

Environmental Performance Data Calculation Standards

Applicable Period: April 1, 2024 – March 31, 2025

Fujitsu Group Environmental Action Plan (Stage 11)

Boundary: For details, refer to [Fujitsu Group Environmental Action Plan](#)

Target Item	Indicator	Unit	Calculation Method
Climate Change			
<Scope1, 2> 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 CO₂ emissions: - Fuel, gas and heat supplied $\Sigma [(fuel\ oil, gas\ annual\ usage) \times CO_2\ conversion\ factor\ for\ each\ type\ of\ energy^*]$ *CO₂ conversion factor: Conversion factor for power, based on the Act on Promotion of Global Warming Countermeasures - Electricity Annual electricity consumption x CO₂ conversion factor (for location-based and market-based calculations) - Location-based: - Japan: Usage of 0.421 tons-CO₂/MWh in FY 2023 (Source: Adjusted emission factors published on April 16, 2025 from the Electric Power Council for a Low Carbon Society) - Overseas: Latest IEA value (IEA Emissions Factors 2024) - Market-based: - Japan: FY 2023 emission factors for each power producer are used (Base emission factor (adjusted for non-fossil power sources)) (Source: GHG Emissions Accounting, Reporting, and Disclosure System List of Emission Factors by Power Producer) - Overseas: Value of the power company or the latest IEA value (IEA Emissions Factors 2024)
	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
	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> 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 2020 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	$\Sigma ((\text{Procurement amount of each procurement item}) \times (\text{3EID factor corresponding to the item of each procurement item}))$ (Source: Embodied Energy and Emissions Intensity Data (3EID) published by the National Institute for Environmental Studies Center for Global Environmental Research) Products procured from outside (including voluntary procurement by Fujitsu Group companies) managed by Fujitsu and Fujitsu Group companies through procurement systems for manufacturing parts, services, and indirect materials. (Excluding FDK Corporation and Shinko Electric Industry Co., Ltd.)
	Capital goods	Tons -CO ₂	Total amount of acceptance inspection of construction objects in the fiscal year $\times$ emission intensity (Source: Database for calculating an organization's greenhouse gas emissions through its supply chain ver. 3.5 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 $\times$ Emissions per unit (Source: Database for calculating an organization's greenhouse gas emissions through its supply chain ver. 3.5 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 * CO ₂ emissions related to domestic transportation by the Fujitsu Group, based on the Act on the Rational Use of Energy as a source 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 $\times$ Emission per unit (Source: GHG protocol emissions coefficient database)
	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 $\times$ Emissions per unit of annual amount of waste processed or recycled (Source: Database for calculating an organization's greenhouse gas emissions through its supply chain ver. 3.5 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) $\Sigma(\text{Transportation expense payment} \times \text{Emissions per unit})$ (Source: Basic Guidelines for Calculating Greenhouse Gas Emissions Via Supply Chains Ver. 2.3 and Emissions per Unit Database Ver. 3.5 published by the Ministry of the Environment and the Ministry of Economy, Trade and Industry)
Reporting company (Scope 1, 2)	Employee commuting	Tons -CO ₂	For portions of commute by public transportation: (By means of transport) $\Sigma(\text{Transportation expense payment} \times \text{Emissions per unit})$ (Source: Same as above) For portions of commute by private automobile: $\Sigma(\text{Transported persons-kilometer} \times \text{Emissions per unit})$ (Source: Same as above) 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 $\times$ Emissions per unit of fuel oil, gas, electricity, and heat consumed (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 2024)
	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 * 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 * 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)
Downstream (Scope 3)	Processing of sold products	Tons -CO ₂	Intermediate product sales volume ^{*1} x Emissions per unit of processing volume ^{*2} *1 Intermediate product sales volume: Fujitsu’s device solution sales *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} *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 *4 Emissions intensity: - Japan: Usage of 0.422 tons-CO₂/MWh in FY 2023 (Source: Emission factors published by the Electric Power Council for a Low Carbon Society) - Overseas: Latest IEA value (IEA Emissions Factors 2024)
	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 (tCO ₂ e/t)) (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.) *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.
	Investment	Tons -CO ₂	GHG emissions by each company (Scope1+2) ^{*6} x Investment ratio *6 Applies to equity-method companies with an equity ratio of less than 50%.

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) 2. Cost for soil contamination countermeasures 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	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

		subject to VOC emissions restrictions		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		m³	Annual use of clean water, industrial water and groundwater (not including groundwater used for melting snow or extracted for purification.)
	Amount of Recycled water		m³	Annual amount of water used for manufacturing and other purposes once, then recovered, processed, and used again for manufacturing and other processes.
	Energy consumption (calorie basis)		TJ	Σ["Purchased electricity" to "District heating and cooling" below] * The following "heat conversion factor (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/Nkm³ is used.
		Purchased electricity	TJ	Annual electricity purchases x 3.6 MJ/kWh*
		Bunker A, fuel oil, light oil, benzine, 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)* (Natural gas data from FY 2023 onward are converted using the SATP standard.)
		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 *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.” *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 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) * Calorific value conversion factor (unit heat generation): in accordance with the "Law Concerning the Rational Use of Energy."
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	
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 substances	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: FY0202)” in the Environmental Action Plan (Stage 11).
		GHG emissions other than CO ₂	Tons	* For the calculation method, see “Reduce GHG emissions at business sites by half of the base year by the end of FY2025 (Base year: FY0202)” in the Environmental Action Plan (Stage 11).
		NOx emissions	Tons	NOx concentration (ppm) x 10 ⁻⁶ x Dry gas emissions (m ³ N/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 ³ N/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 disposed
		Thermal recycling volume	Tons	Among all types of waste put to effective use, the total volume used in thermal recycling * 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 * Material recycling: Processing of waste to facilitate its reuse, and reuse 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
		Waste diversion rate	%	Weight of waste converted/(Weight of waste converted + Weight of waste disposed of in landfill) x100 *Weight of waste converted: Amount of waste processed by methods other than landfilling disposal, such as simple incineration, + Amount of waste effectively used
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).