

EHS Management

- The Tokyo Electron Group regards environment, health and safety activities (EHS activities) as among its top business priorities.

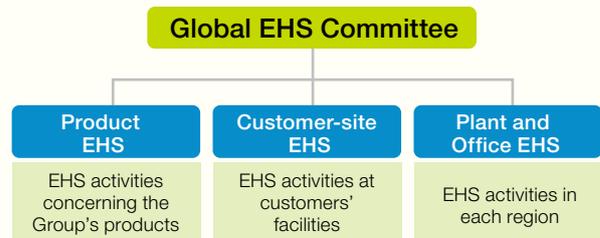
Fundamental idea behind EHS activities and our EHS promotion system

The Tokyo Electron Group regards human health, safety and the global environment as three of its most significant business priorities. Committed to earning the trust of all of those involved in our business operations and to carrying out our business activities accordingly, we base our actions on our belief that EHS activities will lead to long-term benefits for the entire Group. As a responsible corporate citizen, we are committed to realizing a healthier and more thriving society through implementation of our EHS activities.

We have established a system to promote EHS activities throughout the entire Tokyo Electron Group. Our EHS activities cover three areas: Product EHS; Customer-site EHS, which concerns product delivery and installation operations; and Plant and Office EHS. These activities are overseen by our Global EHS Committee.

Our Group companies—manufacturing subsidiaries in particular—have introduced environmental management systems based on ISO 14001 standards and are currently in the process of obtaining ISO 14001 certification.

The Tokyo Electron Group's EHS promotion system



ISO 14001 certified plants and offices

Company name	Plant/office name	Certification date
Tokyo Electron Tohoku Ltd.	Tohoku Plant	February 19, 1998
Tokyo Electron Kyushu Ltd.	Koshi/Ozu Plants	March 26, 1998
Tokyo Electron Yamanashi Ltd.	Yamanashi Plant (Fujii/Hosaka)	May 15, 1998
Tokyo Electron Miyagi Ltd.	Taiwa Plant	March 1, 2005
Tokyo Electron Technology Development Institute, Inc.	Sendai Office	June 24, 2010
Tokyo Electron Device Ltd.	Yokohama Office	July 14, 2004

● EHS training

The Tokyo Electron Group offers EHS training courses consisting of several levels for both Group employees and employees of partner companies who work at the Group's facilities. The training program for new employees also includes mandatory EHS instruction.

● EHS monitoring system

In order to enhance the effectiveness of our EHS management system, we continually increase the level of auditing concerned with monitoring system functions and results. Auditing is performed from multiple viewpoints, including within plants and offices and within the Group, and by third parties.

Tokyo Electron's manufacturing subsidiaries make every effort to comply with laws and regulations, carefully checking environmental laws, emissions standards, and other pertinent regulations while also establishing their own standards for some substances.

In fiscal 2012, there were no environment-related accidents, violations, or litigations.

● Environmental checking at newly established business locations

In fiscal 2012, we conducted environmental audits at plants and offices located in overseas markets, using a unified checklist. The

checklist covers not only basic information such as site area and total floor area but also input and output analysis, including the type and volume of energy used, volume of water consumption, implementation status of recycling, and usage of gas and chemicals (input), as well as the volume of emissions, water discharged, and waste generated (output). All the data were checked against relevant laws and regulations.



Environmental auditing underway

● Biodiversity

The importance of protecting biodiversity during corporate activities is increasing. Under our new Environment Vision (see p. 10), the Tokyo Electron Group will investigate and analyze its current status concerning this issue and then determine a policy and plan in fiscal 2013 to promote the protection of biodiversity.

The Commitment is expected to be fulfilled ahead of schedule

Tokyo Electron's Environmental Commitment, defined in 2008

- ▶ We aim to develop equipment that enables a 50% reduction—compared to 2007 levels—of the total environmental impact of new customer factories scheduled for completion in 2015 or later.
- ▶ We aim for a 50% reduction—compared to 2007 levels—of the impact of our business and transportation activities on the environment by 2015.
- ▶ We will strive to achieve these commitments in partnership with our stakeholders.

● Environmental goals expected to be achieved ahead of schedule

The Tokyo Electron Group has been working on various environmental activities at customers' factories as well as within the Group with the aim of reducing environmental impacts by 50% over the baseline year of fiscal 2008 by the end of March 2015. However, since this goal is expected to be achieved earlier than planned (in fiscal 2012), we have set new environmental goals (see p. 11).

① Develop equipment that enables a 50% reduction in the total environmental impact of customer factories

The selected major pieces of equipment are expected to achieve the target of a 50% reduction in CO₂ emissions per 300 mm wafer soon.

② Reduce the environmental impact of our business and transportation activities by 50%

②-1 Business activities

CO₂ emissions from our business sites, consisting mainly of plants responsible for the development and manufacturing of products, were reduced in fiscal 2012 by approximately 25,000 tons to about 88,000 tons compared with fiscal 2008, when the Environmental Commitment was formulated (about 113,000 tons when calculated using the fiscal 2008 standards regarding applicable plants and offices and power factor). This is due to environmental investments made for the Miyagi and Yamanashi

plants including those for photovoltaic power sources, energy conservation activities, and the reorganization of business sites. By utilizing carbon offsetting*¹ with a domestic clean development mechanism (CDM)*² (including that made available under the government scheme to support recovery following the Great East Japan Earthquake), which amounted to approximately 50,000 tons, as well as through the use of a renewable energy programs in the United States, CO₂ emissions per unit of sales*³ and total CO₂ emissions were reduced by 52% and more than 60%, respectively, making it very likely that we will achieve the 2008 goal soon.

②-2 Customer shipments

CO₂ emissions generated during the transportation of products to customers in fiscal 2012 decreased by 54% to approximately 66,000 tons, and by 22% per ton-kilometer*⁴. For shipments outside Japan, the share of marine transportation increased by more than 20 points over the baseline year of 2008 to 37.8%. In order to address longer shipment times resulting from a shift from airborne to seaborne shipping, we will continue our efforts to minimize lead time, reduce equipment weight by reducing the number of parts used, and raise local procurement rates.

*¹ Carbon offsetting: A system by which companies can compensate for part or all of greenhouse gas emissions that cannot easily be reduced by purchasing credits equal to the amount of reduction, or reabsorption, of greenhouse gases elsewhere

*² Domestic clean development mechanism (CDM): The approved mechanism for CO₂ emissions reduction under Japan's Domestic CDM System (a Japanese government scheme that allows small and medium-sized businesses to receive funding, technology, and technical support from large businesses in order to work collaboratively to reduce CO₂ emissions and trade the reduced amount as emission credits)

*³ Per unit of sales: CO₂ emissions from business activities ÷ net sales

*⁴ Ton-kilometer: A unit of measurement equal to the weight in tons of goods transported multiplied by the number of kilometers transported

■ Goals and results for fiscal 2012 EHS activities and medium-term goals for fiscal 2013 onward

	Action	Medium-term goals	Results for FY2012	Achievement level	Plans and goals for FY2013	Related pages
EHS management	EHS internal audit	Perform EHS internal audit at plants and offices across the supply chain.	Performed safety audits at production facilities.		Conduct environmental audits as well.	p. 14
Product-related initiatives for the environment	Reduction of product-related environmental impacts	Reduce environmental impact by half in FY2016 (in comparison to FY2008). Basic unit: CO ₂ emissions per 300 mm of wafer	Implemented measures for 30-50% reduction in major equipment and made recommendations to customers.		Reduce power consumption of major models of each business unit by 50% by FY2015.	p. 15 p. 16 p. 17
	Measures to reduce the use of regulated chemical substances in equipment	Shipment of equipment with 98.5% or more of parts in compliance with the EU's RoHS	Continued shipment of equipment containing reduced amounts of chemicals since October 2008.		Continue to ensure that major models of each business unit contain 98.5% or more parts that meet the EU's RoHS.	p. 18
Logistics-related initiatives for the environment	Reduction of logistics-related environmental impacts	Reduce environmental impact by half in FY2016 (in comparison to FY2008). Basic unit: CO ₂ emissions per ton-kilometer	Achieved a 54% reduction in total CO ₂ emissions and a 22% reduction in CO ₂ emissions per ton-kilometer.		Promote a modal shift. Continue monitoring.	p. 19
Plant and office initiatives for the environment	Reduction of plant and office environmental impacts	Reduce environmental impact by half in FY2016 (in comparison to FY2008). Basic unit: CO ₂ emissions per unit of sales	Total CO ₂ emissions reduced by 60% or more Achieved a 52% basic unit reduction.		Achieve a 1% basic unit reduction over previous fiscal year. Comprehensive evaluation of basic unit reduction at each plant and office	p. 15 p. 20
	Promotion of waste recycling	Achieve a recycling rate of 97% or more. Continue to achieve zero waste at production facilities.	Increased the recycling rate of the entire Group to 97.4%. Achieved zero waste at production facilities.		Maintain a recycling rate of 97% or more. Continue to achieve zero waste.	p. 22
Health and safety related initiatives	Reduction in the number of accidents/disasters involving injuries or fatalities	Establish a system to prevent accidents that may result in an injury or fatality, and aim to eradicate accidents that may lead to a severe injury.	Achieved a 50% reduction in accidents that may lead to a severe injury, compared with FY2011.		Reduce accidents that may lead to a severe injury by 20% or more compared with FY2012.	p. 24



Achieved target



Achieved 80% of target



Achieved less than 80% of target