# **INTERVIEW WITH THE CEO**



# Q

# What is Tokyo Electron's medium- and long-term vision?



Semiconductors have long been called "the lifeblood of industry." Today, semiconductors are built into all manner of devices around us, and moreover are essential to social infrastructure and the enrichment of our daily lives. Semiconductor production equipment (SPE) is used to manufacture these "lifeblood" semiconductors. As a leading SPE supplier, Tokyo Electron aspires to remain deeply involved in the work of realizing an inspiring future for all people. In addition, SPE technology has an expansive scope and involves some profound innovations. It is used to produce the liquid crystal displays (LCD) for almost all televisions today, and can be applied to the production of organic light-emitting diode (OLED) displays. In addition, it is applied to the production of photovoltaic cells (PV), which are attracting interest as a promising means of harnessing renewable solar energy. Our production equipment technology is very much at the forefront of science and technology. Through these advances, we aim to make a broad contribution to the advancement of society at large.

#### **New Technology Fields OLED Production Equipment PV Production Equipment FPD Production Equipment Semiconductor Production Equipment Technologies** Coating/ Equipment Thermal Testing Cleaning Automation safety design developing processing Material Temperature Clean Design-to-cost Flow control Sensing CO<sub>2</sub> reduction System design Plasma control Power control Mechatronics

## **Development of Semiconductor Production Equipment Technology**

# Q

# What are your key strategies for expanding the SPE business?



The SPE market is expected to see continuing growth driven by technology innovation. First, we intend to do our utmost to enhance our position in this market. To give you some clear examples, let's look at some of our specialized market shares within the SPE market. Tokyo Electron commands a share of more than 80% of the coater/developer market and more than 60% of the thermal processing system market, but has less than a 30% share of the etch system market and less than 20% of the cleaning system market. Etch systems and cleaning systems are both used in key semiconductor production processes and therefore their markets offer strong growth prospects going forward. As a result, we intend to spend a relatively large amount of development and capital expenditures on these two fields, and also on the opening of our new Miyagi plant, in order to ensure that we produce solid results in each



Manufacturing base for coater/developer and cleaning system at Tokyo Electron Kyushu Limited. Cleanroom for process evaluation expanded to strengthen development of cleaning systems, a market expected to grow going forward.

CELLESTA™ -*i* Single Wafer Cleaning System

field. We will also implement efforts directed at commercializing new technology fields, in addition to bolstering exist-

ing product fields.

# Q

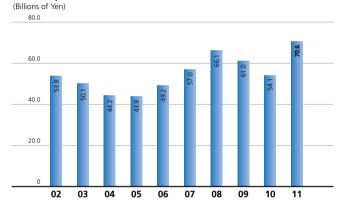
# Which new SPE-related technology fields are you focusing on? Please go into more detail.



Last year, we launched a new plasma etch system Tactras™ RLSA™ Etch, featuring our proprietary revolutionary breakthrough plasma technology. Leveraging this technology, we are also considering entry into new film formation and other fields.

Recently, while development aimed at pushing the limitations of scaling, or miniaturization, has been vigorous, we have been making R&D efforts directed at realizing technologies for

## **R&D Expenses in the Past 10 Years**



dramatically increasing device performance by means of stacking multiple silicon chips. Called 3DI, this chip stack technology also takes full advantage of various technologies we have already developed over many years. With the technology expected to be used in mass production in 2-3 years, we are currently working to upgrade and extend our product lineup.

Additionally, in traditional wafer-test related fields, we have received strong calls for reducing test costs from customers. In response, we are actively preparing to propose new solutions to address their needs.



# Q

# What kinds of OLED display solutions do you plan to offer?



Companies already offer OLED displays based on conventional technologies. However, Tokyo Electron is currently developing new types of OLED film formation equipment for use in the production of large OLED displays for TVs and lighting in the near future. The first type is our own proprietary evaporation system that has a very unique technology that provides a high level of material efficiency. The second type is a film formation system using an inkjet printing method under joint development with Seiko Epson Corporation, a company which has considerable expertise in industrial inkjet technology. OLED is a future display technology that is lighter and more energy efficient than liquid crystal display (LCD), and has a higher resolution of color. The market for OLED displays is expected to come into its own in the near future. Based on our wide range of equipment technology developed through LCD operations, we aim to propose unique technologies for the next generation of OLED displays.

# Competition is intensifying due to the emergence of Asian equipment suppliers. What steps are you taking to expand business and improve earnings?



In recent years, Asian equipment suppliers including those in South Korea have prominently come to the forefront. We must continue to run ahead of them in terms of technology innovation. Fortunately, the industry as a whole has seen technological innovation continue to evolve swiftly. We believe that with this foundation Tokyo Electron can continue to provide better value with its proposals in the future, based on our possession and provision of distinctive technologies that stand out. Moreover, our customers also face relentless competition on a daily basis. If we can provide our high-value-added technologies at the best possible timing, I am confident



that we will be chosen by our customers as a long-term partner. That is also why we decided to set up an SPE process technology center in Hwaseong, South Korea.

Accelerating cost reductions has also become an urgent priority in this process. To this end, we are currently constructing a new plant for FPD production equipment in Kunshan, China.

Ground-breaking ceremony for the new plant at our new subsidiary Tokyo Electron (Kunshan) Limited in Kunshan, Jiangsu Province, China (January 8, 2011)



# Q

# What is your policy on returning profits to shareholders?



We must constantly maintain and expand technological leadership and capabilities that have a competitive edge. This is Tokyo Electron's primary source of growth. Therefore, no matter what conditions we face, the most important factor for ensuring the Company's growth is to retain the necessary funds for this, and to invest these funds in important development projects, intellectual property acquisitions and so forth. We also believe that doing so will lead to increased shareholder value.

At the same time, we have carefully asked ourselves what would be the best possible profit distribution policy—one that would reward shareholders for their support, while maintaining our financial soundness in a fast-changing market environment. Consequently, we decided that the total dividend applicable to fiscal 2011 should be raised to ¥114 per share, marking a large increase from the previous year. This partly reflects our decision to raise the dividend payout ratio target from 20% to 35%, as well as the improvement in net income, from which dividends are paid out.

Looking ahead, we will continue striving to enhance shareholder value through sound business expansion, while at the same time working to directly return a greater portion of earnings to shareholders.

# Response to and Rebuilding After the Great East Japan Earthquake

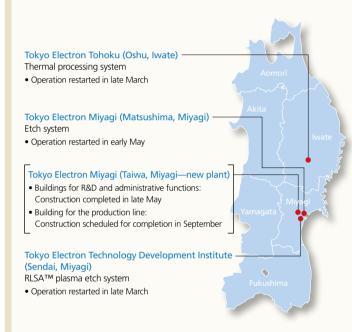
We wish to express our deepest sympathies and condolences for the victims of the Great East Japan Earthquake. We sincerely hope that the affected areas can realize a guick recovery.

## **Safety of Employees**

All employees were safe.

## **Status of Production Facilities**

Three of our manufacturing bases in the Tohoku region suffered minimal damage but have already resumed operation in the first quarter of FY2012.



Tohoku region

## **Post-earthquake Response**

#### **Suppliers**

We worked quickly to ascertain the status of our 300 or so suppliers in the affected regions and are taking measures to remedy the instability in the supply of certain parts.

 We devised workarounds involving adjustments to production processes, temporary adoption of substitute parts, and design changes

#### Radiation

We are measuring the radiation levels of all equipment and parts shipped overseas.

 Implemented in conformity with International Air Transport Association (IATA)

#### **Power Supply**

We intend to reduce power consumption for the coming summer months by 15% compared to the same period last year. However, we are also implementing steps to ensure that these cuts will not result in stoppages in our R&D and production schedules.

- We will install solar power generation systems (2,000 kW), a turbo chiller, and other equipment
- An operation rotation plan will be implemented in the Yamanashi and Sendai regions from July to September

### **Support for the Affected Regions**

## **Monetary Donations**

We donated a total of \$500 million in aid to the recovery effort.

# **Customer Support**

We sent 100 to 200 field engineers to provide support to our customers in their efforts to get their facilities back to normal.

#### Tokyo Electron Tohoku

President & CEO Hiroshi Takenaka visited the plant to provide encouragement to employees March 25, 2011

