calculation

In contrast to sufficiently high market demand, securing sufficient human assets capable of high-quality consulting is likely to be an upper limiting factor for financial impact. In response, our new Medium-Term Management Plan (FY2022–2025) identifies strengthening our consulting capacity as a strategy, and we plan to train and acquire consultants to develop strategies and provide implementation support. At present, we have around 7,000 consultants globally, but we will boost our sustainability-specific consulting while strengthening partnerships with various specialist areas. Specifically, we will engage in the following consultant training and acquisition in FY2022-2025.
1. Internal training: 200-400 people with a grounding in consulting will be selected from among consulting, marketing and development personnel and allocated to projects in climate change and other fields or trained off the job.
2. Acquisition of sustainability and climate-related consultants: acquisition of human resources will be progressed through recruitment of 100-300 people with experience as consultants in climate change related fields, or with experience related to climate change in government or corporations globally.
Additionally, sustainability in-service training is being incorporated into the standard internal training system, together with mid-term hiring and internship systems being used for sustainability-related training for mainly the younger personnel. We are also using IT technology to share knowledge within the Group through the Digital Workplace information sharing solution, online seminars, and websites.
In 2022, NTT DATA invested approx. one billion yen in internal training, acquisition and in-service training of consultants relating to climate change. Internal and in-service training accounted for ¥500 million of that, while ¥500 million went into the acquisition of sustainability- and climate change-related consultants.
Over the four-year period from FY2022 to FY2025, we will make cumulative investments of ¥4 billion (¥1 billion x 4). Based on the expenditure of ¥500 million–¥1 billion related to training and acquiring personnel extracted from expenditure on activities related to strengthening our consulting capacity in FY2022, and considering the rate of personnel increase, we have produced the figure of around ¥1 billion for each of the four years. This investment was approved by the Board of Directors and noted in our 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 energy 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 energy, 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 of 3 April 2023). Over 90% of Japan's credit unions, or 241 credit unions (as of 3 April 2023), are members of the comprehensive online Shinkin Kyodo System for credit unions, giving us 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 committed to achieve Scope1&2 Net-Zero in all owned data centers by 2030 and has begun gradually implementing renewable energy introduction. This will result in all our cloud services from our assets using our data centers being operated with 100% renewable energy.

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)

210,000,000,000

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 320 billion yen. In FY2025 we expect turnover will be 530 billion yen. By dint of responses to improved resilience related to climate change and introduction of renewable energy, we believe turnover will grow, and anticipate the increase in turnover from FY2022 to FY2025 will be a financial impact of 210 billion yen.

Calculation formula
Cloud-related FY2025 turnover 530 billion yen – FY2021 turnover 320 billion yen = resilience and renewable energy response increase of 210 billion yen

Cost to realize opportunity

25,000,000,000

Strategy to realize opportunity and explanation of cost calculation

As part of our efforts to improve climate-related resilience and promote renewable energy in the cloud, as of April 2022, we introduced 100% renewable energy to provide three services, including Open Canvas®, a highly reliable and secure cloud service. We have also declared that the use of our services at our data centers will be Net-Zero by 2030 and have begun phasing in renewable energy sources accordingly. Introducing 100% renewable energy to these services is part of that strategy, and we plan to systematically transition the cloud services that use our data centers to renewable energy operations to achieve Net-Zero in in the use of our services in our data centers by 2030 and across our whole supply chain by 2040.
It has been resolved by the Board of Directors and noted in the annual securities report that ¥25 billion will be invested during the period of our Medium-Term Management Plan (FY2022–2025) on technology development related to resilience improvement and renewable energy deployment in the cloud, as well as on improving cloud services and the operation and maintenance thereof. This includes ¥10.5 billion to develop resilient cloud-related technologies that address climate change, strengthen our global delivery centers, and shift our cloud services to renewable energy, and additional investment of ¥14.5 billion to improve our cloud services and the operation and maintenance thereof, as well as to increase the resilience and extend the life of existing cloud services.

Comment

C3. Business Strategy

C3.1

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

Row 1

Climate transition plan

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

Publicly available climate transition plan

Yes

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

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

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

In FY2021, NTT DATA has decided at a general meeting of shareholders on the policy of sustainability management including the SBTi 1.5 °C target for carbon neutrality in 2050, as one of new medium-term management plan. This was refined in the reporting year, setting NTT DATA's Net-Zero target year to 2040. This content is disclosed in the FY2022 Annual Securities Report (Page 25).

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yuho2023_all.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		Scenario 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. Boundary

			The NTT DATA Group engages in business across a total of five segments, those being “Public & Social Infrastructure,” “Financial” and “Enterprise & Solution” in Japan and in “North America” and “the EMEA & LATAM” overseas. Since we expect that all our clients and suppliers in these areas are likely to experience climate-related impacts, the boundary is all businesses and their associated value chains. Time horizon Now through 2050 (long-term) Trends in socioeconomic development An SSP1-1.9 world is anticipated.
Transition scenarios IEA SDS	Company-wide		Scenario Renewable energy is introduced in at least 50% of operations by 2050. Finally, the physical impacts of climate change stay at FY2021 levels. Boundary The NTT DATA Group engages in business across a total of five segments, those being “Public & Social Infrastructure,” “Financial” and “Enterprise & Solution” in Japan and in “North America” and “the EMEA & LATAM” overseas. Since we expect that all our clients and suppliers in these areas are likely to experience climate-related impacts, the boundary is all businesses and their associated value chains. Time horizon Now through 2050 (long-term) Trends in socioeconomic development An SSP1-2.6 world is anticipated.
Physical climate scenarios RCP 8.5	Company-wide		Scenario Abnormal weather occurrences increase 8 times over the current level due to a 4°C rise as shown in the 6th IPCC Report. The risk of events that lead to facility damage and transportation stoppages due to abnormal weather rises above that of the reporting year. Boundary The NTT DATA Group engages in business across a total of five segments, those being “Public & Social

			Infrastructure," "Financial" and "Enterprise & Solution" in Japan and in "North America" and "the EMEA & LATAM" overseas. Since we expect that all our clients and suppliers in these areas are likely to experience climate-related impacts, the boundary is all businesses and their associated value chains. Time horizon Now through 2050 (long-term) Trends in socioeconomic development An SSP5-8.5 world is anticipated.
Physical climate scenarios RCP 1.9	Company-wide		Scenario Abnormal weather occurrences remain at about the same level as the reporting year due to a 1.5°C rise as shown in the 6th IPCC Report. Boundary The NTT DATA Group engages in business across a total of five segments, those being "Public & Social Infrastructure," "Financial" and "Enterprise & Solution" in Japan and in "North America" and "the EMEA & LATAM" overseas. Since we expect that all our clients and suppliers in these areas are likely to experience climate-related impacts, the boundary is all businesses and their associated value chains. Time horizon Now through 2050 (long-term) Trends in socioeconomic development An SSP1-1.9 world is anticipated.
Transition scenarios IEA STEPS (previously IEA NPS)	Company-wide		Scenario Renewable energy to be introduced will account for about 25% in 2050. Carbon emissions will be maintained at the current level through to 2030 and subsequently decline slightly. Boundary The NTT DATA Group engages in business across a total of five segments, those being "Public & Social Infrastructure," "Financial" and "Enterprise & Solution" in Japan and in "North America" and "the EMEA & LATAM" overseas. Since we expect that all our clients and suppliers in these areas are likely to experience

			climate-related impacts, the boundary is all businesses and their associated value chains. Time horizon Now through 2050 (long-term) Trends in socioeconomic development An SSP2-4.5 world is anticipated.

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

The premise for analysis was evaluation of the materiality of ten risks and five opportunities, and the following three risks and three opportunities were judged material. Business impacts related to these have been analyzed and incorporated into our strategy.

SSP1-1.9
(Transition risks)
1. Risk of reputation loss due to low climate change assessment
There are growing demands for climate-related disclosure. If we were unable to respond to those demands, there is a risk of a fall in stock price associated with a decline in ratings by investors and worse financial terms from the market.

2. Increased costs due to carbon pricing
Turnover from EU and Japan, where carbon pricing has already been introduced and regions where its introduction is being considered, account for approx. 80% of NTT DATA's 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, there will be cost increases due to carbon pricing.

(Opportunities)
3. Increased demand to create sustainability-related offerings
The market related to climate change is growing, and even in Japan, where it accounts for approx. 50% of turnover, disclosure in annual securities reports of information on climate change and other aspects of sustainability has become compulsory as of FY2023. There are opportunities to acquire new revenue by rolling out AI services that optimize air conditioning in DCs and office buildings, leveraging our major strength, software development capabilities, and visibility solutions for GHG.

4. Increased consulting services for realizing a sustainable society
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 GHG 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. Increased demand for greater cloud resilience
It is anticipated that with increasing abnormal weather and 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, resistant to disasters and contribute to energy savings, and by also operating those services using renewable energy, we anticipate even greater growth in business opportunities.

SSP5-8.5
(Physical risks)
6. Increased disaster risk due to abnormal weather
We have sites in places where IPCC Report 6 regional risks are high, and interruptions to power transmission to DCs in and outside Japan due to abnormal weather, and shutdown of DCs 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 our segments and risk of a decline in ratings due to inability to respond to investor demands for climate actions. Reflecting the results of that assessment, we plan to achieve Net-Zero in our DCs by 2030 and in offices by 2035 through energy saving and renewable introduction. In May 2023, the Board also decided to bring forward the long-term Net-Zero target year by 10 years from 2050 to 2040 based on the scenario analysis.

(Physical risks) Results of SSP5-8.5 scenario analysis
In the SSP5-8.5 scenario, we assessed that there is a high level of risk of impact on turnover from increased abnormal weather, associated social and economic damage and decline in client revenue. We also assessed that in Japan, with 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. In August 2021, we decided to build DCs with resilience functions to reduce physical risks, and services were launched from June 2023.

(Opportunities) Results of SSP1-1.9 scenario analysis
In the SSP1-1.9 scenario, we assessed that creation of sustainability-related offerings tied to essential social systems and regulations is material. As need for formulation of

strategies and reduction measures in business increase, we anticipate that climate-related consulting services to clients will grow. In May 2023, the Board decided to increase investment in sustainability-related offerings in FY2023-FY2025 based on the scenario analysis.

(Opportunities) Results of SSP5-8.5 scenario analysis
We assessed that there is a high level of risk of impact on turnover from increased abnormal weather, 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. In May 2023, the Board decided to increase investment in resilient cloud services in FY2023-FY2025 based on the scenario analysis.

(Scenario Analysis Study Groups and its Future Plans)
In FY2022, a company-wide scenario analysis study group spent six months developing specific scopes and time horizons for scenario analysis aiming for strengthening the Group's resilience with the focal question of 'how will the phenomenon of climate change impact on our business within a 2050 time horizon?' Specifically, the group conducted analyses of external trends using the STEEP model recommended by TCFD and created a four-quadrant scenario factoring in uncertainty and potential impacts. We aim to reflect the results to our sustainability management and in our long-term management strategy for 2025 onward.

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	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 40 billion yen by FY2025 (as stated in our annual securities report). Furthermore, we expect to achieve net sales from our cloud business of up to 530 billion yen by FY2025. 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.
Supply chain and/or value chain	Yes	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 14 billion yen per year (as stated in our annual securities report). If an outage occurs, not only could that represent a risk of 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. On the other hand, SSP1-1.9 assumes a global social consensus on achieving Net-Zero, with global supply chains restricted by trade rules between countries associated with carbon taxes, etc. As a multi-vendor company with branch offices in various regions, we will develop local-level mutual understanding as a strength and work to strengthen our relationships with stakeholders. These initiatives will help us to adapt to climate change and mitigate its effects.
Investment in R&D	Yes	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 increase by 210 billion yen in FY2025. 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. 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&D. The aim of IOWN is to achieve major advances in energy efficiency by integrating electronics and photonics so as to supply processing capacity that can cope even with an explosive increase in the amount of information. Among these actions, our actions toward realizing a more resilient cloud will help our company adapt to climate 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 FY2025 to FY2035 by the carbon price of the International Energy Agency (IEA) Net Zero Scenario, we anticipate that 30 billion yen added costs will happen, which will have a significant financial impact on the company's operating costs and profits.

		The action 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	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 1. Revenues (Opportunity 1) Increase in need for creation of “climate change and sustainability-related offerings” -Short-term period - 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: 51 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. (Opportunity 2) Increased consulting services for realizing a sustainable society -Short-term period - Magnitude of impact: medium-high -Opportunities: FY2025 sales impact: +40 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. (Opportunity 3) Increased need for transition to the cloud, which contributes to resilience and carbon neutrality -Short-term period - Magnitude of impact: high -Opportunities: FY2025 sales impact +210 billion yen It is estimated that there will be increased opportunities to growing NTT DATA's cloud business as a result of improved resilience and renewable energy adoption related to climate change. -Investment amount: FY2022 to FY2025: 250 billion yen Record amounts for cloud-related technology development and for cloud-related investments in, for example, strengthening global delivery centers. 2. Indirect costs (Risk 1 in CDP = Risk 3 in the FY2022 Annual Securities Report) Increased costs from carbon pricing -Period: Long-term - Magnitude of impact: Medium-high -Projected financial impact: ▲7 billion yen between FY2022 and FY2025 Achieving Net-Zero 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 FY2025 to FY2035 by the carbon price of the International Energy Agency (IEA) Net Zero Scenario. Note: FY2025 to FY2035 cumulative total of 30 billion yen -Countermeasure cost/Investment amount: 5 billion yen Promote Net-Zero 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). 3. Capital allocation (Risk 2) Increased disaster risk due to abnormal weather -Period: Short-term -Magnitude of impact: Medium-high -Projected financial impact: ▲14 billion yen 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 located in the Tokyo Metropolitan Area due to a typhoon. -Countermeasure cost/Investment amount: 9 billion yen 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. 4. Assets (Risk 5 in CDP = Risk 1 in the FY2022 Annual Securities Report) Risk of ratings decline due to low climate-related rating -Period: Short-term -Magnitude of impact: High -Projected financial impact: ▲24 billion yen 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. -Countermeasure cost/Investment amount: 5 billion yen Establish the Green Innovation Offices as organizations dedicated to Net-Zero and accelerating responses to make clients and society greener through the NTT DATA Group supply chain, and promote activities via the Green Action Committee (formerly called the Climate Action Committee). Record activity costs and innovation investment amounts (cumulative from FY2022 to FY2025) incurred by the Green Innovation Offices.

C3.5

(C3.5) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's climate transition?

	Identification of spending/revenue that is aligned with your organization's climate transition
Row 1	Yes, we identify alignment with our climate transition plan

C3.5a

(C3.5a) Quantify the percentage share of your spending/revenue that is aligned with your organization's climate transition.

Financial Metric

OPEX

Type of alignment being reported for this financial metric

Alignment with our climate transition plan

Taxonomy under which information is being reported

Objective under which alignment is being reported

Amount of selected financial metric that is aligned in the reporting year (unit currency as selected in C0.4)

18,000,000,000

Percentage share of selected financial metric aligned in the reporting year (%)

0.94

Percentage share of selected financial metric planned to align in 2025 (%)

2.61

Percentage share of selected financial metric planned to align in 2030 (%)

12.43

Describe the methodology used to identify spending/revenue that is aligned

Our Group is introducing renewable energy as a means of achieving Net-Zero by 2040. Since 2022, energy used at the Toyosu Center Building (including the Annex) where NTT DATA's headquarters is located, and total energy consumed in the operation of principal services (the settlement/finance related ANSER, CAFIS, and the digital transformation foundation OpenCanvas), has been 100% renewable energy. Our data center business, which accounts for much of our total business energy consumption, was also operating on 39% renewable energy as of FY2021. The NTT DATA Group has committed to achieving Net-Zero in the use of our services in our data centers by 2030 and plans to cover 100% of our electricity use with renewable energy.

To address the expected spike in data center demand in response to the digitalization of society as a whole and the huge increase in the amount of power consumed as a result, we are investing proactively in energy reduction and energy-saving. In July 2022, we launched Green DC energy management™ to enable integrated management of room temperature, server intake temperature, current value, power consumption, CPU availability, cooling energy, and the amount of renewable energy, achieving a cooling energy reduction of around 35% through AI-controlled air conditioning. Further, in PoC experiments conducted in 2022 on a method of immersion cooling that uses a special liquid to directly cool ICT equipment, we confirmed that cooling energy can be reduced by up to 97% compared to data centers with regular air cooling.

Because the plan value in our Medium-Term Management Plan only covers the renewable energy surcharge, we have made the value converted to the renewable energy charge the operating expenses aligned with our 2022 climate transition plan.

The NTT Group to which we belong is undertaking a global restructuring, and with the number of Group companies affiliated with NTT DATA scheduled to increase on a global scale in the coming years, we calculated the FY2025 portion based on the plan value in the Medium-Term Management Plan with the addition of the increase in emissions from the new Group companies who will be joining us.

We calculated the operating expenses aligned with our 2030 climate transition plan from

the estimated value of the necessary amount of renewable energy, taking the target year for achieving Net-Zero in our data centers as the base year. Specifically, while data center demand will soar, we estimated that the necessary energy will remain at 80% of the FY2021 level through the introduction of energy consumption reduction measures, making our calculation based on the current renewable energy introduction cost and taking into consideration the increment from Group restructuring.
In terms of the company-wide operating expenses forming the basis for percentage share, we took the actual figure for FY2022 as the base for calculating the FY2025 and FY2030 amounts, taking into account an average rate of increase of 5.3% for the next three years as well as the restructuring of our Group.

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

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

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 CO2e)

13,117

Base year Scope 2 emissions covered by target (metric tons CO2e)

242,842

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)

Base year total Scope 3 emissions covered by target (metric tons CO2e)

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

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, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)

Base year total 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 CO2e) [auto-calculated]

102,383.6

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

14,018

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

83,912

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)

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

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

97,930

Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

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

102.8999436108

Target status in reporting year

Underway

Please explain target coverage and identify any exclusions

This target of the NTT DATA Group was approved by SBTi as a 1.5°C target in June 2020 after SBT commitment in March 2019. The target coverage is the consolidated NTT DATA Group at the time of SBT certification (NTT Ltd., which became a subsidiary in October 2022, is excluded from the boundary as it does not exist in base year FY2016).

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

In the reporting year, the reduction target Abs1 was achieved 8 years ahead of the target year through introduction of renewable energy, energy conservation and office consolidation. Therefore, we have formulated a more ambitious vision NTT DATA NET-ZERO Vision 2040 (details reported as Abs3) and plan to set targets and apply for SBT certification accordingly. Until the new targets are officially approved by SBTi for the new time frame and boundary, the original target remains to be promoted continuously.
The new vision formulated is to achieve Net-Zero Scope1 and 2 for data centers (accounting for approx. 70% of the company's total Scope1 and 2) by 2030 and achieve Net-Zero for the entire company including offices and other facilities by 2035. The reductions are to be achieved through the introduction of renewable energy and cutting-edge energy conservation technologies in facilities including data centers.

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

Target reference number

Abs 2

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

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 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 CO2e)

Base year Scope 2 emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)

484,274

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)

193,231

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)

26,413

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)

39,095

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)

1,394

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)

52,557

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)

35,143

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)

1,165,159

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)

5,169

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)

122,587

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)

Base year total Scope 3 emissions covered by target (metric tons CO2e)

2,125,022

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

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, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)

100

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)

100

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

100

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)

100

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)

100

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)

100

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)

100

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)

100

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)

100

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)

100

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)

Base year total 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 CO2e) [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, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)

717,508

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)

182,471

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)

18,944

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

49,269

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)

4,129

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)

45,063

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)

32,874

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)

709,613

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)

1,925

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)

76,128

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)

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

1,837,925

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

1,837,925

Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

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

24.5641948862

Target status in reporting year

Underway

Please explain target coverage and identify any exclusions

This target of the NTT DATA Group was approved by SBTi in June 2020 after SBT commitment in March 2019. The target coverage is the consolidated NTT DATA Group at the time of SBT certification (NTT Ltd., which became a subsidiary in October 2022, is excluded from the boundary as it does not exist in base year FY2016).
In FY2022, we changed our calculation methodology for the Scope 3 categories as below.

- Category 1
- Category 2 (change to the same logic as Category 1)
- Category 11

For the emission factor used to calculate Category 1 and 2 emissions, we did not use the Ministry of the Environment's "Database on Emissions Unit Values for Accounting of Greenhouse Gas Emissions, etc., by Organizations Throughout the Supply Chain," but rather a supplier emission factor derived from the Scope 1, 2 and 3 upstream emissions of NTT DATA product and service suppliers and suppliers' total sales.
We previously calculated Category 11 emissions based on the percentage of GHG emissions by product, which is the percentage of GHGs emitted during the manufacture, use, and disposal stages in the lifecycle of a sold product, but in the reporting year we used the power consumed/GHG emissions scenario derived from the normal rated power of a sold product.
In line with these changes in calculation methodology, we have instituted an across-the-board calculation of Scope and Category emissions where the methodology has changed from FY2020 through the FY2022 reporting year. In the case of housing colocation services (leasing of space to clients within our data centers), we conformed with the NTT Group Scope 3 calculation method, which counts these as not Scope 2 but rather Scope 3, Category 12 emissions.
The revised values have gone through the third-party assurance.

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

NTT DATA is implementing the following supplier engagement strategy to reduce emissions in Category 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 SBT 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 FY2022 emissions, Category 1, 2, and 11 of Scope 3 comprise approx. 88% of the entirety of Scope 3. At least 80% of the suppliers who are the sellers in question will be targets of engagement. GHG emissions reductions related to the supply chains in question are essential to achieve the 4.2% annual reduction (interim target of a 60% reduction by 2030) necessary for the certified SBT near-term target, as well as the committed SBT Net-Zero long-term target of 2040. As part of working together with

suppliers, in addition to the supplier briefings on climate change responses that we have been holding since FY2021 (for approx. 150 companies who account for the top 80% of our suppliers by purchase amount), in FY2022 we held workshops for the first time for approx. 40 service-related partner companies. We shared our GHG emissions reduction targets, our policy on climate change response efforts, and our procurement policy for the years ahead, confirmed the status of suppliers' initiatives and supported these, and engaged in effective activities to encourage suppliers to set SBT and to reduce their GHG emissions effectively.

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

Target reference number

Abs 3

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 two years

Target ambition

1.5°C aligned

Year target was set

2022

Target coverage

Company-wide

Scope(s)

Scope 1
Scope 2

Scope 2 accounting method

Market-based

Scope 3 category(ies)

Base year

2021

Base year Scope 1 emissions covered by target (metric tons CO2e)

9,613

Base year Scope 2 emissions covered by target (metric tons CO2e)

130,066

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)

Base year total Scope 3 emissions covered by target (metric tons CO2e)

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

139,679

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, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year

emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)

Base year total 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

2035

Targeted reduction from base year (%)

100

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

0

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

14,018

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

83,912

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)

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

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

97,930

Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

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

29.889246057

Target status in reporting year

New

Please explain target coverage and identify any exclusions

The target coverage is the consolidated NTT DATA Group but does not include NTT Ltd., which became a subsidiary in October 2022.
Since NTT Ltd. was integrated in the middle of the fiscal year, the setting and public disclosure of targets including actual GHG emissions of NTT Ltd. is scheduled in FY2023.

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

In light of the global accelerating moves to achieve Net-Zero, NTT DATA revised the NTT DATA Carbon-neutral Vision 2050 formulated in 2021 to the NTT DATA NET-ZERO Vision 2040.
The new vision formulated is to achieve Net-Zero Scope1 and 2 for data centers

(accounting for approx. 70% of the company's total Scope1 and 2) by 2030 and achieve Net-Zero for the entire company including offices and other facilities by 2035. The reductions are to be achieved through the introduction of renewable energy and cutting-edge energy conservation technologies in facilities including data centers.
In addition, the SBT reapplication for the consolidated NTT DATA Group (company-wide) emission reduction target including NTT Ltd. is planned in the future.

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

50

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

62.5

Target status in reporting year

Underway

Is this target part of an emissions target?

This target is part of the 2040 Net-Zero vision. We plan to achieve Net-Zero Scope 1 and 2 in our data centers by 2030, and the entire company including offices and other facilities by 2035 through energy conservation and introduction of renewable energy. To effectively contribute to GHG emission reduction, we have included renewable introduction in our Medium-term Management Plan for all group companies.

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 FY2023, we plan to achieve at least 50% renewable energy implementation in global operation.

List the actions which contributed most to achieving this target

Target reference number

Low 2

Year target was set

2021

Target coverage

Country/area/region

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

100

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

56

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

56

Target status in reporting year

Underway

Is this target part of an emissions target?

This target is part of the 2030 Net-Zero target of NTT DATA EMEAL, one of our European Group companies.

Is this target part of an overarching initiative?

Science Based Targets initiative

Please explain target coverage and identify any exclusions

The target coverage is 100% NTT DATA EMEAL, one of our European Group companies.

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

Efforts are underway to introduce renewable energy, reduce emissions arising from commuting and business trips, and promote telecommuting.

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
2022

Target coverage
Country/area/region

Target type: absolute or intensity
Intensity

Target type: category & Metric (target numerator if reporting an intensity target)
Waste management
Percentage of total waste generated that is recycled

Target denominator (intensity targets only)
metric ton of waste

Base year
2022

Figure or percentage in base year
95.5

Target year
2030

Figure or percentage in target year
99

Figure or percentage in reporting year
95.5

% of target achieved relative to base year [auto-calculated]
0

Target status in reporting year
New

Is this target part of an emissions target?

Yes. Oth1 leads to a reduction in Scope 3 Category 5. [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

One theme in the NTT DATA Group's sustainable management is "Regenerating Ecosystems: Preserving the Global Environment for the Future," a key issue in which is "Circular Economy."

Specifically, we are fully engaged in initiatives such as reusing and recycling office automation equipment and contracting waste disposal to waste management companies with higher recycling rates.

In the reporting year, we set recycling rates as NTT DATA environmental targets, achieving above the target values of 99% for general and industrial waste recycling and 87% for construction waste recycling.

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

Reusing and recycling office automation equipment and contracting waste disposal to waste management companies with higher recycling rates is proving effective. To reach our targets, we are also approaching Group companies revealed by waste disposal data analysis to be emitting large amounts of waste (providing feedback on target management, conducting hearings, and in some cases, proposing countermeasures.)

List the actions which contributed most to achieving this target

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Target reference number

Oth 2

Year target was set

2022

Target coverage

Country/area/region

Target type: absolute or intensity

Intensity

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

Engagement with suppliers

Percentage of suppliers (by procurement spend) with a science-based target

Target denominator (intensity targets only)

Other, please specify

The top 70% of suppliers by purchase spend in Japan

Base year

2022

Figure or percentage in base year

35

Target year

2025

Figure or percentage in target year

70

Figure or percentage in reporting year

35

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

0

Target status in reporting year

New

Is this target part of an emissions target?

Yes. Oth2 leads to a reduction in Scope 3 Category 1&2.

Is this target part of an overarching initiative?

Science Based Targets initiative – approved supplier engagement target

Please explain target coverage and identify any exclusions

We encourage the top 70% of suppliers by purchase spend in Japan to set SBT-aligned reduction targets by FY2025.

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

・Share with suppliers our reduction know-how, good practices, and tools for GHG target setting, and gain a common understanding of the situation.

・Promote the setting of SBT-certified level targets by suppliers and support their GHG emissions reduction activities.

List the actions which contributed most to achieving this target

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
Abs3

Target year for achieving net zero

2040

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 two years

Please explain target coverage and identify any exclusions

In 2020, we created the NTT DATA Carbon-neutral Vision 2050 with a target year of 2050 and announced it on our website. We also endorsed SBT Business Ambition for 1.5°C. In 2023, the Board decided to change the target year to 2040, and this was announced on our website as NTT DATA NET-ZERO Vision 2040. The coverage is all companies including NTT Ltd., which became a subsidiary in October 2022.

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 approx. 70% of the company's total Scope 1 and Scope 2, will be Net-Zero with respect to Scopes 1 and 2 by 2030. By 2035, Scopes 1 and 2, including offices, will be Net-Zero.
By 2030, we intend to achieve 42% Scope 3 reductions through our supply chain, and 90% by 2040, with base year set as FY2021.
For the remaining 10% in reductions, as we move toward 2040, 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 Category 1, 2, and 11, which significantly contribute to the SBT Scope 3 reduction targets.

1. We give procurement preference to suppliers pursuing emissions reduction at the same level as our company (SBT1.5°C certification standard).
2. We pursue reduced energy consumption and efficient power use through low-GHG

software development, as well as reductions in emissions from hardware use through concentration, etc.
3. We are pursuing sweeping measures such as shifting IT services to the cloud to reduce clients' GHG emissions and shifting our business model from device sales to service provision.
4. We are introducing renewable energy into services used by clients as GHG emissions reduction partners through our pursuit of client engagement.

We are also investigating multiple possible mitigation measures beyond value chains toward Net-Zero, which we plan to achieve through carbon removal. In 2021, as part of this endeavor, we conducted a demonstration experiment in conjunction with local authorities to measure 'blue carbon' absorption. We continued that experiment in the reporting year, identifying issues in the commercialization of blue carbon and specifying future directions and plans. Looking ahead, we will continue to work with clients, government, and universities, etc., toward mitigation and neutralization of residual 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	1	0
To be implemented*	1	360
Implementation commenced*	5	58,753
Implemented*	3	58,471
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 CO2e savings (metric tonnes CO2e)
352

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)
15,390,000

Investment required (unit currency – as specified in C0.4)
1,334,650,000

Payback period
>25 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 CO2e savings (metric tonnes CO2e)
6,137

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)
268,660,000

Investment required (unit currency – as specified in C0.4)
28,620,000

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)

51,983

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)

1,650,000,000

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

230,000,000

Payback period

<1 year

Estimated lifetime of the initiative

21-30 years

Comment

Because we have been pursuing renewable energy procurement since last reporting year, the amount of renewable energy we used increased.
The difference between this year and last year in the amount of energy consumed that comprised renewable energy was 51,893t-CO2e. This was calculated by: Amount of renewable energy used last year 70,682MWh − amount of renewable energy used this year 187,028MWh = 116,346MWh (difference in Japan: 103,974MWh, difference overseas: 12,372MWh), divided by a carbon intensity of 0.457t-CO2/MWh in Japan and 0.361t-CO2/MWh overseas.

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 GHG emissions and operates emissions transaction systems (Tokyo Cap-and-Trade program), 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 GHG 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 our organizations have set activity targets, such as efforts to reduce GHG 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 GHG emissions and carbon pricing by organization and activity. In order to promote efforts to encourage GHG emissions reductions by each organization and employee, we are promoting activities in conjunction with KPIs for each organization, such as GHG emissions reductions.
Partnering with governments on technology development	NTT DATA is working with governments in Japan, the EU, and the United States to develop a number of climate-related technologies.

	-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 GHG emissions, and promote disclosures that address the TCFD, among other efforts. -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. -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.

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 “Green Data Center®”. Below actions were launched from FY2021, 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. Renewable introduction

In FY2022, we began implementing renewable energy at Dojima Data Center, Shinagawa Office Building, and engaged in efforts to procure renewables at Mitaka Data Center EAST.
2. Advanced energy conservation
By visualizing the operating environments of servers using IoT, we have conducted verification experiments in conjunction with ICT equipment manufacturers 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 to realize reduced power consumption for DCs as a whole, including ICT equipment.
3. Development of Green DC energy management™
The system is for real-time visualization of server room temperature in carbon neutral DCs using 100% renewable energy, putting into operation as of 2022. The system enables integrated management of not only room temperature and humidity but also, through sensors installed in servers, intake temperature, current value, power consumption, CPU availability, cooling energy, and the amount of renewable energy.

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 the conventional data center and the Green Data Center® based on PUE (power usage effectiveness), a data center power usage efficiency index.

Reference product/service or baseline scenario used

pPUE of our conventional data centers: 1.55

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

Use stage

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

40,000

Explain your calculation of avoided emissions, including any assumptions

Calculated by comparing the amount of GHG emissions realized with pPUE 1.4 at the Green Data Center®, and the amount of GHG emissions produced if the same amount of electricity were to be used at one of our conventional data centers (pPUE 1.55).

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 GHG 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

GHG emissions from electricity consumption before the introduction of renewable energy during one year of operation of the service in question: 10,000 t-CO2

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

Use stage

Estimated avoided emissions (metric tons CO2e 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 GHG 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 Prefecture, 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 GHG emissions from the electric power consumption of the service in question with the estimated GHG emissions from electric power consumption at other existing centers of a similar size.

Reference product/service or baseline scenario used

GHG 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 CO2e 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?

Yes, a merger

Name of organization(s) acquired, divested from, or merged with

NTT Ltd.

Details of structural change(s), including completion dates

Planning further growth in the overseas business of the NTT DATA Group, NTT Ltd., an NTT Group overseas business and an owned subsidiary of our parent company NTT, became a subsidiary of NTT DATA Group in October 2022. As this occurred during the fiscal year, the GHG emissions including NTT Ltd. will be reported from FY2023.

C5.1b

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

	Change(s) in methodology,	Details of methodology, boundary, and/or reporting year definition change(s)

	boundary, and/or reporting year definition?	
Row 1	Yes, a change in methodology	In the reporting year, we changed our calculation methodology for the Scope 3 categories as below. ・Category 1 ・Category 2 (changed to the same logic as for Category 1) ・Category 11 For the emission factor used to calculate Category 1 and 2 emissions, we did not use the Ministry of the Environment's "Database on Emissions Unit Values for Accounting of Greenhouse Gas Emissions, etc., by Organizations Throughout the Supply Chain," but rather a supplier emission factor derived from the Scope 1, 2 and 3 upstream emissions of NTT DATA product and service suppliers and suppliers' total sales. We previously calculated Category 11 emissions based on the percentage of GHG emissions by product, which is the percentage of GHGs emitted during the manufacture, use, and disposal stages in the lifecycle of a sold product, but in the reporting year, we used the power consumed/GHG emissions scenario derived from the normal rated power of a sold product. In line with these changes in calculation methodology, we instituted an across-the-board calculation from FY2020 through the FY2022 reporting year of Scope and Category emissions where the methodology has changed.

C5.1c

(C5.1c) Have your organization's base year emissions and past years' emissions been recalculated as a result of any changes or errors reported in C5.1a and/or C5.1b?

	Base year recalculation	Base year emissions recalculation policy, including significance threshold	Past years' recalculation
Row 1	No, because the operations acquired or divested did not exist in the base year	The newly merged company NTT Ltd. was established in 2019 thus did not exist in 2016, which is the Group's certified SBT base year. It was subsequently merged into NTT DATA's overseas operation in October 2022. As such, it was not subject base year recalculation. However, considering the environmental impact of NTT Ltd., we plan to reapply for SBT with a target defined in new timeframe and boundary that includes NTT Ltd. in future.	No

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
This is base year for SBT.

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

This is base year for SBT.

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

This is base year for SBT.

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

This is base year for SBT.

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

This is base year for SBT.

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

This is base year for SBT.

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

This is base year for SBT.

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

This is base year for SBT.

Scope 3 category 8: Upstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

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

This is base year for SBT.

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 CO2e)

5,169

Comment

This is base year for SBT.

Scope 3 category 13: Downstream leased assets

Base year start

April 1, 2016

Base year end

March 31, 2017

Base year emissions (metric tons CO2e)

122,587

Comment

This is base year for SBT.

Scope 3 category 14: Franchises

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 15: Investments

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3: Other (upstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3: Other (downstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

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 CO2e?

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)

14,018

Start date

April 1, 2022

End date

March 31, 2023

Comment

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 CO2e?

Reporting year

Scope 2, location-based

165,792

Scope 2, market-based (if applicable)

83,912

Start date

April 1, 2022

End date

March 31, 2023

Comment

Past year 1

Scope 2, location-based

165,748

Scope 2, market-based (if applicable)

130,066

Start date

April 1, 2021

End date

March 31, 2022

Comment

No change from reported figure in CDP 2022

Past year 2

Scope 2, location-based

154,448

Scope 2, market-based (if applicable)

155,165

Start date

April 1, 2020

End date

March 31, 2021

Comment

Revised in line with Scope 3 Category 13

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1, Scope 2 or Scope 3 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)

717,508

Emissions calculation methodology

Hybrid method

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

11.6

Please explain

We multiplied the value of products and services purchased from each supplier by the supplier emission factor derived from suppliers' Scope 1, 2 and 3 upstream emissions and total sales. For Category 1, we took the amount from the purchased products and services corresponding to NTT DATA's cost of services sold.

Capital goods

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

182,471

Emissions calculation methodology

Hybrid method

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

46.4

Please explain

We multiplied the value of products and services purchased from each supplier by the supplier emission factor derived from suppliers' Scope 1, 2 and 3 upstream emissions and total sales. For Category 2, we took the amount from the purchased products and services corresponding to NTT DATA's capital goods increase.

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

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

18,944

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 GHG Emissions, etc., by Organizations Throughout the Supply Chain (Ver. 3.3)," etc.)
Fuel consumption (kWh) x relevant unit value (IDEAv2, etc.)

Upstream transportation and distribution

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

49,269

Emissions calculation methodology

Spend-based method
Fuel-based method
Distance-based method

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

0.8

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 GHG Emissions, etc., by Organizations Throughout the Supply Chain (Ver. 3.3)")

*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)

4,129

Emissions calculation methodology

Waste-type-specific method

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

46.4

Please explain

Amount of waste (t) x relevant unit value (Ministry of the Environment's "Database on Emissions Unit Values for Accounting of GHG Emissions, etc., by Organizations Throughout the Supply Chain (Ver. 3.3)," IDEAv2)

Business travel

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

45,063

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 GHG Emissions, etc., by Organizations Throughout the Supply Chain (Ver. 3.3)")

Employee commuting

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

32,874

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 GHG Emissions, etc., by Organizations Throughout the Supply Chain (Ver. 3.3)")

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)

709,613

Emissions calculation methodology

Spend-based method

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

0

Please explain

We calculated carbon emissions from sold products by identifying the main product power usage factor per sales amount from the normal rated power/sales amount of main products sold by NTT DATA to its customers, multiplying the products' sales amount by the average value of this to obtain the total power consumption of sold products, then multiplying the required amount of power use by the carbon emissions factor per amount of energy generated.

End of life treatment of sold products

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

1,925

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)

76,128

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 GHG Emissions, etc., by Organizations Throughout the Supply Chain (Ver. 3.3)")
For the amount of electricity consumed, we took the amount of energy used by other businesses' facilities inside buildings and grounds owned by NTT DATA.

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 category 1 through 15.

Other (downstream)

Evaluation status

Not relevant, explanation provided

Please explain

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

C6.5a

(C6.5a) Disclose or restate your Scope 3 emissions data for previous years.

Past year 1

Start date

April 1, 2021

End date

March 31, 2022

Scope 3: Purchased goods and services (metric tons CO2e)

746,721

Scope 3: Capital goods (metric tons CO2e)

208,849

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

27,124

Scope 3: Upstream transportation and distribution (metric tons CO2e)

52,966

Scope 3: Waste generated in operations (metric tons CO2e)

3,944

Scope 3: Business travel (metric tons CO2e)

22,018

Scope 3: Employee commuting (metric tons CO2e)

30,912

Scope 3: Upstream leased assets (metric tons CO2e)

0

Scope 3: Downstream transportation and distribution (metric tons CO2e)

0

Scope 3: Processing of sold products (metric tons CO2e)

0

Scope 3: Use of sold products (metric tons CO2e)

842,495

Scope 3: End of life treatment of sold products (metric tons CO2e)

1,983

Scope 3: Downstream leased assets (metric tons CO2e)

95,981

Scope 3: Franchises (metric tons CO2e)

0

Scope 3: Investments (metric tons CO2e)

0

Scope 3: Other (upstream) (metric tons CO2e)

0

Scope 3: Other (downstream) (metric tons CO2e)

0

Comment

Past year 2

Start date

April 1, 2020

End date

March 31, 2021

Scope 3: Purchased goods and services (metric tons CO2e)

782,868

Scope 3: Capital goods (metric tons CO2e)

211,494

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

31,945

Scope 3: Upstream transportation and distribution (metric tons CO2e)

56,532

Scope 3: Waste generated in operations (metric tons CO2e)

3,417

Scope 3: Business travel (metric tons CO2e)

20,292

Scope 3: Employee commuting (metric tons CO2e)

13,189

Scope 3: Upstream leased assets (metric tons CO2e)

0

Scope 3: Downstream transportation and distribution (metric tons CO2e)

0

Scope 3: Processing of sold products (metric tons CO2e)

0

Scope 3: Use of sold products (metric tons CO2e)

455,556

Scope 3: End of life treatment of sold products (metric tons CO2e)

2,170

Scope 3: Downstream leased assets (metric tons CO2e)

93,797

Scope 3: Franchises (metric tons CO2e)

0

Scope 3: Investments (metric tons CO2e)

0

Scope 3: Other (upstream) (metric tons CO2e)

0

Scope 3: Other (downstream) (metric tons CO2e)

0

Comment

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 CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure

0.0000000338

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

97,930

Metric denominator

unit total revenue

Metric denominator: Unit total

2,900,000,000,000

Scope 2 figure used

Market-based

% change from previous year

38

Direction of change

Decreased

Reason(s) for change

Change in renewable energy consumption
Other emissions reduction activities

Please explain

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 0.0000000547. When compared with the emissions calculated by former methodology, there was a 38% 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.

The figure of numerator and denominator provided here does not include NTT Ltd. Until last year's CDP, the intensity figures were reported in the unit of "t-CO2/100,000,000 yen," but from this fiscal year, the figure has been revised to the expected form "t-CO2/yen".

Intensity figure

0.65

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

97,930

Metric denominator

full time equivalent (FTE) employee

Metric denominator: Unit total

151,600

Scope 2 figure used

Market-based

% change from previous year

30

Direction of change

Decreased

Reason(s) for change

Change in renewable energy consumption
Other emissions reduction activities

Please explain

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 0.92. When compared with the emissions calculated by former methodology, there was a 30% reduction. This was due to the fact that, 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. The figure of numerator and denominator provided here does not include NTT Ltd.

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	13,566	IPCC Fourth Assessment Report (AR4 - 100 year)
CH4	6	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	55	IPCC Fourth Assessment Report (AR4 - 100 year)
HFCs	353	IPCC Fourth Assessment Report (AR4 - 100 year)
PFCs	27	IPCC Fourth Assessment Report (AR4 - 100 year)
SF6	11	IPCC Fourth Assessment Report (AR4 - 100 year)

C7.2

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

Country/area/region	Scope 1 emissions (metric tons CO2e)
Japan	3,744
Indonesia	4
Malaysia	308
Philippines	0
Singapore	0
Thailand	407
Viet Nam	0
Australia	0
China	99

Czechia	133
Hungary	97
Poland	308
Slovakia	38
Turkey	0
United States of America	4,723
Denmark	129
Finland	0
Norway	0
Sweden	0
United Kingdom of Great Britain and Northern Ireland	736
Brazil	378
India	1,161
Spain	669
Netherlands	0
Germany	634
Switzerland	0
Taiwan, China	0
Myanmar	0
Mexico	0
Portugal	51
Romania	246
Serbia	9
Italy	50
Austria	0
Belgium	20
Luxembourg	0
Morocco	4
Argentina	0
Chile	0
Colombia	12
Peru	58

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	7,169
Office	3,238
Transportation	3,545

C7.5

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

Country/area/region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Japan	101,828	49,005
Indonesia	22	13
Malaysia	808	663
Philippines	736	722
Singapore	92	92
Thailand	106	69
Viet Nam	181	24
Australia	7	7
China	4,127	2,464
Czechia	31	31
Hungary	1	1
Poland	3	3
Slovakia	4	4
Turkey	96	96
United States of America	36,879	18,339
Denmark	15	0
Finland	1	1
Norway	30	0
Sweden	2	2

United Kingdom of Great Britain and Northern Ireland	105	77
Brazil	172	38
India	12,015	9,354
Spain	1,561	282
Netherlands	23	23
Germany	4,167	1,170
Switzerland	22	22
Taiwan, China	69	69
Myanmar	66	67
Mexico	165	165
Portugal	28	0
Romania	631	541
Serbia	33	33
Italy	1,510	297
Austria	6	2
Belgium	12	1
Luxembourg	3	0
Morocco	66	66
Argentina	37	37
Chile	9	9
Colombia	14	14
Peru	109	109

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	118,020	59,733
Office	47,772	24,179

C7.7

(C7.7) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?

Yes

C7.7a

(C7.7a) Break down your gross Scope 1 and Scope 2 emissions by subsidiary.

Subsidiary name

NTT DATA Corporation

Primary activity

Software

Select the unique identifier(s) you are able to provide for this subsidiary

ISIN code - equity

ISIN code – bond

ISIN code – equity

JP3165700000

CUSIP number

Ticker symbol

SEDOL code

LEI number

Other unique identifier

Scope 1 emissions (metric tons CO2e)

3,895

Scope 2, location-based emissions (metric tons CO2e)

105,909

Scope 2, market-based emissions (metric tons CO2e)

51,537

Comment

Subsidiary name

NTT DATA INTERNATIONAL L.L.C.

Primary activity

IT services

Select the unique identifier(s) you are able to provide for this subsidiary

No unique identifier

ISIN code – bond

ISIN code – equity

CUSIP number

Ticker symbol

SEDOL code

LEI number

Other unique identifier

Scope 1 emissions (metric tons CO2e)

5,825

Scope 2, location-based emissions (metric tons CO2e)

48,150

Scope 2, market-based emissions (metric tons CO2e)

27,024

Comment

Subsidiary name

NTT DATA Europe & Latam, S.L.U.

Primary activity

IT services

Select the unique identifier(s) you are able to provide for this subsidiary

No unique identifier

ISIN code – bond

ISIN code – equity

CUSIP number

Ticker symbol

SEDOL code

LEI number

Other unique identifier

Scope 1 emissions (metric tons CO2e)

1,718

Scope 2, location-based emissions (metric tons CO2e)

4,571

Scope 2, market-based emissions (metric tons CO2e)

1,709

Comment

Subsidiary name

NTT DATA Business Solutions AG

Primary activity

IT services

Select the unique identifier(s) you are able to provide for this subsidiary

No unique identifier

ISIN code – bond

ISIN code – equity

CUSIP number

Ticker symbol

SEDOL code

LEI number

Other unique identifier

Scope 1 emissions (metric tons CO2e)

2,547

Scope 2, location-based emissions (metric tons CO2e)

6,410

Scope 2, market-based emissions (metric tons CO2e)

3,410

Comment

Subsidiary name

NTT DATA Asia Pacific Pte.Ltd.

Primary activity

IT services

Select the unique identifier(s) you are able to provide for this subsidiary

No unique identifier

ISIN code – bond

ISIN code – equity

CUSIP number

Ticker symbol

SEDOL code

LEI number

Other unique identifier

Scope 1 emissions (metric tons CO2e)
27

Scope 2, location-based emissions (metric tons CO2e)
412

Scope 2, market-based emissions (metric tons CO2e)
163

Comment

Subsidiary name
恩梯梯数据（中国）投資有限公司

Primary activity
IT services

Select the unique identifier(s) you are able to provide for this subsidiary
No unique identifier

ISIN code – bond

ISIN code – equity

CUSIP number

Ticker symbol

SEDOL code

LEI number

Other unique identifier

Scope 1 emissions (metric tons CO2e)

6

Scope 2, location-based emissions (metric tons CO2e)

340

Scope 2, market-based emissions (metric tons CO2e)

69

Comment

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 in emissions	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	51,983	Decreased	37.2	Because we have been pursuing renewable energy procurement since last reporting year, the amount of renewable energy we used increased. The difference between this year and last year in the amount of energy consumed that comprised renewable energy was 51,893t-CO2e. This was calculated by: Amount of renewable energy used last year 70,682MWh − amount of renewable energy used this year 187,028MWh = 116,346MWh (difference in Japan: 103,974MWh, difference overseas: 12,372MWh), divided by carbon intensity of 0.457t-

				CO2/MWh in Japan and 0.361t-CO2/MWh overseas. Because last year's total Scope 1 and market-based Scope 2 emissions were 139,678.7t-CO2e, the rate of change was 51,983/139,678.7 × 100 = 37.2%
Other emissions reduction activities	6,488	Decreased	4.7	We achieved a 6,488t-CO2 reduction by implementing the measures in C4.3a. Because last year's total Scope 1 and market-based Scope 2 emissions were 139,678.7t-CO2e, the rate of change was 6,488/139,678.7 x 100 = 4.7%
Divestment	0	No change	0	
Acquisitions	0	No change	0	
Mergers	0	No change	0	
Change in output	13,560	Increased	9.7	Because last year's total Scope 1 and market-based Scope 2 emissions were 139,678.7t-CO2e, the rate of change was 13,560/139678.7 × 100 = 9.7% −13,560 = 97,930 (2022 emissions) − 139,679 (2021 emissions − (−51,983 (use of renewable energy)) − (−6,488 (emissions reduction activities)) − 3,162 (change in emissions calculation methodology)
Change in methodology	3,162	Increased	2.3	By calculating 2022 domestic electricity consumption using the 2022 emissions factor (TEPCO Energy Partner emissions factor), 225,883 MWh × 0.457 t-CO2/MWh = 103,228t-CO2 and calculating 2022 domestic electricity consumption using the 2021 emissions factor (TEPCO Energy Partner emissions factor), 225,883 MWh × 0.443t-CO2/MWh = 100,066t-CO2, the difference is 103,228 − 100,066 = 3,162. Because last year's total Scope 1 and market-based Scope 2 emissions were 139,678.7t-CO2e, the rate of change was 3,162/139,679 × 100 = 2.3%
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 25% but less than or equal to 30%

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	23,407	23,407
Consumption of purchased or acquired electricity		186,744	185,481	372,225
Consumption of purchased or acquired heat		0	15,310	15,310
Consumption of purchased or acquired steam		0	14	14
Consumption of purchased or acquired cooling		0	1,760	1,760
Consumption of self-generated non-fuel renewable energy		284		284
Total energy consumption		187,028	225,972	413,000

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

15,830

MWh fuel consumed for self-generation of electricity

4,225

MWh fuel consumed for self-generation of heat

11,605

Comment

Gas

Heating value

HHV

Total fuel MWh consumed by the organization

7,577

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

7,577

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

23,407

MWh fuel consumed for self-generation of electricity

4,225

MWh fuel consumed for self-generation of heat

19,182

Comment

C8.2d

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

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	5,050	4,509	825	284

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.

Country/area of low-carbon energy consumption

Japan

Sourcing method

Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier

Electricity

Low-carbon technology type

Renewable energy mix, please specify

Mainly solar and wind

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

80,018

Tracking instrument used

NFC – Renewable

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

Japan

Are you able to report the commissioning or re-powering year of the energy generation facility?

Yes

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

2022

Comment

Country/area of low-carbon energy consumption

Japan

Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

Energy carrier

Electricity

Low-carbon technology type

Renewable energy mix, please specify

Mainly solar and wind

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

38,575

Tracking instrument used

NFC – Renewable

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

Japan

Are you able to report the commissioning or re-powering year of the energy generation facility?

Yes

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

2022

Comment

Country/area of low-carbon energy consumption

Indonesia

Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

Energy carrier

Electricity

Low-carbon technology type

Small hydropower (<25 MW)

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

12

Tracking instrument used

I-REC

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

Indonesia

Are you able to report the commissioning or re-powering year of the energy generation facility?

Yes

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

2020

Comment

Country/area of low-carbon energy consumption

Malaysia

Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

Energy carrier

Electricity

Low-carbon technology type

Other biomass

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

202

Tracking instrument used

I-REC

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

Malaysia

Are you able to report the commissioning or re-powering year of the energy generation facility?

Yes

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

2018

Comment

Biogas: Gas from organic waste digestion

Country/area of low-carbon energy consumption

Philippines

Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

Energy carrier

Electricity

Low-carbon technology type

Geothermal

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

28

Tracking instrument used

I-REC

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

Philippines

Are you able to report the commissioning or re-powering year of the energy generation facility?

Yes

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

1979

Comment

Country/area of low-carbon energy consumption

Thailand

Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

Energy carrier

Electricity

Low-carbon technology type

Solar

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

67

Tracking instrument used

I-REC

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

Thailand

Are you able to report the commissioning or re-powering year of the energy generation facility?

Yes

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

2018

Comment

Country/area of low-carbon energy consumption

Viet Nam

Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

Energy carrier

Electricity

Low-carbon technology type

Large hydropower (>25 MW)

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

218

Tracking instrument used

I-REC

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

Viet Nam

Are you able to report the commissioning or re-powering year of the energy generation facility?

Yes

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

2011

Comment

Country/area of low-carbon energy consumption

China

Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

Energy carrier

Electricity

Low-carbon technology type

Large hydropower (>25 MW)

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

1,952

Tracking instrument used

I-REC

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

China

Are you able to report the commissioning or re-powering year of the energy generation facility?

Yes

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

2021

Comment

Country/area of low-carbon energy consumption

United States of America

Sourcing method

Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier

Electricity

Low-carbon technology type

Renewable energy mix, please specify

Mainly wind

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

44,567

Tracking instrument used

Contract

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

United States of America

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

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

Comment

Country/area of low-carbon energy consumption

Denmark

Sourcing method

Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier

Electricity

Low-carbon technology type

Renewable energy mix, please specify

No information on low-carbon technology type

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

113

Tracking instrument used

Contract

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

Denmark

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

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

Comment

Country/area of low-carbon energy consumption

United Kingdom of Great Britain and Northern Ireland

Sourcing method

Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier

Electricity

Low-carbon technology type

Renewable energy mix, please specify

No information on low-carbon technology type

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

144

Tracking instrument used

Contract

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

United Kingdom of Great Britain and Northern Ireland

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

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

Comment

Country/area of low-carbon energy consumption

Brazil

Sourcing method

Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier

Electricity

Low-carbon technology type

Renewable energy mix, please specify

No information on low-carbon technology type

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

454

Tracking instrument used

Contract

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

Brazil

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

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

Comment

Country/area of low-carbon energy consumption

India

Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

Energy carrier

Electricity

Low-carbon technology type

Renewable energy mix, please specify

Mainly solar and wind

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

83

Tracking instrument used

Indian REC

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

India

Are you able to report the commissioning or re-powering year of the energy generation facility?

Yes

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

2012

Comment

Country/area of low-carbon energy consumption

Spain

Sourcing method

Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier

Electricity

Low-carbon technology type

Renewable energy mix, please specify

No information on low-carbon technology type

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

4,684

Tracking instrument used

Contract

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

Spain

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

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

Comment

Country/area of low-carbon energy consumption

Germany

Sourcing method

Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier

Electricity

Low-carbon technology type

Renewable energy mix, please specify

No information on low-carbon technology type

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

8,611

Tracking instrument used

Contract

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

Germany

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

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

Comment

Country/area of low-carbon energy consumption

Switzerland

Sourcing method

Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier

Electricity

Low-carbon technology type

Renewable energy mix, please specify

No information on low-carbon technology type

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

16

Tracking instrument used

Contract

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

Switzerland

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

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

Comment

Country/area of low-carbon energy consumption

Portugal

Sourcing method

Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier

Electricity

Low-carbon technology type

Renewable energy mix, please specify

No information on low-carbon technology type

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

171

Tracking instrument used

Contract

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

Portugal

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

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

Comment

Country/area of low-carbon energy consumption

Italy

Sourcing method

Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier

Electricity

Low-carbon technology type

Renewable energy mix, please specify

No information on low-carbon technology type

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

3,953

Tracking instrument used

Contract

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

Italy

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

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

Comment

Country/area of low-carbon energy consumption

Belgium

Sourcing method

Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier

Electricity

Low-carbon technology type

Renewable energy mix, please specify

No information on low-carbon technology type

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

65

Tracking instrument used

Contract

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

Belgium

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

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

Comment

Country/area of low-carbon energy consumption

Luxembourg

Sourcing method

Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier

Electricity

Low-carbon technology type

Renewable energy mix, please specify

No information on low-carbon technology type

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

29

Tracking instrument used

Contract

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

Luxembourg

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

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

Comment

Country/area of low-carbon energy consumption

India

Sourcing method

Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier

Electricity

Low-carbon technology type

Renewable energy mix, please specify

No information on low-carbon technology type

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

2,859

Tracking instrument used

Contract

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

India

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

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

Comment

C8.2g

(C8.2g) Provide a breakdown by country/area of your non-fuel energy consumption in the reporting year.

Country/area

Other, please specify

NTT DATA Corporation (Japan, India, Malaysia, China, Myanmar)

Consumption of purchased electricity (MWh)

230,636

Consumption of self-generated electricity (MWh)

484

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

12,304

Consumption of self-generated heat, steam, and cooling (MWh)

0

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

243,424

Country/area

Other, please specify

Services (USA, Mexico, India, Philippines, China)

Consumption of purchased electricity (MWh)

108,052

Consumption of self-generated electricity (MWh)

127

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

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

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

108,179

Country/area

Other, please specify

EMEAL(19 Europe & Latam countries (Romania, Switzerland, Portugal etc.))

Consumption of purchased electricity (MWh)

16,911

Consumption of self-generated electricity (MWh)

0

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

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

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

16,911

Country/area

Other, please specify

Business Solutions (25 Europe & Latam countries (Germany, Denmark, Hungary etc.))

Consumption of purchased electricity (MWh)

15,580

Consumption of self-generated electricity (MWh)

3,899

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

4,781

Consumption of self-generated heat, steam, and cooling (MWh)

0

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

24,260

Country/area

Other, please specify

APAC (Indonesia, Malaysia, Philippines, Singapore, Thailand, Vietnam)

Consumption of purchased electricity (MWh)

632

Consumption of self-generated electricity (MWh)

0

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

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

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

632

Country/area

Other, please specify

China (China, Taiwan)

Consumption of purchased electricity (MWh)

414

Consumption of self-generated electricity (MWh)

0

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

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

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

414

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

CDP-verification-letter NTT DATA FY2022_Fixed20230629.pdf
AS_NTT DATA2022_EN_Fixed20230629.pdf
Verification Statement ISO 14064 NTT DATA EMEAL 2023 v1.pdf

Page/ section reference

File1: AS_NTT DATA2022_EN_Fixed20230629
File2: CDP-verification-letter NTT DATA FY2022_Fixed20230629
File3: Verification Statement ISO 14064 NTT DATA EMEAL 2023 v1

File1 is statement of NTT DATA consolidated excluding NTT DATA Europe and Latam S.L.U. The regarding Scope1 is in P2 of File2 as 12,300.
File3 is statement of NTT DATA Europe and Latam S.L.U. The regarding Scope1 is in P4 of File3 as “Category1” 1,718.
Total Scope1 is 12,300 + 1,718 = 14,018, coverage of Scope1 is 100%.

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

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

CDP-verification-letter NTT DATA FY2022_Fixed20230629.pdf
AS_NTT DATA2022_EN_Fixed20230629.pdf

Verification Statement ISO 14064 NTT DATA EMEAL 2023 v1.pdf

Page/ section reference

File1: AS_NTT DATA2022_EN_Fixed20230629
File2: CDP-verification-letter NTT DATA FY2022_Fixed20230629
File3: Verification Statement ISO 14064 NTT DATA EMEAL 2023 v1

File1 is statement of NTT DATA consolidated excluding NTT DATA Europe and Latam S.L.U. The regarding Scope2 LB is in P2 of File2 as 161,221.
File3 is statement of NTT DATA Europe and Latam S.L.U. The regarding Scope2 is in P4 of File3 as “Category2 local based” 4,571.42.
Total Scope2 LB is 161,221 + 4,571 = 165,792, coverage is 100%.

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

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

CDP-verification-letter NTT DATA FY2022_Fixed20230629.pdf
AS_NTT DATA2022_EN_Fixed20230629.pdf
Verification Statement ISO 14064 NTT DATA EMEAL 2023 v1.pdf

Page/ section reference

File1: AS_NTT DATA2022_EN_Fixed20230629
File2: CDP-verification-letter NTT DATA FY2022_Fixed20230629
File3: Verification Statement ISO 14064 NTT DATA EMEAL 2023 v1

File1 is statement of NTT DATA consolidated excluding NTT DATA Europe and Latam S.L.U. The regarding Scope2 MB is in P2 of File2 as 82,203.
File3 is statement of NTT DATA Europe and Latam S.L.U. The regarding Scope2 is in

P4 of File3 as “Category2 market based” 1,708.72.
Total Scope2 MB is 82,203 + 1,709= 83,912, coverage is 100%.

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

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: 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

CDP-verification-letter NTT DATA FY2022_Fixed20230629.pdf
AS_NTT DATA2022_EN_Fixed20230629.pdf

Page/section reference

File1: AS_NTT DATA2022_EN_Fixed20230629
File2: CDP-verification-letter NTT DATA FY2022_Fixed20230629

File1 is 3rd party verification statement of NTT DATA consolidated companies (Scope3

total=1,837,925 and category breakdown figure is in P2 of File2).
The 3rd party verification coverage of NTT DATA's Scope3 is 100%.

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 located in Tokyo. Those are a part of the emissions of "Data Center" in C7.3a, C7.6a. 1, 2, 3, 4, 5, 6, 7, 8

[1]FY2021_Verification_Results_Report_MitakaEast.pdf

[2]FY2021_Verification_Results_Report_Otemachi.pdf

[3]FY2021_Verification_Results_Report_OmoriSanno.pdf

[4]FY2021_Verification_Results_Report_ShinagawaTwins.pdf

[5]FY2021_Verification_Results_Report_Kasai.pdf

[6]FY2021_Verification_Results_Report_Mitaka.pdf

[7]FY2021_Verification_Results_Report_Mita.pdf

[8]FY2021_Verification_Results_Report_AreaShinagawa.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

1

% of Scope 2 emissions covered by the ETS

70

Period start date

April 1, 2020

Period end date

March 31, 2025

Allowances allocated

593,162

Allowances purchased

0

Verified Scope 1 emissions in metric tons CO2e

170

Verified Scope 2 emissions in metric tons CO2e

101,123

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 Cap-and-Trad program (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, 2022

Period end date

March 31, 2023

% of total Scope 1 emissions covered by tax

54

Total cost of tax paid

15,244,504

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 CO2 emissions” stated on Ministry of the Environment’s website [Details on the Carbon Tax] is approx. 15 million yen.

C11.1d

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

As all the 8 buildings (data centers and offices) located in Tokyo which are subject to the Tokyo Cap-and-Trad program (Tokyo CaT) as large-scale business establishments are owned by the company, it is easier to implement equipment upgrading and operational improvement plans contributing to GHG reductions, than in leased buildings where the company is a tenant. In addition, some of these targeted buildings (namely Mitaka Data Center EAST) are already promoting the construction and operation of environmentally friendly “Green Data Center®”, which shall be a model case of green DC solutions provided to our customers as well as in-house operation leveraging edge-cutting energy conservation measures. Therefore, beyond compliance with Tokyo CaT, implementation of GHG reduction actions through energy conservation and visualization at these business sites are part of our climate-related opportunities.

In FY2022, we instituted the following measures to reduce electricity consumption and GHG emissions.

· A 330,501-kWh reduction (162t-CO2) achieved by installing more efficient air conditioning equipment (centrifugal chillers and individually controlled air-conditioning)
· A 9,135,732-kWh reduction (4,467t-CO2) achieved by operational improvement of air conditioning, lighting, and shared equipment

In FY2023, we are planning the following measures to continue reducing GHG emissions in those buildings that fall under the Tokyo CaT.
· Energy-saving through equipment upgrading: Upgrade to high-efficiency air conditioner MASC V in data centers, upgrade office air conditioning, introduce high-efficiency LEDs, upgrade elevators
· Efficiency improvements through operational improvement plans: Improve efficiency through operational improvement plans for machine rooms

In addition, when submitting plans for global warming countermeasure plans pursuant to the Tokyo metropolitan ordinance, we engage in emissions monitoring via the Green Action Committee (formerly the Climate Action Committee), checking whether we need to purchase credits to be compliant with the ordinance. As a result of the above reduction efforts and monitoring, etc., when we submitted our FY2022 plan for global warming countermeasures (FY2021 results), we were deemed not to have to buy credits from outside the company or sell surplus credits outside the company.

C11.2

(C11.2) Has your organization canceled any project-based carbon credits within the reporting year?

Yes

C11.2a

(C11.2a) Provide details of the project-based carbon credits canceled by your organization in the reporting year.

Project type

Biomass energy

Type of mitigation activity

Emissions reduction

Project description

Replacement of fossil fuels with biomass solid fuel (woody biomass) in paper mills (replacement from heavy fuel oil to wood chip and RPF)

Credits canceled by your organization from this project in the reporting year (metric tons CO2e)

225

Purpose of cancellation

Voluntary offsetting

Are you able to report the vintage of the credits at cancellation?

Yes

Vintage of credits at cancellation

2020

Were these credits issued to or purchased by your organization?

Purchased

Credits issued by which carbon-crediting program

Other regulatory carbon crediting program, please specify

Japan's J-Credit Scheme

Method(s) the program uses to assess additionality for this project

Investment analysis

Approach(es) by which the selected program requires this project to address reversal risk

No risk of reversal

Potential sources of leakage the selected program requires this project to have assessed

Upstream/downstream emissions

Provide details of other issues the selected program requires projects to address

Projects registered under the J-Credit Scheme must satisfy all the following requirements:
(1) Implemented within Japan
(2) Implemented on or after the date two years prior to the date of application for the project registration (except for forest management projects, and projects applied for registration when the Ver. 3.1 or earlier versions of the Implementation Outline were valid)
(3) Satisfying the rules on the certification period, in section 1.6 of the Implementation Outline
(4) Being not identical with any projects of emission reduction or removal activities registered on (a) similar scheme(s)
(5) Demonstrating additionality
(6) Implemented based on methodologies that have been approved under the Scheme
(7) Making environmental and social considerations and ensuring sustainability
(8) Validated by validation authorities.
(9) Take action to keep permanence and suitable certification period (only for forest management projects)
(10) Satisfying other requirements under the Scheme

Comment

To offset the carbon emissions from the lifecycle of entire set of office furniture purchased when NTT DATA Group company JSOL relocated its head office, we retired 225t-CO2 in renewable energy J-credits in January 2023 via Okamura Corporation, the furniture supplier.

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.

Type of internal carbon price

Shadow price

How the price is determined

Price/cost of voluntary carbon offset credits
Cost of required measures to achieve emissions reduction targets
Benchmarking against peers

Objective(s) for implementing this internal carbon price

Change internal behavior
Drive energy efficiency
Drive low-carbon investment
Identify and seize low-carbon opportunities
Stakeholder expectations

Scope(s) covered

Scope 2

Pricing approach used – spatial variance

Uniform

Pricing approach used – temporal variance

Evolutionary

Indicate how you expect the price to change over time

The NTT Group will review the price as appropriate in response to market trends, etc., in line with Group policy.

Actual price(s) used – minimum (currency as specified in C0.4 per metric ton CO2e)

6,500

Actual price(s) used – maximum (currency as specified in C0.4 per metric ton CO2e)

6,500

Business decision-making processes this internal carbon price is applied to

Capital expenditure

Procurement

Mandatory enforcement of this internal carbon price within these business decision-making processes

Yes, for some decision-making processes, please specify

Equipment selection: Upgrading of air conditioning equipment in data centers

Explain how this internal carbon price has contributed to the implementation of your organization's climate commitments and/or climate transition plan

In May 2022, it was decided to gradually introduce internal carbon pricing within the NTT Group, and NTT DATA started by launching considerations on operation when air conditioning equipment was upgraded in data centers. Specifically, by visualizing the energy-saving performance of air conditioning equipment that NTT DATA is considering upgrading as a price, we can add "emissions cost at time of product use" (product electricity consumption amount x carbon emission factor x energy-saving performance price*) to the conventional product selection criteria of "product price," "maintenance costs," and "electricity charge," enabling us to advance the procurement of air conditioners with excellent energy-saving performance.

* Energy-saving performance price = Difference from product cost (for the user) in order to reduce emissions by one ton.

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

88

Rationale for the coverage of your engagement

Of FY2022 emissions, Category 1, 2 and 11 of Scope 3 comprise approx. 88% 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 4.2% annual reduction required under our certified SBT near-term target (interim goal of 60% reduction by 2030) and our committed SBT long-term targets (Net-Zero by 2040).

NTT DATA is implementing the following supplier engagement strategy to reduce emissions in Category 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-level 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

To achieve our decarbonization target of a 4.2% annual emission reduction (60% reduction by 2030), we have asked the suppliers accounting for 70% of our procurement value to set SBT-certification level reduction targets by FY2025. We achieved our FY2022 target of 80% of those main suppliers addressed by our engagement strategy either already working on that task or having plans to start work within the year.

In FY2022, in addition to the supplier briefings on climate change responses that we have been holding since FY2021, we held workshops for the first time for approx. 40 service-related partner companies. To advance service-related partner companies' efforts, we took the initiative of creating and distributing instruction manuals and supported their participation in the Ministry of the Environment's model program promoting decarbonization management toward SME GHG emissions reduction targets, and creating a community in which environment promotion officers in supplier companies can work together. As of FY2023, we are also operating Green Procurement Rules which strengthen the Hardware Procurement Rules created in FY2021 (preferential purchasing from hardware vendors that have instituted GHG emissions reduction efforts or have announced plans to do so), further encouraging supplier efforts.

To further expand the scope of our supplier engagement, we have been participating in

the CDP Supply Chain Program as a Premium member since FY2022, and we were also selected as a 2022 CDP Supplier Engagement Leader.
Through these initiatives, the number of suppliers engaged in the task increasing around 2.3 times on the previous year. In terms of progress toward the FY2025 target, suppliers accounting for 35% of our procurement value (50% target achievement rate) have set SBT-certification level reduction targets. Consequently, Scope 3 Category 1, 2, and 11 emissions were reduced by approx. 10% compared to previous year (around 190,000 t-CO2).

Comment

C12.1d

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

To accelerate responses to climate change, we select supplier candidates with environment-related technologies that can resolve envisaged issues as business partners or for investment, verifying those technologies through joint research and assessing market needs and the balance of business and eco-friendliness. In addition, through joint research-based technical validation, press releases, and customer proposals, we evaluate the technical viability, market needs, and the balance of business and eco-friendliness in each case and tackle projects with a priority on those expected to fulfill the above requirements.
Specific examples of joint research and joint experiments are as follows.

1. Venture companies
Together with ugo, Inc., we are using the avatar robot “ugo” to enable remote/automated facility inspection work at the data center NTT Shinagawa TWINS DATA Building that we operate. We have confirmed that it is possible to perform this work remotely rather than in person, and we have also used AI, etc., to automate recording and reporting work. Technical verification began in September 2021, with onsite testing conducted from August to November 2022. A rollout of “ugo” to our nationwide data centers began in April 2023. We are also aiming to provide remote/automated facility inspection services commercially before the end of the fiscal year. Through these proprietary measures, we expect to reduce our Scope 2 and Scope 3 Category 6 and 7 emissions by reducing work activities involving employees. We are treating the reduction of work activities involving employees as a collaborative result metric. This is also a priority initiative for us in terms of Scope 3 Category 6 and 7 emissions reduction.

2. Business partner companies
We have worked with UBE Corporation to develop a system for Carbon Footprint of Products (CFP) calculation by final product and will launch operation of the system for some products manufactured at UBE’s Ube Chemical Factory. UBE will progressively supply CFP data calculated through this system to clients as of January 2023, enabling UBE clients to quickly identify and disclose GHG emissions across the whole lifecycle as required by society, from raw material procurement to disposal and recycling. The system uses CFP calculation logic that

reflects the multiple variations per product and the complex multiple-stage manufacturing processes characteristic of chemical manufacturing, enabling a reduction of approx. 95% of the work involved in calculation to date.
These proprietary measures are expected to reduce UBE's Scope 2 emissions. We are treating the reduction of calculation work at UBE as a collaborative result metric. This is also a priority initiative for us as a project with a chemical manufacturer that is interested in working with us on CFP calculations.

3. Waste management companies
To lift the recycling rate for waste emitted by our company, we are narrowing down waste management companies to those with high recycling rates while simultaneously working with waste management companies to consider measures for boosting recycling rates. We also explain our ESG management, environmental management, and recycling targets to new recycling contractors, garnering their cooperation in data collection and recycling rate improvement. Our criteria for collaborative results from this initiative are a 99% recycling rate excluding construction waste (including heat recovery) and an 87% recycling rate including construction waste (including heat recovery). To that end, we collect recycling data on a quarterly basis from all waste management companies with which we deal, based on which we are switching to those companies with high recycling rates. In FY2022, we achieved a 99% recycling rate excluding construction waste.

4. Building owners and managers
We hold monthly reporting sessions at all 17 of our buildings, sharing progress with energy-saving measures, etc., with the property management companies. For the two most important buildings, our headquarters building included, we hold online energy-saving conferences twice a year with the management company, tenants, and construction companies to discuss and report on energy- and power-saving measures. We also consult regularly with the power companies supplying power to our buildings and the owners of leased buildings about the introduction of renewable energy, deciding on non-fossil certificate procurement volume (or external sales, etc.). We share our issue tracking list with building owners and management companies for discussion, determining the priority of collaborative work on that basis.

C12.2

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

Yes, climate-related requirements are 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.

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 GHG 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

We have acquired letters of agreement pertaining to these Guidelines from approx. 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.

% 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 most of our Category 1&2 came from hardware, we established hardware procurement rules in FY2021, and 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 to promote GHG reduction efforts at hardware vendors to achieve reductions throughout the supply chain. In FY2023, we strengthened this initiative in the form of Green Procurement Rules. We are specifically implementing 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. Spreading information internally as to whether those hardware vendors from whom we procure the most are engaged in GHG reductions or have announced that they are planning to do so and recommending procurement from those companies that have made the most progress. From FY2023, when we procure assets, we will as a rule do so from recommended companies.
The scope of the rules applies to the major categories of hardware products procured by the company, representing approx. 13% of the total value of all products received and inspected, and approx. 81% of the total value of all hardware products procured. Compliance rate when the procurement amounts for all hardware products is set as the denominator is approx. 74%.

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

81

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

74

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

External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

Yes, we engage directly with policy makers

Yes, our membership of/engagement with trade associations could influence policy, law, or regulation that may impact the climate

Yes, we fund organizations or individuals whose activities could influence policy, law, or regulation that may 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 CDP

ApprovedBA1.5.pdf

CDPScienceBasedTargetsCampaign2020impactreportspreads.pdf

RecommendationofTCFD.pdf

Describe the process(es) your organization has in place to ensure that your external engagement activities are consistent with your climate commitments and/or climate transition plan

The expressions of support have been approved by our officers, and engagement opportunities are undertaken across the company under the direction of the Green Action Committee (formerly called the Climate Action 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?

Specify the policy, law, or regulation on which your organization is engaging with policy makers

Rules on product carbon footprint calculations and verification for supply chain-wide carbon neutrality being considered by the Ministry of Economy, Trade and Industry (METI)

Category of policy, law, or regulation that may impact the climate

Climate change mitigation

Focus area of policy, law, or regulation that may impact the climate

Traceability requirements

Policy, law, or regulation geographic coverage

National

Country/area/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

Industry association Japan Electronics and Information Technology Industries Association (JEITA) has contributed to rulemaking by submitting to METI's Study Group on Product Carbon Footprint Calculations and Verification for Supply Chain-Wide Carbon Neutrality a document entitled "A Number of Points on CFP Guidelines." Five or more managers and general employees are participating in JEITA's Green x Digital Consortium, including as sub-leaders of sub-working groups under the Consortium's Visualization Working Group. The JEITA report to the Study Group is the outcome of the Visualization Working Group's considerations.

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 on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?

This is an important measure that will contribute to the creation of the "climate change and sustainability-related offerings" that we noted as a revenue opportunity. We develop and sell CFP calculation services, but the market for these services is limited by insufficient CFP rules.

We believe that CFP calculation rules will help to expand the market, and that ensuring that our services conform to the calculation rules will help to differentiate our services from those of rival companies.

Specify the policy, law, or regulation on which your organization is engaging with policy makers

Battery recycling included in the strategy for a growth-oriented, resource-autonomous circular economy by METI

Category of policy, law, or regulation that may impact the climate

Climate change mitigation

Focus area of policy, law, or regulation that may impact the climate

Traceability requirements

Policy, law, or regulation geographic coverage

National

Country/area/region the policy, law, or regulation applies to

Japan

Your organization's position on the policy, law, or regulation

Support with major exceptions

Description of engagement with policy makers

METI is considering a strategy for a growth-oriented, resource-autonomous circular economy, including studying and considering battery recycling. The ministry has consequently launched a commissioned project on battery traceability. NTT DATA has been considering battery traceability rules as a business operator commissioned under this project.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

Considerations are currently underway, exceptions included.

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?

This is an important measure that will contribute to the creation of the "climate change and sustainability-related offerings" that we noted as a revenue opportunity. We are an IT company that sources hardware with software development as our main business, so most of our carbon emissions are Scope 3. We also have many data centers and source and use a huge number of batteries, so we look forward to the development of a circular economy system for batteries, which, if it permeates society, will help to reduce our Scope 3 emissions.

C12.3b

(C12.3b) Provide details of the trade associations your organization is a member of, or 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 policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

CDP collects and discloses information on activities related to CO2, 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.
In FY2022, we contributed an article on our initiatives to the "Stories of Change" published by the CDP and also informed our supply chain about the article.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

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 GHG 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 policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

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.
In FY2022, we released a carbon emission visualization service and a data center air conditioning power optimization service, helping to maintain and accelerate Japan Business Federation efforts.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

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 policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

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 GHG 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 GHG emissions information and investigate distribution-related technologies.
In FY2022, the JEITA Visualization Working Group, of which NTT DATA is a member, put together draft visualization rules and reported these to METI.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

0

Describe the aim of your organization's funding

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 policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

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 GHG emissions by introducing our own data center technologies.

In FY2022, JISA continued its climate change countermeasures, so we again supported its considerations by dispatching an officer to participate in these.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

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 GHG 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 policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

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 GHG 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.
We hosted GSF Summit Tokyo on June 10, 2022, and gave a lecture on our initiatives at GSF Meetup Tokyo on April 21, 2023.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

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 policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

Japan Environmental Club is an industry organization comprised of corporations, local governments, the 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.
In FY2022, we again dispatched officers to support the continuation of Japan Environmental Club activities.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

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 or individuals in the reporting year whose activities could influence policy, law, or regulation that may impact the climate.

Type of organization or individual

University or other educational institution

State the organization or individual to which you provided funding

Kumamoto University

Funding figure your organization provided to this organization or individual in the reporting year (currency as selected in C0.4)

1,000,000

Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate

We are engaged in R&D with Kumamoto University on eelgrass cultivation, calculation of its carbon absorption, and development of a calculation application. Funds from NTT DATA will go into the eelgrass cultivation and application development.
The Ministry of Land, Infrastructure, Transport and Tourism is considering a blue carbon offset system and already has a trial run underway. However, multiple cases will be required to form the basis for a functional system. Through our joint research with Kumamoto University, we will create cases and provide the necessary information for systematization. Through this, we look forward to accelerating the establishment of a blue carbon credit system.

Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Type of organization or individual

Other, please specify

Governmental institution & University or other educational institution

State the organization or individual to which you provided funding

Niigata University, Sado City

Funding figure your organization provided to this organization or individual in the reporting year (currency as selected in C0.4)

0

Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate

Niigata University and Sado City are working to realize a circular city that uses natural resources to advance the economy, taking advantage of the many blessings of the area’s abundant natural environment to achieve rich lifestyles while protecting biodiversity.
We worked with both parties to hold five dialogue-based workshops with Sado City residents, exploring the region’s current status, issues, needs, future vision, and directionality for problem-solving based on the theme of circularity.

NTT DATA will utilize this joint research to consider social systems and services that create a virtuous cycle of coexistence with nature and economic development.
We are also considering putting together cases of local residents driving local transformation and providing these as a reference for the measures being pursued by the Japanese government to support city administrations in realizing carbon neutrality.

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

Page25_29_yuho2023_EN_rev.pdf
yuho2023_all.pdf

Page/Section reference

"yuho2023_all.pdf" is the complete Japanese Ver. of the FY2022 Annual Securities Report."
"Page25_29_yuho2023_EN" is the English translation for the climate-related part.

- Governance (Page 25-26)
- Strategy (Page 26)
- Risk Management (Page26)
- Risks & opportunities (Page 27-28)
- Emission figures & targets (Page 29)

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment

Publication

In voluntary sustainability report

Status

Underway – previous year attached

Attach the document

sr_2022.pdf

Page/Section reference

"sr_2022.pdf" is the NTT Data Group Sustainability Report for the previous year.

- Governance (Page 22)
- Strategy (Page 27)
- Risks and Opportunities (Page 28-34)
- Emissions figures (Page 52-56)
- Emission targets (Page 38)
- Other metrics (Page 49-51)

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment

C12.5

(C12.5) Indicate the collaborative frameworks, initiatives and/or commitments related to environmental issues for which you are a signatory/member.

	Environmental collaborative framework, initiative and/or commitment	Describe your organization's role within each framework, initiative and/or commitment
Row 1	Business Ambition for 1.5C Race to Zero Campaign Task Force on Climate-related Financial Disclosures (TCFD) Task Force on Nature-related Financial Disclosures (TNFD)	NTT DATA has declared its support for TCFD in FY2020. The climate-related financial disclosure aligned with TCFD recommendations in our FY2021 Annual Securities Report released in FY2022 was selected as a best practice by Japan's Financial Services Agency (FSA). Based on our knowledge and expertise as a TCFD practitioner, we have developed and established comprehensive services including TCFD disclosure consultation and GHG management system development. By doing so, we aim to contribute to the promotion of TCFD disclosure to our customers and to the decarbonization of our society. In addition, as for climate-related initiatives, NTT DATA has declared

		its support for “Business Ambition for 1.5℃” in FY2020 and participated in the “Race to Zero Campaign” through the “JCI Race to Zero Circle” established by the Japan Climate Initiative. As an example of our contribution, one of our Managing Executive Officers was featured in the video message made for the Virtual Japan Pavilion “Towards Zero: Japanese Non-State Actors Tackling Climate Crisis” at COP26. The video message emphasized the importance of digital technology utilization to achieve Net-Zero for our society. Besides the climate-related issues, NTT DATA also participated in the TNFD Forum in FY2022. Through the participation, we are committed to solving social issues and contributing to the global environment by strengthening the effort and support for the conservation and restoration of natural capital as well as biodiversity related to our stakeholders.

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	NTT DATA has acquired ISO 14001 certification for the whole organization, which includes items on environmental protection and restoration of biodiversity and natural habitats. We regard biodiversity as an important element of sustainability management, and the Board discusses target-setting and strategies for materiality, biodiversity included, taking responsibility for oversight. Specifically, we have set up a Green Innovation Office and positioned biodiversity and circular economy as its focus areas. The Green Innovation Office participates in biodiversity initiatives and pursues activities based on employee participation in our various organizations. Our Board and executives have oversight on sustainability management, biodiversity included.

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	SDG Other, please specify Japan Environmental Club, the TFND Forum, the 30b30 Alliance, and the Keidanren Committee on Nature Conservation

C15.3

(C15.3) Does your organization assess the impacts and dependencies of its value chain on biodiversity?

Impacts on biodiversity

Indicate whether your organization undertakes this type of assessment

Yes

Value chain stage(s) covered

Direct operations

Tools and methods to assess impacts and/or dependencies on biodiversity

ENCORE tool
IBAT – Integrated Biodiversity Assessment Tool

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)

We use ENCORE to understand how our business activities impact on natural capital and biodiversity. We then use IBAT to determine whether NTT DATA facilities or those of our Group companies are in conservation areas, studying the points of contact with important biodiversity areas and World Natural Heritage. Based on those studies, we identify the points of contact between our company and the natural environment as well as the impact of this, developing appropriate countermeasures where necessary.

Dependencies on biodiversity

Indicate whether your organization undertakes this type of assessment

No, but we plan to within the next two years

C15.4

(C15.4) Does your organization have activities located in or near to biodiversity-sensitive areas in the reporting year?

No

C15.5

(C15.5) 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?
Row 1	No, we are not taking any actions to progress our biodiversity-related commitments, but we plan to within the next two years

C15.6

(C15.6) 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	

C15.7

(C15.7) 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
In voluntary sustainability report or other voluntary communications	Impacts on biodiversity Biodiversity strategy	File 1: Sustainability Report 2022 P20 Nature Conservation File 2: Press Release on 'NTT DATA Launches Consulting Service to Support Nature and Biodiversity Information Disclosure' All pages 1, 2

[1]Press Release (Biodiversity).pdf

[2]sr_2022.pdf

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	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