The Tokyo Electron Group is implementing aggressive measures to reduce waste, save resources and prevent global warming. This section highlights environmental activities at our manufacturing plants and offices.

**Plant and Office Initiatives for the Environment**

The Tokyo Electron Group is implementing aggressive measures to reduce energy use in compliance with the Energy Saving Act. Our plants and offices are actively reducing their energy consumption by setting specific targets calling for energy efficient use of lighting and OA machines, and appropriate temperature control of air conditioners. We will intensify our efforts to meet our commitment on environmental activities.

**Preventing Global Warming**

**Reducing Energy Consumption**

Our Group is committed to reducing energy use in compliance with the Energy Saving Act. Our plants and offices are actively reducing their energy consumption by setting specific targets calling for energy efficient use of lighting and OA machines, and appropriate temperature control of air conditioners. We will intensify our efforts to meet our commitment on environmental activities.

**CO₂ Emissions from Energy Consumption**

In fiscal year 2008, we achieved the target of reducing CO₂ emissions from energy use per unit sales by 1% from the previous year, although our total emissions of CO₂ from energy consumption increased due to production growth. We will continue to improve on our energy-saving measures.

We also began to calculate our emissions at overseas sites by applying energy coefficients used in the Survey Report on Estimated CO₂ Emission Factors of the Power Sector of Major Countries (June 2006) by the Japan Electrical Manufacturers’ Association (JEMA).

**Reducing the Use of Greenhouse Gases other than CO₂**

We use perfluorocarbons (PFCs) and sulfur hexfluoride (SF₆), which are greenhouse gases, in dry etching, cleaning and other processes during process development and process evaluation.

In fiscal year 2008, we used 10,610 tons of greenhouse gases (as CO₂ equivalent), which is substantially smaller than the fiscal year 2007 level (21,006 tons). This was mainly due to a considerable decrease in the volume of SF₆ used for product development and evaluation at the Yamanashi Plant.
Resource Conservation

Our Approach to Resource Conservation
We are working to minimize our use of resources. Specifically, we are reducing the use and purchase of copy paper and stationery and implementing green procurement practices giving preference to environmentally-conscious products.

We have replaced printer toner cartridges with cartridges made from recycled materials and cooperate with the manufacturers in the recovery of end-of-life cartridges. At some offices, we have established an intranet-based system, under which stationery no longer needed can be used by other departments.

Efforts to Reduce the Use of Paper
We are making a group-wide effort to reduce paper consumption. Our employees are encouraged to practice duplex copying, copy at a reduced size and digitize information and internal circulars. As a result, the Group’s total use of copy paper in fiscal year 2008 fell by about 10%, or about 9.7 million sheets, from the previous year. In addition to reducing paper consumption, we are working to conserve natural resources through efforts such as using recycled paper and introducing bamboo-mixed paper cups.

We will continue to reduce the use of copy paper and minimize paper-based records and accounting slips in order to achieve further reductions in our total paper consumption.

Efforts to Reduce the Use of Water
At our manufacturing plants, various measures are underway to reduce the use of water. For example, the plants have installed a water re-circulating system to reuse cooling water. They have also installed automatic faucets in restrooms and other facilities. These touch-free automatic faucets prevent water waste by automatically shutting off the supply when the user’s hands are removed from the sensor range.

TOPICS

Donating PCs to Industrial High Schools
The Tokyo Electron Group is a partner in the Aizu Craftsman Training Project. This project aims to train the future talent who will support semiconductor and other manufacturing sectors in the Aizu area of Fukushima Prefecture. We donated 10 PCs to each of the project’s member high schools, Aizu Industrial High School and Kitakata Industrial High School. Students from the two schools became the first high school participants of SEMICON Japan* in 2007 with tools they developed themselves. The donated computers were used by our field engineers. We presented the donation certificate at a ceremony held at Aizu Industrial High School on January 25, 2008, which was attended by more than 100 students, teachers and related parties.

*SEMICON Japan: World-class exposition of semiconductor and electronics equipment and materials
Plant and Office Initiatives for the Environment

Waste Reduction and Recycling

Our Approach to Waste Reduction and Recycling
The Tokyo Electron Group strives to reduce and recycle waste. We work according to a firm policy to minimize waste first and foremost, but if waste is generated it should be recycled to the greatest extent possible, and unrecyclable waste should be disposed of in a proper manner.

In recent years, landfill costs have surged due to site shortages. This means that waste reduction also leads to cost reduction. We separate recyclable waste from non-recyclables, use new manufacturing processes which do not involve waste generation, manage the qualifications of contract waste disposal companies and periodically review final waste disposal practices.

Waste Generation and Recycling Rate
In fiscal year 1999, the Tokyo Electron Group set a target of increasing the entire Group’s average recycling rate to 95% by fiscal year 2006. As a result of efforts to attain this target, we achieved a recycling rate of 97.0% in fiscal year 2008 and 97.3% in fiscal year 2007. We are also focusing on reducing overall waste generated, as well as handling liquid waste by installing liquid waste treatment facilities.

Breakdown of Waste Generated
Liquid waste from chemicals used in the product development and evaluation processes accounts for the largest percentage of waste generated by the Group. At present, most liquid waste is recycled. Thanks to the aforementioned treatment of liquid waste by in-house facilities, we were able to achieve a reduction of 20% in the total waste (including waste recycled) in fiscal year 2008, 58% of which is liquid waste, down from 71% in fiscal year 2007.

Zero Emissions
We define plants where less than 2% of waste generated by the plant is incinerated or put into landfills as “zero emission plants” and encourage all plants to achieve zero emissions. In fiscal year 2008, all our manufacturing plants strive to attain this goal, and achieved zero emissions. Our next step is to achieve zero emissions at our office facilities.

Collection and Donation of Pop Can Tabs
Our offices and plants are conducting a variety of programs to promote effective use of waste. For example, our Sagami Plant participated in a pop can tab collection program in November 2007 run by a local association of corporate executives and donated 6.5 kg of collected tabs. With the resulting funds, the association donated wheelchairs to social welfare facilities.

Recycling Rate and Generation of Waste

<table>
<thead>
<tr>
<th>Year</th>
<th>Generation of Waste (Incinerated and landfilled)</th>
<th>Recycling rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>99</td>
<td>3,189</td>
<td>49.7</td>
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<tr>
<td>00</td>
<td>3,179</td>
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<td>414</td>
<td>97.0</td>
</tr>
<tr>
<td>08</td>
<td>366</td>
<td></td>
</tr>
</tbody>
</table>

Note: Rate of recycling of industrial waste (including industrial waste subject to special control)
**Management of Chemical Substances**

**Our Approach to the Management of Chemical Substances**

The Tokyo Electron Group uses chemical substances mainly in developing and manufacturing products. When developing products, we sometimes adopt new chemical substances that have not been used before, or use chemical substances in a way that is different from their traditional usage. In these cases, we look closely at the development facilities and methods, assess the environmental and operational risks associated with the use of the substances, and implement necessary measures before using the substances. We are also replacing dangerous and harmful chemicals used in the manufacturing process with safer substances.

**Compliance with the PRTR* Act**

According to the provisions of the Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (PRTR Act), we rigorously control the specific chemical substances regulated under the act and identify the use and emissions of these substances on a continuous basis. Among the substances regulated under the PRTR Act, we use large amounts of hydrogen fluoride, mainly for cleaning test wafers. The hydrogen fluoride waste is disposed of by an external company or it is disposed of in an approved manner within our premises. Ethylene glycol, used as a refrigerant for cooling water, is another heavily used regulated substance. TEL recycles almost all ethylene glycol we use. We will continue to properly manage all risks associated with the use of chemical substances.

* PRTR: Pollutant Release and Transfer Register. Under the PRTR system, the use of chemical substances that may be hazardous to human health and the ecosystem, their release into the environment, and transfer (contained in waste) outside of the business premises are identified, tabulated and disclosed.

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**TOPICS**

**Prevention of Chemical Pollution**

At our Kansai Technology Center in Amagasaki City, Hyogo, we properly manage various types of chemicals used to develop and evaluate products. At the same time, we also ensure that appropriate steps are taken to prevent air and water pollution. The Center has periodically reported its wastewater data to Amagasaki City for the past five years (the city ordinance required more than nine such reports). Wastewater released from the Center has consistently met the applicable municipal standard. In February 2007, we were recognized by the City as an office with excellent wastewater management. We will continue to manage and control chemical substances, including proper monitoring of wastewater discharge.