

ENVIRONMENTAL, HEALTH AND SAFETY ACTIVITIES

Tokyo Electron's important corporate missions include placing the highest priority on ensuring people's health and safety and preserving the global environment when conducting business activities.

Fundamental Policy

Tokyo Electron positions environmental, health and safety activities as one of its most important management issues to achieve both sustained corporate growth and a sustainable society. With that in mind, Tokyo Electron is committed to reducing the environmental impact of all its activities, and to ensuring absolute safety in the Company's facilities and in those of its customers.

In order to accelerate our environmental activities, in May 2008 we codified Tokyo Electron's environmental commitment, selecting "Technology for Eco Life" as a slogan to guide our environmental activities. One of the stipulated goals of this commitment is to develop production equipment that will enable customers to cut the total environmental burden of their factories in half by 2015, and also to cut the Company's own environmental burden from business activities and logistics in half by the same date. As a result of progress in the related activities, the Company expected to achieve these goals ahead of schedule. The Company has therefore set new goals this fiscal year, and under the slogan "Technology for Eco Life" continues its global environmental preservation activities centered on contributions by innovative product and technology.

Moreover, to push ahead with these environmental, health and safety initiatives, we believe that it is vital to promote communication with all stakeholders as well as to receive and give feedback. In line with this, we are also actively engaging in activities that contribute to society.

EHS Management

Since 1997, Tokyo Electron has developed and implemented environmental management systems based on ISO 14001 standards, mainly for the plants conducting manufacturing operations, and obtained the relevant certification. Furthermore, to enhance the workability and effectiveness of the EHS Management System, we are continuously raising the level of the audits that check the system and its results. These audits are performed from various viewpoints: from within the workplace or the Group, or by a third party.

Initiatives to Reduce the Environmental Burden of Products

Proactive Environmentally Conscious Product Design

Tokyo Electron believes that the promotion of product designs sensitive to the environment is vital. In particular, Tokyo Electron has positioned promotion of energy conservation in its products, as well as the reduction and replacement of regulated hazardous chemicals, as priority issues.

1. Initiatives to Reduce the Environmental Impact During Equipment Usage

Tokyo Electron set a roadmap for reducing the environmental impact of major products, together with such policies for the

equipment usage as reducing the energy consumption, and reducing the heat, air output, water and chemical substances used. In this connection, we now make technological and operational proposals to our customers, and in cooperation with them adjust our approach to each product's characteristics in a multi-faceted manner. We are actively implementing initiatives to achieve these goals. Furthermore, we are working to reduce the total environmental burden during product usage: not merely of our products, but also of the facility equipment owned by customers by means of optimal power management.

2. Initiatives Regarding Regulated Hazardous Substances in Products

As an environmental measure, Tokyo Electron promotes efforts to reduce hazardous chemical substances in its products. Chemical substances contained in the units and parts used in products are managed in a dedicated database. Tokyo Electron has positioned those products in which at least 98.5% of the constituent parts meet standards stipulated by the Europe RoHS directive* as "equipment containing reduced amounts of chemicals." Shipment of these products first began in October 1, 2008.

* Refers to the "Restriction of the use of certain Hazardous Substances in Electrical and Electronic Equipment" directive in Europe (2002/95/EC) and amendments thereto. With the exception of certain applications excluded from its scope, this directive prohibits the inclusion of lead, mercury, cadmium, hexavalent chromium, PBB, and PBDE over a maximum prescribed amount in products.

Health and Safety Activities

Tokyo Electron promotes health and safety in all of its operations. This includes giving top priority to the health and safety not only to our employees but also our customers and cooperating companies, and to designing products with health and safety in mind.

In fiscal 2012, Tokyo Electron developed activities in line with its important goal of preventing accidents that could lead to serious injuries. As a result, succeeded in reducing the number of accidents to half of the number in fiscal 2011. The Company tenaciously continued to implement accident prevention measures such as prior checks of clean rooms before installing equipment, on-site risk prediction activities, safety patrols activities, and safety education for workers that uses accident examples. Tokyo Electron marks the 50th year of its founding this year, and will return to prioritizing fostering a safety culture in line with the safety slogan "Safety First," with the entire Company united in preventing accidents and disasters. For further details, see the "Tokyo Electron Environmental and Social Report 2012" (to be published in September 2012).



Tokyo Electron's Environmental Goals

The Tokyo Electron Group has assessed the impact of its products on the environment throughout their entire lifecycle—from the development of major products, through manufacturing and logistics to product use. Based on this assessment, Tokyo Electron

has set a goal of achieving a 50% reduction of per-unit CO₂ emissions by 2015 compared with 2007 (FY2008) base line year, and we are promoting measures to reduce environmental impact.

Achieving Environmental Goals and New Goals

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

We are nearly achieving the target of CO₂ emissions per 300 mm wafer unit for the most of our major products.

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

2-1 Logistics

The amount of CO₂ emissions in fiscal 2012 was decreased by 54%, and reduced by 22% per ton-kilometer in comparison to the baseline year.

2-2 Business Activities

CO₂ emissions for FY2012 centered on development and manufacturing factories decreased by approximately 25,000 tons compared to the baseline year (FY2008: CO₂ emissions approximately 113,000 tons) to approximately 88,000 tons. We achieved this by energy-saving environmental investment, including the installation of solar power generation systems at the Miyagi and Yamanashi plants, energy-saving activities, and plant integrations.

We expect to achieve our goal of reducing CO₂ emissions per unit of sales by 52% and by over 60% in total volume by using Domestic CDM*¹ (Clean Development Mechanism) to achieve carbon offset*² of about 50,000 tons, including the Great East Japan Earthquake Recovery Program under Japan's Domestic Carbon Credit System, and green power in the U.S.

Tokyo Electron has closed the initial environmental goals in these three fields of activities because we expect to achieve them, and set new environmental goals.

Based on a new environmental vision, these new environmental goals proclaim individual targets in the fields of products, plants and offices, procurement and logistics, and we will strengthen environmental management to contribute to global environmental preservation through enhanced initiatives. For further details, see the "Tokyo Electron Environmental and Social Report 2012" (to be published in September 2012).

*1 Domestic CDM (Clean Development Mechanism)

The approved reduction amount in CO₂ emissions in 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 working collaboratively to reduce CO₂ emissions and trade the reduced amount as emission credits)

*2 Carbon offset

The compensation for part or all of greenhouse gas emissions that cannot easily be reduced by purchasing credits equal to the amount of reduction, or re-absorption, in greenhouse gas elsewhere.

Initiatives in the Thermal Processing System TELINDY PLUS™

The Thermal Processing System Business Unit (TPS BU) has developed a process for forming silicon dioxide films for double patterning*¹ at room temperature. In conventional processes, a temperature of several hundred degrees is required in order to break down gases and promote a vapor phase reaction, but this newly developed process takes place at room temperature through techniques such as selecting the source gas and generating radicals*² of oxidized species using plasma.

This process has yielded the following results.

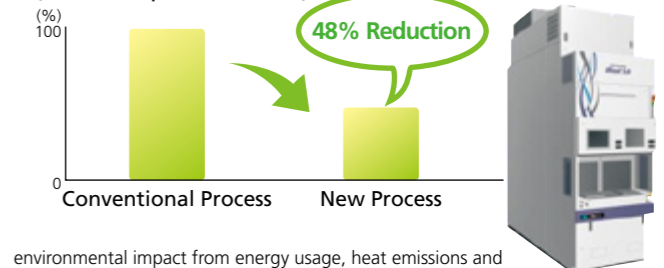
1. Reduced number of process steps:

This process makes it possible to form film atop a highly heat-susceptible resist and achieve miniaturization using double patterning to reduce the number of processes, which results in reducing the energy used at other utilities.

2. Reduced environmental impact from film formation:

Because heat is not required when forming the film, this process reduces the

Environmental Impact from Film Formation (CO₂ Emissions per Wafer Area Unit)



environmental impact from energy usage, heat emissions and cooling water by 48% in CO₂ equivalent.

3. Reduced size of equipment:

Because no heater is required to apply heat to the wafer, this process is able to reduce the number of parts by 30% and footprint by 39%.

*1 Double patterning: One type of miniaturization process.

*2 Generating radicals: Describes one type of atom configuration where a single electron orbits around the atomic nucleus in the outer shell, where normally electrons orbit in a pair.

Status of Tokyo Electron Group's Environmental Initiatives

Organization dedicated to the environment	Corporate Environment Promotion Dept.
Highest responsibility for the environment	Board of Directors and Board of Executive Officers
Environmental audits	Internal and external audits each conducted yearly; other irregular inter-Group audits
Introduction of environmental management systems	Acquired ISO 14001 at 8 plants and offices
Zero emissions of waste	Achieved at all domestic manufacturing bases; recycled products used in-house
Setting of energy conservation targets	Implementing energy-saving products and energy-saving targets at plants and offices
Environmental training for employees	Conducted for all employees
Punished for violating environmental regulations?	Tokyo Electron has never been punished for this