Sales and Income

Operating Environment

The overall world economy in fiscal 2016 saw gradual recovery, despite slowing growth in China and some other emerging countries. In the electronics industry, demand grew for higher capacity memory for mobile devices as well as for CPUs and memory used in data centers, reflecting the further sophistication of mobile devices and development of cloud services. The semiconductor production equipment (SPE) market, in which Tokyo Electron operates, was firm, as semiconductor manufacturers carried out capital investment driven by the dawn of the internet of things (IoT) as well as the adoption of new forms of memory, such as 3D structure devices, and cutting-edge logic semiconductors. The market for flat panel display (FPD) production equipment for thin-film transistor (TFT) array processes saw overall growth as capital investment in small- and medium-sized LCD panels grew considerably, despite a decline in investment in large-sized panels.

Sales

Net sales in fiscal 2016 rose 8.3% year on year to ¥663.9 billion. This reflected the steady development of business with customers of Tokyo Electron’s mainstay products as well as growth in sales of parts and used equipment as a result of increased demand for older generation technologies.

Domestic sales grew 28.2% year on year to ¥212.8 billion, while overseas sales grew 4.6% to ¥451.2 billion. Overseas sales as a share of total consolidated sales came to 81.7% in fiscal 2016, down 2.8 percentage points from 84.5% in fiscal 2015.

Orders received during fiscal 2016 came to ¥670.3 billion, up 2.8% compared with the previous fiscal year. The order backlog at the end of March 2016 was ¥331.1 billion, up 5.2% year on year. For orders received and order backlog in the SPE and FPD production equipment segments, see Performance by Segment on page 18.

Gross Profit, SG&A Expenses and Operating Income

Cost of sales during fiscal 2016 increased 7.1% year on year to ¥396.7 billion, while the cost of sales ratio dropped 0.6 of a percentage point to 59.3%, reflecting the 8.3% increase in net sales. Gross profit was up 10.1% year on year to ¥267.2 billion, and the gross profit margin rose 0.6 of a percentage point to a record high of 40.2%.

SG&A expenses fell 2.7% year on year to ¥150.4 billion. This decrease was mainly due to a reduction in business merger-related expenses as a result of the cancellation of the merger agreement with Applied Materials. The ratio of SG&A expenses to consolidated net sales dropped from 25.2% in the previous fiscal year to 23.6% in the fiscal year under review.

Consequently, operating income increased 32.5% year on year to ¥116.8 billion, and the operating margin rose from 14.4% to 17.6%.

Research and Development

R&D expenses were up 6.9% year on year to ¥76.3 billion. The main cause of this rise was increases in expenses in the key fields of etching, deposition and cleaning systems in the SPE segment. The ratio of R&D expenses to net sales dropped 0.1 of a percentage point year on year to 11.5%.

Tokyo Electron regards advanced technological prowess as the source of its growth. Accordingly, to produce strong next generation products and achieve the goals of the medium-term management plan, the Company focused investment on fields in which market growth is forecast. In the SPE field, development centered on key technologies in the areas of etching, deposition and cleaning. These technologies are needed for multiple patterning for further miniaturization, 3D structure NAND flash memory and the adoption of new materials.

Results of the Company’s R&D efforts included the release of new products, such as coater/devoloper compatible with advanced packaging technologies and single wafer deposition systems for next-generation miniaturization.

Furthermore, the EXIM™ etching system, used to manufacture STT-MRAM™ and other products, was adopted in the development lines of multiple customers.

In FPD production equipment, Tokyo Electron released new etch systems for high-resolution small- and medium-sized panels.

Other Income (Expenses) and Net Income Attributable to Owners of Parent

During fiscal 2016, main sources of other income were ¥1.0 billion in gain on sale of the land and buildings of the former Technology Center Tsukuba, ¥0.9 billion in foreign exchange gain and ¥0.9 billion in interest and dividend income. Other expenses included ¥9.7 billion in loss on impairment of goodwill and other assets and ¥2.2 billion in loss on business restructuring due to revisions to business plans for TEL PSI, Inc. As a result, net other income (expenses) came to ¥10.3 billion of net expense in fiscal 2016, compared with ¥3.0 billion of net expense in fiscal 2015. Consequently, net income before income tax came to ¥106.5 billion, up 22.6% year on year. Net income attributable to owners of the parent totaled ¥77.9 billion in fiscal 2016, up 8.4% from fiscal 2015. Due in part to the repurchase and cancellation of stock (8.5% of issued shares before the cancellation), net income attributable to owners of the parent increased 15.0% year on year, outpacing the rise in net income, to ¥461.0 billion.

Dividend Policy, Dividends and Stock Repurchases

It is the policy of Tokyo Electron to pay dividends on the basis of business performance. As the Company aims for world-class profitability, it seeks to bolster returns to shareholders accordingly, and beginning with fiscal 2016, raised the payout ratio from 33% to 50%. Furthermore, with an eye to ensuring stable dividends, a lower limit of ¥50 per share has been set on annual dividends.

Reflecting the Company’s firm business results, Tokyo Electron paid annual dividends for fiscal 2016 of ¥237 per share (for a payout ratio of 51.4%), its highest ever. In addition, the Company repurchased and cancelled stock (8.5% of issued shares before the cancellation).

Selling, general and administrative expenses

Marketing and selling expenses

Operating income

Research and Development

Other income (expenses)

Net income per share rose 15.0% year on year, outpacing the rise in net income, to ¥461.0 billion.
Performance by Segment

**Semiconductor Production Equipment**

In 2015, the SPE market was roughly level with the previous year. Demand for DRAM and NAND flash memory was firm, reflecting demand for higher performance in smartphones and the shipment growth of data center servers, with particular growth in capital investment for cutting-edge nodes by DRAM manufacturers. However, electronics demand grew less than anticipated, leading to restrained capital investment by logic chip manufacturers and foundries.

In these circumstances, Tokyo Electron’s sales of deposition and cleaning systems, which it positions as key business areas, saw year-on-year growth. In deposition systems, the Company’s cleaning systems in key logic chip and memory systems used in ALD* processes improved. Adoption of the ALD (Atomic Layer Deposition) processes further advanced technology.

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For a business overview of this segment, please see page 9.

**FPD (Flat Panel Display) Production Equipment**

Capital investment in the FPD production equipment market grew overall, as strong growth in investment in small- and medium-sized panels for mobile devices more than made up for a decrease in investment in large-sized panels. In this context, sales remained favorable, boosted by a gain in market share of Tokyo Electron’s inductively coupled plasma (ICP) etch systems, which have a competitive edge among products for large-sized panels. The Company also recorded sales of its first inkjet printing system for manufacturing products for large-sized panels. The Company also recorded sales of its first inkjet printing system for manufacturing products for large-sized panels. The Company also recorded sales of its first inkjet printing system for manufacturing products for large-sized panels.

For a business overview of this segment, please see page 9.

**Other**

Tokyo Electron’s photovoltaic panel production equipment business, from which it has been withdrawing, no longer meets the standards of importance specified by the Accounting Standard for Disclosures about Segments of an Enterprise and Related Information. Accordingly, it has been removed from the reportable segments, and its results are now included under Other. Comparisons with the previous fiscal year hereinafter are based on recalculations of the fiscal 2016 results using the current segment classifications.

In addition to the abovementioned photovoltaic panel production equipment-related sales, other sales mainly include group-wide logistics services, facility maintenance and insurance. Net sales to external customers amounted to ¥6.2 billion, up 49.3% year on year.

**Financial Position and Cash Flows**

**Assets, Liabilities and Net Assets**

**Assets**

Current assets decreased ¥53.5 billion from the end of the previous fiscal year to ¥677.4 billion, reflecting decreases of ¥81.0 billion in total liquidity on hand (cash, cash equivalents and short-term investments with original maturities of less than one year) and ¥12.2 billion in prepaid expenses and other current assets, as well as increases of ¥19.5 billion in inventories.
Financial Review

and ¥5.7 billion in trade notes and accounts receivable. The turnover period for trade notes and accounts receivable improved from 66 days in fiscal 2015 to 64 days in fiscal 2016, and the inventory turnover period worsened slightly from 105 days in fiscal 2015 to 107 days in fiscal 2016.

Net property, plant and equipment decreased ¥10.6 billion on year to ¥237.9 billion. Non-current liabilities increased ¥10.9 billion on year to ¥183.0 billion, due to an increase in net liability for defined benefits of ¥4.2 billion and a decrease in other liabilities of ¥3.3 billion.

Total liabilities (current liabilities and non-current liabilities) stood at ¥229.1 billion, down ¥10.9 billion from the end of the previous fiscal year.

Net assets came to ¥793.4 billion, down ¥82.8 billion on year on year to ¥79.6 billion. This was mainly attributable to a ¥37.0 billion decrease in intangible assets, due in part to loss on impairment at TEL FSI, Inc. These factors more than offset ¥13.3 billion in new fixed asset acquisitions. Investments and other assets decreased ¥18.7 billion on year to ¥79.6 billion. This was mainly attributable to a ¥13.7 billion decrease in intangible assets, due in part to loss on impairment at TEL FSI, Inc., as well as a ¥7.2 billion decrease in net asset for defined benefits and a ¥4.0 billion decrease in investment securities due to sales of stocks held.

As a result, total assets as of March 31, 2016 stood at ¥793.4 billion, down ¥10.9 billion on year on year.

## Liabilities and Net Assets

Current liabilities decreased ¥6.8 billion from the end of fiscal 2015. Current liabilities decreased ¥6.8 billion from the end of fiscal 2015. As a result, total assets as of March 31, 2016 stood at ¥793.4 billion, down ¥10.9 billion on year on year.

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Financial Position

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<tr>
<td>Total current assets</td>
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<td>¥603,127</td>
<td>¥561,722</td>
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## Receivable Turnover and Inventory Turnover

- Receivable Turnover
- Inventory Turnover

## Equity and Equity Ratio

- Equity
- Equity Ratio

## ROE

ROE = (Operating income × (1 - Income tax rate)) / Average total equity × 100

## ROA

ROA = (Operating income × (1 - Income tax rate)) / Average total assets × 100

## Capital Expenditures and Depreciation and Amortization

- Capital Expenditures
- Depreciation and Amortization

## Total Liquidity on Hand

- Total liquidity on hand = Cash and cash equivalents + Short-term investments

As a result, the equity ratio fell 2.1 percentage points from 13.3% at the end of March 2015 to 11.2% at the end of March 2016. ROE climbed to 13.0% from 11.8% in fiscal 2015.

Capital Expenditures* and Depreciation and Amortization**

Capital expenditures were ¥13.8 billion in fiscal 2016, a 1.2% year-on-year increase. Main factors in these expenditures were the acquisition of process evaluation equipment and R&D machinery and equipment, primarily for key areas with high growth potential in the SPE business as part of efforts to achieve the goals of the medium-term management plan.

Depreciation and amortization decreased 7.8% to ¥19.3 billion, reflecting continued low levels of capital investment.

* Capital expenditures represent only the gross increase in property, plant and equipment.
** Depreciation and amortization does not include amortization of goodwill or losses on impairment.

Cash Flows

Net cash provided by operating activities came to ¥69.4 billion, down ¥2.4 billion from fiscal 2015. Major contributors were ¥106.5 billion in income before income taxes, ¥19.3 billion in depreciation and amortization and ¥9.7 billion in loss on impairment. Major negative factors included a ¥23.5 billion increase in inventories, ¥15.4 billion in income taxes paid and a ¥13.0 billion decrease in customer advances.

Net cash used in investing activities was ¥150.0 billion, compared with ¥155.7 billion provided in the previous fiscal year. Major outflows included a ¥141.0 billion net increase in short-term investments and ¥14.3 billion used as payment for purchases of property, plant and equipment.

Cash used in financing activities came to ¥186.6 billion, compared with ¥182.9 billion in fiscal 2015. Major outflows included ¥350.5 billion used in payment for repurchases of treasury stock and ¥33.0 billion in dividends paid.

The balance of cash and cash equivalents at the end of March 2016 stood at ¥95.6 billion, a decrease of ¥222.0 billion from the end of fiscal 2015. Total liquidity on hand, which consists of cash, cash equivalents and short-term investments with original maturities of less than one year, decreased ¥81.0 billion on year to ¥386.7 billion at the end of March 2016.
Financial Review

Business-related and Other Risks

The following risks may have a material impact on Tokyo Electron’s business performance, stock price, or financial position.

(1) Impact from Changes in the Semiconductor Market
Tokyo Electron has achieved a high profit margin by concentrating resources in high-tech fields, including semiconductor production equipment, where technological innovation is rapid but Tokyo Electron can effectively use its strengths. Although technological change is responsible for the semiconductor market’s rapid growth, Tokyo Electron has actively undertaken structural reforms to be able to generate profits under any circumstances, including when the market contracts temporarily due to imbalance of supply and demand. However, order cancellations, excess capacity and personnel and increased inventories resulting from an unexpectedly large market contraction, losses from bad debts resulting from the worsening of a customer’s financial position, and supply shortages resulting from the worsening of a supplier’s management situation, could adversely affect Tokyo Electron’s business performance considerably.

(2) Impact from Concentration of Transactions on Particular Customers
Tokyo Electron has been successful at increasing transactions with the leading semiconductor manufacturers worldwide, including those in Japan, through the provision of products featuring outstanding, cutting-edge technology and of services offering a high level of customer satisfaction. However, Tokyo Electron’s sales may from time to time be temporarily concentrated on particular customers due to the timing of large capital investments of major semiconductor manufacturers. The resulting escalation in sales competition could adversely affect Tokyo Electron’s business performance.

(3) Impact from Research and Development
Through ongoing and proactive R&D investment and activities in cutting-edge technologies—miniaturization, vacuum, plasma, thermal processing, coating/developing, cleaning, wafer transfer and clean technologies—Tokyo Electron has created advanced technologies. At the same time, by quickly bringing to market new products incorporating these technologies, Tokyo Electron has successfully captured a high market share in each of the product fields it has entered and generated a high profit margin. However, delays in the launch of new products and other factors could adversely affect Tokyo Electron’s business performance.

(4) Safety-related Impact
Tokyo Electron’s basic philosophy is to always bear in mind safety and health in the execution of business activities, including development, manufacturing, sales, services and management. In accordance with this philosophy, Tokyo Electron works actively and continuously to improve the safety of its products and to eliminate any harmful impact on health. However, harm to customers, order cancellations or other circumstances resulting from safety or other problems related to Tokyo Electron’s products could adversely affect Tokyo Electron’s business performance.

(5) Impact from Quality Issues
Tokyo Electron actively develops outstanding, cutting-edge technologies for incorporation in new products that are brought quickly to market. At the same time, Tokyo Electron works to establish a quality assurance system, efforts that include obtaining ISO 9001 certification, as well as to establish a world-class service system. These actions have resulted in a large number of customers adopting Tokyo Electron’s products. However, because Tokyo Electron’s products are based on cutting-edge technologies, and due to other factors, many of the technologies developed are unfamiliar fields. The occurrence of unforeseen defects or other issues could adversely affect Tokyo Electron’s business performance.

(6) Impact of Intellectual Property Rights
In order to distinguish its products and make them more competitive, Tokyo Electron has promoted its R&D strategy for the early development of cutting-edge technologies together with its business and intellectual property strategies. This approach has enabled Tokyo Electron to secure sole possession of many proprietary technologies that have been instrumental to the Company’s ability to capture a high market share and generate high profit margins in each of its product fields. Tokyo Electron’s products incorporate and optimize many of these proprietary cutting-edge technologies. There may be cases in which, by avoiding the use of third-party technologies and intellectual property rights, Tokyo Electron’s business performance could be adversely affected.

(7) Impact of Fluctuating Foreign Exchange Rates
Success in the development of overseas operations has increased the share of sales generated overseas. As a rule, Tokyo Electron conducts export transactions on a yen basis to avert exposure to foreign currency risks. However, some exports are denominated in foreign currencies. In these cases, Tokyo Electron hedges foreign currency risk by using a forward foreign exchange contract when an order is received or by other means. However, foreign exchange rate risks can arise from fluctuations in prices due to sudden foreign exchange movements, which could have an indirect adverse effect on Tokyo Electron’s business performance.

(8) Influence of Corporate Acquisitions
As part of its business strategy, Tokyo Electron conducts corporate acquisitions in order to expand into new business areas, secure new technologies and business platforms, and strengthen the competitiveness of existing businesses. The Company conducts due diligence and carefully deliberates each specific acquisition. However, in the event that the results following an acquisition do not meet expectations, Tokyo Electron’s business performance could be adversely affected.

(9) Impact from Major Lawsuits or Legal Actions
Tokyo Electron is not currently involved in any lawsuits or other legal actions that are likely to significantly influence its business results. However, in the event that the Company’s business or other activities become the subject of a major lawsuit or other legal action, depending on the outcome of such action, Tokyo Electron’s business results could be adversely affected.

(10) Other Risks
Tokyo Electron is actively engaged in reforming its corporate structure so that it can generate profits even when markets contract. These reforms have entailed creating new high-growth and high-return businesses and pursuing higher earnings from existing businesses. At the same time, Tokyo Electron has promoted activities to preserve the environment and worked to restructure its compliance, risk management and information security management systems. However, as long as it conducts business activities, as with peer companies or companies in different industries, Tokyo Electron is subject to the effect of many other factors. These include the world and regional economic environments, natural disasters, war, terrorism, infectious diseases and other unavoidable occurrences, financial or stock markets, government or other regulations, supply chains, market conditions for products and real estate, the ability to recruit personnel in Japan and overseas, competition over standardization, and loss of key personnel. Any of these factors could adversely affect Tokyo Electron’s business performance.