Fujitsu Limited - Climate Change 2023



C0. Introduction

C_{0.1}

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

The Fujitsu Group has pursued "operating in harmony with nature" since its founding in 1935. At Fujitsu, we believe our Purpose is "to make the world more sustainable by building trust in society through innovation." We strive to fulfill this Purpose in all of our corporate activities. As a global ICT corporation, the Fujitsu Group develops advanced environmental technologies, and makes products and services employing these technologies available throughout the world. Through the pursuit of this mission we not only lessen the environmental burden of our own business activities but also help to reduce the environmental burden of our customers and society.

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

No

Select the number of past reporting years you will be providing Scope 1 emissions data for <Not Applicable>

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

Select the number of past reporting years you will be providing Scope 3 emissions data for <Not Applicable>

C0.3

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

Australia

Brazil

China

Denmark

Finland

Germany

India

Japan Malaysia

Malaysia New Zealand

Philippines

Republic of Korea

Spain

Taiwan, China

Thailand

United Kingdom of Great Britain and Northern Ireland

United States of America

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	JP3818000006

C1. Governance

C1.1

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

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	Responsibilities for climate-related issues
of	
individual	
or	
committee	
Chief	CEO in charge of environmental issues is the highest standing person responsible for oversight of the Fujitsu Group's climate change-related issues through three internal structures known as the "Risk
Executive	Management & Compliance Committee", the Sustainability Management Committee and the "Environmental Management System". CEO who is as a member of the Board directly receives a report
Officer	from the Risk Management & Compliance Committee that is under its immediate control and supervises the committee on its responses toward key business and climate-related risks. There are
(CEO)	procedures to identify, assess and manage the physical and transitional risks that may potentially occur in relation to climate change, together with a structure that oversees these procedures, in the
	Risk Management & Compliance Committee. Next, the Sustainability Management Committee chaired by the CEO discusses climate-related issues, the main agenda of the Management Council. In
	FY2021, for example, it was decided by the Committee to increase investment in renewable energy to achieve GHG emission reduction targets in line with the SBT 1.5°C target. In addition, the Fujitsu
	Group has ISO14001-based environmental management systems in place; in the systems, the Board receives reports from the "Management Council," which makes the final decisions in climate
	strategies. CEO is transferred the authority concerning the execution of duty by the Board within the appropriate range, and has all the business execution authorities including the problem related to
	the climatic variation.

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	Scope of board-level oversight	Please explain
Scheduled – some meetings	Reviewing and guiding annual budgets Overseeing major capital expenditures 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 Monitoring progress towards corporate targets Reviewing and guiding the risk management process	<not Applicable></not 	The Board receives reports on the following: - A regular report on important aspects selected, analyzed and assessed pertaining to companywide risks including those of climate change - A report on risks pursuant to the procedures prescribed in the company risk management system in case that unexpected events, such as natural disasters, occur - A regular report on climate change strategies determined by the Management Council (The strategies are discussed in the Sustainability Management Committee, under the direct control of the Management Council, as the key agendas). The Board oversees climate change issues after receiving reports on the following: - Ensuring consistency between the strategies to contribute to tackling climate change and the business strategies, through reviewing and guiding strategies - Progress management of GHG reduction actions (in accordance with its own targets such as SBT,RE100 etc.) to contribute to mitigation of the climate change through reviewing and guiding management politic

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		no board-level competence on	Explain why your organization does not have at least one board member with competence on climate-related issues and any plans to address board-level competence in the future
Row 1		We evaluate Board Members' abilities with respect to climate issues from the standpoints of driving and managing initiatives. Specifically, Fujitsu's President & CEO serves as a member of WBCSD's Executive Committee, where he leads global-scale Sustainability Transformation (SX) efforts to address social issues, including climate issues. We also evaluate Board Members' abilities with respect to water-related issues from the standpoint of academic expertise. One of the Board Members is appointed with the expectation that she can provide wideranging advice and direction as an academic authority on Fujitsu's responses to changes in its external environment and efforts to address the SDGs, including climate issues.	<not applicable=""></not>	<not applicable=""></not>

C1.2

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

Position or committee

Chief Executive Officer (CEO)

Climate-related responsibilities of this position

Managing annual budgets for climate mitigation activities

Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)

Providing climate-related employee incentives

Developing a climate transition plan

Implementing a climate transition plan

Integrating climate-related issues into the strategy

Setting climate-related corporate targets

Monitoring progress against climate-related corporate targets

Assessing climate-related risks and opportunities

Managing climate-related risks and opportunities

Coverage of responsibilities

<Not Applicable>

Reporting line

Other, please specify (Report by Risk Compliance Committee and Sustainability Management Committee)

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

Quarterly

Please explain

[Description of responsibilities and organizational structure]

The CEO in the Fujitsu Group has the highest-level responsibility in making decisions on climate change-related issues based on the authority delegated by the Board; various internal committees related to climate change have a governance system in place enabling CEO to

make informed final decisions as the last responsible person. For example, Risk Management & Compliance Committee, an organization directly reporting to the Board, manages companywide risks including climate-related risks globally. The CEO assumes the position of the

committee chairman. The chairman of "the Sustainability Management Committee" positioned directly below the Management Council is also assumed by the CEO. Risk management is an example of the delegation of power by the CEO. The CEO, the chairman of Risk Management & Compliance Committee, appoints a Chief Risk Compliance Officer as an executor of decisions of the Committee and

has the Officer execute the decisions. Climate changes is a topic related to not only risk management but also various areas such as business strategy and supply chain management; therefore, the CEO who can manage several chief operating officers in specialized roles is

considered suitable as a chief executive related to climate change in the Fujitsu Group.

Regarding sustainability , the CEO is the chairman and chief executive of "the Sustainability Management Committee"; however, a director in charge is appointed for the execution of specific activities.

[Description of position specific climate-related issues monitoring process]

The power to execute operations of CEO is delegated to each chief representative director in the Fujitsu Group by utilizing the operating officer system. For example, for risk management, the person responsible for risk and compliance identifies, analyzes, and assesses critical risks and reports the results to the chairman, the CEO, at least twice on years for deliberation. Similarly, the CEO as the chairman of the Sustainability Management Committee makes final decisions on specific policy of climate change strategies semiannually for environmental activities, and specific management is performed under a director in charge with execution responsibilities. For example, Fujitsu is a member of the RE100 initiative. Analysis and plans on expanding the introduction of renewable energy were presented at the Management committee, and the CEO ultimately made a decision based on multiple perspectives, including the investment plan, timeline and impact. As a result, a decision was made to increase investment to proactively expand the use of renewable energy toward achieving GHG emission reduction targets in line with the SBT 1.5 degree target.

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

Board/Executive board

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary

Performance indicator(s)

Company performance against a climate-related sustainability index (e.g., DJSI, CDP Climate Change score etc.)

Incentive plan(s) this incentive is linked to

Short-Term Incentive Plan

Further details of incentive(s)

Emissions reduction project Emissions reduction target Energy reduction project Energy reduction target Efficiency project Efficiency target Behavior change related indicator

Outstanding results with respect to the environment and climate change are reflected in Board Members' annual performance evaluations. We took a new look at the bonus system for our executive directors (CEO, COO, CFO) in 2022. Our aim was to strengthen our commitment to management goals that are linked to the fulfillment of Fujitsu's Purpose: "To make the world more sustainable by building trust in society through innovation." This review led us to decide to add CDP, a set of third-party benchmarks on ESG, as an evaluation indicator in determining executive directors' bonuses.

From now on, Fujitsu's inclusion among CDP's A List companies will be linked to the amount of bonuses paid. And since "reduction of CO2" is included among CDP's evaluation items, the degree to which CO2 reduction efforts have progressed will affect executive directors' bonus payment rate (by plus or minus several percent). Whether the company is on the CDP A List affects the bonus payment percentage (± a few percent) of the executive directors. Since being put on the A List is an incentive, multiple items which are asked about in CDP questions are targets for the incentive.

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

Considering climate issues over the short, medium, and long term can lead to adaptation to and mitigation of risks as well as new opportunities to create value. Earning high marks in evaluations with respect to global indices can help build a stronger upstream presence in business negotiations. It is also conducive to expanded collaboration with business partners.

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	2	FY 2022- FY 2023
Medium-term	2	10	FY 2023 - FY 2030
Long-term	10	30	FY 2030 - FY2050

C2.1b

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

We develop a scenario of climate-related risks and assess it by multiplying the five-level ranks (1 to 5 points) of "financial impact" (1 billion yen to 100 billion yen) and "occurrence frequency" ('several times per year' to 'once in ten years'). When the formula indicates the score equal or higher than the threshold value of 15, and if countermeasures are inadequate, we define it as the substantive financial or strategic impact on our business. ([Financial impact (1-5 points)] x [Likelihood of occurrence (1-5 points)] = 15 or more on a scale of 1-25 will be considered as exceeding the threshold.)

If, for example, a natural disaster such as a flood or typhoon caused devastating damages due to the impact of climate change and disrupted activities at primary sites over several months, the loss in sales could total 50 billion yen or more. However, the presumed frequency of such occurrences is considered to be no more than once in 10 years. Furthermore, solid disaster preventive measures have already been planned and implemented. When verified against the assessment criteria, this scenario does not correspond to risks that would cause substantive change in business as they fall below the threshold.

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

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

Fujitsu group has established the Risk Management & Compliance Committee (chaired by the CEO) as the highest-ranked decision-making body for risk management and compliance directly under the Board. This committee monitors risk management conditions of Fujitsu group at least twice a year. The Committee executes integrated assessment of a comprehensive group-wide risks involving finance, customers, competitor/industry, policies/regulations, security, climate-related issues, and so on. The Committee has developed a tool for regular implementation of risk assessment, which is distributed to respective risk compliance officers who are asked to enter the answers. The tool is designed to enable officers to report on risk threat scenarios by assessing the degree of financial impact, occurrence frequency and condition of countermeasures. Short-term, medium-term and long-term risks are represented in the "Likelihood of occurrence" section.

Using this tool, an assessment is conducted by departments in charge of company-wide, cross-sectional risks, namely: Public Policy and Business Development Office and environmental department for regulatory and market risks; marketing department and environmental department for reputational and technological risks; PR/IR Office and environmental department for investor risks; General Affairs Department, facilities management department and environmental department for physical risks.

The company-wide risk assessment outputs are aggregated with the results of asset-level assessment, and matrix analysis is performed on the consolidated results from two aspects - the degree of financial impact (up to 100 billion yen) and occurrence frequency (in the next ten years and beyond) - to identify group-wide risks that are higher on the priority ranking; then the results are reported to the Board.

Regarding potential risks such as long-term climate issues, the Sustainability Management Committee, chaired by the CEO and comprising the heads of business groups and regions, is specifically engaged in group-wide strategy planning by considering climate-related and other environmental risks and opportunities, as well as confirmation of progress. The Sustainability Management Committee held twice a year to monitor the implementation status of climate strategy including response to risks. This provides an opportunity for the CEOs and executive officers of business groups and regional heads to manage the entire company's response status from the perspective of management execution.

Given that Fujitsu delivers various ICT solutions for societal issues, addressing climate change mitigation/ adaptation is a business opportunity for our technology solutions segment 87% of sales). Each business group head analyzes opportunities and develops strategies, followed by the CEO making final decisions on a business plan and resource allocation in the Management Council.

For short-term, medium-term and long-term climate change risks and opportunities, company-wide strategies are formulated, decisions are made and progress is kept track of while considering environmental risks and opportunities that include climate change at the Sustainability Management Committee chaired by the CEO and comprising heads of business groups and regions.

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	At present, the Fujitsu Group is subject to laws and regulations in regard to GHG emissions and energy use. Those are taken into account in our risk evaluations because the Fujitsu brand may be damaged if we violate them and costs for responsive measures may rise if they become stricter. For example, the industrial air conditioners used in all of over 100 sites in Fujitsu Japan and coolers in our semiconductor plants are applicable for the Act on Rational Use and Proper Management of Fluorocarbons. This law requires regular measurement and reporting of fluorocarbon leakage for industrial air conditioners and a report in the event the leakage exceeds 1,000 CO2-ton per year. If a leakage occurs, administrative authorities will conduct on-site inspection; unless complied, a fine of 200,000 yen will be imposed. Managing the leakage of CFC is one of the compliance items in ISO14001-based Environment Management System (EMS) of Fujitsu. All offices conduct inspections once every 3 months and large equipment run inspections on a monthly basis. Inspection results are aggregated at the environmental division through EMS's reporting procedures. Another regulatory risk is that a levy is added to electricity costs based on the feed-in tariff (FIT) system for renewable energy in Japan. FIT accounts for about 15% of energy procurement costs for Fujitsu in the country. In particular, while data centers and ICT services require power, we expect FIT's impact on procurement costs to further increase as the surcharges are projected to rise. Based on the company-wide risk management system, departments responsible for these facilities, the environmental division and the purchasing department are the main players working on power usage and costs associated with these business activities. The purchasing department compares and analyzes power rates through utilizing our procured power system in considering cost optimization with the contracted power company and cutting down CO2 emissions. The environmental division performs correl
Emerging regulation	Relevant, always included	As an emerging regulation, carbon pricing is likely to be implemented in many countries in the world. Energy use is indispensable in continuing data center operation and production activities in plants, and that account for 80 to 90% of all energy use in the Fujitsu Group. If energy price rises due to regulatory moves, Fujitsu will need to pay for additional cost. Therefore, emerging regulation is relevant to our business and included in our risk assessment, and the trend of risk is being monitored. For example, in Japan the Ministry of the Environment holds "A study group on how carbon pricing should be" from 2017, discussing specific policy proposals. It has been decided that the Japanese version of carbon pricing will be gradually introduced from fiscal 2023. If carbon tax and emissions trading system (ETS) are introduced in Japan in the future, Fujitsu is likely to face an increase in costs, such as capital investment cost for energy saving (current expenditure is about 1.5 billion yen per year), energy procurement cost, credit procurement cost, procurement cost for renewable energy and certification. For instance, if the carbon-emissions tax is introduced in Japan, it is provisionally calculated that our increases for about 1 billion yen. For such emerging regulation risks, analysis, assessment, and management of detailed risks are performed under the company-wide risk management structure, led by Public Policy and Business Development Office and the environmental division as organizations responsible for these risks. Specifically, we collect information on trends of industrial associations and ministries and agencies. We confirm the possibility of risk emergence and timelines. We also assess financial impact on Fujitsu. Based on the results of such risk assessment in the company, we conduct lobbying activities via an industrial association.

		Please explain
	& inclusion	
Technology	Relevant, always included	Electricity use is essential for ICT, in particular super computers and PC servers (including Fujitsu's products) consume a large amount of electricity. The pursuit of energy efficiency would greatly contribute to our market competitiveness, whereas there is a risk that we may lose our competitive edge over our competitors in the technological development competition. Therefore, we always include this in the risk assessment.
		For example, one of the technological development projects Fujitsu is now focused upon is quantum computing. In 2020, Fujitsu started research and development on quantum computing in all areas from hardware to software, and spanning from basic to applied, through open innovation with leading research institutions across the globe (RIKEN, the University of Tokyo, Quantum Benchmark, etc.), and is actively making upfront investments. However, there is a concern in case if we cannot have supremacy in the technological development competition, our share or profitability may decrease.
		Under the company-wide risk management structure, each technology development unit and marketing department, which are responsible for such technological risks, play an active role in analyzing, evaluating, and managing risks in detail including the trends of other companies. On the other hand, for information gathering regarding cutting-edge environmental technologies, the Environmental division plays an active role in collecting information on the trends of other companies via industrial groups such as JEITA (Japan Electronics and Information Technology Industries Association).
		Furthermore, the 11th Fujitsu Group Environmental Action Plan (FY2023-FY2025) aims to resolve environmental and social issues by setting eight targets in three global risks areas highlighted by the World Economic Forum: "Climate Change," "Resource Circulation," and "Living in Harmony with Nature." These targets are mapped against the two values of "Customers and Society" and "Fujitsu and the Supply Chain. In the area of Climate Change, we have set reduction targets for FY2025 to achieve Net Zero emissions of greenhouse gases from our business activities and from the entire value chain. We will achieve them through the strategic introduction of renewable energy and the development of energy conservation through advanced ICT. At the same time, we will promote efforts to grasp and reduce the environmental impact of our suppliers and achieve further energy savings by our products.
Legal	Relevant, sometimes	If the disclosure of climate change-related risks in business is insufficient, there is a non-zero chance that our shareholders and stakeholders file a lawsuit against us; therefore, it is included in the risk assessment appropriately.
	included	After COP 21 in 2015, investment to Fujitsu Group by investors making passive investment in consideration of ESG is increasing. In fact, there was a lawsuit in 2016 in which shareholders sued an Australian bank for neglecting to appropriately disclose climate change-related business risks. As our shareholders individually inquire on matters pertaining to climate change, we recognize that investors perceive this as a risk.
		A number of overseas ESG investors has acquired Fujitsu's stocks, and the holding rate has increased by about 15% since the adoption of the Paris Agreement. These investors tend to place importance on disclosure of information related to climate change. Appropriate information disclosure is becoming increasingly important, including assessment of risks related to climate change in business and results of current activities for measures against global warming. We strives to provide information to all stakeholders by holding ESG briefing sessions every year since FY 2015 and by disclosing information through our websites, CDP responses, etc.
		Under the company-wide risk management structure, we grasp the interests of stakeholders and confirm the possibility of emergence of lawsuit risk, led by environmental department, IR/PR office and legal department as organizations responsible for lawsuit risk. The risk of lawsuit against our company is assessed when the results of trend survey were reported from external organizations and a climate-related lawsuit was filed against other companies.
Market	Relevant, always	The market is expected to become more sensitive to the energy consumption levels of products and services and to the amount of energy savings achieved from solutions, following the increasing demand for GHG reductions to companies and risks of cost increases through the introduction of carbon taxes.
	included	Demands for low-carbon supercomputers and HPC (high-performing computing) have been increasing for the past few years as those are used as platforms for big data analysis and artificial intelligence. The reason energy-saving supercomputers are increasing in demand is the massive utility costs required in running supercomputers. Consequently, supercomputers with poor power efficiency will not be chosen by customers due to the high operational costs required and lead to business opportunity losses. As a result of collecting information on customer requests on improving energy efficiency, it has been determined that expanding demand for such low-carbon products is a potential business risk and has since always been included in risk assessments.
		For example, the annual power consumption of the supercomputer previously delivered by Fujitsu was equivalent to that of about 30,000 general households. When electricity rates rose, the impact was so great that a simple calculation indicated an increase in operating expenses of more than 200 million yen annually. The Company has since announced a successor model with significantly improved power performance, but a lack of continuous improvement in energy-saving performance would pose risks of missing business opportunities. As this risk is especially relevant to Fujitsu's system platform area, which accounts for 617 billion yen of sales in FY2022; in order to respond to the market's increase in demand, the Fujitsu Group is focusing on the development of next-generation HPC-related technology, including CPUs with lower power consumption and circuit technology development. We will also lose business opportunities if the amount of energy consumption reduced from our solutions is low against competitors. Therefore, we will increase business opportunities by maximizing energy efficiency through leveraging our Al-powered Zinrai solution and Digital Annealer that uses digital circuits inspired by quantum phenomena for high-speed solutions for optimization problems.
Reputation	Relevant, always included	If the Fujitsu Group ranks low in rating related to climate-related measures, or if we becomes the target of NGO's negative campaign or boycott campaign, our brand image will be damaged, which may result in a risk of causing long-term negative impact on business, such as decrease in social credibility, increased cost to respond to the situation, and decreased loyalty of employees. Therefore, reputation risk is always included in the risk assessment. For example, together with eight other ICT companies, Fujitsu Finland was a subject of the survey called "How Green Is My Interest?", which is a company assessment carried out by an intermational NGO in 2013, and the benchmark report on energy use was published. While Fujitsu Finland was acknowledged as advanced due to the high energy efficiency of the data center, the limited use of renewable energy was revealed (the second lowest in rank). This NGO is influential in Finland and the NWE and CEE regions (Europe) where our sales account for 72% of our total overseas sales. Therefore, we accelerated the use of renewable energy in Fujitsu Finland, in order to avoid a risk that this NGO may denounce us. Detailed analysis, assessment, and management of such reputation risks are performed under the company-wide risk management structure, led by PR office and environmental department as organizations responsible for the risk. We monitor NGO's proposals, lobbying activities, and survey reports and check the possibility of risks.
Acute physical	Relevant, always included	Due to occurrences of acute natural disasters such as large-scale flood damage, sudden downpours, and lightning, business sites and data centers of the Fujitsu Group may suffer from floods and severed energy supply. We include acute physical risks in the risk assessment as we recognize the possibilities of business impact such as failures of electric devices and power-supply facilities, loss of important data, production line stops, and leakage of toxic substances. For example, there was a case that almost led to service suspension after sudden heavy rain exceeded the area's water treatment capacity within a short time period and flooded into a Fujitsu Group company's office. Since Fujitsu's data centers bear the responsibilities for system operations of customers as the platforms for providing outsourcing services, operation suspension by natural disasters must be prevented. At the primary data centers in Gunma Prefecture, Hyogo Prefectures, etc., we have raised the floor level of the buildings higher than ground level, improved drainage design to prevent puddles on the roof, and carried out periodical waterproofing work, in order to avoid flood risks in case disasters should occur. We make efforts for our business continuity and achieve stable operation of customers' systems. As for such acute physical risks in Fujitsu business sites, the general affairs department, facility management department, and data center operation department play an active role in risk assessments. Based on the data center facility standards (Tier), which are external certified standards, and our in-house facility management standards, internal audits from the quality control department carries out on-site audits and risk assessment in each phase of planning, designing, construction, and operation of buildings. This allows the entire group to ensure the
Chronic	Relevant,	prevention of physical risks due to acute natural disasters and maintain our business continuity. In FY2020, Fujitsu assessed the risk of flooding at its locations, including those of group companies. As a result, it installed waterproof banks for the main building of Fujitsu's Kawasaki Plant, an important hub for the Company's internal network, and throughout Fujitsu Solution Square. Rising average temperatures due to climate change cause air conditioning energy of data centers, plants and offices, alongside energy costs in general, to increase. For example, our data
physical	relevant, always included	rising average temperatures due to climate change cause air conditioning energy or data centers, paints and onloces, alongside energy costs in general, to increase. For example, our data center has seen about a 3% increase in energy usage per every 1°C increase in the average annual outside temperature. In addition, there will be consequences in the event IT equipment in our data center cannot be sufficiently cooled, such as reduced arithmetic processing capacity and shortened equipment life. To fully utilize energy conservation and renewable energy, the new building at our data center in Gunma prefecture makes use of high-efficiency UPS (Uninterruptible Power Supply), free cooling and green energy such as solar power. Feasible energy conservation initiatives have also been reviewed and implemented in other locations as well. With regard to energy consumption and costs associated with business activities, the divisions responsible for facilities, the environment and purchasing play a central role in determining risks through assessments and predictions of power cost increases by collecting data on energy consumption from each facility. When planning and repairing sites, the purchasing department compares and analyzes power rates through utilizing the company's procured power system in considering cost optimization with the contracted power company and cutting down CO2 emissions while also planning energy-saving designs. Environmental department performs correlation analysis of temperature and electricity consumption, estimates energy consumption of the day based on the weather forecast on the previous day, and provides information through a portal website accessible by each site.

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

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(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

For a policy or any lattice	O-share satisfies associated
Emerging regulation	Carbon pricing mechanisms
0 0 0	, 9

Primary potential financial impact

Increased indirect (operating) costs

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

Carbon taxes are being introduced in Europe, the United States, China, Australia, and various other countries where Fujitsu has business bases. In Japan, too, discussions are underway on a proposed system to achieve net zero emissions by 2050, and the government has decided to introduce a Japanese version of carbon pricing in stages beginning in FY2023. If a carbon tax is introduced, the risk of future cost increases could arise. Such increases could be seen in capital investment expenditure for energy conservation (1.5 billion yen in FY2021), energy procurement costs, credit procurement costs, and procurement costs for renewable energy electricity and certificates. For example, according to the the IEA Energy Technology Perspectives (ETP) 2DS Scenario, carbon taxes may begin in the U.S. at \$35/t-CO2 in 2020 and it could increase linearly to \$210/t-CO2 by 2050. (At present, the US has not introduced a carbon tax at a national level. The current administration, however, has pledged to introduce carbon border adjustment measures, and discussions on implementing a carbon tax may suddenly emerge going forward.) As there are business sites of Fujitsu America and Fujitsu Network Communications (FNC), the power consumption in the country accounts for 8.5% of Fujitsu Group's total power consumption of all overseas sites. If Fujitsu's US locations do not continually use power derived from renewable energy sources, The cost of the carbon tax could have a financial impact ranging from 30 million yen to as high as 210 million yen. The Japanese government (Ministry of Economy, Trade and Industry (METI) and Ministry of the Environment (MOE)) is currently discussing the introduction of carbon pricing to achieve zero carbon emissions by 2050, which could pose risks of increased costs going forward. Regarding the carbon pricing policy, in countries with an emissions trading system, as distinct from carbon taxes, a financial impact occurs only when there is an excess of emissions. Therefore, we consider the impact is limited.

A simple simulation of the Scope 1 & 2 emissions (497490 t-CO2) of the entire Fujitsu Group, it is equivalent to a financial impact of 1.3 billion to 9.1 billion yen (Calculated as 131 yen to the dollar).

Time horizon

Medium-term

Likelihood

Likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure - minimum (currency)

1303423800

Potential financial impact figure – maximum (currency)

13685949900

Explanation of financial impact figure

Regulatory compliance cost regarding electricity procurement is included in operating costs. If we do not shift to renewable energy, we will be obliged to pay carbon taxes, which will lead to an increase in operating costs.

According to the 450 scenario of the IEA World Energy Outlook(2020), carbon taxes may be introduced to the U.S. at \$20/t-CO2, and it is expected to be raised to \$140/t-CO2 by 2040. To simply simulate by applying this tax rate to Scope 1 & 2 emissions (497490 t-CO2) of the entire Fujitsu Group, it is equivalent to a financial impact of 1.3 billion to 9.1 billion yen (Calculated as 131 yen to the dollar).

We also take it into consideration of the worst-case scenario. According to the IEA Energy Technology Perspectives (ETP) 2DS Scenario, there is a report that carbon taxes in the U.S. will rise up to \$210/t-CO2 by 2050, it is equivalent to a financial impact of 14.7 billion yen.

Cost of response to risk

1500000000

Description of response and explanation of cost calculation

To minimize the regulatory risks, we simultaneously promotes (1) progressive expansion of renewable energy(RE) use and (2) thorough energy conservation.

(1) As we pursue to expand the use of RE, we joined 'RE100 Initiative' in 2018 with a goal of 40% by 2030 and 100% by 2050.

For example, since June 2022, Fujitsu Australia has been using renewable energy to cover approximately 40% of the electricity it uses at its data centers. This is equivalent to about 30% of Fujitsu Australia's total annual electric power consumption and will offset approximately 30,000 tons of Fujitsu Australia's annual greenhouse gas emissions. Fujitsu Australia's effort is an important step toward decarbonizing its operations and providing low-GHG-emitting services to its customers. This initiative will lead to a reduction in the amount of carbon tax paid, as well.

(2) Each business group set and manage energy reduction target based on Fujitsu's Science Based Target updated in 2020. We promote a reduction in emissions through the evaluation of priority projects, based on the Facility Investment Guidelines which set criteria for investment from economical and environmental perspectives. For example, In 2020, Fujitsu Frontech Ltd. has introduced SOFC to its Kumagaya Service Solution Center(SSC). In light of introducing this fuel cell power generation system, approximately 50% of the electricity consumed at the Kumagaya SSC can be supplied by the fuel cells and reduce annual CO2 emissions by approximately 35% (compared to FY 2018) compared to when all power needed is procured from its power company.

With our promotion of the use of renewable energy and energy-saving facilities, etc., in response to the increased introduction of carbon pricing in various countries, we were able to avoid costs of 85 million yen for renewable energy and 940 million yen for energy-saving facilities, respectively.

'The 'Cost of response to risk' was calculated by totaling the capital investment budget for global warming countermeasures in FY2021 (1.5 billion yen/year). The breakdown is mostly investment for energy conservation, with about 80% for new introduction of air conditioners and refrigerators, and about 20% for LED lighting.

Comment

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Market

Other, please specify (Changes in electricity prices due to decarbonization)

Primary potential financial impact

Increased indirect (operating) costs

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

In the Fujitsu Group, the energy use in the operation of data centers and production in plants accounts for 80 to 90 percent of the total energy use in the group. As energy use is essential in business activities, we consider an increase in expenditure associated with the fluctuation of electricity prices as a risk, and take it seriously. In particular, we are concerned about 'decarbonization surcharges' as a transition risk. In Japan where Fujitsu's data centers are located, for example, there is a Feed-in Tariff (FIT) scheme for renewable energy. The surcharge unit price, According to the Agency for Natural Resources and Energy, It is estimated the amount will reach 4.7 trillion yen in 2030. The unit price of the surcharge, which was 3.45 yen/kWh in FY2022, is expected to rise by about 10% with the increase in renewable energy. If FIT surcharge rises in the future, it will lead to an increase in our expenditure, and our cost competitiveness of data center-related services such as out-sourcing for instance, will decline.

We anticipate possibilities that the similar low-carbon obligation schemes in other countries, either an emerging or strengthened regulation, may impact other Fujitsu sites as well, as maximum potential impact of a surcharge equivalent to 4.1 billion yen is estimated.

Time horizon

Short-term

Likelihood

Likely

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

4100000000

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact figure

Currently, FIT surcharge has brought a financial impact to Fujitsu sites in Japan. Considering that the similar scheme will also bring a financial impact to our sites in other countries in the future, based on the in-house estimation of FIT surcharge in Japan as of 2030 (1.1 times of the current surcharge unit price 3.45 yen/kWh) on the purchased electricity volume of the Fujitsu Group worldwide (it was 1,058,560MWh in FY2022), an impact of about 4.1 billion yen is expected.

Cost of response to risk

120000000

Description of response and explanation of cost calculation

The Fujitsu Group must lower its electric power consumption to mitigate the financial impact of charges associated with the FIT surcharge system. We evaluate priority projects based on our Capital Investment Guidelines, which set internal standards for capital investment from economic and environmental perspectives. We then apply best-practice measures to develop innovative technologies and internal practices.

For example, we introduced into some data centers in the Kanto and Hokuriku regions an air-conditioning control system that utilizes Fujitsu-developed AI (machine learning). This system minimizes the power needed to cool high-performance, high-heat-generating servers and other IT equipment to address their increasing power consumption (heat generation). This step has reduced annual power consumption by over 20%(FY 2019 and beyond). We are likewise implementing energy-saving measures for air conditioners at data centers of other business sites by frequently reassessing the cooling temperature and flow rate of chilled water. Such measures include extending the operating hours of outdoor air cooling and using free cooling. By deploying these measures across our organization, we are endeavoring to minimize the risk that FIT surcharges will affect our financial circumstances.

The "Cost of response to risk" was calculated by aggregating R&D costs for promoting energy conservation, such as power reduction technologies in FY2020 (costs for developing technology to reduce power consumption of servers by accelerating processing speed, etc.). (120 million yen/year). The breakdown is about 50% for the development of energy conservation technologies for data centers and about 50% for the development of manufacturing processes and other related technologies. At Fujitsu, we plan to invest 1 to 2 billion yen annually over the short to medium term in energy-saving equipment and other decarbonization measures. We will also reduce power costs by installing energy-saving equipment.

Comment

Identifier

Risk 3

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Increased stakeholder concern or negative stakeholder feedback
--

Primary potential financial impact

Decreased revenues due to reduced demand for products and services

Climate risk type mapped to traditional financial services industry risk classification <Not Applicable>

Company-specific description

If the Fujitsu Group is ranked low regarding countermeasures against climate change or if the group becomes the target of NGO's negative campaigns or boycott, our brand value will be weakened, and there are risks of a long-term negative impact on our business such as a loss of social credibility, an increase in cost for measures, and a decrease in employees' loyalty. In fact, in recent years, investors and business partners have been demanding more proactive disclosure of climate change measures, and contractual terms and conditions require climate change measures such as greenhouse gas emission reductions, so we recognize that a company-wide approach is essential. According to the RE100 2022 annual disclosure report, the "Services" sector, to which Fujitsu belongs, had a 60% renewable energy utilization rate in 2021, and the average target year for achieving RE100 is 2027, which is ahead of other industries. The sector is facing intensified competition and higher sector-specific risks.

For example, together with eight other ICT companies, Fujitsu Finland was a subject of the survey called "How Green Is My Interest?", which is an company assessment carried out by an international NGO in 2013, and the benchmark report on energy use including our company's information was published. While Fujitsu Finland was acknowledged as advanced due to the high energy efficiency of the data center, the limited use of renewable energy was revealed by the report (the second lowest in rank). This NGO is influential in Finland and the NWE and CEE region (Europe) where our sales account for 72% of our total overseas sales.

Time horizon

Short-term

Likelihood

Very likely

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

26300000000

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact figure

If by any chance the situations get aggravated as to cause product recalls, it will have a significant financial impact. By studying other companies' cases, we estimate that there was a 7 to 15% decrease of revenue due to the impact of extraordinary loss and cost for countermeasures. However, in many cases, behind these worst situations, there are faults on a company's side, including false description of product information. Thus, even if our company becomes the target of negative campaigns or boycott, it is predicted that the impact on sales will remain small, as long as there is no significant negligence made by our company.

To estimate the potential financial impact on overseas sites' sales of 1316.9 billion yen, where NGO's influences are relatively strong, the financial impact will be around 26.3 billion yen if an impact of 1% occurs for two years.

Cost of response to risk

200000000

Description of response and explanation of cost calculation

To avoid reputation risks, Fujitsu gathers information on major environment-related rating surveys, as well as performance data pertaining to climate change at each of its sites, in an effort to be up-to-date. As a result, recognizing the importance of introducing renewable energy(RE), Fujitsu joined the Science Based Target Initiative and the RE100 Initiative, in order to expand our use of RE following the internationally common framework; and we have set targets of 40% of RE use by 2030 and 100% by 2050. In line with this goal, Fujitsu is also working to expand the use of RE primarily in its data centers outside Japan. To that end, Fujitsu is surveying the cost of introducing RE to this end.

For example, in Fujitsu Finland, a benchmark report in comparison with other eight ICT companies was published. While Fujitsu Finland was acknowledged as advanced due to the high energy efficiency of the data center, the limited use of RE was revealed and ranked the second lowest. In addition, considering surging carbon taxes in Finland, a decision was made to shift the power source to RE at the Management Board of Fujitsu Finland. As a result, since 2014, Fujitsu Finland have been purchasing certified, 100% RE (wind power) in its facilities including offices and data centers, in spite of the fact that they are rental facilities.

Furthermore, based on case studies in Finland, we believe that the rate of RE use can be a reputational risk for customers in providing data center services globally, and we are developing carbon neutral data center service offerings, mainly for data center operations with typically high emissions, both in Japan and abroad. Specifically, we completed a switch to 100% RE for all power required to operate the FUJITSU Hybrid IT Service FJcloud, a cloud service provided by Fujitsu data centers in Japan, by FY2022.

The 'Cost of response to risk' is calculated as internal costs for responding to ESG-related information disclosure in order to mitigate and avoid risks of reputation damage. (The costs of major environmental rating surveys and data monitoring at each site are calculated by multiplying the personnel costs per person of 20 million yen per year by the number of employees 10 corresponding to the risk (200 million yen).)Of this amount, about 10% was for environment-related rating surveys and the remaining about 90% was for data monitoring at each site.

Comment

C2.4

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

C2.4a

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

Identifier

Opp1

Where in the value chain does the opportunity occur?

Downstream

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 through access to new and emerging markets

Company-specific description

Globally, the transportation sector has particularly high CO2 emissions, and a significant impact on climate change. In Japan, logistics is becoming increasingly important as a form of infrastructure that supports society. However, driver shortages and traffic congestion accompanying growing logistics volume, increasing CO2 emissions, and other concerns have become important issues. Thus, reducing CO2 in the logistics sector, which accounts for more than one-third of CO2 emissions in the transportation sector, is an urgent and extremely important challenge that must be overcome to achieve the greenhouse gas reduction target (35% reduction in the transportation sector) set in the Plan for Global Warming Countermeasures.

As a service provider, Fujitsu provides logistics solutions and other systems and services ranging from supply chain management strategy planning to development and operation. We aim to contribute to environmental and social issues such as the reduction of CO2 emissions through our business by solving logistics efficiency issues with our technologies.

To meet such customer needs, Fujitsu's quantum computing technology Digital Annealer, a new architecture that rapidly solves "combinatorial optimization problems" using a digital circuit design inspired by quantum phenomena, can be applied. By utilizing Digital Annealer, we were able to reduce CO2 emissions by 8.9%, not only by reducing calculation time, but also by discovering effective distribution routes, improving loading efficiency, and improving the efficiency of the number of trucks and total mileage driven. We also confirmed a 2 ~ 5% reduction in distribution costs, including the number of drivers, number of trucks, mileage, and sorting work. This technology thus possesses an overwhelming advantage over conventional methods.

Time horizon

Short-term

Likelihood

Virtually certain

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

4192000000000

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact figure

According to the GeSI (Global e-Sustainability Initiative) report (Based on a detailed model that quantifies the broad social and economic benefits of ICT, it reports on ICT 's contribution to reducing global CO2 emissions and realizing a sustainable society), new sales that the ICT sector will generate in regards to global warming countermeasures are estimated to be about 2 trillion dollars as of 2030 based. If we apply our IT service share of 1.6% in the world in FY2020 (source: IDC Japan), we can estimate that Fujitsu will have new market opportunities of about 4.2 trillion yen (Calculated as 131 yen to the dollar). Among them, logistics market opportunities are assumed to be around 4,192 billions of yen, which is about 1/10 of the market opportunity.

Cost to realize opportunity

18900000000

Strategy to realize opportunity and explanation of cost calculation

Fujitsu is endeavoring to generate opportunities in the logistics industry in relation to reducing their fuel consumption and CO2 emissions.

As a result, in 2020, for example, Fujitsu and Toyota Systems Corporation jointly conducted a demonstration using Digital Annealer to optimize the distribution network for parts required for automobile manufacturing. To solve the problem of searching for more than 3 million routes to purchase parts from more than several hundred suppliers, pass through relay warehouses, and deliver them to factories, Digital Annealer was used to calculate and optimize logistics costs, including fleet size, total distance traveled, and sorting operations. As a result, it was confirmed that a massive number of optimization calculations could be performed in a very short time span. Furthermore, the demonstration indicated this technology can potentially reduce logistics-related costs by approximately 2% to 5% by discovering effective logistics routes that could previously not be found, thereby improving loading efficiency and increasing fleet efficiency and total distance traveled.

As such, this technology possesses an overwhelming advantage over conventional methods and provides an opportunity to capture the market.

We began making Fujitsu Computing as a Service (CaaS)—which includes the Digital Annealer adopted here as a component technology—available in Japan from October 2022 and will be gradually expanding globally in FY2023. CaaS is a set of services that makes advanced computing and software technologies easily accessible to everyone.

The 'Cost to realize opportunity' is calculated as R&D costs on services pertaining to climate change (calculated by multiplying the Fujitsu Group's R&D costs in FY2022 (109.5 billion yen) by the ratio of low-carbon services (17.2%): 18.9 billion yen/year). These include solution services and infrastructure services such as cloud.By 2030, we aim to increase sales by offering environmental impact reduction-related components as added value when discussing measures to address issues in various industries with customers.

Under our Fujitsu Uvance brand, which envisions society in 2030, we aim to increase sales by providing added value from the perspective of reducing environmental impact when discussing measures to address issues in various industries with our customers, and contribute to achieving carbon neutrality by 2050 on a global scale.

Comment

Identifier

Opp2

Where in the value chain does the opportunity occur?

Downstream

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

Fujitsu recognizes that there is a large demand for energy-saving products in the global market. In recent years, in the public sector, there has been a higher demand for a server called HPC (High Performing Computing) and supercompeter as a basis of big data and Al.

At present, the cost of cooling energy for data centers is extremely high due to the high heat generation of HPCs, and there is thus strong demand for energy-saving products. To meet the growing market demand for energy-saving products, the Fujitsu Group is focusing on the development of supercomputer-related technologies such as CPUs with low power consumption per performance, and circuit technology.

For example, the annual power consumption of the supercomputer previously delivered by Fujitsu was equivalent to that of about 30,000 general households. When electricity rates rose, the impact was so great that a simple calculation indicated an increase in operating expenses of more than 200 million yen annually. In light of this, the Company has strengthened its development of system implementation technology to achieve high performance and energy conservation. The prototype supercomputer equipped with this technology has ranked #1 in the Green500 supercomputer energy efficiency ranking in 2019. This system implementation technology reduces CPU power consumption in addition to mitigating power loss across the entire system by applying measures such as reduced power loss from the power-supply unit through the use of Fujitsu's proprietary circuit method and latest high-efficiency circuits. As a result, the overall power loss across the entire system has fallen significantly from 24% to 14%, achieving one of the world's highest power-efficiency performances. This unique energy-saving technology possesses market advantage over competitors.

As for Fujitsu's business segment, it is considered that the system platform category (servers, storage systems, network products, etc.), which contributes to sales of 678.1 billion yen, will enjoy the benefits of this business opportunity.

Time horizon

Short-term

Likelihood

Virtually certain

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

61800000000

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact figure

The HPC (High Performing Computing) market has been growing steadily. According to the survey conducted by a U.S. research company, Hyperion Research, The HPC cloud market is expected to grow from 6.3 billion USD in 2022 to nearly 11.5 billion USD by 2026. The 5-year CAGR from 2021 to 2026 is 17.6%.

If we assume that the Fujitsu's system platform area, which accounts for 678.1 billion yen of sales in FY2022, will grow to 17.6% by 2026, we can expect an increase in sales by about 618.8 billion yen.

Cost to realize opportunity

18900000000

Strategy to realize opportunity and explanation of cost calculation

While the demand for servers including HPC (High-Performing Computing) and supercomputers is on the rise as foundations for big data and AI, further improvements in energy-saving performance is anticipated given that they consume significant amounts of power.

In order to obtain business opportunities through energy-saving products, since FY2013, Fujitsu has been promoting product development focusing on "energy efficiency" when products are used, which has a significant impact on the product life cycle. To achieve SBT, the Environmental Action Plan Stage X from FY2021 states that the Fujitsu Group will "Reduce CO2 emissions due to power consumption during product usage in FY2021 by at least 37% (compared to FY2013)" and the Group continues to develop energy-saving products by setting energy efficiency and power consumption during use as indicators.

As a result, for example, the PRIMEHPC FX1000 supercomputer, which has achieved one of the world's best power consumption performances, was developed and offered to the market by thoroughly reducing the power loss of the entire system through applying Fujitsu's proprietary circuit method and latest high-efficiency circuits. This supercomputer system was installed in Canon Inc. in 2020 for use in simulations in Canon's product development processes. By reducing unnecessary product prototype developments, benefits including shortened product development phases, cost reductions, and product performance, quality and functionality improvements are anticipated through advanced energy-saving performance.

This proprietary energy-saving technology possesses market advantages over competitors and thus implies opportunities for capturing the market.

The 'Cost to realize opportunity' is calculated as R&D costs on products pertaining to climate change (calculated by multiplying the Fujitsu Group's R&D costs in FY2022 (109.5 billion yen) by the ratio of low-carbon products (17.2%): 18.9 billion yen/year). Approximately 63% account for system products, and approximately 37% account for network products.

Also, Fujitsu plans to invest 700 billion yen in business growth over the three years of its mid-term plan (2023-2025). Our technology strategy is one of the major areas of investment for business growth; in the "computing field," we will develop computing technology with high performance, high scalability, high reliability, and low power consumption.

Comment

Identifier

Opp3

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Products and services

Primary climate-related opportunity driver

Development of climate adaptation, resilience and insurance risk solutions

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

Fujitsu Group is keen to leverage our cutting-edge ICT for contributing to various adaptation measures.

When a disaster occurs, municipalities play a critical role in communicating evacuation advisories to residents. And one of the biggest challenges they face is the timing of it. Simulation technology for predicting weather conditions and the scale of disasters is an effective way to solve this problem. The use of ICT in disaster prevention and mitigation is in great demand among local governments and above, and the research and development on weather-forecasting and disaster-prediction technologies, together with the provision of related services, will generate business opportunities for Fujitsu.

An example is our construction of a supercomputer that forecasts the occurrence of linear precipitation zones, a cause of torrential rain-related disasters such as landslides and river flooding, for the Japan Meteorological Agency (JMA) in 2023. Applying our high-performance and high-reliability PRIMEHPC FX1000, we are working to help realize a safe, secure, and resilient society by supporting the JMA in its efforts to provide prompt, more accurate linear precipitation zone predictions and by contributing to disaster prevention and mitigation by tying those predictions to torrential rain preparations and early evacuation.

In 2020, Fujitsu also started providing an artificial intelligence (AI) water-management forecasting system that predicts river water levels during floods. This system utilizes Fujitsu's AI-based proprietary technology that enables real-time, highly accurate prediction of river levels every 10 minutes for up to six hours in advance during floods, even for small and medium-sized rivers with limited water level data available. This system will help local governments to make appropriate decisions regarding disaster prevention and mitigation, including executing rapid on-site response and issuing evacuation advisories.

The Japanese government's budget for disaster prevention and mitigation is approximately 4.7 trillion yen (FY2023 budget plan), and the IT infrastructure-related budget can be estimated at approximately 10%, or 470 billion yen, based on a breakdown of budget items. Given that demand for IT services for disaster prevention and mitigation is high in other countries as well, business opportunities worth approximately 24.8 billion yen are anticipated when taking into account Fujitsu's share of the IT services market.

Time horizon

Medium-term

Likelihood

Likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

24800000000

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact figure

In recent years, disasters caused by abnormal weather considered to be triggered by climate change are on the rise. Following this, Japan is shifting more importance on preparing for such disasters. The Japanese government's budget for disaster prevention and mitigation is approximately 4.7 trillion yen (FY2023 budget plan), and the IT infrastructure-related budget can be estimated at approximately 10%, or 470 billion yen, based on a breakdown of budget items. Given that demand for IT services for disaster prevention and mitigation is high in other countries as well, for example, if Fujitsu's 1.6% share of the global IT services market in FY2020 (Source: IDC Japan) is applied to the budget scales of three developed countries including Japan and three emerging countries (estimated at 0.1 times the budget scale), business opportunities worth approximately 24.8 billion yen are anticipated. (3 developed countries: 470 billion yen x 3 countries + 3 emerging countries (1/10th of budget scale): 470 billion yen x 0.1 x 3 countries) x Fujitsu's IT service share: 1.6%)

Cost to realize opportunity

18900000000

Strategy to realize opportunity and explanation of cost calculation

Fujitsu advocates "Co-creation in an ecosystem" in its business strategy, and strives to resolve social issues including climate change issues, through big data analysis powered by artificial intelligence (AI) and working with local governments and companies. Systematic city planning and efficient devising of disaster response plans based on simulations of natural disasters are pivotal in preparing for disasters caused by climate change. Fujitsu's AI technology is extremely helpful in running such simulations needed in adapting to climate change.

In 2020, we developed an Al-based water management forecasting system that uses machine learning to predict river water levels based on past rainfall and water level data.

The system can predict water levels at ten-minute intervals for up to six hours ahead by importing forecasted rainfall amounts. This capability will be useful to local governments when preparing on-site response plans, issuing evacuation orders, or making other disaster prevention and mitigation decisions.

The system has been delivered to several municipalities who are now verifying consistency between actual and predicted values and studying practical applications. In addition, more and more companies are adopting our Digital Resilience Service, which we launched in 2021 to support disaster response and business continuity. In this way, we are creating new use cases, such as applications in crisis management as part of in-house general affairs and routine operations in the construction industry. Additionally, Fujitsu intends to provide value to society under the "Trusted Society" concept to realize a prosperous, safe, secure, sustainable, and livable city by backcasting from the vision of the world in 2030 as it should be.

The 'Cost to realize opportunity' is calculated as R&D costs on services pertaining to climate change (calculated by multiplying the Fujitsu Group's R&D costs in FY2022 (109.5 billion yen) by the ratio of low-carbon products (17.2%): 18.9 billion yen/year). These include solution services and infrastructure services such as cloud. Also, Fujitsu plans to invest 700 billion yen in business growth over the three years of its mid-term plan (2023-2025). Our technology strategy is one of the major areas of investment for business growth; in the "Al field" and the "converging technologies field," we are developing technologies to accelerate social implementation of technology in a wide range of fields, such as disaster prevention.

Comment

C3. Business Strategy

(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

We have a different feedback mechanism in place

Description of feedback mechanism

We have two mechanisms for obtaining feedback from investors. The first is an annual ESG briefing held for investors and the media. We use these briefings to explain our transition plans and receive feedback from investors through question-and-answer sessions and post-briefing questionnaire responses. The second is a feedback scheme connected with the Integrated Report. We receive feedback on our transition plans, environmental initiatives, and information disclosure through questionnaires and interviews after publishing the report.

Frequency of feedback collection

More frequently than annually

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

https://www.fujitsu.com/global/about/ir/library/presentations/

Explain why your organization does not have a climate transition plan that aligns with a 1.5°C world and any plans to develop one in the future <Not Applicable>

Explain why climate-related risks and opportunities have not influenced your strategy

<Not Applicable>

C3.2

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

		, , , , , , , , , , , , , , , , , , ,	Explain why your organization does not use climate-related scenario analysis to inform its strategy and any plans to use it in the future
Row 1	Yes, qualitative and quantitative	<not applicable=""></not>	<not applicable=""></not>

C3.2a

$(\hbox{C3.2a}) \ \hbox{Provide details of your organization's use of climate-related scenario analysis.}$

Climate-related scenario	Scenario analysis coverage	alignment of	Parameters, assumptions, analytical choices
Transition scenarios Bespoke transition scenario	Company- wide	1.5ºC	We identified businesses that are susceptible to climate change impacts (Sustainable Manufacturing [petrochemicals, automobiles, food, and electronics businesses], Trusted Society, and Hybrid IT [data center business]) using the 1.5°C and 4°C scenarios. We then conducted scenario analyses with a time horizon of 2050.
			For opportunities, we estimated their maximum values based on share percentage and other factors, and then calculated the business impact as the main parameters for increases or decreases in market size due to climate change. As for risks, we devised hypotheses as follows. As policy regulation risk, that our response costs will rise and our corporate value will decrease due to tougher laws and regulations concerning greenhouse gas emissions and energy use (e.g., carbon tax and energy saving policy). As market risk, that the price of electricity will soar due to efforts to promote a carbon-neutral society (e.g., increasing electrification). As technology risk, that we will lose business opportunities if we fall behind due to fierce competition in technology development (e.g., energy-saving performance and low-carbon services) and cannot satisfy market needs. And as reputation risk, that our costs for responding to the demands of investors, customers, and other stakeholders will increase.
Physical RCP climate 8.5 scenarios	Company- wide	<not Applicable></not 	We identified businesses that are susceptible to climate change impacts (Sustainable Manufacturing [petrochemicals, automobiles, food, and electronics businesses], Trusted Society, and Hybrid IT [data center business]) using the 1.5°C and 4°C scenarios. We then conducted scenario analyses that looked up to the year 2050. For opportunities, we estimated their maximum values based on share percentage and other factors, and then calculated the business impacts as the main parameters for increases or decreases in market size due to climate change. We formulated various hypotheses. Among them were that changes in precipitation and weather patterns, rising average temperatures, sea level rise, and drought will increase our response costs (air conditioning and relocation for disaster avoidance), and that increasingly intense abnormal weather phenomena will lead to operational shutdowns (including in the supply chain) and rising recovery costs.

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

Consistency and resilience of our company business and climate change strategies across multiple scenarios (1.5 °C, 4 °C) of climate change. In addition, identify the direction of business strategies in the business focus areas in each scenario.

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

First half of 2021, We conducted our scenario analysis in four steps: "risk materiality assessment," "scenario definition," "business impact assessment," and "a study of We conducted our scenario analysis in four steps: "risk materiality assessment," scenario definition," "business impact assessment," and "a study of countermeasures."

Focusing on the example of the automotive IT solutions business in the 1.5°C scenario, we estimated that global carbon pricing, emission targets, and policies would accelerate the trend toward tighter regulation of internal combustion engines and carbon neutrality throughout the product life cycle in the automotive industry, an industry which is a major source of business for us. We identified a growing need to visualize CO2 emissions throughout the supply chain, to develop strategies to become carbon neutral, and to support measures using digital technology to reduce environmental impact throughout product lifecycles as a whole, stimulated by demand for enhanced CO2 traceability using digital technology such as blockchain in the supply chains of our client industries. This is an opportunity for us to increase our IT solutions sales. Based on the results of the scenario analysis, In addition, in our Sustainability Manufacturing Department (which deals with IT solutions for manufacturing clients), which one of Fujitsu's priority business areas. From the second half of 2021, we has established "Carbon Neutrality" as a theme for providing value, and have already started offering services such as CO2 emissions visualization and strategic support for achieving carbon neutrality.

We judged that our business demonstrated resilience from medium- and long-term perspectives. We reached this conclusion based on the consistency of the business strategy in the Fujitsu Group (orientation of the offering menu for each priority business area) and climate change strategy (SBT 1.5°C) and development of company-wide promotion of the above stated risk countermeasures.

C3.3

	Have climate- related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	Increased sales opportunities for ICT products and solutions services that can contribute to climate change "mitigation" affect revenue. At the moment, climate change-related solutions, products and services account for 29% of sales. We expect the proportion to further increase, thereby affecting our short and medium-term strategies. Specifically, Fujitsu reflected in its strategy the promotion of development of energy-saving technologies for its products. By providing energy-saving products and services, we can contribute to reducing cusutomer's power usage. This is also in line with the customer demands to reduce CO2 emissions and leads to enhanced competitiveness of our products and services as well as market superiority. Demands for HPC (High Performing Computing) servers as foundations for big data analysis and AI are increasing in recent years. As server performance evolves, power consumption and heat generation increase, and the power consumption of ancillary facilities such as air conditioners for cooling the server likewise increases. As such, power consumption pertaining to servers and air conditioning for cooling are becoming major issues for customers and society. Fujitsu views the reduction of CO2 emissions during customer use through increasing focus on energy-saving product development as a business opportunity. In particular, Fujitsu is strengthening product development focusing on a system implementation technology, to reduce power consumption in HPC for big data analysis and AI. This technology reduces CPU power consumption in addition to mitigating power loss across the entire system with measures including the reduction of power loss of the power supply unit through the use of Fujitsu's proprietary circuit method and the latest high-efficiency circuits. As a result, the overall power loss has been significantly reduced from 24% to 14%, achieving one of the world's highest power efficiency performances. Fujitsu has been offering products incorporating this technology since 2020. This uniqu
Supply chain and/or value chain	Yes	An increase in natural disasters, alongside other physical risks, impact the company, such as making our procurement of parts difficult. Furthermore, when it comes to procurement items, regulatory risks have an impact on the business, such as through price increases of the procurement items regulatory risks. These factors consequently affected Fujitsu's short and medium-term business strategies, including strengthening risk management for the supply chain. For example, we recognize that physical risks, such as floods extraordinary in scale, will particularly affect our business partners in Southeast Asia. In 2011 when significant flooding hit Thailand, our procurement of parts was delayed due to the shutdown of supplier plants and distribution networks were disrupted, resulting in a decrease of sales by 28 billion yen. We immediately surveyed approximately 80 of our business partners in Thailand, which manufacture storage, semiconductors, power supplies and other products, on damages, their progress toward recovery and their impacts on our company. Although we were able to minimize the impact by ordering from other suppliers as necessary among other measures, the events changed our strategies on suppliers, including our strengthening of our BCM (business continuity management) strategy. Specifically, we added monitoring of BCM activities through surveys, analysis of survey responses, and support for BCM enhancement through feedback of analysis results to suppliers to the strategy. In addition, Fujitsu has been using the standardized forms by the JEITA (Japan Electronics and Information Technology Industries Association) Materials Committee since its FY2014 survey. For business partners that were determined to be particularly possessing risks through the survey, we reduce risks on our company by minimizing impact on our business through activities such as multi-sourcing. Fujitsu has incorporated a strategy to maintain and continue these activities and reduce risks.
Investment in R&D	Yes	Increased opportunities to provide ICT products and solutions services that contribute to "mitigation" and "adaptation" of climate change impact revenue. At the moment, climate change-related solutions, products and services account for 29% of sales. While the impact is already significant, we expect the proportion to further increase, thereby affecting our short- and medium-term strategies and leading to the selection and concentration of investment areas in R&D. Fujitsu advocates the use of ICT to empower people and create value for business and society. All R&D activities for this concept generally contribute to climate change countermeasures and sustainability. In 2020, Fujitsu started research and development of quantum computing technology said to be capable of cutting down power consumption significantly, in all areas from hardware to software, and from basics to application, through open innovation with leading research institutions across the globe (RIKEN, the University of Tokyo, etc.). Under the 10th Fujitsu Group Environmental Action Plan, we strove to promote and expand customers' and society's use of renewable energy by expanding renewable energy use at our own business sites through virtual power purchase agreements (VPPA) and other initiatives, and by utilizing the Fujitsu Group's own advanced ICT technologies, such as blockchain technology. In FY2021, we achieved success in energy-saving technology by raising delivery efficiency in logistics. We accomplished this by applying a unique Fujitsu quantum computing technology called "Digital Annealer," a new architecture for solving "combinatorial optimization problems" at high speed using a digital circuit inspired by quantum phenomena. We also had successes in Al and other new technologies that can predict water levels along rivers for which past rainfall and water level data are scarce. These technologies can contribute to disaster prevention, which is one form of climate change adaptation. We plan to invest 700 billion yen in business growth ar
Operations	Yes	Regulatory risks increase the costs of responding to regulatory changes. In order to minimize the impact of this, short-, medium- and long-term business strategies were changed, with the promotion of energy conservation activities in operations added. For example, Fujitsu Climate and Energy Vision, a medium- and long-term environmental vision designed toward 2017 and 2050, was established to promote energy conservation and decarbonization in long-term operations. The Vision was recognized as an SBT as a scientifically based GHG reduction target. In 2020, the Company upgraded to SBT 1.5°C certification. And received Net 0 certification in July 2023.In addition, Fujitsu joined RE100 in 2018 to accelerate the use of renewable energy. In the short to medium term, for example, various measures are being actively promoted to enable compliance with these laws and regulations in response to trends in regulations, including the Act on Rational Use and Proper Management of Fluorocarbons and the Act on the Rational Use of Energy. Specifically, Fujitsu is actively promoting activities to reduce CO2, such as strengthening environmental data management at each business site, introducing state-of-the-art low-carbon facilities and optimizing operations as energy conservation measures, improving the efficiency of manufacturing processes, and conserving electricity in lighting and OA equipment, as well as expanding the purchase and use of renewable energy. In Japan, as a regulatory risk, a levy was added to the cost of electricity under the feed-in tariff (FIT) for renewable energy. To this, Fujitsu is strengthening energy conservation measures. Through the energy-saving measures, CO2 emissions in FY2020 were reduced by approximately 2.5% from the previous year. The introduction of renewable energy also expanded by 22.2% compared to FY2017. Fujitsu has set a target of reducing CO2 emissions from its group companies by 71.4% (compared to FY2013 levels) by FY2030, and is promoting the abovementioned energy-saving measures and t

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	Capital expenditures	Regulatory risks, such as compliance with the current Act on Rational Use and Proper Management of Fluorocarbons, coupled with the projected increase in carbon taxes, have impacted to Fujitsu's capital expenditures. In order to minimize the operation cost increase brought about by these regulations, capital investments to promote energy conservation were affected. For example, investments on global warming prevention such as energy-saving equipment and replacements to better air-conditioning efficiency totaled approximately 1.5 billion yen in2022. In addition, expenses were incurred for regular building repairs and reinforcements to guard against potential damage to facility building and production equipment in the event of a large-scale torrential rain or the occurrence of tropical storms, which are physical risks associated with climate change. In terms of financial impact, these expenses constituted 10% or more of capital investment among Fujitsu's capital expenditures. Because it addresses both climate change and aging of facilities, We plan to make capital investments of approximately 1 billion yen in FY2023. We intend to continue investing this amount over the short to medium term, and therefore our plans call for making investments of between 1 and 2 billion yen each year.

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	Indicate the level at which you identify the alignment of your spending/revenue with a sustainable finance taxonomy
Row 1	Yes, we identify alignment with our climate transition plan	<not applicable=""></not>

C3.5a

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

Financial Metric

Revenue/Turnover

Type of alignment being reported for this financial metric

Alignment with our climate transition plan

Taxonomy under which information is being reported

<Not Applicable>

Objective under which alignment is being reported

<Not Applicable>

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

0

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

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

4.2

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

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

Rate of sales increase gained by providing a Carbon Neutral Data Center (CNDC) The percentage of increase assumes that the improvement in energy consumption intensity is the percentage of increase in sales due to the CNDC in a 1.5°C world. The 1.5°C scenario: Uses IEA's "Net Zero by 2050"

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

2022

Target coverage

Company-wide

Scope(s)

Scope 1

Scope 2

Scope 2 accounting method

Market-based

Scope 3 category(ies)

<Not Applicable>

Base year

2020

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

74944

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

540292

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

<Not Applicable>

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

<Not Applicable>

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)

<Not Applicable>

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

<Not Applicable>

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

<Not Applicable>

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

<Not Applicable>

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

<Not Applicable:

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

<Not Applicables

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

<Not Applicable>

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

Not Applicables

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

<Not Applicable>

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

<Not Applicable>

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

<Not Applicables

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

<Not Applicable>

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

<Not Applicable>

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

<Not Applicable>

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

<Not Applicable>

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

<Not Applicable>

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

615236

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)

<Not Applicable>

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)

<Not Applicable>

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)

<Not Applicable>

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)

<Not Applicable>

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)

<Not Applicable>

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)

<Not Applicable>

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)

<Not Applicable>

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)

<Not Applicable>

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)

<Not Applicable>

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)

<Not Applicable>

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)

<Not Applicable>

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)

<Not Applicable>

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)

<Not Applicable>

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)

<Not Applicable>

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)

<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e) <Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e) <Not Applicable>

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories) <Not Applicable>

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

Target year

2030

Targeted reduction from base year (%)

42

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

356836.88

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

64680

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

339290

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

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) <Not Applicable>

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) <Not Applicable>

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

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

<Not Applicable>

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

<Not Applicable>

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

<Not Applicable>

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

<Not Applicable>

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

<Not Applicable>

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

<Not Applicable>

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

<Not Applicable>

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

<Not Applicable>

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

<Not Applicable>

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

403970

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]

81.7595663638483

Target status in reporting year

Revised

Please explain target coverage and identify any exclusions

The target scope is company-wide and there are no exceptions.

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

This target is a revised version of the SBT 1.5 °C target, which was certified in 2021, as Near-term SBT based on the SBT net 0 standard, and SBTi certification was obtained. As a short-term objective for achieving SBT, the Fujitsu Group Environmental Action Plan (Stage X) for FY2021-2022 sets a goal of "[reducing] GHG emissions from business sites by 4.2% or more annually, compared with the base year (FY2013)" in line with the SBT1.5°C target. By promoting energy conservation and expanding the introduction of renewable energy, we posted actual results for FY2022 that were 17% lower than the previous year. We have therefore achieved this short-term objective.

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

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

<Not Applicable>

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

2°C aligned

Year target was set

2022

Target coverage

Company-wide

Scope(s)

Scope 3

Scope 2 accounting method

<Not Applicable>

Scope 3 category(ies)

Category 1: Purchased goods and services

Category 11: Use of sold products

Base year

2020

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

<Not Applicable>

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

<Not Applicable>

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

1104149

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

<Not Applicable>

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) <Not Applicable>

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e) <Not Applicable>

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

<Not Applicable>

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

<Not Applicable>

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

<Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e) <Not Applicable>

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) <Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e) <Not Applicable>

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) 5004029

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1 <Not Applicable>

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2 <Not Applicable>

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)
20.6

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)

<Not Applicable>

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)

<Not Applicable>

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)

<Not Applicable>

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)

<Not Applicable>

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)

<Not Applicable>

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)

<Not Applicable>

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)

<Not Applicable>

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)

<Not Applicable>

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)

72.7

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)

<Not Applicable>

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)

<Not Applicable>

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)

<Not Applicable>

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)

<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e) <Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e) <Not Applicable>

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 93.3

Target year

2030

Targeted reduction from base year (%)

25

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

3753021.75

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

<Not Applicable>

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

<Not Applicable>

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

1361000

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

<Not Applicable>

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) <Not Applicable>

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e) 3692976

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

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

<Not Applicable>

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

<Not Applicable>

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

<Not Applicable>

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

Not Applicable>

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

<Not Applicable>

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

5053976

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

5053976

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]

-3.9925428090045

Target status in reporting year

Revised

Please explain target coverage and identify any exclusions

Of Scope 3 categories, Category 1 + Category 11 accounts for approximately 93% of Scope 3 overall, so the total value of these two categories is the target setting range.

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

This target is a revised version of the SBT 1.5 °C target, which was certified in 2021, as Near-term SBT based on the SBT net 0 standard, and SBTi certification was obtained.

Measures are being taken to achieve the targets for categories 1 and 11.

In category 1, suppliers are required to implement initiatives to reduce CO2 emissions under the Fujitsu Group Green Procurement Standards. In Category 11, we are promoting the development of products that can contribute to the reduction of power consumption during product use by customers by actively adopting energy-saving technologies and continuously improving energy efficiency.

In fiscal 2022, emissions of 1,361,000 tons-CO2 in category 1 and 3,692,976 tons-CO2 in category 11 increased. To achieve these targets, we will promote the introduction of renewable energy in the supply chain by strengthening engagement in the supply chain, and aim to reduce GHG emissions in scope 3.

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

<Not Applicable>

Target reference number

Abs 3

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

2022

Target coverage

Company-wide

Scope(s)

Scope 1

Scope 2

Scope 3

Scope 2 accounting method

Market-based

Scope 3 category(ies)

Category 1: Purchased goods and services

Category 11: Use of sold products

Base year

2020

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

74944

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

540292

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

1104149

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

<Not Applicable>

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) <Not Applicable>

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e) <Not Applicable>

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

<Not Applicable>

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

<Not Applicable>

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

<Not Applicable>

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

<Not Applicable>

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

<Not Applicable>

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

3899880

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

<Not Applicable>

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

<Not Applicable>

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

<Not Applicable>

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

<Not Applicable>

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

<Not Applicable>

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

<Not Applicable>

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

5004029

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

5619265

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)

20.6

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)

tons CO2e)
<Not Applicable>

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)

<Not Applicable>

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)

<Not Applicable>

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)

<Not Applicable>

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) <Not Applicable>

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)

<Not Applicable>

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)

<Not Applicable>

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)

<Not Applicable>

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)

<Not Applicable>

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)

72.7

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)

<Not Applicable>

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)

<Not Applicable>

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)

<Not Applicable>

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)

<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e) <Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e) <Not Applicable>

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

94

Target year

2040

Targeted reduction from base year (%)

90

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

561926.5

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

64680

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

339290

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

1361000

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

<Not Applicable>

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) <Not Applicable>

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

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) <Not Applicable>

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

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

<Not Applicable>

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

<Not Applicable>

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

<Not Applicable>

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

<Not Applicable>

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

5053976

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

5457946

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]

3.18980032679244

Target status in reporting year

New

Please explain target coverage and identify any exclusions

Of Scope 3 categories, Category 1 + Category 11 accounts for approximately 93% of Scope 3 overall, so the target scope is the sum of these two categories.

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

This target received SBTi certification as a long-term SBT based on the SBT net zero standard. Plans for achieving the targets are described in the responses to abs 1 and abs 2. In fiscal 2022, we achieved a 2.9% reduction from the base year.

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

<Not Applicable>

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)

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

2022

Target coverage

Company-wide

Target type: energy carrier

Electricity

Target type: activity

Consumption

Target type: energy source

Renewable energy source(s) only

Base year

2020

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

1239.696

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

10.1

Target year

2030

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

100

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

30

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

22.1357063403782

Target status in reporting year

Revised

Is this target part of an emissions target?

Abs1

Is this target part of an overarching initiative?

RE100

Please explain target coverage and identify any exclusions

The target covers all electric power purchased within the Fujitsu Group.

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

The target covers all electric power purchased within the Fujitsu Group.

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

We joined the RE100 initiative in July 2018. By 2030, the target was changed to 100% of electricity use derived from renewable energy.

As an interim target, we aim to get at least 40% of the electric power we use from renewable energy sources by 2030. To achieve this goal, our Environmental Action Plan (Stage XI) (FY2022-2025) set a target renewable energy rate in FY2025 of 50% or more. Nevertheless, we achieved a 30% renewable energy rate in FY2022.

We worked to increase the renewable energy usage rates of our factories and other facilities in Japan and to use VPPA in Australia.

List the actions which contributed most to achieving this target

<Not Applicable>

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

The target scope is company-wide and there are no exceptions. SBTi is currently reviewing 2040 targets that meet the SBTi net 0 standard.

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

We expect that GHG emissions to be neutralized in 2040 will be less than 10% of the base year level. We anticipate that neutralization will be achieved through carbon credits from forest conservation. We are therefore planning to formulate an investment plan while keeping an eye on trends in the forest carbon credit market in accordance with the Paris Agreement's Article 6.

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

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	16	870
To be implemented*	26	1240
Implementation commenced*	41	2760
Implemented*	46	12770
Not to be implemented	4	

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)

7532

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

Scope 1

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

100000000

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

63000000

Payback period

1-3 years

Estimated lifetime of the initiative

3-5 years

Comment

Optimizing air conditioning temperatures in offices, saving electricity and increasing efficiency in lighting and office equipment. This is part of the action plan for FY 2022 – 2023. It will continue after the activities are completed.

Initiative category & Initiative type

Energy efficiency in buildings Lighting

Estimated annual CO2e savings (metric tonnes CO2e)

1423

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

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

29000000

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

183000000

Payback period

4-10 years

Estimated lifetime of the initiative

3-5 years

Comment

Energy-Saving measures for equipment, mainly motor facilities (Free cooling, inverters, introduction of energy-saving equipment, fuel conversion, etc.) This is part of the action plan for FY 2022 – 2023. It will continue after the activities are completed.

Initiative category & Initiative type

Energy efficiency in buildings Motors and drives

Estimated annual CO2e savings (metric tonnes CO2e)

35

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

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

2000000

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

10000000

Payback period

4-10 years

Estimated lifetime of the initiative

3-5 years

Comment

Improve efficiency (production innovation activities) by reviewing manufacturing processes, and improve the proper operation and management of power plants. In the semiconductor division, we will continue to switch to gases with low global warming potential and install abatement equipment on new and existing production lines. This is part of the action plan for FY 2022 – 2023. It will continue after the activities are completed.

Initiative category & Initiative type

Energy efficiency in buildings Maintenance program

Estimated annual CO2e savings (metric tonnes CO2e)

727

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

Scope 2 (location-based)

Voluntary/Mandatory

Mandatory

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

24000000

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

1170000000

Payback period

>25 years

Estimated lifetime of the initiative

6-10 years

Comment

Renewal of electric power receiving and distribution facilities such as transformers and transformers at substations of buildings and factories. Although the CO2 emission reduction effect by the modernization is small and the return of investment is long term, it is necessary for the maintenance of the office. This is part of the action plan for FY 2022 – 2023. We will continue to do so after the activities are completed.

Initiative category & Initiative type

Energy efficiency in production processes

Process optimization

Estimated annual CO2e savings (metric tonnes CO2e)

2908

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

Scope 1

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

83000000

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

n

Payback period

<1 year

Estimated lifetime of the initiative

3-5 years

Comment

Improve efficiency by reviewing manufacturing processes (production innovation activities) and improve the proper operation and management of manufacturing facilities. Continued integration of production lines as a whole, improvement of tact time, application of energy-saving mode, etc. This is part of the action plan for FY 2022 – 2024. It will continue after the activities are completed.

Initiative category & Initiative type

Low-carbon energy generation

Solar PV

Estimated annual CO2e savings (metric tonnes CO2e)

145

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

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

4000000

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

30000000

Payback period

4-10 years

Estimated lifetime of the initiative

3-5 years

Comment

Solar panels installed on the roof of the plant. This is part of the action plan for FY 2022 – 2024. It will continue after the activities are completed.

C4.3c

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

Method	Comment
Other	In the "the Sustainable Management Committee", which examines company-wide policies, and its subordinate organizations, we set reduction targets for each business group (business unit),
(Sustainability	improve facilities and processes in the manufacturing area (mounting, assembly, and testing processes), strengthen activities through the development of new technologies, and evaluate priority
Management	projects and promote their implementation based on the "capital investment guidelines", which sets criteria for capital investment from the economic and environmental perspectives.
Committee)	

(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

Group of products or services

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

Other, please specify (ITU-T "Environmental impact assessment method for ICT products, networks, and services (L. 1410)")

Type of product(s) or service(s)

Systems integration	Other, please specify (Solutions)

Description of product(s) or service(s)

We develop low environmental impact solutions so that, by providing them to our customers, we can help lower society's GHG emissions.

By introducing IT solutions, we are contributing to emissions reductions for our customers, most notably with respect to Scope 2 and Scope 3.

As a specific initiative underway since FY2004, the Fujitsu Group has been quantitatively evaluating the environmental impact reduction effect (i.e., achieved reductions in carbon dioxide emissions) brought by solutions and certifying those products and services having a reduction effect of 15% or more as "environmentally friendly solutions." (Total number of certifications: 500)

In addition, we quantitatively evaluate the extent to which the introduction of IT solution-based products reduces customers' environmental impact from the following perspectives.

- 1) We evaluate the environmental contribution effects that the introduction of an IT solution has. Our focus includes increased operational efficiency and other efficiency-related effects within the IT solution's energy and resource-saving effects.
- 2) We evaluate both factors that increase environmental impact and those that reduce environmental impact, and then clearly indicate the overall environmental contribution effect.

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

One solution service

Reference product/service or baseline scenario used

CO2 emissions from solution services before ICT introduction

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

Explain your calculation of avoided emissions, including any assumptions

We convert "seven environmental impact factors" (consumption of goods, movement of people, movement of goods, office space, warehouse space, electric power consumption by ICT/network equipment, and network data communication volume) into CO2 emissions before and after ICT introduction using a database. We then calculate reductions in CO2 emissions that are associated with the ICT solution's introduction.

We also focus our evaluations on the processes used by customers that produce the largest amount of CO2 emissions.

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

9.9

Level of aggregation

Product or service

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

Other, please specify (IEC 62075 "Audio, Video, Information and Communications Technology Equipment - Design for the Environment")

Type of product(s) or service(s)

Description of product(s) or service(s)

To promote the development of environmentally friendly products, we conduct environmental assessments for all newly designed and developed products to ensure that all are environmentally friendly.

We certify products having enhanced environmentally-friendly qualities as "Green Products."

One of the criteria we set for designation as a Green Product is "energy conservation." This leads to lower GHG emissions throughout the entire Fujitsu Group and contributes to SBT achievement.

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

CO2 emissions during product use

Reference product/service or baseline scenario used

CO2 emissions from the use of old products

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

0.16

Explain your calculation of avoided emissions, including any assumptions

"Total CO2 emissions from newly developed products in use in FY2021" (1) is calculated from

the "actual development of new products in FY2021" and the actual number of units shipped.

Here, CO2 emissions (2) are calculated with the assumption that the "actual development of new products in FY2021" mentioned above is zero.

The difference between (1) and (2) is obtained and further divided by the actual number of units shipped to calculate the amount of reduction contribution.

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

17.22

C5. Emissions methodology

C5.1

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

Nο

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 divestment

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

Mie Fujitsu Semiconductor Mie Factory, FDK Sanyo Factory, Fujitsu Interconnect Technologies Kurohime Factory, Fujitsu Semiconductor Aizu-Wakamatsu Factory, FUJITSU TECHNOLOGY SOLUTIONS GmbH, Fujitsu Semiconductor Wafer Solution Co., Ltd. (2021/8/1), Smart Agriculture Culture Iwata Corporation (2021/10/1)

Details of structural change(s), including completion dates

By the start of the reporting year (2022/4/1), the sale of Mie Fujitsu Semiconductor Mie Plant, FDK Sanyo Plant, Fujitsu Interconnect Technologies Kurohime Plant, Fujitsu Semiconductor Aizu-Wakamatsu Plant, FUJITSU TECHNOLOGY SOLUTIONS GmbH, Fujitsu Semiconductor wafer solutions Co., Ltd. (2021/8/1), and Smart Agriculture Iwata Corporation (2021/10/1) had completed. GHG emissions from the sale decreased.

C5.1b

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

	Change(s) in methodology, boundary, and/or reporting year definition?	Details of methodology, boundary, and/or reporting year definition change(s)	
Row 1	No	<not applicable=""></not>	

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 C5.1b2

	1 1	Scope(s) recalculated		Past years' recalculation
Row 1		'	It is the policy to carry out base year recalculation in accordance with the GHG Protocol whenever there are changes such as boundary changes.	Yes

C5.2

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

Scope 1

Base year start

April 1 2020

Base year end

March 31 2021

Base year emissions (metric tons CO2e)

74944

Comment

Scope 2 (location-based)

Base year start

April 1 2020

Base year end

March 31 2021

Base year emissions (metric tons CO2e)

582321

Comment

Scope 2 (market-based)

Base year start

April 1 2020

Base year end

March 31 2021

Base year emissions (metric tons CO2e)

540292

Comment

Scope 3 category 1: Purchased goods and services

Base year start

April 1 2020

Base year end

March 31 2021

Base year emissions (metric tons CO2e)

1104149

Comment

Scope 3 category 2: Capital goods

Base year start

April 1 2020

Base year end

March 31 2021

Base year emissions (metric tons CO2e)

15000

Comment

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

Base year start

April 1 2020

Base year end

March 31 2021

Base year emissions (metric tons CO2e)

98960

Comment

Scope 3 category 4: Upstream transportation and distribution

Base year start

April 1 2020

Base year end

March 31 2021

Base year emissions (metric tons CO2e)

52457

Comment

Scope 3 category 5: Waste generated in operations

Base year start

April 1 2020

Base year end

March 31 2021

Base year emissions (metric tons CO2e)

3540

Comment

Scope 3 category 6: Business travel

Base year start

April 1 2020

Base year end

March 31 2021

Base year emissions (metric tons CO2e)

26880

Comment

Scope 3 category 7: Employee commuting

Base year start

April 1 2020

Base year end

March 31 2021

Base year emissions (metric tons CO2e)

4650

Comment

Scope 3 category 8: Upstream leased assets

Base year start

April 1 2020

Base year end

March 31 2021

Base year emissions (metric tons CO2e)

107750

Comment

Scope 3 category 9: Downstream transportation and distribution

Base year start

April 1 2020

Base year end

March 31 2021

Base year emissions (metric tons CO2e)

200

Comment

Scope 3 category 10: Processing of sold products Base year start April 1 2020

Base year end March 31 2021

Base year emissions (metric tons CO2e)

12153

Comment

Scope 3 category 11: Use of sold products

Base year start April 1 2020

Base year end March 31 2021

Base year emissions (metric tons CO2e)

3899880

Comment

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

April 1 2020

Base year end

March 31 2021

Base year start

Base year emissions (metric tons CO2e)

1180

Comment

Scope 3 category 13: Downstream leased assets

Base year start
Base year end

Base year emissions (metric tons CO2e)

Comment

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 April 1 2020 Base year end

March 31 2021

Base year emissions (metric tons CO2e)

38920

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)

64680

Start date

<Not Applicable>

End date

<Not Applicable>

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

475543

Scope 2, market-based (if applicable)

340858

Start date

<Not Applicable>

End date

<Not Applicable>

Comment

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)

1361000

Emissions calculation methodology

Spend-based method

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

0

Please explain

Calculated based on "Procurement volume of materials within the fiscal year × emission intensity per procurement volume". Emissions intensity per unit of procurement is based on the Environmental Impact Intensity Data Book (3EID) prepared by the Global Environment Research Center, National Institute for Environmental Studies, National Research and Development.

Capital goods

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

11000

Emissions calculation methodology

Average spend-based method

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

0

Please explain

Total receipt and inspected amount of construction properties in the fiscal year x emission intensity (source: Emission Intensity Database for Calculating GHG Emissions of Organizations Throughout the Supply Chain (Ver. 3.2)

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

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

85157

Emissions calculation methodology

Average data method

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

0

Please explain

Annual quantity of fuel oil/gas and electricity/heat purchased (consumed) primarily at Fujitsu-owned facilities x emissions intensity (source: prepared from Ministry of the Environment and Ministry of Economy, Trade and Industry, Emission Intensity Database for Calculating GHG Emissions of Organizations Throughout the Supply Chain (Ver. 3.2) and Emission Intensity Database for Japan; IDEA Ver. 2.3 [for calculation of supply chain greenhouse gas emissions])

Upstream transportation and distribution

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

43917

Emissions calculation methodology

Average data method

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

0

Please explain

Domestic transportation: CO2 emissions from domestic transportation for which Fujitsu Group is the shipper CO2 emissions from domestic transportation for which Fujitsu Group is consignor, based on the Act on the Rational Use of Energy; fuel efficiency method (for some vehicles); and improved ton/kilometer method (for vehicles, railroads, aircraft, and ships) International transportation/overseas intra-regional transportation: ton/kilometers transported x emission intensity (source: GHG Protocol Emission Factor Database)

Waste generated in operations

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

3700

Emissions calculation methodology

Waste-type-specific method

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

0

Please explain

Annual volume of waste treated/recycled by waste type and treatment method generated primarily at Fujitsu-owned facilities x emissions intensity per unit of annual treated/recycled volume (source: prepared from Ministry of the Environment and Ministry of Economy, Trade and Industry, Emission Intensity Database for Calculating GHG Emissions of Organizations Throughout the Supply Chain (Ver. 3.2) and Emission Intensity Database for Japan; IDEA Ver. 2.3 [for calculation of supply chain greenhouse gas emissions]) The Fujitsu Group considers anything less than 0.1% of the total Scope 3 amount to be irrelevant. This category satisfies that criterion.

Business travel

Evaluation status

Relevant calculated

Emissions in reporting year (metric tons CO2e)

47890

Emissions calculation methodology

Spend-based method

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

0

Please explain

(means of transportation) Σ (transportation cost paid x emission intensity) (Source: Ministry of the Environment and Ministry of Economy, Trade and Industry, Basic Guidelines on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain (Ver. 2.5) and Emission Intensity Database (Ver. 3.3))

Employee commuting

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

4860

Emissions calculation methodology

Spend-based method

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

0

Please explain

For the portion using public transportation (means of transportation) Σ (transportation cost paid x emission intensity) (Source: Ministry of the Environment and Ministry of Economy, Trade and Industry, Basic Guidelines on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain (Ver.2.5) and Emission Intensity Database (Ver. 3.3)) For the portion using private vehicles, Σ (transported persons/kilometer x emission intensity) Transported persons/kilometers is calculated from transportation allowances/gasoline prices, and fuel consumption.

Upstream leased assets

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

72420

Emissions calculation methodology

Asset-specific method

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

9.7

Please explain

Annual quantity of fuel oil/gas and electricity/heat consumed at leased facilities x emission intensity per unit of fuel oil/gas and electricity/heat consumed (source: Japan: Greenhouse Gas Emissions Calculation, Reporting and Publication System based on the Act on Promotion of Global Warming Countermeasures; overseas: IEA, CO2 Emissions from Fuel Combustion 2021)

Downstream transportation and distribution

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

150

Emissions calculation methodology

Average data method

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

0

Please explain

The movement of consumers at the time of purchase is set as the scenario, and calculation is made by multiplying the amount of activity (person/kilometer) by the emission factor (source: Greenhouse Gas Emissions Calculation, Reporting and Publication System based on the Act on Promotion of Global Warming Countermeasures). The Fujitsu Group considers anything less than 0.1% of the total Scope 3 amount to be irrelevant. This category meets that threshold.

Processing of sold products

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

16000

Emissions calculation methodology

Average data method

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

0

Please explain

Calculated as "sales volume of intermediate products x emissions intensity per unit of processing volume." Here, the sales volume of intermediate products is Fujitsu's Device Solutions sales, and the emissions intensity per unit of processing volume comes from Fujitsu's 2015 assembly plant data.

Use of sold products

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

3692976

Emissions calculation methodology

Other, please specify (Calculated based on "Power consumption during product use x emission intensity per unit of electricity".)

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

0

Please explain

Calculated as "electric power consumption during product use x emissions intensity per unit of electric power." Here, "electric power consumption during product use" is calculated by multiplying the amount of electric power used during the assumed usage time per product unit by the number of units shipped in the relevant fiscal year. The amount of electric power used during the assumed usage time per product unit is calculated using the following formula. Power consumption(kWh) = electricity consumption (kWh) x hours of use (hours/day) x number of days of use per year x years of use *Hours of use, days of use per year, and years of use are set based on Fujitsu's in-house scenarios. Additionally, "emissions intensity per unit of electric power" is based on the CO2 emission factors (FY2021) of the Electric Power Council for a Low Carbon Society.

End of life treatment of sold products

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

5302

Emissions calculation methodology

Waste-type-specific method

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

9.7

Please explain

Calculates the environmental impact when shipped products reach the end of life, are collected by a recycling center, and undergo recycling or disposal. Σ ((1) Total weight of all products sold (including packaging materials) (t) x (2) Percentage of Waste Disposed by Type and Method (%) x (3) Emission factor of waste disposal method (tCO2e/t)) Here, (1) Total weight of all products sold: Three material types [metal, plastic, and paper] (calculated from the LCA report) (2) Percentage of all waste processed by waste disposal: 3 types [recycled, incinerated, and landfill] (using actual results from recycling centers) (3) Emission factor of waste disposal method: Uses the emission factor for each type of waste and disposal method The Fujitsu Group considers anything less than 0.1% of the total Scope 3 amount to be irrelevant. This category meets that threshold.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Please explain

We have no accounting items of downstream leased assets and no sales from leasing. Therefore "Downstream leased assets" is "not relevant".

Franchises

Evaluation status

Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Please explain

We have no accounting items of franchises and no sales from it. Therefore "Franchises" is "not relevant".

Investments

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

26880

Emissions calculation methodology

Average data method

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

0

Please explain

(Investment first.) Σ (Number of investments first Scope1 and Number of emissions x investment ratio Scope2)

Other (upstream)

Evaluation status

Emissions in reporting year (metric tons CO2e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Please explain

Other (downstream)

Evaluation status

Emissions in reporting year (metric tons CO2e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Please explain

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

1.092e-7

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

405541

Metric denominator

unit total revenue

Metric denominator: Unit total

3713700000000

Scope 2 figure used

Market-based

% change from previous year

21.27

Direction of change

Decreased

Reason(s) for change

Change in renewable energy consumption Other emissions reduction activities Change in revenue

Please explain

- · Increased use of renewable energy
- · Optimization of air conditioning temperature in offices, energy saving and efficiency improvement of lighting and OA equipment.
- · Improve efficiency (production innovation activities) by reviewing manufacturing processes, and improve the proper operation and management of power plants. In the semiconductor division, we will continue to switch to gases with low global warming potential and install abatement equipment on new and existing production lines.
- · Energy-Saving measures for equipment, mainly motor facilities (Free cooling, inverters, introduction of energy-saving equipment, fuel conversion, etc.)

GHG emissions decreased by 18.5% from the previous year due to the above-mentioned reduction activities, sales increased by 3.5% from the previous year, and the basic unit decreased by 21.3% from the previous year (21.3% = (0.000001378 - 0.000001092)/0.0 .0000001387 * 100).

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	62720	IPCC Fifth Assessment Report (AR5 – 100 year)	
PFCs	1470	IPCC Fifth Assessment Report (AR5 – 100 year)	
HFCs	280	IPCC Fifth Assessment Report (AR5 – 100 year)	
Other, please specify (CH3)	10	IPCC Fifth Assessment Report (AR5 – 100 year)	
SF6	200	IPCC Fifth Assessment Report (AR5 – 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	59550
United States of America	440
Malaysia	2820
China	30
Republic of Korea	360
Philippines	190
United Kingdom of Great Britain and Northern Ireland	1130
India	150
Thailand	10

C7.3

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

By business division

By activity

C7.3a

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

Business division	Scope 1 emissions (metric ton CO2e)
Production of information/communication equipment	60060
Others	4250

C7.3c

(C7.3c) Break down your total gross global Scope 1 emissions by business activity.

Activity	Scope 1 emissions (metric tons CO2e)	
Production	2000	
Air conditioning	62680	

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	360044	273480
United States of America	7220	2920
Germany	5830	0
Malaysia	11270	11270
China	3070	3680
Republic of Korea	1930	1930
Philippines	4550	2680
Taiwan, China	2650	2470
Thailand	460	460
India	1770	840
Brazil	30	30
Australia	65640	40890
Sweden	10	0
United Kingdom of Great Britain and Northern Ireland	10030	0
Finland	720	80
Spain	130	10
Denmark	120	120
New Zealand	60	0

C7.6

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

By business division

By activity

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)
Production of information/communication equipment	291620	211138
Others	183923	129720

C7.6c

(C7.6c) Break down your total gross global Scope 2 emissions by business activity.

Activity	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Production	185462	132935
Air conditioning/heat source	218750	156795
Lighting, OA, etc.	71331	51129

C7.7

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

Υρς

C7.7a

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

Subsidiary name

Fujitsu Ltd.

Primary activity

Please select

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

ISIN code – bond

ISIN code – bond

JP3818000006

ISIN code - equity

<Not Applicable>

CUSIP number

<Not Applicable>

Ticker symbol <Not Applicable>

Applicable.

SEDOL code <Not Applicable>

LEI number

<Not Applicable>

Other unique identifier <Not Applicable>

<140t Applicable>

Scope 1 emissions (metric tons CO2e)

13247

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

190656

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

152477

Comment

Subsidiary name

SHINKO ELECTRIC INDUSTRIES CO., LTD.

Primary activity

Please select

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

ISIN code - bond

ISIN code - bond

JP3375800004

ISIN code - equity

<Not Applicable>

CUSIP number

<Not Applicable>

Ticker symbol

<Not Applicable>

SEDOL code

<Not Applicable>

LEI number

<Not Applicable>

Other unique identifier

<Not Applicable>

Scope 1 emissions (metric tons CO2e)

44230

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

149920

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

102790

Comment

Subsidiary name

FDK CORPORATION

Primary activity

Please select

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

 $\mathsf{ISIN}\;\mathsf{code}-\mathsf{bond}\;$

ISIN code – bond

JP3820400004

ISIN code - equity

<Not Applicable>

CUSIP number

<Not Applicable>

Ticker symbol

<Not Applicable>

SEDOL code

<Not Applicable>

LEI number

<Not Applicable>

Other unique identifier

<Not Applicable>

Scope 1 emissions (metric tons CO2e)

3690

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

26830

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

26290

Comment

Subsidiary name

FUJITSU AUSTRALIA LTD.

Primary activity

Please select

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

Please select

ISIN code – bond

	<not applicable=""></not>
	ISIN code – equity <not applicable=""></not>
	CUSIP number <not applicable=""></not>
	Ticker symbol <not applicable=""></not>
	SEDOL code <not applicable=""></not>
	LEI number <not applicable=""></not>
	Other unique identifier <not applicable=""></not>
	Scope 1 emissions (metric tons CO2e) 0
	Scope 2, location-based emissions (metric tons CO2e) 65640
	Scope 2, market-based emissions (metric tons CO2e) 40890
	Comment
	Subsidiary name FUJITSU FRONTECH CHUNGHO GLOBAL PRODUCTS Co. Ltd.
	Primary activity Please select
	Select the unique identifier(s) you are able to provide for this subsidiary ISIN code – bond
	ISIN code – bond JP3818200002
	ISIN code – equity <not applicable=""></not>
	CUSIP number <not applicable=""></not>
	Ticker symbol <not applicable=""></not>
	SEDOL code <not applicable=""></not>
	LEI number <not applicable=""></not>
	Other unique identifier <not applicable=""></not>
	Scope 1 emissions (metric tons CO2e) 1150
	Scope 2, location-based emissions (metric tons CO2e) 8330
	Scope 2, market-based emissions (metric tons CO2e) 6130
_	Comment
C7	9
	7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year? ecreased
C7	9a

CDP

(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	45180	Decreased	9.1	Reduce emissions from renewable energy sources, which increased in fiscal 2022. FY 2022 reduction 45,180/FY 2021 emissions 497,490 = -9.1%
Other emissions reduction activities	7850	Decreased	1.6	Reduction of emissions through projects implemented in fiscal 2022 (Capital investment and investment improvement). FY 2022 reduction -7,850/FY 2021 emissions 497,490 = -1.6%
Divestment		<not applicable=""></not>		
Acquisitions		<not applicable=""></not>		
Mergers		<not applicable=""></not>		
Change in output	17990	Decreased	3.6	Increased emissions due to increased production at manufacturing plants in Japan. FY 2022 decrease 17,990/FY 2021 emissions 497,490 = 3.6%
Change in methodology	12560	Decreased	2.5	Reduction in CO2 emissions due to fluctuations in the CO2 emission coefficient for electricity. FY 2022 decrease 12,560/FY 2021 emissions 497,490 = -2.5%
Change in boundary	8370	Decreased	1.7	Reduction in emissions due to a reduction in the scope of group companies. FY 2022 decrease -8,370/FY 2021 emissions 497,490 = -1.7%
Change in physical operating conditions		<not applicable=""></not>		
Unidentified		<not applicable=""></not>		
Other		<not applicable=""></not>		

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 0% but less than or equal to 5%

C8.2

 $\hbox{(C8.2) Select which energy-related activities your organization has undertaken.}\\$

	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

 $({\tt C8.2a})\ {\tt Report\ your\ organization's\ energy\ consumption\ totals\ (excluding\ feeds tocks)\ in\ MWh.}$

	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	337706	337706
Consumption of purchased or acquired electricity	<not applicable=""></not>	318842	743166	1062008
Consumption of purchased or acquired heat	<not applicable=""></not>	0	1769	1769
Consumption of purchased or acquired steam	<not applicable=""></not>	0	0	0
Consumption of purchased or acquired cooling	<not applicable=""></not>	0	9005	9005
Consumption of self-generated non-fuel renewable energy	<not applicable=""></not>	1066	<not applicable=""></not>	1646
Total energy consumption	<not applicable=""></not>	319907	1092227	1412134

C8.2b

	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	Yes
Consumption of fuel for the generation of steam	Yes
Consumption of fuel for the generation of cooling	Yes
Consumption of fuel for co-generation or tri-generation	Yes

C8.2c

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

Sustainable biomass

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

Ω

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self-generation of cooling

U

MWh fuel consumed for self- cogeneration or self-trigeneration

^

Comment

Other biomass

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of steam

0

. . .

MWh fuel consumed for self-generation of cooling 0

MWh fuel consumed for self- cogeneration or self-trigeneration

Comment

Other renewable fuels (e.g. renewable hydrogen)

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

U

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self-generation of cooling

0

MWh fuel consumed for self- cogeneration or self-trigeneration

0

Comment

CDP

Coal

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

MWh fuel consumed for self-generation of electricity

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam

MWh fuel consumed for self-generation of cooling

MWh fuel consumed for self- cogeneration or self-trigeneration

Comment

Oil

Heating value

HHV

Total fuel MWh consumed by the organization

MWh fuel consumed for self-generation of electricity

580

MWh fuel consumed for self-generation of heat

23810

MWh fuel consumed for self-generation of steam

20

MWh fuel consumed for self-generation of cooling

MWh fuel consumed for self- cogeneration or self-trigeneration

Comment

Total amount of heavy oil A heavy oil, kerosene, diesel oil, and gasoline

Heating value

Total fuel MWh consumed by the organization

MWh fuel consumed for self-generation of electricity

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam

MWh fuel consumed for self-generation of cooling

MWh fuel consumed for self- cogeneration or self-trigeneration

7140

Total amount of heavy oil Natural gas, LNG, City gas

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

Heating value

HHV

Total fuel MWh consumed by the organization

2880

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

2880

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self-generation of cooling

0

MWh fuel consumed for self- cogeneration or self-trigeneration

0

Comment

The amount of Liquefied Petroleum gas

Total fuel

Heating value

 HHV

Total fuel MWh consumed by the organization

337710

MWh fuel consumed for self-generation of electricity

580

MWh fuel consumed for self-generation of heat

96790

MWh fuel consumed for self-generation of steam

208390

MWh fuel consumed for self-generation of cooling

24810

MWh fuel consumed for self- cogeneration or self-trigeneration

7140

Comment

C8.2d

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

		Generation that is consumed by the organization (MWh)	_	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	1646	1646	1066	1066
Heat	0	0	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

C8.2g

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

Country/area

Japan

Consumption of purchased electricity (MWh)

320960

Consumption of self-generated electricity (MWh)

1010

Is this electricity consumption excluded from your RE100 commitment?

No

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

10260

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

0

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

Country/area

United States of America

Consumption of purchased electricity (MWh)

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

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

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

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

20430

Country/area

Australia

Consumption of purchased electricity (MWh)

96770

Consumption of self-generated electricity (MWh)

140

Is this electricity consumption excluded from your RE100 commitment?

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

0

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

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

96910

Country/area

Germany

Consumption of purchased electricity (MWh)

Consumption of self-generated electricity (MWh)

Is this electricity consumption excluded from your RE100 commitment?

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

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

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

18760

Country/area

Finland

Consumption of purchased electricity (MWh)

Consumption of self-generated electricity (MWh)

Is this electricity consumption excluded from your RE100 commitment?

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

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

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

9300

Country/area

United Kingdom of Great Britain and Northern Ireland

Consumption of purchased electricity (MWh) Consumption of self-generated electricity (MWh) Is this electricity consumption excluded from your RE100 commitment? Consumption of purchased heat, steam, and cooling (MWh) Consumption of self-generated heat, steam, and cooling (MWh) Total non-fuel energy consumption (MWh) [Auto-calculated] Country/area Consumption of purchased electricity (MWh) Consumption of self-generated electricity (MWh) 330 Is this electricity consumption excluded from your RE100 commitment? Consumption of purchased heat, steam, and cooling (MWh) Consumption of self-generated heat, steam, and cooling (MWh) Total non-fuel energy consumption (MWh) [Auto-calculated] 2900 Country/area Brazil Consumption of purchased electricity (MWh) Consumption of self-generated electricity (MWh) Is this electricity consumption excluded from your RE100 commitment? Consumption of purchased heat, steam, and cooling (MWh) Consumption of self-generated heat, steam, and cooling (MWh) Total non-fuel energy consumption (MWh) [Auto-calculated] 350 Country/area China Consumption of purchased electricity (MWh) Consumption of self-generated electricity (MWh) Is this electricity consumption excluded from your RE100 commitment? Consumption of purchased heat, steam, and cooling (MWh) Consumption of self-generated heat, steam, and cooling (MWh)

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

5000

Country/area Taiwan, China

Consumption of purchased electricity (MWh)

4850

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment? Consumption of purchased heat, steam, and cooling (MWh) Consumption of self-generated heat, steam, and cooling (MWh) Total non-fuel energy consumption (MWh) [Auto-calculated] 4850 Country/area Denmark Consumption of purchased electricity (MWh) Consumption of self-generated electricity (MWh) Is this electricity consumption excluded from your RE100 commitment? Consumption of purchased heat, steam, and cooling (MWh) 100 Consumption of self-generated heat, steam, and cooling (MWh) Total non-fuel energy consumption (MWh) [Auto-calculated] 1320 Country/area Consumption of purchased electricity (MWh) Consumption of self-generated electricity (MWh) Is this electricity consumption excluded from your RE100 commitment? Consumption of purchased heat, steam, and cooling (MWh) Consumption of self-generated heat, steam, and cooling (MWh) Total non-fuel energy consumption (MWh) [Auto-calculated] 1030 Country/area Malaysia Consumption of purchased electricity (MWh) 17310 Consumption of self-generated electricity (MWh) Is this electricity consumption excluded from your RE100 commitment? Consumption of purchased heat, steam, and cooling (MWh) Consumption of self-generated heat, steam, and cooling (MWh) Total non-fuel energy consumption (MWh) [Auto-calculated] 17310 Country/area Republic of Korea Consumption of purchased electricity (MWh) Consumption of self-generated electricity (MWh)

Is this electricity consumption excluded from your RE100 commitment?

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

CDP

Consumption of self-generated heat, steam, and cooling (MWh) Total non-fuel energy consumption (MWh) [Auto-calculated] Country/area Philippines Consumption of purchased electricity (MWh) Consumption of self-generated electricity (MWh) Is this electricity consumption excluded from your RE100 commitment? Consumption of purchased heat, steam, and cooling (MWh) Consumption of self-generated heat, steam, and cooling (MWh) Total non-fuel energy consumption (MWh) [Auto-calculated] 6430 Country/area Spain Consumption of purchased electricity (MWh) Consumption of self-generated electricity (MWh) Is this electricity consumption excluded from your RE100 commitment? Consumption of purchased heat, steam, and cooling (MWh) Consumption of self-generated heat, steam, and cooling (MWh) Total non-fuel energy consumption (MWh) [Auto-calculated] 840 Country/area New Zealand Consumption of purchased electricity (MWh) Consumption of self-generated electricity (MWh) Is this electricity consumption excluded from your RE100 commitment? Please select Consumption of purchased heat, steam, and cooling (MWh) Consumption of self-generated heat, steam, and cooling (MWh) Total non-fuel energy consumption (MWh) [Auto-calculated] 570 Country/area Consumption of purchased electricity (MWh) Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

60

CDP

C8.2h

(C8.2h) Provide details of your organization's renewable electricity purchases in the reporting year by country/area.

Country/area of consumption of purchased renewable electricity

United Kingdom of Great Britain and Northern Ireland

Sourcing method

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

Renewable electricity technology type

Renewable electricity mix, please specify (Hydropower and solar power,other)

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

Tracking instrument used

REGO

Country/area of origin (generation) of purchased renewable electricity

United Kingdom of Great Britain and Northern Ireland

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

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

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Germany

Sourcing method

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

Renewable electricity technology type

Hydropower (capacity unknown)

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

Tracking instrument used

Country/area of origin (generation) of purchased renewable electricity

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

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

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2016

Additional, voluntary label associated with purchased renewable electricity

TÜV SÜD

Comment

Country/area of consumption of purchased renewable electricity

Finland

Sourcing method

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

Renewable electricity technology type

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

Tracking instrument used

GO

Country/area of origin (generation) of purchased renewable electricity

Finland

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

NΙο

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

<Not Applicable>

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2015

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Sweden

Sourcing method

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

Renewable electricity technology type

Hydropower (capacity unknown)

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

200

Tracking instrument used

GO

Country/area of origin (generation) of purchased renewable electricity

Sweden

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)

<Not Applicable>

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Spain

Sourcing method

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

Renewable electricity technology type

Hydropower (capacity unknown)

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

806

Tracking instrument used

GO

Country/area of origin (generation) of purchased renewable electricity

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)

<Not Applicable>

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2020

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

India

Sourcing method

Purchase from an on-site installation owned by a third party (on-site PPA)

Renewable electricity technology type

Solar

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

329

Tracking instrument used

Contract

Country/area of origin (generation) of purchased renewable electricity

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)

2019

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2019

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

India

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Solar

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

1350

Tracking instrument used

I-REC

Country/area of origin (generation) of purchased renewable electricity

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)

2018

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

United States of America

Sourcing method

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

Renewable electricity technology type

Wind

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

5476

Tracking instrument used

US-REC

Country/area of origin (generation) of purchased renewable electricity

United States of America

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

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

Green-e

Comment

Country/area of consumption of purchased renewable electricity

United States of America

Sourcing method

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

Renewable electricity technology type

Wind

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

6702

Tracking instrument used

US-REC

Country/area of origin (generation) of purchased renewable electricity

United States of America

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

INO

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

<Not Applicable>

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2018

Additional, voluntary label associated with purchased renewable electricity

Green-e

Comment

Country/area of consumption of purchased renewable electricity

New Zealand

Sourcing method

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

Renewable electricity technology type

Large hydropower (>25 MW)

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

572

Tracking instrument used

NZREC

Country/area of origin (generation) of purchased renewable electricity

New Zealand

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)

1965

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2021

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Australia

Sourcing method

Financial (virtual) power purchase agreement (VPPA)

Renewable electricity technology type

Wind

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

36479

Tracking instrument used

Australian LGC

Country/area of origin (generation) of purchased renewable electricity

Australia

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

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Philippines

Sourcing method

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

Renewable electricity technology type

Renewable electricity mix, please specify (Hydropower and solar power)

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

2662

Tracking instrument used

Contract

Country/area of origin (generation) of purchased renewable electricity

Philippines

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

INO

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

<Not Applicable>

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2021

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Japar

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Solar

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

13962

Tracking instrument used

NFC - Renewable

Country/area of origin (generation) of purchased renewable electricity

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)

2013

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2021

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Japan

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Solar

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

01100

Tracking instrument used

NFC - Renewable

Country/area of origin (generation) of purchased renewable electricity

Japar

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)

2014

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2021

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Japan

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Solar

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

31514

Tracking instrument used

NFC - Renewable

Country/area of origin (generation) of purchased renewable electricity

Japar

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)

2015

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2021

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Japan

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Solar

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

12024

Tracking instrument used

NFC - Renewable

Country/area of origin (generation) of purchased renewable electricity

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)

2016

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2021

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Japan

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Solar

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

15566

Tracking instrument used

NFC - Renewable

Country/area of origin (generation) of purchased renewable electricity

Japan

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

. 00

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

2017

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2021

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Japan

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Solar

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

8980

Tracking instrument used

NFC - Renewable

Country/area of origin (generation) of purchased renewable electricity

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)

2018

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2021

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Country/area of consumption of purchased renewable electricity

Japan

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Solar

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

27222

Tracking instrument used

NFC - Renewable

Country/area of origin (generation) of purchased renewable electricity

Japar

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)

2019

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2021

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Japan

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Solar

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

14907

Tracking instrument used

NFC - Renewable

Country/area of origin (generation) of purchased renewable electricity

Japai

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

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2021

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Japan

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Solar

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

1529

Tracking instrument used

NFC - Renewable

Country/area of origin (generation) of purchased renewable electricity

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)

2021

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2021

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Japan

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Solar

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

1166

Tracking instrument used

NFC - Renewable

Country/area of origin (generation) of purchased renewable electricity

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

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Japan

Sourcing method

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

Renewable electricity technology type

Solar

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

6533

Tracking instrument used

NFC - Renewable

Country/area of origin (generation) of purchased renewable electricity

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)

... .

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2021

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Japan

Sourcing method

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

Renewable electricity technology type

Solar

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

1007

Tracking instrument used

NFC - Renewable

Country/area of origin (generation) of purchased renewable electricity

Japar

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)

2015

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2021

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Japan

Sourcing method

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

Renewable electricity technology type

Solar

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

1919

Tracking instrument used

NFC - Renewable

Country/area of origin (generation) of purchased renewable electricity

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)

2017

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2021

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Japan

Sourcing method

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

Renewable electricity technology type

Sola

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

5474

Tracking instrument used

NFC - Renewable

Country/area of origin (generation) of purchased renewable electricity

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)

2019

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2021

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Japan

Sourcing method

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

Renewable electricity technology type

Large hydropower (>25 MW)

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

6300

Tracking instrument used

NFC - Renewable

Country/area of origin (generation) of purchased renewable electricity

Japan

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

res

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

1954

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2021

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Japan

Sourcing method

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

Renewable electricity technology type

Renewable electricity mix, please specify (hydro power and geothermal power) $\,$

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

3340

Tracking instrument used

Contract

Country/area of origin (generation) of purchased renewable electricity

Japan

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

...

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

<NUL Applicable>

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2021

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Japan

Sourcing method

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

Renewable electricity technology type

Renewable electricity mix, please specify (Hydropower and solar power)

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

11525

Tracking instrument used

Contract

Country/area of origin (generation) of purchased renewable electricity

Japan

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

Nο

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

<Not Applicable>

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2021

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Japan

Sourcing method

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

Renewable electricity technology type

Solar

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

866

Tracking instrument used

NFC - Renewable

Country/area of origin (generation) of purchased renewable electricity

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)

2020

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2021

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

C8.2i

(C8.2i) Provide details of your organization's low-carbon heat, steam, and cooling purchases in the reporting year by country/area..

Sourcing method

None (no purchases of low-carbon heat, steam, or cooling)

Country/area of consumption of low-carbon heat, steam or cooling

<Not Applicable>

Energy carrier

<Not Applicable>

Low-carbon technology type

<Not Applicable>

Low-carbon heat, steam, or cooling consumed (MWh)

<Not Applicable>

Comment

C8.2j

(C8.2j) Provide details of your organization's renewable electricity generation by country/area in the reporting year.

Country/area of generation

United Kingdom of Great Britain and Northern Ireland

Renewable electricity technology type

Solar

Facility capacity (MW)

0.15

Total renewable electricity generated by this facility in the reporting year (MWh)

123.7

Renewable electricity consumed by your organization from this facility in the reporting year (MWh)

123.7

Energy attribute certificates issued for this generation

Yes

Type of energy attribute certificate

REGO

Comment

Country/area of generation

Australia

Renewable electricity technology type

Solar

Facility capacity (MW)

0.1

Total renewable electricity generated by this facility in the reporting year (MWh)

138.2

Renewable electricity consumed by your organization from this facility in the reporting year (MWh)

138.2

Energy attribute certificates issued for this generation

No

Type of energy attribute certificate

<Not Applicable>

Comment

Country/area of generation

Thailand

Renewable electricity technology type

Solar

Facility capacity (MW)

0.01

Total renewable electricity generated by this facility in the reporting year (MWh)

45.8

Renewable electricity consumed by your organization from this facility in the reporting year (MWh)

45.8

Energy attribute certificates issued for this generation

No

Type of energy attribute certificate

<Not Applicable>

Comment

Country/area of generation

Japan

Renewable electricity technology type

Solar

Facility capacity (MW)

0.4

Total renewable electricity generated by this facility in the reporting year (MWh)

428.9

Renewable electricity consumed by your organization from this facility in the reporting year (MWh)

428.9

Energy attribute certificates issued for this generation

Nο

Type of energy attribute certificate

C8.2k

(C8.2k) Describe how your organization's renewable electricity sourcing strategy directly or indirectly contributes to bringing new capacity into the grid in the countries/areas in which you operate.

In our company's renewable power procurement strategy, increasing the ratio of renewable energy in Japan, where promotion of renewable energy is lagging behind from the standpoint of users, will also affect the ratio of renewable energy in other users. As a result, efforts to make maximum use of the power transmission network to increase renewable energy will be activated. In 2022, electric power companies in Japan and our company collaborated to conduct a demonstration test using electric power companies' transmission facilities in order to realize a dynamic rating (technology that flexibly operates transmission capacity of transmission and transformation facilities), which is expected as a next-generation power network technology to expand the introduction of renewable energy. The Agency for Natural Resources and Energy (Agency for Natural Resources and Energy) started a non-farm type connection in 2021, which is one of the efforts of the Japanese version of Connect & Manage. In the future, if there is a physical shortage of the transmission network, investment in the expansion of the transmission network capacity will be developed.

C8.2I

(C8.2I) In the reporting year, has your organization faced any challenges to sourcing renewable electricity?

	Challenges to sourcing renewable electricity		Challenges faced by your organization which were not country/area-specific
ſ	Row 1	Yes, in specific countries/areas in which we operate	<not applicable=""></not>

C8.2m

(C8.2m) Provide details of the country/area-specific challenges to sourcing renewable electricity faced by your organization in the reporting year.

Country/area	Reason(s) why it was challenging to source renewable electricity within selected country/area	Provide additional details of the barriers faced within this country/area
Japan	Arbitrary grid usage charges Prohibitively priced renewable electricity	In the past, renewable energy prices remained high in Japan, and there was an issue of cost increase in the procurement of renewable electricity in our company. However, due to the change of the non-fossil certificate system in November 2021, it became possible to purchase directly from customers without going through a retail electricity provider, and cost reduction became possible by forming a scheme to procure at the head office. It is still higher than in Europe, so it is necessary to change the system to make it even cheaper in the future. However, the lowest price of renewable energy will go up from 2023, and the cost of renewable energy procurement in our company will rise again.
Japan	Lack of electricity market structure supporting bilateral PPAs Other, please specify (· It is unclear how to properly account for the loss or loss. · There is no clear guidance on whether the commodity is subject to the Commodity Futures Trading Act.)	With regard to Japan's established VPPA mechanisms in Europe and Oceania, Japan has participated in the Japan Climate Leaders Partnership (JCLP) and the Renewable Energy Foundation's corporate group activities related to the promotion of renewable energy. Although a guide on VPPA has already been published and is now being established, there are still some issues unique to Japan, such as the lack of accounting treatment for purchase costs, etc., which have made it impossible to resolve the situation in which the options for procurement of renewable electricity are becoming limited. Currently, there is no option to easily purchase renewable energy at low prices other than the purchase of non-fossil certificates, and in the future, the government should increase the number of options considering the case where non-fossil certificates cannot be purchased.

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) 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

Underway but not complete for reporting year – previous statement of process attached

Type of verification or assurance

Limited assurance

Attach the statement

第三者保証報告書.pdf

Page/ section reference

1-2 page

Relevant standard

ISAE3000

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

Underway but not complete for reporting year – previous statement of process attached

Type of verification or assurance

Limited assurance

Attach the statement

第三者保証報告書.pdf

Page/ section reference

1-2 page

Relevant standard

ISAE3000

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

Underway but not complete for reporting year - previous statement of process attached

Type of verification or assurance

Limited assurance

Attach the statement

第三者保証報告書.pdf

Page/ section reference

1-2 page

Relevant standard

ISAE3000

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: Use of sold products
Verification or assurance cycle in place Annual process
Status in the current reporting year Underway but not complete for reporting year – previous statement of process attached
Type of verification or assurance Limited assurance
Attach the statement 第三者保証報告書.pdf
Page/section reference 1-2 page
Relevant standard ISAE3000
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? In progress
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. Tokyo \mbox{CaT} - \mbox{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

2 1

% of Scope 2 emissions covered by the ETS

1 9

Period start date

April 1 2022

Period end date

March 31 2023

Allowances allocated

13134

Allowances purchased

0

Verified Scope 1 emissions in metric tons CO2e

1430

Verified Scope 2 emissions in metric tons CO2e

6528

Details of ownership

Facilities we own and operate

Comment

The latest published figure of FY2022 results from Tokyo is not published, so it is an estimated value.

C11.1d

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

In cases where participation is required by laws and regulations, etc., Fujitsu will work towards reducing emissions (or achieve target ratios) as much as possible through voluntary efforts. And while observing social and market trends, Fujitsu will participate when a reliable trading system has been established. With regard to Fujitsu's efforts to reduce emissions, we formulated the Fujitsu Climate and Energy Vision in 2017, a medium and long-term environmental initiative spanning to 2050 designed to achieve decarbonization in the long term. This was recognized as a Science-Based Target (SBT), scientific GHG reduction goal. In 2020, We are Science Based Targets (SBT) 1.5°C certified. The goal of SBT is to "reduce greenhouse gas emissions by 71.4% compared to 2013 by 2030." This goal is in line with the greenhouse gas emission reduction strategy laid out in the Paris Agreement. And Reported to the Board of Directors as in the Fujitsu Group Environmental Action Plan (Stage X) for FY2021-2022, it has set a goal of "reducing GHG emissions from business sites by 4.2% or more annually, compared with the base year (FY2013) " in line with the SBT1.5°C target. These were presented and discussed by the Sustainability Management Committee, which is chaired by the Representative Director & President and comprising the heads of business groups and regions.

In Japan, various measures are being taken to reduce the energy consumption rate by 1% on average in a span of 5 years in accordance with the Energy Conservation Law.

Each location sets planned values for GHG emissions, including energy usage, and the Environmental division reviews the Group's overall expected achievement rate based on these planned values. In addition, the Environmental division uses an in-house data collection system to periodically monitor energy usage and other data for each location. In the event issues such as exceeding the planned value by a large margin occur, the Environmental division manages the overall progress towards achievement and compliance with laws and regulations through encouraging efforts to achieve targets and the like. Our efforts have allowed us to continuously achieve our goals through to 2022. As a result, we has continued to score "S ranks" in the business classification evaluation system of the Energy Conservation Law, which has been in place since

For example, Fujitsu's Kamata Plant is subject to Tokyo's Cap-and-Trade Program. Through the abovementioned target management and reduction measures (Promotion of highly efficient energy use through operation management by the Central Monitoring System for Building Equipment and building inspectors), the plant has never exceeded the allocated amount, and as of 2022, there has been no need to supplement the reduction through emissions trading.

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

Energy efficiency: own generation

Type of mitigation activity

Emissions reduction

Project description

GS1247 VPA 211 Sierra Leone Safe Water

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

160

Purpose of cancellation

Voluntary offsetting

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

Nο

Vintage of credits at cancellation

<Not Applicable>

Were these credits issued to or purchased by your organization?

Purchasad

Credits issued by which carbon-crediting program

Gold Standard

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

Positive lists

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

"Under Gold Standard's rules, and its 'Emission Reductions from Safe Drinking Water Supply' methodology, the project was deemed additional due to its presence in a Least Developed country and the use of a Community Services-based methodology"

"The risk of reversal has been deemed not relevant for this activity type" Gold Standard

"All Gold Standard for the Global Goals documentation is available. This includes Gold Standard's requirements related to double-counting, safeguarding against negative economic, environmental and social harm, and stakeholder inclusivity, amongst other requirements that projects must comply with."

Comment

Project type

Energy efficiency: own generation

Type of mitigation activity

Emissions reduction

Project description

GS2446 GS1265 African Biomass Energy Conservation PoA Malawi Biomass Conservation

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

160

Purpose of cancellation

Voluntary offsetting

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

No

Vintage of credits at cancellation

<Not Applicable>

Were these credits issued to or purchased by your organization?

Purchased

Credits issued by which carbon-crediting program

Gold Standard

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

Positive lists

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

Activity-shifting

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

The project has been deemed additional due to its inclusion on a positive list established by Gold Standard, due to the size of the project and the technology/activity type adopted.

"The risk of reversal has been deemed not relevant for this activity type" Gold Standard.

"All Gold Standard for the Global Goals documentation is available. This includes Gold Standard's requirements related to double-counting, safeguarding against negative economic, environmental and social harm, and stakeholder inclusivity, amongst other requirements that projects must comply with."

Comment

Project type

Afforestation

Type of mitigation activity

Emissions reduction

Project description

VCS1477 The Katingan Mentaya REDD+ project

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

100

Purpose of cancellation

Voluntary offsetting

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

Nο

Vintage of credits at cancellation

<Not Applicable>

Were these credits issued to or purchased by your organization?

Purchased

Credits issued by which carbon-crediting program

VCS (Verified Carbon Standard)

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

Investment analysis

Barrier analysis

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

Monitoring and compensation

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

Activity-shifting

Ecological leakage

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

Land right and conflicts:

The centralistic land tenure policies of the 70's and 80's led to both confusion and conflict among local communities, as lands they had traditionally recognised as their own were designated as lying within the national forest estate and were therefore open to commercial exploitation. As time has passed the situation has slowly improved, with more and more village land being progressively excised from the forest estate as land tenure and planning practices have improved.

The Katingan Project is designed and implemented to fully recognize customary rights and community land tenure. The project has facilitated participatory land-use mapping and demarcated land-use boundaries in the project-zone villages based on customary rights. While this process has allowed a formal consensus to be reached on the project area, the process has also helped local communities to resolve conflicts within the wider project zone. The outcomes can then feed directly into local planning processes and get formal recognition.

Comment

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

Internal fee

How the price is determined

Price/cost of voluntary carbon offset credits

Objective(s) for implementing this internal carbon price

Change internal behavior

Scope(s) covered

Scope 1 Scope 2

Pricing approach used - spatial variance

Iniform

Pricing approach used – temporal variance

Static

Indicate how you expect the price to change over time

<Not Applicable>

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

4000

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

4000

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

Capital expenditure

Operations

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

No

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

Striving to achieve our science-based targets, we set upper limits on CO2 emissions for each business site, and if Group-wide emissions exceed our target, we cover the excess by purchasing renewable energy certificates, investing in energy-efficient equipment, and taking other pertinent steps. The expenses required are recovered from each business unit in proportion to its amount of excess. Each office and business unit fully understands this system and recognizes that recovery represents "risk." This recognition provides a major motivation for Group entities to strengthen their efforts to conserve energy and introduce renewable energy (a motivation to engage in internal activities in all regions, divisions, and operations).

Thus, the primary objective of introducing internal carbon pricing is to encourage internal behavioral changes and improve energy efficiency to achieve each business site's goals. Internal carbon pricing helps to push the decision-making process toward lower carbon in capital expenditure and operations.

C12. Engagement

C12.1

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

Yes, our suppliers

Yes, our customers/clients

C12.1a

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

Type of engagement

Information collection (understanding supplier behavior)

Details of engagement

Collect GHG emissions data at least annually from suppliers

Collect targets information at least annually from suppliers

Collect climate-related risk and opportunity information at least annually from suppliers

% of suppliers by number

6.7

% total procurement spend (direct and indirect)

80

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

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Rationale for the coverage of your engagement

Suppliers with top in annual funding procurement amount and suppliers involved with our main products are categorized as our "key suppliers." These suppliers are applicable to our annual environmental activities survey that investigates their CO2 emission and reduction activities as well as collaboration with other organizations (suppliers, industrial groups, governmental work groups, relevant NPOs, etc.). the rationale for applying such scope include the high procurement amounts (it covers about 80% of total amount) and relevance to the Fujitsu's key products, and thus involve particularly important suppliers to the environmental activities survey. Moreover, we include CO2 reduction activities as one of our requirements in our Green Procurement Standard and request all (100%) of our suppliers to comply. The reason we require this to 100% of our suppliers is that the Fujitsu Group endeavors on environmental activities in all of its business realms, and the procurement of more materials and parts with low environmental impact is one facet of these activities.

Impact of engagement, including measures of success

We survey and find out the implementation status of our "key suppliers", particularly those involving in our main products and those with large transactions with us.

- · As an indicator of the success of the collaboration, the company is working with an annual target of a survey response rate of 90% or more based on the judgment that emissions and trends can be sufficiently grasped. In FY 2022, 95.9% of suppliers responded, achieving the target.
- · The results of the survey are reflected in Fujitsu Group's supplier evaluation, and corrective requests are being made to suppliers with insufficient activities.
- · We also analyze responses and provide feedback about activity trends to suppliers who participated in the implementation survey, and request them further promotion of these activities. For example, we support the implementation of energy saving measures such as heat insulation and energy-saving operations for a supplier's manufacturing equipment based on results of such information gathering. We helped the supplier expect 4% reduction of GHG emission and build consciousness towards energy conservation for the supplier. To roll out these activities on upper stream of the supply chain, we have requested our key suppliers to ask their business partners (second-tier suppliers from Fujitsu Group's perspective) to implement these activities.
- In fiscal 2022, 24.2% of major business partners requested their own business partners to carry out activities, up from 23.5% in fiscal 2021. In total, more than 61,000 suppliers have been asked to carry out the activities but is expected to have a significant ripple effect on the upstream supply chain.

Comment

Type of engagement

Engagement & incentivization (changing supplier behavior)

Details of engagement

Provide training, support, and best practices on how to set science-based targets

Other, please specify (Offering educational materials on greenhouse gas reduction free of charge on the website)

% of suppliers by number

10.2

% total procurement spend (direct and indirect)

79.3

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

80

Rationale for the coverage of your engagement

The top 80% of funds procured from Fujitsu Group's manufacturing and service (excluding licensing) suppliers came from activities targeting major suppliers.

Impact of engagement, including measures of success

As a new initiative from FY2022, we have requested our major suppliers to set CO2 reduction targets in line with the Science Based Targets initiative (SBTi), which is the international standard. In addition to suppliers of parts and materials related to manufacturing, which are the conventional targets of CO2 emission reduction, the targets have been expanded to include suppliers in the service field to more strongly promote global warming mitigation efforts. Since this was an advanced attempt that demanded we set targets in accordance with international standards, we considered it necessary to carefully explain the background to the activities, including the social situation, to our suppliers and seek their understanding and cooperation. We set 80% or more attendance as an indicator of success. We requested 293 companies to attend a briefing session; 261 companies participated. We believe that the 89.1% attendance rate was quite a success. In addition, study sessions (webinars) were held to explain the procedures for setting targets and to discuss FAQs and other information. We support our suppliers' CO2 emission reduction activities by providing a simple tool that enables visualization of their [SCOPE 1 and 2] CO2 emissions and determines compliance with SBTi standard target setting.

Comment

We held a briefing session on setting reduction targets in line with the SBTi, and 89.1% of our targeting suppliers participated in the session in FY2022.

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement & Details of engagement

Education/information sharing	Share information about your products and relevant certification schemes (i.e. Energy STAR)
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% of customers by number

59

% of customer - related Scope 3 emissions as reported in C6.5

0.3

Please explain the rationale for selecting this group of customers and scope of engagement

Given that almost all of FUJITSU's ICT products are provided to business customers, the acquisition of the ENERGY STAR certification directly relates to whether we can secure business opportunities particularly because the Europe region customers accounting for 71% of the sales revenue of our overseas sales bases and the Americas region customers accounting for 6% quite often specify that the acquisition of the certification is a requirement for procurement. In addition, the acquisition of this certification is an appeal factor demonstrating that we actively employ energy-saving technologies, continuously engage in advancing energy efficiency and thereby drive forward our development of products capable of contributing to the reduction of electricity consumed by customers' use of products. For that reason, we have engaged in efforts to acquire the ENERGY STAR certification and to share information. [Scope of engagement] The Fujitsu's product groups targeted for engagement with customers through acquisition of ENERGY STAR are computers, displays, and imaging equipment, as those products are covered by the program. Engagement targets primarily the Europe and Americas region corporate customers. This is because many the Europe and Americas region corporate users require ENERGY STAR certification as a procurement requirement.

Impact of engagement, including measures of success

For PCs, based on the Energy Star standard, the ratio of products whose actual* TEC value (standard power consumption) is lower than the TEC Max (maximum value of the Energy Star standard) is calculated. According to this, 56% of new products launched in 2022 met the Energy Star standard. (TEC (Typical energy consumption) is a numerical value indicating the standard annual power consumption.) The incorporation of various technologies has contributed to reducing power consumption for customers during product usage and also led to Energy Star certifications (examples include incorporation of a new microprocessor with advanced energy conservation performance, high-efficiency power source, power-saving displays, optimization of low-power control, enhancement of the power management function, LSI integration, reduction of the numbers of components and incorporation of power-saving devices). As a specific example, the Energy Star TEC rate for FUJITSU Notebook LIFEBOOK U757 is 70% less than the maximum TEC rate that meets Energy Star requirements. Customers' power consumption during product usage is 17% less compared to the previous model (LIFEBOOK U536) even when including consumption from both standby and operation. By developing energy-saving products and communicating their energy-saving performance to customers through product catalogs, etc. and selecting Fujitsu products for customers, "Scope 3 cat. 11" is reduced as a result. Therefore, Fujitsu uses the "Scope 3 cat. 11" numbers as a measure of customer engagement success. Specifically, we believe that achieving "Reduce CO2 emissions by 5 y FY2030 (Compared to FY2013)" is a success. As a milestone, the Fujitsu Group's Environmental Action Plan Stage IX has set a target of "Reducing CO2 emissions by 14% by FY2020 (compared to FY2013)". At the moment, the Group has reduced emissions at a level exceeding the target. As a milestone, the Fujitsu Group's 10 Environmental Action Plan established the goal of reducing CO2 emissions by 17% by fiscal 2020 (compared to fis

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 Fujitsu Group promotes procurement from suppliers who satisfy the requirements of "Green Procurement", such as "Establishment of Environmental Management System", "Compliance with Fujitsu Group Specified Chemical Substances Regulations", "Establishment of Management System for Chemical Substances in Products", "Efforts to Reduce or Reduce CO2 Emissions", "Efforts to Preserve Biodiversity", and "Efforts to Preserve Water Resources". As for CO2 emissions, we require major suppliers to set emission reduction targets based on scientific grounds.

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

% suppliers by procurement spend in compliance with this climate-related requirement 95.9

Mechanisms for monitoring compliance with this climate-related requirement Supplier scorecard or rating

Response to supplier non-compliance with this climate-related requirement

Other, please specify (Subtract the supplier's evaluation score and request correction.)

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)

[Sustainability Data Book] 5-3-1-1 : Fujitsu Group Environment Goals https://www.fujitsu.com/jp/documents/about/resources/reports/sustainabilityreport/2022-report/fujitsudatabook2022.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

We are monitoring. Using monitoring data, the Department of Environment, which promotes environmental management throughout the Fujitsu Group, is responsible for analyzing whether direct and indirect policy collaborations are consistent with the Group's climate change strategy. The results of the analysis are presented and discussed by the Sustainability Management Committee, which is chaired by the CEO and composed of the heads of business groups, regions, and sustainability departments, which meets periodically twice a year. Through this process, we are building mechanisms to ensure that our internal climate change strategies and our corporate commitments through industry associations are consistent across business units and regions. In addition, internal education on environmental strategies is conducted on a regular basis to ensure a thorough understanding of these strategies, and efforts are made to avoid any discrepancies.

Primary reason for not engaging in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate <Not Applicable>

Explain why your organization does not engage in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate <Not Applicable>

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

Sixth Basic Energy Plan and Green Growth Strategy

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

Climate-related targets

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 minor exceptions

Description of engagement with policy makers

Looking to realize a decarbonized society as early as possible, we presented an "opinion statement for the G7 Ministers' Meeting on Climate, Energy and Environment in Sapporo and Hiroshima Summit" focused on the Japanese government's "Sixth Strategic Energy Plan" and "Green Growth Strategy" through the Japan Climate Leaders' Partnership (JCLP), of which Fujitsu is a full member. The statement includes "decarbonization of the power sector," "accelerating the use of renewable energy," and "introduction of carbon pricing" among other recommendations.

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

For the Sixth Strategic Energy Plan's FY2030 power source composition ratio, we suggest the following alternative approaches:

- 1. Decarbonize the power sector by 2035
- 2. Accelerate the maximum introduction of renewable energy as the power source with the highest priority and reduce dependence on fossil fuels
- 3. Achieve an early phase-out of coal-fired power generation without emission reduction measures

For the positioning of carbon pricing within the Green Growth Strategy, we propose the following alternative approach:

4. Introduce carbon pricing that encourages the rapid expansion of cost-effective decarbonization technologies

For the Green Growth Strategy's automobile/battery industry growth strategy, we propose the following alternative approach:

 $5. \ Set \ a \ target \ of \ 100\% \ ZEVs \ in \ new \ passenger \ car \ sales \ by \ 2035 \ as \ well \ as \ ambitious \ targets \ for \ large \ vehicles$

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?

While not central to achieving the Climate Change Transition Plan, progress in decarbonizing the power sector and introducing renewable energy will have a positive effect in terms of reducing Scope 2 and Scope 3 GHG emissions, as the grid GHG emission factor will come down, and thereby contribute to the plan's achievement. If little progress is made in decarbonizing the power sector and introducing renewable energy, additional cost burdens will arise for the introduction of renewable energy.

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

Japan Business Federation (Keidanren)

Is your organization's position on climate change policy consistent with theirs?

Consisten

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. In response to the Japanese government's 2050 carbon-neutral declaration, Keidanren declared that "We are highly commended by the business community and committed to working together with the government to become carbon-neutral in 2050.". This is in line with our company's position.

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

Describe the aim of your organization's funding

<Not Applicable>

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

Non-Governmental Organization (NGO) or charitable organization

State the organization or individual to which you provided funding

The World Business Council for Sustainable Development (The World Business Council for Sustainable Development) is an organization led by the CEOs of approximately 200 global companies. There are 6 clusters of regularly active projects, including Climate Change and Energy, that advocate for major economic system changes in line with the Sustainable Development Goals/Paris Climate Agreement/Vision 2050.

Funding figure your organization provided to this organization or individual in the reporting year (currency as selected in C0.4) 13000000

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

Fujitsu has been a member of the WBCSD since 2013, has worked on several themes, and has been on the Board since 2018. We join environment-related projects of the WBCSD and other initiatives to address climate change through industry. It participates in the "Cities and Mobility" working group in order to make use of ICT knowledge in order to solve the transportation issues faced by cities. The WBCSD also worked to revise Vision 2050, a long-term vision at the core of the WBCSD's activities, and formulated Vision 2050: Time to Transform, a long-term vision through 2050, in March 2021. Vision 2050: Time to Transform outlines the transformations that companies must undertake in 9 areas, including energy, manufacturing and resources, and health and wellbeing, and provides specific actions for the next 10 years. This vision and transformation path is in line with the Sustainable Development Goals (SDGs) and the goals of the Paris Agreement, and implementing policy recommendations can affect policies, laws or regulations that may affect the climate. Fujitsu's vision for the future is consistent with Vision 2050: Time to Transform, and the two companies are working together toward the realization of a sustainable society under the slogan of "Creating trust in society through innovation and making the world more sustainable" purpose. These are the objectives of funding.

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, incorporating the TCFD recommendations

Status

Complete

Attach the document

有報2022all.pdf

Page/Section reference

p.17-p.20

Content elements

Governance

Strategy

Risks & opportunities

Emissions figures

Emission targets

Comment

Publication

In mainstream reports, in line with the CDSB framework (as amended to incorporate the TCFD recommendations)

Status

Underway - previous year attached

Attach the document

IntegratedReport2022-all.pdf

Page/Section reference

p.63-p.69

Content elements

Governance

Strategy

Risks & opportunities

Emissions figures

Emission targets

Comment

Publication

In voluntary sustainability report

Status

Underway - previous year attached

Attach the document

fujitsudatabook2022e.pdf

Page/Section reference

5-3-2,5-3-3,5-3-4

Content elements

Governance

Strategy

Risks & opportunities

Emissions figures

Emission targets

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	Alliance for Climate Action (ACA) Business Ambition for 1.5C Japan Climate Leaders' Partnership (JCLP) RE100 Race to Zero Campaign Science Based Targets Network (SBTN) Task Force on Climate-related Financial Disclosures (TCFD) UN Global Compact We Mean Business World Business Council for Sustainable Development (WBCSD)	We have the following two roles in each framework, initiative, and commitment: 1. To promote our own GHG reductions toward achieving the Paris Agreement's 1.5°C target 2. To urge society to achieve the Paris Agreement's 1.5°C target Specific activities addressing the former include acquiring SBT Net Zero certification, joining RE100, and disclosing information in accordance with the TCFD. Specific activities addressing the latter include policy recommendations to the Japanese government through JCLP and supporting the formulation of the WBCSD's long-term vision "Vision 2050: Time to Transform."

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		Scope of board-level oversight
Row 1	Yes, both board-level oversight and executive management-level responsibility	, , , , , , , , , , , , , , , , , , , ,	<not Applicable></not

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		Initiatives endorsed
Row	Yes, we have made public commitments and	Other, please specify (We are committed to reducing the loss of biodiversity due to our own activities	SDG
1	publicly endorsed initiatives related to biodiversity	activities on ecosystems and biodiversity.".)	Other, please specify (Keidanren Initiative for Biodiversity Conservation, Japan Business Initiative for Biodiversity)

C15.3

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(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

Upstream

Portfolio activity

<Not Applicable>

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

Other, please specify (Ecological footprint)

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

"Ecological footprint" was selected as an indicator for assessing biodiversity dependence and impacts because it was proposed by the 24th Meeting of the Subsidiary Body on Scientific, Technical and Technological Advice to the Convention on Biological Diversity (SBSTTA24) as a candidate indicator for Target 15 for 2030 under the Kunming-Montreal Global Biodiversity Framework and because it can be used to comprehensively assess the entire range of corporate activities.

Ecological footprint was calculated by inputting "CO2 emissions," "business site area," "waste incineration/landfill," "NOx and SOx emissions," "BOD and COD emissions," and "chemical substance emissions" as items impacting on biodiversity. The results of an ecological footprint assessment that included both dependence and impact showed that "CO2 emissions" and "energy use" together accounted for a 99% share among all impact factors. In other words, it was found that implementing measures to reduce GHG emissions and energy use would be effective not only in combating climate change but also in preserving biodiversity, and therefore it was decided to do even more to promote climate change countermeasures. Looking to reduce our negative impacts, we will monitor our ecological footprint over time to assess the reduction effects measures are having.

Dependencies on biodiversity

Indicate whether your organization undertakes this type of assessment

Yes

Value chain stage(s) covered

Direct operations

Upstream

Portfolio activity

<Not Applicable>

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

Other, please specify (Ecological footprint)

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

"Ecological footprint" was selected as an indicator for assessing biodiversity dependence and impacts because it was proposed by the 24th Meeting of the Subsidiary Body on Scientific, Technical and Technological Advice to the Convention on Biological Diversity (SBSTTA24) as a candidate indicator for Target 15 for 2030 under the Kunming-Montreal Global Biodiversity Framework and because it can be used to comprehensively assess the entire range of corporate activities.

Ecological footprint was calculated by inputting "amount of biological resources used," "amount of non-biological resources used," "amount of water used," "amount of energy used," and "amount of chemicals used" as items dependent on biodiversity. The results of an ecological footprint assessment that included both dependence and impact showed that "CO2 emissions" and "energy use" together accounted for a 99% share among all impact factors. In other words, it was found that implementing measures to reduce GHG emissions and energy use would be effective not only in combating climate change but also in preserving biodiversity, and therefore it was decided to do even more to promote climate change countermeasures. Looking to reduce our negative impacts, we will monitor our ecological footprint over time to assess the reduction effects measures are having.

C15.4

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

Not assessed

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?	Type of action taken to progress biodiversity- related commitments	
Row	Yes, we are taking actions to progress our biodiversity-related	Land/water management	
1	commitments	Species management	
		Law & policy	
		Other, please specify (The Fujitsu Group Environmental Action Plan (Stage X) (2021-2022), which lays out short-term targets, sets "Visualize	
		and reduce the impact of corporate activities on ecosystems and on biodiversity" as one aim.)	

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	Yes, we use indicators	Pressure indicators

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		Attach the document and indicate where in the document the relevant biodiversity information is located
	Governance Other, please specify (Short-term targets and examples of activities)	5-3-1-8 : EMS, Environmental Management Framework 5-3-1-13 : Environmental Risk Management Stracture 5-3-1-18,19 : Conserving Biodiversity 5-3-3-27,28,29 : Environmental Action Plan, Living in Harmony with Nature (Conservation of Biodiversity)

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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	President and Representative Director	Chief Executive Officer (CEO)

SC. Supply chain module

SC0.0

(SC0.0) If you would like to do so, please provide a separate introduction to this module.

SC0.1

(SC0.1) What is your company's annual revenue for the stated reporting period?

	Annual Revenue
Row 1	371370000000

SC1.1

Later, delete