Tokyo Electron's corporate missions include placing the highest priority on people's health and safety and taking the global environment into account when conducting business activities.

# **Fundamental Policy**

Tokyo Electron positions environmental, health and safety activities as one of its most important management issues to achieve sustained corporate growth and continued development of society. With that in mind, Tokyo Electron is committed to reducing environmental loads across its activities, and to ensuring absolute safety in the Company's business premises and in those of its customers. Tokyo Electron embodied these commitments in "TEL's Credo and Principles on Environmental Preservation" and "TEL's Safety and Health Credo and Principles" formulated in 1998. The former statement was reviewed and revised in May 2006 in light of the direction the business was taking and the Company's evolving approach to these issues. Also, recognizing the need to deal with current global warming and climate change issues, in October 2007, Tokyo Electron inaugurated an environmental steering committee in order to accelerate environmental response activities.

In May 2008, we codified Tokyo Electron's environmental commitment, with "Technology for Eco Life" as the slogan guiding 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 load of their factories in half by 2015, and to cut the Company's own environmental load from business activities and logistics in half by the same date. In fiscal 2009, we researched the criteria and roadmaps to establish in preparation for fulfilling this commitment. In fiscal 2010, we intend to flesh out the details of the plans and standards for reaching our goal.



# **EHS Management**

Since 1997, Tokyo Electron has developed and implemented environmental management systems based on ISO 14001 standards, mainly for manufacturing operations, and obtained certification.

# **Adoption of Environmental Accounting**

Tokyo Electron has introduced an environmental accounting system that quantifies the cost of its activities in respect of environmental protection, and uses this as the basis for developing corporate action policies.

For details of results for fiscal 2009, please refer to the Tokyo Electron website.

# Product-related Environmental Initiatives

# Proactive Environmentally Conscious Product Design

As clearly set forth in our revised TEL's Credo and Principles on Environmental Preservation, Tokyo Electron believes that promotion of product designs sensitive to the environment is vital. Tokyo Electron has positioned promotion of energy conservation in its products, as well as reduction and replacement of hazardous chemicals, as priority issues.

#### 1. Reducing Environmental Loads During Equipment Usage

In fiscal 2009, we established a roadmap for reducing environmental loads in all business departments. When developing this roadmap, we positioned reducing the energy requirements of our products, addressing chemical substance-related matters, reducing the number of parts and processes required, reducing the use of processing gases and liquid chemicals, and improving the environmental performance of existing equipment as essential categories. We also set reductions in the processes required to start up equipment as a voluntary category. In line with reducing both materials and processes, we are reviewing them as a part of development and promoting relevant improvements.

Tokyo Electron follows the SEMI S23 Guide for Conservation of Energy, Utilities and Materials Used by Semiconductor Manufacturing Equipment that was adopted as the global standard by the semiconductor industry. Tokyo Electron assesses the energy consumption of its products in accordance with these guidelines.

#### Items in the Environmental Road Map for Each Division

- 1. Reducing the energy consumption of our products
- 2. Addressing chemical substance-related matters
- 3. Reducing the number of parts and processes in our products
- 4. Reducing the use of processing gases and liquid chemicals
- 5. Improving the environmental performance of existing equipment

# **ISO-14001-Certified Plants and Offices**

Company/plant	Plant	Certification date	Certification number
Tokyo Electron AT Limited Tokyo Electron PS Limited	Sagami Plant	December 10, 1997	1110-1997-AE-KOB-RvA
Tokyo Electron Tohoku Limited	Tohoku Plant	February 19, 1998	1118-1998-AE-KOB-RvA
Tokyo Electron Kyushu Limited	Kumamoto/Koshi/Ozu/Saga plants	March 26, 1998	1120-1998-AE-KOB-RvA
Tokyo Electron AT Limited	Yamanashi Plant (Fujii/Hosaka area)	May 15, 1998	1124-1998-AE-KOB-RvA
	Miyagi Plant	March 1, 2005	01245-2005-AE-KOB-RvA
Tokyo Electron Device Limited	Yokohama Office	July 14, 2004	EC04J0144

#### 2. Hazardous Substances in Products

As an environmental measure, Tokyo Electron promotes efforts to reduce hazardous chemical substances in its products. Chemical substances found in the units and parts used in products are managed through a specialized database. One widely known measure targeting such chemical substances is Europe's RoHS<sup>\*1</sup> directive. Although semiconductor and FPD production equipment are not targets of the directive, we use it as a reference point in our drive to limit the use of legally restricted chemical substances. This is in addition to maintaining full compliance with compulsory laws and regulations such as the China RoHS directive.

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 with reduced chemical substances." Shipment of these products has been ongoing since October 1, 2008, with plans to gradually increase volume going forward. Tokyo Electron remains committed to further promoting the development and manufacture of eco-conscious products with the aim of becoming a more environmentally friendly company.

# **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 of our employees and customers and designing products with safety in mind. TEL's Safety and Health Credo and Principles clearly state that all employees are responsible for being constantly aware of health and safety considerations in all their business activities. In fiscal 2009, we reduced the number of injuries excluding those requiring first-aid alone across the Tokyo Electron Group by approximately 20% year on year, and injuries requiring first-aid by more than 40%. Promoting activities aimed at curbing the number of accidents further will remain our policy going forward.

# **Communicating With Stakeholders**

The Tokyo Electron Group actively promotes communication with all stakeholders. To develop environmental, health and safety initiatives, we believe that it is vital to share information as much as possible with all parties related to our business activities and to receive feedback.

One example is efforts to give back to local communities. Our philosophy states, "We place the highest priority on gaining the trust and acceptance of customers, suppliers, investors, and communities around the world" and "We therefore strive to be a faithful and cooperative member of the communities and nations where we do business." In line with this philosophy, we engage in activities to contribute to society and build relationships of trust with governments and local communities around our facilities. These activities are conducted both in Japan and overseas.

For further details, see "Environmental and Social Report 2009" (to be published in September 2009). http://www.tel.com/eng/citizenship/ehsreport.htm



## Preventing Global Warming

#### Initiative for Coater/Developer CLEAN TRACK™ LITHIUS Pro™

A coater/developer is used to coat photoresist and develop the exposed pattern simultaneously in the lithography process (where the same photo development technology is applied) in manufacturing semiconductors. When we developed the CLEAN TRACK LITHIUS Pro coater/developer by redesigning CLEAN TRACK™ LITHIUS™, we concurrently worked to reduce the environmental impact of the overall LITHIUS series. Specifically, we adopted a new exhaust system for hot plate chambers which directly uses exhaust air from the factory. We previously exhausted air by using compressed-air powered ejectors. This shift enabled us to reduce the use of compressed air by 35% or more compared to the previous system. We also worked to achieve a proper volume of nitrogen gas purge in this coater/developer, resulting in at least a 70% reduction in the use of nitrogen gas. Through these improvements, the revised models' energy requirement per unit area of wafer was reduced by approximately 20%. When developing the new LITHIUS Pro, we incorporated energy-saving features, such as introducing an inverter-equipped automatic control system for the humidifying heater and the freezer within the temperature and humidity controller, and reducing the number of pumps used. As a result, LITHIUS Pro requires 32% less electricity than the initial LITHIUS model. Its energy use per unit area of wafer was also slashed by 35% from the existing LITHIUS model. We will continue to incorporate a greater number of energy efficient designs in all new products and adopt such "green" features for existing models.

<sup>\*1</sup> Refers to the "Restriction of the use of certain Hazardous Substances in Electrical and Electronic Equipment" directive in Europe (2002/95/EC) and its amended version. 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. (European Directive 2002/95/EC on the restriction of the use of certain hazardous substances in electrical and electronic equipment)