

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 offers 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 have channeled most management resources into the core sector of Technology Solutions. In FY 2019, Fujitsu 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 Paris Agreement have heightened the need for initiatives that support the development of a sustainable global society. In line with these trends, the Fujitsu Group employed a materiality analysis in a Groupwide review designed to enhance the effectiveness of initiatives 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), that oversees and strengthens non-financial initiatives aiming to realize 'sustainability management' that reflects our role as 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 continues 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 CO₂ 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 removing CO₂ from the atmosphere (DAC) or by absorbing CO₂ 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 of 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) - Increase the use ratio of renewable energy	By reducing power consumption during product use Reduction of GHG emissions
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 Stage XI

- [\[PDF\] Environmental Action Plan Stage 11](#)

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. - 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 - Increase use ratio of renewable energy to 50% or more by 2025	FY 2020	Reduction of at least 50%
		Scope 3 (Category 11)	Reduce CO₂ emissions from power consumption during product use by 12.5% or more	FY 2020	Reduction of at least 12.5%
		Scope 3 (Category 1)	- Reducing GHG emissions in the supply chain - Major suppliers must set emissions reduction targets (aligned with SBT Well Below 2°C) - Collection of GHG reduction data, construction and deployment of mechanisms	-	Target setting completed
	Resource Circulation		Development of products and services that contribute to a circular economy (CE) business model	-	CE Business Products Service Development
			Reduce water consumption by 57,000 m³ or more by implementing water reduction measures	-	57,000m ³ or more
			- Strengthening awareness of water resource conservation in the upstream supply chain - 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

Environmental Action Plan Stage 11 Targets

- [\[PDF\] Environmental Action Plan Stage 11 Targets](#)
- *2 : Climate Change ; Scope 1, 2 and 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 \(Stage VIII\)](#)

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

Fujitsu's business aims to transform its portfolio and offerings by 2030, focusing on ESG contributions and Sustainability Transformation (SX, *1). 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.

*1: Sustainability Transformation

Data-driven response to uncertainty

In times of uncertainty, companies face various challenges at the management, operational, industry and society level. To address these challenges, and maintain and enhance competitiveness, speedy high-level decision making based on data is essential.

Fujitsu offers customers a data-driven management approach to achieving organizational goals. This approach uses data to derive the hypothesis with the highest impact. Through a cycle of increasing real data, linking data correctly, assigning values to data and creating new experiences, we are supporting the transformation of management, business operations, industries and society by advancing Digital Transformation (DX) solutions.

DX solutions with three transformations provided by a data-driven approach

- Management transformation
 - Increased sophistication of decision-making: More advanced decision-making through data, moving from numbers-based management to strategy formulation and decision-making.
- Business operations transformation
 - Traceability: More efficient business processes by linking data to ensure transparency of manufacturing processes and transactions.
 - Demand forecasting: Greater efficiency through data-driven planning and business processes.
 - Advanced facilities operation: Risk-based maintenance through data-driven fault detection.
 - Quality management: Support of enhanced quality through data integration from design and production through to after-sales support.
- Industry and society transformation
 - Transformation of entire industries: Creation of new systems and value across entire industries.
 - Achievement of carbon neutrality and migration to a circular economy: Aiming to contribute to a sustainable society through use of data to reduce environmental impact.

Fujitsu provides Fujitsu Data Intelligence PaaS (DI PaaS) to realize this data-driven decision making and progress powerful solutions to DX topics. 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 the world's most advanced AI solution "Fujitsu Kozuchi"; the "Sustainability Value Accelerator" that enables traceability; and "Data Life-Cycle Utilization" that includes Palantir Foundry and Microsoft Azure/Amazon Web Services for achieving complex data integration, application development, and advanced AI. Using these technologies, 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

Creation of new value by achieving value-chain traceability across companies and industries

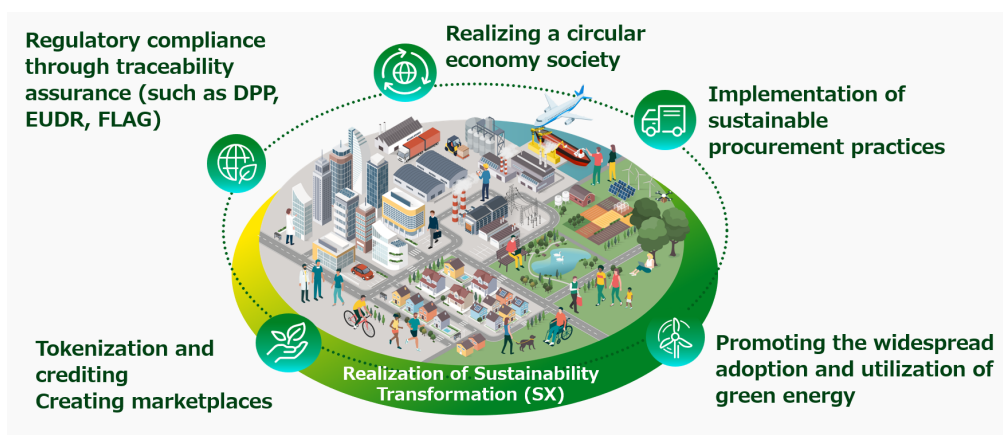
The Sustainability Value Accelerator enhances the transparency of the value chain by collecting verifiable traceability data, enabling collaboration across companies and countries. Through trusted data sharing and cross-company impact simulations, it supports the optimization of the entire value chain and the creation of new business models, helping companies fulfill their social responsibilities while improving profitability. This value chain restructuring supports customers in achieving their business goals and contributes to market revitalization.

Our approach to solutions

- Drive business growth through sustainable procurement: We enable traceability that provides proof of origin both for primary production products, and for secondary products created through recycling and reuse. This clarifies the process by which products are being reused, ensuring transparency for consumers and businesses. We enhance product reliability and promote responsible resource use throughout the supply chain through data collection and management from raw material procurement for primary products to the recycling process for secondary products. This contributes to enhancing brand value by providing sustainable products and appealing to environmental considerations.
- Enable data collaboration between companies in different industries: Reduction of greenhouse gas (GHG) emissions is a prime example of a scenario where data collaboration is essential. GHG emissions reduction is challenging for individual companies to achieve alone, and requires a concerted effort across the entire supply chain. Collecting data from upstream and downstream partners is particularly important for reducing Scope 3 emissions. However, traditional monetary-based calculations often fail to reflect the efforts of suppliers. Therefore, calculating Product Carbon Footprints (PCF) based on

primary data, which requires data collaboration, is crucial. Sustainability Value Accelerator contributes to visualizing and reducing emissions through data collaboration across the entire supply chain, adhering to international standards such as WBCSD PACT.

- Realize a decarbonized society through data-driven carbon credits: We digitize and automate the work required by knowledge specialists to measure, report, and verify CO₂ emissions. The workload for both companies generating both J-Credits (*2) and those responsible for certification is significantly reduced, enabling a faster path to monetization. Fujitsu supports the creation of highly trusted J-Credits by undertaking registration as an MRV support system operator in the J-Credit system.
- *2: Under the J-Credit Scheme, the Japanese government certifies the amount of greenhouse gas emissions (such as CO₂) reduced or removed by sinks through efforts to introduce energy-saving devices or use renewable energy and manage forests, as "credit." J-Credits are categorized into compliance credits based on systems managed by countries and governments, and can be used for regulation compliance.



Sustainability Value Accelerator

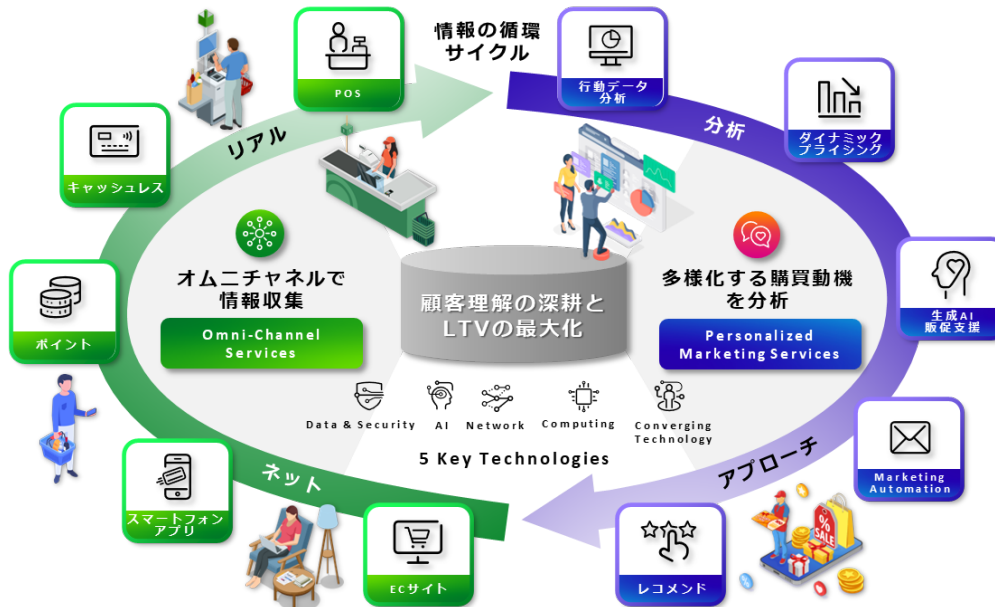
Achieving sustainable consumption by stimulating demand through personalized marketing

With increasing diversification of consumer behavior, companies face challenges in accurately understanding demand as well as reducing waste such as food loss while increasing profit.

By understanding consumer needs using AI-based personalized marketing services, Fujitsu supports demand stimulation to price optimization. Supply and demand balance can be maximized throughout the entire supply chain, reducing waste while providing business sustainability.

Our approach

- Demand creation and customer experience optimization: Enhances the consumer purchasing experience through optimized AI recommendations based on purchase data.
- More efficient promotional activity: Effectively drives demand using generative AI to automatically create optimized promotional contents based on consumer behavior data.
- Waste reduction through dynamic pricing: Reduces unsold goods and waste through automatic generation of optimal pricing based on AI analysis of demand.



Personalized Marketing Services *Japanese text only

Supports transformation to business sustainability through data linkage throughout the supply chain

Organizations are facing complex pressures in their supply chains, with frequent external changes and uncertainties in consumer trends, geo-political risk, tariff fluctuations, procurement chaos and environmental impact reduction. They must forecast changes, formulate responses based on multiple factors, and quickly reflect those measures in their business operations.

Through Dynamic Supply Chain Management (DSCM), Fujitsu enables visualization and simulation of the entire supply chain, permitting speedy yet flexible responses with end-to-end linking even of complex operational instructions. This supports transformation to a truly sustainable data-driven business and maximizes profits while minimizing environmental impact to achieve a resilient supply chain.

Our approach to solutions

- Supply chain visualization and plan optimization: While utilizing existing business processes and systems, enhances visualization of the entire supply chain by consolidating dispersed data, and optimizes planning with technologies such as AI.
- Risk forecasting and strengthened resilience: Uses risk and loss simulations through digital rehearsals to build systems that can respond to unforeseen circumstances such as natural disasters.
- Links to cross-organizational operational instructions : Enhances cross-organization business agility by quickly reflecting plan changes due to sudden modifications or unexpected problems, to supplier order processing or logistics operations.



DSCM *Japanese text only

Efficient development processes with visualization and automation connected by digital threads

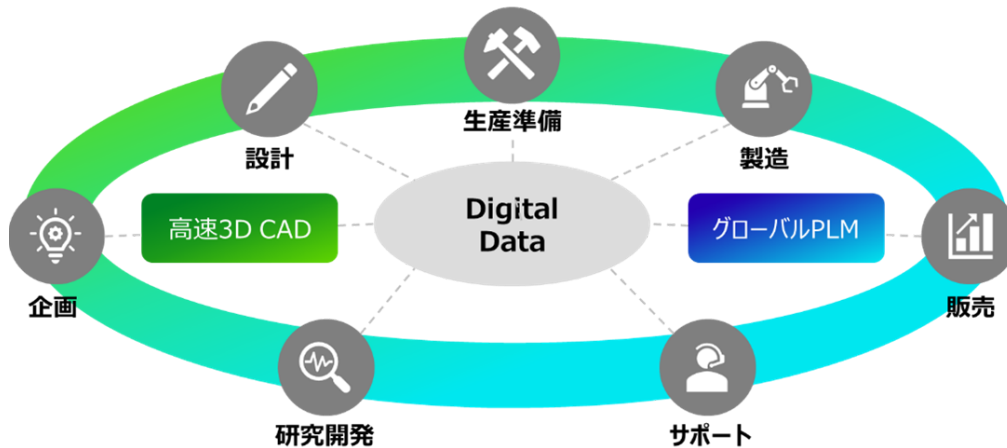
Manufacturing industry processes, from product design through to production preparation, must consider the environment, as well as provide shorter lead times, lower costs, and higher quality.

Fujitsu links the entire product lifecycle using digital threads with PLM at the core, to realize sustainable manufacturing premised on ESG environmental consideration. GHG emissions can be visualized and optimized in real time by linking environmental information to the Bill of Materials (BOM) from an early design stage. We support sustainable growth of manufacturing industry via efficient development processes that achieve both regulatory compliance and competitive product development.

Our approach to solutions

- Integration and visualization of environmental information using digital threads: We build an environmental BOM that links the Engineering BOM to environmental information with PLM-centered digital threads. GHG emissions can be visualized in real time over the entire product lifecycle with integrated linking of data procurement from the supplier through to design and manufacture, promoting environmental consideration from the early design stages.
- Automation of the development process through simulation and optimization: Linking LCA, MBD (Model-Based Design) and 3DCAE (Computer-Aided Engineering), we use a digital twin with automated multi-purpose optimization and simulation of environmental impact and product performance. This enables efficient design in a shorter development time by automating selection of the best material, shape or manufacturing method to achieve environmental goals.

Product Lifecycle Management



Product Lifecycle Management *Japanese text only

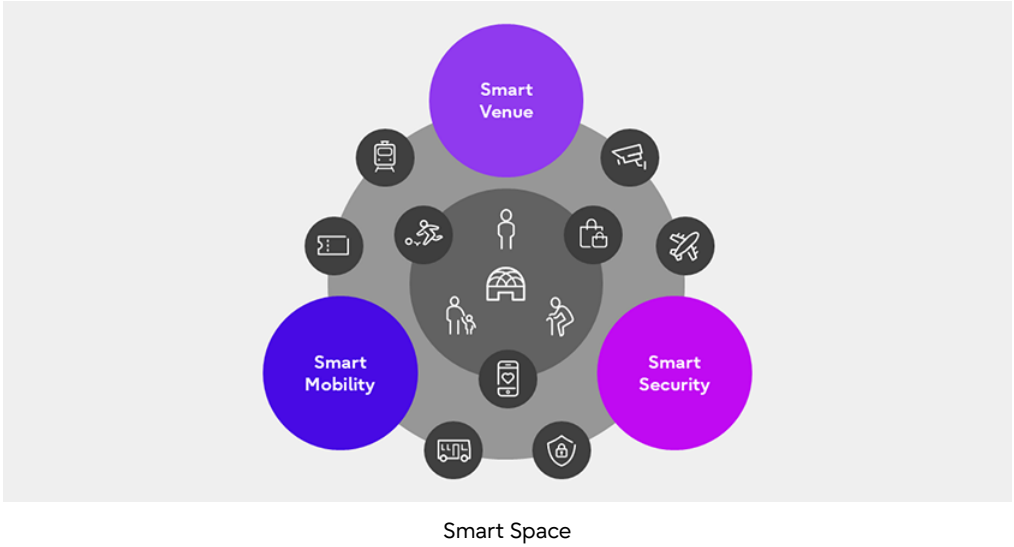
Utilizing AI and ICT to improve comfort, convenience, and safety, and enhance the appeal of Urban spaces

As population aging accelerates and labor shortages become more severe, there is a growing need to flexibly respond to consumer needs and create more livable cities. Providing a safe and secure environment and fostering vibrant urban spaces where diverse people can gather, is essential to promoting sustainable and enriched urban development.

Fujitsu Group's 'Smart Space' optimally connects all elements—people, facilities, and services—to create comfortable and attractive area experiences that people are drawn to. By harnessing the power of data and AI, we aim to transform facilities and cities into safer, more secure, and more appealing spaces.

Our approach to solutions

- Unifying Facility Operations and Surrounding Services on a Single Platform:**
 By centralizing the management of facilities and ticket sales, we enhance the user interface (UI) and user experience (UX). This integration promotes mutual customer referrals between complex facilities and enables autonomous facility management without relying on human intent or decision-making.
- Automatic Detection and Tracking of Suspicious Behavior with Efficient On-Site Response:**
 By using video analysis AI for behavior detection and tracking, suspicious activities can be automatically identified. This enables optimal assignment of response personnel and supports timely on-site action. As a result, facility safety is enhanced, allowing users to feel secure and use the space with peace of mind.
- Stress-Free Mobility Through Diverse Transportation Options and Optimal Deployment:**
 By utilizing a comprehensive traffic simulator to derive optimal multimodal mobility strategies and deployments (MaaS), we reduce the stress associated with user transportation. This enables smoother and more comfortable travel to destinations, contributing to the revitalization of the entire city.



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. Since then, efforts to achieve a carbon-neutral society have been accelerating on a global scale.

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. Based on the TCFD framework, companies use multiple climate scenarios to evaluate the climate-related risks and opportunities to their business and to assess and disclose the financial impact. In addition, the Science Based Targets initiative (SBTi) calls for corporate emissions reduction targets set to meet the 1.5°C trajectory, and RE100 promotes activity by 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 Fujitsu 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% below FY2013 levels. On April 15, 2021, this revised 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 ready' GHG emissions for our own operations by FY2030, and across our entire value chain (Scope 1, 2, 3) by FY2040. In June 2023, our net-zero(*3) 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% by 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.

*2: Intergovernmental Panel on Climate Change (IPCC):

An organization established in 1988 by the United Nations Environment Programme (UNEP) and the World Meteorological Organization (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% of the base year by the target year and removing the remaining 10% or less through measures such as reforestation or Direct Air Capture (DAC) of CO₂ in the atmosphere.

- [\[PDF\] United Nations Environment Programme](#)
- [\[PDF\] World Meteorological Organization](#)

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 CO₂ Emissions by Reducing Power Consumption When Using Products](#)
 - [Activities to Reduce CO₂ 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 CO₂ 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 offices, as well as datacenters) primarily emit CO₂ 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 CO₂ Emitted During Energy Consumption

About 99% of the Fujitsu Group's total GHG emissions arise from CO₂ emissions due to energy consumption. Therefore, we continuously promote the following energy-saving measures to reduce CO₂ 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 CO₂

As for GHGs other than CO₂, 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.

FY2024 Performance

Targets under the Fujitsu Group Environmental Action Plan (Stage XI)	FY2024 result
Reduce GHG emissions of our business sites to 50% or less of the base year (FY2020) level. (FY2024 target: 40% reduction) (*1)	45.8% reduction (*2)

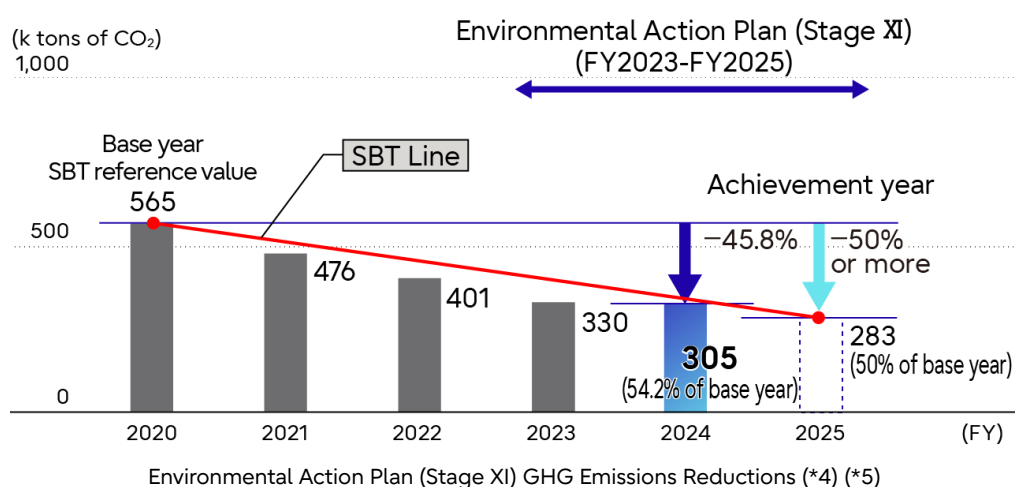
- *1: Target organizations: Business sites owned by Fujitsu and the Fujitsu Group. Includes major data centers.
- *2: GHG emissions reduction rate based on market standards

Promoting Reduction in CO₂ 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 CO₂ emissions by 1,944 t-CO₂ through the continuous and efficient deployment of high-efficiency LED lightning. We also improved facility operations (2,168 t-CO₂) by reviewing air conditioning equipment operating conditions, such as switching to more efficient equipment, controlling the number of units, and suspending operation of pumps and air conditioning devices. Furthermore, we also contributed to reductions (3,744 t-CO₂) through the introduction of high-efficiency chillers and the improvement of chilled water supply efficiency. Through our own efforts, we carried out measures to reduce emissions by roughly 8,000 tons-CO₂ (2.4% 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 45.8% compared to the baseline year (7.5% reduction in comparison to our emissions in FY2023).

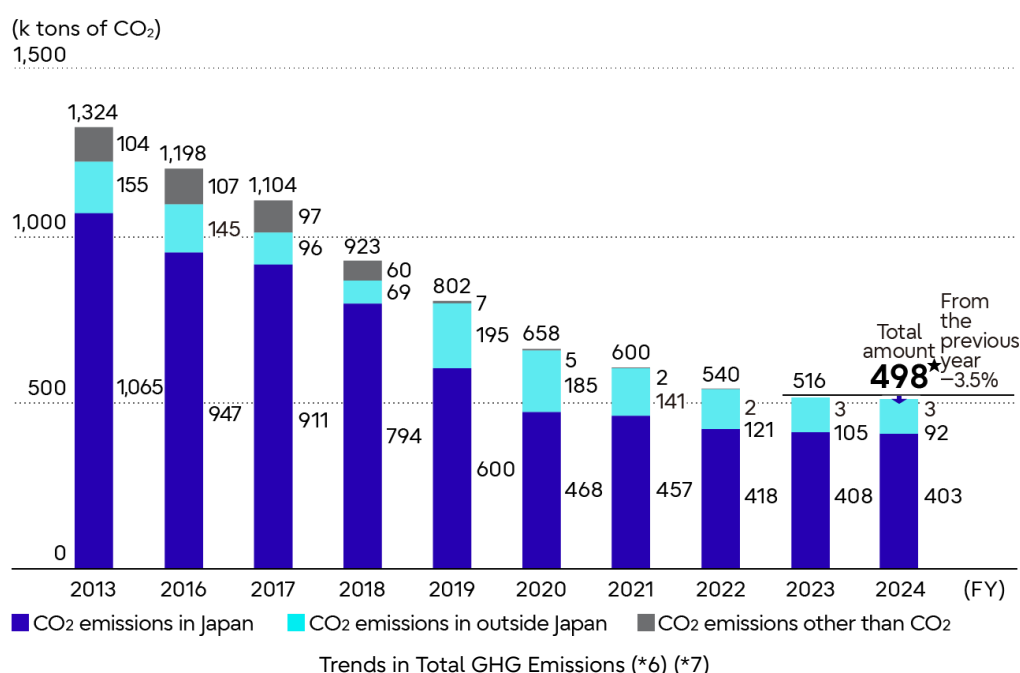


- *3: BAT (Best Available Technologies): Usable state-of-the-art technologies to reduce GHGs.
- *4: Environmental Action Plan (Stage XI) performance values for the reference year (FY2020) and FY2024 are the total values for business sites targeted by the Environmental Action Plan (Stage X).
- *5: CO₂ conversion factors of purchased electricity are market standards for both the reference year (FY2020) and FY2024 performance values.

Total Emissions of 498 ktons-CO₂* in FY2024

★ Indicators assured by third party

Our total GHG emissions in FY2024 were 498 ktons-CO₂ (output level per sales amount: 14.0 tons-CO₂/100 million yen). They decreased by 3.5% in comparison to FY2023.



- *6: CO₂ emissions in Japan and overseas: The CO₂ conversion factor for purchased electric power in performance reports has been calculated with a fixed value of: In Japan - 0.570 tons-CO₂/MWh from FY2013 to FY2015, 0.534 tons-CO₂/MWh for FY2016, 0.518 tons-CO₂/MWh for FY2017, 0.497 tons-CO₂/MWh for FY2018, 0.461 tons-CO₂/MWh for 2019, 0.444 tons-CO₂/MWh for FY2020, 0.441 tons-CO₂/MWh for FY2021, 0.436 tons-CO₂/MWh for FY2022, 0.437 tons-CO₂/MWh for FY2023, and 0.421 tons-CO₂/MWh for FY2024.
Overseas – The same coefficients as those used in Japan are applied from FY2013 to FY2018, and from FY2019 onwards, values are calculated using the latest IEA data (by country) for the relevant FY.
- *7: Emissions other than CO₂: These are converted to equivalent amounts of CO₂ using the global warming potential (GWP) for each gas.

Case Studies

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 diversification 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).

FY2024 Performance

★ Indicators assured by third party

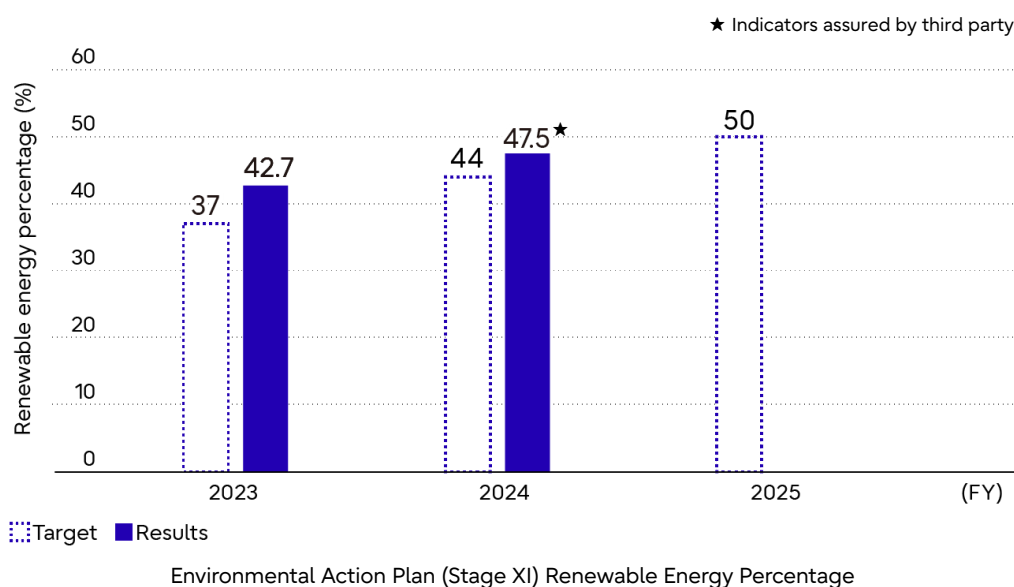
Targets under the Fujitsu Group Environmental Action Plan (Stage XI)	FY2024 result
Expand the rate of renewable energy usage to more than 50 % in 2025 (*1)	47.5%★ (*2)

- *1 Target organizations: Business sites owned by Fujitsu and the Fujitsu Group. Includes major data centers
- *2 Calculation Standard: 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 FY2024, through the purchase of green power and power generation through solar panels, our rate of renewable energy use grew to 47.5%★.

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.



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 CO₂ Emissions by Reducing Power Consumption When Using Products

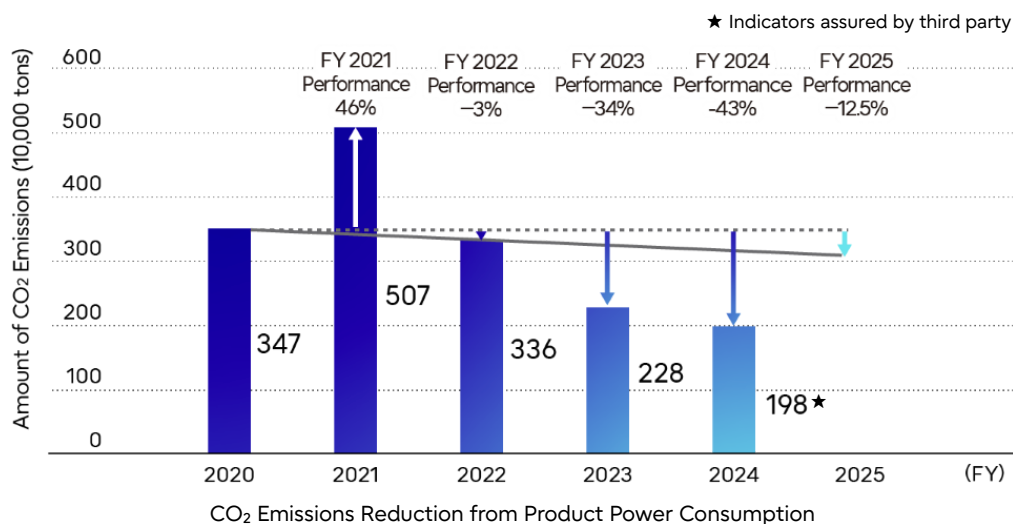
Our Approach

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 efficiency 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.

FY2024 Performance

Targets under the Fujitsu Group Environmental Action Plan (Stage XI)	FY2024 result
Reduce CO ₂ emissions due to product power consumption by 10% or more in comparison to FY2020.	Reduced by 42.9%



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 GHG 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 more 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 42.9% Reduction in CO₂ Emissions in Comparison to FY2020

In FY2024, as a result of applying and expanding energy-saving technologies in our servers, storage, PCs, and network devices, we were able to attain a 42.9% reduction in CO₂ 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 FY2024

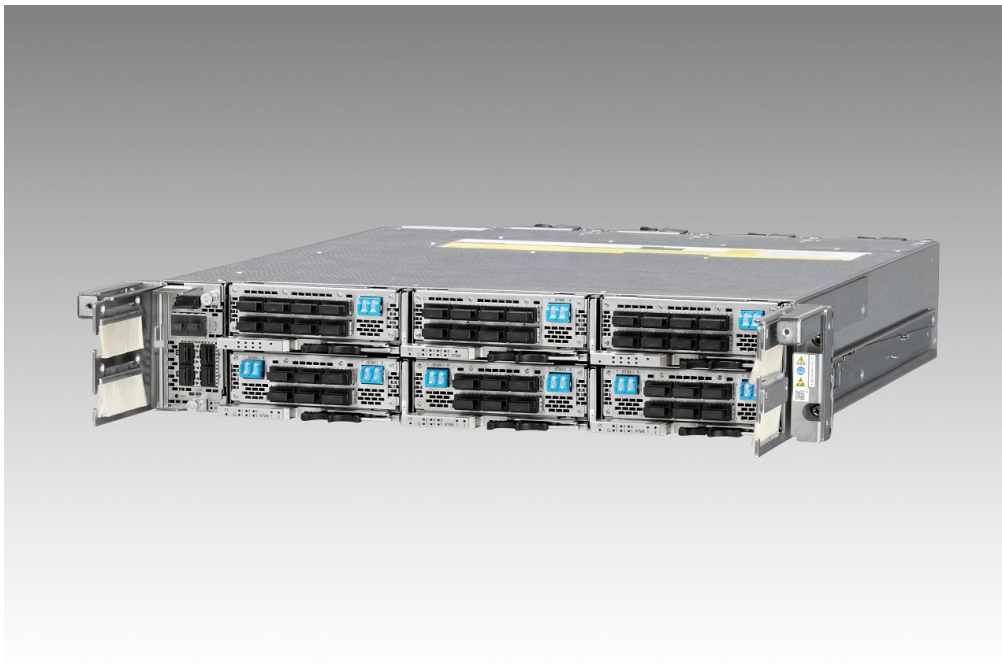
1FINITY T900: Achieving Both High-Capacity, Long-Distance Transmission and Energy Efficiency

The 1FINITY T900 is a product that brings to market an optical transmission platform capable of ultra-high-capacity, long-distance transmission—up to 1.2 Tbps per optical wavelength, among the highest in the world. Key features include high-capacity transmission enabled by cutting-edge digital coherent technology (up to 1.2 Tbps per wavelength), and extended transmission range through Fujitsu's proprietary framer technology, delivering a range that is more than four times the distance of other conventional systems.

From an environmental perspective, the adoption of the latest DSP technology enables higher bit rates while reducing power consumption per 100 Gbps of transmission by 60% compared to previous models.

The product also incorporates Fujitsu's proprietary closed-loop liquid cooling technology, which delivers twice the cooling capacity of traditional air-cooled systems. This enhanced cooling capability helps manage high heat output, contributing to overall energy savings throughout telecom facilities.

Through the deployment of the 1FINITY T900, Fujitsu remains committed to delivering highly reliable, uninterrupted communication services while reducing the environmental impact—creating value for both customers and society.



1FINITY T900

- [Case Studies](#)

Activities to Reduce CO₂ Emissions in the Upstream Portion of the Supply Chain

Our Approach

In addition to reducing our own CO₂ emissions, the Fujitsu Group has also been requesting, as part of green procurement, that its suppliers engage in activities to reduce their own CO₂ emissions in order to help contain global warming. Starting in FY2016, we 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. Moreover, starting in FY2022, we are asking our main suppliers to establish a CO₂ reduction target based on the international standard of Science Based Targets (SBT). We have also expanded the target suppliers for CO₂ 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.

In addition, we host webinars on how to set targets and share FAQ. We support our suppliers' CO₂ reduction efforts through the provision of a simple tool for suppliers to visualize CO₂ emissions (Scope 1 and 2) of their own company and determine the appropriateness of their SBT.

Starting in FY2024, we began collaborating with 15 foreign and domestic suppliers (as of March 2025) to share data of CO₂ emissions per unit of product (carbon footprint). For this initiative, we utilized Fujitsu's offering service "ESG Management Platform" to calculate and share product carbon footprints (PCFs) compliant with rules both in Japan and overseas. By offering options for data confidentiality and automatic calculations, we fostered a sense of trust between corporations and encouraged participation. We will make supply chain emissions transparent and propose measures using actual data, with our vision set on developing products by utilizing AI and visualization of business impact as we accelerate this initiative forward.

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.

- [November 15, 2024 Press Release "Fujitsu collaborates with global suppliers in decarbonization initiative to exchange product-level primary data on CO₂ emissions"](#)

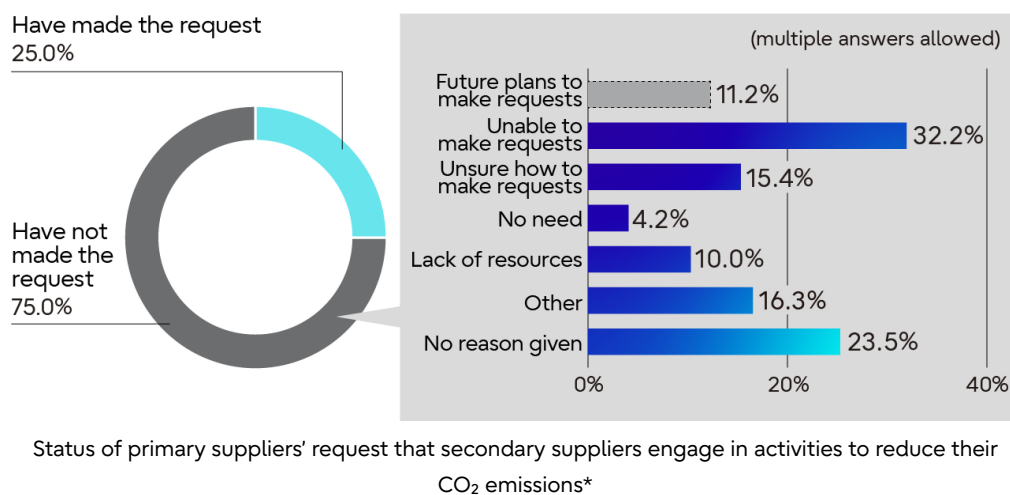
FY2024 Performance

Targets Under the Fujitsu Group Environmental Action Plan (Stage XI)	FY2024 result
Reduction of CO ₂ Emissions: Drive Activities to Reduce CO ₂ Emissions in the Supply Chain	Requested that secondary suppliers (over 61,500 companies) engaged in activities to reduce emissions through primary suppliers of the Fujitsu Group (615 companies)

Reduction of CO₂ 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 CO₂ 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 FY2024, 25% (143 suppliers) responded that they had requested their own suppliers to engage in emissions reduction activities. Over 61,500 secondary suppliers have been asked to engage in emissions reduction activities, and this should substantially impact awareness.



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

Offering Guidelines for Activities for Reducing CO₂ Emissions

The Fujitsu Group created original explanatory materials to facilitate the spread of activities for reducing CO₂ emissions throughout the entire supply chain, and since the end of November 2017, we 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 CO₂ emissions" can be downloaded from the following sites.

- [Japan](#)
- [Global](#)

2. Practical activities: Procedure for target setting

1. Setting of Activity contents

- 1) Extract feasible activities in-house.
- 2) Decide more suitable activities from the extractions.



2. Selection of Progress Indexes (Numerical data)

Select CO₂ emissions data, or data leading to CO₂ emissions directly.

(e.g. p. 2. Practical activities: Examples for activity contents and progress indexes )

* If it is (e.g. (

Select activities to be conducted and progress indexes to be controlled.

Activity items	Activity contents	Progress indexes
Saving energy (reducing lighting power consumption)	Switch off unnecessary lighting/ install LED	Implementation rate/Installation rate /Energy-saving rate
	Light off during break times	Time for lights off/Implementation rate
Saving energy (reducing common-use facility power consumption)	Stop of servers on holidays	Stopping time/Stopping rate
	Reduce overtime hours/ specify days on which all employees leave work at the same time	Implementation rate per department
	Utility time limits on reception/ conference room	Utility time/Energy-saving rate
Saving energy (reducing air-conditioning power consumption)	Appropriate temperature setting of air-conditioning systems	Implementation rate/Implementation period
	Installation of rooftop greening/ wall greening	Implementation rate/Greening area per building
Saving energy (promoting of renewable energy)	Installation of green electricity systems	Installation rate
Saving energy (innovative changes of lifestyles)	Encouragement of bicycle commuting of employees	Number of employees taking part in the initiative/Implementation rate
	Promotion of eco-driving	Implementation rate/ELV installation rate
Preserving biodiversity (preservation of CO ₂ -absorbing resources)	Implementation of forest-preservation activities	Number of activities/Number of participants/Forestation land area/Number of trees planted
Conservation of paper resources	Promotion of paperless	Reduction volume/Implementation rate
Promotion of environmental awareness	Raise awareness by in-house education	Number of attendance/Attendance rate/ Test pass rate

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Informational materials for business partners

Resource Circulation

External Trends

Strengthening Global Resource Circulation

Goal 12 of the Sustainable Development Goals (SDGs), adopted by the United Nations in September 2015, is 'Responsible consumption and production'. The actions that organizations are urged to take in order to meet this goal include the efficient 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 Eco-Design for Sustainable Products Regulation (ESPR) in June 2024, not only expanding the ESPR product scope, but also establishing performance requirements such as recyclability, durability, repairability, and use of recycled materials. With the increase in product sustainability requirements, the ESPR will also introduce Carbon Footprint to provide environmental impact assessment information and a Digital Product Passport (DPP) to ensure traceability throughout the product life cycle. The requirement for more efficient use of resources is increasing 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.

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 level 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. However, by the end of 2024 no agreement had been reached on an international instrument (treaty) to legally restrict plastic pollution, and discussions were held over to a future session. In view of these developments, companies need to continue action to engage in plastic resource circulation throughout the product life cycle.

The Fujitsu Group's Position

Aiming for Resource Circulation

Since the 1990s, the Fujitsu Group has had a long-standing commitment to the 3Rs of resource management: reduce, reuse, recycle. We have promoted measures such as reducing the number of parts in our products and making them smaller, thinner, and lighter. We have also focused on the reuse of resources from used ICT products and waste generated at our business sites. Since reuse of resources from used ICT products has been a past target of our Environmental Action Plan, and

we have now achieved a reuse rate of over 90% for business-use ICT products, our efforts are currently continuing as an internal target.

Recently, the push towards the "Circular economy" is gaining momentum worldwide. In particular, the adoption of the abovementioned ESPR 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. There is also an urgent need for measures to address the problem of plastic waste.

In light of this situation, and building on our foundation of existing initiatives, the Fujitsu Group will target the use of reusable plastics in ICT products, and a switch to paper instead of plastic packaging materials. 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 consider 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
FY2024 waste plastics emissions: 1.5 thousand tons



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

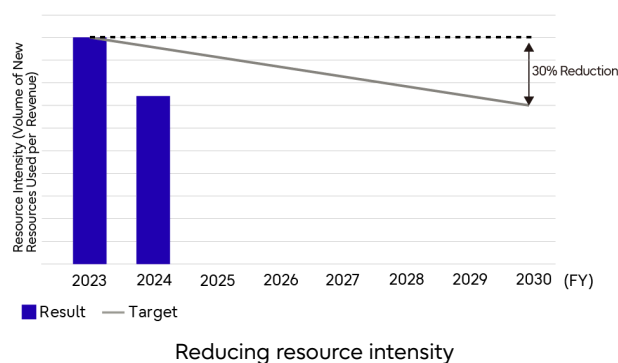
Saving and Reusing Resources in Products and Circular Economy Initiatives

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 efficiency 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 continue to promote the reduction of environmental impact through resource saving while shifting our focus to the realization of the circular economy.

Furthermore, in October 2023, Fujitsu joined the Circular Partners (CPs), a partnership established by Japan's Ministry of Economy, Trade and Industry to foster collaboration among industry, government, and academia aimed at realizing a circular economy. As part of our ongoing efforts, we aim to reduce our resource intensity—a proprietary metric that indicates the volume of new resources used per revenue across the Fujitsu Group—by 30% or more compared to FY2023 levels. In FY2024, we achieved a 26.5% reduction through resource-saving initiatives. To meet our target, we will continue to drive efforts such as increasing the use of recycled materials to reduce our reliance on virgin resources.



FY2024 Performance

Targets under the Fujitsu Group Environmental Action Plan (Stage XI)	FY2024 result
Development of products and services that contribute to a circular economy business model	To raise awareness in service development-related departments, Fujitsu implemented an e-learning program for its Japan-based front-line teams, with around 25,000 participants.

Fujitsu Provided e-Learning Program for Front-line Teams in Japan

As part of our commitment to delivering value to customers and society through circular economy initiatives, the Fujitsu Group provided an e-learning program for front-line teams in Japan. Approximately 25,000 employees received the training. The program covered foundational knowledge of the circular economy, its significance, and its positioning within the Fujitsu Group, as well as approaches that contribute to customers' business success. In addition, we held a trial session of our Sustainability for Me workshop for internal and external participants. The workshop focuses on transforming sustainability into business opportunities. Through deeper discussions, the session helped generate new opportunities for business engagement.



A new resource goal: "Develop products and services that contribute to a circular economy business model" Established by the Product Business Division

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 Is Driving Efforts to Achieve 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). At present, efforts are underway to achieve those targets.

Looking Ahead

Going forward, we will work to make the Fujitsu Group's initiatives more visible by using concrete indicators, while also setting more ambitious targets and driving efforts to achieve them.

Examples of Initiatives in FY2024

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.

- [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

FY2022	93.6 %
FY2023	94.1 %
FY2024	93.3 %

- [Introduction of Other 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 affect 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).

FY2024 Performance

Targets under the Fujitsu Group Environmental Action Plan (Stage XI)	FY2024 result
Adding measures 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 46 thousand m ³ (target for FY2024: 38 thousand m ³)

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

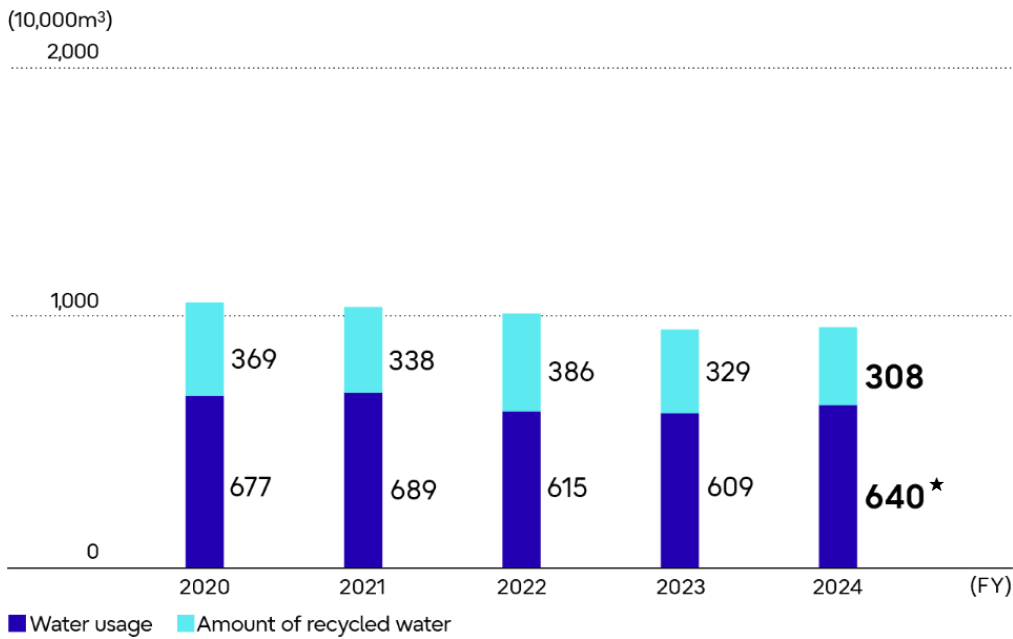
The measures we established in FY2024 to reduce water usage include reducing the amount of water used in coating and cleaning processes, reviewing our water supply and wastewater through actions such as optimizing the water supply for our scrubbers, and upgrading air conditioners from water-cooled units to air-cooled units. We implemented these measures at each business site, plant, etc., so that we could make more efficient use of our water resources.

As a result of these measures, water usage for 2024 was reduced to 46 thousand m³, making a total of 105 thousand m³ from 2023 to 2024, which is 184% of the 57 thousand m³ reduction target set in the Fujitsu Group Environmental Action Plan (Stage XI).

Water Usage in FY2024 was 6.40 Million m³★ (a 5% Increase Compared to the Previous Fiscal Year)

★ Indicators assured by third party

The total amount of water we used in FY2024 was 6.40 million m³★ (output level per sales amount: 180 m³/100 million yen), an increase of 5% compared to FY2023. Additionally, 3.08 million m³ of that usage was recycled water, which was a decrease of 6.6% in comparison to FY2023. Since the total amount of water we used increased, recycled water comprised 48.1% of our total water usage, a deterioration of 5.9% over FY 2023.



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 CO₂ emissions.

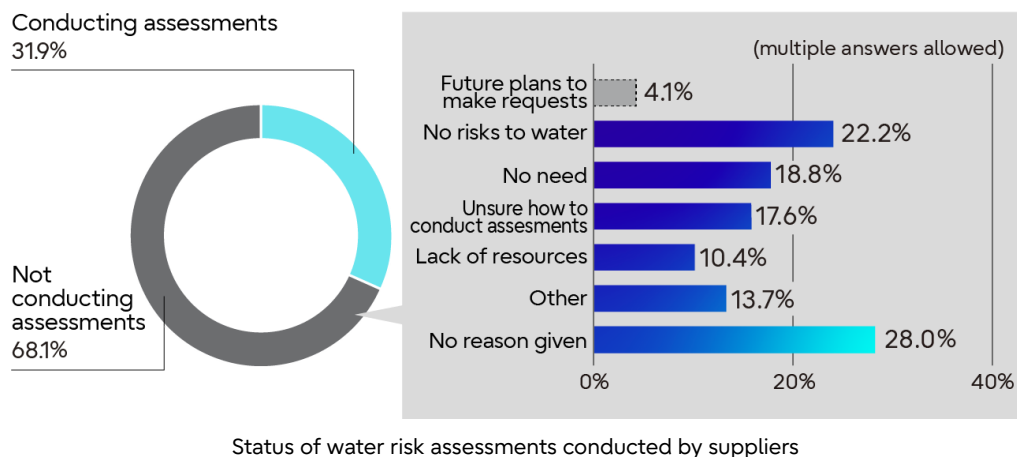
We expect that having the entire supply chain work toward reducing emissions can produce even greater reduction effects (synergies), while also expanding the network of these activities through the supply chain to cover an even wider area spreading beyond national boundaries. Through efforts such as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

FY2024 Performance

Targets Under the Fujitsu Group Environmental Action Plan (Stage XI)	FY2024 result
Conservation of Water Resources: Request that Primary Suppliers Engage in Activities to Conserve Water	Requested that 615 of 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 CO₂ 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.



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 FY2024 found that 31.9% of suppliers had conducted water risk assessments, which has been gradually increasing from 28.4% in the previous fiscal year. 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) within the scope of the 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% (Base year : FY2020) within the scope of the 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.

FY2024 Results

Target Under Stage XI of the Fujitsu Group Environmental Action Plan	FY2024 result
Reduce negative impacts on biodiversity by at least 12.5% (Base year : FY2020) within the scope of the company's corporate activities, including supply chain, and promote activities to increase positive impacts on it.	Negative impacts on biodiversity were reduced by 28.5% (Base year: FY2020) in locations where Group and supply chain activities are located. As one of the Fujitsu Group activities to increase our positive impact on biodiversity, we continue to support forest conservation activities in the Forest of Hope, a tropical rainforest on the island of Sumatra in Indonesia.

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 of the most relevant targets to the business sector is Target 15 : " Take 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:

1. Ecological Footprint is a Component indicator for Target 15 of the Global Targets for 2030, proposed by SBSTTA-24, selected based on scientific findings.
2. It 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 Nationally feasible: Yellow Globally feasible with national disaggregation: Yellow Readiness: Red Summary: Relevant, not fully operational 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) 15.4.1 Ecological footprint 15.4.2 Recycling rate	t15.1. CO ₂ emission per unit of value added (SDG indicator 9.4.1) 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 (*1)

*1 Source: CBD/SBSTTA/REC/24/2 27 March 2022

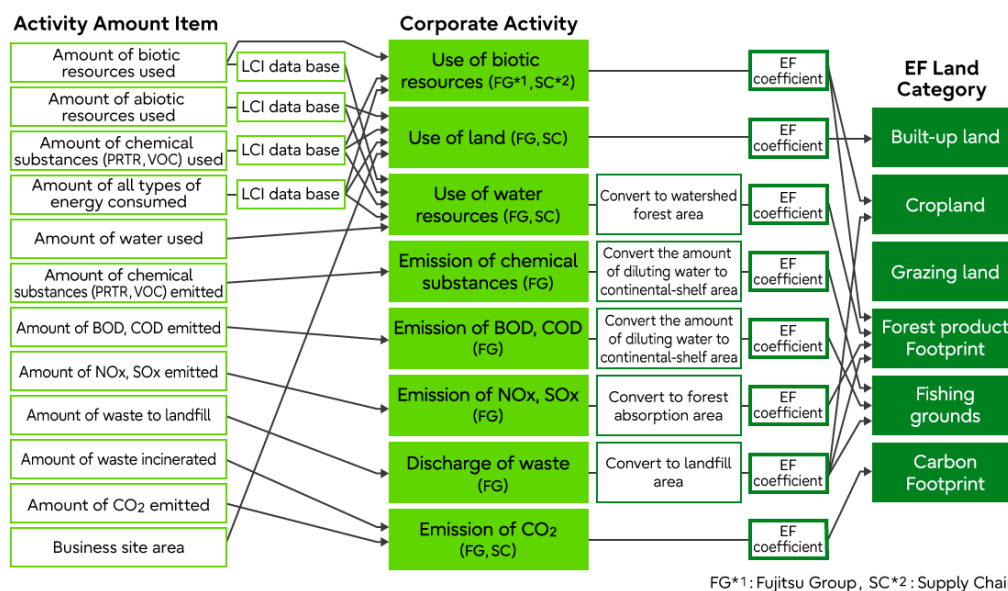
In examining the calculation method, we used the Business & Biodiversity Interrelationship Map® (developed by Japan Business Initiative for Biodiversity (JBIB)) as the basis for extracting items that have biodiversity-related dependencies and impacts, and determined the corresponding amount of activity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

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
	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
				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 NO _x , SO _x emitted
				Amount of PRTR, VOC emitted
	—	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
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

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

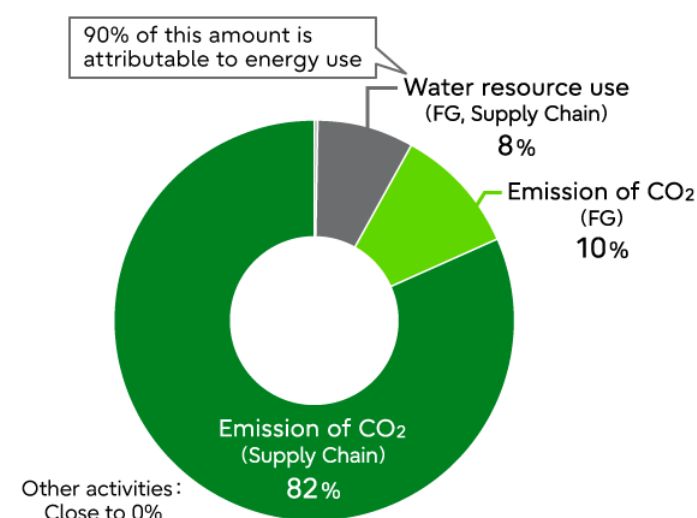
- [\[PDF\] Nature-related dependencies and impacts and corresponding activity data in the Fujitsu Group](#)

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 CO₂ 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 CO₂ 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.



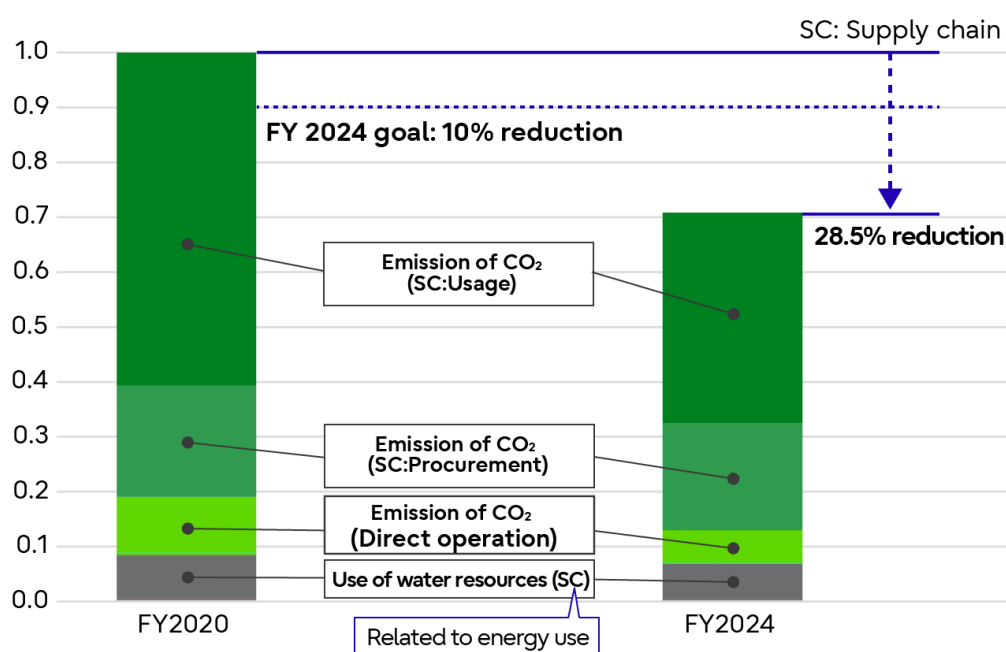
EF Calculation Results in Fujitsu Group (FY2020) - Percentage by Corporate Activity -

FY2024 Initiatives in Detail

28.5% 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 28.5% against a baseline of FY2020, thus achieving our FY2024 target of a reduction of at least 10% against a baseline of FY2020 (*2). This is due to a reduction in CO₂ emissions, notably a significant reduction in CO₂ emissions downstream in the supply chain (Scope 3 Category 11 emissions).

*2 EF coefficients are fixed for comparison



Fujitsu Group EF Assessment (FY2024 Results, by Corporate Activity)

Continuous support of rainforest conservation in the Hutan Harapan (Forest of Hope) tropical rainforest in Sumatra, Indonesia

Since 2018, the Fujitsu Group has been supporting Hutan Harapan, a rainforest conservation effort on the island of Sumatra, Indonesia, through Birdlife International Tokyo. The Hutan Harapan rainforest is a massive forest of around 100,000 hectares (about half the size of Tokyo), located on the southern side of the island of Sumatra. This is the first area in Indonesia set aside as an Ecosystem Restoration Concession (Rights to use forests in a non-logging manner, such as the production of non-timber forest products), and rare animals such as the Sumatran tiger and Sumatran elephant still exist there. In addition to protecting the forest from threats such as forest fires and illegal logging, activities are underway to restore the original ecosystem of secondary forests that were previously commercially logged.

Currently forest patrols are being conducted as an urgent response to large-scale forest fires and illegal logging in the Hutan Harapan rainforest. However, because of the time and effort involved in conducting the patrols and aggregating information, those efforts restricted the resources available for the original mission of forest restoration. The Fujitsu Group has suggested digital technology use to support more efficient forest patrol activity. The use of digital technology has expanded the use of forest monitoring dashboards and new communications infrastructure, effectively countering the destruction of forest and contributing to its conservation.

For further details refer to Contributing to forest conservation through digital technology (*3).

- [*3 Contributing to forest conservation using digital technology](#)

Related information

- Conservation of biodiversity
 - [Supporting biodiversity conservation with funds, technology and personnel](#)



Forests of Hope site: Hutan Harapan
(Source : Hutan Harapan)