

Activities to Reduce Environmental Impact

Tokyo Electron recognizes that the protection of the environment and a commitment to sustained environmental improvement are top priority issues for mankind as well as issues to be considered in business management. At the Company, achieving social prosperity in harmony with the environment is always first and foremost in our minds. Through the environmental activities described below, we are aiming to become a company with overall trust from its stakeholders. The following is an explanation of some of our achievements in the environmental field.

LCA Initiative

The Company uses Life Cycle Assessment (LCA) to quantitatively assess a product's environmental burden during the course of its life at each stage: from raw materials through manufacturing, transport, use, and disposal. For major types of equipment, it has been proven that following the implementation of a LCA program,

comparisons of old and new models show a reduction in the environmental burden of new equipment. Utilization of this assessment in our product development process also allows us to achieve continuous improvement in environmental aspects of our products.

Below we introduce an example of LCA implementation by comparing the new thermal processing system, TELFORMULA with the conventional model, ALPHA (α)-303i.

Lead-Free Solder Movement

Based on the European Union (EU) directive, the use of mercury, cadmium, lead and other hazardous substances in electrical and electronic equipment will be banned in Europe after June 2006. Although semiconductor production equipment does not fall under this directive, the Company is voluntarily and systematically manufacturing our products lead free as part of our efforts to forestall further pollution.

Comparison of Energy Consumption (CO₂ Equivalent) between ALPHA (α)-303i and TELFORMULA

	Electricity	N ₂	Water Coolant	Exhaust	Consumables	Dry Air	Process Gas	(T-CO ₂) Total
ALPHA (α)-303i	463.1	215.6	43.5	44.1	1,217.4	8.7	1.6	1,994.1
TELFORMULA	259.5	96.9	72.2	40.6	36.5	33.4	2.3	541.4

Lead-Free Implementation Plan

- **Restriction of lead use in EU : Cancer and soil pollution prevention**

- WEEE:07/2005, RoHS:07/2006 — for electric and electronic equipment
- Many Japanese electric manufacturers stopped using lead by the end of 2003
Semiconductor equipment is out of scope, but procurements of components including lead will be difficult in the near future.

- **Various lead-free soldering technology : Sn-Ag-Cu, Sn-Zn-**, etc.**

- Potential affection for melting point and adhesiveness

- **To be achieved with a quality and reliability guarantee of lead-free component**

- **The Company's Policy: Implement from the start of 300mm equipment production**

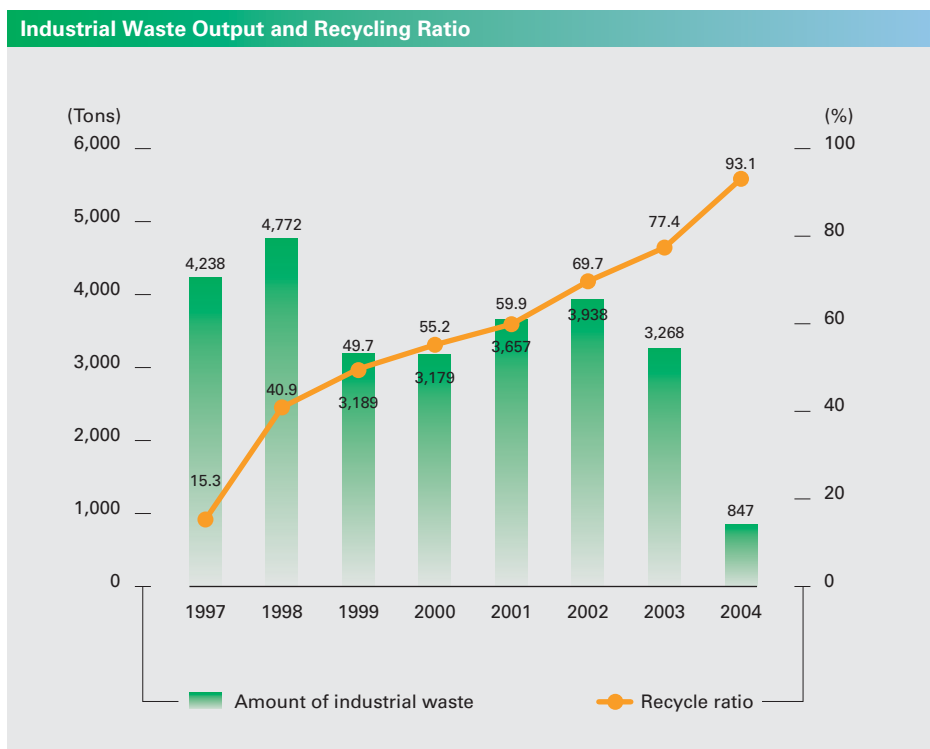
Items	FY2003				FY2004				FY2005				FY2006 1Q
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	
Lead-free task team started activity	▶												
Plan announcement to vender	▶▶												
Technology and material examination to apply	▶▶▶												
Vender investigation and cooperation plan	▶▶▶▶												
Promotion plan to OEM maker					▶▶								
Evaluation of PWB and ASSY (unit)					▶▶▶▶								
Evaluation of PWB and ASSY (built-in)									▶▶▶▶				
Preparation for production									▶▶▶▶▶▶				
Start production													▶▶▶▶

Green Procurement

Almost all of our materials and parts for the manufacturing of semiconductor manufacturing equipment are sourced from suppliers. It is essential to have the cooperation of suppliers, in order to effectively use "Green procurement" to source materials in a manner that reduces environmental damage. To promote their cooperation, the Company issues a Green Procurement Guideline, distributes it to suppliers throughout Japan, and holds green-procurement seminars. As a leader in our industry, we are actively working to introduce trainer education programs to help educate suppliers about green procurement as well as create other educational systems.

Reducing Industrial Waste and Recycling

The Company has set a goal of reducing industrial waste from its manufacturing-related operations in Japan as close to zero as possible by the fiscal year ending March 2005. Targeting zero emissions, we are proceeding with industrial waste reduction and recycling measures. Specific activities include the separation of wastes at each operation into categories for collection, the introduction of processing equipment for effluents, finding recycling companies, and improving industrial processes which do not produce industrial wastes. Through these activities, our recycling ratio has been steadily rising as more effective use is made of our resources.



Environmental Report

The Company has been publishing environmental reports since 2002. We believe that it is important to provide the public as much information as possible about our environmental activities to strengthen communications by sharing it. The results for the fiscal year ended March 2004 will be available in the Environmental Report 2004, to be published in autumn 2004.

Safety Activities

Based on giving top priority to the safety and health of our employees, customers, and everyone involved with the Company's business, we established the TEL Group Credo and Principles on Environment, Safety and Health in 1998. These guidelines clearly state that employees are responsible for being constantly aware of safety and health considerations in each and every business activity. For thorough implementation of these guidelines, we proceed with risk assessments of our shipped products and each assembly and start-up process. Where safety risk is judged to be high, we take systematic steps to reduce it. We are also making efforts to discover and eliminate dangers in our work processes by anticipating them prior to those processes.



Environmental Report 2003



Green Procurement Guideline