TOKYO ELECTRON LIMITED



Environmental and Social Report 2010



Tokyo Electron's Technology Supports Our Everyday Lives in Familiar Ways

Since our establishment in 1963, the Tokyo Electron (TEL) Group has been developing, producing, and selling products in a broad range of fields as a leading supplier of semiconductor production equipment. Utilizing the specialized technology the Company has created in the field of semiconductor production equipment, Tokyo Electron also develops, produces, and sells flat panel display (FPD) production equipment.



The CPUs, memory, liquid-crystal displays and other products manufactured by Tokyo Electron's semiconductor/FPD manufacturer customers are incorporated into a diverse range of electronics products throughout the world and contribute to people's enjoyment of technology through dramatically improved high performance and low energy consumption.

Corporate Profile

Company Name	: Tokyo Electron Limited (TEL)
Address	: Akasaka Biz Tower, 5-3-1 Akasaka, Minato-ku,
	Tokyo 107-6325, Japan
Tel.	: +81-3-5561-7000
Established	: November 11, 1963
Capital	: ¥54,961,190,000 (as of April 1, 2010)
Main Products	: Semiconductor production equipment, flat
	panel display (FPD) production equipment, and
	photovoltaic (PV) cell production equipment
Employees	: 1,099 (non-consolidated; as of April 1, 2010)
	10,204 (consolidated; as of April 1, 2010)

Editorial Policy

This report is intended to explain the TEL Group's stance on corporate social responsibility and report on our initiatives concerning the global environment and society. New information concerning our commitment to customers and shareholders in fiscal 2010 has been added to the report and its content enhanced.

It is our hope that this report will serve to enhance communication between the TEL Group and all its stakeholders, and we hope to make use of such communication in our future activities. We would appreciate you giving us your frank opinions and impressions using the questionnaire form provided.

The results of Tokyo Electron's environmental accounting for fiscal 2010 are available on our website:

web http://www.tel.co.jp/environment/ehsreport.htm

Scope of Report

Tokyo Electron Group

(Tokyo Electron and subsidiary/affiliated companies in Japan and overseas)

Period Covered

Fiscal 2010 (April 1, 2009 - March 31, 2010). However, some information for fiscal 2011 has also been included.



Topics Covered

Areas related to the environment, society, and the economy

Guidelines referred to in preparing this report

Environmental Reporting Guidelines (Fiscal 2007 version) issued by Japan's Ministry of the Environment 2006 Sustainability Reporting Guidelines published by the Global Reporting Initiative (GRI)



Corporate Philosophy

"TEL provides high-value products and services around the world that help people to lead healthy and enriched lives. Demonstrate consistent leadership as a world class company by creating hope for the future and addressing environmental problems. Share a sense of mission with all TEL employees, and become an energetic, dynamic and creative company."

TEL Values

Tokyo Electron Limited (TEL) summarized the values and codes of conduct of the Tokyo Electron Group as TEL Values in April 2006. We will share TEL values with all employees of the Group around the world, which will in turn drive us toward new growth in the future.



TEL Values

Ownership

TEL Values

Pride

We take pride in providing high-value products and services

Teamwork

We will keep ownership in mind as we think things We respect each other's individuality and place through, and engage in thorough implementation in order to achieve our goals. a high priority on teamwork

TEL Values

TEL Values

Challenge

We accept the challenge of going beyond what others are doing in pursuing our goal of becoming number one globally.

TEL Values

Awareness

We must have awareness of and accept responsibility for our behavior as respectful members of society.

Contents

Corporate Profile/Editorial Policy — p.	.2
Corporate Philosophy/TEL Values — p.	.3

Top Commitment p.4



Highlight nal Dound To

niemai nounu Table Discussion.	
he Potential of the Field Solutions Business	р.6
Building a Low-Carbon Society ——	p.10



Management Report

Corporate Governance —	p.12
Compliance	p.13





EHS Report

EHS Management	p. 14
Product-related Initiatives for the Environment —	p.16
Plant and Office Initiatives for the Environment —	p.20
Health and Safety Initiatives	p.24

Social Report

Relationship with Customers and Suppliers —	p.26
Relationship with Shareholders and Investors —	p.27
Relationship with Employees	p.28
Corporate Social Responsibility (CSR)	p.30
Comments from a Third-Party Expert	р. 32
Tokyo Electron's History	р.33

Top Commitment

Through our human resources and technological innovation, the TEL Group is demonstrating leadership in creating a brighter society and addressing environmental issues

Providing high-value technology and service as a top supplier

Fiscal 2010 was a year that saw a huge decline in the global economy due to the financial crisis which began in autumn of 2008. Consequently the electronics industry, of which the TEL Group is a part, also faced a harsh environment. In response, Tokyo Electron took a consistent approach with regard to invigorating our human resources, maintaining worker employment, while at the same time consolidating development and production bases to enhance efficiency and endeavoring to minimize fixed expenses. As a result of these efforts, aided by a rapid market recovery in the second half of the year, our losses for that period were far less than we had initially projected—a promising sign for business recovery in the future.

The main business of Tokyo Electron is the supply of semiconductor production equipment, flat panel display

production equipment, and photovoltaic cell production equipment. These key components in the age of digital networks play a crucially important role, not only in our daily lives, but also in the construction of social infrastructure and environmental responsiveness. To enable further development of these key components, sustained technological innovation in the manufacturing equipment field is imperative.

Tokyo Electron's basic philosophy includes that we provide high-value products and services around the world that help people to lead healthy and enriched lives. Demonstrate consistent leadership as a world class company by creating hope for the future and addressing environmental problems, and share a sense of mission with all TEL employees, and become an energetic, dynamic and creative company.

Demonstrating leadership in achieving a low-carbon society through our technological strength

Interest in environmental issues is growing in Japan in particular, with the national government announcing measures such as a reduction in greenhouse gas emissions by 25% of the 1990 amount by 2020. A shift in values concerning resources, energy, and the environment is occurring on a global scale. In May 2008 under the slogan "Technology for Eco Life," Tokyo Electron announced its commitment to the environment and has since been actively working to reduce impact on the global environment. TEL is pursuing this endeavor through the use of technology, by establishing key objectives, such as the development of production equipment that enables the environmental impact of customers' factories to be halved by 2015, as well as reducing the impact of our business activities and logistics on the environment by 50%.

In fiscal 2010, the energy-saving capacity of all our production equipment was further improved through innovations such as reducing the use of clean water (cleaning system), exhaust emissions (coater/developer), and pump electricity (single wafer deposition). Our field solutions business was launched to enable us to better respond to customers' needs regarding existing equipment. Tokyo Electron has shipped more than 50,000 units of production equipment worldwide and in the future we will be able to respond consistently to requests to improve the productivity of our equipment and their environmental friendliness. It is also possible for us to contribute broadly to society through lowering the power consumption of the semiconductor devices manufactured using our equipment.

In our PV cell production equipment business which we launched in 2008, we are utilizing technology accumulated through our experience with semiconductor production equipment and striving to accelerate research and development with the aim of building a low-carbon society. The thin-film silicon equipment business, which Tokyo Electron is part of, is faltering due to investors pushing back the timing of their investments following reductions in government subsidies for PV cell development and production as well as weakened competition for crystal systems following significant drops in the price of silicon. However, this is a technology with ample room for improving energy conversion efficiency and huge growth can be expected in the medium to long term.

In fiscal 2010, Tokyo Electron also undertook environmental investment expected to reduce CO_2 emissions by approximately 3,000 tons as part of our workplace environmental measures. At our new plant in Taiwa-cho, Miyagi Prefecture, in Japan, which is due to go into operation in April 2011, we will be incorporating various cutting-edge environmental measures, including PV power generation.

We will continue to promote environmental activities as we move towards achieving our commitment goals.

Making employee activation our driving force for growth

We believe that "employees are Tokyo Electron's assets." Despite the harsh business environment in fiscal 2010, we have been enhancing our employee training through our "One Grade Up Program" aimed at helping each of our employees take their individual skills to the next level as we look towards the next period of growth. Through this program, combined with training at our existing internal educational body, TEL UNIVERSITY, we are endeavoring to improve our employees' capabilities. In addition, as a leading production equipment supplier, Tokyo Electron is undertaking activities to spread our basic principle of "providing high value for the construction of a social foundation including people's lifestyles and the environment" so that it may be shared by all employees on a company-wide level.

Building the future with local communities through corporate citizenship activities

As a company with bases throughout the world, Tokyo Electron is aware of its role as a member of the local community, undertaking corporate citizenship activities while collaborating with individual local communities in conscious efforts to contribute to the development of each community.

In fiscal 2010, Tokyo Electron co-hosted with a local newspaper company a well-received hands-on scientific experiment in Miyagi Prefecture, where our new plant is to begin operations in 2011, in collaboration with local universities and NPOs. In the United States, our company headquarters in Austin, Texas has participated in the "Keep Austin Beautiful" clean-up program continuously for more than 10 years.

That concludes my somewhat simplified report of Tokyo Electron's activities in fiscal 2010. It is my hope that this Environmental and Social Report will enable you to gain an understanding of our company's activities, and I welcome any comments you may wish to share with us.

Hiroshi Takenaka President & CEO

Tokyo Electron Limited

Hiroshi Tokerota

Highlight Internal Round Table Discussion: The Potential of the Field Solutions Business

Our field solutions (FS) business undertakes the maintenance, repair, and modification of semiconductor production equipment supplied by the TEL Group to customers, and until now responsibility for these business activities was spread over multiple organizations, including post-sales divisions. In October 2009 these activities were unified and our FS business launched. Employees involved in this area conducted a round table discussion of the potential for FS business (the discussion was held on June 28, 2010).



Generating innovation in the FS business

Moderator: Business models in the world are changing dramatically. From now on not only cutting-edge but also low-cost and other numerous semiconductor applications are going to become necessary, especially when aiming at developing countries. Is there a relationship between the background to these times and the launching of the FS business?

Kaminaga: In our FS business, the entire TEL Group is responding to the polarization of the market into competing with cutting-edge technology and effectively utilizing existing devices and production lines through the sale of TEL-certified used equipment and other efforts. Since there is expected to be demand for FS business products and services centered on consumables even during economic downturns, the business is thought to have the potential to contribute to the stabilization of operations. We are also developing new business models that provide not only hardware-related but across-the-board high-level equipment operation support. We can perceive changes that have come to the surface within the companies in relation to this move in the last six months. Active communications from our locally based affiliates overseas are also increasing, with local offices responding to local situations and creating ideas independently. Asano: I feel that the equipment modification business, which was inactive only a few years ago, has really changed. Our company is now calling this a period of innovation and growth. In the FS business, too, we intend to construct new business models and generate innovation. Sakamoto: I think that one way to generate innovation is through interpersonal communication. By expanding our FS business, our close communication with customers has become livelier than ever before and this has promoted innovation. Moreover, by making use of the broad knowledge and know-how we have accumulated in developing both hardware and software, we provide consulting services for our customers mainly to boost yield and improve wafer productivity. We believe that we should proactively provide support based on our knowledge to not only customers requiring cutting-edge technology but also customers

desiring to improve the production efficiency of their existing semiconductor factories so that they may achieve the same level of operations as cutting-edge semiconductor factories.



Fumihiko Kaminaga Manager Field Solutions Dept. Tokyo Electron Limited



Akira Onodera Field Solutions Dept. Tokyo Electron Limited



Ritsuro Maekawa Field Solutions Dept. Tokyo Electron Limited



Kanto Field Solutions Dept. Tokyo Electron FE Limited



Joji Hoshi Environment, Health & Safety Center Tokyo Electron Limited





Takanobu Asano General Manager Technology & **Development Division** Tokyo Electron PS Limited







Koichi Sakamoto

(participating via teleconference) Field Solutions Dept. Tokyo Electron Limited

Tokyo Electron's used equipment business

Moderator: Please describe the situation regarding used semiconductor production equipment.

Kaminaga: Power semiconductors* and other devices still use small-diameter wafers today. If applications can be adapted, production can be carried out even with used equipment. However, some customers say that the latest equipment is better for dealing with fine particles of dirt and dust.

Sakamoto: We occasionally provide consultation regarding used equipment. There are more problems with how to deal with dirt and dust particles than there is for new equipment. Onodera: One key point in the TEL Group's used equipment business is that the equipment is sold only after improvements have been made to enable it to handle dirt and dust particles. These measures are not undertaken after the used equipment is installed in the customer's factory but beforehand. We believe it is best that the equipment is first taken to one of our factories where it is refurbished (repaired, inspected, etc.) so that it will function adequately at each specific customer site before being delivered to the customer. In this way, defects resulting from aging degradation and various other problems associated with used equipment can be avoided.

Maekawa: Some customers require products that are lowcost. By launching our FS business and dealing in used equipment, we have latched onto a new market. I think it is good to pursue our used equipment business while at the same time maintaining our customers in the cutting-edge equipment field.

Kunugi: We also provide replacement parts for equipment that is still used at customer sites but is no longer in production, by reusing parts recovered from used equipment we have collected. The TEL Group provides part replacement support for up to eight years after production of the

equipment stops, but the results of a survey show that 86% of the models that we produced and delivered 22 years ago are still in operation. Currently, six years after production of the equipment ceased, we are collecting opinions on our support from major customers, and so our policy is to respond to these requests to the very best of our ability.

Main FS Business Services



Reducing costs by listening to workers' opinions and utilizing their experience

Moderator: It seems that ideas are sometimes born from discussions with customers. What about the awareness of workers?



Power semiconductors: semiconductors that can convert/regulate power voltage/current with high efficiency

Highlight

Onodera: In attempting to satisfy our customers' highlevel requirements, engineers make improvement after improvement, which leads to new ideas and our business expands. Our business requires knowledge about not only semiconductors but also electricity, gas, machinery, and a diverse range of other fields. I know that all of our engineers in our various workplaces find the work very interesting. Maekawa: In marketing you need substantial knowledge of how to achieve optimum operations through equipment modification and the costs must be appropriate. We are working out how to reduce costs by making trial-and-error efforts in cooperation with plant staff.

Hasequawa: Awareness of cost has taken root in our FS business because of the constant need to reduce costs, including for marketing, and we endeavor to control costs from the development stage.

Moderator: I assume that veteran engineers, in particular, play an active role in many aspects of the FS business. Is this the case?

Kunugi: Certainly. Each of our engineers has accumulated experience and knowledge, and so they play important roles in various aspects of the business. I think it's necessary to

Customer Comment

Because of Tokyo Electron's consulting services, we have been able to significantly reduce waste in semiconductor production, decrease the rate of defective semiconductor devices, and improve our yield ratio. The cumulative economic effects equal several hundreds of

millions of yen in cost reductions and have contributed to reducing semiconductor device costs.

Shinya Watanabe

Renesas Electronics Corporation

Chief Engineer

Production Technology No. 2 Division Naka Factory, Production Headquarters



8

utilize the expertise of experienced engineers effectively. **Onodera:** Engineers' rich experience and skills generate customer satisfaction and this leads to trust. I think in this business the strength of the workplace brings benefits directly to both parties.

Reducing customers' environmental impact through FS business activities

Moderator: Increased yield and reduced equipment standby times also lead to reductions in environmental impact. To what extent are customers concerned about this aspect? Hoshi: Customer interest in reducing environmental impact is becoming higher than ever before. With respect to reducing environmental impact, what is important is not just simply emphasizing the environment and energy conservation but instead making proposals that position energy as a cost; timing is also very important. For example, energy-saving models or functions are effectively recommended to customers who plan to replace equipment. Adding functions after the equipment is installed increases costs, so relocation of equipment or a factory is also a good time to suggest and implement environmental measures.

Asano: Without legislation or numerical targets set by the government to reduce environmental impact, it would not be easy to go after environmental measures head-on. We are considering ways of incorporating energy-saving functions into our products effectively from the development stage. Kaminaga: As old equipment generally does not have modern energy-saving functions, some people think that old equipment hinders the customers' effort of reducing CO₂ emissions. Many customers ask us for advice on the effective use of high-energy-consuming parts such as pumps, heaters, coolers, and main units.

Onodera: Sometimes it's difficult to get customers to accept proposals for reducing CO₂ emissions because the return on investment is difficult to discern. I think it is also important to obtain the understanding of the customer's top management with an easy-to-understand proposal before moving ahead. **Moderator:** From the perspective of saving and reusing resources, I think that utilizing used equipment is appropriate for the times. Are there any expectations for the FS business from the environmental division?

Hoshi: We view prolonging the life of equipment itself as more important than parts. When you look at environmental impact from the perspective of the product lifecycle, continuing to use old equipment is one way of efficiently using resources, and I think this is a point that we need to emphasize in promoting used equipment to customers. Furthermore, while persistent efforts are being made to make all our major products more eco-friendly, we expect additional efforts to be made by developing other devices supporting environmental measures, including a system for visualizing data on energy use.

Kaminaga: Currently we are analyzing benchmark survey

results and yield management data and checking the findings against our knowledge to enable us to formulate proposals for improvements.

Sakamoto: It is necessary to transform the data we have gathered from information into knowledge. Only after we go through this process, we will be able to use that knowledge to make new proposals, including data on energy-saving pumps, which we have recently begun to promote. We intend to expand these proposals.

Maekawa: In order to sell used equipment, we should emphasize the environmental conservation aspects such as reducing CO_2 emissions. Purchasing new equipment for replacement entails disposing of the old equipment, which has a considerable impact on the environment. We are working to help customers understand that it is possible to achieve a greater reduction in CO_2 emissions by reusing used equipment rather than simply by purchasing new equipment.



Opinions voiced in the round table discussion

Listening to the opinions expressed by the various participants in the round table discussion, I was reminded of the potential of our FS business, which was launched in response to the changing needs of society.

The TEL Group has been conducting its business activities with the trust of our customers, which we have gained through reliable service and cutting-edge production equipment. However, customers' interest is not limited to the purchase of new production equipment but has also begun to include the combined utilization of existing production equipment and used production equipment. The FS business was launched with the objective of responding to these new needs.

In our sales of TEL-certified used equipment, the TEL Group handles high-quality used equipment through certification based on our independent standards. Our base has recently expanded with the introduction of new used equipment, which is produced using the same method as new products, using pre-owned units for some parts. Of course, considering how to best utilize our corporate strengths, I believe that the FS business will be in an extremely important and attractive position in 10 to 30 years for covering the needs of the used equipment market, which is expected to expand.

Looking also at our utilization of human resources, because the requirements of customers in the used equipment market differ from those of customers buying new production equipment, I believe the FS business is a very attractive field for veteran engineers, whose technological expertise and experience are necessary for answering questions such as "How do we maximize efficiency?" and "What are the issues involved when we consider overall optimization?" They are also given the opportunity in this field to work with young engineers in creating something new. With so many types of equipment in existence, the TEL Group has a tremendous advantage in identifying where any problems lie due to our extensive knowledge of multiple types of equipment and production lines. When we are able to come up with complex solutions, the FS business is sure to become even more interesting.

Like other industries, the semiconductor industry is cost-sensitive; therefore, reducing costs for electrical power consumption and conserving cleaning solution and resist are high priorities. Unfortunately, production equipment did not have sufficient energy-saving functions in the past, but if current technology can be fed back into this equipment, I believe it can also contribute to reducing environmental impact by conserving resources and energy while at the same time reducing costs.

Utilizing one technology effectively for a long time leads to an eco-friendly business. Moreover, amidst an industry-wide trend toward eco-friendliness, we intend to take a leadership role in promoting these activities and strive to encourage other equipment manufacturers to understand the importance of these efforts.

Kiyoshi Sunohara General Manager FSBU Tokyo Electron Limited



Highlight Building a Low-Carbon Society



Solving environmental problems such as global warming, climate change, and energy resource depletion is an urgent task for humankind. Under our principle of "tackling environmental problems with technology," the TEL Group is taking an even greater leadership role in addressing environmental problems in order to create a society of dreams.

The TEL Group and its PV Cell Production Equipment Business

Renewable energy is gaining attention within society due to expectations that it can contribute significantly to preventing global warming because it emits no or fewer greenhouse gases than current mainstream energy sources and can be used almost perpetually. PV power generation using solar energy may be said to be representative of this renewable energy. However, further technological innovation and cost reductions are necessary to overcome the current challenges, including increasing the efficiency of converting solar energy to electricity, overcoming the shortage of materials for producing the necessary equipment and overall cost improvements.

Utilizing our production technology cultivated through our experience and expertise with semiconductor and FPD production equipment, the TEL Group made a full-scale entry into the PV cell production equipment business in 2008. In February of that year, we set up a joint venture company with Sharp Corporation (Sharp) to begin joint development of plasma CVD¹ systems for use in thin film silicon PV cells. In February 2009, we also entered an exclusive sales representative agreement with Oerlikon Solar Ltd. (Headquarters: Switzerland) for end-to-end thin-film silicon PV cell production lines and equipment in Asia and Oceania. The TEL Group is also undertaking independent development of technology in relation to chemical and organic PV cells and CVD equipment for use in production processes.

Based on our belief that we must employ technology to tackle environmental issues, we are striving to strengthen our PV cell production equipment business to make it the third pillar of our Group following our semiconductor manufacturing equipment and FPD production equipment businesses and consequently increase our contribution to society.

1 CVD (Chemical Vapor Deposition): a method for creating thin films on wafers. Vapor containing the constituent elements of the desired thin film is poured over the wafer and chemical reactions initiated on the wafer surface, creating the thin film. Tokyo Electron's PV Cell Production Equipment Business Expansion

SHARP Joint Development with Sharp

- Plasma CVD systems for use in thin-film silicon PV cells
 Tokyo Electron: Joint development,
- manufacturing, and sales



Installation of a PV power system on the roof of the new Tokyo Electron Taiwan Ltd. (TET) premises

A PV power system was installed on the roof of the new TET premises, which were completed in October 2009. Several types of PV power panels were installed and information about the relationship between the amount of solar radiation to which each panel is exposed and the amount of electricity it generates is monitored, compared, and evaluated. Currently, the amount of electricity generated is no more than 11 kW, but we intend to utilize feedback from these panels to further advance the Group's technology and enhance product development and production.



The PV power system on the roof of the new TET premises

PV cell factory begins operations at Sharp Corporation's "Green Front Sakai"

In February 2008, the TEL Group established a joint venture company with Sharp Corporation (Sharp) to undertake cooperative development of plasma CVD systems for use in thin film silicon PV cells. The equipment developed through this partnership has been delivered to the PV cell factory at Sharp's "Green Front Sakai" manufacturing complex in Sakai City, Osaka Prefecture, and factory operations began on March 29, 2010. This Sharp factory produces thin film silicon PV cells using large glass substrates measuring 1,000 mm x 1,400 mm. The thin film silicon PV cells comprise silicon thinly deposited on these glass substrates. This is a high energy-saving structure, which allows a significant reduction in the amount of silicon used to approximately 100th of that used in the production of crystal PV cells.

Sales launch of the Probus-SiC[™] batch system, which forms SiC epitaxial films on SiC substrates for use in next-generation power semiconductor applications

The voltage of electricity generated at power stations is too high to be generally used, thus it needs to be lowered through voltage conversion at a substation or by a transformer before the electrical power can be utilized. Moreover, as new technologies are being developed to support expanding power utilization, such as PV power generation, battery storage as well as smart grids,² minimizing power conversion loss is becoming an increasingly important issue. Currently, mainly silicon power semiconductors are used for this purpose, but we now know that using SiC (silicon carbide) instead reduces the loss tremendously and can be used efficiently.

Applying its accumulated semiconductor production technology for developing new tool to support the possibility of SiC power semiconductors, the TEL Group has now launched sales of the "Probus-SiC," a device for forming SiC epitaxial films³ on SiC substrates. The core technology used for this equipment is the result of industry-university collaborative research conducted by Kyoto University, Rohm Co., Ltd., and the TEL Group. Using this tool enables highly productive formation of high-quality epitaxial films and can contribute to the realization of SiC power semiconductors.



- 2 Smart grid: a power grid with the function of automatically adjusting the supply and demand of electrical power to optimize the supply of electricity
- 3 Epitaxial film: film that has the same crystalline structure as the underlying crystal substrate

Improved power conversion is expected to reduce CO₂ emissions

SiC is gaining attention as a new material to follow Silicon, which is currently used in semiconductors. Compared with Silicon, SiC is expected to increase the efficiency of electrical power conversion—whether by inverters or converters—and greatly reduce electricity losses, thereby leading to a reduction in CO_2 emissions. SiC can also accelerate switching speed, which helps the development of small devices with good performance.

SiC can be used effectively in hybrid and electrical cars, for example. Currently, these vehicles are equipped with inverter-cooling devices, which could be made unnecessary by using SiC, as this material can work in a high-temperature environment. This in turn enables extension of driving distance by reducing the weight and size of the vehicle. In addition, the use of SiC for wind and hydroelectric power generation, smart grids, and other measures enables the reduction of electrical

power losses.

The current issue is that the prices of SiC substrates are much higher than for silicon substrates of the same size, but our continuing research and development and cost reduction efforts will lead to the growth of the

SiC market, thus contributing to low-conversion-loss electrical power usage and a reduction in CO_2 emissions.

Toshiya Nishino New Products Promotion Dept Tokyo Electron Limited



Management Report

Corporate Governance

The TEL Group is strengthening its corporate governance as well as improving and reinforcing internal control systems and risk management structures with the aim of maximizing its corporate value.

Corporate Governance Policies

The TEL Group is striving to strengthen its corporate governance through a variety of measures in order to maximize corporate value and enhance shareholder satisfaction. We are endeavoring to establish and operate optimal and highly effective structures of governance that are based on our three basic principles for reinforcing corporate governance.

- Basic Principles of Corporate Governance
- 1. Ensure the transparency and soundness of business operations
- 2. Facilitate quick decision-making and the efficient execution of business operations
- 3. Disclose information in a timely and suitable manner

Corporate Governance Framework

Tokyo Electron uses the statutory auditor system based on the Company Law, and has also established its own Nomination Committee¹ and Compensation Committee² inside the Board of Directors in order to increase the transparency and objectivity of management. Tokyo Electron has also adopted the executive officer system to separate the business execution function from the Board of Directors. In addition, the Company has been disclosing the individual remunerations of representative directors since 1999 in recognition of the importance of managerial transparency for shareholders.

- 1 Nomination Committee: nominates candidates for directorships and CEO and submits these nominations to the Board of Directors
- 2 Compensation Committee: prepares a draft remuneration plan for the Chairman and the President and CEO and submits the draft to the Board of Directors

Board of Directors

The Board of Directors consists of 12 members, two of whom are external directors. In order to ensure that the Company can respond quickly to changing business conditions, and to more clearly define management accountability, the term of office for directors is set at one year. During fiscal 2010, the Board of Directors met on 12 Occasions.

Board of Statutory Auditors

The Company has four statutory auditors, two of whom are outside auditors. The statutory auditors not only attend meetings of the Board of Directors, the Management Meeting and other important business meetings, but also conduct operations audits and accounting audits, and evaluate risk management, in addition to auditing the performance of duties by directors. During fiscal 2010, the board of statutory auditors met seven times.

Internal Control and Risk Management Systems

To strengthen the internal control and risk management systems of the TEL Group more effectively, Tokyo Electron is implementing practical measures in line with the basic policy for internal control systems in the Tokyo Electron Group decided by the Board of Directors. Tokyo Electron has also appointed a Chief Internal Control Director and a Compliance & Internal Control Executive Officer. Under them the Company has established the Risk Management & Internal Control Department, which evaluates and analyzes risks that could affect the TEL Group and works to reduce risks by promoting the necessary measures.

In addition, the Global Audit Center was established as an internal audit organization that overseas the internal auditing activities of the entire group's domestic and overseas bases, as well as their compliance and systems. When necessary, the Global Audit Center also provides guidance to operating divisions.



Corporate Governance Compliance

Compliance

The TEL Group acts in strict compliance with corporate ethics and applicable laws to ensure that its corporate activities are fair and reliable.

Stance on Corporate Ethics and Legal Compliance

Trust is the cornerstone of the TEL Group' business foundation. The fundamental requirements for maintaining trust are rigorous conformity to ethical standards and compliance with the law, by individual employees and by each of our organizations.

In line with the basic policy for internal control systems in the Tokyo Electron Group, all Group employees are required to maintain high standards of ethics and to act with a clear awareness of compliance.

Ethical Standards, Chief Business Ethics Director and Ethics Committee

In 1998, the Company formulated the Tokyo Electron Code of Ethics (revised in June 2007) to establish uniform standards to govern all of its global business activities.

In the same year, Tokyo Electron appointed a Chief Business Ethics Director and established the Ethics Committee, which is responsible for promoting awareness of business ethics throughout the Company.

The Tokyo Electron Code of Ethics prescribes a common code of behavior for all employees of Tokyo Electron and the Group and the Company distributes it to all Group employees, including those overseas.

The Code of Ethics of the Tokyo Electron Group Introduction

I. Principles

- 1. Compliance with Applicable Laws
- 2. Acting in Accordance with Social Conscience
- 3. Maintaining Harmonious Relationships with Local Communities

II. Honest and Fair Business Activities

- II 1 Technology, Safety, and the Environment
 - 4. Ensuring Safety and Pursuing Quality
 - 5. Promoting Environmental Preservation Activities
 - 6. Ethics in Manufacturing
- II 2 Fair Trade
 - 7. Implementing Fair and Open Competition
 - 8. Fair Business with Suppliers
 - 9. Handling of Confidential Information
 - 10. Strict Export/Import Controls
 - 11. Reasonable Exchanges of Gifts and Entertainment within the Bounds of Common Sense
- II 3 Relationship between the Company and Individuals
 - 12. Prohibition of Conduct Causing Conflicts of Interests
 - 13. Prohibition of Improper Use of Company Assets
 - 14. Prohibition of Conduct of Harassment

III. Being a Good Corporate Citizen

- 15. Prohibition of Insider Trading
- 16. Prohibition of Political Activities and Contributions
- 17. Prohibition of Involvement in Antisocial Forces
- 18. Respect for Individuals

Implementation of the Code of Ethics*

The "Implementation" section provides specific matters and procedures

Compliance & Internal Control Executive Officer

Since April 2009, Tokyo Electron has appointed Compliance & Internal Control Executive Officer from among its executive officers to raise awareness of compliance across the Group and further improve its implementation.

Framework for Thorough Implementation of Compliance

Tokyo Electron has drawn up compliance regulations setting out basic compliance-related requirements in line with its Code of Ethics. The compliance regulations are intended to ensure that all individuals who take part in the business activities of the Group clearly understand the pertinent laws, regulations, international standards, and internal company rules and continuously apply these rules in all of their activities.

(1) Internal Reporting System

In the event that an employee becomes aware of any activity which may violate laws, regulations or principles of business ethics, the Company operates an internal reporting system (hotline) that employees may use to report their concerns. Strict confidentiality is maintained to protect the whistle blower, and to ensure that they are not subjected to any disadvantages or repercussions.

(2) Employee Training

Tokyo Electron conducts Web-based training programs for all its employees, makes information on compliance issue available to employees via the Company intranet, and takes other steps to promote broad awareness of compliance throughout the Company.

(3) Management of Information on Japanese Laws

In order to reduce the risk of legal compliance violations, Tokyo Electron regularly identifies and clarifies the Japanese laws that affect company operations and regulations. Information regarding revisions to relevant laws is received in a timely manner via an external Web service and appropriate responses taken such as amending regulations, changing operational procedures, and notifying all personnel affected by the revisions.

(4) Protection of Personal Information

When the Act on the Protection of Personal Information came into full effect, the Tokyo Electron adopted a basic policy and regulations concerning the protection of personal information and prepared various manuals regarding the handling of personal information. Tokyo Electron has also been conducting Web-based training for employees and taking other measures to ensure the proper implementation of these policies and regulations in business operations. In addition, Tokyo Electron has been strengthening personal information management through such measures as installing computer servers specially equipped to handle the storing of personal information, introducing encryption functions, and using auxiliary storage units with password-based access control.

EHS Report

EHS Management

The TEL Group regards environment, health, and safety activities (EHS activities) as its top business priorities.

Fundamental Idea behind EHS Activities and Our EHS Promotion System

The TEL Group regards people's health and safety and the global environment as two of our most significant business priorities. We are committed to earning the trust of all of those involved in our business operations and to carrying out our business activities accordingly, basing 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 affluent society through implementation of our EHS activities.

We have established an EHS promotion system in order to foster EHS activities throughout the entire TEL Group. Our EHS activities cover three areas: Product EHS; Customer-Site EHS, which concerns product delivery and design operations; and Plant and Office EHS. These activities are overseen by our Global EHS Committee.

TEL's Group companies, and TEL's manufacturing subsidiaries in particular, began developing and implementing environmental management systems based on ISO 14001 in 1997 and are in the process of obtaining ISO 14001 certification.

EHS Training

The TEL Group offers EHS-based training courses for both group employees and employees of partner companies who work at the Group's facilities. The training course for new employees also includes a mandatory EHS program.

In fiscal 2010, our triennial basic safety training took place. This program dealt with various themes, including messages from top management about the Group's environment and safety policies, and was attended by all employees.



Basic safety update training via the Internet

The TEL 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 AT Ltd	Yamanashi Plant (Fujii/Hosaka area)	May 15, 1998
Tokyo Electron AT Ltd.	Miyagi 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 Monitoring System

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

TEL's manufacturing subsidiaries endeavor 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 2010, there were no environment-related accidents, legal violations, fines, or complaints within the TEL Group.



Audits are performed by third parties.





Tokyo Electron's Environmental Commitment

In May 2008, the TEL Group spelled out its environmental commitment under the environmental action slogan "Technology for Eco Life."

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

Progress in TEL's Environmental Commitment

In fiscal 2010, we set specific targets and examined methods of achieving these targets. We set the target year as fiscal 2015 (period ending March 2015) in line with the TEL Group's medium- to long-term business goals.

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

In fiscal 2010, to enhance the energy-saving capacity of our production equipment, we took appropriate measures based on roadmaps for each of our products. Reduction in resource use was achieved for respective equipment categories: use of pure water in cleaning systems; volume of exhaust from coater/developers; and pump electricity in single wafer deposition. As a result, we were able to achieve a reduction of 30% or higher in CO₂ emissions per wafer unit during use for approximately 30% of our products.

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

The graph on the right shows trends in CO₂ emissions for the TEL Group's business/logistics activities and basic units (CO2 emissions per 100 million yen in sales) for fiscal 2008 through 2010. We have set a target of 14.45 t/100 million yen by fiscal 2015, or a 50% reduction on the basic unit for fiscal 2008. Basic units for fiscal 2008 through 2010 remained virtually the same, because CO₂ emissions reduced in parallel with changes in sales volumes. In fiscal 2010, environmental investment was carried out to reduce CO2 emissions from the entire TEL Group's business activities by approximately 3,000 tons (see page 20). CO₂ emissions from logistics activities decreased from the base year due in part to decreases in shipping volumes (see page 19).

Technology

for Eco Life



	Action item	Goals for FY2010	Results for FY2010	Achievement level	Plans and goals for FY2011 onward	Related pages
EHS management	EHS internal audit	Perform EHS internal audit at plants and offices across the supply chain	Audits in FY2010 were shelved due to economic trends, etc.		Continue to conduct audits	p.14
Product-related initiatives for the environment	Measures to reduce the use of regulated chemical substances in equipment	Achieve the TEL Environmental Roadmap targets (compliance and support in preparation for shipments beginning in October 2008)	Began shipment of equipment containing reduced amounts of chemicals in October 2008		Increase the number of products in compliance; continue to examine chemical-related regulations and implement measures for compliance	p.18
Plant and office initiatives for the environment	Waste reduction	Continue zero emission efforts at manufacturing plants	Achieved zero emissions at manufacturing plants. The recycling rate for the entire Group remained as high as the previous fiscal year		Continue zero emission efforts and examine reducing the total amount of waste	p.22
Health and safety related initiatives	Reduction in the number of accidents/disasters involving injuries or fatalities	Achieve a 30% year-on- year reduction in the number of accidents involving injuries or fatalities	The number of accidents involving injuries or fatalities was reduced year-on-year by 18%, falling short of the target	Ø	Target a 30% reduction in accidents involving injuries or fatalities in FY2011 compared to the FY2009 level	p.24

Goals and Results for Fiscal 2010 EHS Activities and Goals for Fiscal 2011 EHS Activities

🗩 🗩 🖉 Achieved target 🛛 🗩 Achieved 80% of target 🖉 Achieved less than 80% of target

Product-related Initiatives for the Environment

In accordance with Tokyo Electron's Environmental Commitment, the TEL Group aims to halve the total environmental impact of customer factories through measures such as reducing energy requirements during the usage phase of a product's lifecycle and minimizing the use of regulated chemical substances.

Initiatives for Products with Less Environmental Impact during Use

Approach to Reducing the Environmental Impact of Our Products

The TEL Group believes it is important to promote environmentally conscious designs within our business activities, as is clearly stated in the TEL Group "Credo and Principles on Environmental Preservation." We give top priority to supplying energy-saving equipment and to reducing or finding alternatives to the regulated chemical substances contained in our products.

Organizations for Reducing Environmental Impact

Two working groups, the Chemical Substances Steering Team and the Product Working Team have been established to promote the TEL Group's efforts to reduce the environmental impact of its products. The Chemical Substances Steering Team works to reduce or substitute the use of regulated chemical substances in our equipment parts and components. The Product Working Team has developed and started to implement roadmaps for each business unit to reduce its environmental impact. In preparing these roadmaps, the business units were required to address the following mandatory items: reducing equipment energy requirements, 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. In addition, they were encouraged to cover voluntary items, such as reducing the number of processes required for equipment installation. Progress toward achieving the prescribed goals is reviewed under the Group's medium- to long-term plan.

Environmental Roadmap

- 1. Reducing our products' energy requirements
- 2. Addressing matters related to chemical substances
- 3. Reducing the number of parts and processes required
- 4. Reducing the use of processing gases and liquid chemicals
- 5. Improving the environmental performance of existing equipment

Technology Symposium

Following on from 2008, in December 2009, the TEL Group held its 12th Technology Symposium at the Tokyo Electron Nirasaki Arts Hall. Presentations were made on environmental technologies and a poster area was also set up, enabling the

Product-related Initiatives for the Environment

The EXPEDIUS[™] + Cleaning System Reduces the Amount of Deionized Water Required

Cleaning systems use deionized water (DIW)¹ during the wafer rinsing process. Even in the stand-by mode, when wafers are not being processed, a small amount of DIE is continuously consumed to control the generation of bacteria in the DIW pipes. Reducing the amount of DIW used when the system is in stand-by mode has therefore become an issue. We conducted a survey to identify the time it takes for bacteria to be generated after the DIW supply has been stopped, and based on the survey results, we have adjusted the system so that DIW is supplied only as long as is necessary to control the generation of bacteria. As a result, we have been able to reduce the amount of deionized water used by approximately 70%.





Approx. 70% reduction in deionized water supply achieved during stand-by compared to conventional equipment through the use of water conservation/ intermittent operation.

1 DIW (deionized water): used in semiconductor manufacturing processes to clean wafers and in the manufacture of pharmaceutical products. Deionized water is extremely high-purity water, theoretically close to 100% pure water, containing virtually no impurities such as metal ions or microorganisms.

Reducing Emissions by Downsizing Spinners

In addition to the high controllability required for miniaturizing and enhancing the performance of devices, the CELLESTA+ single wafer cleaning system enables a smaller footprint (installation area) with 12 spinners² by reducing the size of the process chambers. Wafer spin chambers require spatter control of process liquids and atmosphere control, but the input and output of large amounts of air are necessary to control these during high-speed spin processing. The CELLESTA+ uses the "rotational cup concept," in which the spin chambers rotate in synchronization with the wafers. This provides not only a 50% reduction in exhaust air compared with conventional systems but also enables downsized process chambers and enhanced productivity per unit area and C.o.0.³



2 Spinner: a device that creates thin films through centrifugal force by

- rapidly rotating flat and smooth base materials
- 3 C.o.O (cost of ownership): total expenses required for installing, operating and managing facilities/equipment, etc.





The TEL Group's Technology Symposium

divisions and departments to engage in a lively exchange of ideas and information.

Energy-saving Measures for Products

Our technology development efforts to reduce product energy consumption focus on the following five areas: (1) reducing the energy used by the product itself; (2) reducing the energy used by peripheral devices; (3) managing the product in an energy-saving manner; (4) reducing the energy used in the clean room⁴; and (5) managing the clean room in an energysaving manner (planned operation and proper management). Energy-saving management of the clean room necessarily involves our cooperation with customers and facility manufacturers. We will work to further reduce the energy consumption of our products in close cooperation with these partners. In addition, as one measure to reduce device energy consumption, we are working to make measuring the amounts of energy consumed by devices that use electricity, water, dry air, cooling water, and exhaust heat, as well as supplementary devices (e.g. vacuum pumps and cooling equipment) more accurate by following the SEMI S23⁵ guidelines.

- 4 Clean room: a room in which dust floating in the air is controlled at or below a defined cleanliness level and in which the temperature/humidity is maintained at a certain standard temperature. Dust can easily cause defects in precision machinery or cause errors in operation, and so clean environments are vital to ensure that the machinery operates correctly.
- 5 SEMI S23: guidelines for energy conservation for semiconductor production equipment issued by Semiconductor Equipment and Materials International (SEMI), an international industry organization for semiconductor//FPD production equipment and material manufacturers

CELLESTA™ Single Wafer Cleaning System



[Features of CELLESTA+]

- 1. High throughput: maximum 333 wafers/hour
- 2. New spinner model: 12 process spin chamber
- 3. Enables built-in chemical supply circulation unit
- TEL original IPA drying technology enables watermark-free drying
- 5. New atomized spray (AS3) for high particle removal efficiency (PRE) with fine patterns and non-damaging cleaning
- Utilizes the highly reliable CLEAN TRACK™ LITHIUS Pro™ coater/developers handling technology

Thermal Processing System that Reduces Greenhouse Gas Emissions Using Fluorine (F₂) Cleaning Technology

In semiconductor/FPD manufacturing processes, PFC⁶ gases such as NF₃ and SF₆ are widely used in etching and CVD chamber cleaning processes. These gases have a global warming potential $(GWP_{100})^7$ more than 10,000 times higher than CO₂ and their impact on global warming is posing serious concern. In response to this, we have developed dry-cleaning technology that utilizes fluorine (F₂) gas, which has a GWP of zero, instead of PFC gases, and we use it in our vertical LPCVD (low-pressure chemical vapor deposition) systems. In addition, compared with conventional wet cleaning technologies, this fluorine cleaning technology not only reduces downtime but also extends chamber life by eliminating quartz damage, thereby contributing to further reductions in environmental impact.

Global Warming Potential of Cleaning Gases Used in Semiconductor/FPD Manufacturing

Cleaning gas	Global warming potential (GWP ₁₀₀)	Lifetime (years)
SF ₆	23,900	3,200
NF3	10,800	740
F2	0	0

- 6 PFC (perfluorocarbon): a fluorocarbon compound containing absolutely no hydrogen or chlorine that is one of the six gases subject to restriction under the Kyoto Protocol. Although PFCs do not harm the ozone layer, their greenhouse effects are several thousand times that of CO₂.
- 7 GWP¹⁰⁰ (Global warming potential): a measure of how much impact a greenhouse gas has on global warming. It is a relative scale that considers a 100-year time span when the GWP for CO₂ is 1.

Initiatives Related to Regulated Chemical Substances in Products

Reducing the Use of Regulated Chemical Substances in Equipment

Against a backdrop of growing concern over the impact that harmful substances contained in parts and materials have on the environment and ecosystems, many countries are working to regulate the use of these substances in automobiles and electrical products. The TEL Group is also introducing measures to reduce the amount of regulated chemical substances contained in its products. One of the best-known regulations on chemical substances is Europe's RoHS Directive¹, which came into effect in July 2006. Although semiconductor and FPD production equipment is currently exempt from the directive, the Group is taking proactive measures to comply with it.

We have already met all of the requirements for China's RoHS, which was issued in March 2007 and applies to TEL's products.

In order to meet regulatory requirements in a prompt manner, the TEL Group established a Chemical Substances Steering Team comprising representatives from TEL's headquarters and manufacturing subsidiaries. The team shares essential information and investigates the use of regulated chemical substances in our products in cooperation with our suppliers, and also introduces alternatives to replace regulated chemical substances. In addition, the team uses a dedicated database to manage the chemical substances contained in units and the parts used in our products. In fiscal 2007, we voluntarily developed a timetable to phase out the use of regulated substances used in our products (excluding certain products) subject to EU RoHS standards. From the second half of fiscal 2009 successively, we began shipping equipment containing fewer regulated chemical substances, which we define as products containing 98.5% or more parts that meet the EU RoHS standards.

1 RoHS: Restriction of the use of certain Hazardous Substances in Electrical and Electronic Equipment

Chemical Substances to Be Reduced First Priority

Cadmium	Pigments, stabilizers, and resins
Hexavalent chromium	Chrome plating
Lead	Solders, paints, electrical wire coating, and free-cutting metal
Mercury	Batteries and fluorescent lamps
PBBs	Resin parts
PBDEs	Resin parts

Second Priority

Substances designated as Level A substances in JIG² (The TEL Group has already implemented measures for many of these substances)

2 The JIG (Joint Industry Guide for Material Composition Declaration for Electronic Products) was prepared by Japanese, American and European private trade associations. The guide lists the chemical substances for which conservation measures should be implemented. It classifies the substances into Level A and Level B; 16 substances are listed as Level A substances, including cadmium, heavalent chromium, lead, mercury, PBBs and PBDEs, while more than 400 substances are listed as Level B substances.

Construction of a Management System for Regulated Chemical Substances

The TEL Group operates a chemical substances management system that can be used to register and view information on the use of chemical substances according to individual parts. This system allows us to check easily whether parts to be used in our products contain regulated chemical substances or not, and control the manufacture or shipment of products containing chemical substances regulated by the EU/China RoHS and other laws.

Activities to Reduce the Use of Other Chemical Substances

Most nations have begun to implement the Globally Harmonized System of Classification and Labelling of Chemicals (GHS)³ based on the recommendation of the United Nations. In order to comply with this system, the TEL Group has begun to obtain chemical substance safety information (e.g., MSDS) classified and created in accordance with the GHS and has not only made this information available within the Group, but has also begun distributing labels for chemical substance containers.

In Europe, companies will be increasingly required to fulfill their responsibilities as manufacturers and follow the principle of taking precautions, under regulations such as REACH⁴, the EU's New Batteries Directives⁵, and the new CLP⁶ regulations. All TEL Group departments are making concerted efforts to comply with these regulations, from product development, design and manufacture to procurement, quality assurance, and environmental and safety performance. We have started surveying substances of very high concern (SVHC) regulated under REACH and are providing information on parts that have been found to contain 0.1% or higher percentages of these substances.

We will also explore the optimal management of chemical substances by participating in the activities of JAMP⁷ and other forums.

- 4 REACH (Registration, Evaluation, Authorization and Restriction of Chemicals): a set of regulations pertaining to the registration, evaluation, authorization and restriction of chemicals. For products containing SVHC (Substances of Very High Concern) in particular, manufacturers are required to provide information on the SVHC content of their products as well as information to ensure the safe use of the products.
- 5 The EU's New Batteries Directive: regulates the collection and recycling of batteries, requiring batteries to be labeled with a designated recycling mark to facilitate collection and recycling.
- New CLP (EC No 1972/2008 Regulation on Classification, Labelling and Packaging of Substances and Mixtures): EU regulations concerning the classification, labeling, and packaging of chemicals and mixtures
 JAMP (Joint Article Management Promotion-consortium): promotes
- 7 JAMP (Joint Article Management Promotion-consortium): promotes appropriate management of chemicals contained in products and smooth information distribution within the supply chain.

 ³ GHS (Globally Harmonized System of Classification and Labelling of Chemicals): a globally harmonized system related to classification and labeling of chemicals agreed by the United Nations that is intended to harmonize and integrate various countries' classification standards for chemical harmfulness and toxicity, labeling and MSDS details.
 4 REACH (Registration, Evaluation, Authorization and Restriction of

Logistics-related Initiatives

Approach to Addressing Environmental Impact Stemming from Logistics

The TEL Group has established a Logistics Working Team and the relevant divisions and departments have created action plans and are implementing them.

In April 2006, Japan's Act Concerning the Rational Use of Energy was revised and regulations concerning logistics were strengthened with the aim of reducing global warming. Accordingly, there is now greater demand for reducing the environmental impact of logistics operations. In response, the TEL Group has been actively reducing the environmental impact caused by the transport of its products. For example, we are promoting a modal shift[®] for domestic and overseas transport and adopting packaging methods with less environmental impact. We will continue these environmental measures in logistics in order to fulfill our environmental commitment.

8 Modal shift: a shift in the mode of transportation (e.g. switching from conventional freight transportation by truck or aircraft to marine and rail transportation, which have a lower impact on the environment)

Reducing the Environmental Impact Stemming from Logistics

In fiscal 2010, TEL transported 11.96 million ton-km of freight in Japan (on a non-consolidated basis), resulting in 2,294 tons of CO_2 emissions. Due to reductions in production and shipment caused by decreased sales, this was a reduction in ton-km of approximately 30% compared with fiscal 2009. The marine transport rate for domestic logistics activities in fiscal 2010 was 5.4%, down from 15.7% in fiscal 2009. This is thought to have resulted from decreases in total actual freight as well as in the quantity of shipments sent via related routes. Modal shifts helped us to reduce CO_2 emissions from our domestic logistics activities by 106 tons.

Our export-related logistics activities emitted approximately 140,000 tons of CO_2 in fiscal 2008, 30,000 tons in fiscal 2009, and 29,000 tons in fiscal 2010. CO_2 emissions decreased in fiscal 2010, due in part to decreases in sales. Although CO_2 emissions per unit of sales have decreased



compared with the base year of fiscal 2008, we will continue to promote modal shifts to prevent increases in CO_2 emissions in the future as our sales and shipments rise. The marine transport rate for export-related logistics activities in fiscal 2010 was 37%. We estimate that increasing marine transport to 60% of our total transport needs would enable us to meet our goal; we will therefore encourage our customers to switch to marine transport and optimize our packaging methods.



Green Packaging

Most of the TEL Group's products are precision machines, which means they require special packaging to maintain precision and keep them in a clean condition. We use special wooden frames and steel-reinforced corrugated cardboard as packaging materials. As a way to reduce the resources used for packaging, we have begun using reusable corrugated cardboard boxes when shipping large parts to customers inside Japan. After the parts are delivered to customers, the reusable packaging materials are returned to us for reuse. We also collect casters used for moving products and bring them back to our plants for reuse, thereby reducing resource usage.

OPICS

Logistics Measures at Our New Plant

At our new plant in Taiwa-cho, Miyagi Prefecture, which is currently under construction (as of August 2010), we are considering introducing a more environmentally friendly cooperative distribution system for delivering procured material. We plan to introduce this system to more than 100 of our suppliers for delivering materials to the new plant

that will develop and manufacture etch systems. We estimate that this system will enable us to reduce CO₂ emissions from logistics activities by more than 50% compared to having materials delivered individually to the new plant. The cooperative delivery system is also expected to bring cost reductions and enable products to be delivered even more swiftly to our customers. After evaluating the outcome at the Miyagi Plant, we will consider expanding the use of this system to other plants.



Plant and Office Initiatives for the Environment

Through the careful and sustained efforts of each of our employees, the TEL Group is proactively undertaking various initiatives to help prevent global warming, conserve resources, and reduce waste.

Measures to Help Prevent Global Warming

Reducing Energy Consumption

In accordance with Tokyo Electron's Environmental Commitment, the TEL Group aims to achieve a 50% reduction in CO₂ emissions per unit of sales¹ by fiscal 2015 compared with the base year of fiscal 2008. In order to achieve this target, during the second half of fiscal 2010, measures were taken at our manufacturing sites to enhance clean room energy efficiency in order to reduce energy consumption, and investments were made with the expectation of achieving a reduction in CO₂ emissions of approximately 3,000 tons. Meanwhile, efforts made at our offices include installing high-efficiency lighting systems, appropriate control of air-conditioning temperatures, and reducing the power consumption of office equipment. Outside Japan, Tokyo Electron U.S. Holdings, Inc. is implementing environmental

Астинатия выстрания вологические соберение со

Tohoku Plant was awarded the Outstanding Energy-Efficient Factory Prize. measures that include purchasing green electricity from sustainable sources of energy such as wind power. In February 2010, our Tohoku Plant (Tokyo Electron Tohoku Ltd.) was awarded the Chairman's Prize by the Tohoku Seven Prefecture Committee to Promote the Use of Electrical Power for an Outstanding Energy-Efficient Factory.

Energy Consumption and CO₂ Emissions

Regarding energy consumption in fiscal 2010, our electricity usage declined by approximately 7% and heavy oil usage dropped by approximately 8% compared with fiscal 2009 due to energy conservation measures conducted in all regions and a decrease in production activities. CO₂ emissions from energy consumption decreased significantly by more than 20% due in part to an improvement in CO₂ emissions factors by our electrical power provider. CO₂ emissions (energy use) per unit of sales decreased by more than 5%.

We will continue with our activities so as to minimize increases in \mbox{CO}_2 emissions when production increases.

Reducing the Use of Greenhouse Gases Other than CO₂

In process development of products and evaluating process (e.g., dry etching and cleaning processes) we use hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride (SF₆), which are greenhouse gases. In fiscal 2010, we used 17,743 tons of greenhouse gases (CO₂ equivalent). We revised our calculation methods for SF₆ and PFCs in fiscal 2009 and made partial adjustments to our figures.

1 CO₂ emissions (energy use) per unit of sales: CO₂ emissions from energy consumption/sales We use adjusted emission factors for individual electric power providers for the emission factor for electricity consumption in Japan in fiscal 2010. For the emission factor for electricity consumption overseas, we use estimated factors calculated by the Federation of Electric Power Companies of Japan based on values published by the International Energy Agency (IEA).









2 t-CO₂: a unit indicating the amount of CO₂ and other greenhouse gases emitted, absorbed, or stored, which is converted to the weight of CO₂ with an equivalent greenhouse effect.

SOCIAL REPOR

Initiatives to Conserve Resources

Our Approach to Resource Conservation

The TEL Group is working to minimize our use of limited resources. Specifically, we are reducing the use of copier paper and stationery and implementing green procurement practices, giving preference to environmentally conscious products.

We have also replaced printer toner cartridges for use in our offices with cartridges made from recycled materials and cooperated with the manufacturers in recovering end-of-life cartridges. At some offices, we have established an intranetbased system, under which unused stationery can be used by other departments, encouraging the reuse of resources across the organization. In addition, active efforts are made to donate excess office supplies, shelves, and other unused items to local government bodies and non-profit organizations.

Efforts to Reduce the Use of Paper

Our employees are encouraged to use duplex copying, to copy at a reduced size, and to digitize information and internal circulars. As a result, the Group's total use of copier paper in fiscal 2010 dropped by more than 10% over fiscal 2009, which represents a reduction of more than four million sheets in the year. Moreover, since fiscal 2010 we have expanded the scope of data collection for our activities by adding data from field service bases and training centers to that for our main business sites in Japan.

We are encouraging the use of environmentally friendly paper and introducing resource-conserving activities by introducing products such as paper cups made from a bamboo-based material. We are also working to raise employee awareness so that they use fewer paper cups and bring their own cups to work.

Efforts to Reduce Water Consumption

To reduce water consumption, our manufacturing plants have installed water recirculating systems to reuse cooling



water. In fiscal 2010, water consumption fell by approximately 15%— mainly because of lower production. Our plants 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

Joint Development of Clean Suits That Are Both Comfortable and Dust-resistant

Tokyo Electron and ONYONE Inc. have jointly developed a revolutionary clean suit (dust-resistant clothing) that is both comfortable and dust-resistant. In order to develop a work suit that is comfortable to wear, especially while working on equipment manufacturing in clean rooms, the materials, design, and sewing techniques used for the clothing were reviewed and altered. The newly-developed suit has dramatically minimized the discomfort that conventional clean suits impose on wearers in a number of ways that include controlling the temperature and humidity inside the clothing, providing more room in the suit, and making it easier to put on and take off.

With this new suit, it is anticipated that air-conditioning temperatures in clean rooms can be set 2°C higher in summer, which will contribute to saving energy.

Plant and Office Initiatives for the Environment

Our Approach to Waste Reduction and Recycling

The TEL Group is working hard to reduce and recycle its waste. We work according to a clear policy: minimize waste first and foremost, recycle whatever waste is generated to the greatest extent possible, and dispose of non-recyclable waste in a proper and responsible manner.

In recent years, landfill costs have surged due to a shortage of sites, which means that reduced waste also leads to reduced costs. We separate recyclable waste from non-recyclables, use new manufacturing processes that do not involve waste generation, monitor the qualifications of contract waste disposal companies, periodically review final waste disposal practices, and also focus on educational activities related to the sorting of waste and other topics. Some business sites have begun using electronic manifests¹ to ensure proper management of waste materials.

Volume of Waste Generated and Recycling Rates

In fiscal 1999, the TEL Group set the target of increasing its average recycling rate² to 95% by fiscal 2006. As a result of recycling measures, we achieved a recycling rate of 96.1% in fiscal 2005, and 97.3% in fiscal 2010. Compared to the fiscal 2009 figures, incinerated and landfill waste fell by 4.2% and total waste (including recycled waste) decreased by 6.3%. The largest percentage of waste generated by the Group comes from liquid waste resulting from the chemicals used in our product development and evaluation processes, but 99% of this liquid waste is currently being recycled.







Zero Emissions

The TEL Group defines plants where less than 2% of waste generated is incinerated or put into landfill as "zero emission plants." In fiscal 2010, all of our manufacturing plants in Japan achieved zero emissions as the result of efforts to recycle and reduce waste, and we will continue to promote zero emission activities across the entire group.

Recycling Rate for Industrial Waste from TEL Group Plants in Japan

Plant	Recycling rate
Tohoku Plant	98.6%
Miyagi (Matsushima) Plant	99.8%
Yamanashi Plant (Hosaka area)	100%
Yamanashi Plant (Fujii area)	100%
Koshi Plant	100%
Ozu Plant	100%

TOPICS Environmental Training Video

Our Yamanashi Plant has produced an environmental training video for newly assigned employees. This video introduces the Yamanashi Plant's energy conservation and waste management activities. The video aids our

environmental education by showing basic environmental actions such as turning off electricity (switching lights off at lunch time and switching office equipment off at the end of the business day), maintaining set airconditioning temperatures, and encouraging the use of duplex printing, as well as rules for waste disposal.



Environmental training video

¹ Electronic manifest: a system in which the flow of industrial waste is managed via a communications network linking information processing centers, companies generating the waste, waste collecting and transporting companies and waste disposal companies, instead of the conventional paper-based control manifest.

Our Approach to the Management of Chemical Substances

The TEL Group uses chemical substances mainly in developing and manufacturing products. In developing products, whenever we adopt new chemical substances that have not been used before or use chemical substances in a way that is different from their traditional usage, we first closely examine the development facilities and methods, and then assess the environmental and operational risks associated with the use of the substances. We do not begin using the substances until all the necessary measures have been implemented. We are also replacing dangerous and harmful chemicals used in the manufacturing process with safer substances.

Compliance with the PRTR Act

In accordance with the Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (PRTR³ Act), we identify the amounts of regulated substances used, discharged and transferred, and rigorously control these substances. This applies particularly to hydrogen fluoride, which is primarily used for cleaning test wafers, and ethylene glycol, which is primarily used as a refrigerant for cooling water. After use, hydrogen fluoride and ethylene glycol waste is either disposed of by an external contractor or disposed of in an approved manner within our premises. In addition, in accordance with the revised PRTR Act, in April 2010 we began identifying the amounts of newly regulated substances used, discharged and transferred and we will continue to properly manage all the risks associated with the use of chemical substances.

PCB Storage

Based on the Act on the Proper Treatment of PCB Waste and the Waste Disposal and Public Cleaning Acts, the TEL Group reports annually on the storage, management, and disposal of waste containing polychlorinated biphenyl (PCB) to the governor of the prefectures in which our plants are located.

Input and Output (FY2010)

Input		Change from previous year
Electricity	231.88 million kWh	(-7.1%)
Gas	1.17 million m ³	(-2.2%)
Fuel	1,976 kl	(-14.8%)
Water	967,000 m ³	(-15.1%)
Chemical su (regulated as Class I dea chemical substances un	bstances signated ider the PRTR Act) 6.2 tons	(-36.1%)
Paper (copier pap	Der) 102 tons	(-15.0%)

The TEL Group is currently storing two decommissioned transformers and four capacitors that contain PCB in a strict and secure manner in accordance with legal requirements.





3 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 their transfer (contained in waste) outside of the business premises are identified, tabulated, and disclosed.



Output	Change from previous year
Total product shipment 13,105 tons	s (-12.5%)
CO ₂ emissions from energy consumption 90,665 tons	s (-21.9%)
NOx emissions 10.1 tons	6 (-9.0%)
Waste water 957,000 m	3 (-15.1%)
Waste 10,090 tons	s (-6.3%)
Recycled amount 9,814 tons	6.4%)
Amount of waste incinerated or put in landfill 276 tons	6 (-4.2%)

Health and Safety Initiatives

With health and safety positioned as a vital foundation of its business activities, the TEL Group promotes "health and safety first" from a range of aspects.

Our Approach to Health and Safety

As part of our Corporate Social Responsibility (CSR) activities, the TEL Group places great importance on ensuring that our customers, employees, and everyone else involved in its business can work in a safe workplace environment, use our products safely, and enjoy good health.

In fiscal 2010, two experts in system safety—Professor Noboru Sugimoto and Associate Professor Takabumi Fukuda of the Nagaoka University of Technology Graduate School of System Safety—were invited to instruct our designers on the basics of equipment safety design. Based on actual accidents, Professor Sugimoto discussed "intrinsically safe designs—which all designs must be—and the principles and responsibilities designers need to understand and fulfill in terms of safety," while Associate Professor Fukuda talked on "approaches to international standards and system safety from the standpoint of recent global trends." Both of these insightful lectures deepened our designers' understanding of safety issues. We intend to continue organizing these lectures and will continue to develop the content.





Lecture on the basics of equipment safety design

Preventing Occupational Accidents

In fiscal 2010, the TEL Group achieved an 18% decline from fiscal 2009 in the number of occupational accidents (excluding minor accidents and injuries that were incurred while commuting), due in part to the decline in product shipments, although this result fell short of the 30% year-on- year reduction goal.

An analysis of the accidents that occurred in fiscal 2010 shows that approximately 70% occurred on worksites related to our group plants. The most common types of occupational accidents were caused by ergonomics¹, work on high structures, and work near large openings in the floor. Of these, the largest number of accidents remain ergonomics-related, an area which has been under scrutiny since fiscal 2009. We will strengthen safety measures promptly to prevent the reoccurrence of this type of accident and improve the situation.

1 Ergonomics: a scientific approach that researches both human physical and psychological functions as well as properties and designs to develop equipment and environments to match these. Ergonomics aims to lighten the burden on workers while at the same time enhancing safety and work efficiency.



Number of occupational accidents that occurred in the TEL Group
 Reduction target
 Japan's electromechanical manufacturing industry

Tokyo Electorn Group

* The number of occupational accidents in fiscal 2001 is taken as 100. Frequency of occupational accidents is the number of occupational accidents per one million working hours.

TOPICS

Safety Awareness Training

Tokyo Electron FE Ltd. is providing safety awareness training at major Field Engineer (FE) service bases. These practical training sessions were first held at its Fuchu Office in April 2010, and since May have been expanded to other field service bases in Japan. These activities aim to drive home to engineers the importance of workplace safety and prevent occupational accidents by providing them with simulated experiences of workplace dangers. Permanent training facilities/equipment for this safety program have been installed at the Fuchu office, which has started to carry out activities



Safety sensitivity training

systematically, including developing simplified moveable training tools for use in training at FE bases as well as dispatching trainers. The training program covers broad areas ranging from the wearing of safety belts during work on high structures, awareness of physical loads suspended in the air, to awareness of the risk of electrocution.

EHS Report

EHS REPORT

SOCIAL REPOR

Safety Education

Since July 2000, the TEL Group has been promoting the concept of safety education throughout the entire Group. We have produced a manual as a tool for basic safety education that will be provided to Group employees. More advanced safety education is provided for our technical employees who work in clean rooms, using the Semiconductor Equipment Association of Japan (SEAJ) recommended service safety training manual compiled by SEAJ. Following the guidelines in this manual, hands-on training is included in the first training session.

In fiscal 2010, refresher safety training comprised a variety of themes including controlling dangerous energy (importance of carrying out lockout-tagout²), effective use of protective gear for the head, hands and feet, safe handling of cutters and other hand tools, as well as risks posed by automatic guided vehicles used at our customers' sites. These safety refresher courses are conducted online; this allows our employees to take the course at their convenience and allows their progress to be monitored.



2 Lockout-Tagout: to prevent unintended actuation of a power switch on equipment by using tools such as a key to put it out of commission (lockout) and a tag to indicate that use of shutoff or similar equipment is prohibited (tagout).



Training Using Videos

The TEL Group has created videos for use in safety training to prevent ergonomic accidents caused by factors such as the increased unit weight of equipment due to increased size and reduced work space. The aim of these training videos is to ensure that workers maintain a natural posture while installing equipment or performing maintenance as well as an enhanced understanding of worker comfort, safety, and product quality improvements from an ergonomic perspective. In response to the large percentage of ergonomics-related accidents that have occurred over the past few years, the TEL Group uses this video training as part of its efforts to keep ergonomic risks low, remind workers of the importance of safe, userfriendly equipment, and ensure safety.

In order to prevent the reoccurrence of accidents that have actually occurred during work on high structures or near large openings in the floor, and involving heavy lifting gear or electricity, we have created videos that reproduce actual accidents using 3D images. This visual presentation helps us to check the management system at the time of the accident, the work load status of the injured, and whether or not adequate communication has taken place. These videos are becoming an integral part of our safety training.



Video on preventing ergonomicsrelated accidents



Video reproducing accidents using 3D images

TOPICS

CPR and AED Training

Cardiopulmonary resuscitation (CPR) and automated external defibrillation (AED) are both effective methods of saving lives in the case of cardiac arrest, including certain cases of sudden heart attacks, water accidents or electrocution. The TEL Group invites external specialists to provide employees with periodical CPR and AED training. Feedback from participating employees includes, "Many more people can be saved if more people are able to use CPR and AED in an emergency" and, "It will help if a family member meets with an accident."



New employees undergoing CPR/AED training

Social Report

Relationship with Customers and Suppliers

The TEL Group sets honest policies for product quality and procurement aimed at satisfying customers and enhancing growth with suppliers.

Approach to Product Quality

The TEL Group aims for product quality that generates customer trust in our products and services through continuous provision of products and services that consistently satisfy customers. In order to ensure that our manufacturing systems do not produce defective products, the TEL Group has acquired ISO9001 certification and works to ensure that our product quality management system operates appropriately.

- TEL's Commitment to Quality
- 1. Quality is our top priority TEL's goal is to achieve the highest quality in the world 2. Product quality awareness

All employees must understand the importance of product quality to TEL's business. Quality must always be given priority, even if profits are temporarily affected. That is how we build long-term trust, and contribute to society.

- 3. Observing company rules Employees must observe the rules stipulated by each TEL organization to ensure that quality remains our top priority and continues to improve. These rules and regulations are reviewed regularly to ensure that they
- These rules and regulations are reviewed regularly to ensure that they are appropriate and effective in our effort to improve quality. 4. Employees responsibilities

Employees are responsible for making product quality their top priority. They must remain aware of potential problems, actively identify and analyze them, and take necessary action for improvement.

5. Managers' responsibilities

Managers must monitor on-site conditions at all times, spot problem areas, and give instructions for improvement. Managers must ensure that their subordinates have a good understanding of the overall TEL business environment, including customer's requirements, and must make employees aware of the importance of enhancing the quality of all TEL products and services.

Quality Assurance System

The TEL Group has established a quality committee comprising heads of the quality department of each business unit. The committee meets regularly to oversee efforts to enhance product quality and address priority issues, thus promoting improvement and enhancement of product quality for the entire TEL Group.



Approaches to Procurement

The basic philosophy of the TEL Group includes "providing high-value products and services around the world that help people to lead healthy and enriched lives, and demonstrating consistent leadership as a world-class company by creating hope for the future and addressing environmental problems." In order to realize this philosophy, it is vital that we build strong partnerships with our suppliers.

Based on this basic philosophy, we have established the following Basic Procurement Policy and continue to work proactively to fulfill its goals.

Procurement Policy of the TEL Group

- 1. Partnerships
- 2. Cost reduction
- 3. Lead time reduction
- 4. Coexistence with the global environment
- 6. Compliance with legal and social codes
- 7. Product quality/safety assurance
- 8. Information management
- 5. Global procurement activities

Communicating with Suppliers

The TEL Group not only uses EDI* for procuring parts and materials, but also operates its own website as a two-way tool for communicating with suppliers. The website can be linked to the internal systems of both the TEL Group and the supplier.

In order to strengthen our supply chain, the TEL Group has launched joint projects with our suppliers, including annual meetings with numerous suppliers. The fiscal 2010 meeting featured the theme of "Aiming at medium- to longterm growth together in a significantly evolving market," and presentations and discussions were held on growth strategies and environmental initiatives under this topic. This event helped to reaffirm the importance of the supply chain.

* EDI (Electronic Data Interchange) is a framework to electronically exchange information related to commercial transactions among corporations in a unified standard format.



Suppliers are invited to participate in meetings.

Relationship with Shareholders and Investors

The TEL Group emphasizes fair, equitable, and timely disclosure of information to and dialogues with shareholders and investors, both in Japan and overseas.

Information Disclosure

Approaches to Information Disclosure

Tokyo Electron is committed to disclosing information about the Company in a fair, prompt and accurate manner, to ensure that all stakeholders, including shareholders and other investors, can obtain an accurate, in-depth understanding of the Company and its activities, and evaluate the Company's corporate value appropriately. The Company also solicits feedback from its stakeholders as part of its information disclosure activities, and uses the feedback as a point of reference to guide corporate management.

Information Disclosure Methods

If it is subject to the marketable securities listing regulations (material information), Tokyo Electron will release information simultaneously in a press release and via the Tokyo Stock Exchange's "Timely Disclosure Network" (DTnet), and will post the Information on its website as soon as possible, following the official announcement. Even when it does not fall into the category of "material information," the Company will voluntarily disclose information which may be of interest to stakeholders, in a fair, accurate, and easy-to-understand manner, either on its website or in printed form, through various means of communication.

To ensure that foreign investors have fair and equal access to the information, the Company strives to disclose all information

simultaneously in Japanese and English. However, due to the time required for translation, there may be cases where the posting of English information to the website is delayed slightly.



TEL webpage for investor relations



Communicating with Shareholders and Investors

Annual Shareholders' Meeting

To encourage lively discussions at annual shareholders' meetings and to encourage them to exercise their voting rights, invitations are sent out early-more than three weeks prior to the meeting-and for the convenience of our shareholders, we work to avoid the date when most major Japanese companies hold their shareholders' meetings. Tokyo Electron participates in the web-based voting platform for institutional investors operated by Investor Communications Japan Inc. (ICJ). To supplement the above shareholder

meeting related initiatives, Tokyo Electron's website carries notice of convocation. notice of resolution and materials of shareholders' meetings. An English version of the notice of convocation of Annual General Meeting of Shareholders is also provided.



Annual shareholders' meeting

Financial Results Briefing

Tokyo Electron conducts meetings to discuss its financial results with securities analysts and investors; these meetings are also open to members of the press. The Company makes audio recordings of its fiscal year-end and mid-term financial results meetings, and posts these recordings on the Company's website. All of the documents distributed at its quarterly financial results meetings are also posted on the website.

Tokyo Electron is a constituent of the FTSE4Good Global Index.

Since September 2003, Tokyo Electron has been chosen for the FTSE4Good Global Index, which is a CSR index provided by the FTSE Group. The FTSE Group is a world leading index firm, a joint venture between the Financial Times newspaper and the London Stock Exchange.



Relationship with Employees

We are striving to create a workplace that enables all of our employees to reach their full potential based on respect for their enthusiasm, autonomy, and willingness to take on challenges.

Approach to Human Resources

In pursuit of our vision of becoming an energetic, dynamic and creative company, the TEL Group respects the autonomy of its employees and their willingness to undertake challenges, thereby helping them to realize their full potential.

Our personnel system is designed to help each employee achieve self-development and to contribute to the organization. Our evaluation system does not simply focus on results but also emphasizes the process leading up to results, in particular, the efforts made and the level of skills demonstrated by individual employees achieving certain results. The purpose of this system is to fairly evaluate employees' total job performance based on the following three criteria: scope of ability to be assessed for the process-focusing evaluation (competency); roles expected to play (mission); and results achieved according to the roles (performance). The assessed competency provides the skills and competencies possessed by an employee at the time of evaluation, and the assessment is used to improve the skills and competencies required for accomplishing a variety of tasks.

Assisting Employees' Career Development

The TEL Group provides a variety of support to its employees in response to their different career ambitions. Once a year, employees fill out a Self-Declaration Questionnaire to communicate their preferences regarding job transfers or to share individual work-related problems. These employee requests are taken into consideration when transfer decisions are made. In addition, in order to provide employees with opportunities to pursue their own career paths and add dynamism to the organization, an Open Job Posting System was introduced. In fiscal 2010, this system made 21 matches between eager and aspiring employees and recruiting departments within the Group. In addition, 12 employees in the general job category were successfully promoted to management positions, in line with their wishes, after they were evaluated for those positions using an aptitude test.

Developing Employee Support Systems

The TEL Group is committed to developing a system for helping employees to achieve work-life balance. These efforts include enhancement of childcare leave¹, childcare support working hours², nursing leave (five days per year) and childcare support leave (five days per year). In fiscal 2010, a total of 82 employees took childcare leave.

We have instituted a "refreshment vacation" system, which allows employees to take a two-week to one-month holiday when their term of service has reached 10, 15, 20, or 25 years. We are also taking active steps to prevent on-thejob mental health problems, which have increased recently in Japan, by increasing our healthcare staff and providing education on mental health issues.

Enjoying both work and child-raising

Tokyo Electron has numerous schemes to support employees to continue to work after maternity/paternity leave. During the several months it took my child to become accustomed to daycare, I worked shorter hours under one of the Company's childcare support schemes and was able to be at the daycare center for pick-up before it became dark. In addition, my child often falls sick, and the nursing leave helped me a lot on these occasions.

With TEL's extensive childcare support systems as well as a work environment supportive of working parents,

I can continue working with peace of mind and enthusiasm while raising my child. I really appreciate the support offered by the Company.

Ayako Konishi

FPD Division Tokyo Electron Limited

2 Childcare support working hours: a system under which employees can opt to work for shorter hours by one hour per day until the end of the fiscal year in which their child completes elementary school (age 12)



¹ Childcare leave: a system under which employees can take leave until the end of the April following the date on which their child turns 18 months old (or until their child reaches the age of three in some exceptional cases)

TEL's Basic Philosophy on Human Resource Development

Based on the belief that "employees are our valuable assets," the TEL Group fosters a spirit of learning among its employees, characterized by the following three principles established for its human resource development.

- (1) The workplace must support employee development.
- (2) Self-motivation and a sense of responsibility are the basic requirements for employees to develop their talents and careers.
- (3) The Company must build a platform or framework that provides employees with the opportunity and motivation to learn.

The Group believes that education and training only succeed when implemented continuously. In line with this belief, we are working to enhance our management organization and maintain our educational budget.

TEL UNIVERSITY

The TEL Group established an internal educational institution, TEL UNIVERSITY, with the aim of providing employees with opportunities for continued learning, thereby enhancing the capabilities of both individual employees and the overall organization. TEL UNIVERSITY is intended to provide employees with opportunities to obtain the knowledge and skills necessary for each to perform world-class work in addition to building employees' management capabilities and organizational strength and developing future leaders.

TEL executives also attend TEL UNIVERSITY courses, participating in lively discussions with employees. Successful human resource development requires employees that are enthusiastic about learning, as well as managers and a corporate culture that support employee growth. Employees actively learning at TEL UNIVERSITY and applying what they have learned to their work and workplaces contributes to the growth of both individual employees and the organization as a whole. TEL UNIVERSITY will continue to contribute to the growth of the TEL Group by developing competent professionals.

Nurturing Leaders

TEL UNIVERSITY has programs for nurturing future leaders and strengthening the abilities of leaders. These programs

TOPICS

Initiatives to Invigorate the Corporate Group

As part of activities to spread TEL values, the TEL Group provides an "invigoration fund" of 10,000 yen per person to all employees in Japan, including contract employees. With this fund, each department plans and carries out activities that allows participation of all department members, aiming to invigorate the workplace. This program began in fiscal 2008

include training in strategy formulation and organizational management, which are essential subjects for individual leader programs, and collective training sessions for all group leaders of workplaces.

The leader programs are designed to provide practical, interactive training—by encouraging participants to discuss a wide range of workplace-related issues—in addition to giving lectures and teaching theory.

This training also helps increase the team spirit of the Group, which is built by trainees from different locations in Japan.

Participating in management training

I have participated in a number of training programs, but unfortunately I could not make effective use of the knowledge I obtained from those programs to help my work or workplace. However, this is not the case with the management training program I recently attended.

Previously, I had a negative image of "management," assuming it to be an impersonal, rigorously result-oriented kind of work. To my surprise, this training corrected my negative view, making me realize that the essence of management is how effectively you can encourage your subordinates to learn and grow and how well you can create and manage a competent team, although getting results is also important.

I started to try new approaches in my workplace using what I learned from the training. I am pleased to realize that the training and my follow-up practice has greatly helped enhance my interaction with my subordinates and develop my ability and personality.

Jun Ookura

SPE Elec. Engineering Dept. Tokyo Electron Kyushu Limited



and is to be held for the fourth time in fiscal 2011. Each department prepares a proposal and reports details on the activity after it was held via the corporate intranet. Almost all departments take part in this initiative and a diverse range of activities have taken place across the country, including pottery workshops, cook-out parties, fishing contests, and sports meets held jointly with a number of departments.



Corporate Social Responsibility (CSR)

The TEL Group seeks mutual development with local communities through various communication activities that foster a relationship of trust.

Approach to Corporate Citizenship Activities

The TEL Group believes that one of its tasks is to contribute to the development of society, while always complying with social laws and norms. Based on this belief, we engage in a variety of activities in Japan and overseas as a good corporate citizen.



Fundraising as Part of Philanthropic Activities (Europe)

Tokyo Electron Europe Ltd. (TEE) ran a fund drive in a charity event to help Children in Need. TEE employees dressed up in wigs and other costumes and raised money by selling homemade cakes and getting people to guess the number of sweets in a basket. Adding the money obtained from collecting and recycling used mobile phones, TEE donated a total of approximately 400 euros in fiscal 2010.

Activities with the Local Community (1) (the U.S.)

Tokyo Electron U.S. Holdings, Inc. (TEH) participates in the Clean Sweep campaign organized annually by Keep Austin Beautiful (KAB). Working in cooperation with other neighborhood companies and the local community, TEH

has been supporting community beautification and improvement activities for more than 10 years. TEH also holds a joint exhibition of "green art" with Austin Green Art (a local art group) in line with the Earth Day movement, using the space in the entrance hall of the TEH head office.









Activities with the Local Community (2) (Shanghai)

In September 2009 Tokyo Electron (Shanghai) Ltd. (TES) participated in the Fun Run event held each year by the Zhangjiang Group. With major local companies and government agencies also joining in, the number of participants exceeded 1,000. All of the money raised by this year's Fun Run was donated to help disadvantaged children living in Shanghai and other regions.

Forestation/Tree Planting Activities

Tokyo Electron Kyushu Ltd. (TKL) undertook forestation activities in the Tokyo Electron Forest, located in the Kawachi Dam area in Tosu City, Saga Prefecture, in December 2009 and on Mt. Tawara in Aso, Kumamoto Prefecture, in March 2010.

In May 2010, new employees at Yamanashi Plant of Tokyo Electron AT Ltd. weeded and cleared the area around Nirasaki Station and planted trees as part of their orientation training.

Forestation/tree planting activities are conducted by other group companies, including TEH and TES, which actively encourage their employees to participate in tree planting and fundraising activities.







Environmental Debriefing for the Local Community (Tohoku, Japan)

In October 2009 Tokyo Electron Tohoku Ltd. held the second environmental debriefing session for the local community. The session was attended by a total of 31 participants comprising local residents (representatives of neighborhood associations, etc.) as well as business and government representatives. The event consisted of an explanation of the Company profile and business, an inspection tour of plant facilities and manufacturing sites, including the liquid waste treatment wing, and a concluding dialogue session, where the Company received a host of helpful comments from the participants.

Educational Activities Conducted Jointly with the Local Community (Miyagi, Japan)

In collaboration with The Kahoku Shimpo newspaper, Tohoku University, and others, Tokyo Electron held a science event entitled "Talk about Fun Science!" at Tokyo Electron Hall Miyagi. The event featured shows and experiments on a variety of scientific themes. For the science experiment classes, research teams from Tohoku University and local NPOs organized science experiments in purpose-built booths, which, combined with exhibitions by the TEL Group, consisted of a total of more than 15 science experiments presented at the event. Tokyo Electron AT Ltd. presented four experiments on the phenomenon of vacuum, which is an essential theme for our products. We received favorable feedback from a lot of visitors. We will continue to hold this well-received event in coming years.



Comments from a Third-Party Expert

I have read Tokyo Electron's *Environmental and Social Report 2010* and received an explanation of the Company's environmental and social activities from staff at TEL's Environment, Health & Safety Center. Here I express my view on this report as a third-party expert.

1. TEL's Basic Philosophy and Environmental Initiatives

TEL's basic philosophy includes "providing high-value products and services (mainly semiconductor production equipment) around the world in order to realize healthy and enriched lives." Accordingly, TEL is tirelessly promoting technological innovation and addressing environmental issues. Today, as companies continue to grow, the impact their activities exert on society is growing larger and their responsibility to society is becoming increasingly significant. One major aspect of this corporate responsibility involves global environmental issues, which are being addressed by companies in a host of ways depending on their business areas and activities. The main theme of TEL's approach to environmental issues is the reduction of greenhouse gasses (CO₂), and its efforts in this area are made in two stages: the production phase and use phase of the product life cycle. A high evaluation should be given to its proactive efforts to reduce environmental impact during the use phase by improving productivity of and implementing a variety of environmental measures for the semiconductor production equipment it has already delivered worldwide (approximately 50,000 units).

2. Environmental Initiatives for Product Use

Out of the amount of CO_2 emitted throughout the lifecycle of TEL's main products—semiconductor and FPD production equipment—, approximately 80% stems from the use of these products at its customers' sites. In response to this, TEL has set goals for the Company's commitment to reduce environmental impact, specifically by reducing the amount of pure water required for and CO_2 emissions generated by the use of new equipment to be installed at customers' sites in 2015 by 50% from the fiscal 2008 level. I hope that the Company's efforts to achieve this goal will help encourage customers to make efforts to reduce environmental impact and costs, thereby increasing their overall satisfaction. I advise that TEL should continue with these efforts.

3. Environmental Initiatives in Plants and Offices

TEL aims to reduce the amount of CO2 emissions from its plants and

offices by fiscal 2015 by 50 % per unit sales from the fiscal 2008 level. In addition, the Company has been working to reduce waste for disposal, and its recycling rate for resources has been increasing for years. All TEL group plants and offices have achieved zero emissions. This achievement can be attributed to the Group's persistent environmental efforts.

4. Relationship with Employees

In order to help people lead healthy and enriched lives, the Company itself must be energetic and creative and have good employee relations—by nurturing the enthusiasm and autonomy of individual employees, enhancing their skills and supporting career development. TEL endeavors to improve the workplace environment and develop effective personnel systems. In particular, high regard should be given to its efforts to develop and enhance the professionalism of its employees, including the managers, mainly through its internal educational institution, TEL UNIVERSITY.

5. Future Issues

TEL's main business field—the supply of semiconductor production equipment—is not widely known to the general public. To compensate for this general unfamiliarity, efforts are needed to provide more easy-to-understand descriptions of the Company, in particular, its business activities, management policies, corporate responsibility and details of the Group companies. In addition, while TEL's proactive efforts to address environmental issues should be highly regarded, something still needs to be done with regard to explaining what we are doing in other aspects of social responsibility, including the roles of semiconductors in society and messages to shareholders and investors.

* The Third-Party Comment above does not contain opinions on the accuracy of the information included in this report.

Yoshito Nakamura

Professor, Faculty of Business Administration Toyo University Certified Public Accountant Auditor of the Organization Supporting JOCV Auditor of the Kawasaki City Council Social Welfare Director of the Research Institute of Accounting for the Construction Industry

Response to the Third-Party Comment

I am deeply grateful for Professor Nakamura's comments regarding the environmental and social activities of the TEL Group. The semiconductor, FPD, and PV cell production equipment industry, which the TEL Group is part of, is capable of contributing tremendously to environmental conservation and improvement, and we believe that making continued efforts to provide excellent products and services is an effective way of fulfilling our social responsibility.

Following the advice given by Professor Nakamura, we will work to provide explanations that allow all our stakeholders to easily understand semiconductors and the other fields of business in which we are involved. In this way, we will continue to make an effort under our basic philosophy, which places emphasis on demonstrating consistent leadership as a world class company by creating hope for the future and addressing environmental problems, and seek to become a company with high corporate value that is needed and trusted by society.

Satoshi Saito

Director Environment, Health & Safety Center Tokyo Electron Limited

Comments from a Third-Party Expert Tokyo Electron's History

History Tokyo Electron's History

Tokyo Electron continues to evolve, incorporating new technologies and concepts in response to the changing times with a focus on the semiconductor production equipment field.

Founding Era

- 1963
 Tokyo Electron Laboratories, Inc. (TEL) established and registered with a capital of five million yen.
- 1964 Starts importing and selling diffusion furnaces manufactured by Thermco Products Corp., taking its first step into the semiconductor production equipment import business.



- 1965 Concludes an agency agreement with Fairchild Semiconductor Corp. to sell Fairchild's IC testers in Japan.
- 1967 Establishes Pan Electron Inc. to start selling Fairchild's ICs.

Major Business Transformation

- 1968 TEL-Thermco Engineering Co., Ltd. (TEL-Thermco) established as a joint venture with Thermco Products Corp. and starts producing diffusion furnaces in Japan.
- 1972 Tokyo Process Development Inc. established and starts import and sale of analysis equipment. TEL headquarters moved to the Meiho Building in Shinjuku, Tokyo.
- 1975 Withdraws from production and export of consumer electronic goods, such as car radios and calculators, which accounted for 60% of sales.
- 1976 TEL-Thermco develops the world's first high-pressure oxidation system.



Manufacturing Functions Reinforced

- 1978 Tokyo Electron Laboratories, Inc. renamed Tokyo Electron Limited.
- 1980 Listed on the second section of the Tokyo Stock Exchange (TSE).
- 1981
 TEL-GenRad Ltd. established and starts production of in-circuit board testers in Japan.
- 1983 TEL-LAM Ltd., established as a joint venture with U.S.-based Lam Research Corp., and starts production of etch systems in Japan.
- 1984 Listed on the first section of the Tokyo Stock Exchange.

1986 Central Research Laboratory facilities in Yamanashi Prefecture completed.



In-house Production Expanded

- 1988 TEL-Thermco Engineering Co. Ltd. purchased from Thermco Products Corp. and turned into 100%-owned subsidiary.
- 1989 Starts shipment of the CLEAN TRACK MARK-V, coater/developers.
- 1990 Makes a full-scale entry into the LCD production equipment market.



Era of Globalization



2009 Concludes an agency agreement with Oerlikon Solar Ltd. to sell PV cell production equipment in the Asian and Oceanian regions.

Examples of entries received in the TEL Eco-Life Painting and Photo Contest



So Many Flowers!



SH?

Searching for Coolness

Ugly Ducklings!



The Earth is Blue

Listening to the Sound of Nature



Train to the Future



Texas Snowman



Fish



Sensing Nature's Preciousness

Loch Eck

The TEL Group held the TEL Eco-Life Painting and Photo Contest from April to July 2010 as part of its activities to raise environmental awareness. We received a host of entries from Japan and overseas.





Environment, Health & Safety Center 2-30-7 Sumiyoshi-cho, Fuchu City, Tokyo 183-8705, Japan Tel: +81-42-333-8050 Fax: +81-42-333-8477 http://www.tel.com Published: October 2010









