For the Environment—Environmental Management

## Operating Activities and Environmental Burden (Material Balance)

We promote environmentally friendly business activities through overall quantitative assessment of our environmental burden from the life cycle and supply chain standpoints.



**Calculation Methods** 

INPUT			
Development / Planning & Design	Raw Materials	Material inputs to our major products* shipped in fiscal 2009 (raw materials per unit for each product times the number of units shipped in fiscal 2009)	
Procurement	Chemical Substances	Volume of PRTR Law target chemicals handled by plants/sites in fiscal 2009	
Manufacturing / Development	Water	Volume used by plants/sites in fiscal 2009	
	Energy	Electricity, oil and gas consumed by plants/sites in fiscal 2009	
Distribution/Sales	Energy	Energy consumption in transportation in fiscal 2009	
Usage	Energy	Electricity consumption by major products* shipped in fiscal 2009 (Assumed hours of use per product x age-based electricity consumption x the number of units shipped in fiscal 2009)	
Collection/Reuse/Recycling		The weight ratio of recycled parts and resources with respect to the processing volume of post-use products is calculated according to the method of the Japan Electronics and Information Technology Industries Association. It excludes collected waste other than post-use electronic products.	

\* Major products: Personal computers, mobile phones, servers, workstations, storage systems, printers, scanners, financial terminals, retail terminals, routers, LAN access equipment, access network products, mobile phone base stations, and electronic devices. (Magnetic disks and MO drivers were included in major products in the previous fiscal year, but have been removed following the Group's withdrawal from these business areas.)



## **Calculation Methods**

OUTPUT			
Development / Planning & Design Procurement Manufacturing / Development	Raw Materials	Material inputs to our major products* shipped in fiscal 2009 (per-unit volume of CO <sub>2</sub> emitted from mining the resource until it becomes a raw material for each product times the number of units shipped in fiscal 2009)	
	Chemical Substances	Measuring the concentrations of PRTR Law target chemicals discharged through plants' drains and exhaust ports in fiscal 2009 and multiplying the total volume discharged (nickel compounds, manganese compounds, etc.) or total volume emitted (xylene, toluene, etc.), or calculating based on the chemical substance balance (xylene and toluene).	
	Atmospheric Release	CO2: CO2 discharge volume associated with energy consumption by plants/sites in fiscal 2009 (Energy consumption times CO2 conversion factor) NOx, SOx: Calculated from concentrations in gases discharged from vents (boilers, etc.) by plants/offices in fiscal 2009 Greenhouse gases other than CO2: Discharge volume of process gases used in four semiconductor plants in fiscal 2009. (Calculated by formulas such as <volume gas="" of="" used="">x <ratio consumed="" in="" reactions=""> x <detoxification ratio="">) VOC: Emission amounts of the substances subject to emissions restrictions stipulated by the four electric and electronics associations for factories and business sites for fiscal 2009.</detoxification></ratio></volume>	
	Water Discharge	<ul> <li>Wastewater volume discharged by plants/sites into sewerage or rivers in fiscal 2009</li> <li>BOD: A measure of the emission volume of organic pollution of water discharged by businesses employing the volume of oxygen consumed when organic matter in water is removed by microbial activity.</li> <li>COD: A measure of the emission volume of organic pollution of water discharged by businesses employing the volume of oxygen consumed when organic matter in water is removed by microbial activity.</li> <li>COD: A measure of the emission volume of oxygen consumed when organic matter in water is removed chemically by oxidation.</li> </ul>	
	Waste	Quantity of Waste Generated: amount of waste generated by plants/sites in fiscal 2009 Volume of Waste Disposal: The volume of landfill disposal and simple incineration by plants/sites in fiscal 2009 (including waste which is not a zero emission target)	
Distribution/ Sales	Atmospheric Release	The total volume of CO2 emissions in fiscal 2009, including both fuel consumption by Fujitsu's shipping business when measurable, and shipping distance x freight weight x coefficient when the freight of companies other than Fujitsu is included, as in mixed load transportation	
Usage	Atmospheric Release	The volume of CO <sub>2</sub> emissions during use of major products* shipped in fiscal 2009 (Amount of energy consumed x CO <sub>2</sub> conversion coefficient. The amount of energy consumed is calculated by multiplying the quantity of electricity used during the estimated time of use of each product unit by the number of units shipped in FY 2009).	

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With Global and Local Communities