# Global Responsible Business

## — Environment —

The Fujitsu Group has reassessed its social role in light of the escalating global commitment to achieving carbon neutrality. The Group has elected to fast-track its previous commitment to achieve "zero $CO_2$ emissions within the Group by FY2050", instead bringing forward its Vision by 20 years to FY2030. The Group has set the additional target of reaching net-zero greenhouse gas emissions throughout the value chain by 2040.

# Environment

## WHAT FUJITSU ASPIRES TO BE

Fujitsu will fulfill its social responsibilities as a global corporate SX leader. In addition to achieving our carbon neutrality goals, we will solve various environmental challenges by providing innovative solutions through co-creation with our customers.

## GOALS FOR FY2025

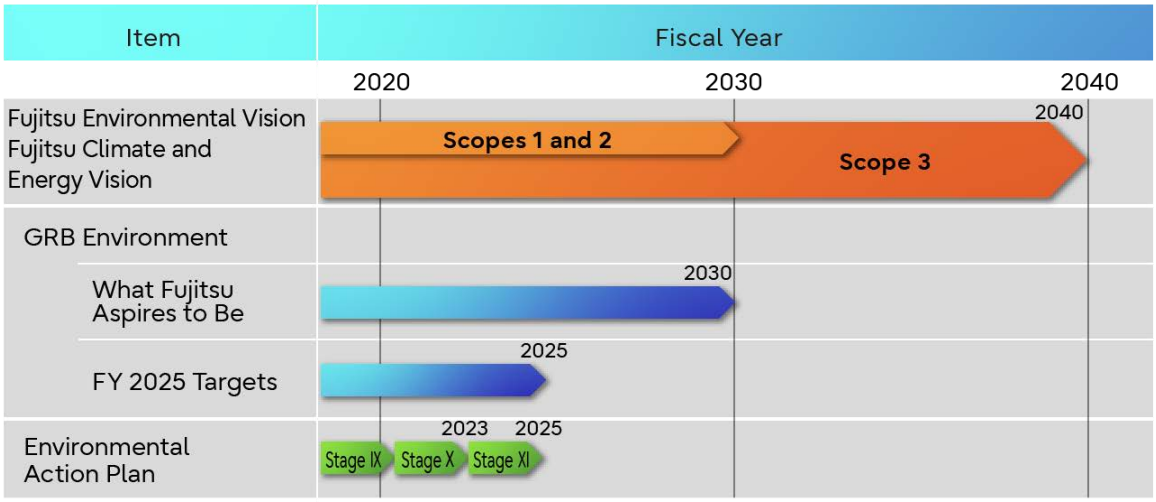
Fulfill our social responsibilities and help to resolve environmental challenges

KPI* :
- Reduce greenhouse gas (GHG) emissions from Fujitsu facilities and the supply chain with the aim of achieving Science Based Targets (SBT) net zero
- Avoid risks associated with our business activities and minimize our impact on the environment
- Help to resolve environmental challenges for customers and society through our business operations

* Specific targets are set in the Fujitsu Group Environmental Action Plan (Stage XI)

# Introduction

Climate change is a global issue that impacts the sustainability of society, and it is closely related to water and resource recycling issues. Engaging in global environmental conservation is essential for achieving our Purpose. The Fujitsu Group does its utmost to reduce environmental impact and minimize risks throughout the value chain, and we contribute to the realization of a sustainable society by solving environmental issues together with our customers.




Environmental Vision, Targets, and Other Milestones Achievement Timeline

# To Reduce GHG Emissions in Accordance With 1.5℃ Target

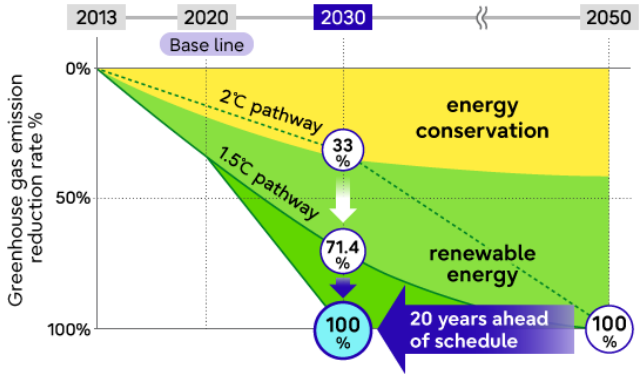
## Updating Medium- and Long-term Goals

In May 2017, the F ujitsu Group formulated the Fujitsu Climate and Energy Vision as our environmental vision. In August 2017, w e acquired Science Based Target (SBT) initiative validation (2℃-aligned) for our reduction target by 2030. As the movement toward carbon neutrality accelerated, we reconsidered the role that the Fujitsu Group must ful. ill, and in April 2021 w e raised our GHG emissions reduction target for 2030 from a 33% reduction compared to FY2013 t o a 71.4% r eduction. This reduction target has been validated as 1.5 ℃-aligned by SBTi.

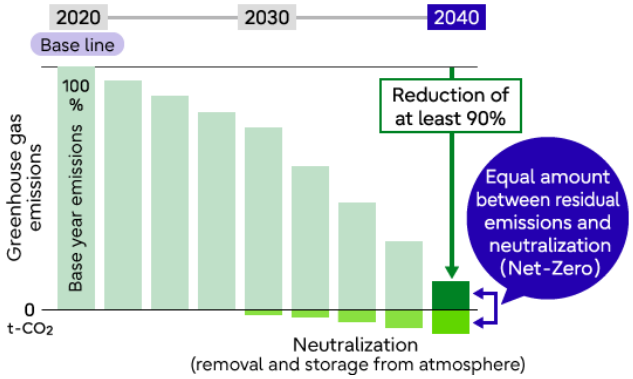
In order to accelerate decarbonization in the global community together with our supply chain, we have moved up the Scope 1 a nd 2 targets deadline for 100% r eduction by 20 years from the previous FY2050 to FY2030. Furthermore, we have decided to aim for Net-Zero emissions in the entire value chain, including the supply chain (Scope 3), by FY2040.

To ensure these targets, we will follow the Fujitsu Group Environmental Action Plan (Stage XI) that we created as our activities through FY2025.

(Our Net-Zero target for FY2040 from the base year of FY2020 has been validated by the SBTi in June 2023.)




Emission reduction of Fujitsu Group (Scope 1 a nd 2)




Emission reduction throughout the value chain (Scope 3)

Roadmap to Net-zero

# Initiatives for Achieving Goals

Since 2018, th e Fujitsu Group has been a member of the international initiative RE100, which aims to popularize and expand renewable energy.
Previously, we focused our sites on Europe and the United States. In April 2021, h owever, in anticipation of full-scale introduction in Japan, we switched all electricity used in the Fujitsu Technology Park (former Kawasaki Plant), the largest scale in the Fujitsu Group, to renewable energy as Fujitsu's flagship model.
Furthermore, in April 2022, Fujitsu Australia signed the largest renewable energy power purchase agreement (PPA) in the Group, accounting for approximately 47% of its FY2023 annual power consumption. We will continue to systematically procure power from renewable sources and proactively invest in power sources with additional potential, such as power purchase agreements (PPAs), to help expand the use of renewable energy in society as a whole.

Exterior of Fujitsu Technology Park (former Kawasaki Plant)

Sapphire Wind Farm
Largest wind farm in New South Wales operated by CWP Renewables

- Fujitsu Group's Largest Facility to Source 100% of its Energy Needs from Renewables, Demonstrating Commitment to Achievement of RE100 >
- Fujitsu Australia signs the group's largest renewable energy power purchase agreement >

# Avoiding Risks Associated with Business Activities and Minimizing Environmental Impact

For more information, click here

- Response to Environmental Risks >
- Saving and Reusing Resources in Products and Circular Economy Initiatives >
- Reducing the Amount of Water Used >

# Examples of How Our Business Helps Solve Environmental Issues for Customers and Society

For more information, click here

- Contributing to solving environmental challenges for customers and society through business >

# Environmental Management System

We are continuously working to improve our ISO14001 (*1) based Environmental Management Systems and to promote Group-wide environmental management.

(*1) ISO14001 :
Environmental Management Systems (EMS) standard determined by the International Organization for Standardization (ISO). Certi.ication is granted to environmentally conscious organizations that develop systems for ongoing reductions in their environmental footprint.

## Fujitsu Group's EMS

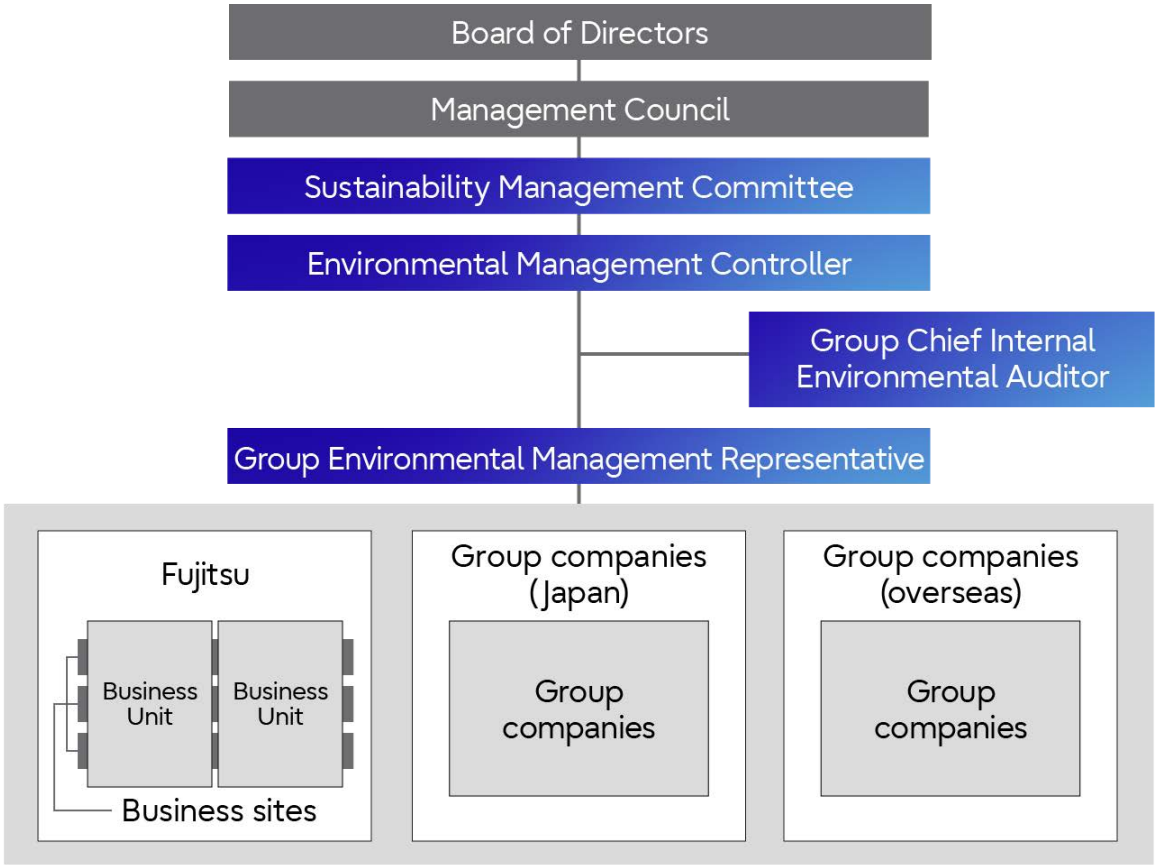
Fujitsu Group has constructed EMS based on the ISO 14001 in ternational standard and is promoting environmental improvement activities across the Group. After acquiring ISO 14001 certification for consolidated subsidiaries in Japan at the end of FY 2004, we expanded this effort to include overseas subsidiaries and acquired global integrated certification at the end of FY 2005. Subsequently, the overseas subsidiaries switched to individual certification.

### Environmental Management Framework

In April 2020, Fujitsu Group set up the Sustainability Management Committee, which leads the charge for management which takes sustainability initiatives into account. The Sustainability Management Committee has established major sustainability issues which are common globally (Global Responsible Business: GRB) and is working to address them, and the environment is one of those to be addressed.

In order to promote environmental activities, we consider medium- and long-term issues, formulate policies, share business risks and opportunities due to climate change, consider ways to respond, and report regularly to the Sustainability Management Committee in order to improve EMS and strengthen governance. Based on that, final approvals on environmental management at the Fujitsu Group are made at meetings of the Management Council. We have in place environmental organizations in charge of specific issues, composed of relevant parties that go beyond the framework of business groups and business units.

Through the promotion structure shown in the figure below, we are moving swiftly to popularize initiatives for addressing environmental issues throughout the Group.




Environmental Management Framework

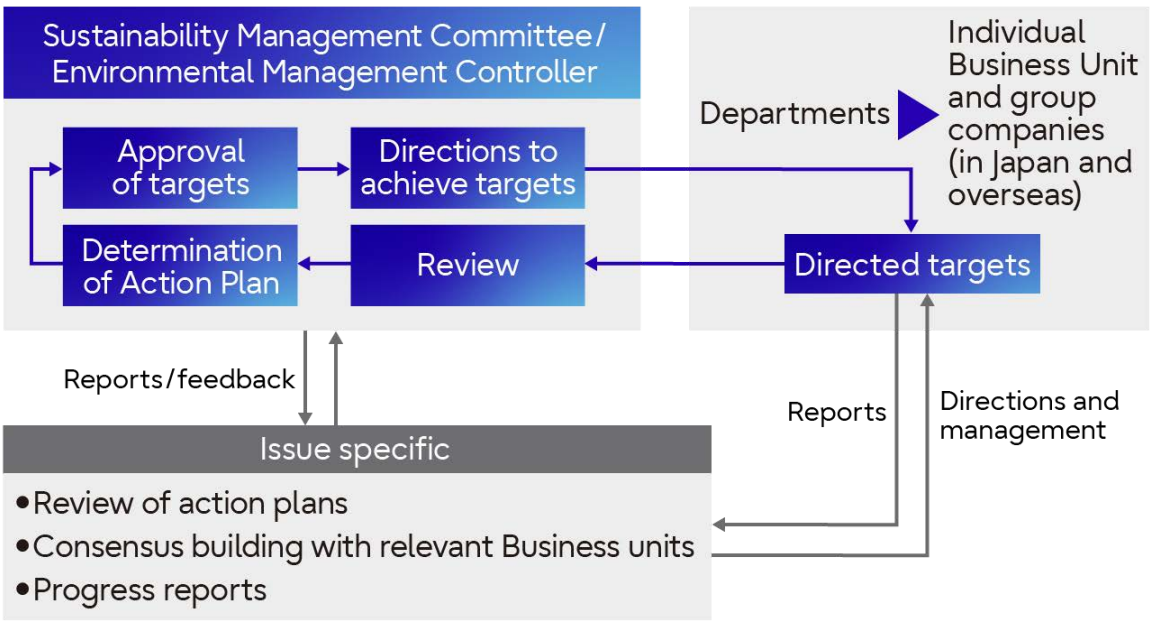
## Constructing and Operating Environmental Management Systems

The Fujitsu Group has constructed EMS based on the ISO 14001 in ternational standard and is promoting environmental improvement activities across the group. By constructing EMS worldwide, the Fujitsu Group further strengthened its Group governance. This also allows the Group to promote even more efficient and highly effective environmental activities, including understanding the state of activities, legal compliance, and emergency response. As of March 2024, Fujitsu and 22 domestic Group Fujitsu companies had acquired ISO 14001 G roup Integrated Certification.

# Activity Flow

The Sustainability Management Committee deliberates on the status of environmental activities related to the entire Group, the achievement status of targets, and new activities, which are all regularly reported by the environmental activities promotion organization. For example, the committee determines the directions to be taken for reduction of energy consumption and $CO_2$ emissions, countermeasure for environmental risk, and other environmental medium-to-long term visions. The Sustainability Management Committee also conducts environmental management reviews and is exercising approval authority for the Fujitsu Group Environmental Action Plan.

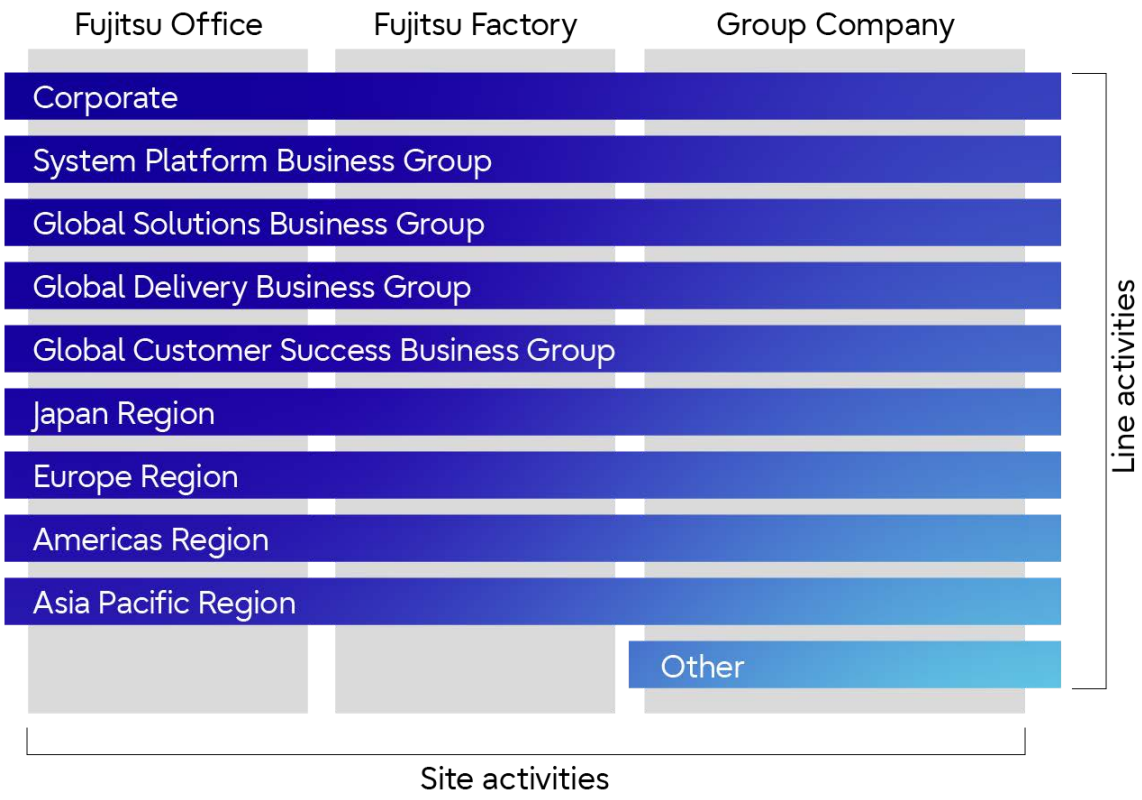
Organizations in charge of issue-specific targets (e.g., energy, greenhouse gases, waste, water) address those matters professionally, identify areas for improvement based on performance data, consider and promote targets in the Environmental Action Plan, and check the progress of the targets. After receiving progress reports from the organizations, the Environmental Management Controller approves the status of activities and suggestions of future focuses, etc., and instructs all organizations to implement the necessary initiatives. To further disseminate these activities and improve skills, we continually provide environmental training/ education and annual briefing on topics such as climate change, resources (including water) and waste.




Activity Flow

# Management Based on the Line/Site Matrix Structure

The Fujitsu Group carries out its environmental management within a matrix structure combining (1) “line activities” directly tied to the business operations of various Business Groups and companies (including development of eco-friendly products and the expansion of environmental contribution solutions) and (2) “site activities” to tackle common themes affecting each factory or business location (such as energy conservation and waste reduction). In this way we carry our environmental management according to the same framework as our management, while also reducing the environmental footprint generated by our business activities and the sale of our products and services.




Line/Site Matrix

- Environmental Management Initiatives (Case Studies) >

# Environmental Management Initiatives (Case Studies)

## Operations Utilizing ICT

The Fujitsu Group actively utilizes its own ICT-driven environmental management tools to visualize and boost the e.ficiency of its environmental management.

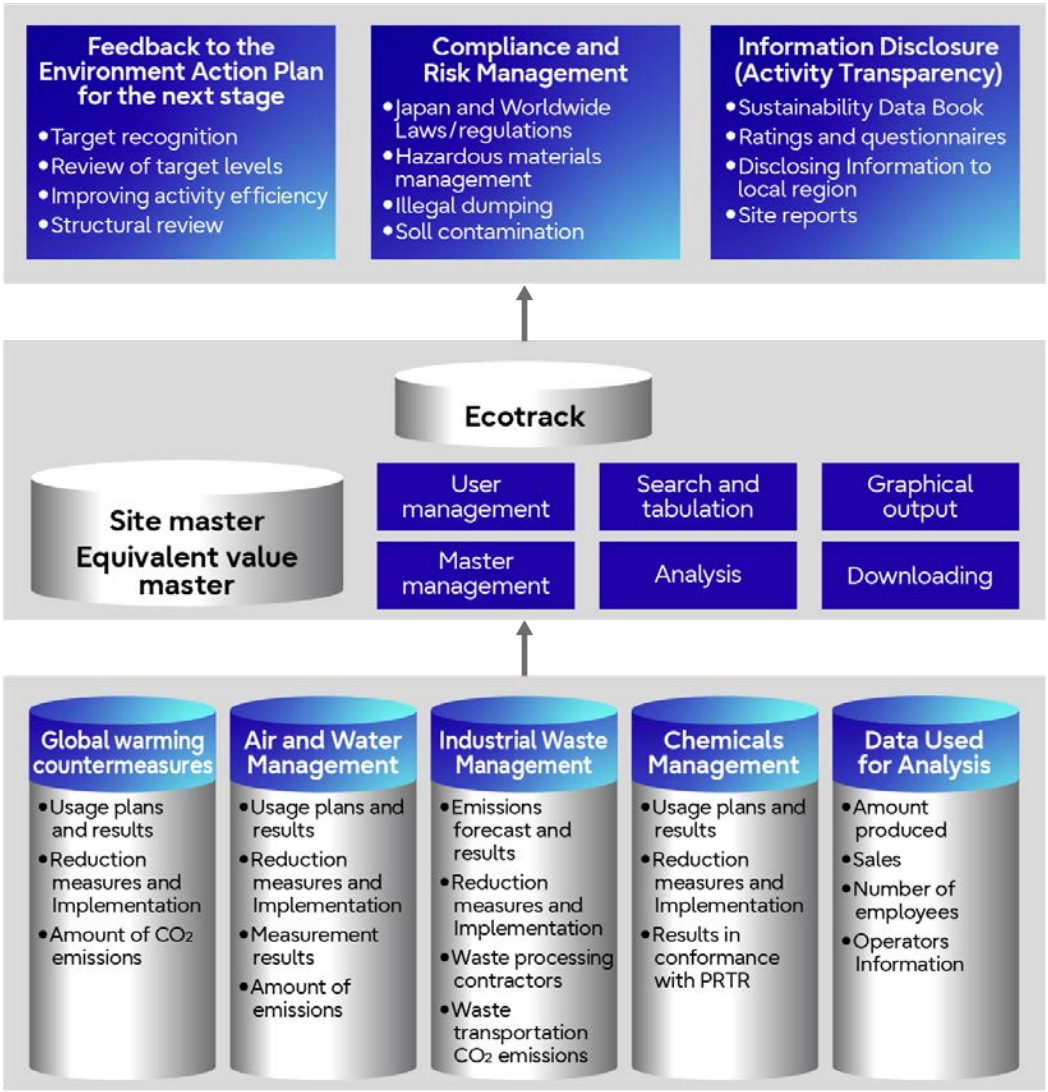
### Environmental Management Systems (EMS) Operations Using ICT

We are working to improve the efficiency and visibility of environmental management by making full use of the Global Environment Database System (Ecotrack), which can centrally manage aspects such as planning, performance, and policy information at business sites scattered throughout the world, and the ISO 14001 G reen Management System (GMS), which centrally manages compliance and risk management status to support Environmental Management Systems (EMS) operations.

Additionally, the communication infrastructure of all companies in the Fujitsu Group is used for EMS operations. For example, we try to conduct smart communication in our EMS operations, through activities such as using remote video conferencing systems to conduct EMS briefings.

### Using the Global Environment Database System

The Global Environment Database System (Ecotrack) is used to gather information about the environmental footprint (performance) of Fujitsu Group companies and business sites and centrally manage aspects such as planning, performance, and policy information.




Global Environment Database System

## Using the ISO 14001 Green Management System

The Fujitsu Group uses the ISO 14001 G reen Management System (GMS) to exercise unified control over the operational status of the EMS concerning matters such as the status of improvements and the state of compliance with regard to items pointed out by internal audits, communications activities, direct and indirect effects identified in environmental impact assessments, and the setting of environmental targets. Through the GMS, we can manage corrective measures and objectives with certainty, and it has been effective for continuously improving our activities and reducing risks.


ISO 14001 G reen Management System

# Implementing Environmental Audits

## Internal Audit Implementation and Results

The Fujitsu Group conducts internal audits, a requirement of ISO 14001. T o ensure the objectivity and independence of internal audits, the Internal Control and Audit Office takes the lead, allocating internal auditors who belong to Fujitsu or Fujitsu Group companies and carries them out. For our manufacturing sites, all audits were conducted remotely in FY2020 and FY2021 b ecause of internal travel restrictions due to COVID-19. A s restrictions were eased in FY2022, on-site audits were conducted at 10 s ites, with that number further increasing to 22 in FY2023. For non-production sites, we continued to use remote audits, focusing on document confirmation.

In FY2023, we carried out internal audits at a total of 81 b usiness sites in Japan, including the plants and offices of Fujitsu and its Group companies.

When conducting audits, we closely examined the results of internal audits and external audits from the previous fiscal year, looking at four policy points, including Environmental Action Plan (Stage XI) and compliance with laws and regulations. There were no findings of minor defects (non-conformity) and 10 ob servations (conformity). Of the observations, with the exception of management risk in a specific group that required timely support and a reputation risk regarding the demolition of an aging building, no overall major risks were found.

## External Audits and Results

To maintain our ISO 14001 c ertification, we are carrying out external audits by a certifying body. In FY2023, we were audited in Japan by the Japan Audit and Certification Organization for Environment and Quality (JACO). As a result, there were 30 opportunities for improvement and zero findings. We shared information about those opportunities within the Group, and are working to improve our response.

Table: Number of Findings by Audits

| | FY2021 (Ja pan) | FY2022 (Japan) | FY2023 (Japan) |
|---|---|---|---|
| Number of findings by internal audits | 7 | 12 | 10 |
| Number of findings by external audits | 0 | 0 | 0 |
| Number of opportunities for improvement | 33 | 36 | 30 |

## Compliance with Environmental Laws

There were no major legal or regulatory violations or accidents with major impact on the environment in the Fujitsu Group during FY2023.

# Response to Environmental Risks

## Environmental Risk Management Structure

The Fujitsu Group built and operates a group-wide risk management system to identify, prevent, and mitigate a variety of potential risks, or prevent their recurrence, including issues related to climate change and environmental pollution. In addition to the Risk Management & Compliance Committee, which reports directly to the Board of Directors, and Risk Management & Compliance Officers at each Fujitsu division and Group company in Japan and overseas, we have regional Risk Management & Compliance Committees, to build a structure where these organizations cooperate with each other to promote risk management and compliance throughout the Fujitsu Group, both in terms of preventing potential risks and responding to risks that have emerged. The Committee identifies, analyzes, and assesses key risks associated with the business activities of each Fujitsu division and Group company in Japan and overseas (focusing on 33 risks considered to be important to the Group), and formulates and reviews the countermeasures for these risks after confirming the status of countermeasures for avoiding, mitigating, transferring, or retaining them. The Committee makes regular reports to the Board of Directors about key risks that have been identified, analyzed and assessed, using methods such as the creation of visualized rankings and maps which take the degree of impact and likelihood of occurrence into account. In addition, we have put response processes into place in the event that risks become tangible, despite the implementation of various measures. Each division and Group company will immediately report to the Risk Management & Compliance Committee about any key risks that become tangible, such as natural disasters, accidents, product accidents or failures, system or service problems, compliance violations such as fraud, information security incidents, or environmental problems.

We also leverage the group's Environmental Management System (EMS), which is based on ISO14001, for minimizing risks to the environment through continuous improvements.

- Risk Management >
- Environmental Management System >

# Efforts to Minimize Risks to the Environment

## Dealing with Risks Related to Climate Change

There is a possibility of significant impacts on our business continuity from increases in the frequency and effects of natural disasters as a result of recent climate changes. For that reason, we have formulated a business continuity plan and are devoting effort to continually revising and improving the plan.

In addition to risks such as implementation of stricter regulations for greenhouse gas emissions and a carbon tax, there is demand from customers and society for contribution to carbon neutral. This creates a risk of increasing the energy cost incurred by the Fujitsu Group, as well as the cost required to comply with regulations related to measures for reducing greenhouse gas emissions. Additionally, if climate change countermeasures are insufficient, there is a risk of harm to our corporate reputation or a disadvantage at bidding.

In order to minimize these risks, we are conducting short-term, medium-term and long-term risk analysis/response within our company-wide risk management structure. As the trend toward carbon neutrality in the global community as a measure against climate change, we have obtained net-zero target certification from the Science Based Targets initiative (SBTi). We will further raise the 1.5°C level we acquired in fiscal 2021 and aim for net-zero by FY 2040.

In accordance with the recommendations issued by the Task Force on Climate-Related Financial Disclosures (TCFD) in 2017, the Fujitsu Group analyzes and discloses risks associated with climate change that may have an impact on its business and financial strategies. Refer to the table below for the major potential risks and responses currently identified.

Risks Associated with the Transition to a Low Carbon Economy, and Our Response to Them

| | |
|---|---|
| Policy/Legal Risks | ● Risks: Increase in cost in order to respond to the strengthened laws and regulations on greenhouse gas emissions and energy use (such as a carbon tax), and diminished corporate value in the event of a violation.<br>○ Response: Complete compliance with laws and regulations through EMS. Continual reduction of the amount of GHG emissions through steady implementation of Science Based Targets and the Environmental Action Plan. |
| Technology Risks | ● Risk: Unrecovered investments and market share decline in the event that the company lags behind in a fierce competition in technological developments toward a carbon-free society (such as energy-saving performance and low-carbon services).<br>○ Response: Enhance development of energy-efficient products and energy-efficient enabling technologies, solutions, and services through steady implementation of Science Based Targets and our Environmental Action Plan. |
| Market Risks | ● Risk: Losing business opportunities if products, solutions, and services do not meet energy-saving performance needs.<br>○ Response: Enhance development of energy-efficient products and energy-efficient enabling technologies, solutions, and services through steady implementation of Science Based Targets and our Environmental Action Plans. |
| Risks to Reputation | ● Risk: Decreased corporate value and increased response costs associated with a negative stakeholder perceptions of the status of implementation of climate change mitigation efforts (e.g., improving renewable energy adoption rates).<br>○ Response: Enhance measures to counteract climate change and promote reduction of environmental footprint through steady achievement of the group's Science Based Targets and Environmental Action Plan. |

Climate Change Related Risks in the Supply Chain, and Our Response to Them

| | |
|---|---|
| Upstream Supply Chain | ● Risk: A temporary suspension of the suppliers' business activities due to the occurrence of severe natural disasters such as large-scale floods, sudden heavy downpours, and lightning strikes, which affects the procurement of materials.<br>○ Response: Conduct surveys of the business continuity capabilities of suppliers and procure materials from multiple sources, as well as implement other measures. |
| Downstream Supply Chain | ● Risk: Losing business opportunities due to the inability to obtain environmental labelling, which is a green procurement requirement of customers.<br>○ Response: Conduct trend surveys and risk assessments of the environmental labelling scheme. Develop and provide top-level energy-efficient products through steady implementation of Science Based Targets and our Environmental Action Plan. |

## RELATED INFORMATION

- Fujitsu Group Responses to the CDP Climate Change Questionnaire 2022 (PDF link)
- Fujitsu Group Responses to the CDP Climate Change Questionnaire 2023 (PDF link)

# Assessing and Monitoring of Potential Water Risks

In recent years, due to a tight demand-supply situation in many areas around the world because of water damage—such as flooding—and droughts that are caused by a variety of factors, including population growth and climate change, there is a growing concern that this issue may become a business risk. The Fujitsu Group conducts assessments of and monitors potential water risks for direct operations sites and supply chains.

Specifically, while using tools and databases provided by NGOs and national and local governments, we identify water stress conditions and natural disaster risks in regions where our business sites are located in accordance with RCP 4.5 (intermediate stabilization scenario) from among the emissions scenarios defined by the Intergovernmental Panel on Climate Change (IPCC). We then comprehensively assess the water risk at each site by analyzing how important water use is in the business activities of each operations base, and we confirm the level of compliance in a variety of activities such as the reduction of water intake, measures to reduce pollution in wastewater, business continuity management (BCM) systems, and others. For the supply chain, we also assess our suppliers' flood preparedness and other water risks based on the supply chain BCM surveys, field surveys conducted according to the Responsible Business Alliance's (RBA) code of conduct and the CDP Supply Chain Program. As a result, we have confirmed that there are no significant risks that could substantially affect our business activities.

## RELATED INFORMATION

- Fujitsu Group Responses to the CDP Water Security Questionnaire 2022 (PDF link)
- Fujitsu Group Responses to the CDP Water Security Questionnaire 2023 (PDF link)

# Physical Climate Risk Adaptation

Fujitsu have risk assessment systems that include Physical Climate risk in place in Japan, Oceania, Europe and cross regional department Global Delivery.

As physical risk is different based on the location, adaption is tailored to that specific location and risk, for example.

Fujitsu Australia and New Zealand has identified the main physical climate risks to our business in the region, which include short term weather events e.g. extreme heat, flooding, storm events, as well as long-term climatic impacts e.g. drought.

Key measures undertaken in Australia and New Zealand to adapt to climate risks have included:

- Extreme heat events
  - Processes to ensure built-in redundancy of critical equipment and reliable operation of uninterruptable power sources in the event of grid-scale outages.
  - Ensuring equipment is designed to tolerate extreme temperatures.
  - Installing temporary cooling equipment (e.g. misting) to reduce ambient temperatures.
- Bushfire
  - Updating site-based procedures to assess business critical activities and evaluate which activities can be performed remotely in the short term.
  - Turning off external air intakes to offices and data centers to limit smoke ingress.
- Drought
  - Deployment and maintenance of rainwater storage tanks at some sites.
  - Use of recycled water where possible.
  - Installing real-time water loggers at all data centers to monitor consumption trends and help inform water usage efficiency projects.
- Other
  - Climate risk (e.g. extreme heat modelling) incorporated into assessment of siting of new data centers

Within Europe the climate risk is different to Oceania and a number of measures to adapt to climate change risk have been undertaken at a cost of over £1million in one London location showing the seriousness that we consider Climate impact and the commitment that we take protecting our continued service.

- Installing the infrastructure to enable the local water authority pumping equipment to use our data centers Uninterruptable Power Supply (UPS) in the event of a flood
- Dredging the local lagoon to help it act as a water sink

Other examples of adaption based on Physical climate risk in specific locations

- Philippines, the Business Continuity Planning includes natural disaster events such a typhoons and monsoons and other extreme weather events
- Malaysia – Natural Disaster Prevention guidelines provides emergency contact details and advice for employees with their safety prevalent

Another example off adaption is the modernisation and cocreation of the Flood Warning System (working with the UK Environment Agency). A system that can issue flood warnings to citizens within 20 minutes. The flood warning service hosts more than 1.5 million registered properties, 2.9 million telephone numbers, 180,000 email addresses and 1.5 million registrations for mobile text alerts. Since its launch the flood warning systemhas sent more than 7 million messages across email, text, telephone and social media.

*Co-creating a flood warning system to alert citizens faster
https://designinaction.global.fujitsu.com/reimagining-the-dynamics-of-success-andresilience/co-creation-in-action/environment-agency

Switching Mechanism to enable Fujitsu Datacenter UPS to power local water pumps in the event of a flood (United Kingdom)


Dredging of a lagoon to act as a water basin (United Kingdom)

Datacentre emergency access via lagoon preserving biodiversity (United Kingdom)

## Flooding Damage Impact Assessments Through Hazard Maps and Measures Against Flooding

Fujitsu and its domestic Group companies conduct impact assessments of flooding damage according to a rainfall scale with two types, depending on the magnitude of the impact on our business, as follows. We identify and assign rankings to business sites which will be highly impacted. If a business site falls under a level 4 impact ranking, we implement various measures.

[Assessment 1 Planned scale (Rainfall on a scale that occurs about once every 10-100 years)]

- Assessment subjects: 169 sites for Fujitsu, 280 sites for Group companies All owned properties and major leased properties (such as sales offices and data centers) in the Fujitsu Group
- Assessment method: We assess whether or not the site falls within the "estimated flood inundation area (planned scale)" for nearby rivers as established by the Ministry of Land, Infrastructure, Transport and Tourism or the prefectural government, as well as the extent of the impact within and outside the site and the impact of flooding on buildings. We rank sites that were assessed as being impacted by flooding on a scale of 1 (minor impact) to 4 (major impact).

[Assessment 2 Assumed maximum scale (Rainfall on a scale that occurs about once every 1000 years)]

- Assessment subjects: Domestic data centers and business sites that will be heavily impacted by flooding (such as Fujitsu Solution Square (SS) and the Kawasaki factory)
- Assessment method: We conduct reassessments by upgrading the criteria to "estimated flood inundation area (assumed maximum scale)," and rank the sites on a four-point scale.

[Results for Assessment 1 and Assessment 2 *Only sites with an impact rank of 4 are shown below.]

| | Sites | Assessment 1 (Assessment on a planned scale) | Assessment 2 (Assessment on an assumed maximum scale) | Final impact |
|---|---|---|---|---|
| Fujitsu | Fujitsu SS | Impact rank 4 | Impact rank 4 | Impact rank 4 |
| Fujitsu | Kawasaki factory | No impact | Impact rank 4 | Impact rank 4 |
| Group companies | No sites which fall under impact rank 4 | | | |

[Major Measures]

(a) Retaining walls and embankments

(b) Sliding gates

Fujitsu SS: The site perimeter is protected by retaining walls and watertight panels

(a) Removable watertight panels

(b) Gates that can be raised and lowered

Kawasaki factory: Perimeter entrances and exits are protected by watertight panels

# Preventing Water Pollution

In order to preserve the water quality of surrounding waterways, including rivers, groundwater and sewers, we have set voluntary controls that are even tougher than legal mandates, and conduct measurement and monitoring on a regular basis. We recover and recycle chemicals used in production processes, instead of discharging them into wastewater. We are also working to properly manage and reduce discharge of harmful substances and pollutants by ensuring appropriate chemical use, preventing chemical leaks and penetration, and properly managing the operations of water treatment and purification facilities, among other measures.

# Preventing Air Pollution

We have set voluntary control values that are more stringent than legally mandated emissions standards in order to prevent air pollution and limit acid rain. Regular measurement and monitoring are conducted based on these controls. Efforts are also made to appropriately process dust and soot, sulfur oxide, nitrogen oxide, and other harmful substances, and reduce emissions through measures including combustion management at facilities that produce soot and smoke, use of fuels with low sulfur content, and managing the operations of exhaust gas processing equipment. Furthermore, we have installed activated carbon adsorption treatment equipment and are reducing our atmospheric emissions of organic solvent vapors containing substances like VOCs. Moreover, with the enactment in April 2015 of the Act on Rational Use and Proper Management of Fluorocarbons, we have set in-house stipulations and striven for proper management of specified products (commercial refrigerators and air conditioners containing fluorocarbon refrigerants) while working to identify the volume of our fluorocarbon leakage.

In addition, emission of dioxins has been prevented by suspending use of all in-house incineration facilities as of January 2000.

# Preventing Destruction of the Ozone Layer

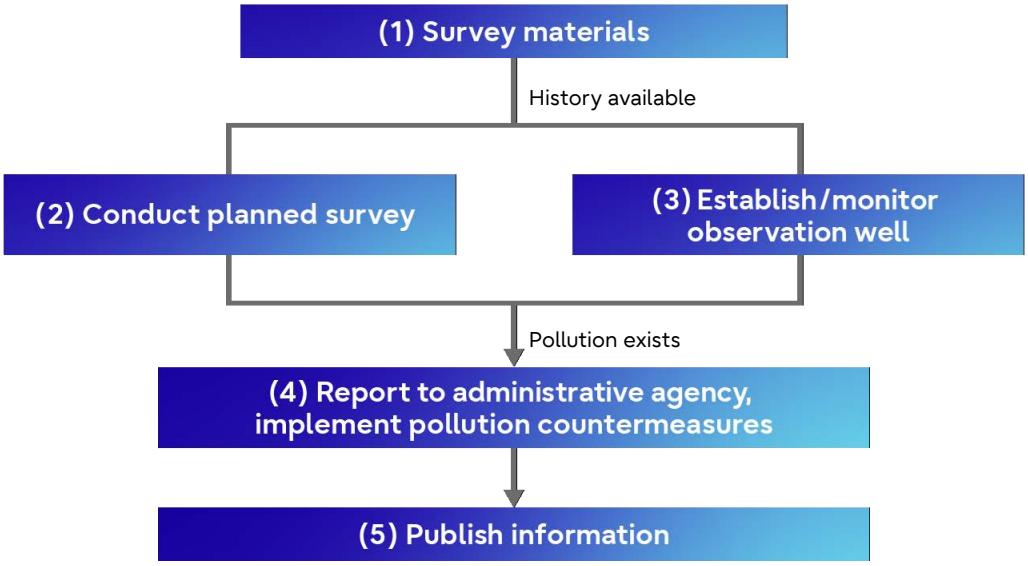
Since fluorocarbons not only destroy the ozone layer but also cause global warming, we have totally eliminated the use of ozone-depleting substances in manufacturing processes (parts cleaning and solvents) by introducing precision water cleaning systems and no-clean soldering technology. On the other hand, with regard to fluorocarbons for refrigerants used in air conditioning facilities (freezers, etc.), we are switching to non-fluorocarbons when equipment is renewed, and are working to appropriately manage and dispose of Class I specified products in accordance with the Fluorocarbons Emission Control Act.
In addition, the annual confirmation of the amount of leakage in the calculation of fluorocarbons indicates that it is less than 1,000 t-$CO_2$ (not subject to reporting to the minister in charge) for FY2023.

| Results for complete elimination of ozone-depleting substances | |
|---|---|
| **Ozone-depleting substances** | **Time of complete elimination** |
| Washing chlorofluorocarbons (CFC-113,CFC-115) | End of 1992 |
| Carbon tetrachloride | End of 1992 |
| 1,1,1-trichloroethane | End of October 1994 |
| Alternative chlorofluorocarbons (HCFCs) | End of March 1999 |

# Preventing Pollution of Soil and Groundwater

We have established rules for soil and groundwater surveys, measures and disclosures. We review these in accordance with changes in the law and social circumstances and respond based on these rules. We systematically examine soil and groundwater, based on the rules, and if pollution is confirmed, we carry out cleanup and countermeasures at each plant according to the situation, while working together with government authorities to disclose information.

As of FY2023, there are four business sites where soil and groundwater pollution from prior business activities have been confirmed. At those business sites, we have installed observation wells to observe effects outside the site due to groundwater pollution, while also working on purification measures through water-pumping aeration, etc.




Monitor Imoact of Groundwater Pollution on Areas Outside of Premises*

※Monitor impact of groundwater pollution on area outside of premises, which is the greatest risk of soil / groundwater water pollution

Business Sites Where Soil or Groundwater Contamination Has Been Found

| Site Name | Location | Cleanup and Measure Execution Status | Maximum Value Found at Observation Well (mg/L) | | Regulated Level (mg/L) |
|---|---|---|---|---|---|
| | | | Substance | Measured Value | |
| Kawasaki Plant | Kawasaki City, Kanagawa Prefecture | We are continuing to clean up VOCs by pumping and aeration. | 1, 2-dichloroethylene | 1.7 | 0.04 |
| | | | Chloroethylene | 9.4 | 0.002 |
| Oyama Plant | Oyama City, Tochigi Prefecture | We are continuing to clean up VOCs by pumping and aeration. | Trichloroethylene | 0.54 | 0.01 |
| | | | 1, 2-dichloroethylene | 3.8 | 0.04 |
| Nagano Plant | Nagano City, Nagano Prefecture | We are continuing to clean up VOCs by pumping and aeration. | Chloroethylene | 1.8 | 0.002 |
| | | | Chloroethylene | 0.022 | 0.002 |
| FDK Washizu Plant | Kosai City, Shizuoka Prefecture | We are continuing to clean up VOCs by pumping and aeration. | Tetrachloroethylene | 0.071 | 0.01 |
| | | | Trichloroethylene | 0.15 | 0.01 |
| | | | 1, 2-dichloroethylene | 0.16 | 0.04 |
| | | | Chloroethylene | 0.0039 | 0.002 |

# Chemical Substance Control

To prevent pollution of the natural environment or damage to health due to the use of harmful chemical substances, we are controlling the use of some 1,300 substances using our original Chemical Information System called "FACE" and working to appropriately control and reduce emissions at our business sites.

- Fujitsu Group Environmental Action Plan (Stage IX): Reducing Chemical Substances Emissions >

With regard to chemical substances included in products, we have determined banned substances according to regulations in Japan and worldwide and are working to thoroughly control them, not only inside the Group but also with business partners who deliver materials and products to us.

- Green Procurement >

# Appropriately Processing Waste

In accordance with the Act on Waste Management and Public Cleansing, we appropriately store and manage waste generated from our business sites, select waste disposal companies that can properly dispose of waste, and outsource disposal. Also, we regularly carry out on-site audits in order to confirm that subcontractors are appropriately handling the waste processing tasks we entrust to them. As part of our efforts to reduce waste, we are promoting the reuse of certain plastic trays in cooperation with a vendor that is working to reuse plastic trays and convert them into recyclable materials.

# Environmental Liabilities

In properly assessing the Fujitsu Group's expected future environmental liabilities, and communicating our integrity and corporate stance of not deferring our liabilities, we have recorded liabilities of 2.50 billion yen in soil pollution cleanup costs, high-level polychlorinated biphenyl (PCB) waste disposal costs, and asbestos processing costs during facilities demolition, which is the amount we calculate, as of the end of FY2023, to be necessary for the Fujitsu Group to conduct these tasks domestically in the next fiscal year and beyond.

# Conserving Biodiversity

In recent years, risks involving the natural environment have been recognized as serious global risks. This necessitates the disclosure of relevant information disclosure by companies, and toward this end, the Task Force on Nature-related Financial Disclosures (TNFD) is considering an information disclosure framework.
If the Fujitsu Group fails to appropriately respond to information disclosure in accordance with the TNFD, its corporate reputation may decline and its ability to procure funds may be affected. Going forward, we will provide disclosures in line with the TNFD framework.

# Green Procurement

We are implementing green procurement alongside our business partners, to provide customers with products and services that have light environmental footprints.

## Procurement Activities Based on Green Procurement Direction

The Fujitsu Group summarized its requirements for business partners regarding the purchase of green parts, materials, and products, in the "Fujitsu Group Green Procurement Direction." This standard is posted on a multilingual basis (in three languages) in order to promote penetration to our business partners. We make an e.fort to communicate by various means, such as briefing sessions or individual meetings if necessary. Through such activities, the Group implements green procurement activities in conjunction with its partners in Japan and overseas and it promotes procurement from business partners that fulfill the green procurement requirements (see below).

Using the Fujitsu Group Environmental Survey Sheet, we conduct annual monitoring of our business partners' statuses with regard to environmental management systems, $CO_2$ emission reduction, biodiversity preservation, and water resource preservation activities, and ask them to take appropriate measures. When making requests, we provide them with various kinds of information—such as guidance on activities to reduce $CO_2$ emissions, explanatory documents related to water risk, and the water risk information tool AQUEDUCT—which have been useful for our business partners.

- Fujitsu Group Green Procurement Direction
  https://www.fujitsu.com/global/about/procurement/green/ >

Green procurement requirements for business partners

| Requirements | Business partners (materials/parts)(*1) | Business partners (non-materials/parts) |
|---|---|---|
| 1.Establishment of environmental management systems (EMS) | ✓ | ✓ |
| 2.Compliance with regulations for Fujitsu Group specified chemical substances | ✓ | — |
| 3.Establishment of chemical substance management systems (CMS) | ✓ | — |
| 4.$CO_2$ emission control/reduction initiatives | ✓ | ✓ |
| 5.Biodiversity preservation initiatives | ✓ | ✓ |
| 6.Water resource preservation initiatives | ✓ | ✓ |

(*1) Business partners (materials/parts): Business partners that supply components for Fujitsu Group products or OEM/ODM products

# Establishment of Environmental Management System

We request our business partners to establish environmental management systems (EMS)(*2) as a base for ensuring that they independently and continuously improve their environmental-preservation activities. In general, we prefer them to have third party-certified EMS. If this is difficult, we ask them to build an EMS that incorporates a PDCA cycle suited to their circumstances.

(*2) EMS: Environmental management systems.

# $CO_2$ Emission Reduction Initiatives

The Fujitsu Group also asks our business partners to work toward $CO_2$ emission reduction in hopes of addressing climate change.

Specifically, we ask them to clearly express the intentions of their initiatives and request that they make efforts to achieve the objectives they set. We also ask them to collaborate with external organizations, where possible, and encourage their own suppliers to make similar efforts, in order to expand the initiatives outside their respective businesses. Our annual Supply Chain Business Continuity Survey gives us a clear picture of how business partners are responding to a variety of climate-change risks, including tsunamis, floods, and torrential rains. Moreover, we are asking our main suppliers to establish a $CO_2$ reduction target based on the international standard of Science Based Targets (SBT) as we strive to further reduce global warming.

# Water Resource Conservation Initiatives

As populations grow rapidly and water sources become progressively more contaminated, the increased need for water around the world, as well as water resource scarcity, has become an international challenge. Water resource conservation initiatives are necessary, even in business activities. The Fujitsu Group asks its business partners to investigate and understand the water risks associated with their own companies, and engage in water resource conservation initiatives, such as preventing water pollution and reducing water use.

# Acquiring and Managing Information on Chemical Substances Contained in Products

Countries around the world are establishing legal regulations as to the chemical substances contained in products, for instance the RoHS directive(*3) and the REACH regulation(*4), with an increasing range of chemical substances, products and applications subject to these regulations.

The Fujitsu Group, using chemSHERPA(*5) as its standard format, investigates and acquires information on the chemical substances contained in our products. We also share this information within the Group, and have a system in place for quick adaptation when laws/regulations are revised or when new regulations are enacted.

(*3) RoHS directive: Directive on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment

(*4) REACH regulation: Regulation for Registration, Evaluation, Authorization, and Restriction of Chemicals

(*5) chemSHERPA: Chemical Information Sharing and Exchange under Reporting Partnership in Supply Chain

# Establishing a Chemical Substance Management System (CMS) for Product Substances

In addition to obtaining information on chemical substances contained in our business partners' products, the Fujitsu Group also asks these partners to establish a Chemical Substances Management System (CMS) based on the industry-standard JAMP(*6) guidelines for the management of such chemical substances. Doing so enables the Group to comply even more thoroughly with laws and regulations related to the chemical substances contained in our products.

The Group also carries out CMS audits in order to con.irm appropriate establishment and operation of such CMS. More specifically, Fujitsu Group's auditors implement on-site evaluation of the management status of the chemical substances contained in our business partners' products. If there are any inadequacies, auditors make requests for corrections and provide support for their enactment. Even after the establishment of CMS, we maintain awareness of its operation status through periodic audits.

(*6) JAMP: Joint Article Management Promotion-Consortium.

# Environmental Training and Awareness Activities for Employees

The Fujitsu Group conducts various environmental education and awareness activities based on the belief that "Greater environmental awareness and proactive e.forts among all employees are essential for pursuing environmental management."

## Comprehensive Environmental Training

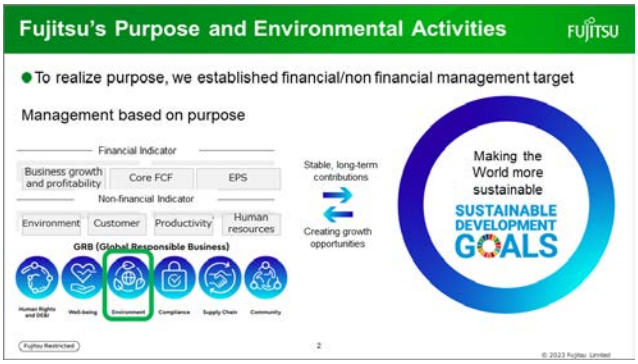
We offer environmental e-Learning opportunities for all employees through programs in our company-wide training system to promote a basic understanding of environmental management. Training is also conducted on a per-division basis. Specialized trainings such as internal auditor training and training for those in charge of waste practices are also conducted for employees who are in charge of environment-related tasks.


Fujitsu's Environmental Training Scheme

# Environmental e-Learning

We offer educational opportunities for employees to comprehensively learn about global trends relating to the environment, the environmental management of the Fujitsu Group, and the role played by each employee, based on the theme of “Environmental Management of the Fujitsu Group and Role of Each Individual Employee“ This education is positioned as providing fundamental knowledge that all Fujitsu employees should have under the company-wide employee training system.

<Images of Environmental e-Learning material>

# The Fujitsu Group Environmental Vision
# “ Fujitsu Climate and Energy Vision ”

The Fujitsu Group has reassessed its social role in light of the escalating global commitment to achieving carbon neutrality. The Group has elected to fast-track its previous commitment to achieve “zero $CO_2$ emissions within the Group by FY2050”, instead bringing forward committed Vision by 20 years to FY2030. The Group has set the additional target of reaching net-zero greenhouse gas emissions (*1) throughout the value chain by 2040.

*1 Net-zero greenhouse gas emissions: Reducing greenhouse gas emissions by at least 90% in the target year in comparison to the base year, and re-absorbing remaining emissions (of 10% or less) from the atmosphere through direct air capture (DAC) technologies or by planting trees.

## The Importance of Responding to Climate Change

The Intergovernmental Panel on Climate Change (IPCC) Special Report “Global Warming of 1.5° C“ articulated the need to limit warming to 1.5 °C above pre-industrial levels and to achieve carbon neutrality by 2050. With social roles expanding and additional demands placed on companies to tackle climate change, in October 2021 the Science Based Target Initiative (SBTi) (*2) launched the world’s first Net-Zero Standard for companies to set net-zero strategies.
In order to resolve issues related to climate change, the Fujitsu Group decided to revise its previous commitment to "zero $CO_2$ emissions by 2050", pursuing instead a more ambitious vision that requires the Group to look beyond social trends and become the very embodiment of a leading SX company that delivers carbon neutrality.

The Fujitsu Group Environmental Vision comprises three pillars, namely, Value chain: Achieve net-zero emissions, Mitigation: Contribute to a carbon-neutral society, and Adaptation: Contribute to climate change adaptation measures. The Fujitsu Group will be quick to leverage advanced DX technologies to tackle its own net-zero strategies, and will make the resulting expertise available as Fujitsu Group solutions for customers and society. In so doing, the Group aims to leverage its own business activities to contribute to climate change mitigation and adaptation.

*2 Science Based Target Initiative (SBTi): An initiative jointly established by the United Nations Global Compact, the World Resources Institute (WRI), and other organizations in 2015. It encourages companies to set GHG emission reduction targets consistent with science-based evidence to the level required by the Paris Agreement, validating targets that comply with criteria including indirect emissions not only within the company but also in the supply chain.

## Concept


Value chain: Achieve Net-zero Emissions

Mitigation: Contribute to a Carbon-Neutral Society

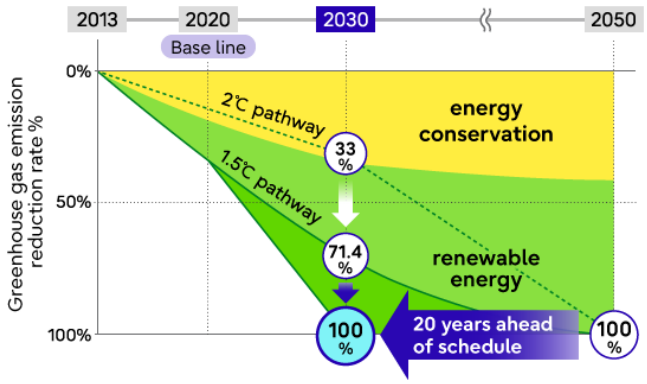
Adaptation: Contribute to Climate Change Adaptation Measures

Three pillars of the Fujitsu Climate and Energy Vision

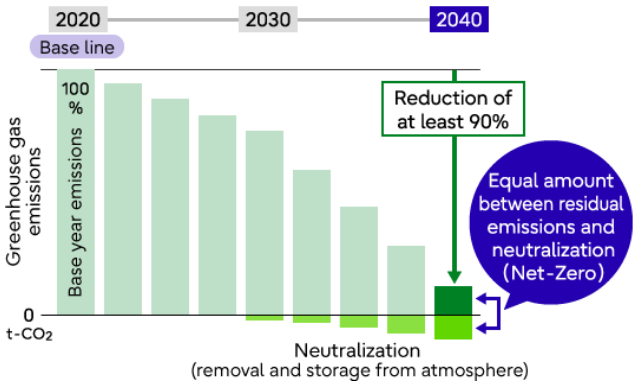
# Achieving Net-zero Emissions in the Fujitsu Group Value Chain

In August 2017, the F ujitsu Group's 2 °C-aligned greenhouse gas emission reduction target earned its SBTi validation. In April 2021, th e Group obtained validation for its 1.5 ° C ambition level (*3) which increased the target from 33% reduction in emissions to 71.4% thr oughout its business sites by FY2030, against a baseline of FY2013.
To accelerate the move toward carbon neutrality, the Group set a target to achieve net-zero emissions from the Group's business activities by FY2030, and from the entire value chain by FY2040, thus earning Net-Zero Target validation from SBTi in June 2023.

*3 1.5° C: According to a report by the Intergovernmental Panel on Climate Change (IPCC), a 1.5 ° C increase in average temperature increases the risks of extreme weather, sea level rise, adverse health effects, food shortages, and water scarcity. The United Nations Framework Convention on Climate Change Conference of the Parties (COP) states that the increase in the global average temperature shall be limited to less than 1.5 de grees Celsius above pre-industrial levels in order to avoid the worst effects of climate change.




Emission reduction of Fujitsu Group (Scope 1 a nd 2)




Emission reduction throughout the value chain (Scope 3)

Roadmap to Net-Zero

# Contributing to a Carbon-neutral Society

The Fujitsu Group contributes to the decarbonization of society by creating ecosystems with customers in a variety of industries and business types. Digital transformation (DX) is crucial to achieving this goal. By integrating advanced AI and other leading-edge digital technologies into a framework that transcends business, industry, and regional boundaries, the Group will reduce greenhouse gas emissions. This will be achieved through, for example, the optimal use of resources and energy across all social systems.

# Contributing to Climate Change Adaptation Measures

We will leverage advanced forecasting technologies, incorporating sensing, high-performance computing (HPC) simulations, AI, advanced ICT and other digital technologies to effectively reduce greenhouse gas emissions. These technologies will be used to develop solutions for building resilient social infrastructure, ensuring a stable supply of agricultural products, and mitigating food loss. Through these efforts, we aim to minimize the harm caused by climate change to society and our customers.

# Environmental Targets

The Fujitsu Group participates in the following initiatives with the aim of making the Fujitsu Climate and Energy Vision—its medium- to long-term environmental vision—a reality.

## Net-Zero Target Validation Gained from Science Based Targets (SBTi)

In August 2017, the gr eenhouse gas (GHG) emission reduction targets set by the Fujitsu Group for emissions from its business facilities and value chain was approved by the Science Based Targets initiative (SBTi) as meeting the science-based level of ambition criteria. The SBTi was established in 2015 join tly by a number of organizations, including the World Resources Institute (WRI) and UN Global Compact. It encourages companies to set GHG emission reduction targets consistent with science-based evidence to the level required by the Paris Agreement, with the aim of limiting the global average temperature increase caused by climate change to 1.5 de grees above pre-industrial levels.

"Science Based Targets" logo

In April 2021, w e updated our target from 33% reduction against the base year FY2020 to 71.4% b y FY2030 and received acknowledgment of our 1.5 ° C-aligned strategy from SBTi. Furthermore in June 2023, we decided to further advance our existing target and aim for net-zero by FY2040. We also received Net-Zero Target validation from the SBTi.

Net-Zero Target

- To reduce GHG emissions at our business sites (Scope 1, 2) a nd from the entire value chain (Scope 3) by at least 90% by FY2040 against a baseline of FY2020 (*1).

*1 Less than 10% o f residual emissions are removed and stored by technologies that directly capture CO2 from the atmosphere or through absorption by a. forestation and other means.

# Global Collaboration with the Climate Group through RE100

In July 2018, the Fujitsu Group became Japan's first Gold Member of RE100 (*2), an initiative which aims to significantly expand the adoption of renewable energy on a global scale. At the time, the Fujitsu Group pledged to use renewables to provide at least 40% of the electricity consumed across all global sites by 2030, and 100% by 2050.
RE100 is an initiative led by international NGO The Climate Group in partnership with CDP and consists of companies committed to source 100% of their electricity requirements from renewable sources.
While we received SBTi's Net-Zero Target validation, we also moved up our previous target date for 100% renewable electricity from 2050 to 2030. This action accelerated our efforts to reach carbon neutrality by 20 years. To achieve this target, we will continue to roll out activities based on the corporate action plan. As Fujitsu Group we will expand our procurement of renewable energy-sourced electricity for data centers outside Japan and other sites in Japan as well as around the globe. We will achieve this by considering the most appropriate means for each region. At the same time, we will invest in new power sources, including PPAs (*3). This way we will contribute to the spread of renewable energy in society as a whole.

*2 RE100 is an initiative led by The Climate Group, an international NGO, in partnership with CDP, and is made up of companies that aspire to obtain 100% of the electricity they use from renewable sources.

*3 PPA stands for Power Purchase Agreement, under which consumers (primarily businesses who wish to use renewable electricity) enter into a long-term contract with a power producer or retail electricity provider to purchase electricity generated from renewable energy sources.

"RE100" logo

# TCFD-Based Information Disclosure

The Task Force on Climate-Related Financial Disclosures (TCFD) was established by the Financial Stability Board at the request of the G20 with the objective of reducing the risk of instability in .inancial markets due to climate change. The task force announced its recommendations in June 2017, asking c ompanies and organizations to identify and disclose the risks and opportunities arising from climate change. The Fujitsu Group announced its support for the TCFD recommendations in April 2019 and i s making every e.fort to disclose information in line with those recommendations to investors and other stakeholders. Disclosures are provided via media such as financial statements, CDP (*1) que stionnaires, the Integrated Report, and websites.

( *1) CDP: An international nonprofit organization that conducts environmental surveys of more than 18,700 c ompanies worldwide and acts on behalf of institutional investors with a combined US$130 t rillion in assets. (As of August 2023).

| Item | | Response status | Reference |
|---|---|---|---|
| Governance | Oversight structure under the Board of Directors for climate-related risks and opportunities | • In the Fujitsu Group, the Sustainability Management Committee shares the risks and opportunities arising from climate change, deliberates on medium- to long-term issues, and formulates policy. To date, matters such as the results of analyses using multiple climate change scenarios (including 1.5 °C), policies to achieve net-zero GHG emissions targets and increase the use of renewables, and materiality (including climate change and other environmental challenges) have been reported to the Board of Directors at meetings of the Executive Management Council.<br>• The Risk Management & Compliance Committee regularly reports to the Board of Directors on the most serious risks identified for the group as a whole, including climate risks. The Fujitsu Group has also developed an environmental management system (EMS) based on the ISO 14001 standard. The results of EMS activities are reported to the Board of Directors at meetings of the Executive Management Council. | • Sustainability Management in the Fujitsu Group ›<br>• Corporate Governance ›<br>• Environmental Management Systems ›<br>• Risk Management › |
| | Role of management in assessing and managing climate-related risks and opportunities | • Fujitsu's CEO, in the role of Chair of the Sustainability Management Committee and the Risk Management & Compliance Committee, bears ultimate responsibility for all decisions made and all business conducted. The Board of Directors are responsible for oversight based on reports received from the Executive Management Council. The Chief Sustainability & Supply Chain Officer (CSSO) bears the highest level of responsibility for sustainability, and in that role proposes reforms to the Board of Directors and to senior management and conducts business that relates to sustainability.<br>• As of FY2022, ESG indicators that include consideration of climate change issues were added to the evaluation indicators for bonuses paid to Executive Directors. | |

<table>
<tr>
<td rowspan="2">Strategy</td>
<td>Short-, medium- to long-term climate-related risks and opportunities</td>
<td rowspan="2">
<ul>
<li>Based on analyses of climate change scenarios, the Fujitsu Group identifies the risks and opportunities relating to climate change and considers and promotes appropriate responses. Developing services and IT products that contribute to climate change mitigation and adaptation offers opportunities for increased sales, while factors such as physical and regulatory risks have an impact on the operating costs of Fujitsu's operations and supply chain.</li>
</ul>
<table>
<tr>
<td>Major risks<br>Stronger regulation (carbon tax, etc.), Stronger competition in low-carbon technologies, Insufficient responses to customer needs</td>
<td>Risk responses<br>Ongoing reductions in greenhouse gas emissions, Increased use of renewable energy, Information disclosure aimed at ensuring transparency in climate change strategy, etc.</td>
</tr>
<tr>
<td>Major opportunities<br>Supplying products/services to tackle climate change, Proposing new uses of digital technology, etc.</td>
<td>Opportunity responses<br>Services for climate change mitigation/adaptation($CO_2$ emissions calculation, visualization, etc.), Energy-efficient products (HPC, 5G virtualization base stations, etc.)</td>
</tr>
</table>
Note: See the CDP responses (C 2.3, 2.4) for details.
</td>
<td rowspan="2">
<ul>
<li>Response to Environmental Risks ></li>
<li>The Fujitsu Group Medium/Long-term Environmental Vision ></li>
</ul>
</td>
</tr>
<tr>
<td>Impacts on business, strategy, and financial planning</td>
</tr>
</table>

| | | | |
|---|---|---|---|
| | Resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2℃ or lower scenario | • In 2021, the Fujitsu Group conducted scenario analyses out to 2050 using 1.5℃ and 4℃ scenarios, focusing on businesses likely to be impacted by climate change.<br>• As a result of our analysis with respect to Fujitsu's risk responses and its ability to seize opportunities by helping customers to resolve issues, our assessment showed that Fujitsu's business strategy was resilient in the medium- to long-term. | |
| Risk Management | Climate-related risk identification and assessment process | • Group-wide risk management is conducted by the Risk Management & Compliance Committee. This committee conducts matrix analysis of the results of the risk assessments by each department in terms of impact and likelihood of occurrence. It then identifies and assesses those risks and reports its findings to the Board of Directors. | • Response to Environmental Risks ›<br>• Environmental Management Systems ›<br>• Risk Management › |
| | Climate-related risk management process | • Fujitsu monitors risks using environmental management systems that are based on the ISO14001 standard. The Sustainability Management Committee is responsible for managing the progress of climate change measures. | |
| | Status of integration with organization-wide risk management | • The Risk Management & Compliance Committee identifies and assesses risk for the entire company, including climate change risk. It collaborates with the Sustainability Management Committee to identify, analyze, and assess risks, and then formulates and implements recurrence prevention measures. | |

★ Indicators assured by third party

<table>
<tr>
<td rowspan="2">Metrics and Targets</td>
<td>Metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process</td>
<td>
<ul>
<li>The Fujitsu Group recognizes the importance of reducing greenhouse gas (GHG) emissions and adopting renewable energy sources in addressing climate-related risks. We also believe that the deployment of innovative energy-saving technologies implemented by our company will lead to the acquisition of climate-related opportunities. We therefore use our GHG emissions and our rate of renewable energy adoption as indicators. We have set SBTi certification and RE100 targets as medium- to long-term goals and established the "Environmental Action Plan" for short-term goals. We are monitoring those indicators, managing the progress of our strategies, and conducting risk management.</li>
</ul>
</td>
<td>
<ul>
<li>The Fujitsu Group Medium/Long-term Environmental Vision ></li>
<li>Fujitsu Group Environmental Action Plan ></li>
</ul>
</td>
</tr>
<tr>
<td>GHG emissions for Scope 1, 2, and 3</td>
<td colspan="2">GHG emissions
<table>
<tr><th colspan="2">Scope</th><th>Baseline year (FY2020)</th><th>Result (FY2023)</th></tr>
<tr><td colspan="2">Scope 1</td><td>66 kT-$CO_2$</td><td>64 kT-$CO_2$</td></tr>
<tr><td colspan="2">Scope 2 (Market-based)</td><td>499 kT-$CO_2$</td><td>266 kT-$CO_2$</td></tr>
<tr><td colspan="2">Scope 3 (Across all categories)</td><td>4,966 kT-$CO_2$</td><td>3,646 kT-$CO_2$</td></tr>
<tr><td rowspan="2">Key categories</td><td>Category 1 (Purchased goods and services)</td><td>1,192 kT-$CO_2$</td><td>1,086 kT-$CO_2$★</td></tr>
<tr><td>Category 11 (Use of sold products)</td><td>3,470 kT-$CO_2$</td><td>2,283 kT-$CO_2$★</td></tr>
</table>
</td>
</tr>
</table>

★ Indicators assured by third party

Targets used by the organization to manage climate-related risks and opportunities and performance against targets

Climate-related targets and performance

| Item | | Targets | | Performance (FY2023) |
|---|---|---|---|---|
| Reduction in own GHG emissions*1 | Medium term | 100% reduction by 2030*2 | SBT Net Zero certification | 41.6% reduction |
| Reduction in GHG emissions in the value chain*3 | Long term | 90% reduction by FY2040 | | 28.1% reduction |
| Renewable energy usage rate | Medium term | 100% renewable energy by FY2030 | RE100 membership | 42.7% deployment ★ |

*1: vs. 2020, *2: Scope 1 + Scope 2,*3: Scope 1, 2 and 3

# Governance

The Fujitsu Group has established a Sustainability Management Committee, chaired by the CEO. This committee examines medium- to long-term issues, formulates policy, shares the business risks and opportunities of climate change and decides how to address those risks and opportunities, and manages the company's progress. It also reports on the results of its activities to the Board of Directors at meetings of the Executive Management Council. In October 2020, the committee made a key decision by revising the Fujitsu Group GHG reduction target (SBT) from 2.0°C to 1.5° C. In April 2021, th e new target was validated as 1.5° C-aligned to the SBTi. In October 2021, the r esults of scenario analyses using two external scenarios, one for 1.5° C and the other for 4°C, were reported to the Sustainability Management Committee. The .indings prompted lively discussion among the committee members on topics such as the need to discuss management strategies, the selection of key solutions, and the measurement of impacts once solutions are provided.

Within the company-wide risk management regime and with oversight by the Board of Directors, the Risk Management & Compliance Committee, chaired by the CEO, conducts risk analysis and implements responses for the entire Group, including on issues relating to climate change. This committee is also the ultimate decision-making body for risk management and reports regularly to the Board of Directors regarding major risks that have been identified, analyzed, and assessed. The Fujitsu Group has also developed environmental management systems (EMS) based on the ISO 14001 s tandard, and the results of EMS activities are reported to the Board of Directors at meetings of the Executive Management Council.

To further strengthen governance relating to climate change, in April 2022 we added ESG-related third-party evaluations (DJSI(*2)) and CDP climate change program(*3) as assessment indices for the bonuses paid to Executive Directors. As of FY2022, these indices will apply to their bonuses. (Executive compensation consists of base compensation, bonuses, and performance-linked stock compensation.).

(*2) Dow Jones Sustainability Index (DJSI): This is a share index published by S&P Dow Jones of the United States that analyzes companies with respect to their corporate economic, environmental, and social performance, and selects companies with superior corporate sustainability.

(*3) CDP climate change program: A program run by CDP to survey and assess corporate climate change initiatives and publish the results of those surveys.

# Strategy

## Climate Change Risks and Opportunities

We have identi.ied the risks and opportunities of climate change for the Fujitsu Group, and considered our responses, by analyzing the business impacts of climate change using external scenarios for 2℃ of global warming in FY2018, a nd for warming of 1.5 ℃ and 4℃ in FY2021. Our aim is to address the transitional and physical risks that negatively impact Fujitsu operations and supply chains, and to identify the climate-related risks faced by customers so that we can better make proposals that create value and grasp the business opportunities on offer.

### Risks

| Risk type | | Term | Details | Key responses |
|---|---|---|---|---|
| Transition | Policy/Regulation | Short- to long-term | • Increased costs due to stronger laws and regulations relating to greenhouse gas emissions and energy use (carbon taxes, energy-saving policies, etc.)<br>• Risk of lost corporate value if such laws or regulations are violated | • Ongoing reductions in greenhouse gas emissions (increased use of renewable energy, comprehensive energy savings)<br>• Strict compliance with laws and regulations through EMS |
| | Market | Medium- to long-term | • Surging electricity prices with the shift to a carbon-neutral world (widespread electrification, etc.) | • Reduced electricity consumption by formulating internal company standards and developing innovative technology, etc. |
| | Technology | Medium- to long-term | • Risk of missing out on business opportunities if we fall behind in fiercely competitive technology development (energy savings, low-carbon services, etc.) and cannot meet market needs | • Promote innovation and develop products/services that address customers' climate change issues |
| | Reputation | Short- to long-term | • Increased cost of responding to demands from stakeholders (investors, customers, etc.)<br>• Negative impacts on ratings and sales due to delays in responding to external demands | • Formulation and promotion of our Medium/Long-term Environmental Vision and Environmental Action Plan<br>• Proactive information disclosure to ensure transparency in our climate change strategy |
| Physical (Natural disasters etc.) | Chronic/Acute | Short- to long-term | • Increased cost of responding to changing rainfall/weather patterns, higher average temperatures, higher sea levels, droughts, etc.<br>• Increased recovery costs when operations, including supply chains, stop due to increasingly severe abnormal weather events | • Implement measures such as greater multi-sourcing, stronger BCP measures, and conducting surveys of suppliers' business continuity systems<br>• Assess potential water risks and undertake monitoring |

### Opportunities

| Opportunity type | Term | Details | Key responses |
|---|---|---|---|
| Products/services | Short- to long-term | • Increased sales by developing and supplying products and services that are highly energy-efficient | • Development and supply of high-performance, energy-saving 5G virtualization base stations, high-performance, low-energy supercomputers, etc. |
| Market | Short- to long-term | • Seizing new market opportunities for climate change solutions created using ICT | • Development and supply of measures to calculate and visualize $CO_2$ emissions in supply chains and more efficiently search for new materials in the shift to zero emissions |
| Resilience | Short- to long-term | • Increased sales through new products and services for resilience enhancement | • Development and supply of disaster prevention information systems and AI predictive water management systems to forecast river levels during floods |

## Scenario Analysis

### Premise

In FY2021, the F ujitsu Group conducted scenario analyses out to 2050 using scenarios for 1.5 ℃ and 4℃ of global warming. The analyses studied businesses likely to be impacted by climate change in the following areas: Sustainable Manufacturing (sectors studied: petrochemicals, automotive, foods, electronic device-related businesses), Trusted Society (sectors studied: public sector, transportation, energy-related businesses), and Hybrid IT (sector studied: datacenter-related businesses).

| | |
|---|---|
| Scenario selection | • 1.5℃, 4℃ scenarios<br>*Established with reference to information published by the IPCC, the IEA, government agencies such as the Ministry of the Environment and the Japan Meteorological Agency, and various private research organizations.<br>For the main reference scenarios, RCP 8.5 and RCP 2.6 are used as physical scenarios, and IEA NZE 2050 (Net Zero Emissions by 2050 Scenario) and IEA STEPS (Stated Policies Scenario) are used as transition scenarios. |
| Target businesses | Opportunity-focused analysis: Addressing climate-related risk in client industries<br>• Sustainable Manufacturing (sectors studied: petrochemicals, automotive, foods, electronic device-related businesses)<br>• Trusted Society (sectors studied: public sector, transportation, energy-related businesses)<br>Analysis of both risks and opportunities: Addressing climate-related risk in Fujitsu businesses and client industries<br>• Hybrid IT (sector studied: datacenter-related businesses) |
| Period covered | • 2050 |

# Scenario Analysis

## Premise

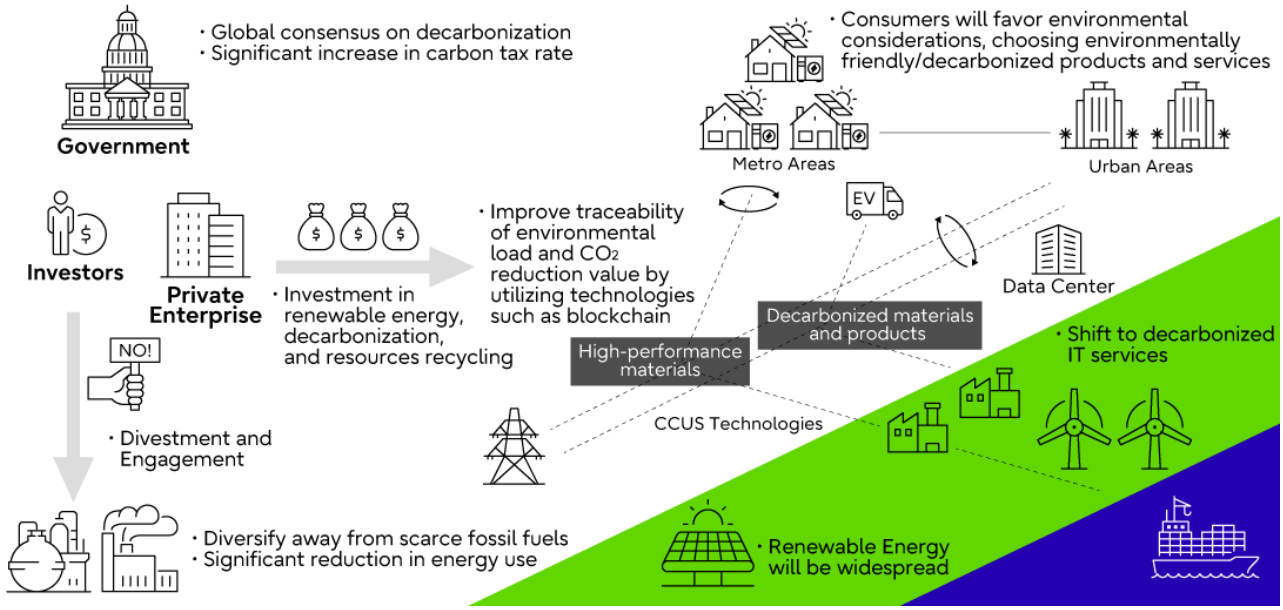
In FY2021, the Fujitsu Group conducted scenario analyses out to 2050 using scenarios for 1.5 ℃ and 4℃ of global warming. The analyses studied businesses likely to be impacted by climate change in the following areas: Sustainable Manufacturing (sectors studied: petrochemicals, automotive, foods, electronic device-related businesses), Trusted Society (sectors studied: public sector, transportation, energy-related businesses), and Hybrid IT (sector studied: datacenter-related businesses).

| | |
|---|---|
| Scenario selection | • 1.5℃, 4℃ scenarios<br>*Established with reference to information published by the IPCC, the IEA, government agencies such as the Ministry of the Environment and the Japan Meteorological Agency, and various private research organizations.<br>For the main reference scenarios, RCP 8.5 and RCP 2.6 are used as physical scenarios, and IEA NZE 2050 (Net Zero Emissions by 2050 Scenario) and IEA STEPS (Stated Policies Scenario) are used as transition scenarios. |
| Target businesses | Opportunity-focused analysis: Addressing climate-related risk in client industries<br>• Sustainable Manufacturing (sectors studied: petrochemicals, automotive, foods, electronic device-related businesses)<br>• Trusted Society (sectors studied: public sector, transportation, energy-related businesses)<br>Analysis of both risks and opportunities: Addressing climate-related risk in Fujitsu businesses and client industries<br>• Hybrid IT (sector studied: datacenter-related businesses) |
| Period covered | • 2050 |

## Analysis Steps and Details

The analysis was conducted in 4 steps: assessment of risk severity, definition of scenarios, evaluation of impacts on business, and discussion of countermeasures.

We began by organizing the risks and opportunities for the target businesses based on data such as the TCFD recommendations and external reports. We also conducted workshops to look at the qualitative aspects of business impacts stemming from each risk and opportunity item from the perspectives of Fujitsu and industry generally. We rated the severity of each risk or opportunity as “High”, “Medium” or “Low”. We then considered the future changes in each of the items classified as having a “High” severity and defined our scenarios using data from agencies such as the IPCC, IEA, and the Ministry of the Environment, together with the evidence provided in various reports. Specifically, we held an executive input session to consider global outlooks for 2050 given temperature rises of 1.5° C and 4°C, and then went on to consider the global outlook for each of the target industries, using tools such as Five Forces analysis. (See below for the 1.5° C global outlook.)




Global outlook of a 1.5° C “carbon-neutral world in 2050”

To look at the impacts on business, we then tentatively calculated the qualitative gap between the scenarios and our existing strategies and plans with respect to risks and opportunities. For Hybrid IT (sector studied: datacenter-related businesses), we discussed how the impacts of climate change on business would affect our Profit and Loss Statement, specifically looking at which financial indicators would be impacted and in what ways. We then summarized those impacts by developing calculation logic for each impact. Both internal and external data and information were used to confirm the positive (opportunities) and negative (risks) impacts on operating profit in 2050. For example, the calculations for the 1.5 ℃ scenario showed rising costs due to changes in power prices, but also revealed that there will be increased demand for carbon-neutral datacenters and for datacenters generally due to increased communications traffic as the uptake of smart devices accelerates. Overall, the calculations showed that the negative financial impacts of risks will be outweighed by the positive financial benefits arising from opportunities, ultimately leading to a net positive financial impact on operating profits.

Our analysis of Sustainable Manufacturing (sectors studied: petrochemicals, automotive, foods, electronic device-related businesses) and Trusted Society (sectors studied: public sector, transportation, energy-related businesses) focused on the business opportunities arising from climate change, assuming the potential to establish new climate change-related markets and concluding that the net impact on sales in 2050 would be positive.

Finally, we held a workshop in which we organized the trends in each industry that had been identified when defining the scenarios and the direction of measures to deal with the business impacts requiring emphasis. In specific terms, during the group work we reviewed the current initiatives and gathered views on the directions that future initiatives should take, taking into account the expectations on Fujitsu in the medium- to long-term.

### Analysis Results

Because we were able to confirm that the study and development directions for our business unit offerings are aligned with the opportunities shown in the scenario analyses, and that countermeasures for the identified risks are also being prepared, our assessment was that Fujitsu's businesses are strategically resilient from a medium- to long-term perspective.

Our current themes and areas are "Carbon Neutrality" and "Resilient Supply Chains" in the Sustainable Manufacturing area, and "Sustainable Energy & Environment" and "Sustainable Transportation" in the Trusted Society area, and we are progressing with the development of our offerings.

| <Opportunity Analysis> | Main Risk and Opportunity Items | Policy/regulation, markets, technology, reputation | Natural disasters |
|---|---|---|---|

# Target businesses : Sustainable Manufacturing

| Sectors studied | Risk severity assessment (both 1.5℃ and 4℃) | Scenario definitions | Countermeasure considerations (in part) |
|---|---|---|---|
| **Petrochemical businesses** | <Policy/regulation, markets, technology, reputation><br>Proliferation of ICT in recycling-based business platforms in the shift to carbon-neutrality<br>Carbon pricing / Emissions targets / Energy-saving measures / Key product/Service price variations<br><br><Natural disasters><br>Increased damage to factories/supply chains due to heightened risk of natural disasters<br>Flooding/Changing weather patterns / More severe abnormal weather events | 1.5℃ scenario | |
| | | Switch to environmentally friendly products that use carbon-neutral materials throughout the supply chain, increasing portfolio reform, increased demand for greater traceability and more efficient R&D | • Visualization of $CO_2$ emissions throughout the supply chain, support for strategies and policies aimed at carbon-neutrality<br>• Eco-friendly materials development solutions that use materials informatics<br>• Management visualization with an ESG pivot, formulation and implementation of SX measures through data-driven management |
| | | 4℃ scenario | |
| | | Increased demand for resilient factories and supply chains due to increasingly severe natural disasters | • Support for risk event simulation and timely provision of risk information<br>• Rapid solutions through data-driven management (review of manufacturing systems, suppliers, SCM, etc.) |

<table>
<tr><td rowspan="4">Automotive businesses</td><td rowspan="4"><Policy/regulation, markets, technology, reputation><br>Stronger regulation of internal combustion engines; widespread adoption of electric vehicles, move toward carbon-neutrality in the entire product life cycle<br>Carbon pricing | Emissions targets<br>Key product/Service price variations | Proliferation of next-generation technology<br>Changes in investor sentiment<br><br><Natural disasters><br>Increased damage to factories/supply chains due to heightened risk of natural disasters<br>Flooding/Changing weather patterns</td><td colspan="2">1.5℃ scenario</td></tr>
<tr><td>Increased demand for services such as MaaS and greater supply chain traceability to help reduce environmental impacts through the entire life cycle</td><td>• Visualization of $CO_2$ emissions throughout the supply chain, support for strategies and policies aimed at carbon-neutrality<br>• Support for EV demand (e.g., circular management of EV batteries)<br>• Management visualization with an ESG pivot, formulation and implementation of SX measures through data-driven management<br>• Process automation services using digital technology, from design through to manufacturing and maintenance</td></tr>
<tr><td colspan="2">4℃ scenario</td></tr>
<tr><td>Faster rollout of internal combustion engines, increased demand for advanced technology. Also, increased demand for enhanced business continuity and stability in raw materials procurement in the face of more severe natural disasters</td><td>• Support for risk event simulation and timely provision of risk information<br>• Rapid solutions through data-driven management (review of manufacturing systems, suppliers, SCM, etc.)<br>• Engineering outsourcing service which contributes to acceleration of development processes/technology and selection of management resources</td></tr>
</table>

<table>
<tr><td rowspan="4">Food-related businesses</td><td rowspan="4"><Policy/regulation, markets, technology, reputation><br>Increased awareness of ethical consumption, promotion of resource recycling and biodiversity, etc.<br>Key product/Service price variations | Proliferation of next-generation technology<br><br><Natural disasters><br>Increased damage to agriculture due to heightened risk from natural disasters and temperature rises<br>Higher average temperatures | More severe abnormal weather events</td><td colspan="2">1.5℃ scenario</td></tr>
<tr><td>Changed consumer awareness leading to increased demand for measures to deal with food waste and support for smart agriculture, certificates of origin, and environmentally friendly packaging materials</td><td>• Visualization of $CO_2$ emissions throughout the supply chain, support for strategies and policies aimed at carbon-neutrality<br>• Support for greater traceability throughout the value chain (supply-demand optimization, help with changes in consumer behavior)<br>• Management visualization with an ESG pivot, formulation and implementation of SX measures through data-driven management</td></tr>
<tr><td colspan="2">4℃ scenario</td></tr>
<tr><td>Increased demand for "resilient agriculture" to cope with issues of stable food supply resulting from natural disasters</td><td>• Support for risk event simulation and timely provision of risk information<br>• Rapid solutions through data-driven management (review of manufacturing systems, suppliers, SCM, etc.)</td></tr>
</table>

<table>
<tr><td rowspan="4">Electronic device-related businesses</td><td rowspan="4"><Policy/regulation, markets, technology, reputation><br>Energy savings in factories and growth in the market for products for EVs; potential for fundamental manufacturing reforms, such as 3D printers and the "buy local" movement<br>Carbon pricing | Emissions targets<br>Key product/Service price variations | Proliferation of next-generation technology<br>Changes in investor sentiment<br><br><Natural disasters><br>Increased damage to factories/supply chains due to heightened risk of natural disasters, water shortages<br>Flooding/Changing weather patterns</td><td colspan="2">1.5℃ scenario</td></tr>
<tr><td>Proliferation of energy/labor-saving technologies. Increased demand from radical changes to business models (demand chains, etc.)</td><td>• Visualization of $CO_2$ emissions throughout the supply chain, support for strategies and policies aimed at carbon-neutrality<br>• Process automation services using digital technology, from design through to manufacturing and maintenance<br>• Management visualization with an ESG pivot, formulation and implementation of SX measures through data-driven management</td></tr>
<tr><td colspan="2">4℃ scenario</td></tr>
<tr><td>Increased demand for higher labor productivity in production sites and the construction of factories and supply chains capable of handling the risks posed by natural disasters</td><td>• Process automation services using digital technology, from design through to manufacturing and maintenance<br>• Support for risk event simulation and timely provision of risk information<br>• Rapid solutions through data-driven management (review of manufacturing systems, suppliers, SCM, etc.)</td></tr>
</table>

# Target businesses : Trusted Society

<table>
<tr><th>Sectors studied</th><th>Risk severity assessment<br>(both 1.5℃ and 4℃)</th><th>Scenario definitions</th><th>Countermeasure considerations<br>(in part)</th></tr>
<tr><td rowspan="4">Public sector, transportation, energy-related businesses</td><td rowspan="4"><Policy/regulation, markets, technology, reputation><br>The values by which we select cities and services, such as environmental concerns, will changes as we shift to carbon neutrality<br>Carbon pricing | Emissions targets | Key product/Service price variations<br><br><Natural disasters><br>Increased damage to cities, buildings, and infrastructure due to heightened risk from natural disasters<br>Flooding/Changing weather patterns | More severe abnormal weather events</td><td colspan="2">1.5℃ scenario</td></tr>
<tr><td>Increased demand for quantifying and visualizing new values, such as environmental concerns, and the digitalization of urban and energy infrastructure</td><td>• Services/solutions related to prediction and regulation of the energy supply-demand balance using real-time data as green energy is used to transition to a carbon neutral society</td></tr>
<tr><td colspan="2">4℃ scenario</td></tr>
<tr><td>Increased demand for resilient urban infrastructure</td><td>• Construction of Digital Twin platforms, enhanced use of simulations, optimization of urban infrastructure that caters for population flows and individuals, support for resilience in transport and logistics, disaster prevention/minimization</td></tr>
</table>

### <Risk & Opportunity Analysis>

## Target businesses : Hybrid IT

| Sectors studied | Risk severity assessment (both 1.5℃ and 4℃) | Scenario definitions | Countermeasure considerations (in part) |
|---|---|---|---|
| Datacenter-related businesses | <Policy/regulation, markets, technology, reputation><br>Traceability of environmental values, datacenter electrification, and the adoption of smart technology will all progress<br>Emissions targets / Key product/Service price variations / Proliferation of next-generation technology / Changes in customer sentiment<br><br><Natural disasters><br>Increased damage to datacenters due to heightened risk from natural disasters<br>Higher average temperatures / More severe abnormal weather events | 1.5℃ scenario | |
| | | Energy savings and environmental concerns become the standard for service selection by customers, and carbon neutrality in datacenters themselves becomes a source of competitive strength | • Highly energy-efficient datacenters |
| | | 4℃ scenario | |
| | | Increased demand for resilient datacenters. Disaster risk for Fujitsu-owned datacenters is also increasing and countermeasures are needed | • Disaster recovery center services in case disasters occur<br>• Resilient earthquake-proof datacenters equipped with every security measure |

*The above scenario analyses are intended to verify the strategic resilience of Fujitsu businesses based on an assumed hypothesis and are positioned as one simulation that takes into account future uncertainties.

# Risk Management

As part of our company-wide risk management system, we have established the Risk Management and Compliance Committee to identify, assess and manage risks across the entire Fujitsu Group, including those related to climate change. To conduct company-wide risk assessments on a regular basis, the committee prepares tools, distributes them to each Risk Management & Compliance Officer and gathers responses. The departments in charge of each risk across the company utilize these tools to conduct assessments on items such as the impact and likelihood of occurrence related to risk threats and the status of countermeasures, and they also provide responses regarding those risk threats. Climate change-related risk assessments are conducted by all relevant departments, using information collected from across the company, based on the expertise of each department in areas such as policy, reputation, natural disasters, the supply chain, and products and services. The Risk Management and Compliance Committee conducts an integrated matrix analysis of the assessments returned by each department with respect to impact severity and likelihood, and then identifies high-priority risks at the company-wide level. The results of this analysis are reported to the Board of Directors.

The Sustainable Management Committee shares the business risks, opportunities, and countermeasures resulting from climate change, and manages their progress. The Fujitsu Group has also established environmental management systems based on the ISO 14001 s tandard. Under these systems, we monitor regulatory compliance and other risks.

# Metrics and Targets

In 2017, the F ujitsu Group obtained 2°C-aligned certi. ication from the SBTi for its GHG emissions reduction targets, and in 2021 w e were granted 1.5° C-aligned certification for our revised targets. To accelerate our efforts towards carbon-neutrality, we set new targets to achieve net-zero emissions from our business activities by FY2030 and net-zero emissions through our entire value chain by FY2040 and were granted net-zero certification by the SBTi. In line with the SBT updates, we have also revised our RE100 r enewable energy target, bringing our target of 100% r enewables by 2050 forward by 20 years and aiming to achieve 100% renewable energy by FY2030.

Against our target of 100% Sc ope 1 a nd 2 GHG reductions in our own emissions by FY2030, in the current year we achieved a reduction for FY2023 of 41.6% on FY2020 l evels. Against our target of a 90% reduction (on FY2020 levels) in GHG emissions throughout the value chain (scope 1, 2 a nd 3 emissions) by FY2040, we also achieved a 28.1% r eduction in FY2023.

We boosted our use of renewable energy up to 42.7% in FY2023 t owards our target of 100% renewable energy use by FY2030.

# Living in Harmony with Nature (Conservation of Biodiversity)

## Vision and Short- to Mid-term Targets

Together with climate change, the loss of biodiversity is seen as a serious and urgent problem, and the delivery of nature-positive outcomes is considered essential to its resolution. At the G7 Summit, held in June 2021, we agreed on a G7 2030 Nature Compact, which includes a commitment to “halt and reverse biodiversity loss by 2030”. During part 2 of the 15th Conference of the Parties to the UN Convention on Biological Diversity (CBD-COP15) - held in December 2022 - the Kunming-Montreal Global Biodiversity Framework, which includes international targets for 2030, was adopted. The framework establishes “23 Global Targets for 2030” aimed at the 2030 Mission “To take urgent action to halt and reverse biodiversity loss to put nature on a path to recovery for the benefit of people and planet” (excerpt).
Committed to delivering nature-positive outcomes, in 2022 the Fujitsu Group formulated its vision for 2050, its 2030 Mid-term Target, and its 2025 Short-term Target (Environmental Action Plan Stage XI) in line with international targets (Kunming-Montreal Global Biodiversity Framework). Achieving the vision will contribute to satisfying the Fujitsu Group’s stated purpose to “Make the world more sustainable by building trust in society through innovation.”

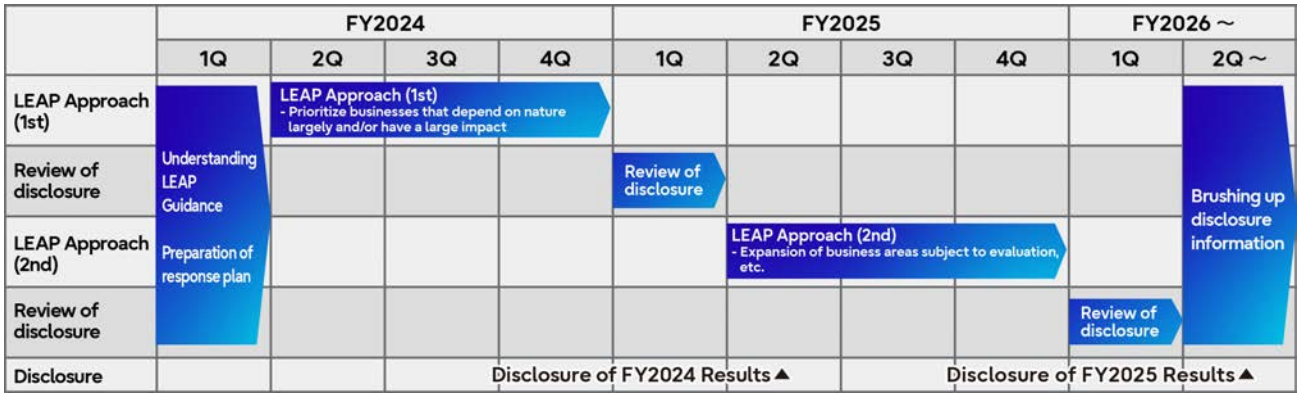
| | |
|---|---|
| Vision (2050) | Create a world in harmony with nature, where "nature and biodiversity," which are fundamental to a sustainable society, are fully restored through digital technology |
| Mid-term Target (2030) | Reduce negative impacts on biodiversity by at least 25% (Base year : FY2020) in the area of company's corporate activities, including supply chain, and promote activities to increase positive impacts on it. |

| | |
|---|---|
| Short-term Target (2025) | Reduce negative impacts on biodiversity by at least 12.5% (Base year : FY2020) in the area of company's corporate activities, including supply chain, and promote activities to increase positive impacts on it. |

# Response to the Taskforce on Nature-related Financial Disclosures (TNFD)

The Fujitsu Group is committed to achieving the abovementioned vision it has established for delivering nature-positive outcomes in line with international targets (Kunming-Montreal Global Biodiversity Framework). The Group endorses the purpose of the Taskforce on Nature-related Financial Disclosures (TNFD), is a registered TNFD Adopter , and has been a member of the TNFD Forum since October 2023. In FY2024, the Group will implement the LEAP (Locate, Evaluate, Assess and Prepare) approach in all business locations where operations have significant nature-related dependencies and impacts (Phase 1 ) , and will disclose the results. Then, in FY2025, the plan is to broaden the reach of the LEAP approach (Phase 2), and fine-tune the disclosure details.

- Fujitsu prepares for disclosure in line with TNFD framework, registers as TNFD Adopter ›




Fujitsu Group's TNFD Adopter-aligned TNFD response plan

# Biodiversity Conservation Activities

The Fujitsu Group is undertaking various biodiversity conservation activities to achieve its vision and targets.

## Activity Example 1: Complying with the Environmental Action Plan Target to "Visualize and reduce the impact of corporate activities on ecosystems and on biodiversity"

As part of Stage XI of its Environmental Action Plan, the Fujitsu Group has set a target for conserving nature and biodiversity, and has commenced activities to evaluate and reduce the nature and biodiversity-related dependencies and impacts of the Group's corporate activities.

- Living in Harmony with Nature (Conservation of Biodiversity) >

## Activity Example 2: Contributing to 30by30 (*1) (Ministry of the Environment: Activity to Gain Certification for Nationally Certified Sustainably Managed Natural Sites)

Just under 80% of the approximately 53 ha site occupied by the Fujitsu Numazu Plant is given over to green space to nurture the precious biodiversity of the region. The factory manages the green space with the aim of preserving the natural environment, maintaining the landscape, and providing a place for employees and local residents to learn about the natural environment. In 2022, Numazu Plant's green space program participated in the screening process of a trial scheme to test a system established by the Ministry of the Environment (MOE) to certify conserved areas identified as Living in Harmony with Nature. It was consequently certified by the MOE as a "Nationally Certified Sustainably Managed Natural Sites" in 2023. This activity is ranked as activities that will increase the positive impact on biodiversity in the Group's short- and mid-term targets.

*1 30by30: A target which aims to effectively conserve 30% of land and sea areas as healthy ecosystems by 2030 with the goal of halting and reversing biodiversity loss by 2030 (nature-positive outcome)

- Outline of sites participating in the early trial phase of Areas Living in Harmony with Nature (working title) (MOE website) (Japanese text only)
- Fujitsu Numazu Plant is awarded the 2023 Prime Minister's Commendation for Meritorious Service to the Greening Promotion Campaign (Japanese text only) >

## Activity Example 3: Supporting Biodiversity Conservation by Providing Funds, Technology, and Talent

The Fujitsu Group supports the activities of organizations that implement biodiversity conservation. These activities are ranked as activities that will increase the positive impact on biodiversity in the Group's short- and mid-term targets.

① Blakiston's Fish Owl Call Recognition Project
The Fujitsu Group has provided the Wild Bird Society of Japan with call recognition software, developed for use in habitat surveys of the endangered Blakiston's fish owl. Implementing measures based on habitat survey results is important for the conservation of the species. Surveys are conducted by analyzing sound data recordings, but the main problem for the Wild Bird Society was that playing and replaying the recorded sounds to identify the Blakiston's fish owl was enormously time-consuming. By providing the call recognition software, we helped streamline the surveys to enable the automatic extraction of the owl's cries, thus greatly reducing the time required for analysis.

- Blakiston's Fish Owl Call Recognition Project >

② Supporting the Harapan Rainforest (Forest of Hope)
We continually provide support to a project launched by BirdLife International Tokyo for reforestation activities in the Harapan Rainforest (Forest of Hope) on the Indonesian island of Sumatra. Dealing with forest fires and illegal logging is an urgent issue in the Harapan Rainforest. This activity contributes to forest conservation by implementing ICT to greatly improve the efficiency of forest patrol operations.

- Providing support for the Harapan Rainforest (Forest of Hope) in Indonesia
- Activity Brochure here

③ Coastal cleanup activities on Tsushima, An Island Seriously Contaminated by Marine Plastics
To deepen employees' awareness of the global environmental issue of marine plastic pollution, and link this to action to deal with the problem, Fujitsu Limited held a hands-on eco-tour of Tsushima for Fujitsu Group employees in collaboration with the Japan Environmental Action Network (JEAN). The project involved a beach cleanup, and an ideathon to come up with solutions to the island's marine plastics problem.

- Tsushima, an island seriously contaminated by marine plastics >

## Activity Example 4: Promoting Initiatives in Collaboration with External Organizations (J-GBF, Keidanren, WIPO, JBIB)

The Fujitsu Group collaborates with various external organizations to promote the following initiatives for conserving biodiversity:

- Japan Conference for 2030 Global Biodiversity Framework (J-GBF): Fujitsu Group announced and registered its Nature Positive Declaration.
- Keidanren: We support The Declaration of Biodiversity by Keidanren and participate in the Initiative based on the Declaration of Biodiversity.
- MOE and Keidanren: Fujitsu Group's case study Blakiston's Fish Owl Call Recognition Project was selected and published on the Business for GBF Project website launched by MOE and Keidanren as one of the good cases by Japanese companies contributing to the biodiversity conservation through their business activities. Furthermore, it was also featured in the Business for GBF Project's promotional video.
- World Intellectual Property Organization (WIPO): Participates as a partner in WIPO GREEN, a matchmaking platform for transferring environmental technologies and services. This led to the conclusion of IP licensing agreements with academic institutions for the use of technologies for conserving natural assets and biodiversity.
- Japan Business Initiative for Biodiversity (JBIB): Hosting activities together with enterprises for the purpose of research and practice in biodiversity conservation.

- Nature Positive Declaration: List of participating organizations ((J-GBF Website) Japanese only)
- Initiative based on The Declaration of Biodiversity by Keidanren (Keidanren website)
- Business for GBF Project (MOE website)
- Promotional video for Business for GBF Project (MOE video)
- Conclusion of IP licensing agreements through WIPO GREEN activities >
- Japan Business Initiative for Biodiversity (JBIB) (JBIB website)

## Activity Example 5: E-learning for Employees

The Fujitsu Group provides environmental education through e-learning programs for all employees to improve their environmental engagement. The programs include content on global trends in biodiversity and the relationship between corporate activities and biodiversity, the intention being to deepen their understanding of how their work relates to biodiversity.

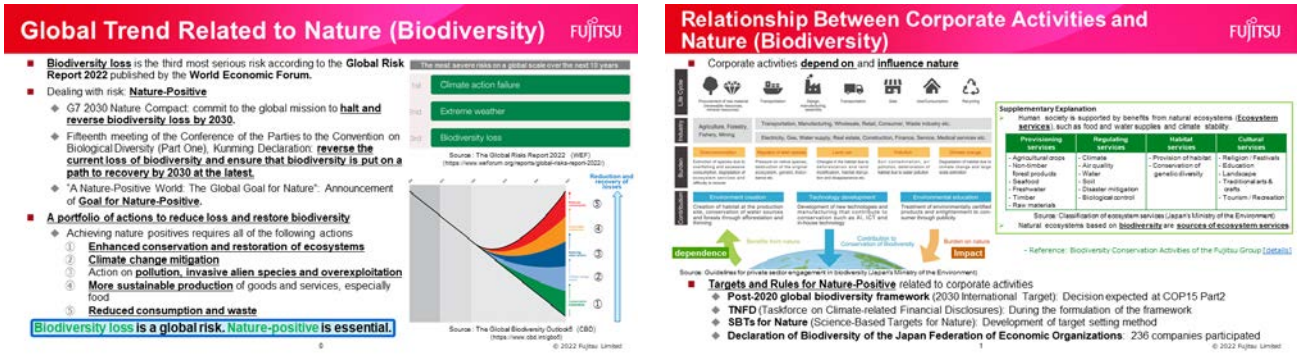



Fig. Image of environment e-learning materials

## Fujitsu Group Biodiversity Action Principles

In October 2009, the Fujitsu Group established its "Biodiversity Action Principles" to explicitly address biodiversity.

- Fujitsu Group Biodiversity Action Principles >

# Fujitsu Group Environmental Action Plan

## Operating Environment and Growth Strategy

### Changing Environmental Activities in Line with Our Business Model Transformation

Originally a manufacturer of telecommunications equipment, Fujitsu developed into a global ICT enterprise with vertically integrated operations in three sectors: Technology Solutions o.fers a range of ICT-based services and solutions, Ubiquitous Solutions designs and manufactures products such as PCs and mobile phones, and Device Solutions is responsible for developing the semiconductor business. Structural reforms undertaken since FY 2015 h ave channeled most management resources into the core sector of Technology Solutions. In FY 2019, F ujitsu repositioned itself as a Digital Transformation (DX) enterprise that aims to make full use of digital technologies in the creation of innovative services and business processes. Then in 2021, the company launched Fujitsu Uvance. The objective going forward is to make the world more sustainable by developing businesses with integrated cutting-edge AI technologies that will help customers achieve Sustainability Transformation (SX) and solve societal problems.

The nature of the Fujitsu Group's environmental impact has changed as a result of this modified business model. For example, manufacturing semiconductors, electronic components and PCs accounted for the majority of energy consumption in the past, but business restructuring has greatly reduced the amount of energy these industries consume. Conversely, with the expansion in cloud computing and IoT, electricity consumption in Fujitsu data centers now accounts for a large portion of total power use. The Fujitsu Group is therefore promoting environmental activities linked to its growth strategy, responding to the demands of society by using renewable energy, reducing the power data centers consume, and improving their efficiency.

## Operating as a Responsible Global Corporate Citizen

The adoption of the Sustainable Development Goals (SDGs) by the United Nations and the commencement of the COP 21 P aris Agreement increased the need for initiatives aimed at building globally sustainable societies. The Fujitsu Group employed a materiality analysis in a Groupwide review designed to enhance the effectiveness of activities that aim to contribute to sustainable development. This analysis identified six priority issues including the environment; human rights, diversity and inclusion; wellbeing; and supply chain. The result is a unified framework under the banner of Global Responsible Business (GRB), which will oversee activities that strengthen initiatives in non-financial areas while striving for 'sustainability management' worthy of a responsible global corporate citizen.

# History of the Environmental Action Plan

## Environmental Awareness Contributes to Sustainability for Our Customers and Society

The Fujitsu Group has formulated an Environmental Action Plan since 1993 and c ontinues to broaden the scope of its environmental activities. Between stages I and V (FY 1993-2009) the objective was to significantly reduce the environmental impact of the Fujitsu Group itself. Far-reaching measures were implemented throughout our factories and offices to cut $CO_2$ emissions and chemical pollutants, to reduce waste, and so on. In stage VI (FY 2010-2012) , we expanded the focus of our activities to three important initiatives. In addition to strengthening measures to lessen our own impact on the environment, we supported similar efforts by customers and society as a whole and also took on the challenge of conserving biodiversity. Between stages VII and IX (FY 2013-2020), we clearly demonstrated our commitment to contributing to the resolution of environmental issues faced by customers and society through the use of ICT. In order to reduce our own environmental impact, we expanded the scope of our activities to cover the entire supply chain, including suppliers. In stage X (FY 2021-2022) , we worked to promote and expand the use of renewable energy for our customers and society by utilizing leading-edge ICT technologies unique to the Fujitsu Group, such as the introduction of renewable energy at our business sites through CPPA and other means, and blockchain technology.

The Fujitsu Group will continue responding to the demands of changing times and will deepen and further develop its environmental activities with the goal of helping to create a sustainable and rewarding society.

# Fujitsu Group Environmental Action Plan (Stage XI)

## Social responsibility as a leading company in Sustainability Transformation (SX)

As a leading company in SX, the Fujitsu Group is committed to reducing the environmental impact of its group companies, including those in the supply chain, and to expanding and enhancing the value it provides to customers and society through technology. We will work with our customers and partners to realize a sustainable future.

## Outline of the Fujitsu Group Environmental Action Plan (Stage XI)

In order to resolve environmental and social issues, we have set eight targets in three global risks areas highlighted by the World Economic Forum: " Climate Change," " Resource Circulation," and " Living in Harmony with Nature ". These are mapped against the two values of " Customers and Society " and " Fujitsu and Supply Chain".

Fujitsu group is taking firm steps to realize its environmental vision, such as contributing to digital technology for customers and society and increasing the ratio of its own use of renewable energy.

Target period: 3 years from Fiscal year 2023 to Fiscal year 2025

# Customers and Society

Fujitsu aims to transform its core business with a portfolio of offerings focused on ESG Contribution and SX by 2030. In particular, to solve environmental issues in the areas of climate change and carbon neutrality, resource recycling through circular economies, and biodiversity, we will connect stakeholders from across society and industries and contribute to the SX of customers and people around the world. In FY 2023, we developed environmental contribution metrics to measure our impact on the environment, allowing us to provide services with clear contributions and value. From FY 2024, we will measure and disclose the quantitative amount of our contribution. Furthermore, to realize a sustainable society in which no one is left behind, we will develop solutions, services and initiatives that contribute to SX, so that customers and societies alike will trust and objectively rate us on a worldwide scale as a leader in SX.

# Fujitsu and Supply Chain

## Climate Change

In order to achieve Net Zero (*1) emissions of greenhouse gases from our business activities and from the entire value chain, we set reduction targets for FY2025. We will achieve these through the strategic deployment of renewable energy and the use of advanced ICT to drive energy conservation, while at the same time encouraging our suppliers to monitor and reduce their environmental impact, make their own products more energy-efficient, and so on.

*1 Net Zero Greenhouse Gas Emissions
Reduce greenhouse gas emissions by 90% or more from the base year in the target year and remove residual emissions of 10% or less by directly recovering $CO_2$ from the atmosphere (DAC) or by absorbing $CO_2$ through planting trees.

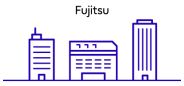
## Resource Circulation

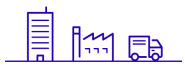
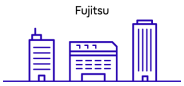
We aim to develop these products and services in FY 2025 in order to design products that conserve resources and improve the resource recycling rate, and to build a circular economy business model that can overcome resource constraints. We will also continue to reduce water use and raise awareness of water resource conservation throughout the supply chain.

### Living in Harmony with Nature

In response to Target 15 o f the Global Targets for 2030 set out by the Kunming-Montreal Global Biodiversity Framework, we will achieve nature-positive outcomes by reducing negative impacts on biodiversity and increasing positive impacts in the areas of our corporate operations, including supply chains.

## Environmental Action Plan

| | Customers and Society | Fujitsu and Supply Chain | | |
|---|---|---|---|---|
| | Business Field | Upstream Business | Fujitsu's Business Areas | Downstream Business |
| |  |  |  |  |
| Climate Change | • Development and provision of solutions that contribute to SX | • Suppliers' GHG reduction (Well Below 2 °C target) | • Reduction of GHG emissions at business sites (1.5 °C target)<br>• Increase the use ratio of renewable energy | • By reducing power consumption during product use Reduction of GHG emissions |

| | Customers and Society | Fujitsu and Supply Chain | | |
|---|---|---|---|---|
| | Business Field | Upstream Business | Fujitsu's Business Areas | Downstream Business |
| |  |  |  |  |
| Resource Circulation | | • Enhancing suppliers' awareness of water resource conservation | • Reduction of water consumption | • To product resource conservation and resource recycling Improving resource efficiency |
| Living in Harmony with Nature | | • Reducing negative impacts of corporate activities on biodiversity | | |

# Environmental Action Plan Targets

| Goal | | | | Base Line | Targets for FY 2025 |
|---|---|---|---|---|---|
| Customers and Society | | | • FY 2023: Environmental contribution metrics will be developed. FY 2024 to FY 2025: The amount of contribution will be measured and disclosed.<br>• To earn the objective recognition of global customers and society as an SX leader. | - | Deliver SX offerings to customers |
| Fujitsu and Supply Chain | Climate Change (*2) | Scope 1,2 | • Business sites must halve their GHG emissions against the baseline (FY2020) by the end of FY2025<br>• Increase use ratio of renewable energy to 50% or more by 2025 | FY 2020 | Reduction of at least 50% |
| | | Scope 3 (Category 11) | • Reduce $CO_2$ emissions from power consumption during product use by 12.5% or mor e | FY 2020 | Reduction of at least 12.5% |
| | | Scope 3 (Category 1) | • Reducing GHG emissions in the supply chain<br>  ◦ Major suppliers must set emissions reduction targets (aligned with SBT Well Below 2°C)<br>  ◦ Collection of GHG reduction data, construction and deployment of mechanisms | - | Goal setting completed |

| Goal | | | Base Line | Targets for FY 2025 |
|---|---|---|---|---|
| Fujitsu and Supply Chain | Resource Circulation | • Development of products and services that contribute to a circular economy business model | - | CE Business Products Service Development |
| | | • Reduce water consumption by 57,000 $m^3$ or more by implementing water reduction measures | - | 57,000 $m^3$ or more |
| | | • Strengthening awareness of water resource conservation in the upstream supply chain<br>• Request major suppliers to implement initiatives to raise awareness of the importance of water resources | - | Request Completed |
| | Living in Harmony with Nature | • Reduce negative impacts on biodiversity in the areas of corporate activities, including supply chains, by at least 12.5% . In addition, promote activities that increase positive impacts on biodiversity | FY 2020 | Reduction of 12.5% or more |

*2 Climate Change:　Scope 1, 2 a nd 3. adjusted for acquisitions and divestitures

## RELATED LINKS

- Fujitsu Group Environmental Action Plan (Stage X) >
- Fujitsu Group Environmental Action Plan (Stage IX) >
- Fujitsu Group Environmental Action Plan (Stage VIII) >
- Fujitsu Group Environmental Action Plan (Stage VII) >
- Fujitsu Group Environmental Protection Program (Stage VI) >
- Fujitsu Group Environmental Protection Program (Stage V) >
- Fujitsu Group Environmental Protection Program (Stage IV) >
- Fujitsu Group Environmental Protection Program (Stage III) >

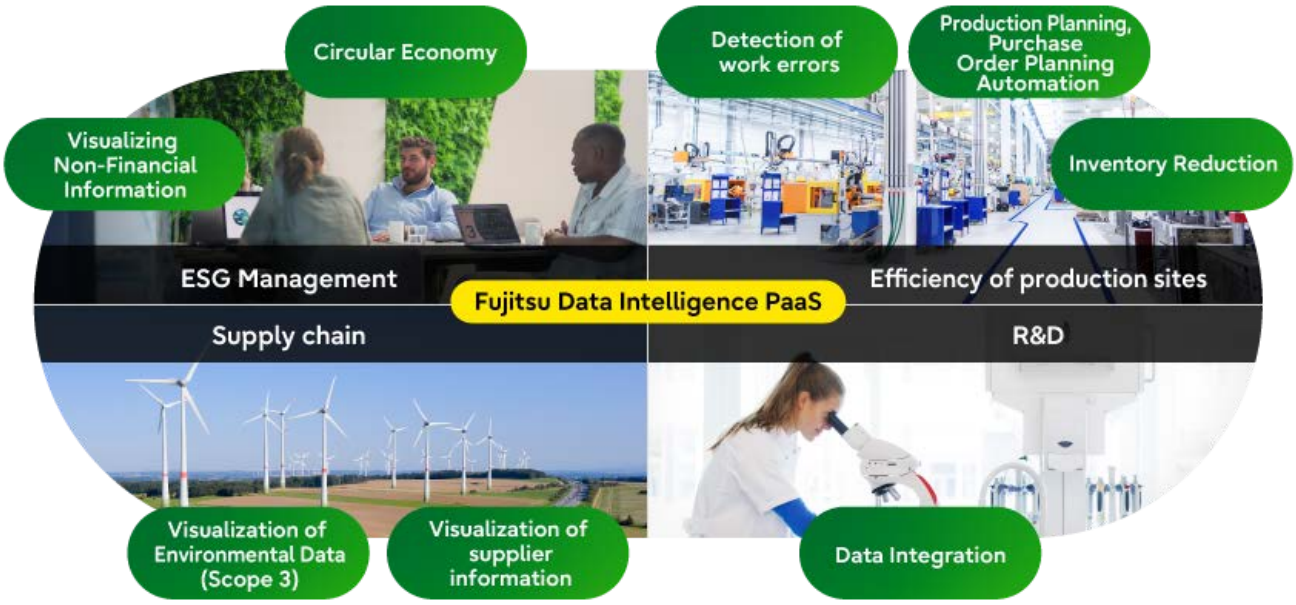
# Help to resolve environmental challenges for customers and society through our business operations

Fujitsu's business aims to transform its portfolio and o.ferings by 2030, focusing on ESG contributions and Sustainability Transformation (SX). In line with its materiality focus on solving global environmental issues, Fujitsu provides a range of cross-industry offerings, from supply chain optimization through to energy efficiency. Notably, we are promoting the development of solutions and initiatives that contribute to SX, targeting both customers and society as part of our Stage XI Environmental Action Plan for 2023 to 2025. Below are examples of Fujitsu's initiatives for helping to resolve environmental challenges for customers and society through its business.

## Comprehensive Optimization Through Next-generation Dynamic Supply Chain Management

Supply Chain Management (SCM) encompasses the optimization of processes from the procurement of raw materials for products through to manufacturing, distribution and sales. Today, all aspects of SCM are undergoing significant changes, demanding adaptation from businesses. Companies are facing a rapidly changing environment  with new challenges, including heightened concerns for human rights, environmental protection, preparedness for future pandemics, and increasingly severe natural disasters that traditional SCM approaches are struggling to address. One key reason for this is the lack of integrated visualization and decision-making across the entire supply chain, hindering companies' ability to make informed decisions. This highlights the urgent need for a transition to next-generation SCM that can respond to modern challenges quickly and flexibly.

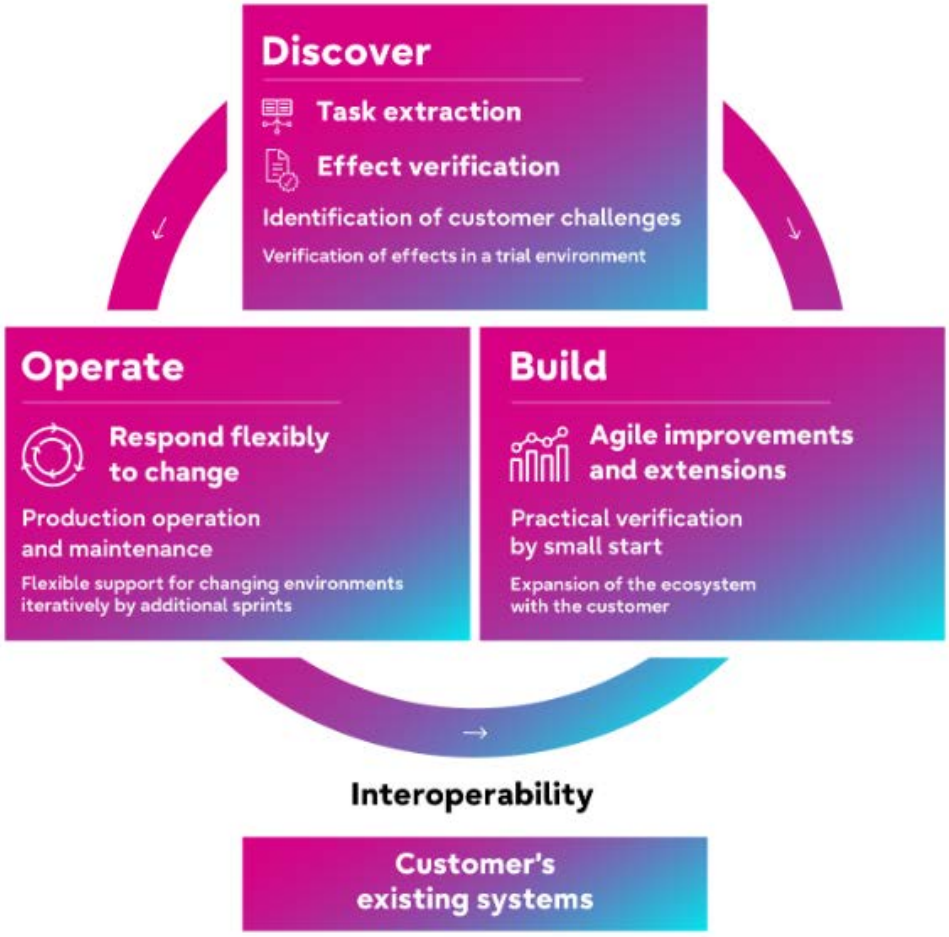
Fujitsu provides Fujitsu Data Intelligence PaaS (DI PaaS) to realize business-speci.ic AI. DI PaaS is a cloud-based all-in-one operation platform that integrates vast amounts of data from both inside and outside organizations into a meaningful format to support decision-making. It consists of four platforms: the world's most advanced AI solution "Fujitsu Kozuchi"; the blockchain technology "Fujitsu Track and Trust" that enables traceability; Palantir Foundry for complex data integration, application development, and advanced AI; and data integration technologies such as Microsoft Azure. DI PaaS helps customers solve their challenges by enabling the integrated connection and analysis of data that has been fragmented across industries, leading to unprecedented cross-value chain solutions and insights.  Furthermore, by seamlessly linking these decision-making outcomes with Fujitsu's long-standing planning and execution systems, DI PaaS empowers autonomous operation of business processes from decision-making to action, enhancing agility and responsiveness to change.




Fujitsu Data Intelligence PaaS

# Connecting data and stakeholders with trust to solve customer business challenges

As people become more conscious of environmental and societal issues, companies are being asked to provide products and services that are not only functional and high-quality, but that also have low environmental impact and are produced and distributed fairly.
This is particularly true in EU countries where, based on the European Green Deal policy, almost all products distributed are subject to Ecodesign regulations as part of a circular economy action plan (excluding some EU countries). The implementation of the Ecodesign regulations is accompanied by a Digital Product Passport (DPP) that will become mandatory in a few years. As an inescapable feature of continuing to conduct business in Europe, these regulations require a range of responses, including customs clearance.
We deliver large numbers of products to consumers via supply chains that span the globe, but to address the various demands outlined above, it is crucial that we provide highly trustworthy levels of traceability to ensure transparency in the transactions between our various stakeholders.
Fujitsu Track and Trust provides a traceability platform that leverages consulting and blockchain technology to solve challenges in customer businesses by quickly testing hypotheses to enable further growth. By providing traceability, Track and Trust enables cost reductions and greater efficiency in implementing the processes involved in raw materials procurement, product manufacturing and the downstream logistics. It can also be used to boost corporate and brand value by disclosing the enterprise's contributions to achieving the SDGs to customers (ESG reports).

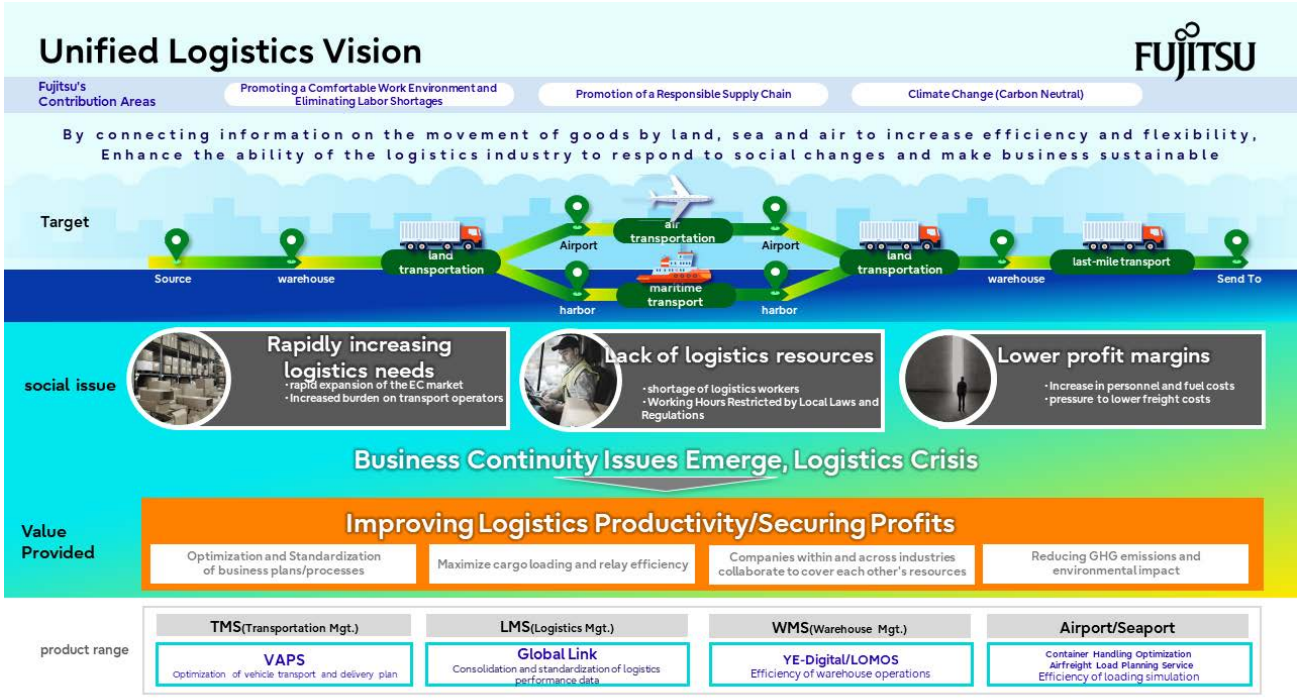



Fujitsu Track and Trust platform

# Connecting land, sea and air logistics data to enhance efficiency, flexibility and business sustainability

While logistics demand is forecast to increase, the logistics industry faces various challenges, including labor shortages, declining transportation capacity, diversification of transportation methods, and measures to reduce GHG emissions.
Fujitsu connects logistics information held by shippers and logistics companies through logistics data standardization services, enhancing efficiency, flexibility, and making business sustainable. It achieves both maximization of transportation capacity and reduction of GHG emissions through industry-wide operational efficiency, enabling resilient logistics that maximizes profits and can respond to not only natural disasters and conflicts, but also everyday changes.

Our approach to solutions
Resolving labor shortages: Optimize and standardize business planning and processes, and use forecasting as the basis for optimizing on-site operations in real time.
Improving transportation capacity: Optimize transportation equipment utilization plans based on cargo loading efficiency, relay efficiency, and future cargo volume forecasts.
Reducing environmental impact: Reduce GHG emissions by optimizing operational plans based on refueling/recharging plans, driving route selection and energy demand forecasts.



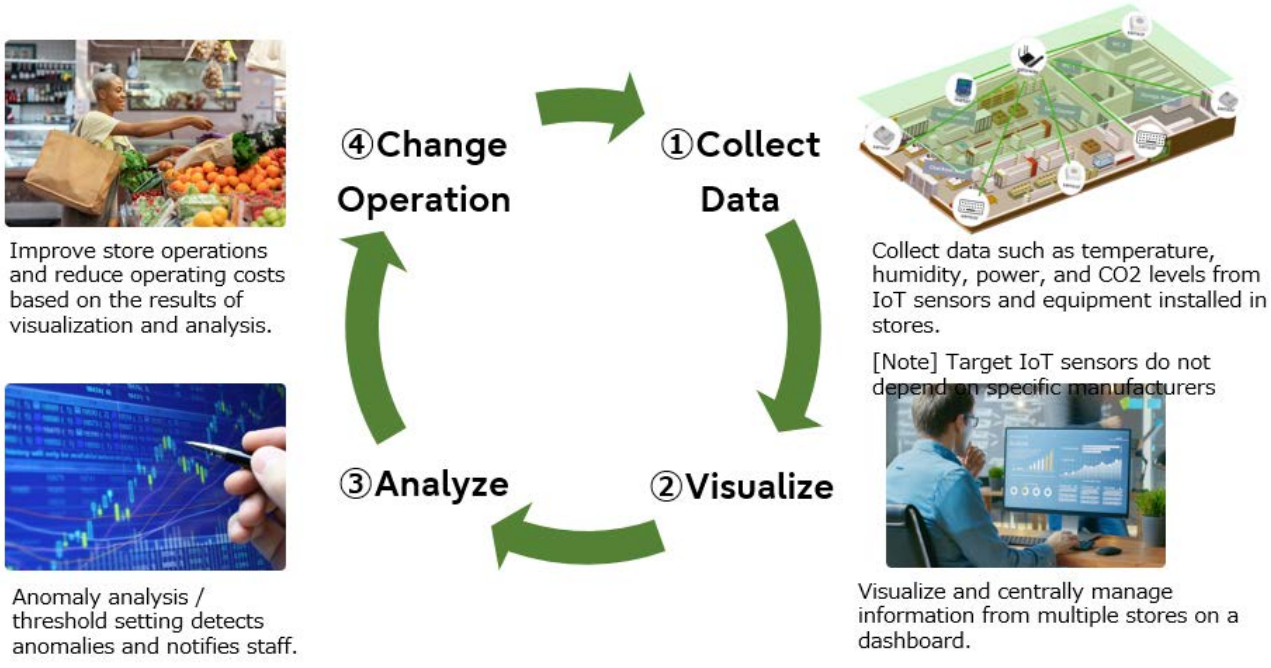

Unified Logistics

# Contributing to sustainability through optimized energy use

The IoT Operations Cockpit supports rapid business decision-making by visualizing information acquired from various IoT sensors in real time, realizing reduced costs and environmental impact.

Service features

- Real-time visualization and analysis of energy usage
  Visualizes data such as energy usage collected from various IoT sensors in real time. Allows information from multiple stores to be centrally managed on a dashboard.
- Fault prediction and error detection using AI-based anomaly analysis
  Learns from collected and stored sensor data, and then uses AI to conduct anomaly analysis and predict faults. Anomalies can also be detected by setting a threshold value, which allows for the identification of equipment requiring maintenance in advance and the ability to take preventive measures.
- Contribution to sustainability through energy efficiency improvements
  By visualizing the operating status of lighting, refrigerators and air conditioning, users can clearly identify areas requiring energy reductions, which in turn assists with the upgrading of infrastructure and operations. This supports reductions in wasted energy consumption and promotes environmentally friendly corporate activities.

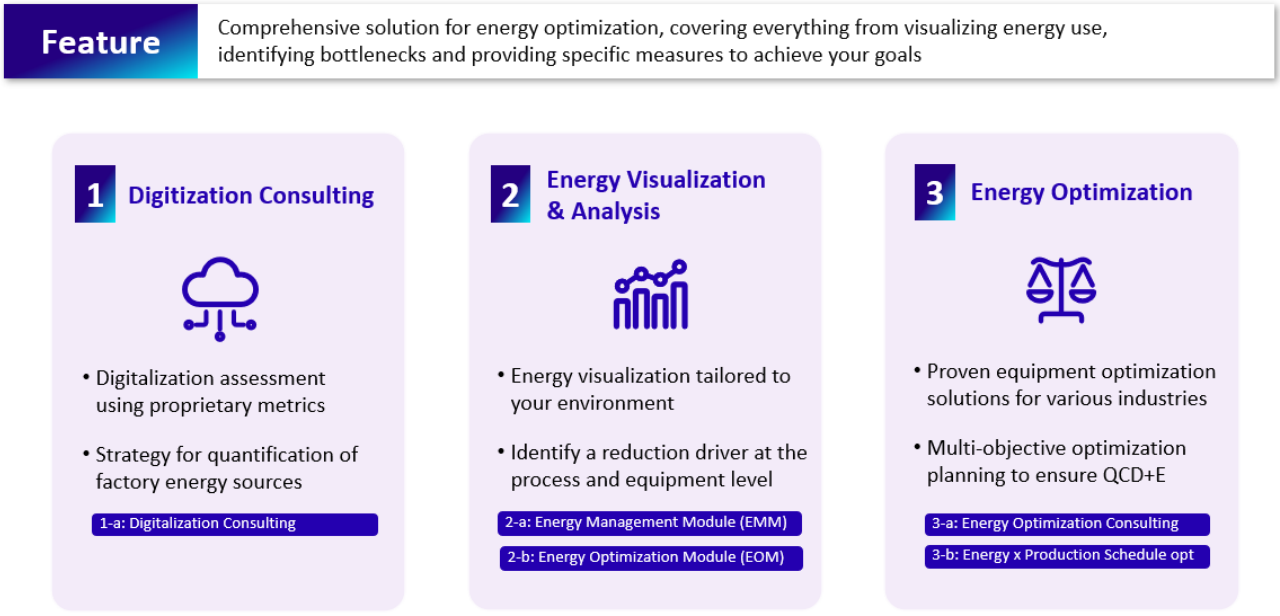



IoT Operations Cockpit

# Energy Consumption Optimization Service

Fujitsu Energy Consumption Optimization powered by METRON is an end-to-end service that assists factories and offices in any industry sector to optimize their energy consumption, from energy data collection and visualization through to analysis and optimization.
In collaboration with METRON, we offer the four key services shown below aimed at accelerating the decarbonization of the manufacturing industry worldwide.

- Digitization Consulting: Energy Data Collection
- Energy Visualization SaaS: Energy Management/Analysis SaaS
- Energy Optimization Consulting: Energy Optimization
- Production Schedule Optimization: Energy x Production Schedule Optimization




Fujitsu Energy Consumption Optimization powered by METRON

# Launch of trials for realizing a blue carbon measurement and verification business using maritime digital twinning as a key technology

Fujitsu is conducting proof-of-concept trials on blue carbon (*1) measurement and verification technology, with the goal of commercialization. The waters of Japan, including its exclusive economic zone (EEZ), ranks sixth in the world and have the potential to realize up to 5,000 tons of $CO_2$ reductions using blue carbon. This could be the trump card when it comes to $CO_2$ reductions, since it surpasses the figure for the amount of $CO_2$ absorbed by the world's forests, which are declining due to the lack of people committed to their preservation. Furthermore, blue carbon has the advantage of being able to be traded in the market as J Blue Credits if it is applied for and verified. However, the creation of blue carbon has been a challenge due to the high cost involved in underwater operations. Fujitsu's blue carbon measurement and verification technology dramatically reduces this high cost of underwater operations through ICT. Rather than the current method where large numbers of divers visually check the growth of multiple hectares of seaweed and then use mathematical formulas to make estimates, Fujitsu's technology uses tools such as underwater drones to enable an AI to learn the underwater $CO_2$ concentrations. Combining this with remote sensing for widespread measurement, enables highly precise calculations at a low cost without using divers. [Fig. 1]

The Fujitsu Laboratories Ocean Digital Twin is a key technology that reproduces the marine environment with high precision in a digital space. It can make predictions by using simulations of the changes in the environments that make up the ocean and the effects of ocean-based global warming countermeasures. This is achieved through the use of technologies such as AI and autonomous underwater vehicles (AUVs) that collect high-resolution 3D data of underwater organisms and structures [Fig. 2]. Through its blue carbon measurement and verification technology, Fujitsu is aiming to establish underwater digital twinning for seaweed beds by FY2026. As well as supporting blue carbon development, this is also working towards Sustainability Transformation (SX)(*2) by supporting proposals for initiatives such as measures by companies and local governments to protect biodiversity on coral reefs and to preserve and develop seaweed beds. Together with an external research organization(*3), we conducted verification testing for these technologies in the coastal waters around Ishigaki Island in Okinawa. We successfully collected highly detailed 3D data for coral reefs and confirmed the viability of the technologies. The results of this testing were very highly rated by the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) and we were the first company to take part in seminars(*4) run by the Ministry.

Our goal is to begin proof-of-concept trials during FY2024, and we are already laying the groundwork for collaborations with other companies. Our goals also include building partnerships with companies, local governments and other organizations to implement countermeasures aimed at achieving carbon neutrality, and supporting proposals for customers' climate measures that use our blue carbon measurement and verification technology (and underwater digital twinning).

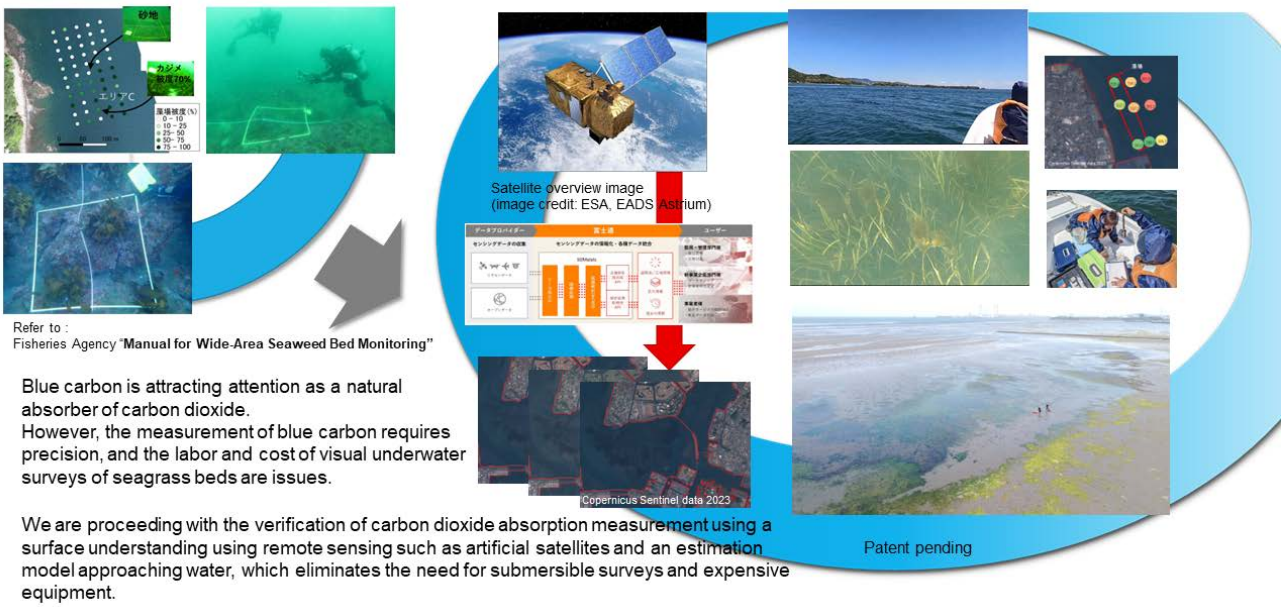



Fig. 1 Ov erview of diverless high-precision measurement

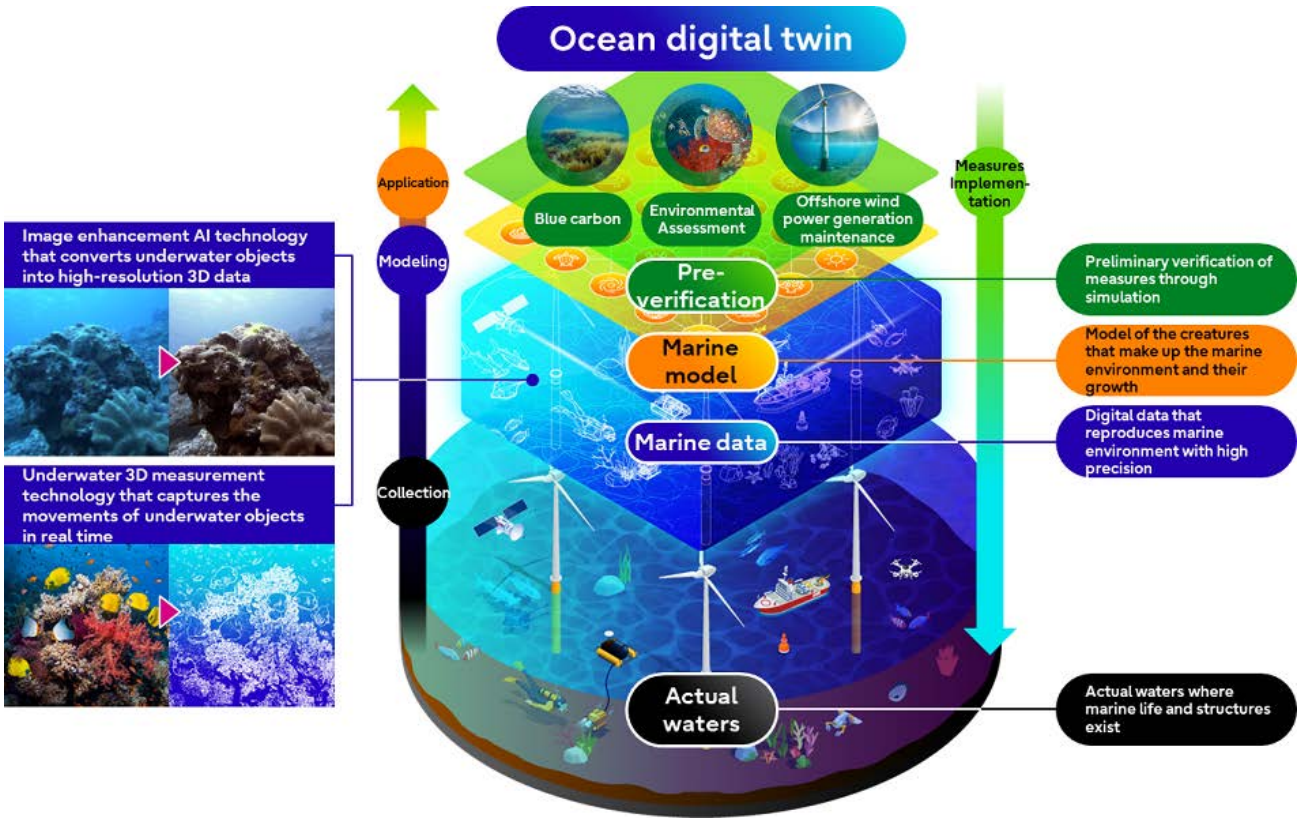



Fig. 2 Technology for collecting 3D data of underwater organisms and structures

*1 Blue carbon refers to carbon that has been sequestered or stored through photosynthesis by marine organisms such as seaweed and seagrass.

*2 Sustainability transformation

*3 National Maritime Research Institute, National Institute of Maritime, Port and Aviation Technology (NMRI)

*4 Blue carbon data measurement manual seminar into the use and application of high-precision data acquisition and management systems for blue carbon

# Business collaboration on platforms addressing international initiatives and societal challenges in Japan

Since early 2024, Fujitsu has worked with the Climate Group through its RE100 initiative by collaborating on proposals for policies and regulations that will enable companies in Japan to procure renewable energy. Fujitsu is one of 12 members on the Policy Working Group tasked with reviewing policies in Japan. The top-priority policies recommended by the RE100 members are listed below.

1. Implement policies promoting transparent and fair electricity prices, aiming to improve the cost-effectiveness of renewable electricity generation and pricing.
2. Improve access to Physical and Virtual Corporate Power Purchase Agreements (PPAs)(*5) by establishing streamlined processes and removing barriers for buyers and suppliers.
3. Prioritize grid upgrades and operational improvements to speed up the connection time for new renewables projects and maximize usage of existing renewables to avoid curtailment.

In a public statement issued on 25 June 2024, RE100 participants consisting of over 420 of the world's biggest and most influential companies, including 87 companies headquartered in Japan, strongly urged the Japanese government to set more ambitious targets for renewable energy installation. They demanded that Japan leverage the opportunities created by the transition to net zero to urgently increase its renewable energy generation capacity threefold (to 363 GW) by 2035 in the forthcoming 7th Strategic Energy Plan being formulated by the Japanese government.
Through this involvement, Fujitsu is both promoting renewable energy within the company and actively participating in campaigns to promote renewable energy throughout Japan. In doing so, we are contributing to the broader adoption of renewable energy across society and to business through the accompanying energy solutions.

Shortly after Fujitsu endorsed the "GX League Basic Concept", released by the Ministry of Economy, Trade and Industry (METI) on February 1, 2022, we began cooperating in this initiative and have continued as active participants since the GX League(*6) became fully operational in FY2023. As of March 27, 2024, the league has attracted participants from a wide range of industries with 747 companies now involved, forming a framework that encompasses over 50% of Japan's greenhouse gas emissions. We are also involved in the planning for the GX-ETS(*7), and as a GX League member, we publish status updates on the progress of various initiatives by each company on the GX dashboard.

This includes our progress towards achieving our own emissions reduction targets, our efforts to reduce emissions across our entire supply chain, and the products and services we supply towards the creation of green markets. Our commitment is also reflected in our business activities, where we contribute to GHG emissions reductions throughout Japan by actively offering proposals for GHG emissions reductions to customers who are GX League participants.

*5 Power purchasing agreements undertaken between power suppliers and consumers where the transactions involve environmental value only

*6 A forum for cooperation between corporate enterprises, the government, universities and academic institutions engaged in similar initiatives aimed at achieving sustainable growth in the society of today and the future, rising to the challenges of GX while remaining focused on social reform and achieving carbon neutrality by 2050

*7 An emissions trading scheme in the GX League that is one of the market-based mechanisms aimed at reducing greenhouse gas emissions. The scheme works by setting a limit (cap) on emissions for companies and other organizations and discourages participants from exceeding that limit. Recent years have seen a greater focus on programs to introduce emissions trading as part of the GX League activities.

- RE100 Our work in Japan
- RE100 calls on the Japanese government to urgently grow renewables capacity
- GX League

# Climate Change

## External Trends

### Accelerated Controls on GHG Emissions are Required for Carbon Neutrality

The COP 21 Paris Agreement, adopted in December 2015, set out a long-term, shared worldwide goal to hold "the increase in the global average temperature to well below 2°C above pre-industrial levels" and pursue efforts "to limit the temperature increase to 1.5° C above pre-industrial levels.", as well as the goal of carbon neutrality (net zero emissions) by the second half of this century (2050). Since then, efforts to achieve a carbon-neutral society have been accelerating on a global scale. The COP26 Glasgow Accords further solidified the 1.5° C target adopted under the Paris Agreement, elevating it to the standard for global climate change measures.

The Task Force on Climate-related Financial Disclosures (TCFD) was established in December 2015 by the Financial Stability Board, which members comprise central banks, financial regulatory authorities and finance ministries from major countries. The TCFD requests companies to use multiple climate scenarios to evaluate the climate-related risks and opportunities to their business and to assess and disclose the financial impact. Various international initiatives have also been launched, such as the Science Based Targets initiative (SBTi), which calls for corporate emissions reduction targets set to meet the 1.5 ℃ trajectory, and RE100, which calls for companies to source 100% of the electricity they use from renewable energy. Furthermore, CDP (*1), which runs the global disclosure system for investment that takes into account Environmental, Social and Governance (ESG) factors, requests that companies reduce GHG emissions by at least 2.1% year-on-year through voluntary efforts.

(*1) CDP:
An international not-for-profit organization providing the only global system for companies and cities to measure, disclose, manage, and share vital environmental information. CDP works with major institutional investors around the world to encourage companies to disclose their impact on the environment and natural resources and to adopt measures that mitigate the impact.

# Fujitsu Group Position

## GHG Emissions Reductions are a Critical Issue for the Fujitsu Group

The Fujitsu Group, as an entity with global operations, is fully aware that climate change is a serious worldwide issue that spans national and regional boundaries. For example, disasters triggered by climate change can disrupt procurement, logistics and energy supply networks, which in turn interrupts the process of supplying materials and energy to business sites. Furthermore, delays in responding to societal and legislative requirements to reduce GHG emissions may impact product manufacturing, service development, etc., potentially leading to the loss of business opportunities.

Since launching the Fujitsu Group Environmental Action Plan, we have treated the reduction of GHG emissions as a critical issue and strived to achieve the defined targets.

The majority of the GHG emissions generated by the Fujitsu Group derive from purchased electricity, rather than the combustion of oil or gas. In particular, the energy consumption for cloud computing, IoT, and network communications continues to rise. To curb energy consumption and reduce GHG emissions, the Fujitsu Group conducts regular checks at its factories, data centers, and offices.

# Approach under the Fujitsu Group Environmental Action Plan (Stage XI)

## Strengthen Efforts to Achieve Carbon Neutrality

In May 2017, the F ujitsu Group formulated the FUJITSU Climate and Energy Vision, its medium- to long-term environmental vision. In August of the same year, the company obtained SBT validation for 2°C-aligned GHG emissions reduction targets. The SBTi aims to significantly reduce greenhouse gases over the medium to long term by encouraging companies to set voluntary GHG emissions reduction targets based on scientific knowledge compiled by organizations such as the IPCC (*2). Given the accelerating global trend toward carbon neutrality, the Fujitsu Group reviewed its position and revised its target to reduce GHG emissions from business sites in FY2030 from 33% to 71.4% b elow FY2013 l evels. On April 15, 2021, this r evised figure was successfully validated as a 1.5° C-aligned target by SBTi. To accelerate the global community's journey to carbon neutrality, including within our supply chain, Fujitsu has pledged to expand our use of renewables to achieve net-zero GHG emissions (*3) for our own operations by FY2030, and across our entire value chain (Scope 1, 2, 3) b y FY2040.
In June 2023, our net-zero by FY2040 target obtained "Net-Zero Target validation" under the SBTi standard.

Working backwards from these GHG emissions reduction targets, we developed the Fujitsu Group Environmental Action Plan (Stage XI) to implement our environmental targets for FY2023-2025. To achieve carbon neutrality, we are aiming for at least 50% of the energy used by our businesses to be from renewable sources by FY2025, with a target of 100% b y FY2030. At the same time, we are working towards achieving net-zero GHG emissions across the entire value chain through measures such as identifying the environmental impacts of our suppliers and promoting emissions reductions, and by further reducing energy consumption of Fujitsu products.

In April 2021, in anticipation of Japan's future transition to renewable energy, the Fujitsu Group switched to 100% renewable energy at our largest facility, the Fujitsu Technology Park (formerly, the Kawasaki Plant), which is now our flagship model. This commitment continued in April 2022 when Fujitsu Australia signed the Group's largest ever Renewable Energy Power Purchase Agreement (PPA), securing approximately 47% of its power consumption for FY2023 from renewable sources. Beyond green power and renewable energy certificates, Fujitsu is investing in power sources with additional potential (such as PPAs), and leveraging advanced ICT technologies to accelerate the adoption of renewable energy across society.

(*2) Intergovernmental Panel on Climate Change (IPCC):
An organization established in 1988 by the United Nations Environment Programme (PDF) (UNEP) and the World Meteorological Organization (PDF) (WMO) with the aim of providing comprehensive assessments of human-induced climate change and its impacts, together with adaptation and amelioration measures from scientific, technological and socio-economic perspectives.

(*3) Net zero:
The elimination of greenhouse-gas emissions through emissions reductions of at least 90% by the target year and removing the remaining 10% or less through measures such as reforestation or Direct Air Capture (DAC) of $CO_2$ in the atmosphere.

## RELATED LINKS

Actions and targets related to climate change initiatives under the Fujitsu Group Environmental Action Plan (Stage XI)

- Reducing Greenhouse Gas (GHG) Emissions at Our Business Sites >
- Expand the Use of Renewable Energy >
- Reduction of $CO_2$ Emissions by Reducing Power Consumption When Using Products >
- Activities to Reduce $CO_2$ Emissions in the Upstream Portion of the Supply Chain >

# Reducing Greenhouse Gas (GHG) Emissions at Our Business Sites

## Our Approach

Considering the prevention of global warming an important issue, the Fujitsu Group formulated its medium- to long-term environmental vision, the Fujitsu Climate and Energy Vision, which aims to eliminate all $CO_2$ emissions from our business activities by 2050. However, we have decided to move the target year forward to 2030.

Among GHGs, our business sites (plants and o.fices, as well as datacenters) primarily emit $CO_2$ when energy (electricity, fuel oil, gas) is used, and perfluorocarbons (PFCs), hydrofluorocarbons (HFCs), sulfur hexafluoride (SF6) during the manufacturing processes and PFCs and HFCs from fluorocarbon leakage. We will set reduction targets in addition to complying with the relevant laws, and we are striving to reduce and control the volume of use and emission of these gases.

### Reducing $CO_2$ Emitted During Energy Consumption

About 99% of the Fujitsu Group's total GHG emissions arise from $CO_2$ emissions due to energy consumption. Therefore, we continuously promote the following energy-saving measures to reduce $CO_2$ emissions.

- Appropriate operation of equipment, improvement in management, and energy-saving measures focused on motive-power facilities (introduction of free cooling, inverters and energy saving equipment, fuel conversion, etc.)
- Increasing efficiency by reviewing the manufacturing process (innovations in production, development of green production technology)
- Maintaining appropriate room temperature for office air conditioning, saving electricity used in lighting and office automation equipment, and switching to LED lighting
- Measuring energy consumption for visualization and promoting use of the data so collected

## Reducing Emission of GHGs Other Than $CO_2$

As for GHGs other than $CO_2$, the Fujitsu Group mainly uses perfluorocarbons (PFCs), hydrofluorocarbons (HFCs) and sulfur hexafluoride (SF6) at the manufacturing divisions. We are taking continuous steps to switch to gases with lower global warming potential (GWP) and install equipment to remove harmful gases in our new and existing production lines. We also carry out inspections and maintenance to comply with relevant laws regarding PFCs and HFCs emissions resulting from fluorocarbon leaks from air conditioning equipment.

# FY2023 Performance

| Targets under the Fujitsu Group Environmental Action Plan (Stage XI) | FY2023 result |
|---|---|
| Reduce GHG emissions of our business sites to 50% or less of the baes year (FY2020) level. (FY2023 target: 30% reduction) (*1) | 58.4% reduction (*2) |

(*1) Target organizations: Business sites owned by Fujitsu and the Fujitsu Group. Includes major data centers.

(*2) Reduction rate based on market standards

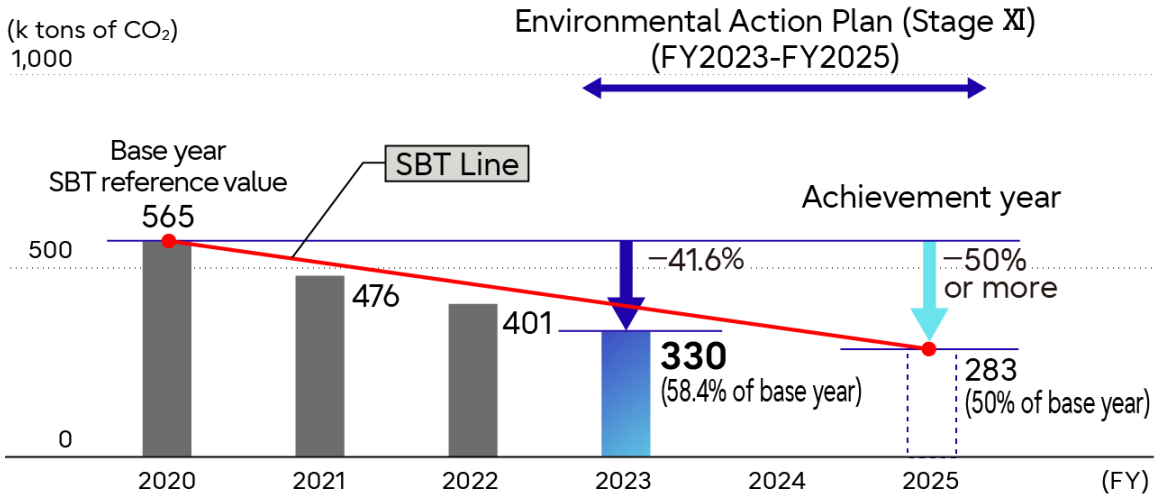
## Promoting Reduction in $CO_2$ Emitted During Energy Consumption

We continue to invest in energy-saving equipment (introduction and upgrade of BAT (*3) equipment, mainly for air conditioning and lighting) and ensure their appropriate operation at the facilities at all business sites. We are also streamlining our production processes, saving electricity used for air conditioning, lighting and automation in offices, making energy consumption visible, and leveraging measurement data.

For instance, as for lighting equipment investments, we have contributed to the reduction of $CO_2$ emissions by 388 t-$CO_2$ through continuous and efficient deployment of high-efficiency LED lightning.

We also improved facility operations (4,775 t - $CO_2$) by reviewing air conditioner operating conditions, such as switching to more efficient equipment, controlling the number of units, and suspending operation of pumps and air conditioning devices. We also use waste heat recovery to generate hot water for air conditioning (380 t-$CO_2$). Through our own efforts, we carried out measures to reduce emissions by roughly 11,000 t ons-$CO_2$ (2.7% in comparison to last fiscal year).

As a result of these initiatives, we reduced our GHG emissions according to market standards in keeping with SBT, which is an objective in the Environmental Action Plan (Stage XI), by 41.6%pt compared to the baseline year (17.7% reduction in comparison to our emissions in FY202 2).




Environmental Action Plan (Stage XI) GHG Emissions Reductions (*4) (*5)

(*3) BAT (Best Available Technologies): Usable state-of-the-art technologies to reduce GHGs.

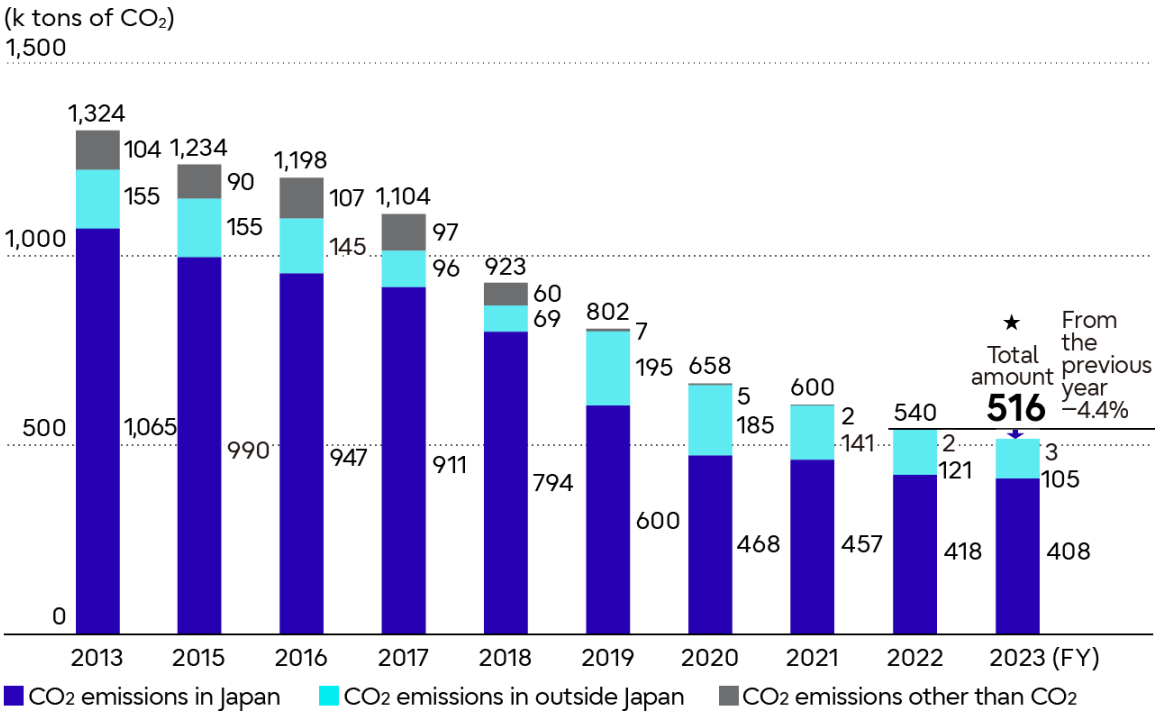
(*4) Environmental Action Plan (Stage XI) performance values for the reference year (FY2020) and FY2023 are the total values for business sites targeted by the Environmental Action Plan (Stage X).

(*5) $CO_2$ conversion factors of purchased electricity are market standards for both the reference year (FY2020) and FY2023 performance values.

# Total Emissions of 516 ktons-$CO_2$ ★ in FY2023

Our total GHG emissions in FY2023 were 516 kt ons-$CO_2$ (output level per sales amount: 13.7 tons-$CO_2$/100 million yen). They decreased by 5.8% in comparison to FY2022.

★ Indicators assured by third party




Trends in Total Greenhouse Gas Emissions (*6) (*7)

(*6) $CO_2$ emissions in Japan and overseas: The $CO_2$conversion factor for purchased electric power in performance reports has been calculated with a fixed value of: In Japan - 0.570 tons-$CO_2$/MWh from FY 2013 to FY 2015, 0.534 tons-$CO_2$/MWh for FY 2016, 0.518 t ons-$CO_2$/MWh for FY 2017, 0.497 t ons-$CO_2$/MWh for FY 2018, 0.461 t ons-$CO_2$/MWh for 2019, 0.444 tons-$CO_2$/MWh for FY 2020, 0.436 tons-$CO_2$/MWh for FY 2022, and 0.437 tons-$CO_2$ for FY 2023
Overseas – Same coefficients as those used in Japan from FY 2013 to FY 2018, and the latest IEA values (by country ) for the relevant FY from FY 2019 on wards

(*7) Emissions other than $CO_2$: These are converted to equivalent amounts of $CO_2$ using the global warming potential (GWP) for each gas.

- Case Studies ›
- Improve Power Usage Effectiveness (PUE) at Our Data Centers ›

# Expand the Use of Renewable Energy

## Our Approach

The popularization and widespread use of renewable energy is becoming increasingly necessary as a way of addressing global warming, securing stable energy supplies through the diversi.ication of our energy sources, and as an energy-based foundation for economic growth.

The Fujitsu Group has established an environmental vision aimed at realizing a decarbonized society. The main pillars for this vision are a dedication to energy conservation, and the active implementation of renewable energy. To achieve this vision, we have set quantitative targets under the Environmental Action Plan, and are actively promoting the introduction and installation of solar power generation equipment at our business sites, as well as the purchase, use, and expansion of green power (electric power generated through 100% renewable energy).

## FY2023 Performance

★ Indicators assured by third party

| Targets under the Fujitsu Group Environmental Action Plan (Stage XI) | FY2023 result |
|---|---|
| Expand the rate of renewable energy usage to more than 50 % in 2025 (*1) | 42.7% (*2) ★ |

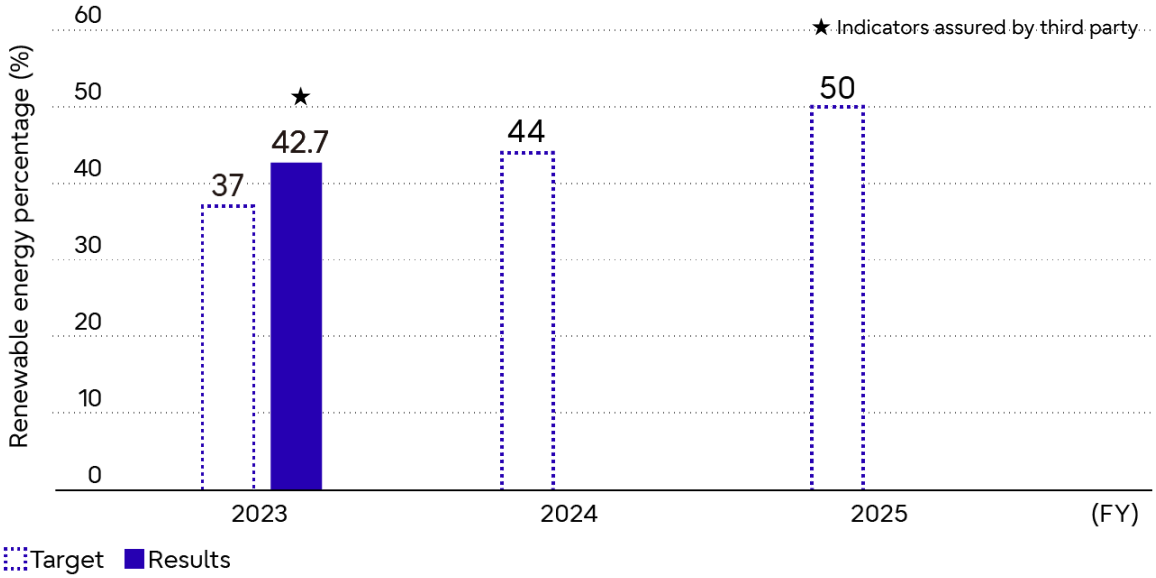
(*1) Target organizations: Business sites owned by Fujitsu and the Fujitsu Group. Includes major data centers

(*2) Calculation Standard: 5 -3 -4 -5
Refer to Environmental Performance Data Calculation Standards for details

## Environmental Action Plan (Stage XI) Initiatives

With the aim of achieving the Fujitsu Group's medium-term environmental goal of "using 100% renewable energy in FY 2030," we set a target under the Fujitsu Group Environmental Action Plan (Stage XI) to expand our use of renewable energy to more than 50% by 2025. In FY2023, through the purchase of green power and power generation through solar panels, our rate of renewable energy use grew to 42.7%.

We will continue to work toward the implementation of renewable energy in both our domestic and overseas business offices, in order to further our purchase and usage of renewable energy.




Environmental Action Plan (Stage XI) Renewable Energy Percentage

# Renewable Energy Procurement Principle

## Mandatory Requirement

- Renewable energy that can be reported through RE 100 activities
  - Power sources are Solar、Wind-power、Geothermal、Biogas、Small-hydro etc.
  - Environmental value (renewable attribute) can be pursued and verified

- No double counting of environmental value
  Ex.) Amortization of environmental value of renewable energy, to be executed through the system of public agency

## Recommended Requirement

- The electric power, in which power consumption to be combined with environmental value
  - The electric power, in which grid power and environmental value certification to be one set (The renewable energy to be generated in the same grid)
  - Power balancing to be managed. In time of emergence, minimum gap of power consumption and environmental value to be generated (within one year etc.)
- To select the renewable energy, by which we can contribute to local society
  - For example, by selecting the renewable energy in the same area as grid consumption, we can make “Local generation for local consumption” possible.
    Or to support the power generation company which makes effort to enlarge renewable energy power
- To procure the power from relatively new sites, in order to contribute the enlargement of renewable energy (Additionality)
  - To promote new project conjuncture, then to procure the power from it, we can contribute to increase the capacity of renewable energy of whole society
- To procure from the power generation site which was developed and constructed with the agreement of local society
  - To avoid making significant impact to the environment or society in which the power generation site is located

# Reduction of $CO_2$ Emissions by Reducing Power Consumption When Using Products

## Our Approach

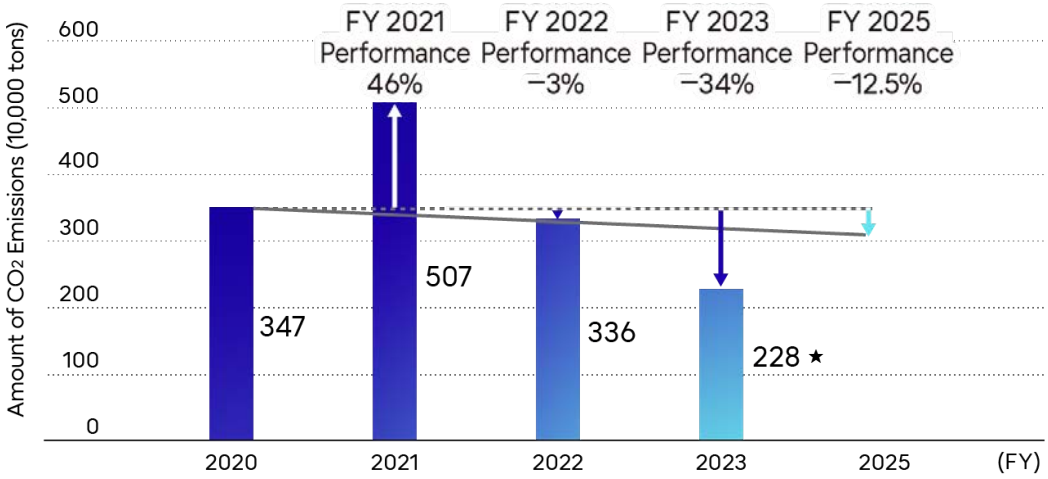
As ICT grows more and more common, we expect there to be an increase in energy demand in proportion to the higher performance and higher-density integration of ICT products. Various countries and regions are also expanding their energy-related regulations for ICT products, and energy e.ficiency is taking on increasing social importance as a factor in energy label conformance and green procurement requirements.

Here at the Fujitsu Group, we believe that we should work to improve the energy performance of our products during their use, in order to reduce GHG emissions. As such, we will actively implement energy-saving technologies and continue working to further improve the energy efficiency of products. Through these efforts, we will work to promote the development of products that contribute to reduced power consumption when in use.

## FY2023 Performance

| Targets under the Fujitsu Group Environmental Action Plan (Stage XI) | FY2023 result |
|---|---|
| Reduce $CO_2$ emissions due to product power consumption by 7.5% or more in comparison to FY2020. | Reduced by 34.2% |

★ Indicators assured by third party




Change in $CO_2$ Emissions Due to Product Power Consumption

Note: In line with the improvement in the accuracy of data collection, we have retroactively adjusted the figures.

## Fujitsu Group Environmental Action Plan (Stage XI) Initiatives

Aiming for net-zero emissions for the entire value chain, the Fujitsu Group Environmental Action Plan (Stage XI) has set a target of reducing emissions in FY 2025 by 12.5% or mor e in comparison to FY 2020. To achieve this target, each unit has been working to improve energy efficiency, etc. of products in the FY2023–FY2025 pipeline. Specifically, we are actively pushing the use of low-power components, aggregating functions to reduce terminal numbers, using high-efficiency power supplies, optimizing power-management controls, reducing the number of components, and implementing eco-friendly devices.

## Attained a 34.2% Reduction in $CO_2$ Emissions in Comparison to FY2020

In FY2023, as a result of applying and expanding energy-saving technologies in our servers, storage, PCs, and network devices, we were able to attain a 34.2% reduction in $CO_2$ emissions in comparison to FY2020.

## Working Toward Our Targets

In order to achieve net-zero GHS emissions across the entire value chain, each unit will work to further develop products with improved energy efficiency. We will also implement advanced energy-saving technologies and expand their application to our products, as part of our cross-Group policy to improve energy efficiency.

Looking toward the future, we aim to push the development of advanced eco-friendly devices, which will contribute to revolutionary improvements in energy efficiency, and aim for the products to be applied at an early stage.

# Initiatives in FY2023

## CELSIUS W5012-Combined speed, power, stability and energy savings

The CELSIUS W5012 P C is a fully equipped PC workstation with the latest technology. PC workstations are designed to perform processing-intensive tasks, and our CELSIUS series provides this functionality.
The CELSIUS W5012, which c ame to market in FY2023, features Windows 11 P ro, a 13th generation Intel® Core™ processor and DDR5 memory, and is suitable for CAD, architectural and structural analysis, healthcare, and 2D and 3D video production.
In terms of eco-friendliness, the use of low-power components has enabled a 44% reduction in power consumption during use compared with previous models. CELSIUS W5012 als o achieved an AAA rating in energy consumption efficiency (FY2022 standard) based on Japan's Energy Conservation Act.
With full deployment of the latest technologies with energy savings in the CELSIUS W5012, Fujitsu will continue to strive to realizing a society that is both environment- and people-friendly.

- Case Studies ›

# Activities to Reduce $CO_2$ Emissions in the Upstream Portion of the Supply Chain

## Our Approach

In addition to reducing our own emissions, the Fujitsu Group has also been requesting, as part of green procurement, that its suppliers engage in activities to reduce their own $CO_2$ emissions in order to help contain global warming. As a result, all of our primary suppliers have undertaken e.forts to reduce their $CO_2$ emissions.
Starting in FY2016, w e have also been expanding these efforts further upstream in the supply chain by encouraging our suppliers to include their own suppliers (secondary suppliers from the perspective of the Fujitsu Group) in these activities.
In parallel, we have also participated in the CDP Supply Chain program since FY2018. B ased on our international environmental research activities, we are taking a more in-depth look at the activities of our primary suppliers to reduce $CO_2$ emissions and conserve water resources, and considering the issues and our policies.
Moreover, as a new initiative, we are asking our main suppliers to establish a $CO_2$ reduction target based on the international standard of Science Based Targets (SBT). Starting in FY2022, we have also expanded the target suppliers for $CO_2$ emissions reduction to include those in the services industry in addition to the existing category of parts manufacturing as we strive to further reduce global warming.
The Group hosts seminars on setting reduction targets based on SBT. About 90% of target suppliers attend the seminar.
In addition, we also host webinars on how to set targets and share FAQ. We support our suppliers' $CO_2$ reduction efforts through the provision of a simple tool for suppliers to visualize $CO_2$ emissions (Scope 1 a nd 2) of their own company and determine the appropriateness of their SBT.

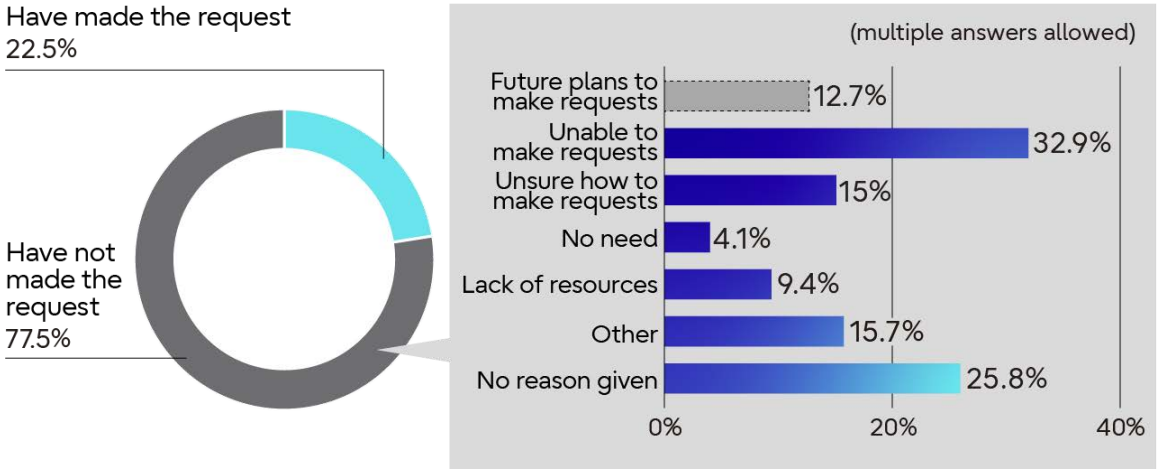
We expect that having the supply chain as a whole work toward reducing emissions can produce even greater reduction effects (synergies), while also expanding the network of these activities through the supply chain to cover an even wider area spreading beyond national boundaries. Through efforts such as these, the Fujitsu Group hopes to help create a carbon-free society for the future and a sustainable water environment.

# FY2023 Performance

| Targets Under the Fujitsu Group Environmental Action Plan (Stage XI) | FY2023 result |
|---|---|
| Reduction of $CO_2$ Emissions: Drive Activities to Reduce $CO_2$ Emissions in the Supply Chain | Requested that secondary suppliers (over 49,000 companies) engaged in activities to reduce emissions through primary suppliers of the Fujitsu Group (612 c ompanies) |

## Reduction of $CO_2$ Emissions: Requesting and Supporting the Expansion of Activities to Secondary Suppliers

The Fujitsu Group has requested that its primary suppliers, who account for the top 80% of the Group's procurement, to engage in activities to reduce their $CO_2$ emissions, and to expand these efforts to also include their own suppliers (the Fujitsu Group's secondary suppliers). We also conducted our own environmental survey to ascertain the status of activities by these suppliers. We then provided suppliers who responded to the survey with feedback in the form of a report that analyzed survey responses as a reference for their future activities, and we also requested that they further promote these activities and expand them to include their own suppliers.
As of the end of FY2023, 22.5% (126 s uppliers) responded that they had requested their own suppliers to engage in emissions reduction activities. Over 49,000 secondary suppliers have been asked to engage in emissions reduction activities, and this should substantially impact awareness.




Status of primary suppliers' request that secondary suppliers engage in activities to reduce their $CO_2$ emissions*

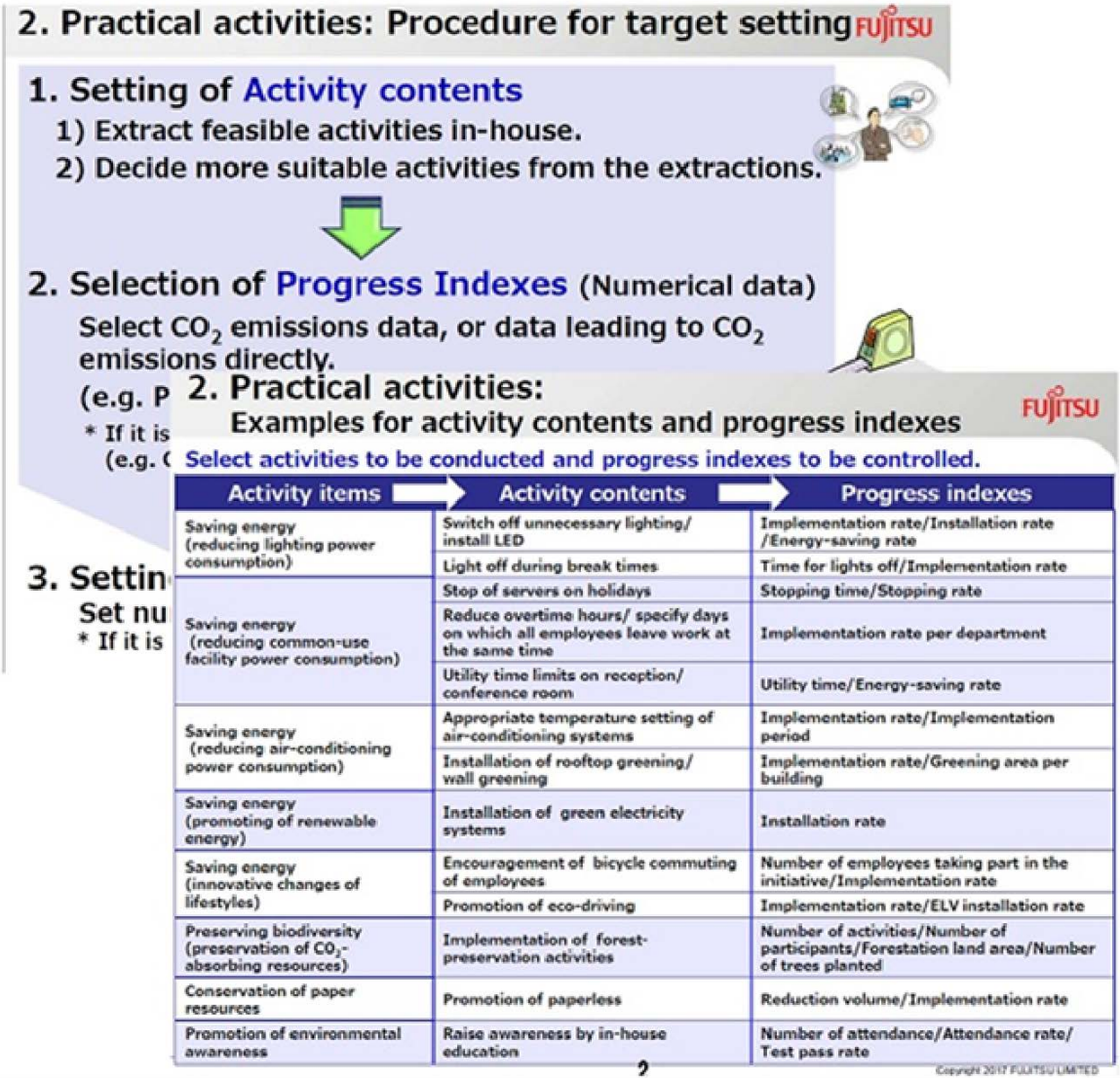
* Excludes suppliers who did not respond and suppliers without secondary suppliers.

## Offering Guidelines for Activities for Reducing $CO_2$ Emissions

The Fujitsu Group created original explanatory materials to facilitate the spread of activities for reducing $CO_2$ emissions throughout the entire supply chain, and since the end of November 2017, w e have made the materials available on the company website and we have provided them to suppliers. The purpose of these materials was not only to give suppliers a greater understanding of the importance of these activities taking place in the supply chain, but also to serve as something they could use to request and assist such activities amongst their own suppliers. To fulfill our responsibilities as a global enterprise, the Fujitsu Group will continue to think about what must be done to contain global warming and will continue to take action.

"Guideline for activities for reducing $CO_2$ emissions" can be downloaded from the following sites.

- Japan >
- Global >




Informational materials for business partners

# Resource Circulation

## External Trends

### Strengthening Global Resource Circulation

Goal 12 o f the Sustainable Development Goals (SDGs), adopted by the United Nations in September 2015, is 'R esponsible consumption and production'. The actions that organizations are urged to take in order to meet this goal include the e. ficient use of natural resources, the appropriate management of chemical substances and waste products throughout the entire product life cycle, and significant reductions in the volume of pollutants emitted into the air, water, and soil. The European Commission also announced its Sustainable Products Initiative (SPI), the cornerstone of its new Circular Economy Action Plan (CEAP), in March 2020. It launched a series of bills and policy packages central to achieving the objectives of the CEAP, including the Eco-Design for Sustainable Products Regulation (ESPR). The ESPR product scope not only expanded, but the Regulation also established performance requirements such as recyclability, durability, repairability, and use of recycled materials. With the increase in product sustainability requirements, the ESPR will also introduce a Digital Product Passport (DPP) to trace throughout the product life cycle, and Carbon Footprint to provide environmental impact assessment information. The requirement for more efficient use of resources is expected to increase worldwide. For example, in the U.S., more and more states are passing Right to Repair laws, while in Japan, the Ministry of Economy, Trade and Industry (METI) is working on building a Circular Economy Information Distribution Platform. Companies will need to accommodate these requirements going forward.

# The Problem of Plastic Waste

A report published by the Organization for Economic Cooperation and Development (OECD) in June 2022 predicts that the amount of plastic waste generated globally will triple by 2060 from its 2019 l evel of 353 Mt. Additionally, while the resumed session of the Fifth United Nations Environment Assembly (UNEA-5.2) held in February 2022 recognized the usefulness of plastics, it also noted that the problem of plastic pollution, in particular marine pollution, is global in scale. It therefore convened an intergovernmental negotiating committee to begin work during the second half of 2022 on developing an international legally binding instrument on plastic pollution, including in the marine environment, with the ambition of concluding the instrument by the end of 2024. In view of these developments, companies need to engage in plastic resource circulation throughout the product life cycle.

# The Fujitsu Group's Position

## Aiming for Resource Circulation

The Fujitsu Group has a long-standing commitment to the 3Rs of resource management: reduce, reuse, recycle. The push of the "Circular economy" is gaining momentum worldwide. In particular, the abovementioned CEAP adopted in Europe in March 2020 has prompted a wave of discussion around resource recycling, including such topics as the reuse of waste as a resource, improvement of product recyclability and the use of recycled materials. Our existing practices already incorporate recycled plastics in ICT products and use paper instead of plastic for packaging. Building on this foundation, we are now taking a step further by promoting measures such as reducing the number of parts in our products and making them smaller, thinner, and lighter. We are also focusing on the reuse of resources from used ICT products and waste generated at our business sites. In the past, reusing resources from used ICT products continues to be one of the targets of our Environmental Action Plan. We have achieved a reuse rate of over 90% for ICT products used in business and are committed to maintaining this high level and are now continuing our efforts as internal target. In light of the urgent need to address the problem of plastic waste, as outlined above, we will continue to implement initiatives that target packaging materials and other plastic waste. Although changes in our business structure have led to a reduction in overall waste generated, we remain dedicated to further reducing waste and strengthening our recycling and resource utilization efforts to further contribute to a more recycling oriented society.

In addition to company-wide measures such as resource-conserving products, we will look at circular economy business models tailored to the characteristics of individual products, and place greater emphasis on designing products tailored to these new business models.

# Responses to The Act on Promotion of Resource Circulation for Plastics

Given the growing environmental challenges posed by plastic waste, both in Japan and globally, there is a need for immediate measures to promote plastic resource recycling, including rationalizing their use, municipal recycling, and establishing systems to encourage voluntary collection and recycling by businesses.

Designated a “high-volume waste emitter” under the legislation, Fujitsu has established targets for reducing and recycling plastic waste and is implementing activities in line with those targets.

Target: Promotion of zero-emissions activities for plastic waste and greater use of returnable plastics
FY2023 waste plastics emissions: 1.8 thousand tons

## RELATED INFORMATION

Actions and targets related to resource circulation initiatives under the Fujitsu Group Environmental Action Plan (Stage XI)


- Saving and Reusing Resources in Products and Circular Economy Initiatives >
- Reducing the Amount of Water Used >
- Activities to Conserve Water Resources in the Upstream Portion of the Supply Chain >

# Saving and Reusing Resources in Products and Circular Economy Initiatives

## Saving Resources in Products and Circular Economy Initiatives

### Our Approach

As risks that threaten the sustainability of society and companies continue to rise, such as environmental destruction due to resource depletion and excessive mining, major fluctuations in resource costs around the world, and concerns about the supply of rare metals, the European Commission (EC) has established a new Circular Economy Action Plan (2.0) as a growth strategic pillar of the European Green Deal and is moving forward with measures to accelerate further implementation of resource e.ficiency into society. For example, the EC has proposed the Circular Electronics Initiative, as well as maintenance for the eco design directive, and is promoting a circular economy through the entire life cycle of products. This is a growing trend all over the world. We believe that from the perspective of recycling resources, it is important for us to make efficient use of the resources in the ICT products that we provide to customers. We have engaged in design that draws on the principles of reduce, reuse, and recycle, and have developed our products with technology that is effective in reducing the amount of resources we use. Given the growing importance of the circular economy worldwide in recent years, we will continue to promote the reduction of environmental impact through resource saving while shifting our focus to the realization of the circular economy.

# FY2023 Performance

| Targets under the Fujitsu Group Environmental Action Plan (Stage XI) | FY2023 result |
|---|---|
| Development of products and services that contribute to a circular economy business model | Each Product Business Division set its own goals. |

## We have established a new resource goal: "Develop products and services that contribute to a circular economy business model."

Under Stage X of Fujitsu Group Environmental Action Plan, we have been uniformly promoting resource saving and resource efficiency(*1) improvement for all products. The goal of Stage XI is to develop products and services that contribute to a circular economy business model. To achieve this goal, we will pursue a shift from a one-time purchase model to a service type business model or new business models.

(*1) Resource Efficiency is our own index calculated by dividing the product value by the environmental burden from resource usage and disposal of each material (resource) that makes up the product.

## Each Product Business Division set its own goals.

The Product Design and Development Divisions played a leading role in organizing briefings and workshops on the circular economy business, and the Product Business Divisions have set targets in accordance with the Fujitsu Group Environmental Action Plan (Stage XI).

## Looking Ahead

In FY2024, we will provide education for front-line employees (sales, consultants, etc.) to deepen their understanding of circular economy business. In addition, workshops will be held to train them to conduct business negotiations related to the circular economy.

# Examples of Initiatives in FY2023

## Development of a reuse program for ATM maintenance parts (Fujitsu Frontech)

When we replace our customers' ATMs, we take back old ATMs that would normally be scrapped and refurbish some of the parts to be used as maintenance parts. This reduces the number of newly manufactured maintenance parts, thereby limiting the use of new resources and helping to reduce waste.

ATM remanufactured maintenance parts (units)

- Introduction of Other Initiatives (Case Studies) ›

# Product Recycling

## Our Approach

The Fujitsu Group's recycling activities are based on the concept of Extended Producer Responsibility (EPR), which holds producers responsible for product design and manufacturing as well as disposal and recycling, and the concept of Individual Producer Responsibility (IPR), which holds a company responsible for its own products. Fujitsu is certified for area-wide disposal of industrial waste based on the Act to Promote Effective Utilization of Resources in Japan. In accordance with these concepts, Fujitsu Recycling Centers around Japan are entrusted to properly dispose of industrial waste, and one of Fujitsu's voluntary management indicators is "to reuse at least 90% of the resources in its ICT products for businesses."

## Changes in Resource Reuse Rates of End-of-life Business ICT Products

| Item | FY2021 | FY2022 | FY2023 |
|---|---|---|---|
| Resource reuse rate (%) | 92.9 | 93.6 | 94.1 |

- Introduction of Initiatives (Case Studies) >

# Reducing the Amount of Water Used

## Our Approach

The risk of a global water shortage is on the rise, due to such factors as climate change, the destruction of forests, and the economic growth and population boom in emerging and developing countries. Such a water shortage is a risk for companies as well, since it may very well a.fect the survival of their businesses. As such, it is important for us to recycle and reduce the amount of water we use.

Since the Fujitsu Group uses particularly large amounts of water in the manufacture of semiconductors and printed circuit boards, we believe it is necessary to reduce our water consumption in these areas especially. In addition to our general water conservation efforts, we have also worked to reuse and recirculate water, through methods such as pure water recycling and the reuse of rainwater. We are continuing our efforts to effectively use water resources in the Environmental Action Plan (Stage XI).

## FY2023 Performance

| Targets under the Fujitsu Group Environmental Action Plan (Stage XI) | FY2023 result |
|---|---|
| Adding policies to reduce water consumption and reducing water usage by at least 57 thousand $m^3$ by the end of FY2025. (*1) | Water consumption was reduced 59 thousand $m^3$ (target for FY2023: 38 thousand $m^3$) |

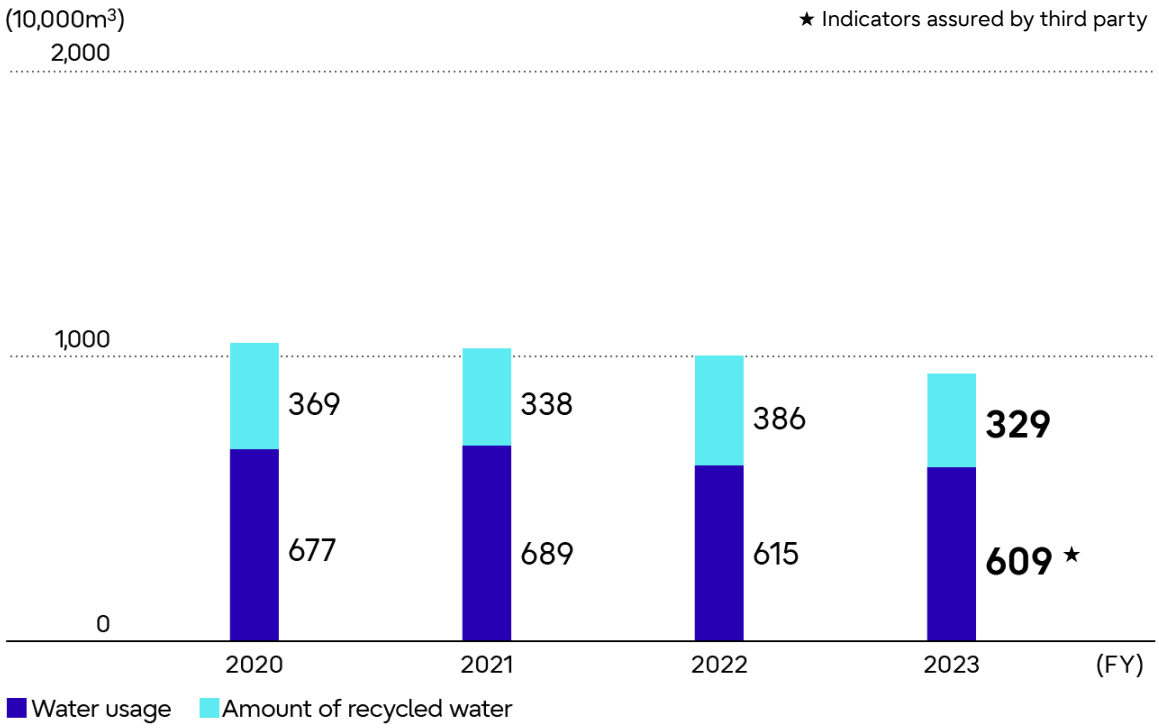
(*1) Target organizations: Japan; Fujitsu and Fujitsu Group offices (excluding data centers)
Overseas; Fujitsu and Fujitsu Group manufacturing sites

The policies we established in FY2023 to reduce water usage include reducing the amount of water used in coating and cleaning processes, reviewing our water supply and wastewater through actions such as optimizing the water supply for our scrubbers, and upgrading air conditioners from water-cooled units to air-cooled units. We implemented these policies at each business site, plant, etc., so that we could make more efficient use of our water resources.

As a result, in FY2023 we reduced our water usage by 59 thousand $m^3$, which is 104% of the 57 thousand $m^3$ target set in the Fujitsu Group Environmental Action Plan (Stage XI).

## Water Usage in FY2023 was 6.09 Million $m^3$ (a 1% Reduction Compared to the Previous Fiscal Year)

The total amount of water we used in FY 2023 was 6.09 million $m^3$ (output level per sales amount: 162 $m^3$/100 million yen), a reduction of 1% compared to FY 2022. Additionally, 3.29 million $m^3$ of that usage was recycled water, which was a decrease of 14.6% in comparison to FY 2022. Since the total amount of water we used declined slightly, recycled water comprised 54.1% of our total water usage, a deterioration of 8.7% over FY 2022.




Trends in Water Usage and Amounts of Recycled Water

# Activities to Conserve Water Resources in the Upstream Portion of the Supply Chain

## Our Approach

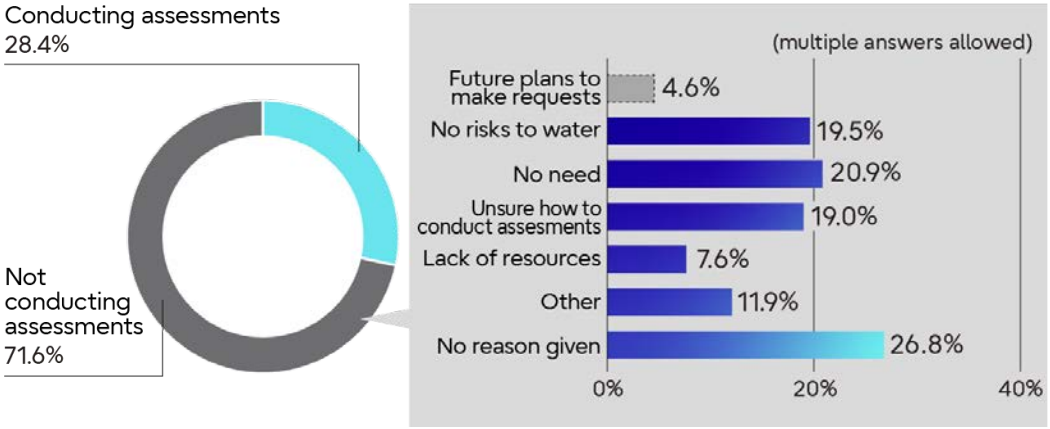
We have also situated the conservation of water resources as a priority issue which we need to ask our suppliers to address, as well as the reduction of $CO_2$ emissions.
We have participated in the CDP Supply Chain program since FY2018, in p arallel with the above-mentioned activities. Based on our international environmental research activities, we are taking a more in-depth look at the activities of our primary suppliers to reduce $CO_2$ emissions and conserve water resources, and considering the issues and our policies.
We expect that having the entire supply chain work toward reducing emissions can produce even greater reduction effects (synergies), while also expanding the network of these activities through the supply chain to cover an even wider area spreading beyond national boundaries. Through efforts such as these, the Fujitsu Group hopes to help create a sustainable water environment.

## FY2023 Performance

| Targets Under the Fujitsu Group Environmental Action Plan (Stage XI) | FY2023 result |
|---|---|
| Conservation of Water Resources: Request that Primary Suppliers Engage in Activities to Conserve Water | Requested that 612 o f the Fujitsu Group's primary suppliers engage in activities to conserve water |

# Conservation of Water Resources: Requesting that Primary Suppliers Work to Conserve Water Resources as a Key Theme They Should Address

Against the backdrop of worsening water resource problems and growing international concern, in addition to continuing our work to reduce $CO_2$ emissions as pursued under the Fujitsu Group Environmental Action Plan (Stage VIII) from FY2016 to FY2018, we situated the conservation of water resources as a priority issue which we need to ask our suppliers to address, starting in FY2019. We reviewed the questions we posed on our environmental survey forms so that we would be able to understand the status of our suppliers' activities and their actual circumstances, and identified the challenges we will face in expanding our activities in the future.



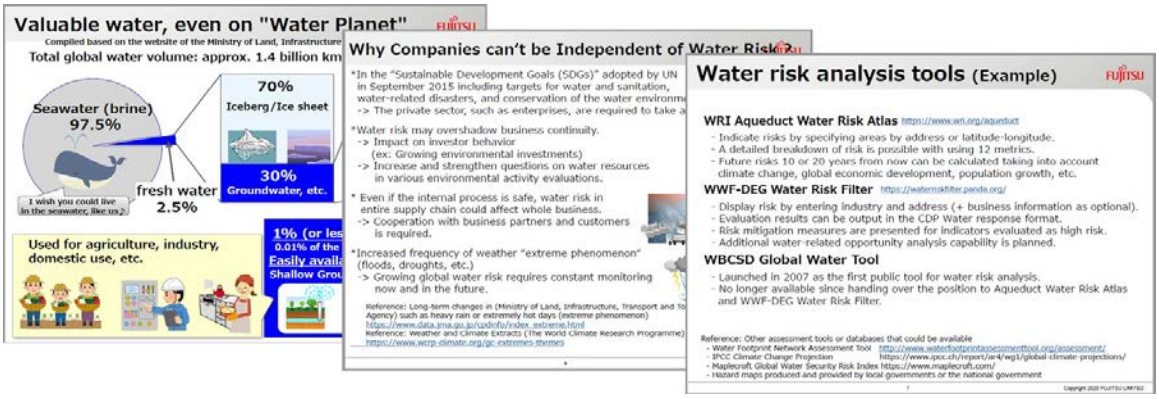

Status of water risk assessments conducted by suppliers

Since many companies are globally connected through their supply chains, water conservation is an issue that no company can afford to ignore. The first step in conserving water resources is to have an accurate understanding of inherent water risks. An environmental survey conducted by Fujitsu in FY2023 found that 28.4% of suppliers had conducted water risk assessments. As the case in FY2022, this indicates that suppliers have an ongoing awareness of water risk as an issue that needs to be addressed.

In order to have suppliers think about conservation of water resources as a more familiar issue, we are offering the "Water Risk Assessment for Companies" document, which compiles materials on topics such as the importance of risk assessments, and introduces publicly available assessment tools. In the future, we will request that even more suppliers conduct water risk assessments and request that they work to conserve water resources.

"Water Risk Assessment for Companies" can be downloaded from the following sites.

- Japan >
- Global >




Contents of "Water Risk Assessment for Companies"

# Living in Harmony with Nature (Conservation of Biodiversity)

## Management Approach

### Biodiversity loss poses an enormous global risk; an integrated response is vital to secure a carbon-neutral and nature-positive future

The Global Risks Report 2023 released by the World Economic Forum (WEF), ranks “Biodiversity loss and ecosystem collapse” as the fourth most severe, long-term risk globally, recognizing biodiversity loss alongside climate change as an urgent and critical issue. Viewing the delivery of a nature-positive world as essential to addressing this issue, the G7 Summit held in June 2021 agreed on a G7 2030 Nature Compact, which includes a commitment to “halt and reverse biodiversity loss by 2030”. Part 2 of the 15th Conference of the Parties to the UN Convention on Biological Diversity (CBD-COP15) held in December 2022 adopted the Kunming-Montreal Global Biodiversity Framework, which includes international targets for 2030. The framework establishes “23 Global Targets for 2030” aimed at the 2030 Mission “To take urgent action to halt and reverse biodiversity loss to put nature on a path to recovery for the benefit of people and planet” (excerpt). Business groups such as the World Business Council for Sustainable Development (WBCSD) and international environmental NGOs such as the World Wide Fund for Nature (WWF) have also announced a joint proposal with a target of achieving a nature-positive planet by 2030. Thus, it is now considered vital that we not only have carbon-neutral initiatives to counter climate change, but also integrated measures aimed at delivering nature-positive outcomes.

# To deliver nature-positive outcomes, we have established a vision and a mid-term goal in line with international targets

Committed to delivering nature-positive outcomes, in 2022 the Fujitsu Group formulated its vision for 2050, its 2030 Mid-term Target, and its 2025 Short-term Target (Environmental Action Plan Stage XI) in line with international targets (Kunming-Montreal Global Biodiversity Framework).

Vision for 2050: Create a world in harmony with nature, where "nature and biodiversity," which are fundamental to a sustainable society, are fully restored through digital technology.
2030 Mid-term Target: Reduce negative impacts on biodiversity by at least 25% (Base year : FY2020) in the area of company's corporate activities, including supply chain, and promote activities to increase positive impacts on it..
2025 Short-term Target: Reduce negative impacts on biodiversity by at least 12.5% (B ase year : FY2020) in the area of company's corporate activities, including supply chain, and promote activities to increase positive impacts on it.

We will continue to implement activities to reduce negative impacts and increase positive impacts on biodiversity.

# FY2023 Results

| Target Under Stage XI of the Fujitsu Group Environmental Action Plan | FY2023 result |
|---|---|
| Reduce negative impacts on biodiversity by at least 12.5% (B ase year : FY2020) in the area of company's corporate activities, including supply chain, and promote activities to increase positive impacts on it. | Negative impacts on biodiversity were reduced by 27.5% (B ase year: FY2020) in locations where Group and supply chain activities are located.<br>As one of Fujitsu Group activities to increase our positive impact on biodiversity, the Fujitsu Numazu Plant has been certified by the Ministry of the Environment as a Nationally Certified Sustainably Managed Natural Sites, contributing to the achievement of the 30 by 30 target. |

## Establishment of a calculation method that uses Ecological Footprint (EF) as the indicator for visualizing the impact of corporate activities on biodiversity

Of the Global Targets for 2030 established by the Kunming-Montreal Global Biodiversity Framework adopted at CBD-COP15, one o f the most relevant targets to the business sector is Target 15: " T ake legal, administrative or policy measures to encourage and enable business, and in particular to ensure that large and transnational companies and financial institutions:
(a) Regularly monitor, assess, and transparently disclose their risks, dependencies and impacts on biodiversity, including with requirements for all large as well as transnational companies and financial institutions along their operations, supply and value chains, and portfolios;
(b) Provide information needed to consumers to promote sustainable consumption patterns;
(c) Report on compliance with access and benefit-sharing regulations and measures, as applicable; in order to progressively reduce negative impacts on biodiversity, increase positive impacts, reduce biodiversity-related risks to business and financial institutions, and promote actions to ensure sustainable patterns of production."

At the 24th meeting of the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA-24), assessment indicators for each target were also discussed and Ecological Footprint was proposed as one of the candidate indicators for Target 15.
In response, the Fujitsu Group established a calculation method that uses the Ecological Footprint indicator to enable a comprehensive evaluation of the organization's activities. Selected to measure negative impacts on biodiversity, the method identified significant negative-impact factors in the Ecological Footprint assessment of the Group's activities. See below for details.

The Fujitsu Group selected Ecological Footprint as an evaluation indicator for the following reasons:

①Ecological Footprint is a Component indicator for Target 15 o f the Global Targets for 2030, proposed by SBSTTA-24, selected based on scientific findings.
②It enables comprehensive evaluation of all corporate activities.

| Goal/Milestone/Target[5] | Headline indicator | Summary of the assessment | Component indicator | Complementary indicators |
|---|---|---|---|---|
| Target 15. All businesses (public and private, large, medium and small) assess and report on their dependencies and impacts on biodiversity, from local to global, and progressively reduce negative impacts, by at least half and increase positive impacts, reducing biodiversity-related risks to businesses and moving towards the full sustainability of extraction and production practices, sourcing and supply chains, and use and disposal. | 15.0.1 [Number of companies assessing and reporting on their][Quantified volumes of ] Dependencies [and] impacts[, risks and opportunities] of businesses on biodiversity [and related human rights] | Relevance: Green<br>Nationally feasible: Yellow<br>Globally feasible with national disaggregation: Yellow<br>Readiness: Red<br>Summary: Relevant, not fully operational<br>Most Parties felt that an indicator on dependencies and impacts was relevant; however, such an indicator would need to be further defined and elaborated. Parties suggested a number of adjustments to the indicator and/or alternative indicators | Tbc (will align with the Task Force for Nature-related Financial Disclosures)<br>15.4.1 Ecological footprint<br>15.4.2 Recycling rate | t15.1. $CO_2$ emission per unit of value added (SDG indicator 9.4.1)<br>t15.2. Change in water-use efficiency over time (SDG indicator 6.4.1) |

CO-CHAIRS' SUMMARY AND PROPOSED LIST OF INDICATORS FOR CONSIDERATION IN DEVELOPING THE MONITORING FRAMEWORK FOR THE POST-2020 GLOBAL BIODIVERSITY FRAMEWORK
Source: CBD/SBSTTA/REC/24/2, March 27, 2022

In examining the calculation method, we used the Business & Biodiversity Interrelationship Map® (developed by Japan Business Initiative for Biodiversity (JBIB)) as the basis for extracting items that have biodiversity-related dependencies and impacts, and determined the corresponding amount of activity for each item, as set out in the following table:

Table: Nature-related dependencies and impacts and corresponding activity data in the Fujitsu Group

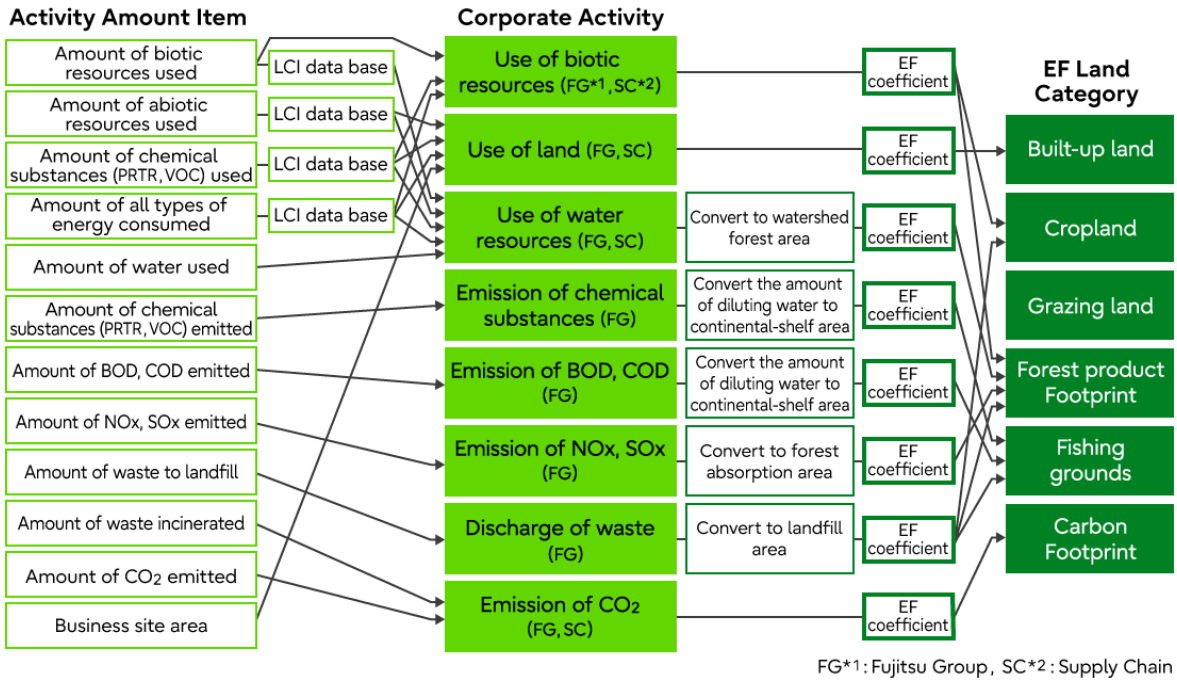
| Life Cycle | Nature-related Dependency | Nature-related Impact | Impact Driver | Activity Amount |
|---|---|---|---|---|
| Procurement | Consumption of raw materials | — | Resource use/replenishment | Amount of resources used (biotic, abiotic) |
| | — | Emissions released into the atmosphere | Climate change | Amount of $CO_2$ emitted |
| Design & Development / Manufacturing | Consumption of water resources | — | Resource use/replenishment | Amount of water used |
| | Consumption of chemical substances | — | Resource use/replenishment | Amount of PRTR, VOC handled |

| Life Cycle | Nature-related Dependency | Nature-related Impact | Impact Driver | Activity Amount |
|---|---|---|---|---|
| Design & Development / Manufacturing | Consumption of energy | — | Resource use/replenishment | Amount of electricity purchased |
| | | | | Amount of heavy oil Type A used |
| | | | | Amount of kerosene used |
| | | | | Amount of gasoline used |
| | | | | Amount of light oil used |
| | | | | Amount of natural gas used |
| | | | | Amount of city gas used |
| | | | | Amount of LPG used |
| | | | | Amount of LNG used |

| Life Cycle | Nature-related Dependency | Nature-related Impact | Impact Driver | Activity Amount |
|---|---|---|---|---|
| Design & Development / Manufacturing | | | | Amount of district heating and cooling supply used |
| | — | Emissions released into the atmosphere | Climate change | Amount of $CO_2$ emitted |
| | | | Pollution/pollution removal | Amount of NOx, SOx emitted |
| | | | | Amount of PRTR, VOC emitted |
| | | | | Amount of waste incinerated |
| | — | Discharge into water bodies | Pollution/pollution removal | Amount of BOD, COD emitted |
| | | | | Amount of PRTR emitted |
| | — | Discharge into the ground | Pollution/pollution removal | Amount of waste to landfill |

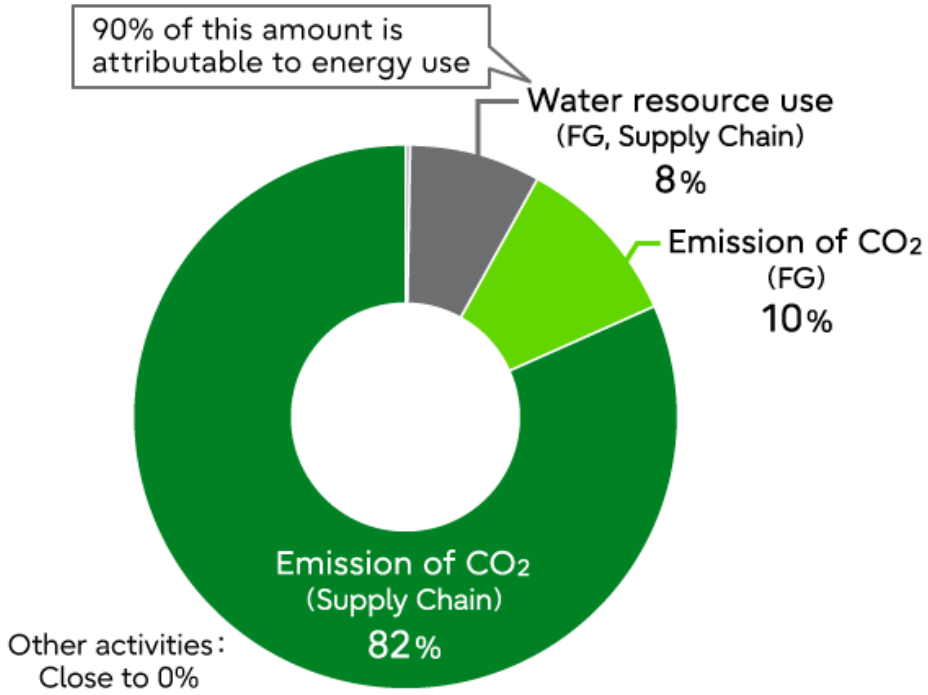
| Life Cycle | Nature-related Dependency | Nature-related Impact | Impact Driver | Activity Amount |
|---|---|---|---|---|
| Logistics & Sales | Consumption of energy | — | Resource use/replenishment | Amount of energy consumed |
| | — | Emissions released into the atmosphere | Climate change | Amount of $CO_2$ emitted |
| Use | — | Emissions released into the atmosphere | Climate change | Amount of $CO_2$ emitted |
| Other | — | Land used for business | Land/ freshwater/ocean use change | Business site area |

We then established an Ecological Footprint (EF) calculation method, using the above Activity Amount items as inputs. We used life cycle inventory (LCI) data to convert some Activity Amount items (e.g., Amount of resources used) to Corporate Activity items that correspond to EF coefficients. Where a Corporate Activity item (e.g., Use of water resources) cannot directly use an EF coefficient, this is reflected in the EF calculation by using additional conversion logic based on scientific knowledge to expand on the original EF method.




Integrated Assessment of Corporate Activities by Ecological Footprint (EF) in the Fujitsu Group

The results of our EF assessment of the Group's corporate activities show that Emission of $CO_2$ from the Group and its supply chain activities together account for 92% of the negative-impact factors. Water resource use accounts for the remaining 8%, but we found that this was mainly attributable to energy use. We established that Emission of $CO_2$ and energy use together account for 99% of the negative-impact factors. This means that activities aimed at reducing GHG emissions, such as energy conservation and the introduction of renewables, can also reduce our Ecological Footprint. In short, this clearly demonstrates that the Group's climate change measures are proving effective in reducing negative impacts on biodiversity.



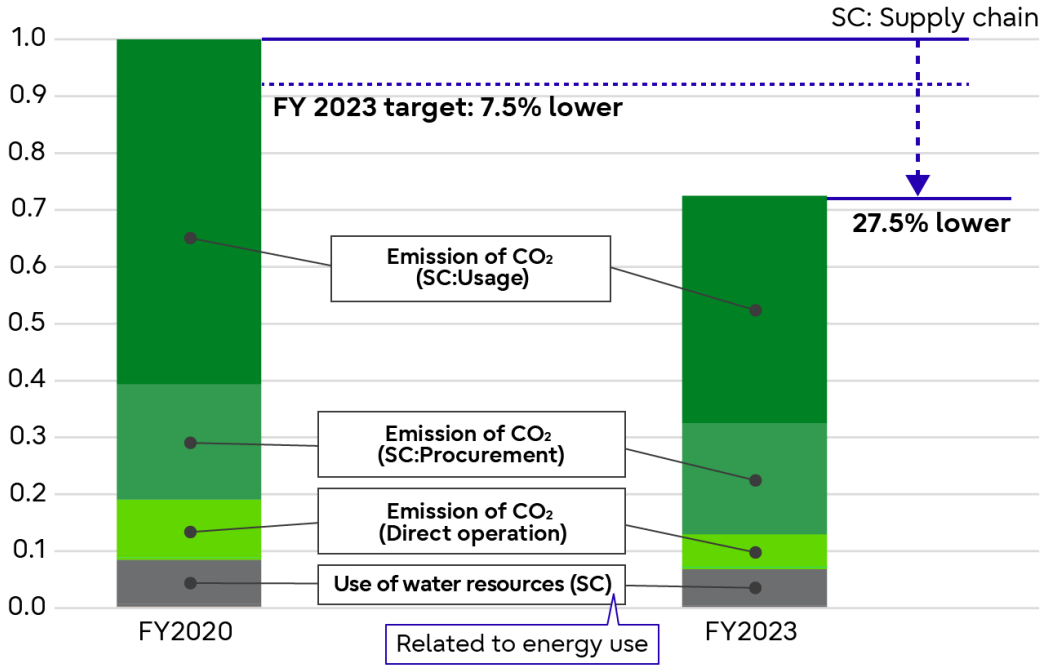

EF Calculation Results in Fujitsu Group (FY2020) - Percentage by Corporate Activity -

# FY2023 Initiatives in Detail

## 27.5% reduction (FY2020 baseline) in negative impacts on biodiversity in the supply chain and locations in which the Group operates

As a result of using the Ecological Footprint as an indicator for assessing impacts in the supply chain and locations in which the Group operates, we have reduced the negative impact on biodiversity by 27.5% against a baseline of FY2020, thus achieving our FY2023 target of a reduction of at least 7.5% against a baseline of FY2020 (*1). This is due to a reduction in $CO_2$ emissions, notably a significant reduction in $CO_2$ emissions downstream in the supply chain (Scope 3 Category 11 e missions).

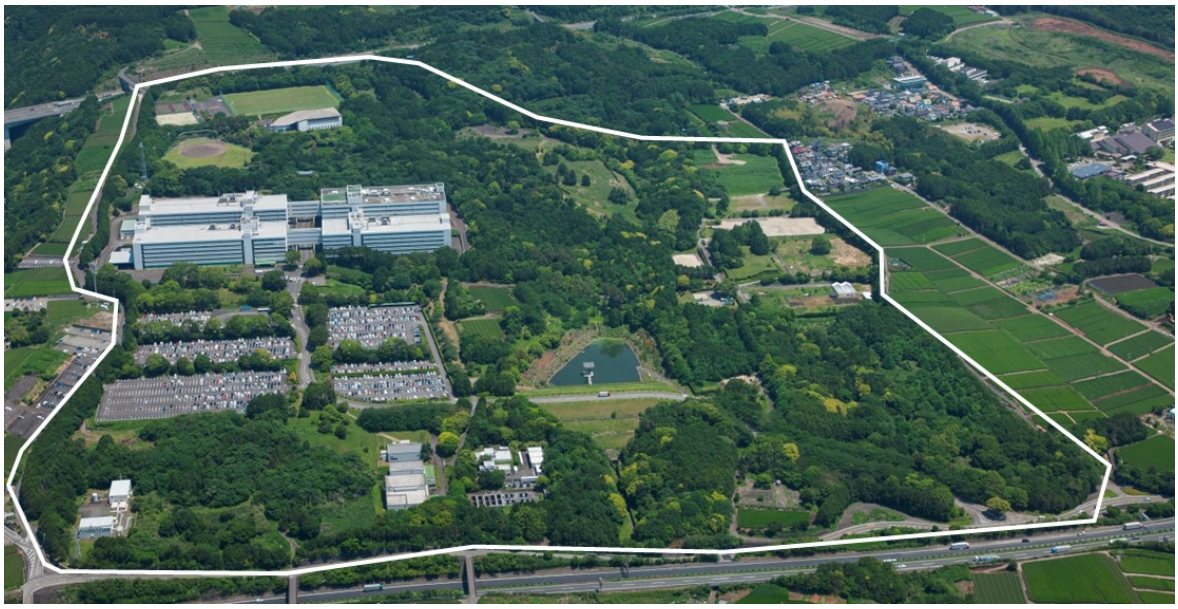
(*1) EF coefficients are fixed for comparison




Fujitsu Group EF Assessment (FY2023 Results, by Corporate Activity)

## One of our activities aimed at increasing our positive impact on biodiversity and contributing to the achievement of the 30by30 target involves the Fujitsu Numazu Plant, now certified by the Ministry of the Environment as a Nationally Certified Sustainably Managed Natural Sites

Just under 80% of the approximately 53 ha site occupied by the Fujitsu Numazu Plant is given over to green space to nurture the precious biodiversity of the region. The Numazu Plant manages the green space with the aim of preserving the natural environment, maintaining the landscape, and providing a place for employees and local residents to learn about the natural environment. In 2023, the Numazu Plant Green Conservation Area was certified by the Ministry of the Environment as a Nationally Certified Sustainably Managed Natural Sites.



Fujitsu Numazu Plant Green Conservation Area (certified by the Ministry of the Environment as a Nationally Certified Sustainably Managed Natural Sites)

Certification logo: Nationally Certified Sustainably Managed Natural Sites

# Global Warming Prevention

## GHG Emissions Report Based on GHG Protocol

★ Indicators assured by third party

| Indicator | | FY2020 | | FY2021 | | FY2022 | | FY2023 | |
|---|---|---|---|---|---|---|---|---|---|
| | | ktons-$CO_2$ | % (*7) | ktons-$CO_2$ | % (*7) | ktons-$CO_2$ | % (*7) | ktons-$CO_2$ | % (*7) |
| Upstream (Scope3) | Purchased goods and services | 1,192 | 21.4 | 1,304 | 18.2 | 1,361 | 25.0 | 1,086★ | 27.3 |
| | Capital goods | 15 | 0.3 | 13 | 0.2 | 11 | 0.2 | 7 | 0.2 |
| | Fuel and energy related activities not included in Scopes 1 and 2 | 99 | 1.8 | 94 | 1.3 | 85 | 1.6 | 82 | 2.1 |
| | Transportation and distribution (Upstream) | 53 | 0.9 | 71 | 1.0 | 44 | 0.8 | 32 | 0.8 |
| | Waste generated in operations | 4 | 0.1 | 4 | 0.1 | 4 | 0.1 | 3 | 0.1 |
| | Business travel | 27 | 0.5 | 23 | 0.3 | 48 | 0.9 | 71 | 1.8 |
| | Employee commuting | 5 | 0.1 | 6 | 0.1 | 5 | 0.1 | 5 | 0.1 |
| | Leased assets (Upstream) | 88 | 1.6 | 64 | 0.9 | 72 | 1.3 | 44 | 1.1 |
| Reporting company (Scope 1,2) | Direct emissions (Scope 1) | 75 | 1.3 | 70 | 1.0 | 65 | 1.2 | 64★ | 1.6 |
| | Indirect emissions from energy sources (Scope 2) | 583 (*3)<br>540 (*4) | − 9.7 | 530 (*3)<br>428 (*4) | − 6.0 | 476 (*3)<br>341 (*4) | − 6.3 | 451★(*3)<br>268★(*4) | − 6.7 |
| Downstream (Scope3) | Transportation and distribution (Downstream) | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| | Processing of sold products | 12 | 0.2 | 16 | 0.2 | 16 | 0.3 | 12 | 0.3 |
| | Use of sold products | 3,470(*6) | 62.2 | 5,073(*6) | 70.7 | 3,358(*6) | 61.7 | 2,283★ | 57.4 |

| Indicator | | FY2020 | | FY2021 | | FY2022 | | FY2023 | |
|---|---|---|---|---|---|---|---|---|---|
| | | ktons-$CO_2$ | % (*7) | ktons-$CO_2$ | % (*7) | ktons-$CO_2$ | % (*7) | ktons-$CO_2$ | % (*7) |
| Downstream (Scope3) | End-of-life treatment of sold products | 1(*6) | 0.0 | 8(*6) | 0.1 | 6(*6) | 0.1 | 4★ | 0.1 |
| | Leased assets (Downstream) | N/A(*5) | - | N/A | - | N/A | - | N/A | - |
| | Franchises | N/A | - | N/A | - | N/A | - | N/A | - |
| | Investment | N/A | - | N/A | - | 27 | 0.5 | 17 | 0.4 |
| Scope3 total | | 4,966 | 89.0 | 6,676 | 93.1 | 5,037 | 92.5 | 3,646 | 91.7 |

(*3) Location-based
(*4) Market-based
(*5) N/A : Not Applicable
(*6) In line with the improvement in the accuracy of data collection, we have retroactively adjusted the figures.
(*7) The percentage of total GHG emissions (Scope 1 + Scope 2[Market-based] + Scope 3) when Scope 2 emissions are calculated using the market-based method.

# Material Balance

## Environmental impact of business activities

### INPUT

★ Indicators assured by third party

| Stage | | Unit | FY2020 | FY 2021 | FY 2022 | FY 2023 |
|---|---|---|---|---|---|---|
| Design / Procurement / Manufacturing / Development | Raw Materials | | | | | |
| | Metal | ktons | 11(*3) | 13(*3) | 11 | 8 |
| | Plastic | ktons | 4 (*5) | 5 | 3 | 3 |
| | Others | ktons | 8 (*5) | 8(*3) | 6(*3) | 5 |
| | Chemical Substances (*1) | | | | | |
| | VOC | ktons | 0.3 | 0.3 | 0.3 | 0.2 |
| | PRTR | ktons | 9.8 | 9.5 | 7.9 | 6.8 |
| | Water | | | | | |
| | Water usage | M m³ | 6.77 | 6.89 | 6.15 | 6.09★ |
| | Energy (*2) | | | | | |
| | Total | TJ | 5,879 | 5,572 | 5,092 | 4,877★ |
| | Purchased electricity | TJ | 4,463 | 4,196 | 3,823 | 3,634 |
| | Heavy oil, kerosene, etc. | TJ | 109 | 99 | 93 | 81 |
| | LPG、LNG | TJ | 113 | 107 | 105 | 102 |
| | Natural gas, city gas | TJ | 1,123 | 1,112 | 1,018 | 1,008 |
| | District heating and cooling | TJ | 71 | 58 | 53 | 53 |
| Distribution/Sales | Energy | | | | | |
| | Fuel (light oil, gasoline, etc.) | PJ | 0.77 | 1.03 | 0.63 | 0.47 |
| Usage | Energy | | | | | |
| | Electricity | GWh（PJ）(*6) | 7,818(*3)（28.15） | 11,507(*3)（41.42） | 9,685(*3)（34.87） | 6,153（22.15） |
| Collection/Reuse/ Recycling | Resources recycling rate | % | 91.6 | 92.9 | 93.6 | 94.1 |
| | Amount processed | tons | 2,991 | 2,393 | 1,996 | 1,986 |

# OUTPUT

★ Indicators assured by third party

| Stage | | Unit | FY2020 | FY 2021 | FY 2022 | FY 2023 |
|---|---|---|---|---|---|---|
| Design / Procurement / Manufacturing / Development | Raw Materials | | | | | |
| | $CO_2$emissions | ktons-$CO_2$ | 293(*3) | 298(*3) | 190(*3) | 120 |
| | Chemical Substances (*1) | | | | | |
| | VOC | tons | 135 | 157 | 161 | 135★ |
| | PRTR | tons | 6 | 6 | 5 | 9★ |
| | Atmospheric Release | | | | | |
| | Total GHG emissions | ktons-$CO_2$ | 658 | 600 | 540 | 516★ |
| | $CO_2$ (*4) | ktons-$CO_2$ | 653 | 598 | 538 | 513★ |
| | GHG other than $CO_2$ (PFCs, HFCs, SF6, NF3, others) | ktons-$CO_2$ | 5 | 2 | 2 | 3★ |
| | NOx | tons | 26 | 10 | 33 | 25 |
| | SOx | tons | 1 | 0.3 | 0.3 | 0.1 |
| | Water Discharge | | | | | |
| | Total | Million m³ | 6.48 | 6.68 | 5.13 | 5.00 |
| | BOD | tons | 303 | 301 | 219 | 137 |
| | COD | tons | 9 | 15 | 12 | 5 |
| | Waste | | | | | |
| | Amount of Waste Generated | ktons | 11.0 | 12.5 | 11.6 | 9.6★ |
| | Thermal recycling volume | ktons | 1.5(*3) | 1.8(*3) | 1.7 | 1.9★ |
| | Material recycling volume | ktons | 9.0(*3) | 10.0(*3) | 9.4 | 7.3★ |
| | Disposal volume | ktons | 0.5 | 0.7 | 0.5 | 0.4★ |
| Distribution/Sales | Atmospheric Release | | | | | |
| | $CO_2$ | ktons-$CO_2$ | 53 | 71 | 44 | 32 |
| Usage | Atmospheric Release | | | | | |
| | $CO_2$ | ktons-$CO_2$ | 3,470(*3) | 5,073(*3) | 3,358(*3) | 2,283★ |

(*1) Substances that qualify as both a PRTR targeted chemical and a VOC are included under "VOCs" only.
(*2) We used the calorific value conversion factor of 9.97 MJ/kWh specified by the Act on the Rational Use of Energy (Energy Conservation Act) to disclose the value of electricity consumption converted to primary energy, but the method has been changed to use 3.6 MJ/kWh from this fiscal year.
(*3) In line with the improvement in the accuracy of data collection, we have retroactively adjusted these figures.
(*4) Location-based
(*5) Figures have been revised due to changes in business areas.

# Environmental Performance Data Calculation Standards

Applicable Period: April 1, 2023 – March 31, 2024

## Fujitsu Group Environmental Action Plan (Stage11)

Boundary: For details, refer to Fujitsu Group Environmental Action Plan

| Target Item | Indicator | Unit | Calculation Method |
|---|---|---|---|
| Climate Change | | | |
| <Scope1, 2><br>Reduce GHG emissions at business sites by half of the base year by the end of FY2025 (Base year: FY2020) | GHG emissions | Tons -$CO_2$ | • Amount of $CO_2$ emissions:<br>1. Fuel, gas and heat supplied Σ [(fuel oil, gas annual usage) x $CO_2$ conversion factor for each type of energy*]<br>*$CO_2$ conversion factor: Conversion factor for power, based on the Act on Promotion of Global Warming Countermeasures<br>2. Electricity<br>Annual electricity consumption x $CO_2$ conversion factor (for location based and market-based calculations)<br>• Location-based:<br>• Japan: Usage of 0.437 tons-$CO_2$ /MWh in FY 2022 (Source: Adjusted emission factors published on February 6, 2024 from the Electric Power Council for a Low Carbon Society)<br>• Overseas: Latest IEA value (IEA Emissions Factors 2023)<br>• Market-based:<br>• Japan: FY 2022 emission factors for each power producer are used (adjusted emission factors) (Source: GHG Emissions Accounting, Reporting, and Disclosure System List of Emission Factors by Power Producer) |

| Target Item | Indicator | Unit | Calculation Method |
|---|---|---|---|
| <Scope1, 2><br>Reduce GHG emissions at business sites by half of the base year by the end of FY2025 (Base year: FY2020) | GHG emissions | Tons -$CO_2$ | • Overseas: Value of the power company or the latest IEA value (IEA Emissions Factors 2023) |
| | | | • Greenhouse gas emissions other than energy-derived $CO_2$:<br>Annual emissions of greenhouse gases other than energy-derived $CO_2$ (Nonenergy source $CO_2$, $CH_4$, $N_2O$, HFCs, PFCs, $SF_6$, $NF_3$)<br>Σ[Annual emissions for each type of gas*1 x Global warming potential for each gas*2 ]<br>*1 Based on the calculation method used by the appliances and electronics industries: Amount of each gas used (or purchased) x Reactant consumption rate x Removal efficiency, etc.<br>*2 Global Warming Potential (GWP): IPCC (Intergovernmental Panel on Climate Change) Fifth Assessment Report 2014 |
| | Rate of reduction of GHG due to voluntary efforts | % | (Total amount of GHG reductions due to voluntary efforts / total amount of GHG emissions in the previous fiscal year) × 100 |
| <Scope1.2><br>Increase use ratio of renewable energy to 50% or more by 2025 | Ratio of renewable energy use | % | Ratio of the total amount of electricity generated by the company and purchased from outside using renewable energy (Solar, wind, hydro, biomass, geothermal, etc.) used in the fiscal year to the amount of electricity used in the fiscal year |
| <Scope3><br>Reduce $CO_2$ emissions from power consumption during product use by 12.5% or more. | Rate of reduction in $CO_2$ emissions when products are used | % | Rate of reduction in GHG emissions based on FY 2013 emissions, as calculated under Scope 3: Use of products sold downstream |
| Resource Circulation | | | |
| Reduce water consumption by 57 thousand kiloliters or more by implementing water resource conservation measures. | Amount of water usage reduction | $m^3$ | Take the accumulated impact (actual or estimated) of water use reduction measures implemented at each business site, and calculate the amount of reduction for the relevant fiscal year |

# GHG Emissions Amount Report based on GHG Protocol

| Indicator | | Unit | Calculation Method |
|---|---|---|---|
| Upstream (Scope 3) | Purchased goods and services | Tons -$CO_2$ | Components purchased during the fiscal year x Emissions per unit of purchase<br>(Source: Embodied Energy and Emissions Intensity Data (3EID) published by the National Institute for Environmental Studies Center for Global Environmental Research)<br>The procurement volume is for the Fujitsu Group's centralized purchasing and does not include voluntary procurement by each Group company. |
| | Capital goods | Tons -$CO_2$ | Total amount of acceptance inspection of construction objects in the fiscal year × emission intensity<br>(Source: Database for calculating an organization's greenhouse gas emissions through its supply chain ver. 3.4 published by the Ministry of the Environment and the Ministry of Economy, Trade and Industry) |
| | Fuel-and-energy related activities (not included in Scope 1 or 2) | Tons -$CO_2$ | Annual amounts of fuel oil and gas, electricity and heat purchased (consumed) mainly at business sites owned by Fujitsu x Emissions per unit<br>(Source: Database for calculating an organization's greenhouse gas emissions through its supply chain ver. 3.4 published by the Ministry of the Environment and the Ministry of Economy, Trade and Industry, Based on the Japanese emissions intensity database, IDEA v2.3 (For calculating greenhouse gas emissions in the supply chain) |
| | Transportation and distribution (upstream) | Tons -$CO_2$ | Transportation of goods within Japan: $CO_2$ emissions related to the transportation of goods within Japan by the Fujitsu Group<br>* $CO_2$ emissions related to domestic transportation by the Fujitsu Group, based on the Act on the Rational Use of Energy as a source<br>The fuel economy method (for some vehicles) or the improved ton-kilometer method (vehicle, rail, air) |
| | | Tons -$CO_2$ | International transport/overseas local transport: transportation ton-kilometer x Emission per unit<br>(Source: GHG protocol emissions coefficient database) |

| Indicator | | Unit | Calculation Method |
|---|---|---|---|
| Upstream (Scope 3) | Waste generated in operations | Tons -$CO_2$ | Annual amounts of waste (discharged mainly by business sites owned by Fujitsu) processed or recycled, by type and processing method x Emissions per unit of annual amount of waste processed or recycled<br>(Source: Database for calculating an organization's greenhouse gas emissions through its supply chain ver. 3.4 published by the Ministry of the Environment and the Ministry of Economy, Trade and Industry, Based on the Japanese emissions intensity database, IDEA v2.3 (For calculating greenhouse gas emissions in the supply chain) |
| | Business travel | Tons -$CO_2$ | (By means of transport) Σ(Transportation expense payment x Emissions per unit)<br>(Source: Basic Guidelines for Calculating Greenhouse Gas Emissions Via Supply Chains Ver. 2.3 and Emissions per Unit Database Ver. 3.1 published by the Ministry of the Environment and the Ministry of Economy, Trade and Industry) |
| | Employee commuting | Tons -$CO_2$ | For portions of commute by public transportation: (By means of transport) Σ(Transportation expense payment x Emissions per unit)<br>(Source: Same as above)<br>For portions of commute by private automobile: Σ (Transported persons-kilometer x Emissions per unit)<br>(Source: Same as above)<br>Transported persons-kilometer: Calculated from transportation expense payment, price of gasoline, and fuel efficiency |
| | Leased assets (Upstream) | Tons -$CO_2$ | Annual amounts of fuel oil, gas, electricity, and heat consumed mainly at leased business sites x Emissions per unit of fuel oil, gas, electricity, and heat consumed<br>(Sources – Japan: Act on Promotion of Global Warning Countermeasures – GHG Emissions Accounting, Reporting, and Disclosure System; Overseas: IEA $CO_2$ Emissions from Fuel Combustion Highlights 2023) |
| Reporting company (Scope 1,2) | Direct emissions | Tons -$CO_2$ | Amount of $CO_2$ emissions from the consumption of fuel oil and gas (burning of fuel) and GHG emissions other than $CO_2$, mainly at business sites owned by Fujitsu<br>* For the calculation method, see "Reduce GHG emissions at business sites by half of the base year by the end of FY2025 (Base year: FY2020)" in the Environmental Action Plan (Stage 11) |
| | Indirect emissions from energy sources | Tons -$CO_2$ | $CO_2$ emissions from the consumption (purchase) of electricity and heat mainly at business sites owned by Fujitsu<br>* For the calculation method, see "Reduce GHG emissions at business sites by half of the base year by the end of FY2025 (Base year: FY2020)" in the Environmental Action Plan (Stage 11) |

| Indicator | | Unit | Calculation Method |
|---|---|---|---|
| Downstream (Scope 3) | Processing of sold products | Tons -$CO_2$ | Intermediate product sales volume[*1] x Emissions per unit of processing volume[*2]<br>*1 Intermediate product sales volume: Fujitsu's device solution sales<br>*2 Emissions per unit of processing volume: Calculated from Fujitsu's FY 2015 assembly plant data |
| | Use of sold products | Tons -$CO_2$ | Electricity consumption during product use[*3] x Emissions per unit electricity[*4]<br><br>*3 Electricity consumption during product use: Calculated as power consumption per unit of each major product shipped in the fiscal year[*1] during the estimated time of use x Units shipped for the subject fiscal year. Electricity usage for the anticipated usage time per product unit is calculated as electricity consumed (kW) x Time used (h / Days) x Number of days used / Year x Number of years used. Time used (h), number of days used per year, and number of years used are set according to Fujitsu's internal scenarios<br>*4 Emissions intensity:<br>• Japan: Usage of 0.437 tons-$CO_2$ /MWh in FY 2022 (Source: Emission factors published by the Electric Power Council for a Low Carbon Society)<br>• Overseas: Latest IEA value (IEA Emissions Factors 2023) |
| Downstream (Scope 3) | End-of-life treatment of sold products | Tons -$CO_2$ | Σ (Weight of major products sold during the fiscal year[*1] by type (t) x Percentage of waste by type and treatment method (%)[*5] x Emissions intensity by type and treatment method (t$CO_2$ e/t))<br>(Source: Database for calculating an organization's greenhouse gas emissions through its supply chain ver. 3.3 published by the Ministry of the Environment and the Ministry of Economy, Trade and Industry. The emission intensity includes the transportation stage of waste.)<br>*5 The percentage by type of waste and disposal method is calculated based on the waste disposal results of our company Recycling Center in the previous fiscal year for products sold, and based on the waste disposal results of the PC3R Promotion Association for the previous fiscal year for other products collected. |

# Response to Environmental Risks: Environmental Liabilities

| Indicator | Unit | Calculation Method |
|---|---|---|
| Cost of environmental liabilities | Yen | 1. Asset retirement obligation (Only asbestos removal cost related to facility disposal)<br>2. Cost for soil contamination countermeasures<br>3. Disposal processing cost for waste with high concentration of PCB (polychlorinated biphenyl) |

# Response to Environmental Risks: Preventing Soil and Groundwater Pollution

| Indicator | Unit | Calculation Method |
|---|---|---|
| Measured value of groundwater pollution | mg/L | The highest value in the fiscal year for substances detected at levels exceeding regulated levels set in the Soil Contamination Countermeasures Act, etc., at monitoring wells at the boundaries of sites where past business activities have resulted in soil contamination |

# Material Balance: Environmental Load in Our Operating Activities

Boundary: Fujitsu and the Fujitsu Group (For details, refer to List of Companies Covered by the Report on Environmental Activities)

| Indicator | | | Unit | Calculation Method |
|---|---|---|---|---|
| INPUT | | | | |
| Design/ Procurement/ Manufacturing/ Development | Raw Materials | | Tons | Material inputs to our major products[*1] shipped in the fiscal year (raw materials per unit for each product x the number of units shipped in the fiscal year) |
| | Chemical Substances | Volume of substances subject to VOC emissions restrictions | Tons | Of the 20 VOCs (Volatile Organic Compounds) specified in the environmental voluntary action plans of the four electrical and electronic industry associations[*2], total amounts handled are provided for those substances handled in quantities exceeding 100 kg annually per substance at individual business sites, including overseas sites Substances subject to VOC emissions controls that are also covered by the PRTR law are included in the section on substances subject to VOC emissions controls |
| | | Volume of PRTR targeted substances | Tons | Of the substances covered by the PRTR law (Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environmental and Promotion of Improvements to the Management Thereof), totals are provided for those substances handled in quantities exceeding 100 kg annually per substance per business site, including overseas sites |
| | Amount of water used | | $m^3$ | Annual use of clean water, industrial water and groundwater (not including groundwater used for melting snow or extracted for purification.) |
| | Amount of Recycled water | | $m^3$ | Annual amount of water used for manufacturing and other purposes once, then recovered, processed, and used again for manufacturing and other processes. |

| Indicator | | | Unit | Calculation Method |
|---|---|---|---|---|
| Design/ Procurement/ Manufacturing/ Development | Energy consumption (calorie basis) | | TJ | Σ["Purchased electricity" to "District heating and cooling" below]<br>* The following "heat conversion facotor(calorific value)": According to the "Act on the Rational Use of Energy and the Conversion to Non-fossil Energy Sources, etc." For electricity, 3.6 MJ/kWh is used, and for city gas, the value for each supplier or 44.8 GJ/Nkm$^3$ is used. |
| | | Purchased electricity | TJ | Annual electricity purchases x 3.6 MJ/kWh* |
| | | Bunker A, fuel oil,light oil, gasoline | TJ | Annual fuel oil usage (or purchases) x heat conversion factor (calorific value)* |
| | | Natural gas | TJ | Annual natural gas usage (or purchases) x heat conversion factor (calorific value)*<br>(Natural gas data for FY2023 is converted based on SATP.) |
| | | Town gas | TJ | Annual town gas usage (or purchases) x heat conversion factor (calorific value)* |
| | | LPG | TJ | Annual LPG usage (or purchases) x heat conversion factor (calorific value)* |
| | | LNG | TJ | Annual LNG usage (or purchases) x heat conversion factor (calorific value)* |
| | | District heating and cooling | TJ | Annual district heating and cooling (cold and hot water for cooling and heating) usage (or purchases) |
| Distribution / Sales | Energy consumed for transport | | PJ | Total value of transport energy consumption for Fujitsu*1 and Fujitsu Group companies*2<br>*1 Fujitsu (domestic transport): Energy consumption related to domestic transport by the Fujitsu Group, based on the Act on the Rational Use of Energy "Logistics."<br>*2 Fujitsu Group Companies: Calculated from the transport $CO_2$ emissions from OUTPUT (distribution and sales) using the ratio of Fujitsu (domestic transport) transport energy consumption to transport $CO_2$ emissions. |
| Use of sold Products | Energy | Electricity | GWh<br>PJ | Electricity consumed in connection with major products*1 shipped during the fiscal year (Amount of electricity used for time estimated per product unit x Units shipped in the fiscal year)<br>* Calorific value conversion factor (unit heat generation): in accordance with the "Law Concerning the Rational Use of Energy.". |

| Indicator | | Unit | Calculation Method |
|---|---|---|---|
| Recycling of resources | Resource recycling rate | % | Based on the calculation method provided by JEITA, recycled components and resources are calculated as a percentage of the weight of used products processed in Japan. Excludes collected waste other than used electronic products. |
| | Processed volume | Tons | |

| Indicator | | | Unit | Calculation Method |
|---|---|---|---|---|
| Output | | | | |
| Design/ Procurement/ Manufacturing/ Development | Raw Materials | $CO_2$ emissions | Tons - $CO_2$ | $CO_2$ emissions related to all stages from resource extraction through processing into raw materials ($CO_2$ emissions equivalent for raw materials used per product unit x Units shipped in the fiscal year) for the raw materials used in major products[*1] shipped in the fiscal year |
| | Chemical Substances | Volume of substances subject to VOC emissions restrictions | Tons | Of the 20 VOCs (Volatile Organic Compounds) specified in the environmental voluntary action plans of the four electrical and electronic industry associations[*2], total amounts released are provided for those substances handled in quantities exceeding 100 kg annually per substance at individual business sites, including overseas sites. Substances subject to VOC emissions controls that are also covered by the PRTR law are included in the section on substances subject to VOC emissions controls. |
| | | Volume of PRTR targeted substances released | Tons | Of the substances covered by the PRTR law (Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof), released totals are provided for those substances handled in quantities exceeding 100 kg annually per substance per business site, including overseas sites. It is the sum of air emissions and water emissions. |
| | Atmospheric pollution | $CO_2$ emissions | Tons -$CO_2$ | * For the calculation method, see “Reduce GHG emissions at business sites by half of the base year by the end of FY2025 (Base year: FY2020)” in the Environmental Action Plan (Stage 11). |
| | | GHG emissions other than $CO_2$ | Tons -$CO_2$ | * For the calculation method, see “Reduce GHG emissions at business sites by half of the base year by the end of FY2025 (Base year: FY2020)” in the Environmental Action Plan (Stage 11). |

| Indicator | | | Unit | Calculation Method |
|---|---|---|---|---|
| Design/ Procurement/ Manufacturing/ Development | Atmospheric pollution | NOx emissions | Tons | NOx concentration (ppm) x $10^{-6}$ x Dry gas emissions ($m^3N/hr$) x Operating time (hr/yr) x 46/22.4 x $10^{-3}$ |
| | | Sox emissions | Tons | SOx concentration (ppm) x $10^{-6}$ x Dry gas emissions ($m^3N/hr$) x Operating time (hr/yr) x 64/22.4 x $10^{-3}$ |
| | Water Discharge | Wastewater discharges | $m^3$ | Annual water discharge into public waterways and sewers (not including groundwater used for melting snow, but including groundwater extracted for purification when the amount of water is known) |
| | | BOD emissions | Tons | BOD concentration (mg/l) x Water discharges ($m^3/yr$) x $10^{-6}$ |
| | | COD emissions | Tons | COD concentration (mg/l) x Water discharges ($m^3/yr$) x $10^{-6}$ |
| | Waste | Amount of waste generated | Tons | Total value obtained by adding the total amount of effective utilization (thermal recycling, material recycling) and the amount of waste processed |
| | | Thermal recycling volume | Tons | Among all types of waste put to effective use, the total volume used in thermal recycling<br>* Thermal recycling: Recovery and use of the heat energy generated by incinerating waste |
| | | Material recycling volume | Tons | Among all types of waste put to effective use, the total volume used in material recycling<br>* Material recycling: Processing of waste to facilitate its reuse, and re-use of processed waste as material or raw materials for new products |
| | | Disposal volume | Tons | Volume of industrial and general waste processed by, for example, landfilling or simple incineration |
| Distribution / Sales | Atmospheric Release | | Tons -$CO_2$ | For the calculation method, see “Transportation and distribution (upstream)” in the GHG Emissions Amount Report based on GHG Protocol. |
| Usage | Atmospheric Release | | Tons -$CO_2$ | For the calculation method, see “Use of sold products” in the GHG Emissions Amount Report based on GHG Protocol. |

*1 Major products:
Personal computers, servers, workstations, storage systems, printers, financial terminals, retail terminals, routers, LAN access equipment, access network products and mobile phone base stations.

*2 Four electrical and electronic industry associations:
The Japan Electrical Manufactures’ Association (JEMA), Japan Electronics and Information Technology Industries Association (JEITA), Communications and Information Network Association of Japan (CIAJ), and Japan Business Machine and Information System Industries Association (JBMIA).

# List of Organizations Covered by the Report on Environmental Activities in FY2023

## Organizations Covered by the report

The coverage is of Fujitsu itself plus a total of 74 companies centering on consolidated subsidiaries that have built environmental management systems. The table below shows the organizations (*1) for which individual performance data is gathered.

(*1) The following company names are as of March 31, 2024.

## Organizations covered by each Indicators

| | | |
|---|---|---|
| ① GHG emissions | : | All Fujitsu Group business sites |
| ② Scope1,2 | : | Fujitsu and the Fujitsu Group's own offices and managed rental offices |
| ③ Energy | : | Fujitsu and the Fujitsu Group's own offices and managed rental offices |
| ④ Water | : | Japan; Fujitsu and Fujitsu Group offices excluded datacenters.<br>Overseas, Fujitsu and Fujitsu Group manufacturing sites |
| ⑤ Waste | : | Japan; Fujitsu offices excluded datacenters and Fujitsu Group manufacturing sites. From FY 2021, waste plastics from rental offices are included in the calculation.<br>Overseas; Fujitsu and Fujitsu Group manufacturing sites |
| ⑥ Chemical | : | Fujitsu and Fujitsu Group manufacturing sites.<br>*The sites that handle less than 100 kg per substance per year are excluded. |

⑦ EMS : Organizations with Environmental Management Systems (EMS). Including organizations with voluntary EMS.

## Headquarters

| No. | Company name | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
|---|---|---|---|---|---|---|---|---|
| 1 | Fujitsu Limited | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

## Fujitsu Group companies in Japan (51companies)

| No. | Company name | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
|---|---|---|---|---|---|---|---|---|
| 1 | FUJITSU HOME & OFFICE SERVICES LIMITED | ✓ | | | | | | ✓ |
| 2 | Kawasaki Frontale Limited | ✓ | | | | | | ✓ |
| 3 | Fujitsu Techno Research Limited | ✓ | | | | | | ✓ |
| 4 | DIGITAL PROCESS LTD. | ✓ | | | | | | ✓ |
| 5 | FUJITSU BANKING SOLUTIONS LIMITED | ✓ | | | | | | ✓ |
| 6 | FUJITSU KAGOSHIMA INFORNET LIMITED | ✓ | | | | | | ✓ |
| 7 | FUJITSU CLOUD TECHNOLOGIES LIMITED | ✓ | | | | | | ✓ |
| 8 | G-Search Limited | ✓ | | | | | | ✓ |
| 9 | FUJITSU FSAS INC. | ✓ | | | | | | ✓ |
| 10 | FUJITSU COMMUNICATION SERVICES LIMITED | ✓ | | | | | | ✓ |

| No. | Company name | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
|---|---|---|---|---|---|---|---|---|
| 11 | FUJITSU NETWORK SOLUTIONS LIMITED | ✓ | | | | | | ✓ |
| 12 | Fujitsu Frontech Limited | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 13 | Fujitsu Japan Limited | ✓ | ✓ | | ✓ | | | ✓ |
| 14 | FUJITSU SYSTEM INTEGRATION LABORATORIES LIMITED | ✓ | | | | | | ✓ |
| 15 | FUJITSU DEFENSE & NATIONAL SECURITY LIMITED | ✓ | | | | | | ✓ |
| 16 | FUJITSU DEFENSE SYSTEMS ENGINEERING LIMITED | ✓ | | | | | | ✓ |
| 17 | FUJITSU LEARNING MEDIA LIMITED | ✓ | | | | | | ✓ |
| 18 | FUJITSU RESEARCH INSTITUTE | ✓ | | | | | | ✓ |
| 19 | FUJITSU CoWorCo LIMITED | ✓ | | | | | | ✓ |
| 20 | TWO-ONE LIMITED | ✓ | | | | | | ✓ |
| 21 | FUJITSU I-NETWORK SYSTEMS LIMITED (*2) | | | | | | | ✓ |
| 22 | Fujitsu Telecom Networks Limited | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 23 | FUJITSU IT PRODUCTS LIMITED | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 24 | Fujitsu Isotec Limited | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 25 | FUJITSU PERSONAL SYSTEM LIMITED | ✓ | | | | | | ✓ |
| 26 | FUJITSU QUALITY LABORATORY ENVIRONMENT CENTER LTD. | ✓ | | | | | | ✓ |

| No. | Company name | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
|---|---|---|---|---|---|---|---|---|
| 27 | Fujitsu Optical Components Limited | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 28 | FDK CORPORATION | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 29 | Transtron Inc. | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ |
| 30 | SHINKO ELECTRIC INDUSTRIES CO. LTD. | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 31 | FUJITSU CAPITAL LIMITED | ✓ | | | | | | ✓ |
| 32 | FUJITSU DATA CENTER SERVICE CORPORATION | ✓ | | | | | | ✓ |
| 33 | Fujitsu IT Management Partner Co. Ltd. | ✓ | | | | | | ✓ |
| 34 | Fujitsu IS Service Limited | ✓ | | | | | | ✓ |
| 35 | FUJITSU ADVANCED SYSTEMS LIMITED | ✓ | | | | | | ✓ |
| 36 | FUJITSU SHIKOKU INFOTEC LIMITED | ✓ | | | | | | ✓ |
| 37 | Ridgelinez Limited | ✓ | | | | | | ✓ |
| 38 | FUJITSU NETWORK SERVICE ENGINEERING LIMITED | ✓ | | | | | | ✓ |
| 39 | Mobile Techno Corp. | ✓ | | | | | | ✓ |
| 40 | Per Te Corporation | ✓ | | | | | | ✓ |
| 41 | Care Net Ltd. | ✓ | | | | | | ✓ |
| 42 | Fujitsu Advance Accounting service Limited | ✓ | | | | | | ✓ |
| 43 | Fujitsu Harmony Limited | ✓ | | | | | | ✓ |

| No. | Company name | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
|---|---|---|---|---|---|---|---|---|
| 44 | ZIS INFORMATION TECHNOLOGY CORPORATION | ✓ | | | | | | ✓ |
| 45 | Fujitsu Yamagata Information Technology Limited. | ✓ | | | | | | ✓ |
| 46 | BANKING CHANNEL SOLUTIONS Limited | ✓ | | | | | | ✓ |
| 47 | IT MANAGEMENT PARTNERS LIMITED | ✓ | | | | | | ✓ |
| 48 | YJK Solutions Co.,Ltd. | ✓ | | | | | | ✓ |
| 49 | Best Life Promotion Ltd. | ✓ | | | | | | ✓ |
| 50 | Fujitsu Engineering Technologies Limited | ✓ | | | | | | ✓ |
| 51 | FITEC | ✓ | | | | | | ✓ |

(*2) Although the Company is not included in the aggregation of environmental impacts ① to ⑥ for FY2023 due to its transfer in December 2022, it continued to participate in the ISO 14001 in tegrated certification until partway through FY2023.

## Fujitsu Group companies worldwide (22 companies)

| No. | Company name | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
|---|---|---|---|---|---|---|---|---|
| 1 | Jiangsu Fujitsu Telecommunications Technology Co., Ltd. | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ |
| 2 | FUJITSU HONG KONG LIMITED | ✓ | | | | | | ✓ |
| 3 | FUJITSU DO BRASIL LIMITADA | ✓ | ✓ | ✓ | | | | ✓ |
| 4 | FUJITSU ASIA PTE LTD | ✓ | | | | | | ✓ |

| No. | Company name | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
|---|---|---|---|---|---|---|---|---|
| 5 | FUJITSU NETWORK COMMUNICATIONS, INCORPORATED | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ |
| 6 | Fujitsu North America, Inc. | ✓ | ✓ | ✓ | | | | ✓ |
| 7 | FUJITSU BUSINESS TECHNOLOGIES ASIA PACIFIC LIMITED | ✓ | | | | | | ✓ |
| 8 | FUJITSU AUSTRALIA LIMITED | ✓ | ✓ | ✓ | | | | ✓ |
| 9 | Fujitsu Technology Solutions GmbH | ✓ | ✓ | ✓ | | | | ✓ |
| 10 | Nanjing Fujitsu Nanda Software Technology Co., Ltd. | ✓ | | | | | | ✓ |
| 11 | FUJITSU SERVICES LIMITED | ✓ | ✓ | ✓ | | | | ✓ |
| 12 | FUJITSU KOREA LIMITED | ✓ | | | | | | ✓ |
| 13 | FUJITSU TAIWAN LIMITED | ✓ | | | | | | ✓ |
| 14 | Fujitsu (China) Holdings Co., Ltd. | ✓ | | | | | | ✓ |
| 15 | FUJITSU (XI'AN) SYSTEM ENGINEERING Co.,Ltd. | ✓ | | | | | | ✓ |
| 16 | Beijing Fujitsu System Engineering Co., LTD. | ✓ | | | | | | ✓ |
| 17 | FUJITSU (CHINA) Co., Ltd. | ✓ | | | | | | ✓ |
| 18 | Fujitsu Finance America, Inc. | ✓ | | | | | | ✓ |
| 19 | FUJITSU EMEA PLC | ✓ | | | | | | ✓ |

| No. | Company name | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
|---|---|---|---|---|---|---|---|---|
| 20 | Fujitsu Systems Global Solutions Management Sdn. Bhd. | ✓ | | | | | | ✓ |
| 21 | FUJITSU CONSULTING INDIA PRIVATE LIMITED | ✓ | ✓ | ✓ | | | | |
| 22 | FUJITSU CONSULTING COSTA RICA, S.A | ✓ | | | | | | |